

**U. S. Department of Education
Office of Career, Technical, and Adult Education**

Strengthening Career and Technical Education for the 21st Century Act (Perkins V) State Plan

I. Cover Page

- A. State Name: West Virginia
- B. Eligible Agency (State Board) Submitting Plan on Behalf of State:
West Virginia Council for Community and Technical College Education
- C. State Agency delegated responsibilities by Eligible Agency under section 131(b) for the administration, operation, or supervision of activities of the State plan (*if applicable*).
West Virginia Council for Community and Technical College Education
- D. Individual serving as the State Director for Career and Technical Education:
1. Name: Dr. Sarah Armstrong Tucker
 2. Official Position Title: Chancellor
 3. Agency: West Virginia Council for Community and Technical College Education
 4. Telephone: 304-558-0265
 5. Email: tucker@wvctcs.org
- E. Type of Perkins V State Plan Submission – FY 2019 (Check one):
- 1-Year Transition Plan (FY 2019 only) - *if an eligible agency selects this option, it will then complete Items G and J.*
State Plan (FY 2019-2023) – *if an eligible agency selects this option, it will then complete Items G, I, and J.*
- F. Type of Perkins V State Plan Submission – *Subsequent Years* (Check one):
- State Plan (FY 2020-2023) - *if an eligible agency selects this option, it will then complete Items H, I, and J.*
State Plan Revisions (Please indicate year of submission: _____) – *if an eligible agency selects this option, it will then complete Items H and J.*
- G. Submitting Perkins V State Plan as Part of a Workforce Innovation and Opportunities Act (WIOA) Combined State Plan – FY 2019 (Check one):

- Yes
 No

H. Submitting Perkins V State Plan as Part of a Workforce Innovation and Opportunities Act (WIOA) Combined State Plan – *Subsequent Years (Check one):*

- Yes (If yes, please indicate year of submission: _____)
 No

I. Governor’s Signatory Authority of the Perkins V State Plan (Fill in text box and then check one box below):¹

Date Governor was sent State Plan for signature: March 2, 2020


J. Date that the State Plan was sent to the Governor for signature

- The Governor has provided a letter that he or she is jointly signing the State plan for submission to the Department.

The Governor has not provided a letter that he or she is jointly signing the State plan for submission to the Department.

K. By signing this document, the eligible entity, through its authorized representative, agrees:

1. To the assurances, certifications, and other forms enclosed in its State plan submission; and
2. That, to the best of my knowledge and belief, all information and data included in this State plan submission are true and correct.

Authorized Representative Identified in Item C Above (Printed Name)	Telephone:
Dr. Sarah Armstrong Tucker	304-558-0265
Signature of Authorized Representative	Date: June 10, 2020
	

¹ Item I is required in FY 2019 only for States that choose to submit a full Perkins V State plan, covering FY 2019-23.

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A. PLAN DEVELOPMENT AND CONSULTATION

A.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 West Virginia Community and Technical College System (WVCTCS) and the West Virginia Department of Education (WVDE), in collaboration with its system partners at the state and local levels, embarked on a collaborative process to develop the West Virginia Perkins V State Plan beginning in late 2018. Utilizing the framework and outcomes of the state's Workforce Development Board Strategic Plan, WVDE Strategic Plan, and West Virginia's Climb initiative, WVCTCS and WVDE developed a process to gather information on issues and opportunities of strategic significance to the state of West Virginia.

The process began with a series of statewide meetings and listening sessions that included invitations to all of the required stakeholders listed in section 122 (c)(2) of Perkins V as well as individuals from the following groups:

- Representatives of secondary and postsecondary Career and Technical Education (CTE) programs
- Interested community representatives including parents, students, and community organizations
- Representatives of the West Virginia Workforce Development Boards, Workforce West Virginia (WFWV), and the West Virginia Economic Development Department (EDD)
- Representatives of special populations and individuals with disabilities
- Business, industry and labor organization representatives
- Representatives of agencies serving out-of-school youth, homeless youth, and at-risk youth including the state's coordinator for the Education of Homeless Children and Youth
- Secondary and postsecondary students
- The Governor's office

More than 400 stakeholders provided feedback through 10 in-person listening sessions around the state in 2018 and 2019 (see Appendix A). Each Perkins V listening session began with contextual information about federal Perkins legislation and how it impacts secondary and postsecondary CTE programs, as well as details about the requirements of the Perkins V State Plan. Stakeholder discussions were structured to solicit input and feedback on questions consistent with the requirements of Perkins V. Participants at each meeting were also provided a link to an online survey regarding student performance quality indicators (see pertinent survey results in Appendix B).

Through these discussions the following key areas of focus were identified as the basis for the formation of the state's Perkins V State Plan:

- Align CTE programs with high-wage, in-demand, and high skill occupations in the state of West Virginia.
- Provide funding and opportunities for students to earn credentials (including industry-based certifications, certificates, associate, and bachelor's degrees).
- Structure opportunities for work-based learning in rural, suburban, and urban settings.
- Construct, support, and promote meaningful and effective CTE cross-sector collaboration in West Virginia across secondary and postsecondary programs, and the workforce.
- Continually improve the academic and technical content of CTE postsecondary programs as well as their administration to reflect and respond to local, regional, and state workforce needs.
- Ensure equitable access to secondary and postsecondary CTE programs and credentials through multiple on- and off-ramps for all students with particular attention to special populations.

Using these key areas of focus as a foundation, a Perkins V State Plan writing team was formed with selected staff from WVDE, WVCTCS, and the West Virginia Council for Community and Technical Education (WVCCTE).

Once West Virginia's Perkins V State Plan is approved by the U.S. Department of Education, selected members of the writing team will be invited to participate in the statewide Career Pathway Project. The Career Pathway Project is a system-wide process to develop a comprehensive pathways approach to career-connected learning across all levels of education and training in the state. The writing team will engage leaders from education, business, and community-based organizations to assist in the development of regional and statewide guided pathways (the Guided Pathways Project). Team members will also work collaboratively with their constituents to uncover local assets and gaps in addressing regional workforce needs and seek consensus on the best methods of delivering guided pathways.

A.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)

Following a review of funding by WVDE and WVCTCS it was determined that the Perkins V allocation split for secondary and postsecondary eligible recipients in West Virginia will be calculated annually based on the proportion of full-time equivalent (FTE), as described in C.1.c. No public comments or objections were submitted by any agency other than the eligible agency relating to any and all sections and content of the State plan.

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

A draft of the West Virginia Perkins V State Plan was made available for online public comment to all stakeholders in the state for 30 days from February 25, 2020, through March 25, 2020. The state plan was available on the WVCTCS website and the West Virginia Department of Public Instruction (DPI) website and opportunities for comment were communicated using both email and social media posts. The public could also comment on the draft state plan using an online survey composed of open-ended textbox prompts. Stakeholders were able to provide public comments through the 11 in-person listening sessions.

B. PROGRAM ADMINISTRATION AND IMPLEMENTATION

1. State's Vision for Education and Workforce Development

B.1.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)

West Virginia's workforce and economic development activities link well with the state's secondary and postsecondary education initiatives and goals for CTE. Perkins V is an opportunity to examine and expand efforts to implement CTE programs of study and career pathways that result in high wage, high skill, and in-demand careers for more students and adults.

At the state level, economic development agencies, WVDE staff, WVCTCS faculty, community representatives, and business and industry leaders work together to enhance strategies that align workforce needs with secondary and postsecondary CTE programs. The West Virginia Workforce System is comprised of the following entities:

- The Office of Governor's Economic Initiatives
- West Virginia State Workforce Development Board
- Regional workforce development boards
- West Virginia Department of Health and Human Services
- Community and technical colleges
- Local adult education providers
- Veterans Commission
- Workforce West Virginia
- West Virginia Development Office
- West Virginia Economic Development Authority

- WVDE: K-12 and Career Technical Education, Adult Education, Diversion and Transition and Governor’s Economic Initiative

WVDE and WVCTCS work in collaboration with the state’s labor agency, WFWV, and the West Virginia Department of Commerce which is charged with approving West Virginia Invest grant program degree inventory. WFWV is a one-stop center for workforce resources, including job opportunities and labor market information. One-stop centers provide services at 13 comprehensive career centers throughout the state. In addition, WFWV has the largest online database of job seekers and job openings in the state. WFWV is divided into seven regions that administer programs funded by the Workforce Innovation and Opportunity Act of 2014 (WIOA) out of 18 local offices across the state. Each regional workforce development board (WDB) utilizes strategies that are based on the current and projected needs of the local regions and emphasize coordination and collaboration with local education agencies at all levels to assist employers and job seekers needing training, including those with disabilities.

The WVDE and WVCTCS are the primary public providers of CTE for workforce development in the state.

The WVDE secondary CTE system is comprised of 64 eligible recipients that include:

- 55 county systems with:
 - 33 career centers
 - 48 comprehensive high schools offering of a minimum of six career cluster programs of study (see Appendix C)
 - 53 high schools with less than six career cluster programs of study available
 - Middle school foundational and career awareness and exploration courses available as mandated in West Virginia Policy 2510
- Seven multi-county centers
- Two specialized entities including:
 - West Virginia Schools for Deaf and Blind
 - Office of Diversion and Transition which provides educational services to juveniles assigned through the court system in 19 residential and other state-operated facilities.

Postsecondary CTE is comprised of programs for adults through WVDE and for post-secondary students through WVCTCS:

- WVDE oversees the certificate-granting Advanced Career Education (ACE) programs for adult students offered at the secondary career-technical centers and comprehensive high schools across the state as designated by state legislation. Twenty-two of these postsecondary career technical centers and comprehensive high schools are accredited through the Council on Occupational Education (COE), which is a United States Department of Education recognized national accreditor. COE accreditation is awarded to institutions that exceed the established criteria of educational quality and student achievement and permits West Virginia’s local career technical education centers to pursue Title IV federal funds and other federal aid for adult students.

- West Virginia Community and Technical College System’s nine community and technical colleges offer certificate and associate degree programs through the West Virginia Council for Community and Technical Education system. These institutions are accredited through the North Central Association Commission on Higher Learning (NCA-HLC) which is a regional accreditor recognized by the United States Department of Education.

The collaboration between the community and technical colleges, WVDE, and local WDBs emphasized in Table 1 below, demonstrates the state’s coordinated efforts to both collaborate on statewide workforce development activities and address the education and skill needs of individuals who seek skills training.

Table 1. West Virginia CTE and Workforce Collaboration

Goal 1: Focus on Employers System Partner Strategy	Agency	System Objective
Involvement of business and industry in workforce skills training and skills review and programs of study development.	West Virginia Community and Technical College System (WVCTCS) West Virginia Department of Education (WVDE) Workforce West Virginia (WFWV)	Increase business and industry involvement
Use third-party, industry-based certifications where relevant as an education or training outcome to connect graduate competencies to job skill requirements.	WFWV WVDE WVCTCS	Expand licensure and industry certification
Align career and technical education program content and outcomes with third-party, industry-based certifications.	WVDE WVCTCS	
Goal 2: Engage in Partnerships System Partner Strategy	Agency	System Objective
Increase access to, referral between, and outcomes of adult education programs and services.	WVDE WVCTCS WFWV	Expand partnerships with system partners and stakeholders to promote collaboration, joint planning, and enhance participant outcomes

Goal 3: Align System Elements System Partner Strategy	Agency	System Objective
Develop and implement programs of study in community and technical colleges and align with secondary programs of study.	WVDE WVCTCS	Provide services, programs, and policies to facilitate effective and efficient transitions

As a part of the work outlined in the state’s workforce strategic plan, WVCTCS and WVDE engaged members of the workforce to advise in the development of CTE programs of study, including coherent sequences of courses, industry-based certifications, and work-based learning to ensure students are prepared for high-skill, high-wage, and in-demand careers in West Virginia (see Figure 1).

Figure 1. Career Pathway Metric



From this work 35 Advanced Career Education (ACE) pathways, developed with resources and support from the Southern Regional Education Board (SREB), are now in place in the state’s secondary technical centers and high schools to mirror West Virginia’s community and technical colleges’ programs of study.² Secondary ACE pathways lead to occupations that meet West Virginia labor market criteria for projected job growth, annual job openings, and the state median wage. Many of these pathways allow secondary students to earn graduation endorsements, industry credentials of value, and postsecondary certifications that link to college degrees and in-demand careers.

Advanced Career Education pathways are just one aspect of the state’s comprehensive Career Pathway Project which also includes adult education Advanced Career Education (ACE) pathways and a new initiative, called the Guided Pathways Project, that will comprehensively develop statewide secondary to postsecondary career pathways (see section B.2.a.).

² West Virginia state law mandates Advanced Career Education pathways for adults. Secondary CTE pathways developed with SREB resources are also called Advanced Career Education pathways. Though the terminology is identical, the content and structure of the state’s two sets of ACE pathways are different.

The WVDE Division of Technical Education and the Governor's Economic Initiative Offices support secondary and postsecondary certificate CTE programs in the state. Secondary CTE programs integrate core academics with a real-world application through Simulated Workplace environments. Secondary CTE programs have adopted the National Occupational Competency Testing Institute (NOCTI) technical assessments and utilize CTE portfolios. NOCTI has been chosen by WVDE to provide state-approved CTE programs of study with a credible means of verifying the knowledge and skills expected by the industry. The NOCTI assessments serve as a quality indicator for West Virginia's CTE programs because they were developed by educators and industry experts across the country to align with national industry standards. The NOCTI assessments have been added to the West Virginia Board of Education (WVBOE) policy to ensure all state-approved CTE concentrators have an opportunity to demonstrate their skill attainment using equal and consistent assessments across the state.

To further ensure students are prepared with the technical and employability skills employers need, all secondary level programs must include: 1) active employer involvement through programmatic advisory councils for each CTE program of study, 2) labor market data-driven alignment with high-skill, in-demand occupations, 3) skill sets based on the national NOCTI standards, 4) a Simulated Workplace instructional environment, 5) opportunities for students to earn credentials of value tied to industry or postsecondary advancement, and 6) a focus on student career goal opportunities.

Similarly, all nine WVCTCS institutions have established advisory committees to advise, develop, and recommend implementation of industry-driven credentials or degrees and statewide programs of study. Representatives from secondary education, postsecondary institutions, and relevant workforce sectors are included on each advisory committee.

From these advisory committees, multiple programs of study have been approved for the Construction, Health Sciences, and Information Technology career clusters. The state's community and technical colleges have partnered with more than 700 businesses across the state utilizing state-funded initiatives such as:

- The Rapid Response Advance Grant which awards colleges that partner with industries on projects that address the state's workforce needs, including pre-employment programs, pre-preparation programs, skills upgrades, new and expanding companies, and job retention.
- The Technical Program Development Grant which supports the creation and development of technical programs that are in high demand and lead to high-wage careers.
- The Learn and Earn program which connects employer with college students wanting to gain work experience while completing technical courses.

Over the last decade, WVCTCS colleges have created nearly 150 customer training programs and over 250 certificates and applied degree programs through partnerships with business and industry. Customized training and degree programs have also been developed to meet

employer workforce needs and connects West Virginians with careers.

B.1.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)

In July 2018, the state formalized its strategic vision for preparing an educated workforce with the launch of an initiative called West Virginia's Climb, which aims to equip 60% of West Virginians with a certificate or degree by 2030. Currently, only approximately 34% of West Virginia's adult population holds a certificate or higher. Workforce projections estimate that at least 60% of working-aged West Virginians will need a certificate or degree in order to meet future workforce needs to maintain a healthy economy.

Individually, WVDE and WVCTCS have visions that align with the vision of West Virginia's Climb. West Virginia Department of Education's vision is to provide an effective and quality system for learning that supports and empowers West Virginia students to:

- Develop the knowledge and skills to become lifelong learners;
- Promote a culture of responsibility and personal well-being to become engaged community members;
- Prepare for the future with a pathway to workforce readiness.

The WVCTCS vision is for a globally and nationally competitive community and technical college system that is the 'first choice' for workforce development and provides affordable access to postsecondary education. The community and technical college system will be an entrepreneurial, comprehensive community and technical college system comprised of responsive, collaborative, and innovative colleges with the flexibility to meet the education and training needs of West Virginia's students and employers. The system will:

- Be futuristic, strategic, and innovative in its planning and program delivery;
- Provide proactive and responsive services to business and industry;
- Increase the educational attainment of West Virginia's citizens and provide life-long learning opportunities that are accessible and customer-driven;
- Deliver programs anywhere, anyplace, anytime, by any means or device;
- Celebrate and promote diversity;
- Utilize cutting edge technology; and
- Deliver relevant, rigorous and modularized curriculum.

Most job growth in West Virginia comes from industries that rely heavily on CTE. The four most rapidly growing industry sectors are: healthcare, information technology, manufacturing, and energy. Each of these industries has seen rapid job growth for individuals who hold at least a recognized industry credential or an associate degree. Table 2 lists the ten areas identified by

WFWV as the fastest growing in West Virginia.

Table 2. Fastest-Growing Services and Industries in West Virginia

Health Care Services	Professional, Scientific and Technical Services
Hospitals	Waste Management and Remediation Services
Social Assistance	Couriers and Messengers
Nursing and Residential Care Facilities	Data Processing, Hosting, and Related Services
Administrative and Support Services	Amusement, Gambling, and Recreation Industries

To meet workforce demands, the state plans to promote CTE programs that already exist, as well as identify and create emerging programs of study for the future. West Virginia Community and Technical College System and WVDE are working together to leverage the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) to meet the following goals that align with the vision of West Virginia’s Climb initiative:

- Increase the number of students who have access to high-quality career pathways starting in high school and address the barriers to participation and completion.
- Leverage Perkins funding to provide targeted supports and district-wide reforms that will help close educational attainment gaps, specifically for students of color, students with disabilities, and students from low socioeconomic backgrounds.
- Promote and expand education opportunities for communities that have been historically underserved in West Virginia.
- Continue to leverage data used for Perkins reporting to identify equity gaps and explore potential causes and interventions to eliminate these gaps in student success.
- Continue to collaborate with stakeholders (employers, community organizations, etc.) to increase articulated credit, dual enrollment, dual credit offerings, and bridges to postsecondary education.
- Expand work-based learning and apprenticeship opportunities and enhance student awareness of CTE while supporting student success.

The state’s vision and goals for CTE will also be met by supporting secondary and postsecondary programs in meeting the size, scope, and quality requirements outlined in Section B.2.h. and the state determined performance levels detailed in Section D.2.

West Virginia's approach to college and career-readiness ensures that students exit high school with a complete understanding of the career opportunities available to them, the education necessary to be successful in their chosen pathway – whether going directly to work or advancing to postsecondary education – and a plan to attain professional goals. To accomplish the state’s vision, West Virginia engages in a variety of initiatives summarized in Table 3.

Table 3. West Virginia’s CTE Programs and Initiatives

Secondary	Postsecondary
College and Career Readiness Standards Simulated Workplace	West Virginia Invests
WV Adult Education program	Learn & Earn
Governor’s Economic Initiatives	Rapid Response Advance Grant
Career Technical Education	Tech Program Development
Office of Diversion and Transition Programs	Tech Scholars Program and 15 to Finish

The Tech Scholars program listed in the table above provides scholarships to students who enroll in high-demand postsecondary CTE programs. The Learn & Earn program connects college students with employers so students can earn money and gain valuable work experience while completing postsecondary technical education courses. 15 to Finish is a national initiative encouraging postsecondary students to earn sufficient college credits each semester (15 credits per semester) to graduate on-time. Other programs listed in Table 3 are explained in more detail later in this document.

The partnership between WVCTCS and WVDE strives to prepare an educated and skilled workforce (including special populations) to meet the demands of employers, including those in existing and emerging in-demand industry sectors.

B.1.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)

There is a need for greater alignment, transparency, and coordination between the state’s K-12 and higher education systems. To address this need, the chancellor of WVCTCS and the state superintendent for WVDE recently created an Interagency Joint Leadership team.

The team focuses on six areas, broken down into subcommittees, focusing on teacher preparation, the P-20 data system, strategic plan initiatives, the Perkins V State Plan, student social-emotional health, and how the agencies align communication efforts to effectively reach education stakeholders and the general public. The subcommittees meet regularly to share information, coordinate ongoing efforts, align shared goals, and jointly plan future activities. The Perkins V State Plan subcommittee is specifically tasked with aligning CTE from K-12 to community college education via career pathways to the workforce. To deliver these services, the collaborative team will meet quarterly to align programming, review local applications, and

make recommendations about funding for competitive grants focused on improving Perkin's performance outcomes and Guided Career Pathways as outlined in C.3.

At the local level, nine career-preparation consortia provide links between secondary and postsecondary CTE. Each consortium is comprised of a WVDE and WVCTCS district and the secondary level districts within its borders. These consortia include all 398 elementary schools, 162 middle schools, and 120 high schools in the state. They also consist of 24 CTE centers, seven multi-county centers, 21 education programs in juvenile centers within institutional programs, and 119 students enrolled in West Virginia Schools for the Deaf and the Blind.

West Virginia's Consortia include the following:

- Shenandoah Valley Consortium: CTC Institution: [Blue Ridge Community & Technical College](#): Counties Served: Berkeley, Jefferson, Morgan
- Mid-Ohio Valley Consortium: CTC Institution: [WVU at Parkersburg](#): Counties Served: Jackson, Pleasants, Ritchie, Roane, Tyler, Wirt, Wood
- North Central Consortium: CTC Institution: [Pierpont Community & Technical College](#): Counties Served: Barbour, Braxton, Calhoun, Doddridge, Gilmer, Harrison, Lewis, Marion, Monongalia, Preston, Randolph, Taylor, Upshur
- Northern Panhandle Consortium: CTC Institution: [West Virginia Northern Community College](#): Counties Served: Brooke, Hancock, Marshall, Ohio, Tyler, Wetzel
- Potomac Highlands Consortium: CTC Institutions: [Eastern West Virginia Community & Technical College](#)
Counties Served: Grant, Hampshire, Hardy, Mineral, Pendleton, Tucker, and the WV Schools for the Deaf & Blind
- Southeastern Consortium: CTC Institution: [New River Community & Technical College](#): Counties Served: Greenbrier, Mercer, Monroe, Nicholas, Pocahontas, Raleigh, Summers, Webster
- Southern Mountains Consortium: CTC Institution: [Southern West Virginia Community & Technical College](#): Counties Served: Boone, Lincoln, Logan, McDowell, Mingo, Wyoming
- Advantage Valley, West Consortium: CTC Institution: [Mountwest Community & Technical College](#): Counties Served: Cabell, Mason, Putnam, Wayne, Collins Career Center (Lawrence Co., OH)
- Advantage Valley, East, Consortium: CTC Institutions: [Bridge Valley Community and Technical College](#): Counties Served: Clay, Fayette, Kanawha, Putnam, Nicholas, Raleigh

Local consortia and staff have identified sixteen career clusters within the West Virginia Career Cluster Initiative (see Appendix C) based on the nationally defined 16 National Career Clusters framework.³ The local CTE administrator coordinates secondary to postsecondary student transitions through dual credit and articulation agreements, as well as activities that focus on professional development for high school and technical college staff including counselors, instructors, and administrators.

³ <https://careertech.org/career-clusters>

To help achieve West Virginia's goals for CTE, WVDE and WVCTCS also collaborate with employers, WFWV, and the Department of Commerce to align the state's CTE goals with the state's WIOA strategies. West Virginia's WIOA plan acts as the primary driver of workforce development efforts among all public agency partners. The state superintendent and president of BridgeValley Community and Technical College System are active members of the WIOA Board. All WIOA partners who register with WFWV work collaboratively to enhance job

readiness and placement efforts, and support career planning.

In addition, WVCTCS and WVDE collaborate with the West Virginia Division of Rehabilitation Services, which specializes in serving individuals, including high school students, with the most significant disabilities; and adult education programs that serve individuals aged 16 years or older who are not required to be enrolled in the public school system. By coordinating activities at the state and local levels, a comprehensive service delivery system can be developed and strengthened to provide students with the highest quality services.

At the secondary level, the WVDE is charged with developing the ESSA state plan and articulating how it will strengthen and support student achievement. The major components of the ESSA state plan address school accountability and improved student learning by supporting improvements in academic standards, assessments, and educator training. The plan details a comprehensive, individualized system of support that utilizes education partnerships to promote student success and matriculation to one of the state's community and technical colleges.

Business and industry representatives inspect West Virginia's Simulated Workplace classrooms to ensure alignment with industry needs. Using a scorecard, these representatives evaluate CTE program facilities, safety, equipment, space, tools, supplies, technology, professional skills, customer service, and teaching materials. Results are communicated to administrators and teachers so that classrooms can improve over time.

West Virginia's community and technical colleges often graduate students with a 100% job placement rate which means participating students gain employment right out of college with the same employers who provided their training. These programs leverage a company's training dollars to strengthen student success. As one example of the power of these partnerships, West Virginia's community and technical colleges delivered nearly 800,000 hours of training in 2016-17 alone. WVCTCS also leverages funds among the state's CTE initiatives and programs of study, thereby seamlessly aligning itself to strategic vision and goals that are supported by Perkins legislation.

B.1.d. Describe how the eligible agency will use State leadership funds made available under section 112(a)(2) of Perkins V for purposes under section 124 of the Act. See Text Box 2 for the required uses of State leadership funds under section 124(a) of Perkins V. (Section 122(d)(7) of Perkins V)

Perkins state leadership funds are used to support direct efforts at both the secondary and postsecondary levels to improve CTE across West Virginia. At the secondary level, annual funding is allocated for WVDE CTE coordinators who are assigned to specific programs of study by cluster and aligned with their professional expertise in these areas. West Virginia's community and technical colleges use state leadership funds to directly support the state's CTE goals through the delivery of high-quality technical education and training.

Secondary level CTE coordinators provide services that focus on targeted monitoring assistance, programming in non-traditional occupations (NTO), collaborating with CTE instructors and community and technical college faculty in the creation of Guided Pathways and programs of study, establishing Earn a Degree Graduate Early (EDGE) dual credits and opportunities to earn industry credentials of value, facilitating professional development for teachers to deliver Guided Pathways instruction, and assuring students have work-based learning experiences in Simulated Workplace environments, as well as internship and apprenticeship opportunities

with business partners.

In addition to supporting CTE coordinators, funds will be made available through a competitive grant process to Local Education Agencies (LEAs) or consortia for initiatives designed to expose students (particularly members of special populations) to NTO opportunities through hands-on learning in NTO fields and high-skill, high-wage, and in-demand occupations. The LEA is accountable for the implementation of all local, state, and federal policies, as well as fiscal management and curriculum integration. These standards are implemented, monitored, enforced, and evaluated as documented in an annual LEA Plan. The amount of state leadership dollars allocated to promote enrollment and completion in non-traditional programs of study is \$70,000.

West Virginia Department of Education provides \$73,368 annually from state leadership funding to education programs in juvenile centers for CTE programming, including updating curriculum, equipment, and providing training opportunities in high-skill, high-wage, and in-demand occupations.

State leadership funds are also used by WVDE to provide technical assistance and professional development for educators and to support personnel through statewide CTE meetings. The focus is on implementing Perkins grants by using performance data for gap analysis, identifying promising CTE strategies, and developing and evaluating quality CTE programs. West Virginia Department of Education CTE staff members are assigned to programs of study consistent with their cluster area expertise and continually analyze CTE accountability data to determine the lowest and highest performing Simulated Workplace programs of study. See the sample CTE Data Profile in Appendix D.

Under Perkins V, state leadership funds will also be utilized to focus on middle school career awareness and hands-on exploration.

At the postsecondary level, WVCTCS uses state leadership funds to support its nine community and technical colleges through a grant program and local application process. Funds must be used to increase access to opportunities in Science, Technology, Engineering, and Mathematics (STEM) programming increase technical skills attainment opportunities for current and potential students promote Guided Pathways in STEM programs, increase student retention and completion rates, identify and use stackable credentials, and provide industry-related training that leads to increased job placement rates for students.

Perkins state leadership grants will be used for recruiting, preparing, or retaining CTE faculty, developing and revising course-specific instructional supports for personnel and paraprofessionals. These grants also support:

- Professional development projects
- Improvement of career and academic counseling
- Improvement of academic and career and technical skills
- Improvement of student achievement through educational partnerships
- Integration of programs of study and development of guided pathways across career and technical education and academics program
- Development, improvement, or expansion of technology
- Recruitment of non-traditional students in traditional careers
- Statewide evaluation for student success as it relates to student attainment of a

credential, certificate, or diploma

Overall, postsecondary state leadership funds support projects that (1) contribute to the overall advancement of CTE in the state as opposed to projects that benefit a single institution; (2) focus on improving a specific CTE area; (3) have a budget that shows how the planned project and related activities will be sustainable without continued federal funding through Perkins or other sources; (4) include a plan for the implementation of the project's goals and deliverables after funding ends; and (5) where appropriate, partner with secondary and postsecondary education institutions. Projects related to curriculum development or redesign must indicate adherence with applicable West Virginia education code.

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

B.2.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)

Establishing statewide career pathways is a priority for WVDE and WVCTCS. To initiate this process, the state engaged members of the workforce, secondary education, and higher education to advise on the development of state-level programs of study including coherent sequences of courses, industry-based certifications, and work-based learning to ensure students are prepared for high-wage, high-skill, and in-demand careers in West Virginia.

The WVDE and WVCTCS also conducted a process to identify high wage, high-skill, and in-demand occupations in West Virginia using stakeholders from the West Virginia Workforce Development Board, WFWV, LEA teachers and administrators, and industry representatives. EMSI provided the data and analysis for this comprehensive report. Occupations to target were identified utilizing a median growth rate of 17%, a median annual salary of \$35,339, and a minimum annual number of openings floor of 50, each based on data from all occupations in West Virginia.

From this work, WVDE and WVCTCS identified two programs of study that are in-demand, high-wage, with a high-skill level requirement to begin the development of West Virginia's Guided Pathways; Health Sciences and Information Technology. The program development phase will be carried out in summer 2020, followed by a process for developing and pilot testing two aligned statewide pathway programs.

WVDE and WVCTCS will identify K-12 teachers and college instructional faculty in the Health Sciences and Information Technology programs. These high school and college faculty from each of the nine community colleges will work with their high school counterparts to design a statewide framework for Guided Pathways in career and technical education.

The Information Technology Career Cluster will have four programs of study to guide students to their desired occupation in:

- Network Systems
- Information Support and Services
- Web and Digital Communications
- Programming and Software Development

The Health Science Career Cluster will include five programs of study:

- Therapeutic Services
- Diagnostic Services
- Health Informatics
- Support Services
- Biotechnology Research and Development

These programs of study align with those outlined by the U.S. D.O.L.

Using state and national sources, WVDE and WVCTCS high school teachers and college faculty will create a suggested list of master end-of-program standards, including the NOCTI Blueprint skillsets which include statements of knowledge, skills, and abilities (KSAs) for each program. Each KSA will be set at the approximate level for the program completer to earn an initial professional certification (where such certification is recognized or required), and access entry-level employment in the career field.

A facilitator will be used to assist in the development of the two sets of Guided Pathways. These programs of study will provide articulated credit from secondary CTE programs to aligned CTE programs at the state's community and technical colleges. A course sequencing methodology will be used to backward-map the career knowledge and technical skills required of employees in the identified occupations, to the postsecondary preparation (college, trade schools, certifications, etc.) and secondary education and training needed of students. The processes used in this project will be replicated for the development of additional statewide Guided Pathways in future years.

In addition, WVDE and WCTCS will provide information to and seek feedback from state-level personnel on the Guided Pathways process including:

- Governor's Office of Economic Development, director or associate director
- State Senate Education Committee staff member
- State House Education Committee staff member
- WVDE, Offices of CTE and WVDE Governor's Economic Initiatives
- West Virginia Community and Technical College System
- West Virginia Economic Development Authority

Upon completion of the Guided Pathways, CTE teachers and college faculty will be given a stipend to conduct three, one-day professional development sessions with faculty and teachers. Participants will include program instructors from nine campuses and an equal number of CTE teachers from secondary CTE programs. Each day will include a four- or five-hour session focused on one pathway program. Perkins V will continue to support existing pathways of study as outlined in Appendix C.

B.2.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 132 will—

Approvals for all locally developed career pathways are based on similar components and criteria as the state-endorsed regional career pathways. Eligible recipients begin by outlining

how the career pathway or program of study addresses local labor market needs and meets the required elements for size, scope, and quality (see Section B.2.h.).

As part of the secondary application for Perkins funds, eligible recipients must identify at least one career pathway connected to their comprehensive local needs assessment (CLNA). Local applications for funding are reviewed by WVDE CTE staff members who check to make sure that size, scope, and quality criteria are met, and that the local plan supports the development and implementation of pathways with a focus on student outcomes, particularly for special populations.

In order to ensure continuous improvement in academic development and technical skill attainment, local applications for secondary CTE must identify how each program of study includes coherent and rigorous academic and technical content. Reviews consider the degree to which programs:

- Require all CTE students to complete the same rigorous academic core as all other students (currently 22 credits)
- Collaborate with academic teachers in the delivery of instruction
- Embed English and mathematics teachers in technical centers to support student academic skills in the context of challenging technical studies
- Include interdisciplinary projects
- Offer project-based learning that includes both rigorous technical and academic content
- Use differentiated instruction
- Require senior projects and oral presentations
- Use student-managed projects through the implementation of Simulated Workplace protocols
- Align to state standards for career and technical education (WV Policy 2520.13)

Community and technical colleges develop and design new programs of study if it is determined that they meet specific workforce needs locally, regionally, or statewide. All West Virginia secondary- and postsecondary-approved CTE programs of study and subsequent certificates, credentials, and degrees are aligned with the workforce needs of the state and are regularly reviewed for relevance and revised, if needed, through a collaboration with business and industry, the Department of Commerce, and third-party recognized industry organizations such as CompTIA, American Culinary Federation (ACF), the American Welders Society (AWS), etc. Data is collected and analyzed by county, region, and state data systems, the state's higher education and P-20 data systems, and Economic Modeling Specialists International (EMSI) analytics.

WVCTCS is charged by state statute with general authority for academic program approval for West Virginia community and technical colleges. The postsecondary career pathways and programs of study developmental process include the following steps:

- CTE career pathways and programs of study will be identified by the consortium and institutional leadership appointed by the president of the community and technical college, whose members are postsecondary faculty, business and industry professionals, and other CTE experts.
- Rigorous course standards sequenced in each specialization that lead to the industry- recognized credentials of value will be identified.
- Labor market data showing that the career pathway aligns with in-demand, high-wage, and/or high-skill industry sector careers will be validated.

- Business and industry will be involved in the design, validation, implementation, and review of the career pathway structure and content.
- Each local high school will decide if academic credit will be offered for these pathways.
- A team of K-12 teachers and college faculty will design the sequence of courses in each career pathway program of study aligned to its respective accrediting body.
- Courses must meet the same rigorous standards as those required for on-campus instruction or the associated credentialing body.
- Courses must utilize college-approved syllabi, texts, assignments, and assessments or those required by the credentialing body.
- The postsecondary institution must facilitate communication between the appropriate instructional department and the early enrollment faculty member to assure quality.
- Courses will be limited to lower-division undergraduate courses which are jointly agreed upon by the community college and high school.
- Each institution offering early enrollment courses shall establish policies for the routine evaluation of instructors and courses.
- Early-enrollment faculty will be evaluated by college personnel using the same processes as for other faculty.

WVCTCS requires colleges submitting postsecondary CTE programs for approval to follow state procedural rules outlined in [Series 11](#). Series 11 requires that colleges develop proposed programs in close cooperation with business and industry to satisfy a need for timely and effective workforce education. As described above, business and industry experts must provide substantial input into the curriculum design of a proposed CTE program, including the identification of profession-specific knowledge, skills, and abilities and general skills as appropriate, such as oral and written communication, mathematics, computer literacy, and industry-related workplace practices.

All proposed postsecondary CTE programs submitted for WVCTCS approval must contain the following common elements:

- Using national, state, and local industry-based trends, standards, and labor market information, the institution must document pertinent local, regional, or statewide workforce demand for the program.
- Institutions must demonstrate that the proposed award provides the necessary academic skills and the workforce skills, knowledge, and abilities necessary to attain entry-level employment in a target occupation. WVCTCS encourages institutions to develop or adopt skill standards-based curricula and other statewide CTE initiatives developed collaboratively with business and industry. Alternatively, the program competencies must be developed and documented using a curriculum alignment process, or another systematic methodology approved by the institution.
- The final proposed program curriculum must adequately address all identified competencies, and the program's courses must ensure that students have the opportunity to master the competencies. The program's industry advisory committee must take an active role in identifying program competencies and validate the curriculum's capacity to instill the competencies.
- To verify entry-level workplace competencies, the institution must provide at least one of the following for each proposed CTE award: a) capstone experience, b) eligibility for a credentialing exam or c) an external learning experience. The experience should occur during the last semester of the student's educational program.

- Programs must be designed to permit maximum access for students by establishing linkages with other programs in public secondary schools and/or other institutions of higher education, as well as non-duplication with similar programs within the higher education region or service area. Linkages may be demonstrated by articulation agreements that provide for student transfer, inverted degree plans, and advanced standing opportunities.
- The program design must be consistent with the standards of the Higher Learning Commission (HLC) and with the standards of other applicable accrediting agencies and must comply with appropriate licensing authority requirements.

WVCTCS requires that colleges establish an industry-based advisory committee for each workforce education program. Advisory committees may be organized by career cluster, provided that each individual program is reviewed, the committee has the necessary expertise, and ample time is allotted for each program. The role of an advisory committee is to 1) help a college document the need for a workforce education program and 2) ensure that the program has adequate resources and a well-designed curriculum to provide students with the knowledge, skills, and abilities essential for employment. The advisory committee is one of the principal means of ensuring meaningful business and industry participation in program creation and revision.

All degree programs must include a complement of general education requirements appropriate to the level of the degree. Therefore, the process and criteria used for approving locally developed programs of study or career pathways require the use of nationally standardized nomenclature regarding certificate and associate degrees and the nationally promulgated standards for the general education components of the respective degrees.

B.2.b.i. - promote continuous improvement in academic achievement and technical skill attainment;

Business and industry reviews play a key role in the continuous improvement system for West Virginia's secondary and postsecondary CTE programs.

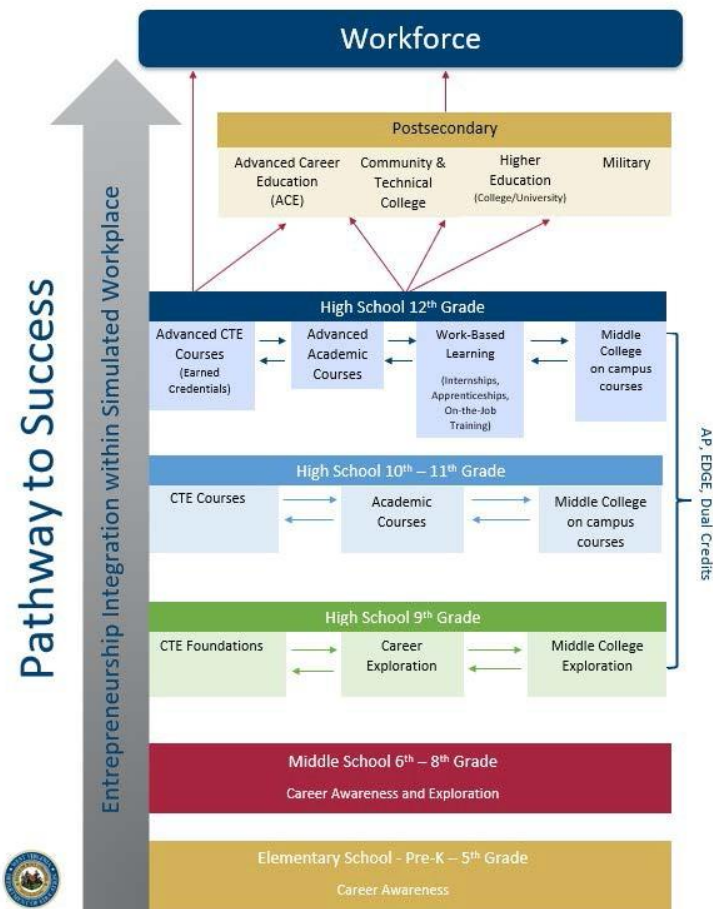
At the secondary level, business and industry reviews are used by all Simulated Workplace stakeholders to ensure programs and employers are maintaining high-quality standards. Additionally, NOCTI technical skills assessments have been chosen by WVDE because they are aligned with the knowledge and technical skills expected by industry and developed by subject-matter experts.

NOCTI provides schools, districts, and state entities with the ability to accurately assess student and program needs, gaps, growth, and/or strengths, thus creating a high-quality CTE ecosystem across the state that encourages continuous improvement. NOCTI and the West Virginia Education Information System (WVEIS) have developed and implemented an accountability system comprised of tools that assist schools in easily transferring student data and assessment results between platforms, alleviating time management challenges, and duplication of information for school personnel. NOCTI serves as the platform for directors, administrators, instructors, student leaders, advisory board members, and WVDE staff to complete these reviews.

Certificate and degree programs offered at the postsecondary level are reviewed on a three-year basis that includes examining enrollment, graduation rates, and retention numbers. Data are also collected to determine whether graduates are acquiring jobs in their field of study. When programs are not making sufficient progress, a recommendation may be made for closing or altering the program.

The colleges review programs both for viability in the labor market and to identify areas for improvement based on student outcomes (e.g. successful course completion, equity gaps, retention rates, viability, and adequacy, etc.). The Board of Governors selects approximately 20% of all programs for review each year. For the assessment of student metrics, WVCTCS provides interactive data dashboards to colleges to more readily identify areas for program improvement.

Each of the nine community and technical colleges also utilizes local advisory boards and committees to promote continuous improvement at the postsecondary level in academic achievement and technical skill attainment. The advisory committees are comprised of representatives from business and industry who offer their knowledge and expertise to the



community and technical college faculty and administrators on the design, development, implementation, evaluation, maintenance, and revision of instructional programs in workforce instruction for the purpose of producing world-class programs.

To ensure the college's academic and technical skill programs meet accrediting standards set by the HLC, a culture of continuous improvement by HLC includes improvement as one of two major strands in all its pathways. HLC expects that institutions have the standards, the processes, and the will for quality assurance throughout their educational offerings.

The continuous improvement assessment is grounded in evidence-based institutional learning and self-presentation, integrity, transparency, ethical behavior or practice, governance for the well-being of the institution, planning, and management of resources to ensure institutional sustainability, mission-centered evaluation, and accreditation through peer review

Moreover, state policies direct the WVCTCS in the approval and discontinuance of academic programs and establish processes by which institutions can request approval of new academic programs.

B.2.b.ii. expand access to career and technical education for special populations; and

Services will continue to be made available to all students in special populations enrolled in CTE courses and programs. At the secondary level, the strategies for serving students with disabilities vary depending upon students' individualized education plans (IEP) but may include remediation, curriculum and instructional modifications, facility modifications, and instructional aids and devices. Support personnel will be provided to students as needed. The Division of Technical Education and Governor's Economic Initiatives (DTEGEI) works closely with the WVDE Office of Special Education to ensure that exceptional students are served in career and technical programs statewide and that all eligible recipients follow state policies governing special education.

Annual Office of Civil Rights compliance reviews of secondary and postsecondary sub-recipients are conducted based on Title IX, Title VI of the Civil Rights Act, Section 504 of the Rehabilitation Act, and Title III of the Americans with Disabilities Act (ADA). The purpose of the reviews is to ensure students enjoy equal access to CTE programs and services regardless of race, color, national origin, sex, economic level, or disability.

The WVDE plans to expand the guidance and counseling services afforded to special populations who need additional support in order to succeed in CTE programs of study. Annually collected and disaggregated student participation and achievement data will also be analyzed to identify special population outcomes and to target interventions. This information will be used to guide efforts at both the state and local levels to improve student access and outcomes.

West Virginia community and technical colleges are open-access institutions that support diverse students from across the state. All college programs and student services are compliant with federal policies including the ADA are periodically reviewed by the West Virginia Council for Community College Education and the West Virginia Higher Education Policy Commission system office. Internal reviews are done at each institution.

West Virginia community and technical colleges are dedicated to expanding access to CTE pathways, especially for special populations. The colleges have defined access as an essential element of a high-quality CTE pathway and believe all students should be provided ample opportunities to attain the necessary knowledge and skills required to maximize their individual goals. The state also believes that high-quality CTE pathways that integrate CTE and academics help: increase readiness, Improve career advancement, and provide economic stability for all genders, races, socioeconomic backgrounds, and ability levels. Eligible recipients are encouraged to design career pathways that are inclusive of special student populations.

The state aims to further address equity and access barriers in CTE program enrollment, participation, and completion as the Perkins V State Plan is implemented. Expansion of services to special populations will be part of the development process in creating the new Guided Pathways. High-quality career pathways can help to eliminate achievement gaps by providing students information on how to access programs, services, and rigorous course work regardless of region, gender, socioeconomic status, special needs, or English proficiency.

B.2.b.iii. support the inclusion of employability skills in programs of study and career pathways. (Section 122(d)(4)(B) of Perkins V)

Employability skills are a required focus of all secondary CTE programs in West Virginia. CTE programs of study encompass a mix of academic, employability, and technical skills necessary for employment and continued study. Complementing this focus, the state is participating in the SREB's *Technology Centers and High Schools That Work* initiatives. This undertaking requires schools to focus on enhanced assignments utilizing project-based learning (PBL) format, which deepens student understanding of content and expands it with the use of technology, independent research, use of a design process to solve authentic workplace problems, and team-focused applications. West Virginia Department of Education intends to expand this work across all technical centers, comprehensive high schools, and middle schools over the next five years.

Employability skills will continue to be further developed in all CTE students through active participation in Simulated Workplaces. The West Virginia Simulated Workplace model is a required environment for all secondary CTE offerings (State Board Policy 2510) because it:

- Presents the curriculum in a more relevant and purposeful manner.
- Places business and industry processes directly into CTE programs.
- Incorporates foundational academic and career-ready skill sets.
- Provides students a multifaceted understanding of an industry or business, and helps them connect their individual successes to company profitability.

- Provides each student with an understanding and knowledge of how knowledge of STEM, along with ethics, workplace processes, teamwork, and behavior are integral skills for career success.

WVCTCS follows a prescribed process (detailed in the state’s Series 11 procedures) that uses industry-based committees to review and revise the employability skills embedded in postsecondary CTE programs. WVCTCS utilizes state leadership funds to support this work.

Because all Perkins eligible recipients are required to integrate employability skills in career pathways offered at the local and regional levels, secondary and postsecondary programs will be expected to provide evidence of this in their local application for funding. West Virginia provides a variety of resources to encourage and support the teaching of employability skills including numerous professional development activities, a variety of online resources, frequent training and conferences, and funding incentives. West Virginia looks forward to consulting with stakeholders to expand and refine existing employability skills development implementations.

B.2.c. Describe how the eligible agency will

B.2.c.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;

The success of CTE at both the secondary and postsecondary levels is dependent on the ability of students to make informed choices to participate in quality, relevant career preparation programs. The West Virginia Department of Education and WVCTCS make information on approved programs of study and career pathways available to students and families in several ways, beginning in middle school.

WVBE Policy 2510 requires that each sixth-grade student has multiple opportunities to investigate careers in each of the 16 National Career Clusters, explore postsecondary training options related to various careers, and complete a variety of self-discovery inventories. In grade eight, each student in consultation with his or her parent and/or guardian and the school counselor or advisor must have the opportunity to select a broad career cluster of interest for future exploration in high school. The student may amend his or her Personal Education Plan (PEP) at the end of any semester if it does not interfere with the completion of graduation requirements.

In grades 11-12, students enter a more personalized aspect of their PEP, focusing on selected coursework that leads to the successful completion of personal and academic goals. While the

the process defined in Policy 2510 is intended to provide students and parents opportunities to explore and set informed career goals, the challenge is assuring that the provisions are equitably afforded to students and families in all schools.

In addition, West Virginia's *Pathways to the Future* website (pathwayswv.org), maintained by the Division of Rehabilitation Services, helps students and families receive up-to-date information on programs of study and career pathways, career exploration, work-based learning opportunities, and guidance and advisement resources. The site provides information on postsecondary dual credit, concurrent enrollment, and early college high school opportunities. Middle and high school counselors around the state utilize the website. It is also promoted to parents by the Transition Technical Assistance Center (funded by the WVDE Office of Special Education).

WVCTCS communicates CTE information to students and parents via agency websites, targeted marketing strategies, social media, annual events, and coordination between secondary and postsecondary representatives. Every college has dual enrollment programs, and several are developing early college enrollment programs. WVCTCS provides resources and support to each college for the dissemination of CTE opportunities and career exploration. Colleges share all aspects of CTE as well as dual enrollment opportunities with potential students, parents, employers, education partners, and other stakeholders. This communication is shared in multiple formats (e.g., magazines, social media, [videos](#), and [reports](#), etc.) and in multiple places (e.g., West Virginia Department of Motor Vehicle offices and Workforce Development offices) and is accessible for easy understanding.

A new WVCTCS marketing campaign deploys digital advertising to reach prospective students from diverse backgrounds. These targeted advertisements and videos have already received over 3,000,000 views on various social media platforms. Both WVDE and WVCTCS use social media (Facebook, Twitter, YouTube, Instagram) to broadcast information about CTE offerings, opportunities, and events statewide. In addition, the WVCTCS sends "WTCS-in-Brief" weekly e-news updates on CTE to education partners, employers, and community members, and shares information about pathways and programs of study during various student-centered events, including an annual Student Success Summit, College Application and Exploration Week, and via a College Ambassador program.

Secondary and postsecondary representatives often coordinate to share CTE information, brochures, and other materials with teachers, students, and parents. Many secondary CTE programs provide online information about CTE programs of study and each college website has links to catalogs with programs of study offerings.

To complement these efforts, the West Virginia secondary and postsecondary career and technical education system under Perkins V will develop a joint marketing and informational campaign – based on survey responses received in the transition year – to assure that all stakeholders are aware of the career development opportunities available to them. This effort will include expansion of the current public broadcasting focus on opportunities in CTE, joint

development of radio and TV advertisements, creation of informational brochures for students and parents, and the formation of a joint marketing and informational taskforce focused on statewide outreach.

B.2.c.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;

West Virginia's regional career pathway collaboratives (described in Section B.2.c.v.) bring together secondary schools, technical colleges, workforce development representatives, and local businesses and industries to develop, coordinate, and review CTE programs. This quarterly process results in secondary level career pathways that offer stacked credentials linked to the postsecondary pathways provided by regional technical colleges. As mentioned in B.2.b. ii., the state's processes and criteria for approving programs and career pathways include creating multiple entries and exit points within a program, aligned with workforce need based on local and statewide data.

The state also facilitates eligible recipient collaborations through the CLNA process, the pathway approval process, and program articulation and program alignment.

The WVCTCS collaborates with WVDE to promote engagement in secondary-postsecondary partnerships and cross-college collaborations. Each of West Virginia's nine technical colleges has career advisors, deans, and vice presidents of instruction and workforce to coordinate and facilitate collaboration with the high schools in their district in creating articulation agreements or transcript credits.

To facilitate further collaboration among eligible recipients, WVCTCS and WVDE plan to host regular meetings with CTE Pathway Design Teams, CTE and postsecondary leadership, curriculum leaders, superintendents, and administrators to provide professional development regarding pathways and programs of study, articulation agreements, and advisory committees.

B.2.c.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;

As detailed in B.1.a., WVDE employs several methods to determine the alignment of programs of study to state, regional, and local labor market demands including:

- Requiring secondary CTE programs to have local advisory committees comprised of various stakeholders including representatives of local businesses and industries. All secondary schools must have a minimum of two advisory committee meetings per year and the online Business and Industry Evaluation Tool is to be implemented during one of the meetings. Advisory members use this tool to provide programmatic feedback.
- Providing a Simulated Workplace instructional environment.

- Ensuring that CTE teachers and administrators communicate with employers and examine labor market data to stay current with their field of expertise.

CTE administrators submit a new program of study approvals into the online LEA application process from October to February 1st each year. Before submission, they must research the labor market need for the program from the Approved State Programs of Study list in WVBOE Policy 2520.13.

The biennial CLNA is another process that supports the alignment of career pathways and programs of study with the needs of the state, region, and local economy. Through the CLNA, all eligible secondary and postsecondary recipients funded through Perkins V must assess the alignment of their programs with labor market needs including:

- Evaluating the current labor market needs in comparison to current CTE programs of study offerings. In each locality, recipients should determine whether there are needs in local labor markets that are not being adequately addressed. This evaluation may serve to identify additional program offerings for future planning and development.
- Evaluating all planned program offerings to determine their alignment with local labor market needs. Any program that is not aligned will not be eligible for the use of Perkins V funds. Recipients will be required to maintain local documentation of this alignment process.

The WVCTCS also ensures that postsecondary CTE programs are aligned with state, regional, or local labor market needs via the program approval and annual review process.

As part of postsecondary program approval and annual review processes (outlined in the [Policy Regarding Program Review](#)), eligible recipients provide a comprehensive analysis of labor market information using data from EMSI, the Bureau of Labor Statistics, WFWV, or the Department of Commerce. For new and emerging occupations, eligible recipients supplement quantitative labor market data with results from surveys, interviews, and advisory committee focus groups. Within this analysis, eligible recipients address labor market demands and projections, how these demands may be met by similar programs that are already offered at the college or through consortia, and examine the necessary level of education and skills required for workers in these in-demand fields.

Many of the state's high-demand career fields, including new and replacement jobs identified in WFWV's statewide long-term occupational projections, are matched with the appropriate WVCTCS program. The list of high-demand fields is updated every two years as WFWV updates its projections.

B.2.c. iv. - ensure equal access to approved career and technical education programs of study and activities assisted under this Act for special populations

West Virginia affirms its continuing commitment to provide and ensure equity and access by students in all CTE programs and related activities at the secondary and postsecondary levels.

The state requires LEAs to design educational environments that are responsive to and supportive of the needs of special population students. This includes developing or disseminating training and informational materials for administrators, faculty, counselors, and student support staff to assist students who are members of special populations gain access to and succeed in quality CTE programs; providing adaptive equipment and services; and ensuring the flexibility of program schedules to accommodate working students and students with young children.

All students, including those who are members of special populations, are taught to the same challenging academic standards as taught to all other students. State performance standards, whether required by state education legislation or the Perkins Act, apply to all students including special populations.

At the secondary level, two targeted options exist for students with IEPs to complete a CTE program of study:

- The typical completion of a CTE program of study with or without accommodations and supports if a student is capable of passing 100% of the safety exam for the respective concentration.
- The Individual Work Ready Competencies (IWRC) program of study was designed to allow special needs students to enroll in a CTE program of study after a comprehensive review from the IEP team which identifies accommodation needs and targeted skill sets. IWRC is a state-approved CTE career pathway that provides students who have a disability and a current IEP the opportunity to gain valuable work readiness and occupational skills. Students must have originally been enrolled in a typical state-approved CTE program of study where it was determined through classroom assessment measures conducted by CTE staff that the student was not on track to master ALL skill sets associated with the four state-approved sequences of courses.

The state also conducts annual Office of Civil Rights (OCR) compliance reviews of secondary and postsecondary sub-recipients based on Title IX, Title VI of the Civil Rights Act, Section 504 of the Rehabilitation Act, and Title III of the Americans with Disabilities Act to ensure students enjoy equal access to CTE programs and services regardless of race, color, national origin, sex, economic level or disability.

The West Virginia School for the Deaf and Blind offers five CTE programs of study: Agriculture Education, Carpentry, ProStart, Business Education, and Radio Broadcasting. Students may also complete a customized IWRC program of study. Students participate in a curriculum that focuses on hands-on, real-world applications in a Simulated Workplace environment and offers skills-based certifications to prepare them for employment or continuing education after graduation.

The Office of Diversion and Transition Programs offers comprehensive hands-on training for juveniles assigned to court-ordered facilities in CTE programs of study as well as the customized Career Integrated Experiential Learning program. This is a personalized CTE program of study developed to meet student needs by helping students develop marketable job skills and test for multiple nationally recognized certifications.

The state's postsecondary institutions also have policies and procedures in place to ensure equal access to all programs, services, and activities offered. Policies and practices, including

admissions and recruitment, are reviewed regularly to ensure compliance with all relevant laws, rules, regulations, and other requirements. Institutions are encouraged to develop appropriate linkages and partnerships with social services, workforce development agencies, and community-based organizations to provide appropriate services for students in special populations.

To ensure equal access across CTE programs, especially for members of special populations, West Virginia's colleges provide the following:

- Outreach and recruitment to increase student/parent awareness of educational/career options
- Career support (e.g., career development and exploration, field trips, mentoring and exposure with a focus on career paths that include high skill, high wage, or in-demand jobs)
- Academic support (e.g., advisement, tutoring, and special instructional classes)
- Financial support (e.g., for childcare, transportation, books, and instructional materials)
- Access to technology (e.g., developing technology skills to succeed)
- Staff development (e.g., intentional learning about the specific needs of special populations and the most effective tools and strategies to assist special population students and those facing multiple barriers)

West Virginia will continue to invest in providing access to high-quality CTE programs and wholly embraces the new provision in Perkins V requiring states to utilize a portion of their allocation in the recruitment of special populations to enroll in CTE programs. West Virginia is committed to promoting equity and access by eliminating institutional barriers and achievement gaps for all students to realize their educational and career aspirations.

B.2.c.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;

State-endorsed regional career pathways are developed at the state level and made available for adoption by local eligible recipients through the work of regional collaboratives. Regional collaboratives require participation by, and partnerships with, local workforce and economic development boards. Development of career pathways requires alignment to state and local economic and education needs including, as appropriate, in-demand industry sectors and occupations, the ability to earn a recognized postsecondary credential or credit toward a recognized postsecondary credential (earned through a dual or concurrent enrollment program or early college high school), and work-based learning opportunities (including internships, externships, and simulated work environments).

WDBs are actively involved in creating career pathways as indicated in WIOA which states WDBs "shall lead efforts in the local area to develop and implement career pathways within the local area by aligning the employment, training, education, and supportive services." As part of this work, WDBs have deployed sector strategies across West Virginia for career pathway development in collaboration and partnership with technical colleges and secondary education.

Each secondary and postsecondary school is linked to a local workforce consortium. This connection to local workforce development boards ensures workforce input into decisions impacting the development of career pathways and programs of study at the secondary and

postsecondary levels.

Workforce board members are invited to serve on local CTE program advisory committees and participate in Perkins V biennial CLNA discussions. Workforce representatives contribute real-time labor data and information to comprehensive local needs assessment discussions regarding the alignment of pathways to business and industry demands. During these discussions with their education partners, each local workforce development board will have the opportunity to review and discuss data regarding pathways alignment plus student enrollment, completion, and performance.

In addition, both WVDE and WVCTCS review and approve new and updated programs as part of the program approval process. This process involves labor market research and input from local advisory committees to ensure that new and revised programs meet workforce demands locally and/or at the state level.

Based on stakeholder input, a stronger line of communication between secondary and postsecondary education, parents and industry is needed. To address this need, the state team will develop marketing and data analysis materials to increase awareness and encourage commitment to CTE in West Virginia. Administrators and education leaders will be provided with data dashboards and marketing materials to share with the local workforce boards, community leaders, business and industry partners, and other stakeholders. Diffusing a unified message and equipping workforce and education leaders with the data and materials they need to advocate for CTE will yield stronger partnerships between educators, workforce development teams, policymakers, and employers.

B.2.c.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

West Virginia's secondary schools, career centers, and postsecondary institutions support effective and meaningful collaborations with employers in multiple ways including through:

- Advisory committees and district boards
- Job shadowing, tours, and fairs
- Internships and work-based learning opportunities
- Employer guest speakers
- Mock interviews with employers
- Clinicals (e.g., CNA, Nursing)
- Apprenticeships (employer-paid college instruction while gaining paid work experience)
- Re-entry programs for veterans, out of work individuals and persons who had been incarcerated

Based on the results of statewide Perkins V State Plan surveys regarding this topic, stakeholders consider advisory committees – those comprised of secondary teachers, administrators and staff, business and industry partners, student alumni, school district leadership or board members and postsecondary faculty – vital to connecting with industry to identify jobs that provide family-sustaining wages. Advisory committees are the heart of the collaboration between employers and education, as they are the best opportunity for stakeholders to come

together to make meaningful decisions based on the needs of the local community. The committees advise the pathway and program instructors regarding industry-standard equipment and procedures, internship/work-based learning opportunities for students, appropriate curriculum, and resources vital to a quality program. West Virginia will continue supporting CTE programs that offer experience in, and understanding of, all aspects of industries by connecting CTE programs to local business and industry partners.

Together, WVDE and WVCTCS foster students' understanding of all aspects of an industry in a number of additional ways including:

- WVCTCS Learn and Earn. This wage match program provides students the opportunity to have paid-work experiences while completing their postsecondary program.
- Entrepreneurship education. Because entrepreneurship programs have a proven track record of keeping students in school, each CTE program is encouraged to promote these programs by using the national standards for entrepreneurship education. West Virginia is a member of Entre-Ed, the National Consortium for Entrepreneurship Education.
- Work-based learning experiences and WBL Toolkits. Students gain valuable work experience and understanding of an industry by participating in work-based learning activities. These include on-the-job site experiences but also business and industry partner presentations in the classroom, field trips and career fairs, technical/community college and university tours, mentoring with business and industry partners, job shadowing, internships, on the job training, apprenticeships, and employability skills training. West Virginia's Work-Based Learning Toolkits provide guidance for district administrators and CTE teachers on how to establish and manage work-based learning experiences.
- SkillsUSA and other CTE Student Organizations SkillsUSA have strong industry participation that ensures students learn about all aspects of an industry in challenging and motivating ways.
- Articulation agreements. These agreements support collaboration between secondary and postsecondary institutions by providing validation of the skills learned at the secondary level while adding value to the process by providing the option of college credit. With the implementation of Perkins V, the State Team will continue to work with eligible recipients to advance the program articulation agreement process into a truly non-duplicative program of study.

One of the newest collaborations between West Virginia secondary schools and employers is the Simulated Workplace initiative. In order to ensure CTE classroom environments truly mimic a real-world workplace, WVDE collaborated with numerous businesses, postsecondary institutions, Workforce West Virginia, and educators to design and implement the Simulated Workplace program. This new educational initiative has been created to assist schools in implementing workplace environmental protocols that align with West Virginia's workforce requirements, including random drug testing, professionalism, attendance, and safety.

Through Simulated Workplace partnerships, students work toward industrial certifications and credentials in addition to acquiring college credit hours through the EDGE program. To validate students' work skills, business and industry evaluators conduct onsite evaluations which include reviewing curriculum, equipment, the classroom and lab environment, and student portfolios.

All secondary CTE programs must operate as Simulated Workplace instructional environments. Through these programs, students are more actively engaged in and take ownership of their

learning. Classroom labs transform into "companies" and students are empowered to work in various roles related to their particular industry to build academic, employability, and technical skills. WVDE provides extensive professional development opportunities on Simulated Workplaces for student leaders, CTE teachers, and CTE administrators through hands-on best practice simulations at model program sites. The Business and Industry Simulated Workplace online evaluation tool is required for advisory council members, teachers, students, administrators, and WVDE Coordinators. The tool provides feedback to schools and analyzes results for continuous improvement.

The state will continue to support local recipients as they continue to provide exposure to all aspects of the industry for their students utilizing a variety of innovative means.

B.2.c.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)

West Virginia has established several programs to improve outcomes and reduce performance gaps among CTE concentrators. At the secondary and post-secondary levels, proficiency in mathematics has been in continuous need for improvement. To address the issue, the WVDE established a statewide campaign titled *Math for Life* to support and elevate math achievement in grades K-12. The four-part focus of the initiative includes 1) providing counties with data for local decision-making to support and improve math achievement; 2) providing professional learning supports and resources; 3) implementing a statewide marketing campaign, and 4) conducting additional research.

The West Virginia legislature has provided funding to employ certified mathematics and language arts instructors at all CTE and multi-county centers to assist with aligning CTE skill sets alongside the state's College and Career Ready academic standards. The CTE math and English and language arts team at WVDE is also working to develop online embedded courses with integrated CTE and academic standards for 1) Technical Math, 2) Transitions Math and 3) Transitions English. The WVDE Secondary Learning staff and CTE offices are collaborating on implementing a plan to provide more resources and assistance in data analysis of learning gaps for CTE programs.

The WVCTCS provides [interactive data dashboards](#) and professional development to eligible postsecondary recipients for the purposes of identifying and closing equity gaps for students.

To allow student success advocates easy and effective access to student success analytics, WVCTCS has purchased Tableau for developing its interactive higher education data portal that also includes dashboards from the P-20 system. The dashboards disaggregate student metrics across race and ethnicity, gender, and special populations to help highlight and identify equity gaps. Professional development is routinely provided by WVCTCS staff to faculty, administrators, and board of governors to help them understand how to use the information provided in the dashboards to improve college outcomes.

Secondary and postsecondary programs are encouraged to use additional strategies to improve outcomes and reduce performance gaps for West Virginia's CTE concentrators, including those who are members of special populations. Strategies include the following:

- Coordinate with personnel working with special populations to assess abilities, interests, aptitudes, and unique learning needs and styles.

- Foster achievement of academic skills by relating real-world applications to the classroom and work-based learning.
- Create a climate of excellence in the classroom with high expectations for all students.
- Provide frequent feedback to learners concerning their progress.
- Use Perkins funds to hire tutors or classroom/lab aides.
- Provide flexible pacing of instruction and assignments to meet the needs of individual learners.
- Develop a student mentor/tutor system to increase student achievement.
- Involve technical and academic teachers in a team approach to teaching.
- Organize instruction into self-contained units, modules, and mini-courses.
- Provide wrap-around services and support for students.
- Offer work-based learning, such as externships, internships, on-the-job training, apprenticeships, and technical courses at each institution.

B.2.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)

Pathway alignment requires the sequencing of courses across segments to enable students to proceed smoothly from secondary to postsecondary pathways during and after high school. Course articulations and dual enrollment opportunities offer benefits to students by conferring postsecondary course credits prior to high school graduation. Courses and programs may be designed to use cross-system strategies like dual enrollment and/or dual credit with community colleges and universities, stackable badging and credentials, or other articulations to create a seamless student experience and avoid unnecessary repeating of courses or other inefficient practices and to facilitate “on-time” postsecondary graduation.

Participants at Perkins V regional stakeholder feedback sessions and those responding to the surveys expressed the need for improving results from the state’s Earn a Degree Graduate Early program. EDGE was enacted in 2012 to prepare high school students for success in the workplace or post-secondary education and to provide the opportunity for these students to earn community and technical college credit free-of-charge for the duplicated secondary and postsecondary courses identified during the curriculum alignment process. EDGE is part of the programs of study and a seamless curriculum initiative that focuses on aligning curriculum between secondary and postsecondary education levels. Table 4 details the differences between EDGE and traditional dual enrollment.

Table 4. Differences Between Dual Enrollment and EDGE

Dual Enrollment	EDGE
High school students become college-ready students	Students are not college students while taking courses
Credits are applied to the student’s college transcript on completion	Credits are recorded in a statewide datasytem
College transcripts provided to students on course completion	Credits are applied to college transcripts when matriculation occurs
Qualified high school instructors become college adjunct faculty	Instructors are certified high school instructors

Through West Virginia's Career Pathway Project, the development of new Guided Pathways beginning in 2020 will streamline opportunities for students to participate in dual or concurrent enrollment programs by:

- Aligning all WVCTCS community and technical college programs of study to the 16 National Career Clusters.
- Articulating the four courses required in secondary Advanced Career pathways as a program of study rather than course by course credits.
- Crosswalk nationally established NOCTI work readiness scores and industry credentials/certifications with the appropriate community technical college curriculum.

This initiative also coordinates with grant-funded regional articulation projects to ensure that appropriate resources are available to all secondary and postsecondary faculty tasked to develop pathways. The outcome will establish true guided career pathways including meta-majors with the community and technical college programs of study that eliminate duplication, address performance gaps, and meet the needs of the labor market.

For instance, high school students can start their career pathways through low-cost dual enrollment courses. In addition, supports will be provided to adults in need of remedial education or who do not have a high school diploma to help them more quickly advance into their chosen career pathway (i.e., career pathway bridges, ability to benefit opportunities, integrated education and training programs).

The WVCTCS offers additional opportunities for students to earn postsecondary credit such as credit for prior learning based on students' work experience or other non-classroom opportunities (e.g., mastery of course competencies while in the military). The requirements for awarding credit for prior learning are set by each community college and will be included in a Guided Pathway or program of study option. The state has also implemented policies that award credit for competency-based education and an increasing number of early college high school programs have appeared on the landscape as options for students.

Early enrollment courses must meet the same rigorous standards as those required for on-campus instruction. Such standards are essential for maintaining institutional accreditation by the HLC and for assuring institutional credibility. Courses must utilize college-approved syllabi, texts, assignments, and assessments. The higher education institution facilitates communication between the appropriate academic department and the early enrollment faculty member to assure quality.

In addition, WVCTCS has implemented a policy that enables students who have successfully completed any Advanced Placement (AP) exams to receive academic credit at all public community colleges in West Virginia. Among the provisions of the policy are:

- High school students earning a minimum score of 3 on a College Board AP exam will receive credit at any Perkins recipient higher education institution in West Virginia.
- When the AP examination is in the area of the student's major, the institution will award credit toward the major or core curriculum.
- An academic department within the institution, upon internal approval, may require an AP score higher than 3 if the credit is to be used toward meeting a course requirement

for a major in the department.

- Credits awarded by regionally accredited institutions of higher education for successful completion of AP exams are transferable to the other state colleges and universities in accordance with each receiving institution's AP policy.

Under Perkins V, the state will reexamine and align the secondary and postsecondary programs of study that will further promote opportunities for advanced placement credit in technical in-demand, high-skill programs, including credit for industry credentials of value earned at the secondary level. A major focus of this effort will be to significantly increase the number of secondary CTE concentrators successfully matriculating to related community and technical college programs. To that end, up to 5 percent of Perkins V funding will be awarded to community colleges which successfully increase the number of secondary students matriculating to a postsecondary CTE program. See C.4 for greater detail.

B.2.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)

In addition to the new Perkins V comprehensive local needs assessment process that includes stakeholder groups that examine strengths, gaps, and provide feedback on current CTE programming at the local and regional level, West Virginia has several other mechanisms for meaningful stakeholder involvement. The state requires all approved CTE programs to have a technical advisory committee that functions at the regional or local level to assist education providers in planning, conducting, and evaluating their CTE program of study curricula and operations. These local advisory committees help educators and business and industry representatives develop strategies to strengthen CTE programs within a career pathways system.

Each advisory committee is made up of individuals with experience and expertise in the occupational fields correlated to the program. Members advise educators on the design, development, implementation, evaluation, maintenance, and revision of CTE programs within that career pathway. Advisory committees allow the community to be linked to the educational system in order to 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 promotes career pathways within the community.

WVDE and WVCTCS encourage the active involvement of parents, academic and CTE teachers, administrators, faculty, career guidance, and academic counselors, local businesses (including small business), and labor organizations in the planning, development, and implementation of CTE programs through their local advisory committee.

The WVCTCS program concept and curriculum approval processes (outlined in the *Degree Designation, General Education Requirements, New Program Approval, and Discontinuance of Existing Programs*) involve guidance and input from multiple stakeholders and experts through program advisory committees, district boards, the WVCTCS Board, and

WVCTCS staff. Advisory committees are representative of each college’s geographic location and include equal representation of local employees and employers. In addition, students and representatives from secondary and postsecondary schools are often members of program advisory committees.

According to state legislation (§18B-3C-4), district board members must include parents, teachers, faculty, administrators, career and academic counselors, members of labor organizations, local businesses, government officials, and members of community-based organizations (e.g., United Way).

B.2.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.

See Appendix E and Appendix F for copies of West Virginia’s secondary and postsecondary Perkins V Local Applications. Historically, WVDE and WVCTCS have utilized separate local applications and distinct processes for approval. The interagency leadership team has recommended establishing a common, online local application tool addressing the Perkins V criteria for use by secondary and postsecondary institutions alike. Furthermore, the interagency leadership team will review the applications collaboratively to ensure that the state meets its common performance indicators, reduces duplication, and identifies workforce gaps across CTE programming. This online tool is under development. Perkins recipients will prepare and update their LEA plan using the online application during the second week of March. Plans are then reviewed using an LEA checklist.

B.2.g. Include a copy of the comprehensive local needs assessment template and/or guidelines that the eligible agency will require of eligible recipients to meet the requirements of section 134(c) of Perkins V. See Text Box 3 for the requirements of the comprehensive local needs assessment under section 134(c) of Perkins V.

A comprehensive local needs assessment was conducted by EMSI for the state of West Virginia. Local needs were assessed at the secondary and postsecondary consortia level. The assessment identified the fastest growing occupations with a minimum wage of \$15 per hour at each consortia level. This information has been provided to each consortia for validation and verification. A copy of this analysis can be found in Appendix G.

A copy of the combined WVDE and WVCTCS CLNA template is in Appendix H. Technical assistance and webinars will be provided to help secondary and postsecondary recipients complete their CLNA.

B.2.h. Provide the eligible agency’s definition for “size, scope, and quality” that will be used to make funds available to eligible recipients pursuant to section 135(b) of Perkins V.

For eligible recipient CTE programs funded under Perkins V, the following indicators and definitions will be used to determine the minimum size, scope, and quality components.

Secondary:

Size

- Multi-county centers, CTE centers, and comprehensive high schools must offer students access to a state-approved career and technical program of study in a minimum of six of the 16 approved WV career clusters (WVBOE Policy 2510).
- CTE programs have a minimum class size of 15 students or are making continuous progress toward increased enrollment.
- CTE programs identify and report a substantial number of CTE concentrators and a minimum of 10 annual pathway completers.
- CTE Completer is a student who completes the four state-approved sequence of courses and participates in a state-approved technical assessment within a specific CTE program of study.
- CTE programs have adequate qualified staff to offer the identified programs of study (WVBOE Policy 5202).
- All State-approved programs of study have a minimum of four required core courses in order for a student to be a state-completer as identified in WVBOE Policy 2520.13.

Scope

- Clearly articulated links and/or pathways between secondary and postsecondary programs of study.
- State-approved CTE program of study is an approved sequence of a minimum of four CTE courses which align to a CTE cluster and pathway, impacts state economic labor market needs as verified by Workforce data and leads to an industry-recognized credential or certificate or opportunity for continuing into postsecondary education.
- Programs of study course standards align with the identified needs of business and industry and are consistent with the state approved CTE programs of study and standards (WVBOE Policy 2520.13).
- Each program of study is offered within a Simulated Workplace environment that empowers students to demonstrate critical thinking, problem solving, teamwork, and leadership skills.
- CTE staff members at multi-county centers, CTE centers, and comprehensive high schools actively participate in CTE Community and Technical College Consortia meetings and activities.

Quality

- All student performance targets established for Perkins V core indicators are met or the CTE program has implemented an improvement plan approved by the state.
- CTE program completers score at the workforce entry level on the CTE NOCTI technical assessment.
- CTE Completer (State Certified) is a student who completes the four state-approved sequence of courses with a "C" or higher and meets the industry benchmark on the state-approved technical assessment
- CTE program completers have opportunities to earn industry credentials as identified in Policy 2520.13 for each program of study.
- Schools offering CTE achieve a minimum 70% overall rating on the State CTE Data Profile.

- CTE schools and programs actively engage local business and industry sectors and postsecondary partners in institutional and programmatic advisory councils.
- Dual credit, EDGE, and other advanced credit opportunities exist in all applicable programs of study and career pathways.

Postsecondary:

Size

- CTE programs must have a sufficient number of students within a program, number of instructors and staff, number of courses within a program, and available resources for the program in order to adequately address student learning outcomes.

Scope

- Programs of study and career pathways are clearly defined with multiple entry and exit points.
- Programs of study and career pathways are aligned with local workforce needs and skills.
- Where available, postsecondary programs connect with secondary CTE via articulation agreements, dual credits, dual enrollment, and other programs allowing secondary students to earn college credits.
- Program of study and career pathways develop student technical skills as well as applicable employability skills for in-demand careers.

Quality

- Programs must meet two of the following three criteria:
 - The program of study leads to (a) high-skilled credential, (b) the program is in a high-wage career, and (c) individuals who receive credentials for an in-demand occupation.
 - High-skilled is defined as programs with industry-validated curricula that result in industry-recognized certificates, credentials, degrees, or apprenticeship diplomas.
 - High-wage include occupations with hourly wages above the West Virginia state average median wage of \$33,789.86 per year based on the WFWV 2019 wage data. (*Median wage data will be adjusted per fiscal year during the duration of the Perkins V year)
 - In-demand is defined as the top 10 occupations that are identified in the West Virginia Department of Commerce statewide long-term occupational projections and local needs.
- Articulation agreements, state program alignment, and industry credentialing are components of quality pathways and programs
- Industry-standard equipment and technology encourage relevant and rigorous technical skill attainment
- Programs must work to close student equity gaps in access and completion (e.g., reducing barriers to students, implementing guided pathways).
- Eligible recipients meet student performance targets (where applicable) and continuously work toward reaching or exceeding those targets

- Local recipients demonstrate the need for CTE programs by presenting labor market data and economic development projections that indicate current or projected employment demands

B.3. Meeting the Needs of Special Populations

B.3.a. Describe the eligible agency's program strategies for special populations, including a description of how individuals who are members of special populations

B.3.a.i. will be provided with equal access to activities assisted under this Act;

Education is the key to closing equity gaps across West Virginia communities and eliminating the skills shortage. Both the WVCTCS and WVDE are committed to increasing equity and access for our students in pursuit of the following goals:

- Increase postsecondary credential attainment so that 60% of West Virginians ages 25-64 have a postsecondary degree or credential of value by 2027.
- Eliminate equity gaps in credential attainment across student race and ethnicity groups, gender, and special populations.

West Virginia Community and Technical College System and WVDE have laid the groundwork for advancing equity and student achievement using disaggregated data, evidence-based practices, and collaboration with national partners. Both the WVCTCS and WVDE evaluate student data at the state level to identify equity gaps in student access and success. This information informs CTE policies, supports, and resources for colleges and schools and provides insight into professional development needs.

Similarly, WVDE provide disaggregated student data in a publicly accessible portal, called ZoomWV. ZoomWV is the WVDE's interactive data portal which allows area programs to identify equity gaps and areas of need. Similarly, West Virginia's Higher Education portal is an interactive data tool that provides public access to higher education data ranging from the postsecondary aspirations of graduating high school seniors, to their success in college and workforce outcomes.

The state has entered into an MOU between the West Virginia Department of Education, the West Virginia Higher Education Policy Commission, and the West Virginia Council for Community and Technical College Education to establish and maintain a "longitudinal student unit record data system that educators and policymakers can use to analyze and assess student progress beginning with early learning programs and continuing through postsecondary education and into employment," as stated in West Virginia Code §186-ID-10.

Both the WVCTCS and WVDE share best practices for student learning, success, and equity with schools and colleges (e.g., through culturally responsive teaching). In addition, the WVCTCS joined a national network of Student Success Centers in 2017. The work of the WVCTCS and

WVDE is focused on closing student equity gaps and promoting collaboration and sharing of best practices (e.g., guided pathways) across colleges to achieve this goal.

All special populations have equal access to CTE programs at both the secondary and postsecondary levels. This is evident through partnerships with special education, adult basic education, WFWV, Division of Rehabilitation Services, Department of Health and Human Services, Women's Commission, Goodwill Industries, and other groups representing special population groups across the state.

The local applications for Perkins V funding at both the secondary and postsecondary levels require local recipients to clearly define strategies that assure equal access to programs and activities for all special population groups. Specific activities include the creation of promotional materials tailored to specific special populations, counseling and guidance to assist special populations, incentives for non-traditional students, and data analysis to determine the level that special populations are being served in career and technical programs.

Recruitment activities at both levels actively engage special populations groups, including college and career readiness classes, STEM camps, ABE refresher courses, career information, and career and technical educator participation in Individualized Education Plan development for identified students with disabilities.

Colleges are asked by WVCTCS to review data to identify groups that are in most need of support in their district and write their grant applications to specifically address such needs. Community and technical colleges work locally with nonprofit agencies to provide services to homeless, at-risk, and students in foster programs.

Examples of activities for special populations funded by these grants include:

- Provide direct comprehensive student support services to pupils experiencing gaps in successful outcomes. These services include proactive academic advising, case management, career assessment, tutoring, the provision of accommodation services, and career exploration for students who are interested in non-traditional occupation (NTO) fields.
- Implement a proactive approach in working with students who are experiencing gaps in successful outcomes. These targeted efforts include the development and implementation of early alert systems and timely follow-up with students to support course and program completion.
- Provide case management services to students who are experiencing gaps in success outcomes to promote course completion, skill attainment, and persistence. These case management services include identification of students who are experiencing gaps in successful outcomes, proactive case management follow-up sessions, referrals to appropriate services including, but not limited to financial aid, academic services, diversity resources, academic advising, community agencies, and/or counseling services.
- Provide tutoring services, student success skills workshops, and support groups to enhance occupational and academic skill attainment and course completion.

- For students with disabilities, use adaptive course materials, Universal Design for Learning, disability-related accommodations, assistive technology, and interpretive services.
- Provide leadership to spotlight best practices that promote successful completion outcomes and greater student access.

All the state's local educational agencies continue their participation in recruitment and placement efforts and the monitoring of activities for students who are members of special populations. Students are assessed for interest, ability, and learning styles. Where appropriate, they are provided with counseling services, curriculum, equipment modification, resource personnel, basic skills instruction, and instructional aids and devices.

The West Virginia Office of Disability Services prepares students for their transition to college and by assisting them with goal setting, study strategy techniques, time and self management, and organizational skills. All offices act as a liaison between students with disabilities and faculty. Students must declare and provide appropriate documentation of their disability in order to receive services. Documentation must include:

- The stated disability
- Suggested accommodations
- The anticipated impact on the student's learning experience

In the state's ESSA plan, WVDE describes efforts and considerations made for all learners including specific subgroups of students, many of which are also considered special populations in the Perkins state 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.

Similarly, compliance checks will be incorporated into WVCTCS systems and processes; however, minimum compliance is not considered sufficient to successfully serve every student who comes to our doors. Equity, access, and inclusion is the foundation of West Virginia's approach to developing strategies and promising practices that will be reviewed and shared as appropriate. Additionally, WVCTCS staff are provided training to equip instructors, counselors, student organization advisers and others to have meaningful career conversations with students who come to our college.

Through the comprehensive needs assessment process, WVCTCS requires that a variety of data be reviewed including where gaps may exist. As part of the need's 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 need's assessments occurring locally, sub-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.

Additionally, college-level student services coordinators work with students to determine eligibility and appropriate accommodations. Employees such as CTE faculty, paraprofessionals, counselors, and advisers are expected to be provided with information on appropriate student accommodations as stipulated by local, state, and federal policies.

B.3.a.ii. - will not be discriminated against on the basis of status as a member of a special population;

The Individuals with Disabilities Education Act IDEA mandates that all students with disabilities from birth up to 21 years of age have access to a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living.

Non-discrimination safeguards are in place in all secondary public schools and community and technical colleges that provide student services under Perkins V. Each public school system and community and technical college have non-discrimination policies in place and require staff to participate in focused training session on practices and laws that prohibit discrimination and harassment (Title I of the Civil Rights Act, Americans with Disabilities Act and other federal and state laws that prohibit discriminatory practices). All staff are informed of the consequences associated with unlawful practices.

Annual Office of Civil Rights compliance reviews of secondary sub-recipients are also conducted based on Title IX of the Civil Rights Act, Section 104 of the Rehabilitation Act and Title III of the Americans with Disabilities Act. The purpose of the reviews is to guarantee students enjoy equal access to CTE programs and services regardless of race, color, national origin, sex, economic level or disability.

To make certain that postsecondary students from all backgrounds are provided with equal access and are not discriminated against at their college, all nine technical colleges and programs have federal laws disclosed on each of their websites and have on staff Title IX coordinators, directors, etc. In addition, Public Notifications of Nondiscrimination are posted on their respective websites which read, pursuant to the requirements of Titles IV, VI, VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975, that the college does not discriminate against applicants, employees, or students on the basis of race, color, religion, sex, disability, age, gender, ancestry, marital or parental status or national origin in its employment policies and/or educational programs or activities, including admissions to such.

In addition to the review of human resource practices and facility and process requirements, the visits include an in-depth look at a variety of student services. The visits consist of assessing student and employee data for identifying any equity gaps, interviews with staff and students, and review of publications and websites. In addition, each college is required to submit an [Assurance of Compliance-Civil Rights Certificate](#) for all federal grants.

B.3.a.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;

All students, including those who are members of special populations, are taught to the same challenging academic standards. All state performance standards, whether required by state education legislation or the Perkins Act, apply to all students, including special populations.

At the secondary level, two options exist for students with IEPs to complete a CTE Program of Study:

- The typical completion of a CTE program of study with/without accommodations and associated supports if a student is capable of passing 100% of the safety exam for the respective concentration.
- The Individual Work Ready Competencies (IWRC) program of study. This program was renovated to allow all special needs students to enroll in CTE programs of study after a comprehensive review from the IEP team and the identification of accommodation needs and targeted skill sets. Individual Work Ready Competencies (IWRC) is a state-approved CTE career pathway that provides students who have a disability and a current IEP the opportunity to gain valuable work readiness and occupational skills. Students must have originally been enrolled in a typical state-approved CTE program of study, where it was determined through classroom assessment measures conducted by CTE staff that the student was not on track to master all skill sets associated with the four state-approved sequences of courses.

Like students in other CTE programs of study, students in the IWRC program of study participate in a wide variety of project-based learning activities that are designed to prepare them for the future. Instructors utilize West Virginia's content skill sets and Simulated Workplace protocols. Students can earn multiple industry credentials while enrolled including a National Center for Construction Education and Research credential, an Automotive Service Excellence certification, ServSafe certificate, and an OSHA credential as well as West Virginia's Welding Certificate, State Vehicle Inspectors License, and many more.

West Virginia Community and Technical Colleges help to assure all West Virginia residents have the skills needed to successfully participate in the state's workforce by delivering equitable educational outcomes. To address diversity in the state of West Virginia, the [Chancellor's Diversity Initiative](#) (CDI) was created in November 2009 by the Higher Education Policy Commission. The CDI and its coordinating body, the Diversity Council, is charged with developing a system-wide approach to create and support enhanced policies and strategies for diversity within the state's four-year public colleges and universities as institutions and communities. Recognizing institutional missions, histories, and objectives, the CDI offers advice and guidance on the development of programs under the initiative and coordinates current and future programs to ensure a diverse postsecondary experience at the state's public colleges and universities.

The objectives are:

- To provide direction to the Commission regarding how its existing programs and policies can be coordinated and improved to enhance and celebrate diversity;

- To help establish a framework for the long-term continuation of the Chancellor's Diversity Initiative, including a strategic planning cycle; and
- To provide recommendations regarding the appropriate roles for the Commission in encouraging and supporting campus diversity initiatives.

By identifying a common language, sharing a clear mission, and establishing opportunities to engage in promising practices to address equity gaps in student outcomes, West Virginia's technical colleges continue to lead in innovative educational practices that increase the prosperity of individuals and communities to strengthen the state's economy.

Policies within the classroom also help remove barriers for students who are members of special populations. Course design incorporates principals from Universal Design for Learning and Guided Pathways which both help to improve the outcomes for students from all backgrounds (e.g., students with disabilities and students from special populations).

Student support services also help students who are members of special populations excel in their education. These services include training in financial literacy, career planning services, support groups, tutoring, academic counseling, accommodation services (e.g., assistive technology, adaptive equipment), emergency dependent care, transportation services, and funding for immediate needs (e.g., housing, transportation, utilities).

B.3.a. iv. - will be provided with appropriate accommodations; and

In addition to the accommodations provided for students from special populations at both secondary and postsecondary levels, appropriate guidance and counseling services are available for students needing additional support in order to succeed in CTE programs. Work-based learning experiences are available to students without regard to their status as members of a special population.

Adult students enrolled in ACE Programs through WVDE are provided support services by the Adult Basic Education programs throughout the state.

Each college provides accommodation services in accordance with the Americans with Disabilities Amendments Act of 2008 and section 504 of the Rehabilitation Act of 1974. Additional accommodation services are provided by accommodation resource specialists, at the nine Community and Technical Colleges, who convene periodically to explore best practices in the field and develop or enhance resources that may be helpful for the entire technical college system. Additionally, each college has been awarded a state grant to fund captioning of college resources and course materials.

Transition services are provided to students with disabilities regarding the information on careers and postsecondary programs, along with an exploration of the similarities and differences in accommodations offered in K-12 through the Individuals with Disabilities Education Act with those offered in college under the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. In recognition of the need to improve transition programming for students with disabilities whose goal is to enter the workforce directly after high school, the Division of Technical Education and Governor's Economic Initiatives and the WVDE Office of Special Education have partnered to address this issue.

B.3.a.v. - will be provided instruction and work-based learning opportunities in integrated settings that support competitive, integrated employment. (Section 122(d)(9) of Perkins V)

In West Virginia's Simulated Workplace Initiative employer partners play a key role in bringing the real world to the secondary classroom and helping students, including those who are members of special populations, learn how to thrive in a business environment as they earn college credits and work toward advanced industry and postsecondary credentials with real value in the workplace. Authentic projects transform the classroom into a business environment in which students not only have to apply academic, technical, and workplace skills to solve problems, but also learn to be punctual, follow company protocols, provide good customer service, and work well with teammates.

Simulated Workplaces are utilized to develop and integrate student leadership, work ethic, and work-based learning opportunities into all Office of Diversion and Transition CTE programs. All students are taught responsibility from a real-world perspective. Simulated Workplace provides instruction and skill development that enables students to obtain employment in a competitive workforce.

All nine West Virginia community and technical colleges have some form of work-based learning opportunities available to all students, regardless of disability, that support competitive employment including:

- Apprenticeships
- Job Shadowing
- Career Mentorship
- Paid and Non-Paid Internships
- Service Learning
- Student-Led Enterprises
- Learn and Earn
- Paid and Non-Paid Work Experience
- Volunteering
- Workplace Tours and Field Trips

New work experience programs being developed for students, including students who are members of special populations, include the Scaling Apprenticeship Through Sector-Based Strategies Grant and West Virginia's Learn and Earn program that links postsecondary programs with in-demand industries who hire students pursuing a certificate or associate degree.

B.4. Preparing Teachers and Faculty

B.4.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)

West Virginia, like most states, is facing instructor shortages in many areas including CTE. Under Perkins V, West Virginia plans to use state leadership funding to develop and implement a robust CTE teacher recruitment effort for secondary teachers and college faculty.

CTE teachers are recruited at the LEA through local board-approved policies. Advisory councils assist in identifying potential candidates from the industry. New secondary CTE teachers coming directly from industry without a higher education degree are required to hold a high school diploma or equivalent; have at least 4 years and/or 8,000 hours of relevant, verifiable work experience; must hold valid industry credentials; and score well on the basic skills exam administered to every new hire unless certain exemption criteria are met. These applicants are required to enroll in a new teacher preparation program consisting of 18 credit hours from a state-approved higher education provider to learn about subjects such as classroom management, lesson planning, and safety.

Once these criteria are met, a 1-year CTE permit is issued, allowing the individual to work toward completing the requirements to achieve his or her CTE certificate. Teachers in this path have the opportunity to renew the 1-year permit until the 18 credit hours are completed and the CTE 5-year certificate can be requested. Once the 5-year is approved, the CTE teacher is required to take at least 6 credit hours during that 5 year period and continue to maintain the valid industry credential in their field to be eligible to renew the certificate.

New CTE teachers that hold an associate's or bachelor's degree must go through the same procedures above, except they only need to provide evidence of 2 years and/or 4,000 hours of relevant work experience to be considered for the initial CTE permit. If the new CTE teacher applicant holds a master's degree the basic skills exam is not required and if the applicant holds a West Virginia professional teaching license, the requirement to attend the new teacher preparation program is waived and they can apply directly for the CTE certificate as long as all other requirements are met.

To ensure that West Virginia CTE administrators are properly prepared for a CTE teaching position, it will soon become a requirement that newly hired CTE administrators apply for the CTE Administrator Authorization which is good for 1 year.

Though the state has no formal program to recruit secondary and postsecondary CTE faculty, high school graduates can earn the Underwood-Smith Teaching Scholarship that provides up to \$10,000 per year in financial aid and encourages students to become West Virginia public school teachers. Multiple media platforms are used to recruit secondary CTE instructors and administrators and postsecondary faculty, such as LinkedIn and HigherEdJobs online platforms as well as the Chronicle of Higher Education, etc. A diversity statement is always included in job postings and every attempt is made to ensure secondary schools and community and technical colleges enlist a diverse pool of candidates.

CTE teachers from the college system must meet the same requirements set forth above but are exempted from a requirement if meeting any prerequisites for every step.

Within the WVCTCS, faculty members are recruited based on need. Once a postsecondary program has determined additional faculty members are warranted, the college follows the state's policy of publishing the position and hiring faculty. The onboarding process is based on local college policies. The faculty must meet all credentialing requirements of the HLC. Once hired, each community and technical college employs its own process for how to prepare its faculty. Professional development is based on accreditation standards, program requirements, and college and third-party credentialing protocols. Postsecondary professional development with CTE programs is supported with Perkins funding.

Professional development is one of three major areas in which faculty set goals and are evaluated. Progress toward meeting professional development goals agreed upon within the academic department are linked to instructional, professional development, and institutional and community service. The office of West Virginia's vice chancellor for academic affairs is in charge of soliciting feedback from all nine community and technical colleges to determine professional development needs which are then delivered through various means. Also, each college is charged with identifying and fulfilling faculty professional development needs.

WVCTCS supports the efforts of individual colleges in providing a variety of professional development activities to secondary and postsecondary CTE instructors that focus on the use of technology in the classroom and other areas.

Because Perkins V funding can cover institutional membership in professional organizations, state leadership funding will be used to enhance professional development opportunities for faculty, staff, and administrators through training and conference attendance. Technical workshops in e-Campus Blackboard, videoconferencing/Tannburg, WebX, BANNER, Outlook, Access, Excel, PowerPoint, Word, and online course delivery are also provided regularly to CTE instructors in addition to focused sessions on best practices.

Additional professional development focuses on engaging CTE students in the learning process. Perkins funding will also be used to allow Disabilities Student Services Specialists to attend conferences or training to enhance disability services for special populations. This training provides ways to incorporate technology in serving these students with special needs.

C. FISCAL RESPONSIBILITY

C.1. Approving Eligible Recipients

C.1. Describe the criteria and process for how the eligible agency will approve eligible recipients for funds under this Act, including how—

C.1.a. each eligible recipient will promote academic achievement;

The eligible agency for Perkins is WVCTCS, and the fiscal agent is WVDE. These two agencies approve eligible recipients under their respective jurisdictions. Between WVCTCS and WVDE, the funding allocation split is calculated annually based on FTE as described in C.2.

Historically, WVDE and WVCTCS have utilized separate local applications, and have had distinct processes for approving local applications. The interagency leadership team has recommended establishing a common, online local application tool addressing the Perkins V criteria. This tool will be used by secondary and postsecondary institutions alike. Further, the interagency leadership team will review the applications collaboratively to ensure that the State meets its common performance indicators, reduces duplication, and identifies workforce gaps across CTE programming.

Career and technical education programs that are supported by Perkins funding regularly undergo multiple review processes to ensure that they promote academic achievement. Each

program has a local advisory board that is comprised of employers and subject matter experts and is consulted in the process of developing new programs and improving existing programs. All programs are re-evaluated annually to determine whether the program is still viable based on labor market needs. If a program is no longer viable, then it is suspended for a period and ultimately may be discontinued. In addition, each program is assessed with student data every year to identify equity gaps and evaluate student success metrics (e.g., completion rates) to inform improvements (e.g., provide gatekeeper course supports, improve online course design, etc.). Lastly, every program undergoes a rigorous review for accreditation via the HLC. This review includes an assessment of program quality, learning goals, available student supports, instructor qualifications, and assessing the academic achievement of students.

West Virginia legislators have provided funding to employ certified math and language arts teachers in all career technical education centers and multi-county centers in the state. These teachers will continue to align the CTE skill sets and state academic College and Career Ready academic standards in CTE programs to integrate academic standards into the CTE curriculum. Several programs have embedded credit opportunities for students within the CTE curriculum. Comprehensive professional development is ongoing through the SREB.

Because mathematics proficiency has been an area of need throughout the state, WVDE has established a statewide *Math for Life* campaign to support and elevate math achievement in K-12 schools.

For approval at the postsecondary level, nine public community and technical colleges are eligible based on the sum of the number of individuals who are federal Pell grant recipients. Each institution is required to submit a local application that addresses the Perkins LEA plan application criteria. To receive funding, colleges must identify activities, goals, and objectives that reflect yearly and long-term progress. Funds are allocated to eligible recipients each quarter on a reimbursement basis.

C.1.b. each eligible recipient will promote skill attainment, including skill attainment that leads to a recognized postsecondary credential; and

As stated earlier, each secondary CTE program has a local advisory board comprised of employers and subject matter experts to review a program's curriculum to ensure it is building relevant skills. Eligible recipients promote a spectrum of work-based learning opportunities through Simulated Workplace environments that allow students hands-on opportunities to learn while gaining employability skills. These experiences may include job shadowing to participation in Career and Technical Student Organization initiatives, local co-ops, youth apprenticeships, or other supervised work experiences including school-based enterprises or experiences that lead to an industry credential of value. Each state-approved secondary CTE program of study is aligned with a NOCTI assessment that is administered to all secondary CTE concentrators. The NOCTI assessments are based on a job and task analysis process which incorporates input from subject matter experts representing regions of the United States in secondary and postsecondary education as well as business and industry. The assessments are aligned with federal O'NET information, national academic standards in math, language arts, and science, as well as business and industry standards. West Virginia's College and Career Readiness Secondary Programs of Study Standards are aligned with NOCTI and are supported in all CTE programs of study, allowing students to acquire and further develop their abilities to be critical thinkers and problem solvers as they continue their educational journey.

Similarly, all nine colleges in the WVCTCS participate in a CTE program review process to ensure that all programs are aligned with employer needs. Each credential at every level must lead to employment. Students who gain the credential are encouraged to re-enter the program at any time to complete the next level of the pathway to enhance their education and advance in their careers.

To make certain that students are acquiring the necessary technical skills for their career pathway, WVCTCS programs use industry-validated curricula that incorporate hands-on experiences and/or work-based learning opportunities. In addition, students are regularly assessed to ensure mastery of technical skills. The information from these assessments is then used for accreditation review by the HLC. This rigorous approach to technical skill attainment leads to successful employment outcomes for WVCTCS graduates.

C.1.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)

Labor market information and industry input are critical to all programs at both the secondary and postsecondary levels to ensure they are aligned with skills relevant to the marketplace.

As detailed in Section B.2.c.iii, secondary and postsecondary CTE administrators who plan to submit a new program of study for state approval must research and provide evidence of the labor market need for the program. This procedure is included in the online LEA application process from October to February 1st each year.

Both secondary and postsecondary recipients of Perkins funding must also discuss the alignment of programs of study with local and regional labor market needs with a required list of stakeholders via the biennial comprehensive local needs assessment. These efforts will be reflected in secondary and postsecondary recipients' annual local application for funding.

C.2. Funding Distribution

C.2. Describe how funds received by the eligible agency through the allotment made under section 111 of the Act will be distributed

C.2.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

The funding allocation split between WVBE and WVCTCS is calculated annually based on FTE as shown in Table 5 below.

Table 5. Calculations for Annual Allocation of Federal Carl Perkins Funds

WVDE	
Secondary:	Total Contact hours divided by 450 = FTE
CTCS	
Credit Hours:	Number of students divided by 15 = FTE
Non-Credit Hours:	Number of students divided by 1080 = FTE

Total = % of WVDE FTE/Total All FTE
Total = % of CTCS FTE/Total All FTE

Funds allocated to the State Board of Education for secondary technical education programs are being distributed by a pro-rated formula based on census data population to LEAs:

- (a) Thirty (30) percent shall be allocated to LEAs in proportion to the number of individuals aged 5 through 17, inclusive, who reside in the school district served by the LEA for the preceding fiscal year compared to the total number of such individuals who reside in the school districts served by all LEAs in the state for such preceding fiscal year.
- (b) Seventy (70) percent shall be allocated to LEAs in proportion to the number of individuals aged 5 through 17, inclusive, who reside in the school district served by the LEA from families with incomes below the poverty level [as determined on the basis of the most recent satisfactory data used under section 1124(c)(1)(A) of the Elementary and Secondary Education Act of 1965 applicable to a family of the size involved for the fiscal year for which the determination is made compared to the number of such individuals who reside in the school districts served by all the LEAs in the state for such preceding fiscal year.

Recipients may apply for their allocation if the allocation is above \$15,000 and the program is of such size, scope, and quality to be effective.

For approval at the postsecondary level, nine public community and technical colleges are eligible based on the sum of the number of individuals who are federal Pell grant recipients. Table 6 is a summary of how Perkins funding was allocated in West Virginia in FY 2020.

Table 6. Perkins V Planned Distribution of Funds

FY 2020 - Allocation	
Basic Grant - Appropriation	\$8,836,812
Local Formula Distribution (not less than 85%)	\$7,511,290
WVCCTC Percentage of Students	28.9362%
WVCCTC Share of Basic Grant	\$2,557,038
Federal Formula	\$2,064,808
State Leadership	\$209,878
State Administration	\$87,631
Admin. WV Council for Com. & Tech College	\$40,221
RESERVE	\$108,674
Institutions/Corrections 1%	\$25,570
State Level /Non-Traditional	\$20,255
GRAND TOTAL	\$2,557,038

C.2.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 workplace. (Section 122(d)(8) of Perkins V)

As authorized by Perkins V Section 132(a)(3)(A)(i), in order to meet the minimum grant requirement for Section 132 funds, a postsecondary recipient may join in a consortium with other postsecondary partners (s) to meet or exceed the minimum grant award of \$50,000. Each formed consortium must submit a memorandum of understanding which identifies its member agencies, the fiscal agent, and agreed-upon guidelines for developing and determining the CTE program(s) to be assisted with the funds, and preparing an annual application, required fiscal claims, and annual accountability report.

The funds calculated for each consortium member agency will be totaled to calculate the total funds allocated to each consortium. Consortia must meet the minimum grant award limits prescribed in Perkins V in order to receive funding and submit the required annual application.

The state has not funded consortia formed among secondary schools and eligible institutions as referenced in Perkins V. However, if secondary schools or colleges wish to partner with another sub-recipient, they would be afforded this opportunity. To date, this has not happened.

C.3. Allocations

C.3. For the upcoming program year, 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 secondary formula allocation for the upcoming program year is \$5,070,918 (71.0638% of the available Perkins allocation). Table 7 summarizes how FY 20 secondary funds will be allocated with summary percentage breakdowns.

The minimum grant award for Section 131 funds is \$15,000. The minimum grant award for Section 132 funds is \$50,000. The West Virginia Department of Education has waived the minimum allocation due to a large number of school districts being in rural, sparsely populated areas. Area Career and Technical Centers will receive an allocation based on the amount that would otherwise be distributed to the feeder school districts based on their relative share of students who are attending the area center. The state has not funded and does not plan to fund consortia formed among secondary schools and eligible institutions, and there are no charter schools in West Virginia.

Table 7. Perkins V Fiscal Year 2020 Secondary Allocations

LEA	FY2020 Allocation	Percentage
Barbour Co Bd of Education	\$46,226.00	0.91%
Berkeley Co Bd of Education	\$139,935.00	2.76%
Boone Co Bd of Education	\$74,745.00	1.47%
Braxton Co Bd of Education	\$43,460.00	0.86%
Brooke Co Bd of Education	\$52,708.00	1.04%
Cabell Co Bd of Education	\$250,045.00	4.93%
Calhoun Co Bd of Education	\$3,975.00	0.08%
Clay Co Bd of Education	\$36,884.00	0.73%
Doddridge Co Bd of Education	\$15,853.00	0.31%
Fayette Co Bd of Education	\$148,379.00	2.93%
Gilmer Co Bd of Education	\$6,798.00	0.13%
Grant Co Bd of Education	\$4,859.00	0.10%
Greenbrier Co Bd of Education	\$92,965.00	1.83%
Hampshire Co Bd of Education	\$71,926.00	1.42%
Hancock Co Bd of Education	\$77,850.00	1.54%
Hardy Co Bd of Education	\$27,416.00	0.54%
Harrison Co Bd of Education	\$128,828.00	2.54%
Jackson Co Bd of Education	\$44,698.00	0.88%
Jefferson Co Bd of Education	\$83,929.00	1.66%
Kanawha Co Bd of Education	\$485,640.00	9.58%
Lewis Co Bd of Education	\$28,276.00	0.56%
Lincoln Co Bd of Education	\$75,117.00	1.48%
Logan Co Bd of Education	\$105,788.00	2.09%
Marion Co Bd of Education	\$147,894.00	2.92%
Marshall Co Bd of Education	\$87,320.00	1.72%
Mason Co Bd of Education	\$85,411.00	1.68%
McDowell Co Bd of Education	\$100,577.00	1.98%
Mercer Co Bd of Education	\$205,414.00	4.05%
Mineral Co Bd of Education	\$72,072.00	1.42%
Mingo Co Bd of Education	\$87,840.00	1.73%
Monongalia Co Bd of Education	\$158,596.00	3.13%
Monroe Co Bd of Education	\$36,829.00	0.73%
Morgan Co Bd of Education	\$19,320.00	0.38%

WVDE and WVCTCS will coordinate activities, faculty, and staff to develop a Guided Pathway Project. The project will provide comprehensive career awareness and career exploration opportunities beginning in middle school linked to aligned high school, postsecondary, and adult education CTE programs.

Using the additional funding provided in Perkins V in 2020-2021, funds not to exceed 15% will be used to further develop and implement Guided Career Pathways through competitive innovation grants to secondary and postsecondary programs. An Interagency Joint Leadership Team led by the chancellor of WVCTCS and state superintendent of WVDE will analyze other revenue funds to support the development of Guided Career Pathways. Through these efforts it is intended that state-developed Guided Career Pathways will:

- Align with business and industry needs as identified by the West Virginia Department of Commerce,
- Provide a seamless pathway of opportunities for students to advance obtain skills and recognized industry credentials,
- Maximize resources by eliminating duplication, and
- Meet or exceed the accountability measures defined by the WVDE board of trustees, the state superintendent of public instruction, and the WVCTCS.

In addition, local LEAs will identify their funding allocations to support high-skill, in-demand career pathway opportunities, and target funds toward Perkins performance outcome deficiencies in the annual LEA local plan application.

The WVBE and WVCTCS will also award grants using the funds in the following grant categories:

- Strengthening Career and Technical Education Programs
- Achieving Student Success
- Assuring Access and Participation in Non-traditional Training Occupational Employment
- Promoting and Supporting High School to College Transitions for Career and Technical Education Students
- Promoting industry credentials leading to employment opportunities

The funds will be allocated based on project needs in closing equity gaps in student completion across student groups (students with and without disabilities, students of color, students with and without an economic disadvantage) and increasing credential attainment (based on the postsecondary attainment rates of the West Virginia counties within a college district).

The state will monitor and evaluate programs through an annual process that will review plan metrics, including which metrics were met or not met and why, and what additional measures may be needed to reach desired outcomes.

C.4. Allocations

For the upcoming program year, 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.

For the upcoming 2020 program year, \$2,064,808 federal Perkins funding will be made available to West Virginia's nine Community and Technical Colleges based on the total number of Pell Eligible students as a percentage allocation to each college.

Postsecondary funds will be allocated to each of the nine eligible institutions in an amount that bears the same relationship to the portion of funds made available for any fiscal year as the sum of the number of individuals who are Federal Pell Grant recipients enrolled in eligible programs offered by these institution in the preceding fiscal year. See Table 8.

Table 8. Perkins V Fiscal Year 2020 Postsecondary Allocations

Institution	# Pell Recipients	% of Total	Fiscal Year 2020 Allocation
Blue Ridge Community and Technical College	594	12.80%	\$263,762.57
BridgeValley Community and Technical College	754	16.20%	\$334,809.73
Eastern WV Community and Technical College	113	2.40%	\$50,177.05
Mountwest Community and Technical College	629	13.50%	\$279,304.14
New River Community and Technical College	455	9.80%	\$202,040.35
Pierpont Community and Technical College	531	11.40%	\$235,787.75
Southern WV Community and Technical College	727	15.60%	\$322,820.52
WV Northern Community College	409	8.80%	\$181,614.30
WVU at Parkersburg	438	9.40%	\$194,491.59
TOTALS	4,650	100%	\$2,064,808.00

In an effort to ensure that the adoption of the Reserve Funds does not jeopardize the 'Minimum Grant Amount' provision of 50,000 under Section 132, the WVCTCS will establish a minimum allocation amount of \$50,000 and continue to calculate sub-recipient allocations based on the formula utilizing Federal Pell Grant recipients, as reflected in Table 8. To date, there are no postsecondary enrollees receiving assistance from the Bureau of Indian Affairs in eligible institutions in the state.

C.5. Allocation Adjustment Process

C.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)

West Virginia Department of Education annually re-allocates unrequested and carryover Perkins funds from the previous year to participating districts based on the same distribution formula as the allocation. West Virginia school district boundaries do not change.

C.6. Secondary Waiver Request

C.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).

Secondary education will not apply for a waiver to the secondary allocation formula for the funding allocation.

C.7. Postsecondary Waiver Request

C.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).

Postsecondary education will not submit an application for a waiver to the postsecondary allocation formula for the funding allocation.

C.8. Reserve Funds

C.8. If the eligible agency will award reserve funds to eligible recipients under section 112(c) of Perkins V, describe the process and criteria for awarding those funds.

In accordance with Section 112(a)(1), West Virginia will redistribute up to 15% of our state allocation as “Reserve” fund grants to eligible recipients in rural areas based on the following criteria. One-third of the funding will be awarded to improve the state’s matriculation rate for those students transitioning from high school to Community and Technical colleges. Two-thirds of the funding will be used for competitive grants to promote projects in field-based innovation, to encourage the conception, design, and execution of creative field-originated projects by institutions that will contribute to the overall advancement of CTE in West Virginia and its regions, and credential completion to incorporate the communication of credentialed

information to students and employers and the benefits to students with on-track credential completion.

Each award will have a designed request for the award application process that incorporates Perkins V legislative requirements such as Required Use and Statement of Assurances language tied to teach application for compliance

C.9. Fiscal Effort Per Student

C.9. 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)

West Virginia will exercise the one-time option provided under Perkins V to reestablish our State's Maintenance of Effort baseline levels. For the fiscal year ending June 30, 2019, West Virginia's aggregate CTE expenditures were \$114,869,441. The new baseline levels for FY 2020 (July 1, 2019 – June 30, 2020) will be reestablished at 109,125,969.

- FY 2019 (July 1, 2018 – June 30, 2019) aggregate baseline CTE expenditures for the state: \$114,869,441
- FY 2020 (7/1/19 to 6/30/20) the reestablished new level baseline of aggregate CTE expenditures for the state will be set at \$109,125,969. The new baseline level is set at 95 percent of the State's aggregate CTE expenditures in the prior fiscal year (FY 2019).

The calculations for the aggregate baseline expenditures were determined using the following:

- WVEIS reports of LEA expenditures
- Administration & Leadership Funding (total expenses from WVDE payroll, travel, etc.)
- WVCTCS's administration and regular programs expenditure reports

D. ACCOUNTABILITY FOR RESULTS

D.1. Program Quality Indicators

D.1. Identify and include at least one (1) of the following indicators of career and technical education program quality—

- a. the percentage of CTE concentrators (See Text Box for the statutory definition of a CTE concentrator under section 3(12) of Perkins V) 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(s) of student success in career and technical education that are statewide, valid, and reliable, and comparable across the State. (Section 113(b)(2)(A)(iv)(II) of Perkins V). Please note that the inclusion of “other” program quality measure(s) are optional for States. 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.

All secondary CTE programs will be measured on the following program quality indicators:

- 1S1: Four-Year Graduation Rate = 95.00% baseline
The overall statewide CTE cohort concentrators' high school graduation rate for 2018/2019 was 95.01% compared to 91.40% statewide for a total population of all high school cohort graduates. The state’s long-term graduation goal is to increase the 4-year adjusted cohort graduation rate to 95.00% by the 2029-2030 school year for all student groups and subgroups. Highlighting graduation rate as a prominent indicator in the accountability system will encourage schools and LEAs to implement strategies to improve graduation rates for all subgroups of students (West Virginia’s Consolidated State Plan – ESSA, 7/12/19 Revision).
 - Numerator: Total # of CTE concentrators who graduated
 - Denominator: Total # of all CTE concentrators
- 1S2: Extended Graduation Rate = N/A
Reporting the percentage of CTE concentrators who graduate high school, as measured by an extended-year adjusted cohort graduation rate, is at the state’s discretion. West Virginia has not previously collected or reported data on this measure and will continue this policy under Perkins V.
- 2S1: Academic Proficiency in Reading/Language Arts = 38.70% baseline

CTE concentrators’ reading/language arts proficiency rate was 38.7% in the 2018-19 school year compared to 50.70% statewide for all high school graduates who took the state assessment.

West Virginia administers the English Language Proficiency Assessment for the 21st Century (ELPA21) to all English learners in grades K-12. The assessment is aligned to West Virginia’s English Language Proficiency (ELP) standards and measures the proficiency of students

across the four domains of listening, reading, speaking, and writing (West Virginia's Consolidated State Plan – ESSA, 7/12/19 Revision).

One major challenge the WV CTE community faces in addressing the required literacy measure is the fact that the state assessment is given during the 11th grade, allowing less than one school term for intensive interventions in a CTE environment.

- Numerator: Total # of CTE concentrators proficient in reading/language arts
- Denominator: Total # of CTE concentrators

- 2S2: Academic Proficiency in Mathematics = 15.50% baseline

CTE concentrators' state mathematics proficiency rate was 15.50% compared to 24.37% statewide for all high school graduates in 2018-19.

Mathematic proficiency has been an area of need throughout the state in all grades and disaggregated student populations. West Virginia Department of Education is deploying a Math for Life program to address the need. The state legislature has also provided funding to CTE and multi-county centers to employ certified math and language arts teachers. Additional programs are detailed in Section C.1.a.

- Numerator: Total # of CTE concentrators proficient in mathematics
- Denominator: Total # of CTE concentrators

- 2S3: Academic Proficiency in Science=28.87%

In 2018-19, CTE concentrators' state science proficiency rate was 28.87% compared to 33.84% statewide for all high school graduates.

- Numerator: Total # of CTE concentrators proficient in science
- Denominator: Total # of CTE concentrators

- 3S1: Postsecondary Placement = 88.00% baseline

The new Perkins V definition of a CTE concentrator is a student completing two courses in a program of study will be implemented moving forward. Current baseline data is derived from West Virginia's definition of a "completer" which are students completing four required courses in a CTE state-approved program of study. The 2017-2018 completer data for postsecondary placement is used for this baseline. The rate of CTE completers in 2017-2018 with positive placement in postsecondary education, employment, or the military was 87.83%.

Postsecondary education is defined as enrollment in a college or university and includes WVDE Adult ACE accredited certificate-granting programs, in-state and out-of-state community and technical colleges, technical schools, and four-year colleges and universities. Placement data is collected, reported, and certified into the WVDE WVEIS system. The West Virginia P-20 longitudinal data system is currently working to conduct data matches with workforce wage and labor data and higher education enrollment data.

- Numerator: Total # CTE concentrators who, in the second quarter after graduating high school, are designated as having positive placement as defined above
- Denominator: Total # CTE concentrators who left secondary education during the reporting year

- 4S1: Non-traditional Program Enrollment = 30.20% baseline

The previous Perkins IV indicator 6SI states that LEA's must report on the number of student participants in non-traditional programs. The numerator represents the number of CTE

participants from underrepresented gender groups who participated in a program that leads to employment in non-traditional fields. The denominator represents the overall number of CTE participants who participated in a program that leads to employment in nontraditional fields during the reporting year. West Virginia had a total of 20,337 students who participated in programs that lead to employment in nontraditional fields during the 2018-2019 school year.

- Numerator: Total # of CTE concentrators identified as enrolled in Non-traditional Programs of Study
- Denominator: Total # of CTE concentrators

- 5S1: Program Quality – Attained Recognized Postsecondary Credential = 40.00% baseline

Postsecondary education attainment is defined as completion of WVDE Adult ACE accredited certificate-granting programs, in-state, and out-of-state community and technical colleges, technical schools, and four-year colleges and universities and/or attainment of recognized industry credential including certificates and licensures. Students attaining credentials, certificates or degrees will be considered positive attainment.

A process is being implemented to identify the specific industry credentials of value that are recognized by employers, as well as the collection of results processes from credentialing and licensing agencies. Current placement data shows 3,901 of the 8,247 completers for 2017-2018 are enrolled in WVDE Adult ACE accredited certificate-granting programs, in-state and out-of-state community, and technical colleges, technical schools, and four-year college and universities. This represents 47% for self-reported data.

- Numerator: Total # of CTE concentrators completing of WVDE Adult ACE accredited certificate-granting programs, in-state, and out-of-state community and technical colleges, technical schools and four-year colleges and universities and/or attainment of recognized industry credential including certificates and licensures
- Denominator: Total # CTE concentrators

- 5S2: Program Quality – Attained Postsecondary Credits = 1.82% baseline

Based on the Senate Bill 436 Earn a Degree Graduate Early Annual Legislative Report from December 2019, 1.82% of students received EDGE dual transcribed credit. Implementation of the P-20 system and restructuring of the EDGE dual credit and dual enrollment system will redefine the criteria and data collection of this performance indicator.

- Numerator: Total # CTE concentrators earning transcribed college credits
- Denominator: Total # CTE concentrators

- 5S3: Program Quality – Participated in Work-Based Learning = 70.00% baseline

Work-based learning will include the West Virginia Simulated Workplace model, internships, clinical experiences, apprenticeships, and on-the-job training experiences. The data collection process is under development. All CTE state-approved programs of study must follow the Simulated Workplace instructional model to receive state or federal funding.

- Numerator: Total # of CTE concentrators with work-based learning experiences
- Denominator: Total # of all CTE concentrators

- 5S4: Program Quality – Other – Attained CTE Completer Status= 55.00% Baseline
Based on West Virginia’s definition of a CTE concentrator, 55% of concentrators met or exceeded the workforce readiness score on the NOCTI Technical Assessment for technical skills in the 2018-19 school year. The state will continue to hold secondary CTE programs accountable for this indicator.
 - Numerator: Total # of students meeting or exceeding NOCTI technical assessment score in their career pathway
 - Denominator: Total # of all CTE concentrators

Perkins V postsecondary performance indicators 1P1 and 2P1 baseline are established to align with the state West Virginia’s Climb initiative and will be in effect for the duration for a 5-year period.

- 1P1: Postsecondary Retention and Placement = 69.63% baseline
1P1 is defined as the percentage of CTE concentrators in the given entry cohort who, during the 2nd quarter following program completion, were:
 - Enrolled at a post-secondary institution
 - Enrolled in advanced training
 - In military service
 - In national or community service or the Peace Corps or
 - Employed
 - Numerator: Number of CTE concentrators who, during the second quarter after program completion, remain enrolled in postsecondary education; are in advanced training, military service, or a service program that receives assistance under title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.); are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C. 2504(a) or are placed or retained in employment.
 - Denominator: Number of CTE concentrators who completed their programs in the reporting year.
- 2P1: Credential, Certificate or Diploma = 41.97% baseline
West Virginia defines 2P1 as the percentage of CTE concentrators in the given entry cohort who receive a CTE award (certificate) within the cohort timeframe.
 - Numerator: Number of CTE concentrators who receive recognized postsecondary credentials during participation in or within one year of program completion.
 - Denominator: Number of CTE concentrators who left postsecondary education in the prior reporting year.
- 3P1: Non-traditional Program Enrollment = 16.30% baseline
West Virginia defines 3P1 as the percentage of CTE concentrators from underrepresented gender groups who participate in career and technical programs and programs of study that lead to nontraditional fields. Note that baseline data is currently not available but will be collected for FY21. In the interim, 16.20% will be the target for the first year.

3P1 is defined as the percentage of CTE concentrators enrolled in programs non-traditional for the student’s gender.

- Numerator: Number of CTE concentrators from underrepresented gender groups in CTE programs and programs of study that lead to non-traditional fields.

- Denominator: Number of CTE concentrators in a CTE program or program of study that leads to non-traditional fields during the reporting year.

The public comment period for the state-determined levels of performance opened on February 17, 2020 and concluded on March 17, 2020. This information also was included in the public hearing process for the Perkins V State Plan, as described in A.3.3.

D.2. State Determined Performance Levels FY 2020-2023

D. 2. Provide on the form in Section V.B, for each year covered by the state plan beginning in FY 2020, State determined performance levels 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).

Table 9 summarizes the state determined performance level for each of the secondary and postsecondary core indicators.

Table 9. State Determined Performance Levels for Secondary and Postsecondary Core Indicators

Secondary Indicators	Baseline Level	FY 2020	FY 2021	FY 2022	FY 2023
1S1: High School Graduation Rate	95.01%	95.25%	95.50%	95.75%	96%
1S2: Extended Graduation Rate	N/A				
2S1: Academic Proficiency in Reading/Language Arts	38.70%	41.50%	44.30%	47.10%	49.90%
2S2: Academic Proficiency in Mathematics	15.50%	23.10%	27.00%	30.80%	34.70%
2S3: Academic Proficiency in Science	28.87%	32.00%	35.00%	38.00%	41.00%
3S1: Post Program Placement	87.83%	88.00%	88.50%	89.00%	89.50%
4S1: Non-Traditional Program Enrollment	30.20%	31.00%	32.00%	33.00%	34.00%
5S1: Program Quality – Attained Recognized Postsecondary Credential	40.00%	45.00%	50.00%	55.00%	60.00%
5S2: Program Quality – Attained Postsecondary Credits	1.82%	3.00%	10.00%	15.00%	20.00%
5S3: Program Quality – Participated in Work-Based Learning	70.00%	75.00%	80.00%	85.00%	90.00%
5S4: Program Quality – Other = Attained CTE Completer Status	55.00%	60.00%	65.00%	70.00%	75.00%
Postsecondary Indicators	Baseline Level	FY 2020	FY 2021	FY 2022	FY 2023
1P1: Postsecondary Placement	69.63%	69.88%	70.23%	70.58%	70.93%
2P1: Recognized Postsecondary Credentials	41.97%	42.22%	42.48%	42.73%	42.99%
3P1: Non-traditional Program Concentration	16.30%	16.37%	16.54%	16.52%	16.59%

In accordance with the WVBOE Policy 2520.13, West Virginia CTE secondary definitions go beyond the concentrator minimum for state accountability and include the following:

- CTE Completer is a student who completes the state-approved sequence of four courses and participates in a state-approved technical assessment within a specific CTE program of study.
- CTE Completer (Dual) is a student who completes the required state-approved sequence of four courses within more than one CTE program of study.
- CTE Completer (State Certified) is a student who completes the state-approved sequence of four courses with a “C” or higher and meets the industry benchmark on the state-approved NOCTI technical assessment.

The West Virginia Community and Technical College Systems calculated state baseline levels using current performance level data, when available, and simulated data based on the Perkins V concentrator definition for each core indicator of performance.

D.3. State Determined Levels of Performance

D.3. Describe the procedure the eligible agency adopted for determining State determined levels of performance described in section 113 of Perkins V, 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. (See Text Box 5 for the statutory requirements for consultation on State determined performance levels under section 113(b)(3)(B) of Perkins V);
- 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).

As part of the procedures for determining State determined levels of performance, describe the

Focus groups were held among various stakeholder groups including CTE teachers, administrators, data professionals at the secondary and postsecondary levels, and state staff to determine appropriate definitions as well as to discuss what data were available and could be gathered. Since many Perkins performance metrics have changed under Perkins V, as well as concentrator definitions, West Virginia did not have all the data needed to recalculate historic student data. Thus, we calculated three years of historic trends to help guide where to set performance targets.

Where applicable, West Virginia ESSA and WIOA plans were reviewed to ensure that secondary and postsecondary metrics aligned with our LEAs’ goals related to graduation, retention, and matriculation rates. West Virginia CTE also consulted with other states as part of the Data Quality Institute to ensure that all our baselines were sufficiently rigorous. Because secondary level work-based learning state data had been collected, we consulted with other states with relevant data to establish an informed starting point. As part of our state’s initiatives, West Virginia set performance goals to increase incrementally based on historical data.

The public was able to comment on the state determined levels of performance and other elements of the Perkins V State Plan during the meeting dates and locations summarized in Table 10 and during the public comment periods in February and March.

Table 10. Stakeholder and Public Comment Meetings on State Determined Levels of Performance

Meeting Dates	Locations
October 31, 2019	Southern West Virginia Community and Technical College, Logan, WV
November 6, 2019	Blueridge Community and Technical College, Martinsburg, WV
December 5, 2019	North Central Advanced Technology Center, Fairmont, WV

The long-term academic achievement goal for CTE concentrators is to reduce the non-proficient rate—the gap between the baseline proficiency levels in 2018 and 100 percent proficiency—by 50% by the end of the 2029-2030 school year. For example, the current baseline 2018 English/language arts proficiency rate for the 2019 cohort of CTE completers is 38.7%. See Table 11.

The long-term goal target for this group of students was established by the following steps:

1. Subtract the current baseline proficiency rate from 100% (100% - 38.7% = 61.8%).
2. Multiply the result by 0.5 to determine the non-proficient rate reduction target (61.8% x 0.5 = 30.6%).
3. Add the non-proficient rate reduction target to the current baseline proficiency rate to determine the long-term goal target for 2030 (38.7% + 30.6% = 69.3%).
4. Divide the non-proficient rate reduction target (30.6%) by 11, the number of years between 2019 and 2030 to determine the amount of annual improvement needed to reach the 2030 target (30.6% ÷ 11 = 2.8%).

Table 11. Academic Achievement Calculations

Baseline year *	Subject	Proficiency Rate	Gap	2030 Goal Target	Annual Improvement	Year Span	2020	2021	2022	2023	2024
2019	Math	15.5	42.3	57.7	3.8	11	19.3	23.1	27.0	30.8	34.7
2019	ELA	38.7	30.6	69.4	2.8	11	41.5	44.3	47.1	49.9	52.6
* 2019 Cohort Completers assessment results from 2018											

An explanation for the of each state determined level of performance for West Virginia’s secondary and postsecondary cored indicators is summarized in Table 12.

Table 12. Explanations for State Determined Levels of Performance in West Virginia

Indicator	Explanation for State Determined Level of Performance
1S1: High School Graduation Rate	West Virginia’s statewide cohort graduation rate was 91.40%. The overall cohort population had 19,040 students. 17,403 of the 19,040, were designated as graduates. (17,403/19,040 = 91.4%) 12,839 of the 19,040-total population of all high school cohort concentrators were

	CTE cohort concentrators. 12,198 of the 12,839 CTE cohort concentrators were designated as graduated. ($12,198/12,839 = 95.00\%$).
1S2: Extended Graduation Rate	Not applicable since the state has decided to not measure this performance level.
2S1: Academic Proficiency in Reading/Language Arts	West Virginia's statewide cohort reading/language arts proficiency rate was 50.70 %. The overall cohort population had 19,040 students. Scores were available for those 16,355 students who tested the 19,040-total population. Of the 16,355 tested, 8,292 were designated as proficient in Reading/Language Arts. ($8,292/16,355 = 50.70\%$) 12,839 of the 16,355 total tested population of all high school cohort graduates were CTE cohort concentrators. 4,969 of the 12,839 CTE cohort concentrators were designated as reading/language arts proficient. ($4,969/12,839 = 38.70\%$).
2S2: Academic Proficiency in Mathematics	West Virginia's statewide cohort math proficiency rate was 24.37%. The overall cohort population had 19,040 students. 4,640 of the 19,040, were designated as proficient in math. ($4,640/19,040 = 24.37\%$) the 19,040-total population of all high school cohort graduates were CTE cohort concentrators. 1,990 of the 12,839 CTE cohort concentrators were designated as math proficient. ($1,990/12,839 = 15.50\%$).
2S3: Academic Proficiency in Science	West Virginia's statewide cohort science proficiency rate was 33.84%. The overall cohort population had 19,040 students. Scores were available for those 16,327 students who tested the 19,040. 5,525 of the 16,327 were designated as proficient in Science. ($5,525/16,327 = 33.84\%$). 12,839 of the 19,040-total population of all high school cohort graduates were CTE concentrators. Scores were available for 11,355 students of the 12,839 concentrators. 3,278 of the 11,355 CTE cohort concentrators were designated as science proficient. ($3,278/11,355 = 28.87\%$).
3S1: Post Program Placement	The new Perkins V definition of a CTE concentrator completing two courses in a program of study will be implemented moving forward. Baseline data is currently based on the West Virginia state definition of a "CTE completer" as used in previous years for students completing four required courses in a CTE state-approved program of study. The 2017-2018 completer data for postsecondary placement is used for this baseline. The number of CTE completers in 2017-2018 with placement in postsecondary education, employment and/or military was 87.83%.
4S1: Non-Traditional Program Enrollment	West Virginia had a total of 20,337 students who participated in programs that lead to employment in non-traditional fields during the 2018-2019 school year. 6,135 out of the 20,337 participants were from underrepresented gender groups who participated in a program that

	leads to employment in non-traditional fields. $6,135/20,337 = 30.2\%$
5S1: Program Quality – Attained Recognized Postsecondary Credential	Current placement data shows 3,901 of the 8,247 completers for 2017-2018 are enrolled in WVDE Adult ACE accredited certificate-granting programs, in-state and out-of-state community and technical colleges, technical schools and four-year college and universities. This represents 47% for self-reported data.
5S2: Program Quality – Attained Postsecondary Credits	This indicator is based on EDGE data that shows 1.82% of students are receiving transcribed credits.
5S3: Program Quality – Participated in Work-Based Learning	Work-based learning will include the West Virginia Simulated Workplace model, internships, clinicals, apprenticeships, and on-the-job training experiences. A new data collection process is under development. All CTE state-approved programs of study must follow the Simulated Workplace instructional model to receive state or federal funding.
5S4: Program Quality – Other Attained CTE Completer Status	According to the most recent data, 55% of CTE completers met or exceeded the workforce readiness score on the associated NOCTI technical assessment for technical skills.
1P1: Postsecondary Placement	The baseline for postsecondary placement is 69.53% This was calculated using simulated data based on the Perkins V concentrator definition and utilized WFWV data currently located within the WV P-20 system. It is important to note that placement in advanced training, military service, or service or volunteer programs was not included in the preliminary analysis as these data are not readily accessible at this point in time.
2P1: Recognized Postsecondary Credentials	This indicator begins with a baseline of 41.97% and was established by analyzing three years of trend and simulated data based on the Perkins V concentrator definition. These proposed performance levels are based on goals associated with West Virginia’s attainment goal to equip 60% of West Virginians with a certificate or degree by 2030.
3P1: Non-traditional Program Concentration	Non-traditional program concentration is new to Perkins V and is not comparable with Perkins IV data therefore simulated data using Perkins V definitions were used to determine the baseline of 16.30%.

The WVCTCS calculated state baseline levels using current performance level data, when available, and simulated data based on the Perkins V concentrator definition for each core indicator of performance. Baseline levels, along with growth targets, were then shared with the data and accountability group and stakeholders through the postsecondary public comment period to gain consensus before submission to WVDE.

The WVDE CTE secondary performance levels meet the statutory requirements for Perkins V. Performance levels are expressed in percentage form and baselines for each secondary performance indicator were established by the 2018-2019 baseline performance data. The public had an opportunity to provide feedback through an online survey and in-person events.

Goals for secondary CTE performance include:

- Prioritizing the improvement of the academic performance indicators for all populations by 2030.
- Increasing the completion rate of participants in WVDE adult ACE accredited certificate-granting programs, in-state and out-of-state community and technical colleges, technical schools and four-year college and universities, or attainment of a recognized industry credential including certificates, industry certifications, and licenses.

Postsecondary performance levels are expressed in percentage form and baselines for each postsecondary performance indicator were established by the requirements of the COE mandatory performance measures that are collected and analyzed annually.

In addition, state-determined levels of performance support continual improvement and meaningful progress over the course of the four-year Perkins plan. The state determined levels of performance were intentionally set to focus on our state goals and prioritized areas of need.

Goals for postsecondary CTE performance include increasing postsecondary credential attainment so that 60% of West Virginians aged 25-64 have a postsecondary degree or credential of value by 2030.

With this focus, we have set incremental increases (see table) in postsecondary credential attainment from 2020-23. This increase will result in more students graduating with postsecondary degrees, thereby helping to supply the talent and skills to meet employer needs and grow the West Virginia economy. In addition, colleges are setting goals for increasing credential attainment for students of color and members of special populations to help eliminate equity gaps within their districts, as part of the requirements for their Perkins Local Plan. We have also set an increase of 0.44% per year in the concentration of students in programs that lead to non-traditional occupations (e.g., female students enrolled in construction and male students in nursing programs) from 2020-23. This increase will help diversify talent in the West Virginia workforce. Lastly, eligible agencies will work to maintain areas in which West Virginia CTE students excel, including placement in employment, further education, and advanced training. The baseline for postsecondary placement is currently 69.53%. The state has set targets to maintain this high achievement level throughout the duration of this plan (2020-23).

D.4. Comments on State Determined Performance Levels

D.4. Provide a written response to the comments regarding State determined performance levels received during the public comment period pursuant to section 113(b)(3)(B) of Perkins V.

(Section 113(b)(3)(B)(iii) of Perkins V). As part of the written response, include a description of any the changes made to the State determined performance levels as a result of stakeholder feedback.

A draft of the West Virginia Perkins V State Plan was made available for online public comment to all stakeholders in the state for 30 days from February 25, 2020, through March 25, 2020. The state plan was available on the WVCTCS website and the West Virginia Department of Public Instruction (DPI) website and opportunities for comment were communicated using both email and social media platforms.

No public comments were submitted concerning the State determined performance levels by the state’s constituencies during the 30 days public comment period.

D.5. Addressing Disparities in Performance

D.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)

The state will annually review and analyze state performance results for each core indicator of performance to identify disparities or gaps. For identified gaps, the state will in consultation with appropriate stakeholders and stakeholder agencies and organizations evaluate the first program year succeeding the program year for which the state identified disparities or performance gaps.

At the secondary level, the CTE Data Profile performance data (see the sample in Appendix D) are used to guide and evaluate the quality of CTE performance. Performance measures are weighted and disaggregated by individual CTE program of study, school, and county. Individual program of study Simulated Workplace and composite school scores are identified and compared to statewide results. The performance measures include CTE concentrator numbers, NOCTI technical assessment results, student portfolio completion, business and industry evaluations, CTE concentrator graduation rates, positive postsecondary placement (e.g. continuing education, workforce, or military enrollment), earning of the Governor’s Workforce Credential, participation in random drug testing, and industry credential attainment.

To ensure each district adheres to policies and regulations defined by state and federal requirements as well as criteria for Simulated Workplace protocols and CTE standards, a CTE Data Profile will be provided to each county, school, and program. This profile will be provided to CTE administrators and superintendents in February of each year. Using this profile, the CTE Division at the WVDE will establish a target

percentage score to prioritize technical assistance needs. Career and technical education programs in the bottom one third will be provided support from WVDE CTE staff or via CTE administrator mentors. The Simulated Workplace Business and Industry Inspection Tool will be used onsite by WVDE CTE staff to review programs, identify strategies for improvement, and as a follow-up communication tool. Counties and schools that remain in the low percentage ranking and do not implement required improvement strategies will be identified as “needing assistance” on the annual determination of the CTE Efficiency Indicator.

At the postsecondary level, improvement plans will be based on state collected CTE data, evidence-based research, and stakeholder feedback. As part of the plan development process, West Virginia will require resources and support strategies to be identified and developed in collaboration with stakeholders. The state will use a process that mirrors the comprehensive local needs assessment to develop goals and improvement strategies. Potential resources and support strategies may include:

- Regional workshops
- Webinars
- Distribution of evidence-based or research-based strategies
- Targeted professional development
- Targeted assistance for outlier districts
- Prescribed improvement plans.

If no meaningful progress has been made prior to the third year, an evaluation of the local recipient’s performance improvement efforts will be made. If the state determines that a sub-recipient is not properly implementing its responsibilities or is not making substantial progress, the state will provide technical assistance to the sub-recipient focusing on the implementation of improvement activities.

The state will determine whether to impose sanctions of withholding all or a portion of the sub-recipient allotment if a sub-recipient meets any of the following conditions:

- Fails to implement an improvement plan.
- Fails to make any improvement in meeting the local adjusted level of performance for any of the core indicators of performance within the first program year of implementation of its improvement plan.
- Fails to meet at least the percentage of an agreed-upon local adjusted level of performance for the same core indicator of performance for three consecutive years.

Any determination regarding sanction will not be made without notice and opportunity for the local entity to have a hearing. In determining whether to impose sanctions, the state will consider:

- Exceptional or uncontrollable circumstances, such as a natural disaster or a precipitous and unforeseen decline in the financial resources of the sub-recipient.

- The impact of the small size of a CTE program on the sub-recipient's reported performance.

If the state does withhold funds due to performance as described above, the state will use those funds to provide (through alternative arrangements) services and activities to students within the area served by the sub-recipient.

Appendix A

Perkins V State Plan Stakeholder Engagement Opportunities

Type of opportunity	Dates and Timelines	Attendee Categories	Number of Attendees
In-person listening session	September 19-20, 2018	Secondary CTE teachers, administrators, coordinators, Principals, Assistant Principals, Counselors	80
In-person listening session	November 29, 2018	State Superintendent, Advisory Council, Governor's Office, Departments of Commerce, Labor, Education, Rehabilitation, City Council, Private business and industry	26
In-person listening session	September 16, 2019	Community College vice-president, of instruction, academic affairs, Provost, Deans, student services, workforce enrollment management,	25
In-person listening session	October 7, 2019	Community College vice-president, of instruction, academic affairs, Provost, Deans, student services, workforce enrollment management, financial aid,	40
In-person listening session	October 21, 2019	State Senator, WVCTCS Chancellor, College President, vice-president, of instruction, academic affairs, Provost, Deans, student services, workforce enrollment management, financial aid, academic advisors, faculty, CTE Administrators and WVDE leadership	25
In-person listening session	November 6, 2019	Community College vice-president, of instruction, academic affairs, Provost, Deans, student services, workforce enrollment management, financial aid, academic advisors, faculty	20
In-person listening session	November 21, 2019	State Senator, Governor's Office, Departments of Commerce, Labor, Education, Rehabilitation, City Council, Private business and industry	50
In-person listening session	November 25, 2019	West Virginia Department of Education CTE Staff, CTC leadership	40
In-person listening session	December 6, 2019	Community College vice-president, of instruction, academic affairs, Provost, Deans, student services, workforce enrollment management, financial aid, academic advisors, faculty	100
In-person listening session	December 9, 2019	Division of Rehabilitation Services, WVDE – Adult Education and Special Populations, and Agency	4

Appendix B

Perkins V State Plan Selected Online Survey Results

Q1 How would you define Career, Technical, and Adult education in West Virginia?

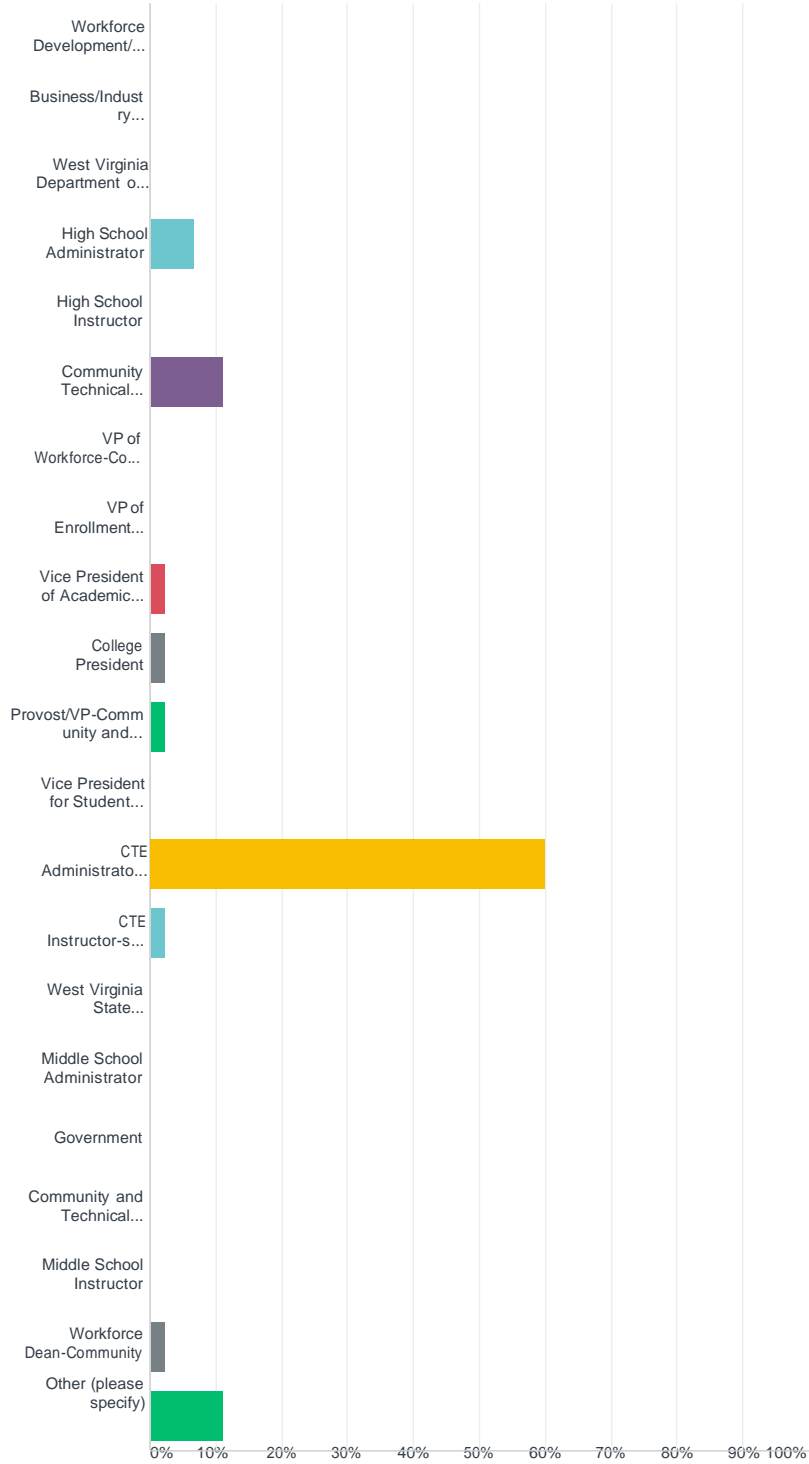
Answered: 45 Skipped: 0

#	RESPONSES	DATE
1	Programs of Study that provide training in today's technological workforce.	12/16/2019 6:42 PM
2	Programs that teach technical skills through real world simulated workplace environments and prepares students for the workforce.	12/3/2019 8:34 PM
3	Hands-on, project-based learning environment that allows students to leave secondary schools either college or career ready in order to provide the next workforce.	12/3/2019 3:52 PM
4	Programs offered by the public-school systems to begin the transition of students into careers.	11/26/2019 3:05 PM
5	I believe CTE and AE are moving in the right direction preparing students for the world of work.	11/25/2019 7:40 PM
6	Specialized occupational instruction that facilitates job entry; the educational experience is relevant and planned with the end goal of employment for the student in mind	11/25/2019 1:48 PM
7	Career, Technical, and Adult education in WV provides for the development of the minimum job skills need for individuals to enter the workforce and be successful.	11/25/2019 1:45 PM
8	Educating those students who will be the workforce of tomorrow for our state. To teach them the skills needed to successfully compete for jobs in the future and bring new jobs to their area.	11/25/2019 1:05 PM
9	Career and Technical education is education that allows students to gain knowledge, experience, and understand workplace environments. It is full of rigor and in many programs, extensive amount of math incorporated in the courses. CTE helps students to be able to either go directly into the workforce or go on to gain more knowledge in a higher education/community college/union setting. There are multiple opportunities for students in all routes. Adult Education encompasses two areas. One is to prepare adults to take the high school equivalency exam and pass. Another part of that is to help adult students gain some types of certification that will be helpful to them in their current or future job. Yet another part of Adult education is certification programs, such as the LPN program. It is also complete with rigor, experiences in the workplace, and preparation for the licensing exam. It's an alternative for those who choose not to attend higher education.	11/20/2019 8:17 PM
10	designed to prepare students for post-secondary education and or training for workforce.	11/20/2019 3:16 PM
11	The best opportunity for ALL students to be successful in developing career skill sets, pursuing a post-secondary training and or being prepared for a 2 year or 4-year education.	11/20/2019 2:48 PM
12	Career, Technical and Adult education is the education that prepares students for middle skills jobs. This training includes both technical and soft skills needed for individuals to succeed in the workplace and encourages life-learning to evolve as technology and skills that are need evolve.	11/19/2019 10:53 PM
13	Career, Technical and Adult education curriculum is designed to prepare students and adults to enter the workforce and be productive citizens	11/19/2019 7:00 PM
14	CTE is an integral part of the education system in WV. The Simulated Workplace initiative puts WV above other states in our service to students and industry.	11/19/2019 6:56 PM
15	An essential component of student education in public schools	11/19/2019 12:42 PM
16	Top Notch	11/19/2019 10:29 AM
17	To meet the needs of the region's people to attain desired careers and opportunities. To help develop the workforce that the region's industry needs to be positive economic factors.	11/19/2019 2:31 AM
18	I think for the most part - thriving. There is always room for improvement, but I think WV continues to develop very good and productive CTE programs.	11/18/2019 8:26 PM
19	Exposure to skills need to locate employment and skills needed to further education.	11/18/2019 7:59 PM
20	The program is upbeat, on target, meeting the needs of students, challenging, and has dedicated teachers that make a difference in students' lives.	11/18/2019 7:31 PM
21	Career and technical education (CTE)—describe classes that are designed to prepare students for work and college readiness. It is programs that specialize in skilled trades areas with opportunities for students to earn credentials to be able to compete in the job market usually right out of high school.	11/18/2019 7:06 PM
22	Career and Technical education and Adult education assist students in developing skills required to enter a workforce better prepared for positions or to be ready for very job specific training.	11/18/2019 7:00 PM
23	Prepares students to be career and college ready	11/18/2019 6:44 PM
24	Rigorous, Relevant and Revolutionary!! I believe that WV has the best CTE/Adult programs in the country. Our Simulated Workplace programs are setting the standard for other states to follow.	11/18/2019 6:41 PM
25	Career and Technical Education is a combination of each respective programs' specific skills, the soft skills that each student must learn to be more employable, and a myriad of lessons that accompany what it means to be dependable, drug free, punctual, honest, and to hold a high degree of work ethic. All 12 of the protocols of SWP are important to the holistic approach of educating a child to be Career Ready. The hands-on approach allows students to dig deeper and learn in a more meaningful way by having ample opportunities to apply the knowledge they have learned into transferable work skills.	11/18/2019 6:38 PM

26	CTE in WV is at the forefront in educating West Virginia high school students and adults. Industry credentials, Simulated Workplace, and job placement define CTE success in WV. Career/Technical Centers offer the best skill set training available to our student population at a reasonable price.	11/18/2019 6:20 PM
27	For what we have to work with we are surviving at best.	11/18/2019 6:16 PM
28	I believe both secondary and adult career technical education is on the rise in WV. More students are obtaining state and national industry certifications in high school than ever before.	11/18/2019 6:04 PM
29	It is evolving in the right direction with the best interest of students at heart.	11/18/2019 5:54 PM
30	THE key piece to diversifying our job market.	11/18/2019 5:27 PM
31	Programs able to put students in employment post-secondary	11/18/2019 5:24 PM
32	CTE programs at the secondary and adult levels in WV offer a plethora of opportunities for students to gain experiences that can lead to gainful employment and life-long careers.	11/18/2019 5:24 PM
33	CTE in WV has been extremely enhanced by the Simulated Workplace Initiative. It offers real world education and training to better prepare students for employment.	11/18/2019 5:14 PM
34	I feel that WV has some high-quality programs that bring in true work based learning however I don't feel that it is that way for all areas of the state.	11/18/2019 4:39 PM
35	Innovative but too much focus in tech centers and too little on comprehensive HS programs.	11/18/2019 4:37 PM
36	CTE is a vital part of the state of West Virginia students. Most of the students in WV are differently hands-on learners and will join the workforce, before going onto college.	11/18/2019 4:34 PM
37	Credentials that students can earn for work readiness in a classroom setting that allows growth in job skills, drug free work area in a simulated work environment.	11/18/2019 4:28 PM
38	Setting the standard.	11/18/2019 4:27 PM
39	Prepare students for Career and College Readiness. Providing students with skills to make them successful in careers.	11/18/2019 3:48 PM
40	All programs that lead completers to a specific job.	11/18/2019 3:36 PM
41	Education and training to prepare students for high-wage, high-demand occupations in the state.	11/18/2019 3:35 PM
42	Programs that lead to entry-level employment or preparation for matriculation to post-secondary education.	11/18/2019 3:29 PM
43	I do not have a quick answer to this question.	11/18/2019 3:21 PM
44	Education for all	11/18/2019 3:15 PM
45	Not distinctly defined.	11/18/2019 3:05 PM

Q2 Choose the role that best describes you?

Answered: 45 Skipped: 0



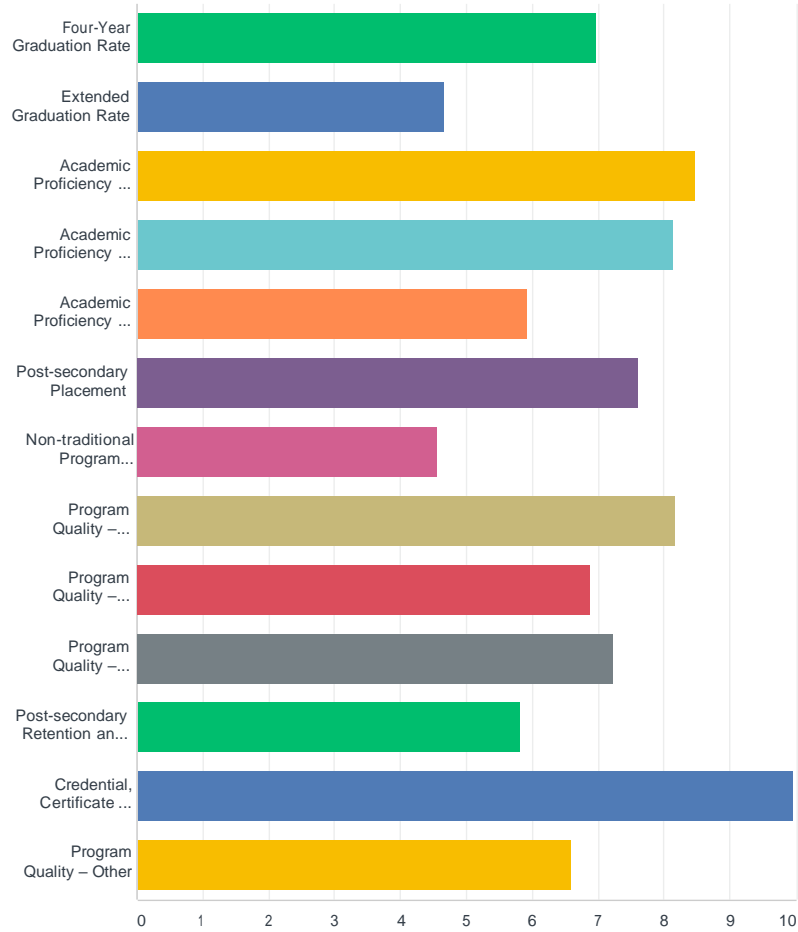
ANSWER CHOICES	RESPONSES
Workforce Development/Commerce	0.00% 0
Business/Industry representative	0.00% 0
West Virginia Department of Education CTE Staff	0.00% 0
High School Administrator	6.67% 3

High School Instructor	0.00%	0
Community Technical College Administrator	11.11%	5
VP of Workforce-Community and Technical College	0.00%	0
VP of Enrollment Management-Community and Technical College	0.00%	0
Vice President of Academic Affairs-Community and Technical College	2.22%	1
President	2.22%	1
Provost/VP-Community and Technical College	2.22%	1
Vice President for Student Services-Community and Technical College	0.00%	0
CTE Administrator-secondary	60.00%	27
CTE Instructor-secondary	2.22%	1
West Virginia State Department Staff (Community)	0.00%	0
Middle School Administrator	0.00%	0
Government	0.00%	0
Community and Technical College Workforce Instructor/Faculty	0.00%	0
Middle School Instructor	0.00%	0
Workforce Dean-Community and Technical College	2.22%	1
Other (please specify)	11.11%	5
TOTAL		45

#	OTHER (PLEASE SPECIFY)	DATE
1	CFO	11/25/2019 1:45 PM
2	Administrator K-12/Adult	11/18/2019 6:16 PM
3	Assistant Superintendent K-12	11/18/2019 5:24 PM
4	Higher Education Representative	11/18/2019 4:39 PM
5	Dean - Pre-professional Programs CTC	11/18/2019 3:36 PM

Q3 Please rank the importance of the Core Indicator by preference.

Answered: 45 Skipped: 0



	1	2	3	4	5	6	7	8	9	10	11	12	13
Four-Year Graduation Rate	11.11% 5	2.22% 1	4.44% 2	15.56% 7	4.44% 2	4.44% 2	8.89% 4	13.33% 6	2.22% 1	13.33% 6	2.22% 1	13.33% 6	4.44% 2
Extended Graduation Rate	0.00% 0	6.67% 3	2.22% 1	0.00% 0	4.44% 2	2.22% 1	11.11% 5	8.89% 4	13.33% 6	6.67% 3	11.11% 5	13.33% 6	20.00% 9
Academic Proficiency in Reading/Language Arts	15.56% 7	11.11% 5	13.33% 6	8.89% 4	4.44% 2	2.22% 1	8.89% 4	11.11% 5	4.44% 2	8.89% 4	8.89% 4	2.22% 1	0.00% 0
Academic Proficiency in Mathematics	2.22% 1	17.78% 8	8.89% 4	8.89% 4	13.33% 6	11.11% 5	4.44% 2	6.67% 3	11.11% 5	6.67% 3	4.44% 2	4.44% 2	0.00% 0
Academic Proficiency in Science	0.00% 0	0.00% 0	15.56% 7	6.67% 3	2.22% 1	2.22% 1	11.11% 5	4.44% 2	20.00% 9	11.11% 5	17.78% 8	6.67% 3	2.22% 1
Post-secondary Placement	2.22% 1	8.89% 4	13.33% 6	6.67% 3	8.89% 4	8.89% 4	13.33% 6	15.56% 7	2.22% 1	8.89% 4	6.67% 3	4.44% 2	0.00% 0
Non-traditional Program Enrollment	0.00% 0	2.22% 1	2.22% 1	2.22% 1	2.22% 1	6.67% 3	17.78% 8	2.22% 1	6.67% 3	6.67% 3	20.00% 9	20.00% 9	11.11% 5
Program Quality – Attained Post-secondary Credential	6.67% 3	8.89% 4	0.00% 0	20.00% 9	11.11% 5	22.22% 10	4.44% 2	8.89% 4	4.44% 2	6.67% 3	2.22% 1	2.22% 1	2.22% 1
Program Quality – Attained Post-secondary Credits	0.00% 0	2.22% 1	8.89% 4	6.67% 3	22.22% 10	8.89% 4	4.44% 2	11.11% 5	11.11% 5	8.89% 4	8.89% 4	4.44% 2	2.22% 1

West Virginia Perkins V Planning - Putting Vision into Action

Program Quality – Participated in Work-Based Learning	0.00% 0	13.33% 6	11.11% 5	11.11% 5	8.89% 4	4.44% 2	8.89% 4	11.11% 5	0.00% 0	13.33% 6	4.44% 2	6.67% 3	6.67% 3
Post-secondary Retention and Placement	2.22% 1	4.44% 2	8.89% 4	2.22% 1	6.67% 3	13.33% 6	0.00% 0	4.44% 2	17.78% 8	8.89% 4	8.89% 4	13.33% 6	8.89% 4
Credential, Certificate or Diploma	35.56% 16	13.33% 6	8.89% 4	2.22% 1	11.11% 5	8.89% 4	4.44% 2	0.00% 0	6.67% 3	0.00% 0	2.22% 1	4.44% 2	2.22% 1
Program Quality – Other	24.44% 11	8.89% 4	2.22% 1	8.89% 4	0.00% 0	4.44% 2	2.22% 1	2.22% 1	0.00% 0	0.00% 0	2.22% 1	4.44% 2	40.00% 18

Q19 What strategies/activities would you recommend that would impact West Virginia's economic growth and workforce development for students who wish to pursue high-skill, high-wage, and in-demand career opportunities?

Answered: 45 Skipped: 0

#	RESPONSES	DATE
1	To provide programs of study that will train students and provide credentialing necessary to meet the job market demands.	12/16/2019 6:42 PM
2	strategy for raising wages and increasing work opportunities	12/3/2019 8:34 PM
3	Bringing business leaders in all fields into the school and showing them what students have learned and what they can do. Then working with these future employers to come up with a set of recognized credentials to show the students are valuable in the future workforce.	12/3/2019 3:52 PM
4	Stronger connections and pathways between CTE programs, post-secondary Workforce programs, and college Career and Technical programs. If there were less turf-oriented concerns, the students would benefit and move toward high-skill, high-wage, and in-demand careers in a timelier manner while receiving college credentials that will enable life-long learning.	11/26/2019 3:05 PM
5	unsure	11/25/2019 7:40 PM
6	Funding support from the state that is consistent and recognizes the value of technical education. Ensuring the employers are at the table to work with K-12 and higher education on program design and content.	11/25/2019 1:48 PM
7	More effective marketing of the high skill, high demand job opportunities available in WV so we can keep our young people in the state.	11/25/2019 1:45 PM
8	For students to be able to see the career and the skills needed firsthand in the job setting. High school students need to hear and see more real-world experiences on job sites and in companies and trade schools.	11/25/2019 1:05 PM
9	In order to attract companies with high-skill, high-wage and in-demand career opportunities, the state needs to make it attractive. Being attractive not only means tax benefits, etc. for companies for a limited period of time to help with start up, but also improved road system, health system and education. Many great teachers leave the state because of low salaries as compared with other states. It's a cycle. When companies look at the state and the possibility of people relocating to WV, they will look at all those things that will affect the living conditions of their employee.	11/20/2019 8:17 PM
10	1. Continue SWP 2. Internships / Apprenticeships 3. Real world application / Projects involving STEM, effective communication, life skills. 4. Thought process / Failure is the opportunity to learn 5. Inspiring / Strong Entrepreneurship skills-based programs	11/20/2019 3:16 PM
11	Simulated Workplace	11/20/2019 2:48 PM
12	Have realistic career discussions with students, coupled with Return on Investment (ROI) about the different degree options. This should be coupled with forth right explanation on the amount of (study time and years) to complete. Need more honest involvement of business leaders to influence parents, students, and secondary education teachers about real workforce demands and opportunities.	11/19/2019 10:53 PM
13	More company OJT opportunities at local tech centers and high schools.	11/19/2019 7:00 PM
14	Incorporate Design Thinking in the younger grades so that problem solving strategies are commonplace by the time students enter middle school.	11/19/2019 6:56 PM
15	true Seamless transition	11/19/2019 12:42 PM
16	Simulated Workplace Partnerships with the Business Community Advisory Councils	11/19/2019 10:29 AM
17	Earlier education in k12 of possible careers and means to attain education tasked to their desired career. Some shadowing may help students decide careers. Many change majors due to not really know what the career is.	11/19/2019 2:31 AM
18	1. There needs to be some collaboration between industry and education to see what skills are needed and lacking. 2. Industry and Education can develop steps and structure on how to ensure students graduate with necessary skills.	11/18/2019 8:26 PM
19	Communication and connection to employers.	11/18/2019 7:59 PM
20	The key is bringing in teachers that excel in those areas. Our current teacher shortage is a huge problem.	11/18/2019 7:31 PM
21	Internships and apprenticeship	11/18/2019 7:06 PM
22	Offer programs for a variety of students, straight to work, certificate programs, paid internships/apprenticeships, two- and four-year programs. Easy access.	11/18/2019 7:00 PM
23	no recommendations	11/18/2019 6:44 PM
24	I would like to see more high school required classes be offered as embedded credits through CTE courses. This would allow more of our students to participate in CTE.	11/18/2019 6:41 PM

25	For there to be a pipeline for skilled and certified laborers into high demand/high wage employment opportunities, WV needs to start in Middle School and create/support a continuum of CTE opportunities from 6th grade to 12th. But beyond that, WV also needs to do more in creating motivation/excitement for CTE students to wish to pursue an associate degree in a local 2-year college program. Creating a continuum from 6th grade to Higher Education is the best way to ensure that high demand jobs will be filled with a qualified and skilled work force.	11/18/2019 6:38 PM
26	Direct students to Career Technical Center ACE programs for the most cost effective, quality career training.	11/18/2019 6:20 PM
27	An accurate educational campaign for parents and counselors that highlights opportunities for certificate and associate degree holders. Most of the K-12 and college system are still promoting 4-year degrees at the expense of everything else. In many cases, students feel like they are valued less by the systems if they are not pursuing a four-year bachelor's degree.	11/18/2019 6:16 PM
28	Continue to expand on the opportunities for secondary CTE programs to address the needs of public and private businesses in WV. A good example is the state park initiative.	11/18/2019 6:04 PM
29	Career Prep, Job Readiness, Job Fairs, Mock/Real Interviews, On Job Training, Apprenticeships	11/18/2019 5:54 PM
30	CTE participation from "Traditional High School". MANY counselors and school administrators still treat CTE like its not for the top students.	11/18/2019 5:27 PM
31	Introduce to middle school students	11/18/2019 5:24 PM
32	Reverse Job Fairs are very worthwhile strategies where employers are able to visit with students at their school and see their work and experience their work ethic firsthand.	11/18/2019 5:24 PM
33	Additional funding to implement middle school programs and expand high school programs.	11/18/2019 5:14 PM
34	Statewide equity for programs; more in-depth conversations with local and regional employers; more discussions about living wages vs minimum wage	11/18/2019 4:39 PM
35	Put teeth in the student attendance requirements	11/18/2019 4:37 PM
36	Preparing the students from the Middle School to come to High School with a knowledge of the CTE programs available to them. It will assist in getting students jobs in the future, who may not wish to attend college.	11/18/2019 4:34 PM
37	Promoting: credentials, drug free work zone, simulated work area, and job skills	11/18/2019 4:28 PM
38	Funding PLTW programs with fidelity. It is a great model.	11/18/2019 4:27 PM
39	Engage the business community, specifically at the local level.	11/18/2019 3:48 PM
40	Working with students in elementary and middle school to get them thinking about post-secondary training/education so that they take their education seriously.	11/18/2019 3:36 PM
41	Make sure all colleges are on the same page and approach it as a united effort. One particular college is straying from the fundamental purpose of a community & technical college and focusing in areas that do not produce sustainable jobs. We need a collective mission with everyone across the state working towards the same goals.	11/18/2019 3:35 PM
42	Coordinated regional approach to Guided Pathways from high schools to CTCs based on workforce data with a clear role and understanding of that role for high school CTE and CTC education.	11/18/2019 3:29 PM
43	More prepared for college (independence, work ethic) Programs that are truly 'vocational' for individuals who want to do what has been traditionally considered "blue-collar, manual" labor...elimination of general education requirements or revision of Eng. & math courses so they are truly specific to those skills used on the job (taught collaboratively by Eng./math instructor and program/workforce faculty)	11/18/2019 3:21 PM
44	I think the state is doing a lot at the present time. Easy access is the key for most potential students. WV Invest is limited because it doesn't cover fees for the programs that typically have very high fees.	11/18/2019 3:15 PM
45	Not allowing them to think that a High School Diploma is all they will ever need.	11/18/2019 3:05 PM

Q21 As we develop the West Virginia Perkins V State Plan, what are your concerns, challenges, and issues, you wish to see addressed?

Answered: 45 Skipped: 0

#	RESPONSES	DATE
1	I would like to see a portion of Perkins given to ACE programs.	12/16/2019 6:42 PM
2	Additional funding to update old equipment or start new programs.	12/3/2019 8:34 PM
3	Proper alignment and a good working agreement with all parties. As we branch to the middle level we need to make sure the classes will be a benefit to students in secondary and then there needs to be an agreement in place with the CTC system to allow students to take advantage of what they learned.	12/3/2019 3:52 PM
4	Limited opportunities to support flexible workforce short-term programs exist. The core indicators often have only a weak relationship to state priorities. More support in the plan to bring on specialist instructors to meet possibly short-term industry need, often it is difficult to hire instructors for the long term for programs that do not last indefinitely.	11/26/2019 3:05 PM
5	Not sure at this time	11/25/2019 7:40 PM
6	The representative institutions must get over being competitive and work together for the good of the students. Allow room for regional differences to be accommodated--the same solutions won't be effective in all locations.	11/25/2019 1:48 PM
7	Improving graduation rates and enrollment among non-traditional age West Virginians.	11/25/2019 1:45 PM
8	This is the first year I have hands on experience with CTE and Perkins. I find what is already in place to be valuable and working for our students.	11/25/2019 1:05 PM
9	Clear and concise information and correlation between the two	11/20/2019 8:17 PM
10	more opportunity / alignment of high school programs	11/20/2019 3:16 PM
11	To continue to strengthen Career and Technical Education at the Secondary level.	11/20/2019 2:48 PM
12	A state plan needs to provide local flexibility to meet needs identified by the colleges. Centralized planning is always theoretically sound, but in reality, an abysmal failure.	11/19/2019 10:53 PM
13	Perkins is a wonderful and much needed funding source for the CTE programs. I feel the restrictions limit the ability to expand programs. I would love to see a fractional part of Perkins be used to purchase teaching supplies. W	11/19/2019 7:00 PM
14	I would like to see more flexibility with spending the grant money.	11/19/2019 6:56 PM
15	Fair split	11/19/2019 12:42 PM
16	none	11/19/2019 10:29 AM
17	Helping students to transition to typically higher education demands - success coach. Continue the great programs focused on transitioning individuals - drug rehab, alcohol, incarceration, etc. Increasing accessibility especially to our more remote regions, first-generation students, and low economic students.	11/19/2019 2:31 AM
18	I think locally we must do a better job in promoting & marketing CTE programs and opportunities. This is primary to our students and parents. I think from a state wide perspective, they can do a better job with the promoting and marketing as a whole as well.	11/18/2019 8:26 PM
19	None at this time.	11/18/2019 7:59 PM
20	Being able in include the special education population in our workforce.	11/18/2019 7:31 PM
21	That we could provide more opportunities for graduates to be employed after graduation.	11/18/2019 7:06 PM
22	Continued communication between all stakeholders to increase opportunities that can be certificate programs with internships to get students into workforce in a timely manner and programs geared to employer needs.	11/18/2019 7:00 PM
23	no concerns	11/18/2019 6:44 PM
24	As most counties in WV are seeing smaller enrollments, we are seeing cuts in teacher positions. CTE programs help the state by making sure that our graduates have skills that make them employable. However, waiting until 11th grade year to enter a CTE program is often too late and students are either on the drop-out pathway or cannot schedule it in due to failing grades. Capturing the interest of these students in Middle School, I believe, would give these students a reason to excel. I would like to see at least one CTE faculty member in each county to be fully funded.	11/18/2019 6:41 PM
25	Cooperative purchase opportunities (e.g. we know that welding programs will need welding rods. Why not purchase a multitude of rods for all programs in order to save money state-wide)?	11/18/2019 6:38 PM
26	I would like to see that the CTC's aren't allowed to duplicate programs that Career/Technical Centers offer. We do not have the disposable population to charge students more at CTC's for what CTE's do better.	11/18/2019 6:20 PM
27	My biggest concern is that funding remains relatively unchanged over a period of many years. Obviously, this is financially troubling from a management perspective.	11/18/2019 6:16 PM
28	There needs to be a better alignment from secondary to WV Community colleges.	11/18/2019 6:04 PM
29	Bridging the gap between workforce, technical school and the student.	11/18/2019 5:54 PM

30	None	11/18/2019 5:27 PM
31	None at this time	11/18/2019 5:24 PM
32	Development of life skills and career exploration curriculums for middle school students.	11/18/2019 5:24 PM
33	More funding would help improve	11/18/2019 5:14 PM
34	I would like to see the CTE programs offered in both the secondary and post-secondary schools to be truly equitable throughout the state.	11/18/2019 4:39 PM
35	Not leaving comprehensive high schools out of the discussion. There needs are different that CTE centers.	11/18/2019 4:37 PM
36	Some students are not interested in attending college following high school graduation. They are interested in the workforce or military service. If funding is taken from the CTE Center, it may hurt the future of students.	11/18/2019 4:34 PM
37	How is allotment base? What are areas that are a focus?	11/18/2019 4:28 PM
38	Reporting and tracking student progress. Higher Ed will not want to deal with WVEIS.	11/18/2019 4:27 PM
39	More emphasis placed on CTE and CTC at the local, county level. Additional funding, support.	11/18/2019 3:48 PM
40	No particular concerns at this time.	11/18/2019 3:36 PM
41	I would like to see less restrictions on the use of Perkins funds.	11/18/2019 3:35 PM
42	The number of high school career-technical students continuing their education at community and technical college.	11/18/2019 3:29 PM
43	Clearer guidelines regarding use of funding The consideration that at the post-secondary level it is often difficult to provide support exclusively to students in Perkins-eligible programs; often these students are most in need of support in general education requirements (math & Eng.) and to apply funding to these areas means that perhaps students who are not technically in "Perkins-eligible" programs may benefit at the same time	11/18/2019 3:21 PM
44	I am concerned that we will not have enough time to fully understand it before we have to submit the requests on the guide.	11/18/2019 3:15 PM
45	K-12 and CTCs will both try to control money and real purpose will not be accomplished.	11/18/2019 3:05 PM

Appendix C West Virginia Career Clusters

Career Cluster	WVDE Secondary CTE (# of Completers)	WVDE Adult (ACE) (# of Certificate Graduates)	WV Community and Technical Colleges (# of Certificates and Associate Degrees)		
Agriculture, Food, and Natural Resources	Agribusiness systems (364)				
	Animal Processing (25)				
	Animal Systems (65)				
	Chemical Energy and Mechanical Technologies (5)				
	Forest Industry (23)				
	Natural Resource Management (48)				
	Pet Grooming (17)				
	Plant Systems (208)				
	Power, Structural, and Technical Systems (122)				
Architecture and Construction	Building Maintenance and Operations (27)				
	Carpentry (315)			Carpentry (4)	Construction Management (A-8)
					Computer Aided Drafting (C-3)
	Drafting (92)				Drafting (A-7, C-2)
					Electrical Distribution
	Electrical Technician (200)			Electrical Technician (ACE)(68)	Residential/Commercial Electricity (C-2)
				Heavy Equipment Operations and Preventative Maintenance (ACE)(5)	
				Heavy Equipment Operator (ACE)(New)	
	HVAC Technician (59)			HVAC Technician (93)	HVAC Technology (A-4)
	Masonry (49)				
Plumbing (18)					
	Sustainable Building Technology (0)				
Arts/AV Technology and Communications	Broadcasting Technology (29)	Broadcasting Technology (1)	Broadcast(A-1)		
			Digital Communication (C-1)		
	Graphic Communications (16)				

	Graphic Design (77)		Graphics/Graphic Design (A-14)
			Journalism(A-2)
	Multimedia Publishing (12)		
Business Management and Administration	Management and Administrative Support (539)	Administrative and Business Support (ACE)	Business Administration (A- 205, C- 117)
	Career and Work Skills Training (CWST) (181)		
			Banking/Finance (A-3)
			Business and Technology
			Business Integration Business Operations (C-38)
			Entrepreneurship (C-3)
			Organizational Leadership Development
			Small Business Management
		American Sign Language (A-16, C- 19)	
Education and Training	Careers in Education (87)		Education (a-6, C-13)
			Early Childhood (A-39, C-28)
Finance		Accounting (ACE)	Accounting/Bookkeeping (A-39, C- 25)
			Banking and Finance (A-3)
Government and Public Administration	JROTC (398)		
Health Science	Allied Health (204)	Allied Health (2)	Allied Health(A-77, C-45)
			Central Sterile Supply Technician (C-1)
		Certified Nursing Assistant (ACE)	
		Dental Assisting (ACE)(5)	
			Dental Hygiene (A-14)
			Dental Laboratory Technology (A- 1)
	Biomedical Science (PLTW) (18)		
	Diagnostics Services (20)		Diagnostic Medical Sonography (A-11)
	Health Informatics (12)		Health Information Management (A- 86)
			Gerontology (A-1, C-1)
		Health Professions/Health Sciences (A-3)	

		Massage Therapy (ACE)	Massage Therapy (A-5, C-7)
		Medical Assisting (ACE)(22)	Medical Assisting (A-56, C-30)
			Medical Coding (C-51)
			Medical Laboratory Technology (A-35, C-11)
		Medical Office (5)	
	Personal Fitness and Wellness Training (16)		Exercise Science(C-2)
			Nuclear Medical Technology (A-11)
			Patient Care Technical (C-44)
			Pharmacy Technician (A-10, C-2)
		Phlebotomy (ACE) (92)	
			Physical Therapist Assisting (A-44)
	Therapeutic Services (637)	Practical Nursing (ACE)(230)	Practical Nursing (C-41)
			Radiologic Technician (A-28)
		Respiratory Therapy Technician (ACE)	Respiratory Technology (A-32)
		Veterinary Technology (ACE)	Veterinary Assistant (C-5)
			Veterinary Technology (A-27)
Hospitality and Tourism	Baking and Pastry (7)		Baking/Pastry (A-3, C-3)
	Hospitality and Tourism Concentration (33)		Hospitality Management
	ProStart Restaurant Management (259)		Food Service Retail Management (A-8,C-1)
		Culinary Arts (ACE) (4)	Culinary Arts (A-10, C-11)
	Barbering (1)	Barbering Apprenticeship (ACE 9)	
		Cosmetology (ACE)(84)	Cosmetology (C-13)
		Esthetics (ACE)(13)	
		Nail Technology (ACE) (9)	
		Hair Stylist (ACE)(17)	Salon Management (A-10)
Human Services	Human Services Assistant (8)		Human Services (A-42, C-11)
Information Technology			3-D Printing (C-3)
	CISCO Networking Academics (32)		CISCO Certified (C-6)
	Coding, Applications, and Game Design (92)	Coding, App, and Game Design	Coding/Animation, Game and Web Design (A-6)

			Computer Application Specialist (A-3, C-1)
	Computer Science (PLTW)(17)		Computer Networking (A-16, C- 10)
			Computer Science Software/Software Development (A-31)
	Computer Systems Repair Technology (188)	Computer Systems Repair Technology (2)	
			Cybersecurity (A-27,C-2)
			Database Management
	Informatics (Advanced Career) (5)		Digital Media Specialist (A-1)
	Information Management (315)		Information Technology (A-69, C- 29)
			Microsoft Certified Solutions (C-8)
			Network Engineering (A-9)
			Technology Systems (C-3)
Law, Public Safety, Corrections, and Security			Corrections (A-1)
	Law and Public Safety (215)		Criminal Justice (A-21,C-52)
			First Response/Paramedic
			Forensic Science (C-3)
	Emergency and Firefighting Management Services (40)	Emergency and Firefighting Management Services (ACE)	Emergency Medical Services (A- 11, C-17)
			Paramedic Science (A-20,C13)
			Homeland Security (c-^)
	Paralegal Assistant (2)		Legal Office Assistant (C-6)
			Legal Studies (A-7,C6)
			Legal Support (C-7)
		Police Science (A-18)	
		Paralegal Studies (A-24,C-1)	
Manufacturing		Advanced Manufacturing (4)	Advanced Manufacturing (A- 15, C-1)
			Applied Lab Technology (A-1)
			Applied Process Technology (A- 20)
			Biomedical Instrumentation Technology (A-4)
			Electric Utility Technology(A-42)
			Electrical Distribution Technology (A-6, C-27)
		Electromechanical Technology (ACE)	Electromechanical Technology (C- 2)
	Electronics Technician (12)		Electronics Technology (A-4)

	Industrial Equipment Maintenance (47)	Industrial Equipment Maintenance (9)	Industrial Technology (A-1, C-7)
	Machine Tool Technology (69)		Instrumentation Process Technology (A-5, C-1)
		Machine Tool Technology (ACE)	Machine Tool Technology (A-13, C-11)
			Mechatronics (A-6, C-5)
	Millwork and Cabinetmaking (27)		
			Petroleum Technology (A-5, C-10)
			Renewable Energy Systems
			Power Plant Technology (0)
	Robotics (42)		Robotics (C-2)
			Oil & Gas Pipe Welding (C-6)
	Welding (395)	Welding ACE (52)	Welding (A-47, C-26)
			Wind Energy Technology A-2, C-6)
Marketing	Marketing Management (72)		Marketing
			Advertising (0)
Science, Technology, Engineering and Mathematics	Aerospace Engineering (Advanced Career) (11)		
			Applied Design Technology (A-10)
	Clean Energy Technology (Advanced Careers)		
	Energy, Power, and Engineered Systems (Advanced Careers)(26)		
			Energy Assessment Management
	Pre-Engineering- Project Lead the Way (144)		Renewable Energy Systems (C-1)
			Engineering-Civil-(A-7)
			Engineering Design Technology (A-4)
			Engineering -Electrical (A-10, C-5)
			Engineering-Mechanical-(A-8)
	Innovations in Science and Technology (Advanced Career) (5)		Engineering Technology (A-3)
Transportation, Distribution and Logistics	Automotive Technology (372)	Automotive Technology (ACE) (20)	Automotive Technology (A-7, C-5)
			Aviation Maintenance Technology (A-11)
			Bridge Inspection (A-1)
	Collison Repair Technology (120)	Collison Repair Technology (2)	

	Diesel Equipment Technology (88)	Diesel Equipment Technology (ACE) (8)	Diesel Technology (A-8, C-9)
	Global Logistics and Supply Chain Management (Advanced Careers) (2)		
			Highway Engineering Technology (A-12)
	Power Equipment Systems (41)		Multi-Craft Technology (A-7)
			Power Sports Technology (A-2)
			Transportation (A-10, C-1)
			Transportation Railway (C-1)
		CDL Truck Driving (126)	

Appendix D Sample Data Profile

Data Profile - DEMO

999 Demo County
701 Demo School

2018 Overall School Score

Avg. Program Score	Points Possible	Points Earned	Overall School Score
60.6%	80	48.5	60.3%
Composite Totals	Points Possible	Points Earned	
59.2%	20	11.8	

Program Score - 80% of Overall School Score

#	Prog #	Program of Study Name	15		40		5		15		10			15		Program Score	
			Completters	Points Earned	NOCTI	Meeting %	Points Earned	Points	Points	Points	Points	Points	Points	Points	Points		Points
			# Current	% Meeting	# Audited	Workforce	Entry	Points	Scored	Points	Points	Points	Points	Points	Points	Points	
1	AA9999	Program of Study Name	7	10.5	7	5	71.4	28.6	7	5.0	1	1	0	6.0	10	9.0	74.1
2	AA9999	Program of Study Name	5	7.5	0	0	0.0	0.0	1	1.0	0	0	0	0.0	1	10.0	33.5
3	AA9999	Program of Study Name	15	15.0	15	3	20.0	8.0	15	5.0	1	1	0	6.0	16	8.1	57.1
4	AA9999	Program of Study Name	1	1.5	0	0	0.0	0.0	1	5.0	1	1	0	6.0	0	0.0	27.5
5	AA9999	Program of Study Name	11	15.0	6	4	66.7	26.7	11	5.0	0	0	0	0.0	0	0.0	61.7
6	AA9999	Program of Study Name	7	10.5	9	8	88.9	35.6	7	5.0	1	1	0	6.0	14	9.3	81.4
7	AA9999	Program of Study Name	0	0.0	0	0	0.0	0.0	0	0.0	1	1	0	6.0	13	10.0	31.0
8	AA9999	Program of Study Name	6	9.0	5	3	60.0	24.0	6	5.0	1	1	0	6.0	12	8.3	67.3
9	AA9999	Program of Study Name	5	9.0	4	4	100.0	40.0	5	4.2	1	1	0	6.0	6	10.0	84.2
10	AA9999	Program of Study Name	16	15.0	16	15	93.8	37.5	16	5.0	1	1	0	6.0	10	10.0	88.5
Totals			9.3	20.0	4.0	4.8	7.5	15.0	10.0	7.5	0.0	0.0	0.0	0.0	60.6		

Composite Score - 20% of Overall School Score

#	Prog #	Program of Study Name	10		5		5		5		Program Score
			Graduation	Points	Points	Points	Points	Points			
			# in Cohort	% Cohort	Points	Points	Points	Points	Points	Points	
1	AA9999	Program of Study Name	169	166	98.2	9.8	N	0.0	N	0.0	5.0
Totals			169	166	98.2	9.8	N	0.0	N	0.0	5.0

59.2%

Legend

100 - 90
89 - 80
79 - 70
69 - 60
59 and below

Appendix E Secondary Checklist and Local Application

LEA PLAN REVIEW CHECKLIST

County _____

CTE Administrator

Date of Action Request

Date of Corrections

Date of Provisional Approval

Date of Final Approval

LEA PLAN REVIEW

Please clarify review areas indicated in the “No*” columns for each of the LEA forms, correct on the online LEA Plan, and email sherri.nash@k12.wv.us with a copy to ngivens@k12.wv.us for verifying for final LEA Plan approval.

Form #	Form	Review Area	Yes	No*	Action Completed
A	Statement of Assurance	Superintendent Signature		X	
B	Levels of Performance	Superintendent Signature - Updated Signature after Negotiated Rates		X	

Perkins V Performance Requirements

1S1: Four-Year Graduation Rate	95.00%
2S1: Academic Proficiency in English/Language Arts	38.70%
2S2: Academic Proficiency in Mathematics	15.50%
2S3: Academic Proficiency in Science	28.87%
3S1: Postsecondary Placement	88.00%
4S1: Non-Traditional Program Enrollment	30.20%
5S1: Attained Recognized Postsecondary Credential	40.00%
5S2: Attained Postsecondary Credits	1.82%
5S3: Participated in Work-Based Learning	70.00%
5S4: Attained CTE Completer Status	55.00%

Form 1 – Use of Funds

Projected Allocation \$ =

Final Allocation \$ =

Maximum 5% Administration Calculation = \$

Review Area	Yes	No*
1. Total of Form 1 equals projected allocation amount	X	
2. All rows and columns are accurately calculated	X	
3. Each line entry has all information completed (School, Description, Program of Study, Section 135 Code, \$ amount, type of expenditure)	X	
4. Expenditure descriptions align with selected Section 135 Code	X	
5. Administrative expenditures identified in P19 codes AND contained within the narratives of all	X	

Review Area	Yes	No*
6. No funds are used for CTSO (CTE student organizations).	X	
7. No funds are used for adult expenditures.	X	
8. Funds to address performance deficiencies are identified (Note: OR strategies are identified in Form 1.2 – 1.10 that do not require funds).	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as “No”	Action Completed

Form 1.1 – Programs of Study

Review Area	Yes	No*
1. Compare 2016-2017 Approved Curriculum List with Program of Studies identified on the 2018-2019 Form 1.1		
a. If a new Program of Study is listed, verify Forms 4,5, and 6 (if applicable) are completed – See section Forms 4,5, 6 below).	X	
b. If Program of Study is eliminated, verify Form 3 is completed – See Section Form 3 below).	X	
c. If Program of Study is modified, verify Form 3 is completed – See Section Form 3 below).	X	
2. Verify all data is identified for each Program of Study:		
a. Program of Study is an approved WVDE CTE Program of Study for 2017-2018.	X	
b. NOCTI Assessment and skill sets are identified	X	
c. The four required courses with WVEIS codes are accurate.	X	
d. EDGE credits for continuing postsecondary pathway for the Program of Study are identified.	X	
e. Industry credential opportunity numbers are identified for the Program of Study (if applicable).	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as “No”	Action Completed

Form 1.2 – Improving Academic and Technical Skills

Review Area	Yes	No*
1. Strategies with clear description narratives are identified.	X	
2. If academic and technical performance deficiencies are identified for individual school:		
a. Strategies to address deficiencies for WV Summative Assessment (academic improvement).	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as “No”	Action Completed

Form 1.3 – Professional Development

Review Area	Yes	No*
1. Strategies with clear description narratives are identified.	X	
2. If academic and technical performance deficiencies are identified for individual school:		
a. Strategies to address deficiencies for WV Summative Assessment (academic improvement) are identified.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as “No”	Action Completed

Form 1.4 – Consultation

Review Area	Yes	No*
1. Strategies with clear description narratives are identified.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as “No”	Action Completed

Form 1.5 – Program Evaluation

Review Area	Yes	No*
1. Strategies with clear description narratives are identified.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as “No”	Action Completed

Form 1.6 – Access, Nondiscrimination, and Support for Special Populations

Review Area	Yes	No*
1. CTE Special Needs % is equal to or less than County %	X	
2. Strategies with clear description narratives are identified.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as “No”	Action Completed

Form 1.7 – Preparation for Non-Traditional Fields

Review Area	Yes	No*
1. Strategies with clear description narratives are identified.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as "No"	Action Completed

Form 1.8 – Career Guidance and Academic Counseling

Review Area	Yes	No*
1. Strategies with clear description narratives are identified.	X	
2. Middle School strategies are identified.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as "No"	Action Completed

Form 1.9 – Improving CTE Staff Recruitment and Retention

Review Area	Yes	No*
1. Strategies with clear description narratives are identified.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as "No"	Action Completed

Form 1.10 – Preparation for High Skill/High Wage/High Demand for Special Populations

Review Area	Yes	No*
1. CTE Special Needs % is equal to or less than County %	X	
2. Strategies with clear description narratives are identified.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as "No"	Action Completed

Form 2 – Advisory Councils

Review Area	Yes	No*
1. County Advisory members are identified.	X	
2. School-wide advisory members are identified.	X	
3. Program of Study advisory members are identified for all Program of Studies.		

a. Composition of advisory members contains business/industry representatives	X	
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Review Area #	*Corrective Action Needed: Review Areas Indicated as "No"	Action Completed

Form 3a – Program of Studies to be Discontinued

Review Area	Yes	No*
1. Program of Study is not listed on Form 1.1 Program of study.	X	
2. Data includes WVEIS code, level, and reason for closure.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as "No"	Action Completed

Form 3b – Modifications to a Program of Study

Review Area	Yes	No*
1. Data includes WVEIS code, level, and explanation of modification.	X	
2. Approval has been submitted to CTE Instructional Staff for Review (facilitated by Reviewer)	X	
3. Approval has been acquired by CTE Instructional Staff (facilitated by Reviewer).	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as "No"	Action Completed

Forms 4, 5, and 6 – Objectives for New CTE Curriculum, Curriculum Description, and Application for Approval of Equipment (if applicable)

Review Area	Yes	No*
1. New Program of Study has been requested. (If no, verify if should be submitted).	X	
2. New Program of Study data is completed: school, Program of Study, WVEIS code, level, secondary enrolled, upgraded students, post-graduate, adult prep, hours completed, contact hours, student teacher, % co-op, % simulated work, % employed field, and advisory committee meetings	X	
3. Labor market analysis has been completed and supports Program of Study.	X	
4. Curriculum is state-approved.	X	
5. If curriculum is local-approved, WVEIS code, level, units of instruction and hours are identified.	X	
6. Approval has been submitted to CTE Instructional Staff for Review (facilitated by Reviewer)	X	
7. Approval has been acquired by CTE Instructional Staff (facilitated by Reviewer).	X	
8. Form 6 is completed for equipment request (verify if applicable).	X	

9. Request forwarded to Sherri Nash and copy to Pat Givens for review.	X	
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Review Area #	*Corrective Action Needed: Review Areas Indicated as "No"	Action Completed

Forms 7 – Application for Approval Incentive or Other Special Project

Review Area	Yes	No*
1. Form 7 is completed. If not, verify if should be submitted.	X	
2. Data is completed for school, curriculum, level, WVEIS Code, Status, Type Request, Instructor, Salary, Fixed Costs, Supplies and Materials, Travel, Equipment, Other, Indirect Cost, and Total. Indirect Administration Costs may not exceed 5%.	X	

Forms 8 – Application for Approval of Continuing Secondary Technical Education Program of Studies (Secondary Teachers)

Review Area	Yes	No*
3. Data is completed for CTE teachers for school name, WVEIS code, teacher name, email, days employed. % time, determine if Teacher offers the four required courses or Non-applicable if the Program of Study is non-occupational, and teacher WVEIS endorsement code.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as "No"	Action Completed

Forms 10a – Application for Approval of Continuing Secondary Technical Education Program of Studies (Secondary Teachers)

Review Area	Yes	No*
1. Data is completed to assure administrative services information is complete with school, name, job title, email, days employed, and % of time.	X	

Review Area #	*Corrective Action Needed: Review Areas Indicated as "No"	Action Completed

West Virginia Council for Community and Technical College Education

**Strengthening Career and Technical Education for the
21st Century Act (Perkins V)**

LOCAL APPLICATION

Narrative

FISCAL YEARS 2021 – 2024

Postsecondary recipients must include a Qualifying Program of Study.

Institution Name:	
Mailing Address:	
Perkins Contact Person:	
Title:	
Phone:	
E-mail:	
Qualifying Program of Study:	
Original Submission:	<input type="checkbox"/>
Modification:	<input type="checkbox"/>
Modification #:	<input type="checkbox"/> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> __.
Date:	

Note: In order to obtain funding under the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), a college must have at least one Qualifying Program of Study. If the college has more than one Qualifying Program of Study, then choose the one most affected by proposed projects.

APPLICATION DUE DATE: August 1, 2020

SUBMIT APPLICATION TO: Rick Goff at goff@wvctcs.org

INTRODUCTION

The ***Strengthening Career and Technical Education for the 21st Century Act (Perkins V)*** was signed into law on July 31, 2018, to be effective on July 01, 2019. This Act, which became Public Law 115-224, reauthorizes the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV). Perkins V is largely based on the structure and content of Perkins IV and remains the most important piece of legislation affecting career and technical education (CTE). The purpose of the law is to develop more fully the academic knowledge and technical and employability skills of secondary and postsecondary education students who elect to enroll in CTE programs and programs of study. Perkins V facilitates this by placing a greater emphasis on the following areas:

- local flexibility;
- comprehensive stakeholder engagement and collaborative planning;
- innovation;
- equity and accountability; and,
- alignment with other education and workforce programs.

Perkins V requires colleges to develop and implement a **four-year local application**. Please note that fiscal year 2020 was a transition year; thus, the fiscal years to be covered in this application are 2021-2024. To effectively do so and ensure local needs are met, colleges must engage stakeholders in the planning and development of their four-year application. **Required stakeholders** include representatives of secondary CTE programs, minority-serving institutions, the local workforce development board, business and industry, special populations, community organizations, and Adult Education.

The Local Application under Perkins V is comprised of elements from a comprehensive local needs assessment, Application narrative, and Budget. To be eligible for funds, each college must submit a complete Local Application and Budget that identifies activities, goals, and objectives that reflect yearly and long-term progress.

GENERAL PROVISIONS

1. **Supplement Not Supplant:** An eligible recipient may not use Federal funds to replace state or local funds. Supplanting is (1) using Perkins funds to replace other funds that previously supported an activity or (2) funding an activity for CTE areas while funding that same activity for non-CTE areas with state funds (e.g., upgrading computers across campus on a three-year cycle but funding the CTE areas with only federal funds).
2. **Maintenance of Effort:** The maintenance of effort provision continues. An eligible institution must maintain the same level of support from state appropriated funds for the delivery of career-technical education as the previous year.
3. **Amendments:** Amendments to the approved local application are required when the scope of the activity is substantially changed or when expenditures exceed the budget by 10% in any budget category. If a budget category exceeds the budget in excess of 10%, it will be an unallowable expense. Amendments will not be accepted after June 15.
4. **Obligations & Expenditures for Grant Period:** Funds from a new grant period (July 1 – June 30) may not be used for obligations or expenditures that occurred in the previous grant period. New money cannot be used to pay for old expenditures.

5. **Substantial Approval of Local Application:** After review, the plan will be given a “not approved”, “substantially approved” (requires minimal revisions for approval), or “approved” rating. If the application is “not approved”, Perkins funds cannot be obligated until the application is revised and resubmitted in a “substantially approved” or “approved” format. The date (after July 1) you receive a “substantially approved” or “approved” rating will be the effective date of your grant.
6. **Three-Year Rule:** Perkins expenditures must be used for new, expanded, improved, or modernized projects, services, or activities and are eligible for up to three fiscal years of funding. The year of its inception and the next two fiscal years. It is considered maintaining/sustaining effort and not allowable if funded beyond the third fiscal year.
7. **Carryover:** Institutions are not permitted to carry forward unspent funds from one fiscal year to the next.
8. **Time and Effort Reports:** Time and effort records must be kept for all employees paid with Perkins funds and employees used in maintenance of effort calculations. Contractors are not required to complete time and effort reports.
9. **High-Skill, High-Wage, and In-Demand Occupations:** An emphasis must be placed on career-technical programs which assist students in preparation for high-skill, high-wage, and In-demand occupations. An emphasis will be placed on creating Guided Pathways in the Health Sciences and Information Technology career cluster framework/programs of study and subsequent focus on identifying in-demand and high-wage occupations.

ALLOCATION OF FUNDS

1. **Method of Allocation to Community and Technical Colleges:** Perkins allocations are based on the number of Pell Grant recipients enrolled in career-technical programs approved for Perkins funding.
2. **Minimum Allocation:** An eligible institution shall receive an allocation amount not less than \$50,000 based on the Pell Grant recipient formula or the eligible agency’s determination that the formula allocation method does not result in an equitable distribution of funds based on rural location, sparse population and economically disadvantage individuals.
3. **Allocation Timeline:** Funds will be allocated to eligible recipients each quarter on a reimbursement basis.
4. **Redistribution of Funds:** If the recipient does not obligate its allocation by the end of the fiscal year, the funds will be reallocated the next fiscal year based on the funding formula as described in the Perkins Act.

Statement of Assurance

(Institution) hereby assures the West Virginia Council for Community and Technical College Education that:

1. This plan has been developed in consultation with local advisory councils and committees for career-technical education programs and will be made available for review and comment by interested parties.
2. Equal opportunities in career-technical education programs will be offered to all persons without discrimination regardless of race, color, national origin, sex, religious preference, or disability.
3. Perkins funds shall be used to supplement local and/or state funds available for career-technical education. In no case shall federal funds supplant funds currently available.
4. Perkins funds will be used to provide career-technical education in programs that are of such size, scope, and quality as to improve career-technical education; to integrate academic and career-technical education in such programs through coherent sequences of courses so that students achieve both academic and occupational competencies; and to provide equitable participation in such programs for members of special populations.
5. Students who are members of special populations will be assisted in entering career-technical education programs.
6. Supplementary services, including curriculum modification, equipment modification, classroom modification, supportive personnel, instructional aids and devices, guidance, counseling, career development activities, counseling and instructional services designed to facilitate transition from school to post-school employment, and career opportunities will be provided to students who are members of special populations.
7. The institution will maintain documentation to verify the eligibility of special population students enrolled in programs supported by federal funds.
8. All academic programs eligible for Perkins funding will have advisory committees whose majority membership will be individuals from the industry.
9. No more than five percent (5%) of the Perkins allocation will be utilized for administrative purposes (direct and indirect).
10. Statistical, financial, and descriptive reports required by the WV Council for Community and Technical College Education and the U.S. Department of Education will be submitted in a timely manner.
11. Institutions will provide disaggregated data for each of the indicators of performance which shall include all student categories, including special populations.
12. Perkins funding may only be directed to programs that lead to high-wage, high-skill, or In-demand occupations.
13. Offer at least 1 career-technical program of study as described in Section 122(d)(4)(A) of the Act.

President's Signature

Date

SECTION 1: ANNUAL REPORT

Annual Report

Perkins recipients are required to continually make progress toward improving the performance of CTE students. In the text box below, please provide a general narrative on how the Perkins funds have helped CTE students and/or improved project outcomes. **The text boxes will expand as needed.**

SECTION 2: PERKINS LOCAL APPLICATION CONTENTS

Local Application for Career and Technical Education Programs. Sec. 134 - Local Application Required - Any eligible recipient desiring financial assistance under this part shall, in accordance with the requirements established by the eligible agency (in consultation with such other educational training entities as the eligible agency determines to be appropriate) submit a local plan to the eligible agency. Such local plan shall cover the same period of time applicable to the State plan submitted under section 122. This application is specific to State fiscal year 2021 – 2024. **The text boxes will expand as needed.**

(1) Comprehensive Local Needs Assessment (CLNA)

Describe the results of the Comprehensive Local Needs Assessment.

1. **IN GENERAL.** — To be eligible to receive financial assistance, your college shall conduct a CLNA related to career and technical education and include the results with the local application. The CLNA shall be updated not less than once every 2 years.

2. **REQUIREMENTS.**— The comprehensive local needs assessment shall include:
 - (A) An evaluation of the performance of the students served by your institution to include performance levels for special populations and each subgroup.

- (B) A description of how your career and technical education programs are sufficient in size, scope, and quality to meet the needs of all students served (see size, scope, and quality in the State Plan); and

how do your CTE programs align to the State, regional, or local in-demand industry sectors or occupations identified by WFWV or your local workforce development board, including career pathways where appropriate; or how are your CTE Programs designed to meet local education or economic needs not identified by your local workforce development boards;

- (C) please evaluate your progress toward the implementation of career and technical

education programs and programs of study;

- (D)** describe how your college will improve recruitment, retention, and training of career and technical education teachers, faculty, specialized instructional support personnel, paraprofessionals, and career guidance and academic counselors, including individuals in groups underrepresented in such professions;

- (E)** please describe your progress toward implementation of equal access to high-quality career and technical education 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;
 - programs that are designed to enable special populations to meet the local levels of performance; and activities to prepare special populations for high-skill, high wage, or in-demand industry sectors or occupations in competitive, integrated settings that will lead to self-sufficiency.

(2) CTE Programs

Provide information on the career and technical education course offerings and activities that your college will provide and include not less than 1 program of study approved by the State, including —

- (A)** how will the results of the CLNA inform the selection of the specific career and technical education programs and activities selected to be funded;

- (B)** describe any new programs of study that you will develop and submit to the State for approval;

- (C)** how will students, including students who are members of special populations, learn about their school's career and technical education course offerings and whether each course is part of a CTE program of study.

(3) Career Exploration

Describe how your college, in collaboration with local workforce development boards, other local workforce agencies, and other partners, will provide —

- (A)** career exploration and career development coursework, activities, or services;

[]

(B) career information on employment opportunities that incorporate the most up-to-date information on high-skill, high-wage, and in-demand industry sectors or occupations, as determined by the CLNA;

[]

(C) career guidance and academic counseling to students before enrolling and participating in a CTE program.

[]

(4) Academic and CTE Integration

Describe how your college will improve the academic and technical skills of students participating in CTE programs by strengthening the academic and CTE components of such programs through the integration of coherent and rigorous content aligned with challenging academic standards and relevant CTE programs to ensure learning in the subjects constitutes a well-rounded education. *Perkins funds may not be used for academic or remedial courses.*

[]

(5) Special Populations

Describe how your college will -

(A) provide activities to prepare special populations for high-skill, high-wage, or in-demand industry sectors or occupations that will lead to self-sufficiency;

[]

(B) prepare CTE participants for non-traditional fields;

[]

(C) provide equal access for special populations to CTE courses, programs, and programs of study; and

[]

(D) ensure that members of special populations will not be discriminated against based on their status as members of special populations. *Descriptions should include how the recipient identifies barriers related to special populations and provides accommodations to promote equity in the student population. Discuss possible strategies for promoting programs of study to non-traditional students. You may include a portion of your non-discrimination policy.*

[]

(6) Work-based Learning

Describe the work-based learning opportunities that your college will provide to students participating in CTE programs and how you will work with representatives from employers to develop or expand work-based learning opportunities for CTE students.

Perkins V places a greater emphasis on work-based learning. Recipients must describe how they will work with industry leaders to provide hands-on activities including apprenticeships, mentorships, internships, job shadowing, simulated work environments, business/industry field trips, and other activities.

(7) Postsecondary Credit

Describe how your college will provide students participating in CTE programs with the opportunity to gain postsecondary credit while still attending high school, such as through dual or concurrent enrollment programs or early college high school.

Descriptions do not need to include specific courses but should include a general overview of the program and with whom statewide and individual articulation agreements are currently in effect.

(8) Recruitment, Preparation, Retention, and Training

Describe how your college will coordinate with the State Agency and institutions of higher education to support the recruitment, preparation, retention, and training, including professional development, of teachers, faculty, administrators, and specialized instructional support personnel and paraprofessionals who meet applicable State certification and licensure requirements, including individuals from groups underrepresented in the teaching profession.

(9) Performance Gaps

Describe how your college will address disparities or gaps in performance in each of the plan years, and if no meaningful progress has been achieved before the third program year, a description of additional actions you plan take to eliminate those disparities or gaps.

SECTION 3: LOCAL USES OF FUNDS

PROJECT DESCRIPTION AND BUDGET

In this section, please indicate those projects that you elect to fund with your Perkins allocation. **It is not necessary to have a project for each Local Use of Funds.** If you have more than one project for each Local Use of Funds, please copy and paste this section to reflect the Local Use of Funds number, Project Title, Project Description, Project Budget Amount, and the Perkins Local Application Alignment. Attachment A lists the requirements for Uses of Funds and provides further details necessary to complete Section 3. If a Project encompasses more than one Local Use of Funds, indicate the Project again under that particular Use of Funds and detail the Project Description and Budget applicable to that particular Use of Funds. An Excel Workbook is provided for budget line items and year-end reporting. **The text boxes will expand as needed.**

Local Use # 1: Career Exploration and Development

Project Title

Program of Study related to the Project

Project Description

Describe the project that *provides career exploration and career development activities through an organized, systematic framework designed to aid students before enrolling and while participating in a career and technical education program, in making informed plans and decisions about future education and career opportunities and programs of study.* The description should be as descriptive as possible and may include general information about planned purchases.

Project Budget (Enter the Total Project Amount. Total will be itemized on the Budget Worksheets)

Total:

Perkins Local Application Alignment

How does your project align with the answers given in Section 2 of the Perkins Local Application? How does it improve the CTE program? Please note, all projects must comply with Perkins V Sec. 135. Local Uses of Funds. Only include allowable costs in the project budget.

Local Use # 2: Professional Development

Project Title

Program of Study related to the Project

Project Description

Describe the project that *provides professional development for teachers, faculty, school leaders, administrators, specialized instructional support personnel, career guidance and academic counselors, or paraprofessionals*. The description should be as detailed as possible and include general information about planned purchases.

Project Budget (Enter the Total Project Amount. Total will be itemized on the Budget Worksheets)

Total:

Perkins Local Application Alignment

How does the project align with the answers given in Section 2 of the Perkins Local Application? How does it improve the CTE program? All projects must comply with Perkins V Sec. 135. Local Uses of Funds. Only include allowable costs in the project budget.

Local Use # 3: High-skill, High-wage, or In-demand Occupations

Project Title

Program of Study related to the Project

Project Description

Describe *the skills necessary in your career and technical education project that leads to high-skill, high-wage, or in-demand industry sectors or occupations*. The descriptions should be as detailed as possible and include general information about planned purchases.

Project Budget (Enter the Total Project Amount. Total will be itemized on the Budget Worksheets)

Total:

Perkins Local Application Alignment

How does the project align with the answers given in Section 2 of the Perkins Local Application? How does it improve the CTE program? All projects must comply with Perkins V Sec. 135. Local Uses of Funds. Only include allowable costs in the project budget.

Local Use # 4: Academic Integration

Project Title

Program of Study related to the Project

Project Description

Describe the project that *supports the integration of academic skills into career and technical education programs and programs of study*. The description should be as detailed as possible and include general information about planned purchases.

Project Budget (Enter the Total Project Amount. Total will be itemized on the Budget Worksheets)

Perkins Local Application Alignment

How does the project align with the answers given in Section 2 of the Perkins Local Application? How does it improve the CTE program? All projects must comply with Perkins V Sec. 135. Local Uses of Funds. Only include allowable costs in the project budget.

Local Use # 5: Initiate/Improve Programs

Project Title

Program of Study related to the Project

Project Description

Describe the project elements that support the implementation of career and technical education programs and programs of study that result in increasing student achievement at the local levels of performance established under section 113 (State determined performance measures). Descriptions should be as detailed as possible.

Project Budget (Enter the Total Project Amount. Total will be itemized on the Budget Worksheets)

Total:

Perkins Local Application Alignment

How does the project align with the answers given in Section 2 of the Perkins Local Application? How does it improve the CTE program? All projects must comply with Perkins V Sec. 135. Local Uses of Funds. Only include allowable costs in the project budget.

Local Use # 6: Evaluation

Project Title

Program of Study related to the Project

Project Description

Describe the project you will develop, implement, and evaluate and the activities carried out with funds under this section, including evaluations necessary to complete the comprehensive needs assessment and the local report. Descriptions should be as detailed as possible.

Project Budget (Enter the Total Project Amount. Total will be itemized on the Budget Worksheets)

Total:

Perkins Local Application Alignment

How does the project align with the answers given in Section 2 of the Perkins Local Application? How does it improve the CTE program? All projects must comply with Perkins V Sec. 135. Local Uses of Funds. Only include allowable costs in the project budget.

ATTACHMENT A

Requirements for Uses of Funds

Funds made available to eligible recipients under this part shall be used to support career and technical education programs that are of sufficient size, scope, and quality to be effective and that—

- (1)** provide career exploration and career development activities through an organized, systematic framework designed to aid students, including in the middle grades, before enrolling and while participating in a career and technical education program, in making informed plans and decisions about future education and career opportunities and programs of study, which may include—
 - (A) introductory courses or activities focused on career exploration and career awareness, including non-traditional fields;
 - (B) readily available career and labor market information, including information on—
 - (i) occupational supply and demand;
 - (ii) educational requirements;
 - (iii) other information on careers aligned to State, Local, or Tribal (as applicable) economic priorities; and
 - (iv) employment sectors;
 - (C) programs and activities related to the development of student graduation and career plans;
 - (D) career guidance and academic counselors that provide information on postsecondary education and career options;
 - (E) any other activity that advances knowledge of career opportunities and assists students in making informed decisions about future education and employment goals, including non-traditional fields; or
 - (F) providing students with strong experience in, and comprehensive understanding of, all aspects of an industry;

- (2)** provide professional development for teachers, faculty, school leaders, administrators, specialized instructional support personnel, career guidance and academic counselors, or paraprofessionals, which may include—
 - (A) professional development on supporting individualized academic and career and technical education instructional approaches, including the integration of academic and career and technical education standards and curricula;
 - (B) professional development on ensuring labor market information is used to inform the programs, guidance, and advisement offered to students, including information provided under section 15(e)(2)(C) of the Wagner-Peyser Act (29 U.S.C. 491–2(e)(2)(C));
 - (C) providing teachers, faculty, school leaders, administrators, specialized instructional support personnel, career guidance and academic counselors, or paraprofessionals, as appropriate, with opportunities to advance knowledge, skills, and understanding of all aspects of an industry, including the latest workplace equipment, technologies, standards, and credentials;
 - (D) supporting school leaders and administrators in managing career and technical education programs in the schools, institutions, or local educational agencies of such school leaders or administrators;
 - (E) supporting the implementation of strategies to improve student achievement and close gaps in student participation and performance in career and technical education programs;
 - (F) providing teachers, faculty, specialized instructional support personnel, career guidance and academic counselors, principals, school leaders, or paraprofessionals, as appropriate, with opportunities to advance knowledge, skills, and understanding in pedagogical practices, including,

- to the extent the eligible recipient determines that such evidence is reasonably available, evidence-based pedagogical practices;
- (G) training teachers, faculty, school leaders, administrators, specialized instructional support personnel, career guidance, and academic counselors, or paraprofessionals, as appropriate, to provide appropriate accommodations for individuals with disabilities, and students with disabilities who are provided accommodations under the Rehabilitation Act of 1973 (29 U.S.C. 701 et seq.) or the Individuals with Disabilities Education Act;
 - (H) training teachers, faculty, specialized instructional support personnel, career guidance and academic counselors, and paraprofessionals in frameworks to effectively teach students, including a particular focus on students with disabilities and English learners, which may include universal design for learning, multi-tier systems of supports, and positive behavioral interventions and support; or
 - (I) training for the effective use of community spaces that provide access to tools, technology, and knowledge for learners and entrepreneurs, such as makerspaces or libraries;
- (3)** provide within career and technical education the skills necessary to pursue careers in high-skill, high-wage, or in-demand industry sectors or occupations;
- (4)** support integration of academic skills into a career and technical education programs and programs of study to support—
- (A) CTE participants at the secondary school level in meeting the challenging State academic standards adopted under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965 by the State in which the eligible recipient is located; and
 - (B) CTE participants at the postsecondary level in achieving academic skills;
- (5)** plan and carry out elements that support the implementation of career and technical education programs and programs of study and that result in increasing student achievement of the local levels of performance established under section 113, which may include—
- (A) a curriculum aligned with the requirements for a program of study;
 - (B) sustainable relationships among education, business and industry, and other community stakeholders, including industry or sector partnerships in the local area, where applicable, that are designed to facilitate the process of continuously updating and aligning programs of study with skills that are in demand in the State, regional, or local economy, and in collaboration with business outreach staff in one-stop centers, as defined in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102), and other appropriate organizations, including community-based and youth-serving organizations;
 - (C) where appropriate, expanding opportunities for CTE concentrators to participate in accelerated learning programs (as described in section 4104(b)(3)(A)(i)(IV) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7114(b)(3)(A)(i)(IV)), including dual or concurrent enrollment programs, early college high schools, and the development or implementation of articulation agreements as part of a career and technical education program of study;
 - (D) appropriate equipment, technology, and instructional materials (including support for library resources) aligned with business and industry needs, including machinery, testing equipment, tools, implements, hardware and software, and other new and emerging instructional materials;
 - (E) a continuum of work-based learning opportunities, including simulated work environments;
 - (F) industry-recognized certification examinations or other assessments leading toward a recognized postsecondary credential;
 - (G) efforts to recruit and retain career and technical education program teachers, faculty, school leaders, administrators, specialized instructional support personnel, career guidance and academic counselors, and paraprofessionals;

- (H) where applicable, coordination with other education and workforce development programs and initiatives, including career pathways and sector partnerships developed under the Workforce Innovation and Opportunity Act (29 U.S.C. 3101 et seq.) and other Federal laws and initiatives that provide students with transition-related services, including the Individuals with Disabilities Education Act;
 - (I) expanding opportunities for students to participate in distance career and technical education and blended learning programs;
 - (J) expanding opportunities for students to participate in competency-based education programs;
 - (K) improving career guidance and academic counseling programs that assist students in making informed academic and career and technical education decisions, including academic and financial aid counseling;
 - (L) supporting the integration of employability skills into career and technical education programs and programs of study, including through family and consumer science programs;
 - (M) supporting programs and activities that increase access, student engagement, and success in science, technology, engineering, and mathematics fields (including computer science and architecture) for students who are members of groups underrepresented in such subject fields;
 - (N) providing career and technical education, in a school or other educational setting, for adults or out-of-school youth to complete secondary school education or upgrade technical skills;
 - (O) supporting career and technical student organizations, including student preparation for and participation in technical skills competitions aligned with career and technical education program standards and curricula;
 - (P) making all forms of instructional content widely available, which may include use of open educational resources;
 - (Q) supporting the integration of arts and design skills, when appropriate, into career and technical education programs and programs of study;
 - (R) partnering with a qualified intermediary to improve training, the development of public-private partnerships, systems development, capacity-building, and scalability of the delivery of high-quality career and technical education;
 - (S) support to reduce or eliminate out-of-pocket expenses for special populations participating in career and technical education, including those participating in dual or concurrent enrollment programs or early college high school programs, and supporting the costs associated with fees, transportation, child care, or mobility challenges for those special populations; or
 - (T) other activities to improve career and technical education programs; and
- (6)** develop and implement evaluations of the activities carried out with funds under this part, including evaluations necessary to complete the comprehensive needs assessment required under section 134(c) and the local report required under section 113(b)(4)(B).

ATTACHMENT B

Allowable vs. Non-Allowable Activities and Expenditures

Allowable	Non-Allowable
Administrative costs (5%)	Alcoholic beverages
Advisory councils (printing, materials, etc. No food or beverages)	Capital expenditures
Career guidance and academic counseling to students who are enrolled in career & technical education programs	CTSO competition costs, including student travel
Consumable student laboratory manuals (e.g. accounting workbooks)	Donations and contributions
Consumable materials and supplies that support the instructional program	Entertainment
CTE teacher in-service	Expenditures associated with students not enrolled in CTE programs
Curriculum development	Expenditures for CTE programs below the 7 th grade
Electronic-based curriculum that supplements content when the curriculum cannot be reused and/or shared (e.g. an individual student's access to a program or testing software)	Expenditures not related to project outcomes
Equipment/technology for approved CTE instruction, including computers necessary for CTE program software	Expenditures to support academic programs or remediation
Fees and expenses for supplemental specialized instruction (e.g. Red Cross certified CPR instructor for short-term, specialized instruction in a health professions program)	Fines and penalties
Marketing and outreach materials	Food and beverages
Meeting and conferences	Fundraising expenditures
Professional development costs	Gifts, door prizes, etc.
Professional service costs, including services contracted by the district for CTE equipment and laboratory maintenance (e.g. equipment service contracts and hazardous waste disposal)	Goods or services for personal use
Program evaluation	Items retained by student
Rental/lease costs of equipment	Pre-awarded costs
Salaries (must provide time and effort)	Print textbooks, electronic textbooks, and/or other electronic media used as the primary source of content delivery
Single copy reference materials, including single-user electronic reference materials	Promotional items/materials such as T-shirts, cups, keychains, etc.
Supplemental staff for clinical or lab supervision of students enrolled in health programs	Professional dues
Technical skill assessment instructional materials and administration cost	Substitute pay for teachers
Training costs	Student scholarships
Transportation (related to CTE program standards and/or transition to postsecondary CTE programs)	Technology related to basic instructional delivery, e.g., Smart Boards, cell phones, etc.

ATTACHMENT C

BUDGET TERMS AND DEFINITIONS

EDUCATION DEPARTMENT GENERAL ADMINISTRATIVE REGULATIONS (EDGAR) EXPENDITURE CATEGORIES

Compensation - Personnel 2 CFR 200.430

Compensation for personnel services includes all remuneration, paid currently or accrued, for services of employees rendered during the period of performance under the Federal award, including but not necessarily limited to wages and salaries.

Compensation - Fringe Benefits

2 CFR 200.431 Fringe benefits are allowances and services provided by employers to their employees as compensation in addition to regular salaries and wages. Fringe benefits include, but are not limited to, the costs of leave (vacation, family-related, sick or military), employee insurance, pensions, and unemployment benefit plans. Except as provided elsewhere in these principles, the costs of fringe benefits are allowable provided that the benefits are reasonable and are required by law, non-federal entity-employee agreement, or an established policy of the non-Federal entity.

Travel Costs - 2 CFR 200.474

Travel costs are the expenses for transportation, lodging, subsistence, and related items incurred by employees who are in travel status on official business of the non-Federal entity. Such costs may be charged on an actual cost basis, on a per diem or mileage basis in lieu of actual costs incurred, or on a combination of the two, provided the method used is applied to an entire trip and not to selected days of the trip.

Equipment - 2 CFR 200.439

Equipment is defined as an article of tangible personal property that has a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the non-Federal entity for financial statement purposes, or \$5,000. An applicant organization may classify equipment at a lower dollar value but cannot classify it higher than \$5,000.

Supplies - 2 CFR 200.94

All tangible personal property [other than those described in §200.33 Equipment]. Generally, supplies include any materials that are expendable or consumed during the course of the grant.

Contractual Services 2 CFR 200.318

All products or services which are procured by contract. "Contract" means a legal instrument by which a non-Federal entity purchases property or services needed to carry out the project or program under a Federal award.

Consultant/ Professional Service Costs - 2 CFR 200.459

Costs of professional and consultant services rendered by persons who are members of a particular profession or possess a special skill, and who are not officers or employees of the non-Federal entity.

Training and Education - 2 CFR 200.472

The cost of training and education provided for employee development.

Indirect Cost/General Administration (limited to 5% of the college allocation) – 2 CFR 200.414

Indirect costs: those costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives specifically benefitted without effort disproportionate to the results achieved.

General Administration (Perkins Section 136(d)): organized administrative activities that provide assistance and support to CTE students, including activities specifically designed to provide administrative or managerial support for CTE programs and any special services provided for CTE students.

ATTACHMENT D

COMPREHENSIVE LOCAL NEEDS ASSESSMENT

(c) COMPREHENSIVE NEEDS ASSESSMENT.—

(1) IN GENERAL.—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 includes 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.

(2) REQUIREMENTS.— The comprehensive local needs assessment described under paragraph (1) shall include each of the following—

- (A)** An evaluation of the performance of the students served by the eligible recipient with respect to State determined and local levels of performance established pursuant to section 113, including an evaluation of performance for special populations and each subgroup described in section 1111(h)(1)(C)(ii) of the Elementary and Secondary Education Act of 1965;
- (B)** a description of how career and technical education programs offered by the eligible recipient are—
 - (i)** sufficient in size, scope, and quality to meet the needs of all students served by the eligible recipient; and
 - (ii)(I)** aligned to State, regional, Tribal, or local in-demand industry sectors or occupations identified by the State workforce development board described in section 101 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3111) (referred to in this section as the ‘State board’) or local workforce development board, including career pathways, where appropriate; or
 - (II)** designed to meet local education or economic needs not identified by State boards or local workforce development boards;
- (F)** an evaluation of progress toward the implementation of career and technical education programs and programs of study;
- (G)** A description of how the eligible recipient will improve recruitment, retention, and training of career and technical education teachers, faculty, specialized instructional support personnel, paraprofessionals, and career guidance and academic counselors, including individuals in groups underrepresented in such professions;
- (H)** A description of progress toward implementation of equal access to high-quality career and technical education courses and programs of study for all students, including —
 - (i)** strategies to overcome barriers that result in lower rates of access to, or performance gaps in, the courses and programs for special populations;
 - (ii)** providing programs that are designed to enable special populations to meet the local levels of performance; andproviding activities to prepare special populations for high-skill, high wage, or in-demand industry sectors or occupations in competitive, integrated settings that will lead to self-sufficiency;

(d) CONSULTATION.—In conducting the comprehensive needs assessment under subsection (c), and developing the local application described in subsection (b), an eligible recipient shall involve a diverse body of stakeholders, including, at a minimum—

- (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

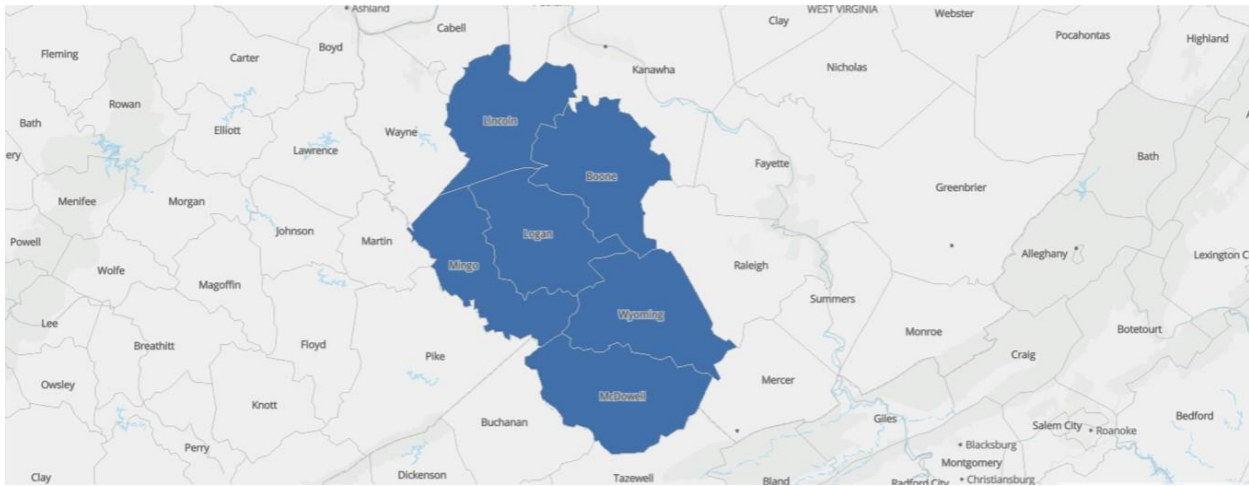
- institutions, including faculty and administrators;
- (3) representatives of the State board or local workforce development boards and a range of local or regional businesses or industries;
 - (4) parents and students;
 - (5) representatives of special populations;
 - (6) representatives of regional or local agencies serving out-of-school youth, homeless children and youth, and at-risk youth (as defined in section 1432 of the Elementary and Secondary Education Act of 1965);
 - (7) representatives of Indian Tribes and Tribal organizations in the State, where applicable; and
 - (8) any other stakeholders that the eligible agency may require the eligible recipient to consult.

(e) CONTINUED CONSULTATION.—An eligible recipient receiving financial assistance under this part shall consult with the stakeholders described in subsection (d) on an ongoing basis, as determined by the eligible agency. This may include consultation in order to—

1. provide input on annual updates to the comprehensive needs assessment required under subsection (c)(1)(B);
2. ensure programs of study are—
 - (A) responsive to community employment needs; (B) aligned with employment priorities in the State, regional, tribal, or local economy identified by employers and the entities described in subsection (d), which may include in-demand industry sectors or occupations identified by the local workforce development board;
 - (C) informed by labor market information, including information provided under section 15(e)(2)(C) of the Wagner-Peyser Act (29 U.S.C. 491–2(e)(2)(C));
 - (D) designed to meet current, intermediate, or long-term labor market projections; and
 - (E) allow employer input, including input from industry or sector partnerships in the local area, where applicable, into the development and implementation of programs of study to ensure such programs of study align with skills required by local employment opportunities, including activities such as the identification of relevant standards, curriculum, industry-recognized credentials, and current technology and equipment;
- (3) identify and encourage opportunities for work-based learning; and
- (4) ensure funding under this part is used in a coordinated manner with other local resources.

Appendix G

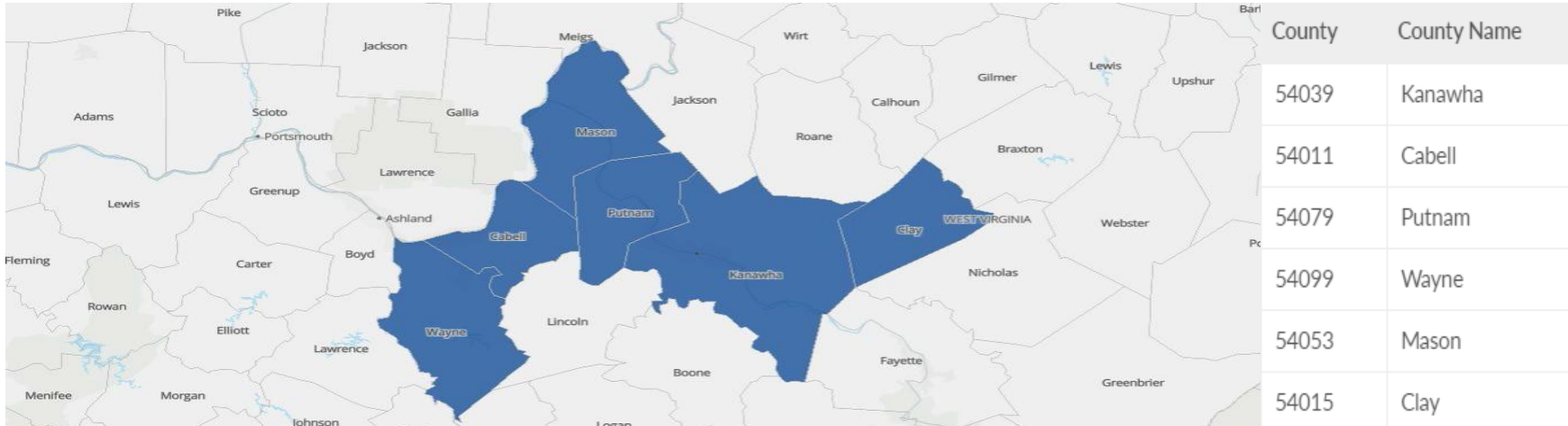
EMSI Comprehensive Needs Assessment



County	County Name
54045	Logan
54047	McDowell
54109	Wyoming
54005	Boone
54059	Mingo
54043	Lincoln

2029 Jobs

29-1141	Registered Nurses	46	590	628	644	682	92	16%	41	\$26.72
11-9151	Social and Community Service Managers	19	45	54	57	66	21	47%	7	\$24.36
11-3031	Financial Managers	0	58	61	62	65	7	12%	5	\$33.49
11-9111	Medical and Health Services Managers	0	57	63	65	71	14	25%	6	\$40.55
13-1071	Human Resources Specialists	0	73	78	79	83	10	14%	9	\$24.11
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	0	72	82	89	102	30	42%	13	\$18.44
21-1021	Child, Family, and School Social Workers	0	140	161	170	193	53	38%	22	\$16.00
21-2011	Clergy	0	65	70	75	82	17	26%	10	\$16.90
29-1171	Nurse Practitioners	0	40	45	47	52	12	30%	3	\$45.31
41-1012	First-Line Supervisors of Non-Retail Sales Workers	0	56	58	60	63	7	13%	6	\$16.70

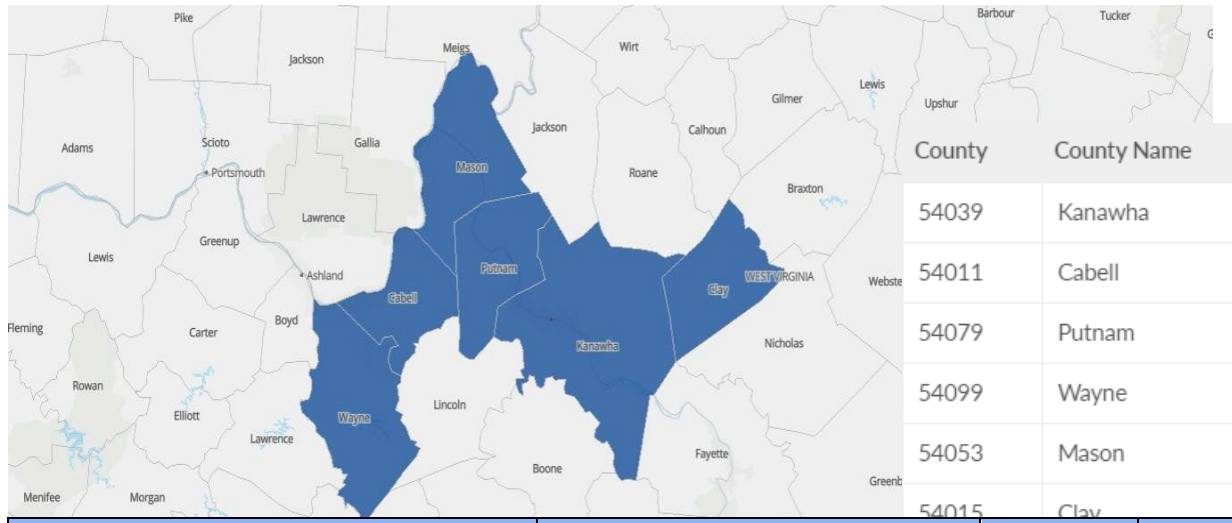


Growth Level: Secondary		# of Programs	Average Earnings					
High Growth		38	\$26.18	Greater than or equal to 10% growth over 10 yrs				
Low Growth		45	\$24.22	1% - 9% growth over 10 yrs				
No Growth		52	\$20.86	0% or negative growth over 10 yrs				
No/Low Impact		34	\$15.75	There is insufficient data to provide a growth rate				
Growth Level: Post-Secondary		# of Programs	Average Earnings					
High Growth		64	\$23.64					
Low Growth		78	\$25.19					
No Growth		89	\$21.69					
No/Low Impact		44	\$15.07					

Mountwest Community & Technical College

Institution	Program Type	Occupation	Jobs 2019	Jobs 2024	2019-2029 % Change	Annual Openings	Median Earnings	Growth Level
Mountwest Community & Technical College	Post-Secondary	Magnetic Resonance Imaging Technologists	148	153	0	9	\$30.88	Low Growth
Mountwest Community & Technical College	Post-Secondary	Medical Equipment Preparers	129	134	0	17	\$16.20	Low Growth
Mountwest Community & Technical College	Post-Secondary	Database Administrators	137	138	0	9	\$30.08	Low Growth
Mountwest Community & Technical College	Post-Secondary	Police, Fire, and Ambulance Dispatchers	175	178	0	17	\$16.03	Low Growth
Mountwest Community & Technical College	Post-Secondary	Mixing and Blending Machine Setters, Operators, and Tenders	105	108	0	13	\$16.50	Low Growth
Mountwest Community & Technical College	Post-Secondary	Graphic Designers	161	163	0	16	\$17.60	Low Growth
Mountwest Community & Technical College	Post-Secondary	Database Administrators	137	138	0	9	\$30.08	Low Growth
Mountwest Community & Technical College	Post-Secondary	Dietitians and Nutritionists	121	127	0	9	\$29.58	Low Growth
Mountwest Community & Technical College	Post-Secondary	Speech-Language Pathologists	218	229	0	13	\$27.04	Low Growth
Mountwest Community & Technical College	Post-Secondary	Ophthalmic Medical Technicians	108	112	0	9	\$16.12	Low Growth
Mountwest Community & Technical College	Post-Secondary	Medical Equipment Preparers	129	134	0	17	\$16.20	Low Growth
Mountwest Community & Technical College	Post-Secondary	Logisticians	115	120	0	12	\$31.80	Low Growth

Mountwest Community & Technical College	Post-Secondary	Logisticians	115	120	0	12	\$31.80	Low Growth
Mountwest Community & Technical College	Post-Secondary	Database Administrators	137	138	0	9	\$30.08	Low Growth
Mountwest Community & Technical College	Post-Secondary	Database Administrators	137	138	0	9	\$30.08	Low Growth
Mountwest Community & Technical College	Post-Secondary	Occupational Health and Safety Specialists	155	158	0	9	\$31.04	Low Growth
Mountwest Community & Technical College	Post-Secondary	Occupational Health and Safety Specialists	155	158	0	9	\$31.04	Low Growth
Mountwest Community & Technical College	Post-Secondary	Police, Fire, and Ambulance Dispatchers	175	178	0	17	\$16.03	Low Growth
Mountwest Community & Technical College	Post-Secondary	Medical Equipment Preparers	129	134	0	17	\$16.20	Low Growth



Occupations trained for in the Advantage Valley region			
Occupations that are untrained for in the Advantage Valley region			
Parameters:			
- 2019 jobs greater than or equal to 40			
- Growth by 10% or more over the next 10 years			
- Median hourly wage greater than or equal to \$15/hr			

Occupation	Institution	2019 Jobs	2022 Jobs	2019 - 2029 Change	2019 - 2029 % Change	Annual Openings	Median Hourly Earnings
Postsecondary Teachers	BridgeValley Community & Technical College	1,367	1,462	235	17%	135	\$19.64
Information Security Analysts	BridgeValley Community & Technical College	94	104	22	23%	9	\$43.38
Web Developers	BridgeValley Community & Technical College	121	130	23	19%	12	\$24.66
Computer Systems Analysts	BridgeValley Community & Technical College	365	387	45	12%	29	\$30.32
Software Developers, Systems Software	BridgeValley Community & Technical College	150	166	35	23%	14	\$44.37
Software Developers, Applications	BridgeValley Community & Technical College	305	358	129	42%	36	\$32.91
Respiratory Therapists	BridgeValley Community & Technical College	334	354	54	16%	22	\$22.81
Diagnostic Medical Sonographers	BridgeValley Community & Technical College	146	155	25	17%	11	\$29.38
Social Scientists and Related Workers, All Other	BridgeValley Community & Technical College	50	53	5	10%	5	\$43.76
Industrial Engineers	BridgeValley Community & Technical College	153	170	36	24%	15	\$38.32
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	BridgeValley Community & Technical College	54	60	9	17%	7	\$16.05
Medical and Health Services Managers	BridgeValley Community & Technical College	583	612	74	13%	55	\$44.23
Financial Analysts	BridgeValley Community & Technical College	166	174	20	12%	17	\$29.90
Financial Managers	BridgeValley Community & Technical College	594	616	62	10%	51	\$40.53
Computer and Information Systems Managers	BridgeValley Community & Technical College	272	288	34	13%	24	\$51.03
Massage Therapists	BridgeValley Community & Technical College	167	176	25	15%	21	\$17.15
Physical Therapist Assistants	BridgeValley Community & Technical College	100	107	20	20%	15	\$21.10
Healthcare Support Workers, All Other	BridgeValley Community & Technical College	53	58	10	19%	8	\$18.27
Occupational Therapy Assistants	BridgeValley Community & Technical College	70	77	15	21%	11	\$29.98
Fitness Trainers and Aerobics Instructors	BridgeValley Community & Technical College	211	249	82	39%	51	\$15.38
Cement Masons and Concrete Finishers	BridgeValley Community & Technical College	87	91	12	14%	12	\$18.71
Operating Engineers and Other Construction Equipment Operators	BridgeValley Community & Technical College	1,329	1,392	147	11%	170	\$22.14
Marketing Managers	BridgeValley Community & Technical College	98	107	21	21%	11	\$40.01
Pipelayers	BridgeValley Community & Technical College	74	95	48	65%	15	\$24.22
Septic Tank Servicers and Sewer Pipe Cleaners	BridgeValley Community & Technical College	63	81	35	56%	14	\$22.15
Earth Drillers, Except Oil and Gas	BridgeValley Community & Technical College	67	76	21	31%	11	\$16.28
Continuous Mining Machine Operators	BridgeValley Community & Technical College	83	88	12	14%	12	\$29.43
Maintenance Workers, Machinery	BridgeValley Community & Technical College	77	81	10	13%	9	\$21.85
Millwrights	BridgeValley Community & Technical College	45	52	11	24%	6	\$33.05

Electrical Power-Line Installers and Repairers	BridgeValley Community & Technical College	79	103	56	71%	14	\$34.72
Computer-Controlled Machine Tool Operators, Metal and Plastic	BridgeValley Community & Technical College	140	150	20	14%	17	\$25.59
Tool and Die Makers	BridgeValley Community & Technical College	71	76	9	13%	8	\$28.47
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	BridgeValley Community & Technical College	58	70	25	43%	11	\$23.29
Athletic Trainers	BridgeValley Community & Technical College	76	81	10	13%	5	\$17.85
Family and General Practitioners	BridgeValley Community & Technical College	79	86	16	20%	4	\$39.44
Nurse Practitioners	BridgeValley Community & Technical College	481	523	114	24%	37	\$46.71
Child, Family, and School Social Workers	BridgeValley Community & Technical College	389	411	54	14%	47	\$15.34
Human Resources Managers	BridgeValley Community & Technical College	140	146	18	13%	14	\$41.47
Education Administrators, Postsecondary	BridgeValley Community & Technical College	124	131	16	13%	11	\$40.61
Meeting, Convention, and Event Planners	BridgeValley Community & Technical College	66	71	8	12%	9	\$19.29
Fundraisers	BridgeValley Community & Technical College	81	85	14	17%	10	\$19.72
Market Research Analysts and Marketing Specialists	BridgeValley Community & Technical College	326	361	92	28%	45	\$18.99
Operations Research Analysts	BridgeValley Community & Technical College	159	168	25	16%	13	\$25.58
Statisticians	BridgeValley Community & Technical College	42	46	14	33%	5	\$21.12
Educational, Guidance, School, and Vocational Counselors	BridgeValley Community & Technical College	393	411	44	11%	47	\$21.21
Mental Health and Substance Abuse Social Workers	BridgeValley Community & Technical College	112	119	15	13%	14	\$16.43
Veterinarians	BridgeValley Community & Technical College	87	92	10	11%	4	\$39.47
Clergy	BridgeValley Community & Technical College	425	444	54	13%	54	\$16.33
Teachers and Instructors, All Other	BridgeValley Community & Technical College	226	239	24	11%	29	\$21.85
Instructional Coordinators	BridgeValley Community & Technical College	198	208	20	10%	21	\$29.05
Technical Writers	BridgeValley Community & Technical College	40	42	4	10%	4	\$17.82
Interpreters and Translators	BridgeValley Community & Technical College	52	56	13	25%	7	\$23.47
Physician Assistants	BridgeValley Community & Technical College	180	196	44	24%	15	\$49.27
Occupational Therapists	BridgeValley Community & Technical College	93	101	20	22%	7	\$35.48
Physical Therapists	BridgeValley Community & Technical College	385	404	53	14%	22	\$38.41
Refuse and Recyclable Material Collectors	BridgeValley Community & Technical College	194	205	24	12%	27	\$15.76
Computer Systems Analysts	Mountwest Community & Technical College	365	387	45	12%	29	\$30.32
Software Developers, Systems Software	Mountwest Community & Technical College	150	166	35	23%	14	\$44.37
Web Developers	Mountwest Community & Technical College	121	130	23	19%	12	\$24.66
Information Security Analysts	Mountwest Community & Technical College	94	104	22	23%	9	\$43.38
Software Developers, Applications	Mountwest Community & Technical College	305	358	129	42%	36	\$32.91
Interpreters and Translators	Mountwest Community & Technical College	52	56	13	25%	7	\$23.47
Physical Therapist Assistants	Mountwest Community & Technical College	100	107	20	20%	15	\$21.10
Computer-Controlled Machine Tool Operators, Metal and Plastic	Mountwest Community & Technical College	140	150	20	14%	17	\$25.59
Respiratory Therapists	Mountwest Community & Technical College	334	354	54	16%	22	\$22.81
Postsecondary Teachers	Mountwest Community & Technical College	1,367	1,462	235	17%	135	\$19.64
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	Mountwest Community & Technical College	54	60	9	17%	7	\$16.05
Industrial Engineers	Mountwest Community & Technical College	153	170	36	24%	15	\$38.32
Massage Therapists	Mountwest Community & Technical College	167	176	25	15%	21	\$17.15
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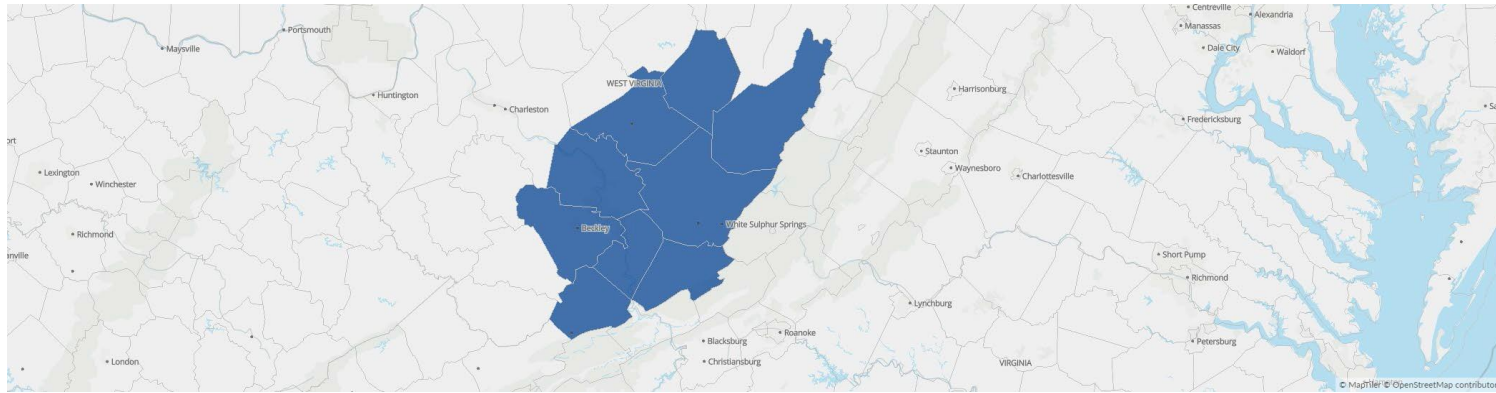
Athletic Trainers	Mountwest Community & Technical College	76	81	10	13%	5	\$17.85
Diagnostic Medical Sonographers	Mountwest Community & Technical College	146	155	25	17%	11	\$29.38
Nurse Practitioners	Mountwest Community & Technical College	481	523	114	24%	37	\$46.71
Healthcare Support Workers, All Other	Mountwest Community & Technical College	53	58	10	19%	8	\$18.27
Septic Tank Servicers and Sewer Pipe Cleaners	Mountwest Community & Technical College	63	81	35	56%	14	\$22.15
Cement Masons and Concrete Finishers	Mountwest Community & Technical College	87	91	12	14%	12	\$18.71
Operating Engineers and Other Construction Equipment Operators	Mountwest Community & Technical College	1,329	1,392	147	11%	170	\$22.14
Pipelayers	Mountwest Community & Technical College	74	95	48	65%	15	\$24.22
Earth Drillers, Except Oil and Gas	Mountwest Community & Technical College	67	76	21	31%	11	\$16.28
Continuous Mining Machine Operators	Mountwest Community & Technical College	83	88	12	14%	12	\$29.43
Maintenance Workers, Machinery	Mountwest Community & Technical College	77	81	10	13%	9	\$21.85
Millwrights	Mountwest Community & Technical College	45	52	11	24%	6	\$33.05
Electrical Power-Line Installers and Repairers	Mountwest Community & Technical College	79	103	56	71%	14	\$34.72
Tool and Die Makers	Mountwest Community & Technical College	71	76	9	13%	8	\$28.47
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	Mountwest Community & Technical College	58	70	25	43%	11	\$23.29
Veterinarians	Mountwest Community & Technical College	87	92	10	11%	4	\$39.47
Family and General Practitioners	Mountwest Community & Technical College	79	86	16	20%	4	\$39.44
Physical Therapists	Mountwest Community & Technical College	385	404	53	14%	22	\$38.41
Statisticians	Mountwest Community & Technical College	42	46	14	33%	5	\$21.12
Financial Managers	Mountwest Community & Technical College	594	616	62	10%	51	\$40.53
Human Resources Managers	Mountwest Community & Technical College	140	146	18	13%	14	\$41.47
Education Administrators, Postsecondary	Mountwest Community & Technical College	124	131	16	13%	11	\$40.61
Medical and Health Services Managers	Mountwest Community & Technical College	583	612	74	13%	55	\$44.23
Meeting, Convention, and Event Planners	Mountwest Community & Technical College	66	71	8	12%	9	\$19.29
Fundraisers	Mountwest Community & Technical College	81	85	14	17%	10	\$19.72
Market Research Analysts and Marketing Specialists	Mountwest Community & Technical College	326	361	92	28%	45	\$18.99
Financial Analysts	Mountwest Community & Technical College	166	174	20	12%	17	\$29.90
Operations Research Analysts	Mountwest Community & Technical College	159	168	25	16%	13	\$25.58
Social Scientists and Related Workers, All Other	Mountwest Community & Technical College	50	53	5	10%	5	\$43.76
Occupational Therapists	Mountwest Community & Technical College	93	101	20	22%	7	\$35.48
Educational, Guidance, School, and Vocational Counselors	Mountwest Community & Technical College	393	411	44	11%	47	\$21.21
Child, Family, and School Social Workers	Mountwest Community & Technical College	389	411	54	14%	47	\$15.34
Mental Health and Substance Abuse Social Workers	Mountwest Community & Technical College	112	119	15	13%	14	\$16.43
Clergy	Mountwest Community & Technical College	425	444	54	13%	54	\$16.33
Teachers and Instructors, All Other	Mountwest Community & Technical College	226	239	24	11%	29	\$21.85
Instructional Coordinators	Mountwest Community & Technical College	198	208	20	10%	21	\$29.05
Technical Writers	Mountwest Community & Technical College	40	42	4	10%	4	\$17.82
Computer and Information Systems Managers	Mountwest Community & Technical College	272	288	34	13%	24	\$51.03
Physician Assistants	Mountwest Community & Technical College	180	196	44	24%	15	\$49.27
Refuse and Recyclable Material Collectors	Mountwest Community & Technical College	194	205	24	12%	27	\$15.76

				County	County Name
				54081	Raleigh
				54055	Mercer
				54025	Greenbrier
				54019	Fayette
				54067	Nicholas
				54075	Pocahontas
				54063	Monroe
				54089	Summers
				54101	Webster
High Growth	27	40	\$21.80		
Low Growth	31	58	\$22.65		
No Growth	38	79	\$22.26		
No/Low Impact	32	56	\$0.00		
Growth Level: Post-Secondary	# of Programs	Occupations	Average Earnings		
High Growth	41	50	\$22.51		
Low Growth	47	74	\$24.91		
No Growth	54	107	\$20.06		
No/Low Impact	42	69	\$0.00		

New River Community and Technical College

Institution	Program Type	Program Name	Occupation	Jobs 2019	Jobs 2022	2019-2029 Change	2019-2029 % Change	Median Earnings	Growth Level
	Secondary	Animal Processing	Nonfarm Animal Caretakers	174	180	16	9%	\$9.37	Low Growth
	Secondary	Animal Systems	Nonfarm Animal Caretakers	174	180	16	9%	\$9.37	Low Growth
	Secondary	Building Maintenance And Operations	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1564	1622	143	9%	\$11.10	Low Growth
	Secondary	Cosmetology (Ace)	First-Line Supervisors of Personal Service Workers	178	185	16	9%	\$15.01	Low Growth
New River Community and Technical College	Post-Secondary	Cosmetology	First-Line Supervisors of Personal Service Workers	178	185	16	9%	\$15.01	Low Growth
New River Community and Technical College	Post-Secondary	Health Professions	Rehabilitation Counselors	102	106	9	9%	\$15.76	Low Growth

New River Community and Technical College	Post-Secondary	Medical Insurance Billing And Coding	Billing and Posting Clerks	238	247	23	10%	\$13.79	Low Growth
New River Community and Technical College	Post-Secondary	Management And Supervisory Development	Business Operations Specialists, All Other	263	273	23	9%	\$27.69	Low Growth
New River Community and Technical College	Post-Secondary	Green Entrepreneurship	Business Operations Specialists, All Other	263	273	23	9%	\$27.69	Low Growth
New River Community and Technical College	Post-Secondary	Criminal Justice	Business Operations Specialists, All Other	263	273	23	9%	\$27.69	Low Growth
New River Community and Technical College	Post-Secondary	Business Administration	Business Operations Specialists, All Other	263	273	23	9%	\$27.69	Low Growth
New River Community and Technical College	Post-Secondary	Business	Business Operations Specialists, All Other	263	273	23	9%	\$27.69	Low Growth
New River Community and Technical College	Post-Secondary	Hospitality And Tourism Management	First-Line Supervisors of Personal Service Workers	178	185	16	9%	\$15.01	Low Growth
New River Community and Technical College	Post-Secondary	Medical Stenography	Billing and Posting Clerks	238	247	23	10%	\$13.79	Low Growth
New River Community and Technical College	Post-Secondary	Banking	Billing and Posting Clerks	238	247	23	10%	\$13.79	Low Growth
New River Community and Technical College	Post-Secondary	Lodging Operations	First-Line Supervisors of Personal Service Workers	178	185	16	9%	\$15.01	Low Growth
High Growth:	Greater than or equal to 10% growth over 10 yrs								
Low Growth:	1% - 9% Growth over 10 yrs								
No Growth:	0% or negative Growth over 10 yrs								
No/Low Impact:	There is insufficient Data to provide a growth rate								

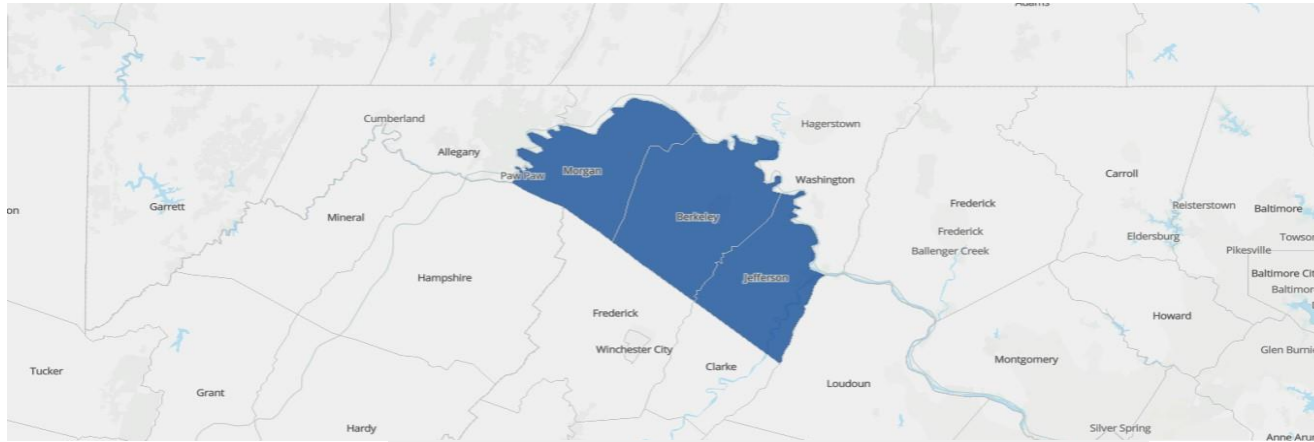


County	County Name
54081	Raleigh
54055	Mercer
54025	Greenbrier
54019	Fayette
54067	Nicholas
54075	Pocahontas
54063	Monroe
54089	Summers
54101	Webster

New River Community and Technical College

SOC Code	Completions (2017)	2019 Jobs	2022 Jobs	2024 Jobs	2029 Jobs	2019 - 2029 Change	2019 - 2029 % Ch	Annual Openings	Median	
11-9151	Social and Community Service Managers	21	130	136	139	146	16	12%	14	\$38.93
11-9199	Managers, All Other	21	388	403	411	431	43	11%	33	\$17.07
15-1133	Electrical Power-Line Installers and Repairers	17	136	145	148	154	18	13%	14	\$29.89
15-1199	Massage Therapists	14	71	83	88	101	30	42%	12	\$15.10
11-2021	Medical and Health Services Managers	1	243	253	259	274	31	13%	23	\$41.24
25-2011	Teachers and Instructors, All Other	0	116	126	130	138	22	19%	16	\$27.60
47-2051	Automotive Body and Related Repairers	0	112	117	119	124	12	11%	13	\$17.39
39-1018	Sheet Metal Workers	0	70	73	75	78	8	11%	9	\$24.95
31-9011	Cement Masons and Concrete Finishers	0	58	63	64	67	9	16%	8	\$23.82
29-2099	First-Line Supervisors of Gaming Workers	0	188	201	205	212	24	13%	34	\$16.45
29-2021	Health Technologists and Technicians, All Other	0	78	84	87	93	15	19%	7	\$20.52
27-2042	Dental Hygienists	0	120	126	129	136	16	13%	10	\$25.66
27-1024	Nurse Practitioners	0	167	181	189	206	39	23%	13	\$47.67
25-3097	Physician Assistants	0	169	183	190	207	38	22%	14	\$43.67
25-3021	Interpreters and Translators	0	43	45	46	48	5	12%	5	\$23.09
25-2031	Musicians and Singers	0	83	86	89	94	11	13%	10	\$40.59
21-1099	Education Administrators, Preschool and Childcare Center/Program	0	55	57	59	63	8	15%	5	\$20.44
21-2021	Self-Enrichment Education Teachers	0	93	97	100	110	17	18%	13	\$16.89
21-2011	Preschool Teachers, Except Special Education	0	365	386	398	426	61	17%	45	\$15.71
11-3031	Directors, Religious Activities and Education	0	103	109	113	121	18	17%	15	\$17.65
21-1094	Clergy	0	252	274	289	316	64	25%	37	\$17.22
21-1021	Community Health Workers	0	50	53	54	57	7	14%	7	\$18.10
21-1018	Mental Health and Substance Abuse Social Workers	0	47	54	57	65	18	38%	8	\$15.06
15-1132	Healthcare Social Workers	0	74	79	82	88	14	19%	10	\$23.31
13-1161	Child, Family, and School Social Workers	0	298	311	321	338	40	13%	36	\$16.20
13-1121	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	0	212	235	246	272	60	28%	31	\$16.79
11-9111	Marriage and Family Therapists	0	40	44	46	52	12	30%	6	\$20.94
11-9031	Software Developers, Applications	0	100	106	111	118	18	18%	9	\$25.72
47-2211	Market Research Analysts and Marketing Specialists	0	109	115	121	130	21	19%	14	\$19.66
	Secondary School Teachers, Except Special and Career/Technical Education	0	44	69	78	99	55	125%	11	\$21.26

Southern WV Community and Technical College	Post-Secondary	Practical Nursing	Home Health Aides	113	130	46	41%	19.9	\$10.11	High Growth
Southern WV Community and Technical College	Post-Secondary	Long Term Health Care Prof.	Home Health Aides	113	130	46	41%	19.9	\$10.11	High Growth
Southern WV Community and Technical College	Post-Secondary	Social Service Technology	Social and Community Service Managers	45	54	21	47%	6.9	\$24.36	High Growth
Southern WV Community and Technical College	Post-Secondary	Social Service Technology	Marriage and Family Therapists	22	26	10	45%	3.8	\$20.59	High Growth
Southern WV Community and Technical College	Post-Secondary	Strategic Business Integration	Social and Community Service Managers	45	54	21	47%	6.9	\$24.36	High Growth



County	County Name
54003	Berkeley
54037	Jefferson
54065	Morgan

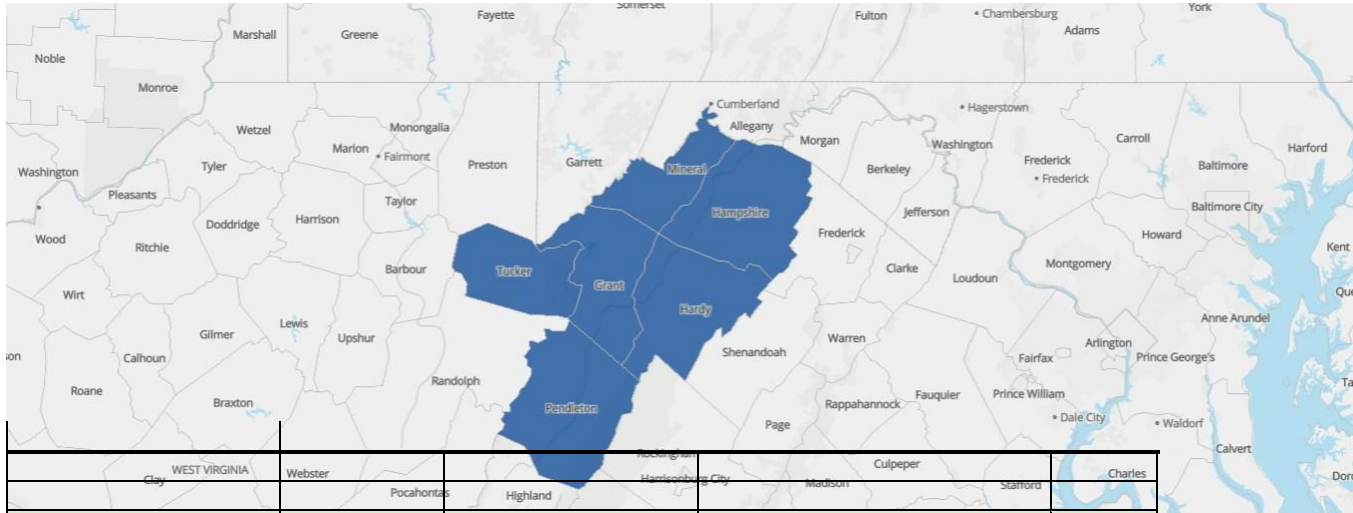
Yellow Fill:	Occupations trained for in the Shenandoah Valley region
White Fill:	Occupations that are untrained for in the Shenandoah Valley region

Parameters:

- 2019 jobs greater than or equal to 40
- Growth by 10% or more over the next 10 years
- Median hourly wage greater than or equal to

Occupation	Blue Ridge Community and Technical College Completions (2018)	2019 Jobs	2022 Jobs	2024 Jobs	2029 Jobs	2019 - 2029 Change	2019 - 2029 % Change	Annual Openings	Median Hourly Earnings
Postsecondary Teachers	361	1,058	1,139	1,173	1,246	188	18%	106	\$33.76
Industrial Production Managers	58	53	63	66	72	19	36%	6	\$39.27
Web Developers	48	50	54	56	62	12	24%	5	\$22.54
Plant and System Operators, All Other	41	62	67	68	70	8	13%	7	\$30.63
Operating Workers	41	128	147	153	167	39	30%	18	\$31.05
Material Moving Workers, Except Aircraft Cargo	41	173	207	219	245	72	42%	29	\$28.06
Computer and Information Systems Managers	41	182	191	193	202	20	11%	16	\$61.16
and Repairers	41	135	147	152	161	26	19%	15	\$26.33
Preschool Teachers, Except Special Education	36	150	157	160	167	17	11%	17	\$16.74
Managers, All Other	34	369	388	399	421	52	14%	33	\$29.67
Computer Network Support Specialists	33	53	56	58	62	9	17%	5	\$20.43
Computer User Support Specialists	33	225	242	250	267	42	19%	22	\$17.70
First-Line Supervisors of Housekeeping and Janitorial Workers	32	76	79	82	85	9	12%	10	\$19.04
Network and Computer Systems Administrators	25	63	67	70	73	10	16%	5	\$35.59
Registered Nurses	25	1,021	1,097	1,129	1,203	182	18%	74	\$33.47
Health Technologists and Technicians, All Other	19	152	170	176	187	35	23%	14	\$22.97

Computer Systems Analysts	18	94	101	105	113	19	20%	9	\$33.47
Management Analysts	17	208	221	226	238	30	14%	22	\$41.99
General and Operations Managers	17	685	739	762	805	120	18%	72	\$41.60
Sales Managers	17	67	73	75	81	14	21%	8	\$38.44
Transportation, Storage, and Distribution Managers	17	61	67	69	73	12	20%	6	\$45.27
Social and Community Service Managers	17	59	61	62	65	6	10%	6	\$24.06
Cost Estimators	17	41	46	47	51	10	24%	5	\$27.66
Administrative Services Managers	17	99	108	109	116	17	17%	10	\$38.03
Software Developers, Applications	15	216	243	257	284	68	31%	23	\$42.09



County	County Name
54027	Hampshire
54057	Mineral
54093	Tucker
54031	Hardy
54023	Grant
54071	Pendleton

	15	17	1312	\$24.48
20%-35% Growth	15	17	1312	\$24.48
Greater than 35% Growth	8	9	356	\$26.77
No Growth	22	44	7017	\$18.44
No/Low Impact	30	71	0	\$18.83

Growth Level: Post-Secondary	# of Programs	Occupations	Jobs	Average Earnings
1%-9% Growth	11	10	2495	\$20.20
10%-19% Growth	6	11	2366	\$32.29
20%-35% Growth	7	8	772	\$32.44
Greater than 35% Growth	2	2	37	\$40.38
No Growth	14	22	10305	\$18.55
No/Low Impact	18	35	0	\$17.53

Institution	Program Type	Program Name	Occupation	Jobs 2019	Jobs 2024	Jobs 2029	2019-2029 % Change	Annual Openings	Median Earnings	Growth Level
	Secondary	Accounting And Finance	Bookkeeping, Accounting, and Auditing Clerks	311	315	316	2%	35.9	\$13.53	1%-9% Growth
	Secondary	Carpentry	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	78	81	85	9%	10	\$13.00	1%-9% Growth
	Secondary	Marketing Management	Interviewers, Except Eligibility and Loan	57	61	62	9%	7.5	\$14.10	1%-9% Growth
Eastern WV Community and	Post-Secondary	Accounting	Bookkeeping, Accounting, and Auditing Clerks	311	315	316	2%	35.9	\$13.53	1%-9% Growth
Eastern WV Community and	Post-Secondary	Accounting	First-Line Supervisors of Office and Administrative Support Workers	275	283	287	4%	29	\$18.34	1%-9% Growth
Eastern WV Community and	Post-Secondary	Accounting	Bookkeeping, Accounting, and Auditing Clerks	311	315	316	2%	35.9	\$13.53	1%-9% Growth
Eastern WV Community and	Post-Secondary	Business Accounting	Bookkeeping, Accounting, and Auditing Clerks	311	315	316	2%	35.9	\$13.53	1%-9% Growth
Eastern WV Community and	Post-Secondary	Business Management	First-Line Supervisors of Office and Administrative Support Workers	275	283	287	4%	29	\$18.34	1%-9% Growth
Eastern WV Community and	Post-Secondary	Business Management	First-Line Supervisors of Office and Administrative Support Workers	275	283	287	4%	29	\$18.34	1%-9% Growth



county Name

hamshire

mineral

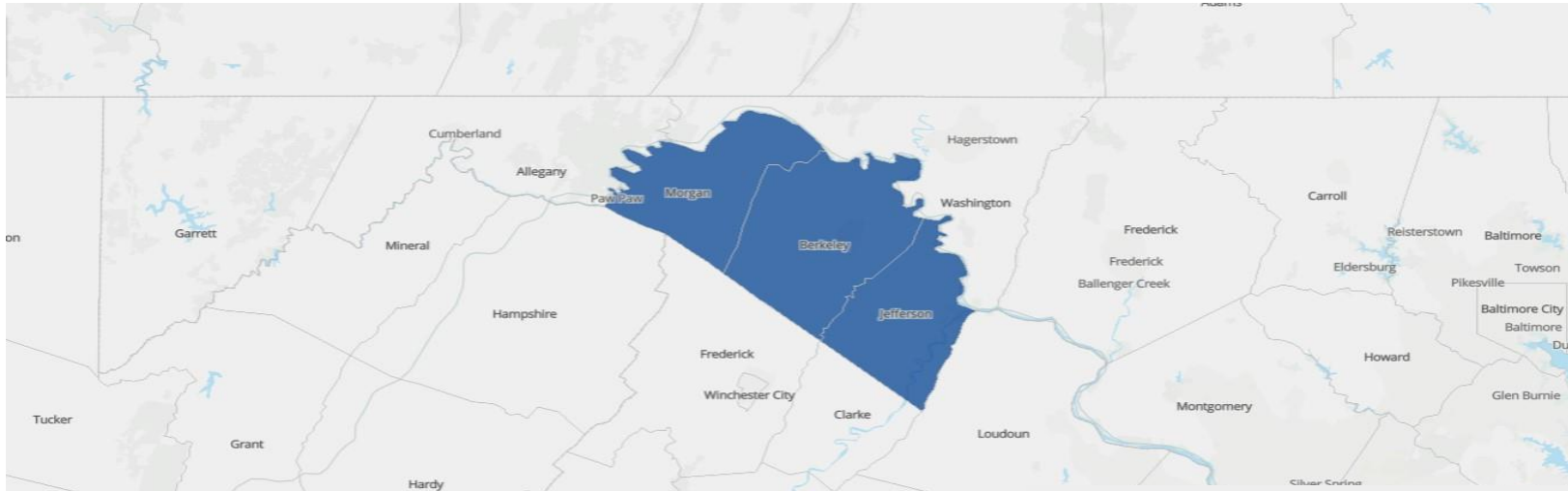
tucker

hardy

Yellow Fill:	Occupations trained for in the Potamic Highlands region
White Fill:	Occupations that are untrained for in the Potamic Highlands region

Parameters:
- 2019 jobs greater than or equal to 40
- Growth by 10% or more over the next 10 years
- Median hourly wage greater than or equal to \$15/hr

Occupation	Eastern West Virginia Community and Technical College Completions (2018)	2019 Jobs	2022 Jobs	2024 Jobs	2029 Jobs	2019 - 2029 Change	2019 - 2029 % Change	Annual Openings	Median Hourly Earnings
Registered Nurses	16	479	501	511	534	55	11%	31	\$27.32
Postsecondary Teachers	14	117	132	139	152	35	30%	14	\$21.75
General and Operations Managers	13	350	366	373	389	39	11%	34	\$30.37
Management Analysts	13	81	86	88	93	12	15%	9	\$33.98
First-Line Supervisors of Housekeeping and Janitorial Workers	13	56	60	62	65	9	16%	8	\$15.54
Industrial Production Managers	13	54	56	57	60	6	11%	5	\$49.13
Managers, All Other	13	141	146	150	157	16	11%	12	\$21.86
Software Developers, Applications	8	129	144	151	164	35	27%	13	\$37.89
Computer Systems Analysts	8	41	45	46	50	9	22%	4	\$34.22



Growth Level: <i>Secondary</i>	# of Programs	Occupations	Jobs	Average Earnings
1%-9%	33	46	13504	\$23.54
Growth	32	46	17338	\$27.49
Growth	26	25	3778	\$25.00
30-39% Growth	18	18	2434	\$26.38
Growth	6	3	73	\$27.79
Growth	5	3	207	\$21.36
Growth	2	1	26	\$23.86
100% Growth	1	1	42	\$18.26
No Growth	27	52	1966	\$23.19
No/Low Impact	32	59	0	#DIV/0!

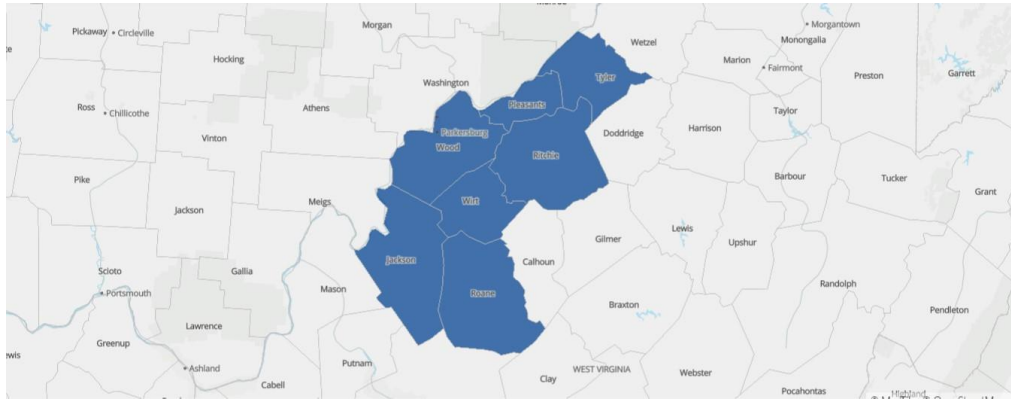
County	County Name
54003	Berkeley
54037	Jefferson
54065	Morgan

Growth Level: <i>Post-Secondary</i>	# of Programs	Occupations	Jobs	Average Earnings
1%-9%	54	45	44022	\$21.15
10%-19%				\$28.62
Growth	63	53	26777	\$28.62
20%-29%				\$30.22
Growth	32	21	3469	\$30.22
30-39% Growth	22	12	1748	\$28.38
40%-48%				\$34.10
Growth	20	4	539	\$34.10
49%-60%				\$26.04
Growth	4	2	386	\$26.04
60%-80%				\$26.60
Growth	2	2	31	\$26.60
Greater than 100% Growth	1	1	10	\$46.21
No Growth	48	39	4246	\$19.89
No/Low Impact	52	56	0	#DIV/0!

Institution	Program Type	Program Name	Occupation	Jobs	Jobs 2024	Jobs 2029	2019-2029 % Change	Annual Openings	Median Earnings	Growth Level	
	Secondary	Advanced Manufacturing (Advanced	First-Line Supervisors of Production and Operating Workers	128	153	167	30%	18	\$31.05	30-39% Growth	High Growth
	Secondary	Advanced Manufacturing (Advanced	Packaging and Filling Machine Operators and Tenders	254	308	334	31%	42	\$11.56	30-39% Growth	High Growth
	Secondary	Baking And Pastry	Chefs and Head Cooks	27	32	36	33%	5	\$20.77	30-39% Growth	High Growth
	Secondary	Coding, App And Game Design	Software Developers, Applications	216	257	284	31%	23	\$42.09	30-39% Growth	High Growth
	Secondary	Computer Science (Pltw)	Software Developers, Applications	216	257	284	31%	23	\$42.09	30-39% Growth	High Growth
	Secondary	Computer Systems Repair Technology	Software Developers, Applications	216	257	284	31%	23	\$42.09	30-39% Growth	High Growth
	Secondary	Cosmetology (Ace)	Manicurists and Pedicurists	32	38	42	31%	5	\$11.46	30-39% Growth	High Growth
	Secondary	Cosmetology (Ace)	Skincare Specialists	36	44	47	31%	6	\$22.72	30-39% Growth	High Growth
	Secondary	Electronics Technician	Industrial Machinery Mechanics	100	130	143	31%	14	\$28.14	30-39% Growth	High Growth
	Secondary	Industrial Equipment Maintenance	Industrial Machinery Mechanics	100	130	143	31%	14	\$28.14	30-39% Growth	High Growth
	Secondary	Information Management	Software Developers, Applications	216	257	284	31%	23	\$42.09	30-39% Growth	High Growth
	Secondary	Law And Public Safety	First-Line Supervisors of Police and Detectives	13	16	17	31%	1	\$29.30	30-39% Growth	High Growth
	Secondary	Machine Tool Technology	Industrial Machinery Mechanics	100	130	143	31%	14	\$28.14	30-39% Growth	High Growth
	Secondary	Marketing Management	Market Research Analysts and Marketing Specialists	101	122	138	37%	15	\$24.39	30-39% Growth	High Growth
	Secondary	Medical Assisting (Ace)	Medical Secretaries	100	124	138	34%	16	\$15.10	30-39% Growth	High Growth
	Secondary	Power Equipment Systems	Electricians	170	205	225	32%	28	\$25.88	30-39% Growth	High Growth
	Secondary	Power Equipment Systems	Helpers--Electricians	88	107	117	33%	18	\$16.66	30-39% Growth	High Growth
	Secondary	Power Equipment Systems	Telecommunications Equipment Installers and Repairers, Except Line Installers	27	32	37	37%	5	\$26.80	30-39% Growth	High Growth
	Secondary	Pre-Cosmetology	Manicurists and Pedicurists	32	38	42	31%	5	\$11.46	30-39% Growth	High Growth
	Secondary	Pre-Cosmetology	Skincare Specialists	36	44	47	31%	6	\$22.72	30-39% Growth	High Growth
	Secondary	Pre-Engineering - Project Lead The	Chemical Engineers	17	21	23	35%	2	\$48.38	30-39% Growth	High Growth
	Secondary	Pre-Engineering - Project Lead The Way	Industrial Engineers	31	38	41	32%	3	\$41.30	30-39% Growth	High Growth
	Secondary	Therapeutic Services	Massage Therapists	46	54	61	33%	7	\$20.18	30-39% Growth	High Growth
	Secondary	Truck Driving (Ace)	Bus Drivers, Transit and Intercity	21	25	28	33%	4	\$17.22	30-39% Growth	High Growth
	Secondary	Truck Driving (Ace)	Taxi Drivers and Chauffeurs	81	97	107	32%	12	\$9.76	30-39% Growth	High Growth

Blue Ridge Com	Post-Secondary	Applied Technology	Industrial Production Managers	53	66	72	36%	6.4	\$39.27	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Applied Technology	Operations Research Analysts	17	21	23	35%	1.8	\$25.55	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Baking And Pastry	Chefs and Head Cooks	27	32	36	33%	4.8	\$20.77	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Business Operations	Industrial Production Managers	53	66	72	36%	6.4	\$39.27	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Business Operations	Operations Research Analysts	17	21	23	35%	1.8	\$25.55	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Business Strategies	Industrial Production Managers	53	66	72	36%	6.4	\$39.27	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Cisco Networking	Telecommunications Equipment Installers and Repairers, Except Line Installers	27	32	37	37%	4.5	\$26.80	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Clerk-Typist	Production, Planning, and Expediting Clerks	71	87	97	37%	11.2	\$23.62	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Computer Networking Engineering T	Telecommunications Equipment Installers and Repairers, Except Line Installers	27	32	37	37%	4.5	\$26.80	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Criminal Justice	First-Line Supervisors of Police and Detectives	13	16	17	31%	1.2	\$29.30	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Culinary Arts	Chefs and Head Cooks	27	32	36	33%	4.8	\$20.77	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Data Processing	Operations Research Analysts	17	21	23	35%	1.8	\$25.55	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Digital Media Specialist	Software Developers, Applications	216	257	284	31%	22.6	\$42.09	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Electric Utility Technology	Electricians	170	205	225	32%	27.9	\$25.88	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Electric Utility Technology	Helpers--Electricians	88	107	117	33%	17.6	\$16.66	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Electric Utility Technology	Telecommunications Equipment Installers and Repairers, Except Line Installers	27	32	37	37%	4.5	\$26.80	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Fundamentals Of Computer Technol	Operations Research Analysts	17	21	23	35%	1.8	\$25.55	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Homeland Security	First-Line Supervisors of Police and Detectives	13	16	17	31%	1.2	\$29.30	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Marketing Management	Market Research Analysts and Marketing Specialists	101	122	138	37%	15	\$24.39	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Medical Assisting	Medical Secretaries	103	124	138	34%	16.4	\$15.10	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Medical Coding Specialist	Medical Secretaries	103	124	138	34%	16.4	\$15.10	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Network Specialities	Telecommunications Equipment Installers and Repairers, Except Line Installers	27	32	37	37%	4.5	\$26.80	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Safety Technology	Occupational Health and Safety Specialists	22	27	29	32%	1.9	\$36.76	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Software Development Engineering	Software Developers, Applications	216	257	284	31%	22.6	\$42.09	30-39% Growth	High Growth

Blue Ridge Com	Post-Secondary	Systems Networking	Telecommunications Equipment Installers and Repairers, Except Line Installers	27	32	37	37%	4.5	\$26.80	30-39% Growth	High Growth
Blue Ridge Com	Post-Secondary	Virtualization	Software Developers, Applications	216	257	284	31%	22.6	\$42.09	30-39% Growth	High Growth



County	County Name
54107	Wood
54035	Jackson
54085	Ritchie
54087	Roane
54095	Tyler
54105	Wirt
54073	Pleasants

Yellow Fill:	Occupations trained for in the Mid-Ohio Valley region
White Fill:	Occupations that are untrained for in the Mid-Ohio

Parameters:	
-	2019 jobs greater than or equal to 40
-	Growth by 10% or more over the next 10 years
-	Median hourly wage greater than or equal to \$15/hr

		University at Parkersburg									
SOC Code	Occupation	2019 Jobs	2022 Jobs	2024 Jobs	2029 Jobs	2019 - 2029 Change	2019 - 2029 % Change	Annual Openings	Median Hourly Earnings		
11-1021	General and Operations Managers	204	869	915	930	966	97	11%	85	\$33.34	
11-9021	Construction Managers	204	168	217	236	280	112	67%	27	\$45.79	
11-9199	Managers, All Other	204	273	283	290	304	31	11%	23	\$32.85	
13-1051	Cost Estimators	204	77	98	106	124	47	61%	15	\$30.36	
51-4121	Welders, Cutters, Solderers, and Brazers	26	280	348	372	420	140	50%	52	\$20.15	
15-1132	Software Developers, Applications	12	54	60	64	70	16	30%	6	\$32.64	
15-1151	Computer User Support Specialists	9	87	93	96	100	13	15%	8	\$20.20	
11-3021	Computer and Information Systems Managers	9	46	49	49	52	6	13%	4	\$51.21	
47-4011	Construction and Building Inspectors	0	56	66	70	77	21	38%	9	\$37.32	
47-2211	Sheet Metal Workers	0	54	57	57	60	6	11%	7	\$28.46	
47-2152	Plumbers, Pipefitters, and Steamfitters	0	246	317	346	409	163	66%	51	\$23.60	
47-2151	Pipelayers	0	380	504	547	630	250	66%	79	\$24.85	
47-2073	Operating Engineers and Other Construction Equipment Operators	0	1,059	1,348	1,457	1,676	617	58%	214	\$19.19	
47-2111	Electricians	0	297	320	327	341	44	15%	40	\$22.89	
47-5013	Service Unit Operators, Oil, Gas, and Mining	0	237	264	275	299	62	26%	38	\$18.65	
47-2061	Construction Laborers	0	1,599	2,105	2,299	2,700	1,101	69%	334	\$15.91	
47-2051	Cement Masons and Concrete Finishers	0	64	88	97	118	54	84%	15	\$16.62	
47-5012	Rotary Drill Operators, Oil and Gas	0	74	85	90	100	26	35%	13	\$20.46	
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	0	190	222	233	257	67	35%	28	\$20.84	
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	0	250	262	267	279	29	12%	26	\$23.94	
49-3021	Automotive Body and Related Repairers	0	143	155	159	166	23	16%	17	\$15.13	
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	0	188	200	205	216	28	15%	21	\$16.26	
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	0	621	800	868	1,009	388	62%	119	\$29.93	
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	0	70	73	75	78	8	11%	9	\$18.02	
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	0	50	57	59	65	15	30%	6	\$36.19	
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	0	123	129	131	137	14	11%	14	\$16.46	
49-9051	Electrical Power-Line Installers and Repairers	0	63	85	95	118	55	87%	13	\$30.08	
49-9052	Telecommunications Line Installers and Repairers	0	139	156	162	176	37	27%	21	\$33.85	
49-9099	Installation, Maintenance, and Repair Workers, All Other	0	52	56	58	64	12	23%	7	\$16.64	
53-1048	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo	0	162	175	178	186	24	15%	20	\$21.52	
53-3032	Heavy and Tractor-Trailer Truck Drivers	0	1,349	1,526	1,588	1,723	374	28%	204	\$17.29	
47-2031	Carpenters	0	322	349	360	384	62	19%	40	\$15.78	
31-2022	Physical Therapist Aides	0	47	50	51	54	7	15%	7	\$16.07	
43-5032	Dispatchers, Except Police, Fire, and Ambulance	0	89	94	96	102	13	15%	10	\$22.04	
17-2171	Petroleum Engineers	0	46	48	49	52	6	13%	4	\$42.13	
11-3031	Financial Managers	0	121	132	136	147	26	21%	12	\$46.73	
11-9041	Architectural and Engineering Managers	0	46	52	53	56	10	22%	5	\$62.28	
11-9111	Medical and Health Services Managers	0	122	127	130	136	14	11%	11	\$44.33	
13-1041	Compliance Officers	0	80	83	85	88	8	10%	7	\$29.47	
13-1161	Market Research Analysts and Marketing Specialists	0	79	87	91	101	22	28%	11	\$22.05	
13-2052	Personal Financial Advisors	0	53	55	57	59	6	11%	5	\$27.80	
17-1022	Surveyors	0	62	72	76	84	22	35%	7	\$30.19	
17-2051	Civil Engineers	0	135	158	168	188	53	39%	17	\$36.94	
17-2112	Industrial Engineers	0	71	75	78	83	12	17%	6	\$43.49	
17-2141	Mechanical Engineers	0	46	56	60	69	23	50%	6	\$36.83	
19-4041	Geological and Petroleum Technicians	0	45	49	50	53	8	18%	6	\$23.86	
41-3099	Sales Representatives, Services, All Other	0	234	243	248	258	24	10%	33	\$25.18	
21-2011	Clergy	0	155	166	174	188	33	21%	22	\$17.68	
21-2021	Directors, Religious Activities and Education	0	73	75	77	81	8	11%	10	\$17.65	
29-1069	Physicians and Surgeons, All Other	0	109	115	117	122	13	12%	4	\$97.39	
29-1071	Physician Assistants	0	60	64	66	71	11	18%	5	\$53.95	

29-1123	Physical Therapists	0	127	132	135	142	15	12%	7	\$42.83
29-1171	Nurse Practitioners	0	83	89	91	98	15	18%	6	\$46.87
29-2018	Clinical Laboratory Technologists and Technicians	0	43	51	55	61	18	42%	5	\$20.77
29-2041	Emergency Medical Technicians and Paramedics	0	255	289	304	333	78	31%	26	\$15.82
29-9011	Occupational Health and Safety Specialists	0	46	50	52	56	10	22%	4	\$33.57
31-2021	Physical Therapist Assistants	0	56	60	62	66	10	18%	8	\$23.37
39-9041	Residential Advisors	0	54	60	61	64	10	19%	11	\$16.86
53-7022	Excavating and Loading Machine and Dragline Operators	0	53	74	82	98	45	85%	13	\$23.55



County

54069

54029

54051

54103

54009

County Name

Ohio

Hancock

Marshall

Wetzel

Brooke

Growth Level: Secondary	2019-2029 %		
	# of Programs	Change	Average Earnings
1%-9% Growth	26	5%	\$20.99
10% - 19% Growth	21	15%	\$23.74
20% - 29% Growth	16	24%	\$29.67
30% - 39% Growth	10	32%	\$30.87
40% - 45% Growth	6	44%	\$31.55
46% - 59% Growth	5	53%	\$31.36
60% - 100% Growth	1	70%	\$44.15
No Growth	34	-4%	\$19.05
No/Low Impact	33	#DIV/0!	\$40.45

Growth Level: Post-Secondary	19-2029 % Chan		
	# of Programs	19-2029 % Chan	Average Earnings
1%-9% Growth	44	4%	\$20.69
10% - 19% Growth	30	14%	\$23.38
20% - 29% Growth	17	24%	\$26.98
30% - 39% Growth	8	32%	\$24.07
40% - 45% Growth	2	43%	\$21.05
46% - 59% Growth	6	53%	\$30.41
60% - 100% Growth	1	79%	\$21.22
Greater than 100% Growth	4	110%	\$13.72
No Growth	49	-8%	\$17.06
No/Low Impact	45	#DIV/0!	\$9.36

Institution	Program Type	SOC Code	Occupation	Jobs 2019	Annual Openings	Median Earnings	Growth Level
	Secondary	13-2082	Tax Preparers	12	2	\$15.06	40% - 45% Growth
	Secondary	47-4011	Construction and Building Inspectors	25	4.3	\$27.03	40% - 45% Growth
	Secondary	47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	539	97.3	\$35.14	46% - 59% Growth
	Secondary	15-1132	Software Developers, Applications	67	8.2	\$36.80	40% - 45% Growth
	Secondary	15-1132	Software Developers, Applications	67	8.2	\$36.80	40% - 45% Growth
	Secondary	15-1132	Software Developers, Applications	67	8.2	\$36.80	40% - 45% Growth
	Secondary	15-1132	Software Developers, Applications	67	8.2	\$36.80	40% - 45% Growth
	Secondary	13-1161	Market Research Analysts and Marketing Specialists	68	11.4	\$19.60	46% - 59% Growth
	Secondary	49-3042	Mobile Heavy Equipment Mechanics, Except Engines	115	19.6	\$28.76	46% - 59% Growth
	Secondary	49-3043	Rail Car Repairers	36	6.5	\$34.40	46% - 59% Growth
	Secondary	17-2171	Petroleum Engineers	37	5.8	\$44.15	60% - 100% Growth
	Secondary	47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	539	97.3	\$35.14	46% - 59% Growth
	Secondary	47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	539	97.3	\$35.14	46% - 59% Growth
WV Northern Community College	Post-Secondary	13-2082	Tax Preparers	12	2	\$15.06	40% - 45% Growth
WV Northern Community College	Post-Secondary	11-9021	Construction Managers	131	19.1	\$33.03	46% - 59% Growth
WV Northern Community College	Post-Secondary	11-9021	Construction Managers	131	19.1	\$33.03	46% - 59% Growth
WV Northern Community College	Post-Secondary	47-5071	Roustabouts, Oil and Gas	66	19	\$14.08	Greater than 100% Growth
WV Northern Community College	Post-Secondary	47-5071	Roustabouts, Oil and Gas	66	19	\$14.08	Greater than 100% Growth
WV Northern Community College	Post-Secondary	47-5013	Service Unit Operators, Oil, Gas, and Mining	101	20.1	\$23.06	46% - 59% Growth
WV Northern Community College	Post-Secondary	47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	539	97.3	\$35.14	46% - 59% Growth
WV Northern Community College	Post-Secondary	47-5012	Rotary Drill Operators, Oil and Gas	14	3.7	\$23.59	60% - 100% Growth
WV Northern Community College	Post-Secondary	53-7073	Wellhead Pumpers	47	10.4	\$18.84	60% - 100% Growth
WV Northern Community College	Post-Secondary	47-5071	Roustabouts, Oil and Gas	66	19	\$14.08	Greater than 100% Growth
WV Northern Community College	Post-Secondary	47-5013	Service Unit Operators, Oil, Gas, and Mining	101	20.1	\$23.06	46% - 59% Growth
WV Northern Community College	Post-Secondary	47-4011	Construction and Building Inspectors	25	4.3	\$27.03	40% - 45% Growth
WV Northern Community College	Post-Secondary	47-2151	Pipelayers	78	24.1	\$12.63	Greater than 100% Growth
WV Northern Community College	Post-Secondary	47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	539	97.3	\$35.14	46% - 59% Growth



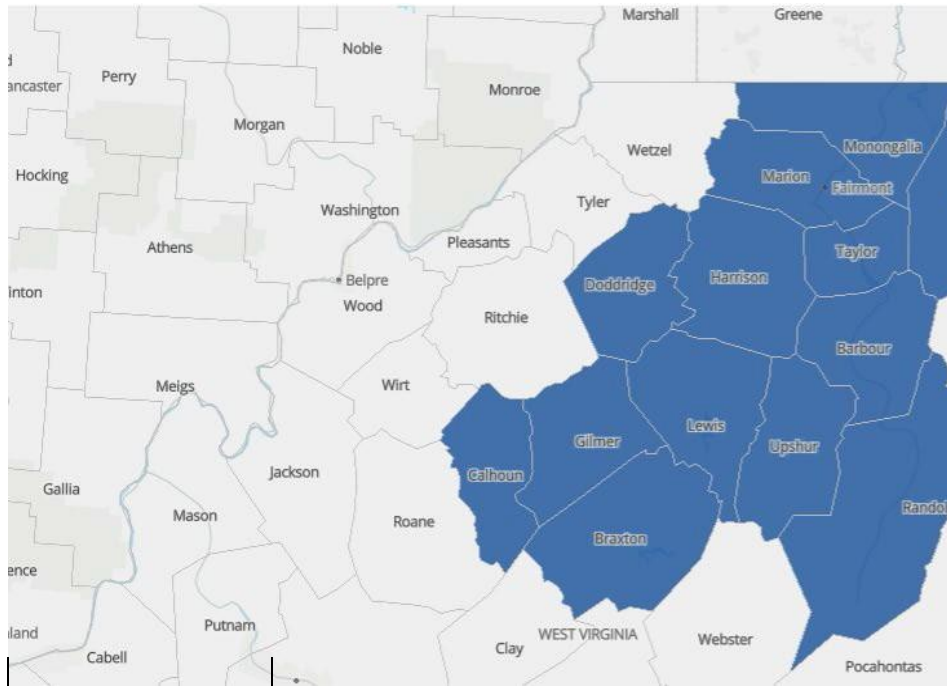
County	County Name
54069	Ohio
54029	Hancock
54051	Marshall
54103	Wetzel
54009	Brooke

Yellow Fill: Occupations trained for in the Northern Panhandle
White Fill: Occupations that are untrained for in the Northern

Parameters:
 - 2019 jobs greater than or equal to 40
 - Growth by 10% or more over the next 10 years
 - Median hourly wage greater than or equal to \$15/hr

West Virginia Northern Community College										
SOC Code	Occupation	Completions (2018)	2019 Jobs	2022 Jobs	2024 Jobs	2029 Jobs	2019 - 2029 Change	2019 - 2029 % Change	Annual Openings	Median Hourly Earnings
29-2071	Medical Records and Health Information Technicians	33	89	93	94	98	9	10%	7	\$19.05
15-1122	Information Security Analysts	23	63	67	69	74	11	17%	6	\$25.40
15-1121	Computer Systems Analysts	22	96	110	115	128	32	33%	10	\$31.29
15-1132	Software Developers, Applications	22	67	78	84	97	30	45%	8	\$36.80
11-9199	Managers, All Other	21	186	202	209	226	40	22%	18	\$21.88
11-1021	General and Operations Managers	21	1,085	1,162	1,190	1,244	159	15%	110	\$32.96
11-9021	Construction Managers	20	131	162	175	204	73	56%	19	\$33.03
11-2022	Sales Managers	20	62	71	74	82	20	32%	8	\$36.01
11-3051	Industrial Production Managers	20	68	74	76	77	9	13%	6	\$46.18
13-1051	Cost Estimators	20	126	144	149	160	34	27%	19	\$30.08
13-1111	Management Analysts	20	157	169	176	193	36	23%	19	\$36.19
49-9043	Maintenance Workers, Machinery	1	67	74	75	81	14	21%	9	\$23.98
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	0	393	429	446	476	83	21%	52	\$22.14
43-9041	Insurance Claims and Policy Processing Clerks	0	137	169	181	208	71	52%	25	\$15.77
47-2031	Carpenters	0	236	255	264	283	47	20%	30	\$17.15
47-2073	Operating Engineers and Other Construction Equipment Operators	0	460	622	688	827	367	80%	108	\$22.90
47-2111	Electricians	0	397	417	424	439	42	11%	51	\$26.95
47-2152	Plumbers, Pipefitters, and Steamfitters	0	239	287	307	351	112	47%	43	\$28.88
47-5013	Service Unit Operators, Oil, Gas, and Mining	0	101	123	132	150	49	49%	20	\$23.06
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	0	62	65	67	70	8	13%	8	\$37.93
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	0	539	675	726	836	297	55%	97	\$35.14
47-5061	Roof Bolters, Mining	0	214	228	234	248	34	16%	32	\$33.62
47-5041	Continuous Mining Machine Operators	0	71	79	83	91	20	28%	12	\$38.83
41-3021	Insurance Sales Agents	0	317	333	340	351	34	11%	36	\$20.44
47-5099	Extraction Workers, All Other	0	76	84	88	96	20	26%	13	\$28.18
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	0	208	222	228	239	31	15%	23	\$22.87
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	0	115	140	151	173	58	50%	20	\$28.76
49-9051	Electrical Power-Line Installers and Repairers	0	88	109	116	131	43	49%	13	\$29.67
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	0	56	59	62	63	7	13%	8	\$20.47
53-1048	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	0	206	222	228	244	38	18%	27	\$29.01
53-3032	Heavy and Tractor-Trailer Truck Drivers	0	893	1,024	1,070	1,169	276	31%	139	\$16.76
53-7032	Excavating and Loading Machine and Dragline Operators	0	76	94	101	116	40	53%	15	\$26.91
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	0	616	662	677	714	98	16%	101	\$15.05
41-3099	Sales Representatives, Services, All Other	0	201	221	229	246	45	22%	31	\$17.38
29-2041	Emergency Medical Technicians and Paramedics	0	240	265	275	299	59	25%	22	\$15.07
41-1012	First-Line Supervisors of Non-Retail Sales Workers	0	116	126	130	137	21	18%	14	\$23.44
13-2051	Financial Analysts	0	82	89	92	98	16	20%	9	\$33.91
11-3021	Computer and Information Systems Managers	0	42	46	46	49	7	17%	4	\$55.99
11-3031	Financial Managers	0	140	158	168	192	52	37%	17	\$36.80
11-3121	Human Resources Managers	0	57	62	62	64	7	12%	6	\$40.15
11-9111	Medical and Health Services Managers	0	154	161	166	174	20	13%	15	\$40.94
13-1031	Claims Adjusters, Examiners, and Investigators	0	69	85	91	104	35	51%	11	\$18.78
13-1041	Compliance Officers	0	57	62	65	70	13	23%	6	\$27.70
13-1071	Human Resources Specialists	0	162	171	174	181	19	12%	19	\$19.86
13-1161	Market Research Analysts and Marketing Specialists	0	68	80	86	101	33	49%	11	\$19.60
13-1199	Business Operations Specialists, All Other	0	163	186	193	214	51	31%	22	\$25.53
13-2011	Accountants and Auditors	0	476	512	526	559	83	17%	55	\$30.17
13-2052	Personal Financial Advisors	0	84	90	93	99	15	18%	8	\$21.66
31-2021	Physical Therapist Assistants	0	49	52	53	55	6	12%	7	\$25.27
17-2051	Civil Engineers	0	57	63	66	72	15	26%	7	\$56.51
17-2141	Mechanical Engineers	0	47	51	52	55	8	17%	4	\$41.02
19-4031	Chemical Technicians	0	59	62	63	66	7	12%	7	\$20.47
21-1022	Healthcare Social Workers	0	65	68	69	72	7	11%	8	\$23.04
27-3031	Public Relations Specialists	0	49	51	51	54	5	10%	6	\$25.32
29-1126	Respiratory Therapists	0	73	76	78	81	8	11%	4	\$24.08
29-1171	Nurse Practitioners	0	81	87	91	98	17	21%	6	\$40.44
29-2032	Diagnostic Medical Sonographers	0	101	106	108	114	13	13%	7	\$29.44
29-2057	Ophthalmic Medical Technicians	0	54	58	59	62	8	15%	6	\$16.05

29-9011	Occupational Health and Safety Specialists	0	99	111	115	122	23	23%	8	\$40.42
53-7073	Wellhead Pumpers	0	47	58	64	77	30	64%	10	\$18.84



County	County Name
54061	Monongalia
54033	Harrison
54049	Marion
54083	Randolph
54077	Preston
54041	Lewis
54097	Upshur
54007	Braxton
54001	Barbour
54021	Gilmer
54091	Taylor
54013	Calhoun
54017	Doddridge



1%-9% Growth	42	54	\$20.80
10%-19% Growth	44	67	\$21.89
20%-29% Growth	26	28	\$32.61
30%-39% Growth	12	7	\$30.55
40%-99% Growth	5	4	\$20.42
No Growth	24	39	\$19.60
No/Low Impact	23	35	\$25.73

Growth Level: Post-Secondary	# of Programs	Occupations	Average Earnings
1%-9% Growth	53	64	\$20.04
10%-19% Growth	44	59	\$22.59
20%-29% Growth	24	25	\$29.76
30%-39% Growth	15	10	\$23.88
40%-99% Growth	3	3	\$23.39
Greater than 100% Growth	1	1	\$15.39
No Growth	37	53	\$19.54
No/Low Impact	23	31	\$32.16

Institution	Program Type	Program Name	Occupation	Jobs 2019	Annual Openings	Median Earnings	Growth Level
	Secondary	Therapeutic Services	Physical Therapist Aides	32	6	\$10.62	40%-99% Growth
	Secondary	Information Management	Information Security Analysts	66	7.5	\$40.33	30%-39% Growth
	Secondary	Information Management	Software Developers, Applications	379	43.6	\$38.01	30%-39% Growth
	Secondary	Pre-Engineering - Project Lead The Way	Electrical Engineers	97	10	\$45.44	30%-39% Growth
	Secondary	Welding	Structural Iron and Steel Workers	85	13.9	\$21.84	30%-39% Growth
	Secondary	Masonry	Cement Masons and Concrete Finishers	117	22.7	\$18.17	40%-99% Growth
	Secondary	Coding, App And Game Design	Software Developers, Applications	379	43.6	\$38.01	30%-39% Growth
	Secondary	Simulation And Game Development Virtual	Software Developers, Applications	379	43.6	\$38.01	30%-39% Growth
	Secondary	Computer Systems Repair Technology	Information Security Analysts	66	7.5	\$40.33	30%-39% Growth
	Secondary	Computer Systems Repair Technology	Software Developers, Applications	379	43.6	\$38.01	30%-39% Growth
	Secondary	Power Equipment Systems	Electrical Powerline Installers and Repairers	152	22.4	\$30.32	40%-99% Growth
	Secondary	Marketing Management	Market Research Analysts and Marketing Specialists	263	37.7	\$21.28	30%-39% Growth
	Secondary	Allied Health	Physical Therapist Aides	32	6	\$10.62	40%-99% Growth
	Secondary	Allied Health	Medical Secretaries	346	56	\$14.37	30%-39% Growth
	Secondary	Machine Tool Technology	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	26	3.9	\$15.56	30%-39% Growth
	Secondary	Medical Assisting (Ace)	Medical Secretaries	346	56	\$14.37	30%-39% Growth
	Secondary	Cisco Networking Academies	Information Security Analysts	66	7.5	\$40.33	30%-39% Growth
	Secondary	Welding (Ace)	Structural Iron and Steel Workers	85	13.9	\$21.84	30%-39% Growth
	Secondary	Truck Driving (Ace)	Bus Drivers, Transit and Intercity	29	7	\$26.40	40%-99% Growth
	Secondary	Truck Driving (Ace)	Bus Drivers, Transit and Intercity	29	7	\$26.40	40%-99% Growth
Pierpont Community and Technical College	Post-Secondary	Petroleum Technology	Roustabouts, Oil and Gas	281	48	\$14.90	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Petroleum Technology	Petroleum Pump System Operators, Refinery Operators, and Gaugers	38	7	\$29.23	40%-99% Growth
Pierpont Community and Technical College	Post-Secondary	Petroleum Technology	Wellhead Pumpers	183	34	\$18.63	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Applied Welding	Structural Iron and Steel Workers	73	11	\$21.48	30%-39% Growth

Pierpont Community and Technical College	Post-Secondary	Welding Technology	Structural Iron and Steel Workers	73	11	\$21.48	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Veterinary Assistant	Veterinary Technologists and	70	9	\$16.40	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Architectural Engineering Technology	Cost Estimators	165	23.6	\$29.27	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Business	Cost Estimators	165	23.6	\$29.27	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Civil Engineering Tech	Cost Estimators	165	23.6	\$29.27	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Computer Science	Software Developers, Applications	379	43.6	\$38.01	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Electric Utility Technology	Electrical Powerline Installers and Repairers	152	22.4	\$30.32	40%-99% Growth
Pierpont Community and Technical College	Post-Secondary	Health Information Technology	Medical Secretaries	346	56	\$14.37	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Health Sciences	Veterinary Technologists and	76	9.5	\$16.40	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Homeland Security	Information Security Analysts	66	7.5	\$40.33	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Machinist Technology	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	26	3.9	\$15.56	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Medical Secretarial Studies	Medical Secretaries	346	56	\$14.37	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Nursing	Nurse Practitioners	200	18.4	\$45.92	30%-39% Growth
Pierpont Community and Technical College	Post-Secondary	Physical Therapist Assistant	Physical Therapist Aides	32	6	\$10.62	40%-99% Growth

51-4041	Machinists	0	277	292	297	306	29	10%	33	\$18.09
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	0	43	44	45	48	5	12%	5	\$17.12
49-9099	Installation, Maintenance, and Repair Workers, All Other	0	228	240	243	252	24	11%	25	\$17.00
49-2021	Radio, Cellular, and Tower Equipment Installers and Repairs	0	48	52	54	57	9	19%	7	\$15.07
47-5099	Extraction Workers, All Other	0	48	50	51	54	6	13%	7	\$18.60
47-5013	Service Unit Operators, Oil, Gas, and Mining	0	562	605	624	664	102	18%	85	\$21.93
47-5012	Rotary Drill Operators, Oil and Gas	0	128	142	147	160	32	25%	21	\$25.27
47-4011	Construction and Building Inspectors	0	192	209	215	228	36	19%	26	\$29.15
41-3099	Sales Representatives, Services, All Other	0	495	545	563	607	112	23%	77	\$22.43
47-2221	Structural Iron and Steel Workers	0	85	99	104	116	31	36%	14	\$21.84
47-2152	Plumbers, Pipefitters, and Steamfitters	0	302	329	340	367	65	22%	42	\$22.37
47-2151	Pipelayers	0	233	264	276	300	67	29%	35	\$23.02
47-2141	Painters, Construction and Maintenance	0	440	472	483	508	68	15%	49	\$19.32
47-2121	Glaziers	0	66	72	73	78	12	18%	10	\$18.09
47-2073	Operating Engineers and Other Construction Equipment Operators	0	1,318	1,449	1,499	1,610	292	22%	192	\$21.07
47-2071	Paving, Surfacing, and Tamping Equipment Operators	0	59	69	73	84	25	42%	10	\$18.46
47-2051	Cement Masons and Concrete Finishers	0	117	145	156	182	65	56%	23	\$18.17
29-1131	Veterinarians	0	174	186	190	199	25	14%	10	\$44.03
43-9199	Office and Administrative Support Workers, All Other	0	190	197	201	210	20	11%	24	\$21.77
43-5061	Production, Planning, and Expediting Clerks	0	227	239	244	252	25	11%	27	\$21.33
43-5032	Dispatchers, Except Police, Fire, and Ambulance	0	110	116	118	125	15	14%	12	\$17.76
43-4031	Court, Municipal, and License Clerks	0	214	224	228	238	24	11%	22	\$16.32
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	0	908	944	960	1,005	97	11%	107	\$20.35
29-1141	Registered Nurses	0	5,431	5,765	5,910	6,235	804	15%	376	\$29.60
27-4011	Audio and Video Equipment Technicians	0	49	51	52	55	6	12%	5	\$17.12
29-1127	Speech-Language Pathologists	0	216	227	232	243	27	13%	14	\$27.05
13-2011	Accountants and Auditors	0	852	920	950	1,022	170	20%	100	\$29.63
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	0	40	43	44	46	6	15%	4	\$30.87
17-2081	Environmental Engineers	0	103	110	113	119	16	16%	9	\$36.19
17-2071	Electrical Engineers	0	97	110	114	127	30	31%	10	\$45.44
17-2051	Civil Engineers	0	415	465	486	536	121	29%	46	\$37.79
17-2011	Aerospace Engineers	0	53	56	57	59	6	11%	4	\$43.65
17-1022	Surveyors	0	244	261	268	282	38	16%	23	\$36.08
17-1011	Architects, Except Landscape and Naval	0	45	51	53	58	13	29%	5	\$39.04
15-2041	Statisticians	0	63	67	71	77	14	22%	7	\$38.23
15-1133	Software Developers, Systems Software	0	148	164	170	186	38	26%	15	\$44.74
15-1132	Software Developers, Applications	0	379	436	463	523	144	38%	44	\$38.01
13-2052	Personal Financial Advisors	0	97	105	109	119	22	23%	10	\$34.19
13-2051	Financial Analysts	0	111	120	124	134	23	21%	13	\$36.66
13-1199	Business Operations Specialists, All Other	0	718	765	782	826	108	15%	80	\$31.68
17-2141	Mechanical Engineers	0	122	135	138	153	31	25%	12	\$34.81
13-1161	Market Research Analysts and Marketing Specialists	0	263	298	312	348	85	32%	38	\$21.28
13-1141	Compensation, Benefits, and Job Analysis Specialists	0	76	80	81	84	8	11%	7	\$18.66
13-1131	Fundraisers	0	136	140	146	152	16	12%	16	\$22.88
13-1121	Meeting, Convention, and Event Planners	0	52	56	58	61	9	17%	7	\$21.43
13-1071	Human Resources Specialists	0	381	406	416	440	59	15%	45	\$27.64
13-1041	Compliance Officers	0	283	294	303	313	30	11%	27	\$27.81
11-9111	Medical and Health Services Managers	0	402	434	449	482	80	20%	42	\$49.00
11-9041	Architectural and Engineering Managers	0	139	151	157	169	30	22%	14	\$67.94
11-9031	Education Administrators, Preschool and Childcare Center/Program	0	110	116	118	123	13	12%	10	\$15.93
11-3121	Human Resources Managers	0	99	106	109	116	17	17%	10	\$43.54
11-3031	Financial Managers	0	405	443	459	495	90	22%	42	\$47.88
11-3021	Computer and Information Systems Managers	0	186	203	208	223	37	20%	19	\$53.23
11-2031	Public Relations and Fundraising Managers	0	54	56	57	60	6	11%	5	\$32.28
17-2112	Industrial Engineers	0	145	159	167	175	30	21%	14	\$42.99
17-2171	Petroleum Engineers	0	117	130	135	149	32	27%	13	\$57.07
29-1126	Respiratory Therapists	0	293	321	334	364	71	24%	22	\$23.72
25-3097	Teachers and Instructors, All Other	0	153	163	167	175	22	14%	20	\$18.10
29-1123	Physical Therapists	0	425	454	467	497	72	17%	26	\$40.24
29-1122	Occupational Therapists	0	158	170	176	188	30	19%	11	\$41.21
29-1071	Physician Assistants	0	284	316	332	367	83	29%	26	\$46.48
29-1069	Physicians and Surgeons, All Other	0	596	628	642	673	77	13%	25	\$100.79
29-1067	Surgeons	0	135	143	146	152	17	13%	6	\$200.81
29-1062	Family and General Practitioners	0	58	66	70	80	22	38%	4	\$103.59
29-1031	Dietitians and Nutritionists	0	117	120	122	130	13	11%	9	\$22.42
11-2021	Marketing Managers	0	90	99	103	110	20	22%	11	\$42.56
27-3041	Editors	0	103	111	116	130	27	26%	15	\$28.34
27-3031	Public Relations Specialists	0	81	89	93	101	20	25%	11	\$28.53
27-2042	Musicians and Singers	0	112	116	119	125	13	12%	13	\$42.07
27-2041	Music Directors and Composers	0	41	43	44	48	7	17%	5	\$21.06
27-2012	Producers and Directors	0	41	47	49	54	13	32%	6	\$24.15
25-3021	Self-Enrichment Education Teachers	0	321	342	351	369	48	15%	43	\$15.67
17-3011	Architectural and Civil Drafters	0	124	138	144	155	31	25%	15	\$23.55
23-1023	Judges, Magistrate Judges, and Magistrates	0	89	93	95	99	10	11%	5	\$30.87
21-2021	Directors, Religious Activities and Education	0	119	124	128	137	18	15%	17	\$17.72
21-2011	Clergy	0	317	346	364	397	80	25%	47	\$19.15
21-1092	Probation Officers and Correctional Treatment Specialists	0	174	183	187	195	21	12%	18	\$18.30
21-1091	Health Educators	0	119	124	126	132	13	11%	16	\$21.45
21-1023	Mental Health and Substance Abuse Social Workers	0	86	93	96	103	17	20%	11	\$17.43
21-1022	Healthcare Social Workers	0	173	183	187	199	26	15%	21	\$23.11
21-1021	Child, Family, and School Social Workers	0	296	314	323	344	48	16%	37	\$17.36
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	0	309	329	339	361	52	17%	40	\$17.63

21-1013	Marriage and Family Therapists	0	122	128	130	136	14	11%	15	\$20.59
17-3031	Surveying and Mapping Technicians	0	151	166	170	180	29	19%	20	\$18.76
17-3023	Electrical and Electronics Engineering Technicians	0	154	160	163	170	16	10%	16	\$34.96
17-3022	Civil Engineering Technicians	0	122	134	139	151	29	24%	15	\$18.89
53-7073	Wellhead Pumpers	0	185	202	210	230	45	24%	32	\$18.58



County	County Name		
54107	Wood		
54035	Jackson		
54085	Ritchie		
54087	Roane		
54095	Tyler		
54105	Wirt		
54073	Pleasants		

Growth Level: Secondary	# of Programs	Occupations	Average Earnings
1%-9% Growth	26	30	\$20.17
10%-19% Growth	25	33	\$28.21
20%-34% Growth	23	19	\$22.35
35%-49% Growth	8	7	\$27.96
50%-70% Growth	6	5	\$22.44
Greater than 70% Growth	2	1	\$23.73
No Growth	27	52	\$18.66
No/Low Impact	34	46	\$21.88

Growth Level: Post-Secondary	# of Programs	Occupations	Average Earnings
1%-9% Growth	38	43	\$21.39
10%-19% Growth	40	36	\$27.94
20%-34% Growth	27	21	\$26.61
35%-49% Growth	6	6	\$22.23
50%-70% Growth	9	6	\$30.05
Greater than 70% Growth	3	2	\$26.91
No Growth	55	95	\$20.00
No/Low Impact	64	83	\$12.99

Institution	Program Type	Program Name	Occupation	Jobs 2019	Annual Openings	Median Earnings	Growth Level
	Secondary	Carpentry	First-Line Supervisors of Construction Trades and Extraction Workers	621	119	\$29.93	50%-70% Growth
	Secondary	Carpentry	Helpers--Carpenters	12	3	\$9.26	50%-70% Growth
	Secondary	Allied Health	Surgical Technologists	12	2	\$15.55	50%-70% Growth
	Secondary	Allied Health	Phlebotomists	19	4	\$14.03	50%-70% Growth
	Secondary	Welding	First-Line Supervisors of Construction Trades and Extraction Workers	621	119	\$29.93	50%-70% Growth
	Secondary	Welding	Structural Iron and Steel Workers	26	6	\$23.73	Greater than 70% Growth
	Secondary	Phlebotomy Technician (Ace)	Phlebotomists	19	4	\$14.03	50%-70% Growth
	Secondary	Welding (Ace)	First-Line Supervisors of Construction Trades and Extraction Workers	621	119	\$29.93	50%-70% Growth
	Secondary	Welding (Ace)	Structural Iron and Steel Workers	26	6	\$23.73	Greater than 70% Growth
	Secondary	Pre-Engineering - Project Lead The Way	Mechanical Engineers	46	6	\$36.83	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Allied Health	Phlebotomists	19	3.6	\$14.03	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Allied Health	Surgical Technologists	12	1.9	\$15.55	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Architectural Design-Drafting Technology	Construction Managers	168	27	\$45.79	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Architectural Design-Drafting Technology	Construction Managers	168	27	\$45.79	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Architectural Design-Drafting Technology	Cost Estimators	77	14.6	\$30.36	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Architectural Design-Drafting Technology	Cost Estimators	77	14.6	\$30.36	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Business Administration	Construction Managers	168	27	\$45.79	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Business Administration	Construction Managers	168	27	\$45.79	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Business Administration	Cost Estimators	77	14.6	\$30.36	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Business Administration	Cost Estimators	77	14.6	\$30.36	50%-70% Growth

WVU at Parkersburg	Post-Secondary	Business Administration	Cost Estimators	77	14.6	\$30.36	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Business Administration	Cost Estimators	77	14.6	\$30.36	50%-70% Growth
WVU at Parkersburg	Post-Secondary	General Business	Cost Estimators	77	14.6	\$30.36	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Heating, Ventilation, Air Condg. & Refrige	Pipelayers	380	79	\$24.85	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Residential and Commercial Electricity	Electrical Powerline Installers and Repairers	63	12.7	\$30.08	Greater than 70% Growth
WVU at Parkersburg	Post-Secondary	Residential and Commercial Electricity	First-Line Supervisors of Construction Trades and Extraction Workers	621	119	\$29.93	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Residential/Commercial Electricity	Electrical Powerline Installers and Repairers	63	12.7	\$30.08	Greater than 70% Growth
WVU at Parkersburg	Post-Secondary	Residential/Commercial Electricity	First-Line Supervisors of Construction Trades and Extraction Workers	621	119	\$29.93	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Surgical Technology	Surgical Technologists	12	1.9	\$15.55	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Surgical Technology	Surgical Technologists	12	1.9	\$15.55	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Welding Technology	First-Line Supervisors of Construction Trades and Extraction Workers	621	119	\$29.93	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Welding Technology	First-Line Supervisors of Construction Trades and Extraction Workers	621	119	\$29.93	50%-70% Growth
WVU at Parkersburg	Post-Secondary	Welding Technology	Structural Iron and Steel Workers	26	6.3	\$23.73	Greater than 70% Growth
WVU at Parkersburg	Post-Secondary	Welding Technology	Structural Iron and Steel Workers	26	6.3	\$23.73	Greater than 70% Growth

**Appendix H
CLNA Template**



WEST VIRGINIA
COMMUNITY & TECHNICAL
COLLEGE SYSTEM

WEST VIRGINIA PERKINS V

COMPREHENSIVE LOCAL NEEDS ASSESSMENT TEMPLATE

**West Virginia Council for Community and Technical College Education
Strengthening Career and Technical Education for the
21st Century Act (Perkins V)
Comprehensive Local Needs Assessment (GUIDE)**

To be eligible to receive financial assistance, your college shall conduct a Comprehensive Local Needs Assessment (CLNA) related to career and technical education and include the results in Section #2 of the local application. The CLNA shall be updated not less than once every 2 years. **This document is a guide and should not be submitted with your local application.**

	EVIDENCE			FINDINGS		GOALS
	Date Reviewed	Data Reviewed	Stakeholders Consulted	Analysis	Discoveries	Program Goals 2020-2022
STUDENT PERFORMANCE QUESTIONS						
How are students in your CTE programs performing in comparison to non-CTE students?						
How are students from special populations performing in your CTE programs in comparison to non-special population CTE students?						
Which groups of students are struggling the most in your CTE programs?						
Which CTE programs overall have the highest student success rates?						
What does the data suggest as a cause for inequitable outcomes in your CTE programs?						
PROGRAM IMPLEMENTATION – SIZE, SCOPE & QUALITY ALIGNMENT QUESTIONS						

Are you offering a sufficient number of courses, and course sections, within your programs/degrees?						
Are there students who want to enroll in your programs unable to do so? (waiting list, 3-year average)?						
Should the need to transfer arise, do students have the ability to complete a program of study at your institution or other institutions in your service area?						
How do you ensure the quality of your CTE programs?						
How do you ensure the quality of your internship opportunities?						
How do specific components of your program, such as work-based learning, apprenticeships, job shadowing, internships, or co-op compare in quality? (see, size, scope, and quality in the State plan)						
LABOR MARKET ALIGNMENT QUESTIONS						
What industries are projected to grow the most in your local area?						
How do your CTE program enrollments match projected job openings? Where are the biggest gaps?						
What are the emerging occupations in your area to which students should be exposed?						
What skill needs have industry partners identified as lacking in your program(s)?						
What opportunities exist in your local labor market for students with disabilities, i.e., English learners, or other special populations?						

QUESTIONS ABOUT PROGRESS IMPLEMENTING CTE PROGRAMS/POS						
How fully are your program(s) aligned and articulated across secondary to postsecondary educational systems in your region?						
Do your program(s) incorporate applicable academic, technical employability skills at each learner level?						
Do you have credit transfer agreements in place to assist students to earn articulate credit?						
Are your students being retained in the program of study in which they originally enrolled?						
Do students in the program of study have multiple entry and exit points?						
Are students in your CTE programs earning recognized postsecondary credentials? Which ones?						
Are students in your programs earning dual/concurrent enrollment credit?						
QUESTIONS ABOUT RECRUITMENT, RETENTION & TRAINING OF FACULTY & STAFF						
Does staff diversity reflect the demographic makeup of the student body?						
What challenges if any exist to recruit and onboard new CTE faculty?						
What challenges if any have you identified concerning professional development opportunities for CTE faculty and staff?						

What professional development offerings are most highly rated by participating, faculty, and staff?						
In what subject areas do you need to develop or recruit more educators?						
QUESTIONS ABOUT IMPROVING ACCESS & EQUITY						
Which special populations groups are underrepresented in your CTE programs overall and what particular program areas?						
Are there enrollment discrepancies related to high-wage, high-skill, or in-demand occupations?						
What barriers exist that prevent special population groups from accessing your programs?						
How are special population groups performing in your programs?						
What accommodations, modifications, and supportive services do you currently provide to ensure the success of special population groups? Which ones are most effective? Which ones are underutilized?						
What additional accommodations, modifications, and supportive services would help ensure access and equity for all students within your programs?						