Aligning Federal Resources for Semiconductor Workforce Development: A Conversation with the U.S. Departments of Labor and Education

February 14, 2024
Today’s Speakers

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Agenda for today

• CHIPS for America Overview

• Leveraging the Public Workforce System
  (US DOL Employment and Training Administration)

• Leveraging Career, Technical, and Adult Education
  (US ED Office of Career, Technical, and Adult Education)

• Q&A: Aligning semiconductor workforce needs
  • Engaging in state planning
  • Recent federal guidance
  • Innovative examples
  • Connecting to local systems

• Closing: CHIPS workforce updates and follow up resources
CHIPS for America Vision

**Economic Security**
The CHIPS Act will strengthen supply chain security and increase economic resilience in critical sectors.

**National Security**
The CHIPS Act will ensure that the U.S. can manufacture advanced technologies, including secure chips for the U.S. military.

**Future Innovation**
The CHIPS Act will spur innovation, increase competitiveness, and ensure long-term U.S. leadership in the sector.
Delivering on our **national and economic security objectives** demands **major investments in the semiconductor workforce** that will support **good-paying jobs across the industry**.

**America’s diversity is a comparative advantage**; we must make significant investments to create opportunities for **Americans from historically underserved communities**.

Effective workforce solutions **enable key stakeholders to work together**.
CHIPS Workforce Call to Action

Over the next decade…

- **Double** the U.S. semiconductor workforce overall.

- **Triple the number of graduates** in semiconductor-related fields, including engineering.

- **Train 100,000 new technicians** through apprenticeships, career and technical education, and career pathway programs.

- Expand recruitment for **more people from underserved communities** – including women and veterans – to launch semiconductor industry careers.

- Hire and **train an additional million women in construction** to meet the demand across a range of industries, including CHIPS projects.
Aligning Federal Resources for Semiconductor Workforce Development

LEVERAGING THE PUBLIC WORKFORCE SYSTEM
The Public Workforce System Purpose

The public workforce system is designed to:

• **help job seekers** access employment, education, training, and support services to succeed in the labor market and

• **to match businesses** with the skilled workers they need to compete in the global economy.
Opportunities to partner

- Leveraging the public workforce system ecosystem
- Engaging on state planning
- Utilizing WIOA partner programs
- Developing or expanding registered apprenticeship
Public Workforce System: Opportunities to Plug In

U.S. Department of Labor
Oversees the public workforce system

State Agency / State Workforce Development Board
Develops a strategic vision for the state, provides leadership to the workforce development boards and informs local strategies.

Local Workforce Development Boards
Provides strategic direction to their areas and sets training priorities

American Job Centers/Other Service Providers
AJCs serve job seekers and employers directly. Local Boards contract for some services, such as youth programming, that may be delivered outside the AJC.
National reach, local connection

https://www.careerones.top.org/
WIOA: Coordinated Local Strategies

Addressing Workforce Challenges
State Planning: Strategic Partnership

Due date: March 4th - but opportunity for ongoing updates and editing. This is a living document!

WIOA requires that States submit a Unified or Combined Plan for the four-year period covering PYs 2024-2027.

• Connects the folks responsible for coordinated state strategies
• Includes partners from Department of Education for Unified and TANF/SNAP/HUD for combined

The WIOA State Plan is both a strategic document.

• Ensures that statutory and regulatory requirements are met
• Serves as a roadmap that reflects strategic and operational planning to implement the State’s workforce development system to deliver services to employers and jobseekers
• Opportunity to link Infrastructure investment
• **Youthbuild**
  - Community-based pre-apprenticeship program that provides job training and education services for youth 16-24 who left high school without a diploma
  - Focus on construction, as well as other high demand industries
  - Participants complete on the job training and classroom

• **Job Corps**
  - Largest, free residential career training and education program for low-income adults aged 16-24
  - On-site program- 120+ campuses nation-wide
  - 10 industries, including advanced manufacturing and construction
Registered Apprenticeship

- Industry-driven, high-quality career pathway where employers can develop and prepare their future workforce, and individuals can obtain paid work experience, classroom instruction, and a nationally-recognized, portable credential.
- Advanced manufacturing and construction opportunity

**Spotlight**

*Advanced Manufacturing Intermediaries work to:*
- Increase awareness through industry outreach
- Connect employers and labor organizations with workforce and education partners
- Provide technical assistance to launch and expand Registered Apprenticeship
- Help apprenticeship sponsors refine recruiting, hiring, and retention strategies to increase Diversity, Equity, Inclusion and Accessibility (DEIA)

*Find a list of industry intermediaries, home pages, and contact info [here](#)
We're excited to partner

- Meet Your Industry's Workforce Needs
- Leverage Resources
- Save Time
- We Are Where You Are
U.S. Department of Education
Career, Technical, and Adult Education in the U.S.

Webinar: Aligning Federal Resources for Semiconductor Workforce Development

February 14, 2024
Luke Rhine and Catherine McConnell

Office of Career, Technical, & Adult Education
K-12 Education in the U. S.

- Just over 130,000 public schools and roughly 30,000 private schools
- Nearly 50 million students
  - Just over 16.9 million are in high school (grades 9-12)
- Each state establishes its own standards, curriculum, assessments, and graduation requirements
- 87 percent of students graduate on time (within 4 years)
- Roughly 64 percent of students enroll in some form of postsecondary education immediately after graduation
- Roughly 34 percent of students enter the workforce immediately after high school immediately after graduation
Postsecondary Education in the U. S.

• Just over 3,900 degree-granting institutions
  • 2,300 are 4-year institutions offering programs at the bachelor’s or higher degree level and
  • 1,300 are 2-year institutions offering associate’s degrees and other certificates.

• Another 1,900 non-degree-granting institutions offering academic courses to transfer or short-term credentials

• Roughly 19.6 million students are enrolled in postsecondary education

• Similar to K-12 institutions, postsecondary institution have freedom to develop their programs and courses.

• Institutions and/or programs are accredited through a peer review process

• 30 percent of students earn a bachelor’s degree within 6 years; 20 percent earn an associates degree within 6 years.
Adult Education in the U. S.

- Approximately 48 million U.S. adults that have low English literacy skills and 69 million adults that have low numeracy skills in English.

- Delivered through a network of local education agencies, including community-based and faith-based organizations, libraries, community colleges, and correctional institutions.

- Programs are designed to help adults get the basic skills they need including reading, writing, math, English language acquisition, and problem-solving to be productive workers, family members, and citizens.
Career and Technical Education (CTE) in the U. S.

- Delivered through a vast network of local educational agencies (including middle schools, high schools, and area CTE centers) and institutions of higher education (mostly community colleges)

- Funding for CTE is provided through:
  - States and local communities - roughly 90 percent
  - Federal appropriation through the Carl D. Perkins Act - roughly 10 percent

- As of FY 2023, there were roughly 8.1 million secondary and 3.4 million postsecondary students participated in CTE classes.
Perkins V
U.S. federal legislation supporting CTE
How Perkins Funds Flow To States

Via formula

Congress
- Writes the legislation
- Passes the law
- Sets the formula
- Appropriates the funds

US Department of Education
- Allocates funds to each state based on formula set by Congress

Eligible Agency (state board for CTE)
- Sets overall policy direction
- Develops 4-year state plan

State Administrative Agency
- Administers the state plan
Secondary vs. Postsecondary

**Perkins V:** Each state determines how to divide the Perkins funds between secondary and postsecondary. On average across the US, 62% of Perkins funds got to secondary schools and 38% go to postsecondary schools.

- **Secondary:** Secondary education teaches students ages 11 to 18. In the U.S., this is often separated into lower secondary education (ages 11 to 14), known as "middle school", and upper secondary education (ages 14 to 18) known as "high school."

- **Postsecondary School:** Postsecondary education, also known as tertiary education, follows high school.
Utilizing FY24 State plans

1-Year Transition Plan
(July 1, 2019-June 30, 2020)

4-Year State Plan
(July 1, 2020-June 30, 2024)

New 4-Year State Plan
(July 1, 2024-June 30, 2028)

Annual Revisions to SDPLs and Any Other Revisions
(July 1, 2024 - June 30, 2025)

Plan/ Updates due May 10th
# Procedures for State Plan Submissions Under Perkins V and EDGAR

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Areas within Perkins to think about Advanced Manufacturing/ Semiconductor

Multiple ways to leverage Perkins funding and CTE ecosystem to support the Advanced Manufacturing sector:

Within a Perkins State Plan:
- State’s vision and goal section
- High Skill, High Wage, In-Demand
- Involvement with designing programs of study
- Work based learning

Connecting to CTE Ecosystem:
- Work-based learning opportunities
- Working directly with state agencies, community colleges and school districts to create programming and pathways
If I am an economic development official in a region with semiconductor industry presence, what is the best way for me to engage with Perkins or WIOA programs and support my state or locality's planning process?
Frequently Asked Questions

Does recent guidance issued by your Department give any preference to programs or investments that support critical Investing in America fields like semiconductors?
What are some innovative or interesting ways you have seen states or localities leverage your agency’s resources to support career advancement opportunities in semiconductors and/or advanced manufacturing?
If a company in my region receives funding for workforce development through CHIPS, how should I advise them to connect to their local workforce and CTE ecosystem to support long-term sustainability?
CHIPS Workforce Update and Next Steps
Key CHIPS for America Workforce Updates

Since the passage of the CHIPS and Science Act...

- At least nine states have dedicated new funding to support workforce training for semiconductor jobs.
- Over 50 community colleges across 19 states have announced new or expanded programming to support semiconductor opportunities.
- Semiconductors companies partnering with labor unions to recruit, train and retain a skilled construction workforce, including several that committed to Project Labor Agreements.
- Commerce announced most CHIPS incentives awards for construction, modernization or expansion of manufacturing facilities will include dedicated funds for workforce development.
- NSTC Vision and Strategy Paper named workforce development as one of NSTC’s Top Three priorities.

NSTC Workforce Center of Excellence Roles

Convene industry, research, education, government and labor stakeholders

Use data to measure the success of existing programs and guide future investment

Scale up proven programs

Pilot new efforts, including initiatives to engage underserved communities

Activities will engage the Department of Labor, Department of Education, National Science Foundation, Department of Defense, Department of Energy, among other federal agencies.

National Institute of Standards and Technology | U.S. Department of Commerce
Additional CHIPS Resources

• Visit CHIPS.gov for resources, including:
  • Workforce Progress Report
  • Workforce Development Guide
  • National Semiconductor Technology Center Vision & Strategy
  • Past webinars recordings and slides

• Join CHIPS mailing list
• Join Teaming Partner list
• Complete Natcast Community of Interest survey
• Contact CHIPS
  • askchips@chips.gov – general inquiries
  • apply@chips.gov – application-related inquiries
Recap: Key ED Resources

- Perkins State Plan Guidance
- Perkins Collaborative Resource Network
- Contacts:
  - Luke.Rhine@ed.gov
  - Catherine.McConnell@ed.gov
Recap: Key DOL Resources

RESOURCE HUBS
- Tools for Building and Equitable Infrastructure Workforce: Report link
- Apprenticeship Homepage: apprenticeship.gov
- Advanced Manufacturing Apprenticeship page: Advanced Manufacturing | Apprenticeship.gov
- DOL Good Jobs Initiative: DOL Good Jobs Homepage
- Advanced Manufacturing Sector Competency Framework: Clearinghouse Homepage
- Career Exploration Home Page: Homepage
- Find your state and local workforce development board contact info: Workforce Board Finder
- Leveraging the 2024 Workforce Innovation and Opportunity Act Planning Period to Capitalize on Investment Passed in the 117th Congress: Opportunities for Governors and State Workforce Development Boards: National Governors Association and US DOL Partnership

PROGRAMS / GRANTS
- General DOL Grants Hub: Hub Homepage
- Women in Apprenticeship and Nontraditional Occupations (WANTO): Grant Page
- Building Pathways to Infrastructure Job Grants: H-1B Skills Training Grants | U.S. Department of Labor (dol.gov)
- Job Corps: Program Homepage
- DOL YouthBuild: Program Homepage

TECHNICAL GUIDANCE
- Building Pathways to Infrastructure Careers: Framework for Preparing an Infrastructure Workforce: Training and Employment Notice (TEN) 08-22
- Increasing Equitable Service Access and Employment Outcomes for All Jobseekers in Workforce Innovation and Opportunity Act Adult and Dislocated Worker Programs: Training and Employment Guidance Letter 21-22

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