Technical Assistance Goals

1. Measuring program quality using industry-recognized credentials (IRCs)
   • How do states identify credentials that have value for employers locally and nationally?
   • Are there resources or experts that West Virginia might consult regarding the value of credentials outside of West Virginia and nationally?
   • Where do micro-credentials figure in state lists of high-value credentials?
   • How do states collect data on credential attainment from credentialing agencies?

2. Measuring quality work-based learning (WBL) experiences
   • How do West Virginia’s criteria for WBL (drawn from the state’s simulated workplace program) compare with those of other states, particularly with those of states with significant rural populations?

3. Establishing program alignment to labor market
   • What criteria are states using to determine whether career and technical education (CTE) programs are aligned to high-wage, high-demand industries?
   • How are states aligning programs and credentials to regional labor markets

4. Developing Comprehensive Local Needs Assessments (CLNAs)
   • How are state application and assessment templates structured?
• **Gather feedback on IRC quality measures:**
  – Using input from employers, industry, and education stakeholders, West Virginia could identify criteria for a “high-quality” credential. West Virginia could use the criteria to develop a process for soliciting and vetting credential suggestions.
  – West Virginia Community & Technical Colleges could administer an employer survey to gather feedback on the value of postsecondary credentials, including micro-credentials offered at the local level, for hiring and career advancement.

• **Create a flexible WBL definition:** A definition of WBL that allows flexibility in terms of the duration, location, and mode (virtual or in a workplace) can support high-quality WBL statewide, including rural areas with few employers. West Virginia could couple a flexible definition of WBL with statewide WBL objectives or standards to encourage consistency and quality.
• **Use multiple data points to identify priority occupations for CTE program alignment:** Following the example of other states, West Virginia might consider multiple criteria for identifying occupations with robust employment opportunities. Criteria include wage levels and current and projected job openings to ensure that the occupations that students train for are well paid and needed in the labor market.

• **Incorporate regional labor market needs into alignment:** Working with regional workforce agencies and using regional labor market data, West Virginia could establish region-level definitions of high-wage, high-demand industries to use in evaluations of CTE program alignment. West Virginia could also consider taking regional needs into account by, in cases where programs do not align with a state-level definition, allowing local education agencies (LEAs) to provide evidence of how their programs align with regional needs.

• **Tailor CLNA template:** CLNA templates vary by state needs and systems. West Virginia could consider a template that reflects elements of existing systems, such as the local application process, and emphasizes state CTE needs and priorities.
Contents

• **Credentials of value**
  – **Identifying credentials**
  – **Defining high-quality credentials**
  – **Collecting data**
  – **State strategy spotlights**

• **WBL definitions**

• **Labor market alignment**

• **CLNA structure**

• **Methodology**
• Develop an application process for LEAs to suggest credentials
• Establish a schedule for reviewing and updating lists of approved credentials
• Identify processes for collecting employer input:
  – Require endorsements from employers (Louisiana, Nevada) or industry associations (New Jersey)
  – Review by state industry or workforce investment council members (Louisiana, Ohio, South Dakota, Tennessee)
  – Implement an employer survey (Kentucky)

**Kentucky’s** regional workforce investment boards and chambers of commerce survey employers and industry groups annually to collect input, asking about the following:
• Number of employees
• Location
• Industry
• Recognized credentials
• Required credentials for employment
• Willingness to hire high school students
• WBL participation
• Contact information for follow-up

(See spotlight for details on Kentucky)

TA resource: RTI International drafted a survey for West Virginia to collect employers’ views/opinions on the value of industry certifications, micro-credentials, and community college programs and credentials.
### Identifying Credentials of Value: National Resources

<table>
<thead>
<tr>
<th>Components</th>
<th>CareerOneStop</th>
<th>Credential Finder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider</td>
<td>U.S. Department of Labor (USDOL)</td>
<td>Credential Engine</td>
</tr>
<tr>
<td>Content</td>
<td>Lists certification descriptions. Allows searches by occupation, industry, or certification name.</td>
<td>Lists descriptions of credentials, quality assurances, jurisdiction, and related training programs.</td>
</tr>
<tr>
<td>Limitations</td>
<td>Does not include detailed descriptions of the certification or connections to instructional programs or subjects.</td>
<td>Limited coverage of credentials across states due to lack of state participation.</td>
</tr>
<tr>
<td>Example of use</td>
<td>New Jersey uses the USDOL Certification Finder tool to validate suggested credentials.</td>
<td></td>
</tr>
<tr>
<td>Link</td>
<td><a href="#">Website</a></td>
<td><a href="#">Website</a></td>
</tr>
</tbody>
</table>

- Accrediting bodies, such as American National Standards Institute (ANSI) and the International Certification Accreditation Council, allow users to search their lists of accredited certifications.
- National industry associations’ websites also list employer-valued certifications.
Defining High-Quality Credentials: State Credential Lists

• Numerous states maintain state-approved lists of credentials that meet minimum criteria for inclusion, such as the following:
  – Transferability across state lines (i.e., nationally recognized)
  – Alignment with a program of study
  – Accessible to secondary students (i.e., minors with little job experience)
  – Transference to postsecondary credit or a living wage

• State credential lists include a variety of credential characteristics, such as the following:
  – Credential identification code for reporting
  – Relevant program of study, career cluster, or Classification of Instructional Programs (CIP) code
  – Issuing organization
  – Level of skill needed
  – Industry endorsements
  – Exam cost

TA resource: RTI provided West Virginia examples of credential lists from other states
<table>
<thead>
<tr>
<th>Consideration</th>
<th>Secondary</th>
<th>Postsecondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of third-party credentials included</td>
<td>Certifications only (Florida, New Jersey, Tennessee); Certifications plus licenses or pre-apprenticeships (Kentucky, Ohio, Pennsylvania, Virginia)</td>
<td>Certifications and licenses; Postsecondary issued certificates and micro-credentials (Louisiana)</td>
</tr>
<tr>
<td>How pathways with no credential are handled</td>
<td>Students take assessments developed by the state (Arizona, Nevada) or by NOCTI assessments, career readiness assessment, or student capstones or portfolios</td>
<td>Students earn certifications with regional labor market value that are offered by local institutions (Louisiana)</td>
</tr>
<tr>
<td>Relevance of credentials earned</td>
<td>Many credentials prepare secondary students for entry-level jobs and beyond; Some basic credentials are less valued by employers (e.g., Microsoft Office, Occupational Safety and Health Administration 10, CPR)</td>
<td>Many colleges communicate with local employers about the relevance of postsecondary credentials; some are less relevant at the state or national level</td>
</tr>
</tbody>
</table>
Defining High-Quality Credentials: Not All Credentials Are Considered Equal

- Ohio assigns point values to credentials based on their importance for occupation entry. High school students must earn 12 credential points within a single career field to use the credential option for meeting graduation requirements.

- New Jersey’s credential list is categorized by type and endorsement or alignment. The types and endorsements for credentials include the following:
  - **Types**: Core, Specialty, Skill, Advanced, Product/Equipment
  - **Endorsements**: Industry, CTE, Accreditation (ANSI, National Commission of Certifying Agencies [NCCA]), Military Occupation Specialty, Job Corps

- Kansas offers financial incentives to districts and postsecondary institutions for students earning credentials aligned with high-priority industries and on a state-approved list. While this list associated with incentives contains fewer than 100 credentials, the list of all credentials that may be reported for Perkins V includes several hundred credentials.

Example point allocations in Ohio:
- CPR First Aid: 1 point
- Forklift Operation: 1 point
- National Center for Construction Education and Research (NCCER) Core: 6 points
- Air Conditioning Contractors of America HVAC Universal: 12 points
• At least 17 states are piloting or implementing micro-credential programs for K–12 educators.
  – Two states have statewide micro-credential programs for educators (North Carolina, Wisconsin).
  – States use micro-credentialing for purposes such as licensure requirements, recertification or professional development requirements, and evaluation assessments. States view these as opportunities to improve teacher leadership pathway pipelines.

• Some postsecondary institutions (two-year and four-year) offer micro-credentials in industries such as manufacturing, education, engineering, and data science.
  – Postsecondary systems such as the State University of New York have established processes and guiding policies for campuses to develop micro-credentials.

• While many micro-credentials are offered locally, these are often excluded from state credential lists since they are not nationally recognized.
  – Exception: Louisiana maintains state and regional credential lists, the latter of which includes employer-endorsed credentials offered at local postsecondary institutions.
Credential Data Collection: State Strategies

• District-reported data collected from students at the secondary and postsecondary levels
  – Alumni surveys
  – Student transcript or district CTE data reporting
  – In some states, districts are required to maintain copies of certificates

• State-level agreements with vendors
  – One vendor for one exam (e.g., ACT Career Readiness)
  – One vendor or test administrator for several exams (e.g., Florida, Iowa, North Carolina, South Carolina)
    ▪ Contract with Certiport for IT exams
  – All vendors administering a credential on the state-approved list (Tennessee)
• **Identifying credentials**
  - Kentucky combines employer survey data on credential use with labor market information to determine which credentials are valued by industry.
    - The Kentucky Center for Education and Workforce Statistics collects regional workforce data from local workforce investment boards.
    - Boards work with local businesses to determine credentials associated with in-demand jobs.
    - The Kentucky Workforce Innovation Board and the state education agency work together to refine the credential list and disseminate it to school districts.
  - Credentials must align with one of the five sectors with the most openings for jobs paying $35,000 or more.
  - The state list includes licenses, certifications, and other credentials associated with in-demand jobs.

• **Collecting credential data**
  - Legislation requires LEAs to report on credential completion for all students, not just CTE students.
  - Apprenticeships are tracked by the state apprenticeship department.
Credential Spotlight: North Carolina

• **Identifying credentials**
  – Educators, businesses, and industry representatives recommend credentials with labor market value that align with programs of study.
    ▪ The state commerce department assigns occupations from one to five stars based on wages, projected growth rate, and projected job openings. Recommended credentials must align with jobs having three or more stars.
  – The process for identifying and reviewing credentials is still being determined.

• **Collecting credential data**
  – The state longitudinal data system includes an online alumni survey (the Common Follow-Up survey) of all public secondary and postsecondary alumni, within one year of exit. One question asks for certification completion (yes/no).
  – Additionally, the CTE Concentrator Feedback Survey collects self-reported data on credentials earned by students after graduation.
• **Identifying credentials**
  – Must be approved by a career cluster advisory council, align with a program of study, and have transference to either postsecondary credits or high-quality employment.
    ▪ High-quality employment is defined as above entry level.
    ▪ The amount of postsecondary credit depends on the level of rigor of the credential.
  – The state education agency reviews the list annually and opens a request for additions from LEAs.

• **Collecting credential data**
  – Vendors must establish data-sharing agreements with the state agency for their certification(s) to appear on the state-approved list.
    ▪ Vendors use a standard record layout for data submission to the state.
    ▪ State education staff match the vendor data to student records. About 50% of data can be matched to student records.
  – Districts review the lists of credentials earned by their students provided by vendors and can submit proof of attainment if any are missing.
• **Identifying credentials**
  - At the postsecondary level, the community college system adopted a credential list created by the state workforce development board.
    - The Virginia Board for Workforce Development included credentials that align with current high-demand fields.
    - The community college system added industries with growing demand (e.g., drones) or ongoing need (e.g., agriculture).

• **Collecting credential data**
  - Community colleges submit data monthly through an online submission process for data on all non-credit programs in community colleges.
    - Institutions must submit student data to receive incentive funding through the Fast Forward program.
Perkins V offers the following definition of WBL:
“Sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, firsthand engagement with the tasks required in a given career field, that are aligned to curriculum and instruction.”

Most states that selected the WBL program quality indicator have adopted the Perkins V definition as is, or with further specifications. Three states included a different definition in their Perkins V state plans.
• Sixteen states specify the types of activities that can be counted:
  - Internships, apprenticeships, cooperative education, and clinical experiences
  - Where applicable, participation in a WBL capstone course

• Some states specify a minimum number of hours for a “sustained” interaction:
  - Ohio: 250 hours of cumulative WBL experience throughout high school
  - New York: 54 hours of qualifying WBL experience
  - North Dakota: 40 hours of qualifying WBL experience

• Most states do not specify the location of WBL experiences, permitting
  activities to be in a school setting, at the worksite, or virtual
### State Definitions of WBL: Perkins V Reporting (Slide 3)

<table>
<thead>
<tr>
<th>State</th>
<th>WBL definition from <em>Perkins V</em> draft plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alabama</strong></td>
<td>Work-based learning is a structured component of the Career and Technical Education (CTE) curriculum that integrates classroom instruction with productive, progressive, <strong>supervised</strong>, work-based experiences/apprenticeships (Paid) and internships (Unpaid), related to students’ career objectives. Content is planned for students through a cooperative arrangement between the school and employer as a component of work-based learning.</td>
</tr>
<tr>
<td><strong>Colorado</strong></td>
<td>Work-based learning provides <strong>hands-on or realistic experiences</strong> for secondary learners that relate to the students’ CTE Program of Study.</td>
</tr>
<tr>
<td></td>
<td>For <em>Perkins V</em> reporting, qualifying experiences will include: Apprenticeship, On-the-Job Training, Clinical Experience, Credit for Work Experience, Internship, Pre-Apprenticeship, Industry-Sponsored Project, School-Based Enterprise Managed by Students.</td>
</tr>
<tr>
<td><strong>North Dakota</strong></td>
<td>Definition provided in legislation, plus: Option 1: Sustained interactions (including cooperative experiences): <strong>supervised experiences of &gt;= 40 hours on the worksite</strong>; Option 2: Simulated environments in an educational setting (which means any CTE-funded course) should strive for a minimum of <strong>40 hours throughout a series of in-class projects/lab work</strong>, with each project/lab taking no less than 1 week or 5 successive hours of class time to complete.</td>
</tr>
</tbody>
</table>
### Establishing a Definition of Quality WBL

<table>
<thead>
<tr>
<th>Seven most common quality elements (based on RTI's review of state definitions)</th>
<th>Elements in West Virginia’s definition:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinforces classroom instruction with hands-on applications</td>
<td>X</td>
</tr>
<tr>
<td>Aligns to student career goals/plans</td>
<td>X</td>
</tr>
<tr>
<td>Provides career exploration and exposure</td>
<td>X</td>
</tr>
<tr>
<td>Fosters connection to industry and real-world experiences</td>
<td>(partial)</td>
</tr>
<tr>
<td>Prepares students, teachers, and employers</td>
<td>X</td>
</tr>
<tr>
<td>Assesses student growth and skill gain</td>
<td>X</td>
</tr>
<tr>
<td>Requires or encourages participation in guided reflection</td>
<td></td>
</tr>
</tbody>
</table>

### Other quality components in West Virginia’s definition:
- Definitions and categories of WBL activities
- Alignment of WBL experiences to state and industry standards
- Detail of WBL policies, requirements, and logistics
- Use of training agreements between schools and employers, and training plans for students
- Collaboration and open communication between schools, families, and employers

### Quality components not in West Virginia’s definition:
- Compensation (monetary or credit) for students
- WBL experiences should be objectives-based and outcomes-driven
Labor-market aligned CTE programs prepare students for employment or further education in occupations that are high wage, high skill, and high demand/in demand. States typically convene stakeholders to select criteria for identifying in-demand occupations and guidance on program alignment.

- Typical stakeholder agencies or organizations
  - Workforce or economic development agencies
  - Secondary or postsecondary education agencies
  - Industry partners or advisory groups
- Other agencies or organizations
  - Governor’s office
    - Consultation (District of Columbia—Mayor’s office)
    - Alignment to economic development priorities (Nevada, Rhode Island)
  - Data and research (Kentucky)
States often prioritize program alignment with occupations and fields that are as follows:

- **High wage**, as indicated by the following:
  - A median wage that reaches or exceeds a state-determined level, such as $14/hour (Minnesota, Nebraska, Texas, Wisconsin); the target wage might be set statewide (Wisconsin) or vary by region (Nebraska)
  - An average wage that meets or exceeds a benchmark, such as the state’s living wage (District of Columbia)

- **High skill**, as indicated by the following:
  - Education and credential requirements, including IRCs, on-the-job training, apprenticeships, internships, and postsecondary degrees or credentials

- **High demand/in demand**, as indicated by the following:
  - A target rate of projected annual (and sometimes five-year) job growth (District of Columbia, Kentucky, Ohio)
  - A target number of current job openings (Ohio, Wisconsin), number of jobs overall (District of Columbia, Ohio, Wisconsin)

Some states include additional criteria, such as feedback from industry representatives on new and emerging occupations, that may not be captured by the above metrics.
• **Secondary**
  – Programs must align to one of six service areas defined by the state education agency that corresponds to the national career cluster framework.
  – Labor market alignment: The state education agency provides LEAs labor market information for preparing the CLNAs required by *Perkins V*.

• **Postsecondary**
  – Programs must align with in-demand occupations and industry sectors.
    ▪ Occupations with a median wage of at least $14/hour and either minimum growth of 1 percent or at least 250 job openings annually
    ▪ Four target industry sectors: nursing, advanced manufacturing, information technology, and biotechnology
  – Community colleges may also partner with industry to show regional industry needs.
  – Iowa targets state financial aid to students enrolled in programs that are aligned to in-demand fields and occupations.
Some states use local definitions of high wage, high demand
- The Kentucky Center for Education and Workforce Statistics works with local workforce investment boards to provide workforce data for the region and identify aligned credentials.

Recognize regional credentials of value
- Louisiana includes regional and postsecondary certifications recognized by local employers.

Tools to incorporate regional data into CLNA
- Kansas LEAs must use the state’s regional labor market alignment tool.
- New York LEAs must use regional industry and occupation projections, created by the state Department of Labor.
- Colorado provides optional tools and resources for exploring regional data and industry partners.
The level of structure in states’ CLNA and subgrantee application templates varied.

**Virginia’s** template lists the assessment requirements included in the *Perkins V* legislation and asks LEAs to respond with a description for each.

**South Carolina’s** template includes open-ended questions along with tables that guide LEAs in listing key stakeholders by type, interpreting labor market information by program, and describing what they learn from a review of performance indicators.

**Iowa’s** template follows the Advance CTE guidelines, which recommend using rubrics with ratings.

**TA resource:** RTI provided West Virginia examples of CLNA templates and guides.
Methodology

• Review of national initiatives and practices across states
  – Analysis of 40+ Perkins V draft plans
  – State documents and websites for 20 states and District of Columbia

• Synthesis of state and local templates and examples
  – Employer survey (e.g., Kentucky)
  – Micro-credential programs and policies (e.g., New York, North Carolina, Wisconsin)
  – State credential lists (e.g., Florida, Kansas, Kentucky, Louisiana, Massachusetts, Missouri, Nevada, New Jersey, South Dakota, Tennessee, Virginia)
  – State CLNA guides and templates (e.g., Florida, Iowa, Ohio, Oklahoma, South Carolina, Texas, Virginia)