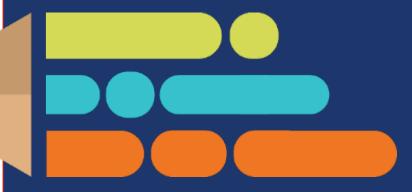


Sarah G. Williams and Steve Playl

College, Career and Technical Education | May 20, 2021

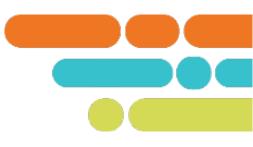


## What is CTE in TN?





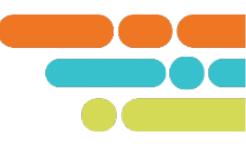
### **Career Clusters**



- Tennessee's career clusters are organized into 16 broad categories
  - encompass virtually all occupations from entry through professional levels
  - aligned with the U.S. Department of Education's structure of career and technical education (CTE)
- Career clusters
  - identify the knowledge and skills needed to follow a pathway toward career goals
  - provide a context for exploring the many occupational options available



### **Programs of Study**



Within each career cluster, students take courses that are organized into programs of study. These programs of study

- incorporate challenging academic standards (evidence: course description documents/standards);
- 2. address both academic and technical knowledge and skills, including employability skills (evidence: course description documents/standards);
- **3.** are aligned with the needs of industries in the economy (evidence: statewide industry advisory council review of standards);
- 4. progress in specificity (evidence: program of study matrix);
- 5. have multiple entry and exit points that incorporate credentialing (evidence: programs of study matrix and promoted industry credential listing); and
- 6. culminate in the attainment of a recognized postsecondary credential (evidence: promoted industry credential listing).



**High Quality CTE Student** Experience

### **Program of Study**

#### **Student identifies**

- knowledge and skills needed to follow a pathway toward career goals
- Provides context for exploring many occupational options

#### **CTSO**

### **WBL**

#### Student

**develops** employability skills applies classroom theory to practical problems

#### **CREDENTIALS**

One of eight early postsecondary opportunities, EPSOs.

- **Validates** the technical skills and competencies gained through their chosen CTE program of study
- Measure of quality in Tennessee CTE programs



## Advanced Manufacturing

- Machining Technology
- Industrial Maintenance Technology
- Mechatronics
- Welding





# Agriculture, Food, and Natural Resources

- Agribusiness
- Agriculture, Engineering, Industrial, and Mechanical Systems
- Environmental and Natural Resource Management
- Food Science
- Horticulture Science
- Veterinary and Animal Science



## **Architecture & Construction**

- Architectural & Engineering Design
- Interior Design
- Mechanical, Electrical, & Plumbing (MEP) Systems
- Residential & Commercial Construction
- Structural Systems



# Arts, AV Technology, & Communications

- Audio/Visual Production
- Digital Arts & Design
- Fashion Design





# Business Management & Administration

- Business Management
- Health Services Administration
- Human Resource Management
- Office Management





## **Education & Training**

- Early Childhood Education Careers (Pre-K-4)
- Educational Therapy and Support
- Teaching as a Profession (K-12)





## **Finance**

- Accounting
- Banking and Finance



## Government & Public Administration

- Public Management and Administration
- Leadership in Government





## Health Science

- Diagnostic Services
- Emergency Services
- Nursing Services
- Sport and Human Performance
- Therapeutic Services





## Hospitality & Tourism

- Culinary Arts
- Hospitality & Tourism





## **Human Services**

- Barbering
- Cosmetology
- Dietetics and Nutrition
- Human and Social Services



## **Information Technology**

- Coding
- Cybersecurity
- Networking Systems
- Web Design





# Law, Public Safety, Corrections, & Security

- Criminal Justice and Correction Services
- Fire Management Services
- Pre-Law





## Marketing, Distribution & Logistics

- Entrepreneurship
- Marketing Management
- Supply Chain Management





## **STEM**

- Advanced STEM Applications
- BioSTEM
- Engineering
- Technology





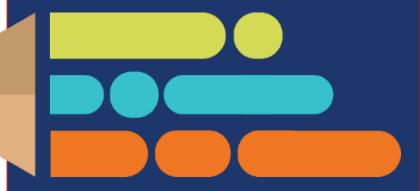
## Transportation

- Automotive Collision Repair
- Automotive Maintenance and Light Repair
- Aviation Flight





## Perkins V





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

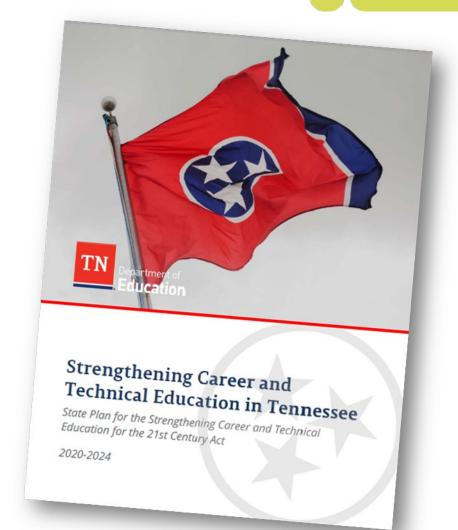


- Strengthening Career and Technical Education for the 21st Century Act (Perkins V) was signed into law July 31, 2018, effective July 1, 2020.
  - Reauthorized the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV)
  - The purpose of Perkins V is to "develop more fully the academic knowledge and technical and employability skills of secondary" and postsecondary students.
- The Tennessee Department of Education is the eligible state agency in Tennessee responsible for implementation of Perkins V and related funding.
  - TDOE is responsible for administration at the K-12 level.
  - Tennessee Board of Regents is responsible for administration at the postsecondary level.



## Strengthening Career and Technical Education in Tennessee

- Perkins V 4-Year State Plan
  - Developed over 18 months (October 2018-March 2020) with significant statewide stakeholder input and feedback
  - Approved by Governor Bill Lee and submitted to US Department of Education (April 2020)
  - Effective July 1, 2020 June 30, 2024
- Vision
  - To expand opportunities for all students to explore, choose, and follow a career pathway to success





## **Strengthening Career and Technical Education in Tennessee**



### Priorities

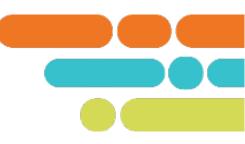
- To improve equitable access to comprehensive career exploration, advisement, leadership, and skill development through CTE pathways
- To expand participation in aligned career
   pathways which prepare students to seamlessly transition into high wage, high skill, and/or indemand occupations
- To increase participation in high-quality learning experiences, like work-based learning, and the attainment of relevant credentials needed to meet the workforce demands of Tennessee



Photo: Tennessee Department of Economic and Community Development



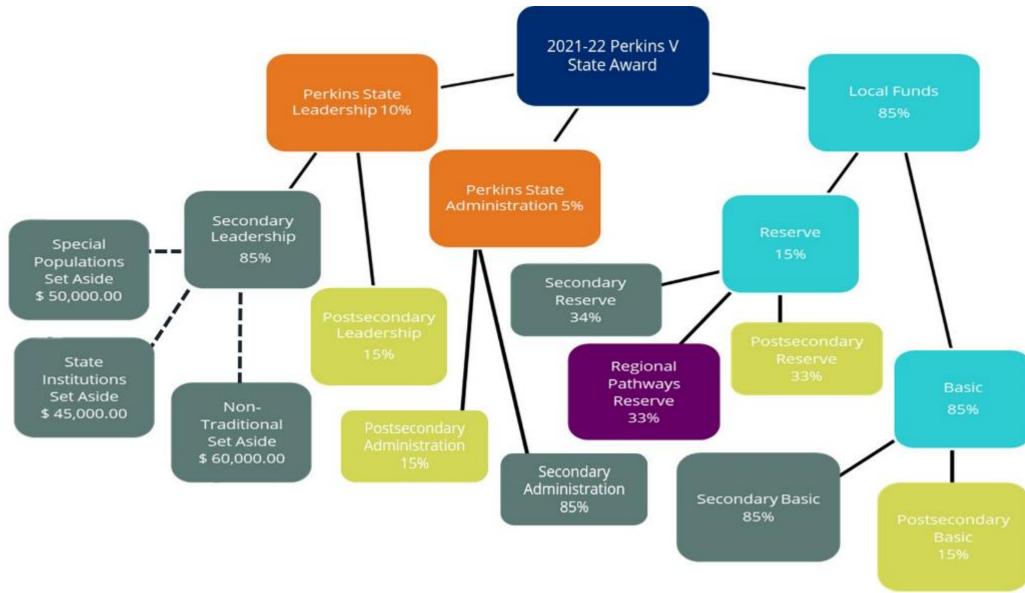
## **Strengthening Career and Technical Education in Tennessee...**



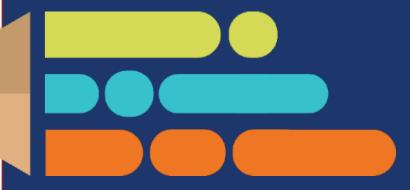
- Annually:
  - Around \$28 million in federal Perkins V funding is used to support CTE at the secondary and postsecondary level
    - 85% of the annual award is split and distributed between secondary schools and postsecondary institutions as **local funds**
    - 5% of annual award is retained and split between TDOE and the Tennessee Board of Regents for **administration** of the grant
    - 10% of annual award is retained and split between TDOE and the Tennessee Board of Regents for state-level leadership activities
      - o Includes required expenses or set-asides which are earmarked for State institutions, support for special populations, and non-traditional students



## **Perkins V Funding in Tennessee**

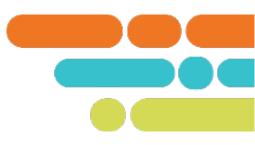


## CTE + Industry





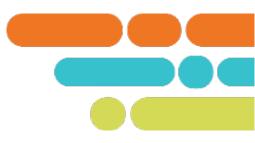
## **Industry Credentials**



- Industry credentials can be used to...
  - indicate quality of Tennessee CTE programs
  - validate the technical skill and competencies students have acquired through their chosen CTE program
  - support Tennessee's school and district accountability framework under Every Student Succeeds Act (ESSA) as part of the college and career readiness indicator, "Ready Graduate"
- How are they earned?
  - Awarded to secondary students based on the mastery of a specific set of industry or job-related competencies. Industry certifications are usually developed in collaboration with employers and validated through a third-party vendor which uses an assessment to determine mastery.



### **Industry Credentials**



### Minimum Criteria

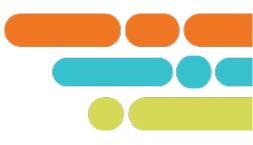
- the credential is aligned to at least one TDOE approved CTE program of study
- the student-level credential attainment data is documented in the form of a certificate, certification, badge, micro-credential, etc.
- an agreement is in place, or is available, for the data to be shared directly with TDOE

### Tiers

- Recognized
- Valued
- Preferred



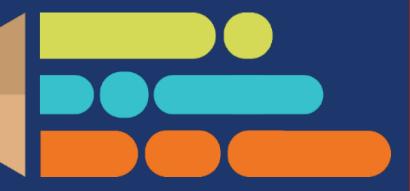
### **Engagement with Industry**



- CLNA Advisory Council
  - LEA (district-wide school-wide, and/or content specific)
  - Requirement of Perkins V
  - Informs CLNA that then determines district priorities for use of Perkins
     V funding
- Career Cluster Industry Advisory Councils
  - Statewide
  - Review course standards, resources, training, and industry credentials for all programs of study
  - Meet twice annually



# Status of CTE in Tennessee





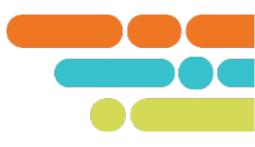
## Program of Study (POS) Data



| High skill, High wage, and In Demand occupations  | Aligned POS   |
|---|---|
| Market Research Analysts and Marketing Specialists  | Marketing Management  |
| Calibration Technologists and Technicians and<br>Engineering Technologists and Technicians, Except<br>Drafters, All Other | <ol> <li>Mechatronics</li> <li>Advanced STEM Applications</li> <li>Agricultural Engineering, Industrial, and Mechanical Systems</li> </ol>  |
| Physical Therapist Assistants   | <ol> <li>Sport &amp; Human Performance</li> <li>Therapeutic Service</li> </ol>  |
| Construction Managers   | <ol> <li>Architectural and Engineering Design</li> <li>Entrepreneurship</li> <li>Residential and Commercial Construction</li> <li>Agricultural Engineering, Industrial, and Mechanical Systems</li> </ol> |
| Producers and Directors   | Audio/Visual Production   |
| Aircraft Mechanics and Service Technicians  | Aviation Flight   |



## **CTE Data Highlights**

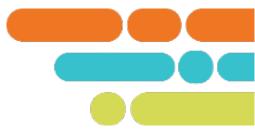


### • Annually:

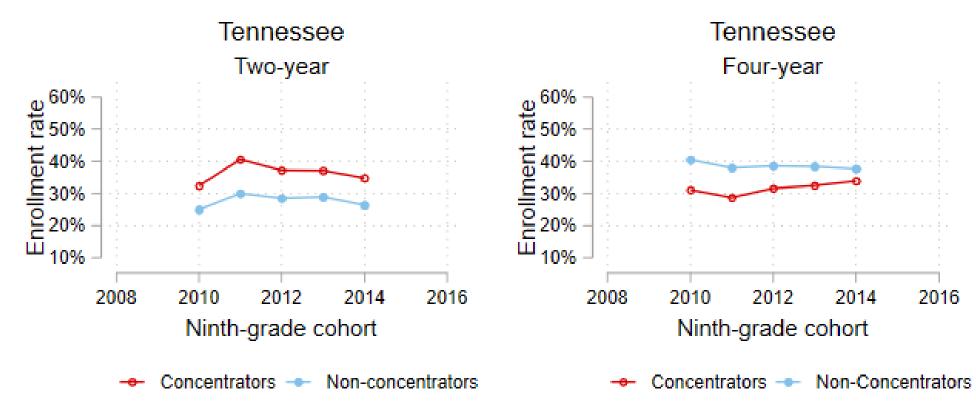
- -Nearly 20% of all secondary students enroll in CTE courses
  - Of those secondary CTE participants, around 45% become a "CTE Concentrator"
    - oOf those CTE Concentrators, more than 98% graduate on time
    - More than 93% seamlessly transition into advanced training, postsecondary education, military, or employment after high school graduation



### **CTE Data Highlights**



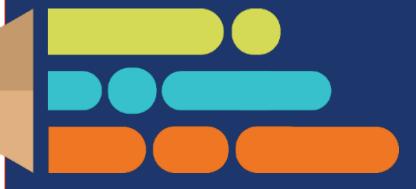
 In Tennessee, CTE concentrators are more likely to enroll in college than non-concentrators over time by two to four percentage points.





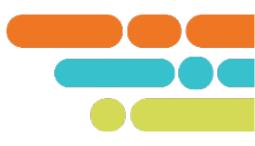
Postsecondary enrollment of secondary non-CTE and CTE concentrator graduates. Source Tennessee Department of Education, CTE Policy Exchange (CTEx), Carruthers, C., University of Tennessee, May 2021

## National Landscape





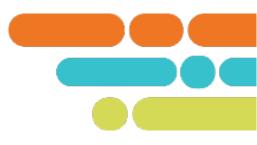
### On the Horizon



- Without Limits: A Shared Vision for the Future of Career Technical Education
  - A national vision from Advance CTE to leverage CTE to close equity gaps in educational outcomes and workforce readiness and ensure each learner can reach success in the career of their choice
  - Developed with input from nearly 200 national, state and local education and workforce development leaders, including multiple from Tennessee
- Advancing the National Career Clusters® Framework
  - Effort led by the U.S. Department of Education to revise the National Career Clusters®, which serves as a framework and provides common language to connect CTE from state to state and education to industry



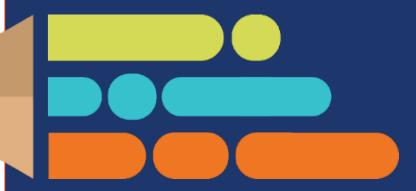
### On the Horizon



- Aligning Federal Policy
  - Reauthorization of the Higher Education Act
  - Reauthorization of the National Apprenticeship Act
  - Reauthorization of the Workforce Innovation and Opportunity Act



## Questions?





## Thank You!

**#TNBestforAll** 

#StrengtheningCTEinTN



