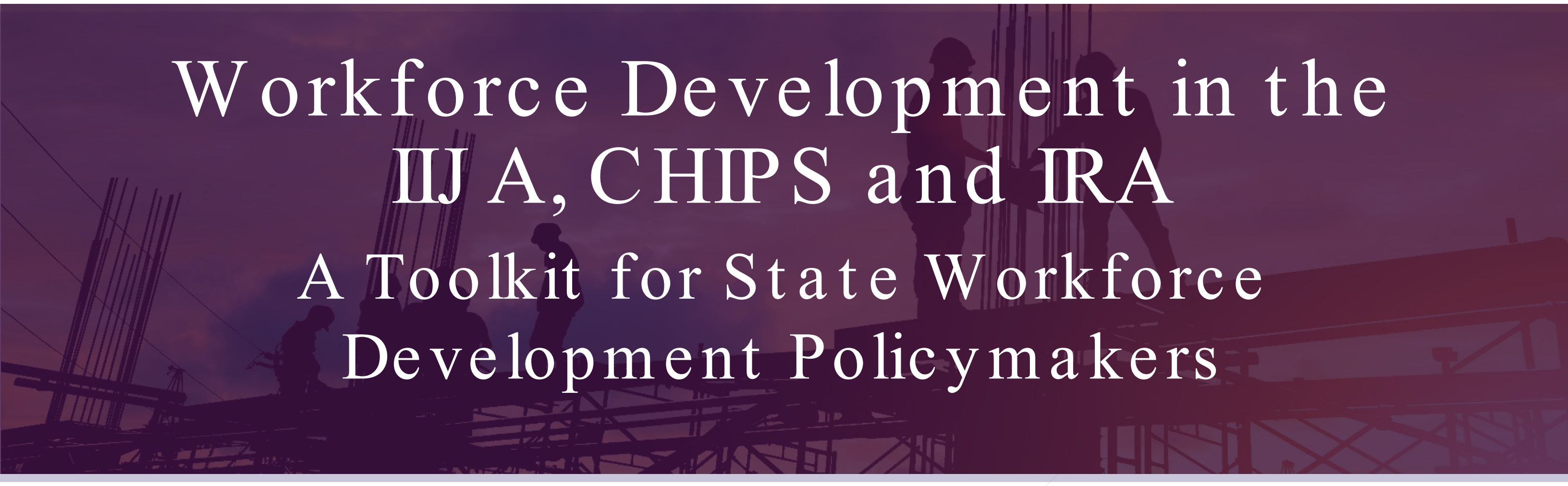

Workforce Development in the IIJA, CHIPS and IRA

A Toolkit for State Workforce Development Policymakers

In today's economy, Governors are hyper-focused on addressing workforce shortages across key sectors. The three major pieces of federal legislation that were passed during the 117th Congress will allocate significant funds to states and are meant to, in part, help create good-paying jobs across the infrastructure, semiconductor manufacturing, and energy industries.

From October 2022 through January 2023, the NGA Workforce Development Technical Assistance Program held conversations with key staff at federal agencies that received new funding from the Infrastructure Investment and Jobs Act (IIJA), the CHIPS and Science Act (CHIPS), and the Inflation Reduction Act (IRA). This series was held following programming at NGA's Summer 2022 Workforce Symposium on the role that state workforce policymakers should play in implementing recently enacted federal initiatives that will create jobs but lack a legislated role for the public workforce system.

This toolkit draws on insight from federal officials to outline the most pertinent programs and opportunities for state workforce development policymakers to consider as they seek to play a proactive role in implementing IIJA, CHIPS, and IRA. Moreover, the toolkit includes additional resources from NGA and federal agencies that will be helpful to state workforce development policymakers in this endeavor.

This resource is a product of the NGA Center for Best Practices Workforce Development & Economic Policy program. Technical assistance requests, examples of state policy efforts, or questions regarding the content of this brief can be directed to Rachael Stephens Parker at rstephensparker@nga.org.

Growing the Infrastructure Workforce Through the Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act (IIJA) represents a historic, $1.2 trillion investment to expand access to high-speed internet, improve public transit, and take up key construction projects on America's roads, bridges, and waterways. While there is not a legislated role for the public workforce system in the IIJA, there are multiple opportunities for state workforce development policymakers to play a proactive role in implementation. The IIJA newly allows states to expend funds from surface transportation programs on key workforce development activities, includes formula and competitive programs through which states may invest in workforce development, and encourages states to undertake long-term planning for their infrastructure workforce needs.

New Allowable Uses for Workforce Development in Surface Transportation Programs

The IIJA newly allows states to obligate funds from four programs in the Fixing America's Surface Transportation Act (FAST Act) toward workforce development, including registered apprenticeship and pre-apprenticeship programs. The IIJA also expands the allowable uses of these funds to allow for engagement with workforce development boards and for activities around addressing workforce gaps and developing the surface transportation workforce. The IIJA allows these uses under the following programs:

- The National Highway Performance Program;
- The Surface Transportation Block Grant Program;
- The Highway Safety Improvement Program; and
- The Congestion Mitigation and Air Quality Improvement Program

Select IIJA Programs with Workforce Eligibility

The IIJA includes several formula and competitive programs through which states can invest in their infrastructure workforce. These programs include:

- Federal Highway Administration's On-The-Job Training Program
- Federal Transit Administration's Bus and Bus Facilities Program and Low or No Emission Grant Program
- Joint Office of Energy and Transportation's National Electric Vehicle Infrastructure Program
- Federal Motor Carrier Safety Administration's Commercial Motor Vehicle Operators Grant Program
- Federal Motor Carrier Safety Administration's Commercial Motor Vehicle Enforcement Training and Support Grants Program

- [Federal Railway Administration's Consolidated Rail Infrastructure and Safety Improvement Program]
- [Federal Transit Administration's Passenger Ferry Program]
- [Federal Transit Administration's Public Transportation Technical Assistance and Workforce Development Program]
- [USDOT's University Transportation Centers]
- [Broadband Equity, Access, and Deployment (BEAD)]

Note: This list is not exhaustive. NGA's IIJA Tracker includes a column with highlights which programs in the Infrastructure Investment and Jobs Act can potentially be used to fund workforce development programs.

Human Capital Plans

The IIJA encourages – but does not require – states to develop five-year Human Capital Plans to outline the immediate and long-term workforce needs they plan to address using the transportation and public infrastructure investments. States may incorporate this planning into the statewide transportation plans already required by federal rules. State workforce development system leaders, including state workforce agencies and state workforce development boards, would make useful partners to state departments of transportation in developing these plans.

Opportunities for State Workforce Systems to Consider Include:

- Investing funds from surface transportation programs in workforce development, as is newly allowed by the IIJA
- Aligning investments from surface transportation programs with existing workforce development policy and programs
- Developing a holistic strategy for which competitive or formula programs, if any, should make investments in workforce development
- Developing a Human Capital Plan in conjunction with the state Department of Transportation's existing long-term plan

Additional Resources:

- NGA Memo – "What the Infrastructure Package Means For Workforce Development: Opportunities For Governors"
- NGA Infrastructure Workforce Resource Mapping Tool
- NGA IIJA Implementation Webpage
- U.S. Department of Transportation Fact Sheet on Highway Funding for Workforce Development
- U.S. Department of Labor Training and Employment Notice 08-22 – "Building Pathways to Infrastructure Careers: Framework for Preparing an Infrastructure Workforce"

Growing the Semiconductor Manufacturing Workforce Through the CHIPS and Science Act of 2022

The CHIPS and Science Act of 2022 (CHIPS) will invest approximately $280 billion to increase semiconductor production in the United States. The most pertinent programs and provisions for workforce development policymakers are contained in the Creating Helpful Incentives to Produce Semiconductors for America Fund, or the "CHIPS for America Fund." The CHIPS for America Fund includes $39 billion in incentives for employers to increase semiconductor production and $11 billion for research and development. Both of these items will fund efforts that will, in part, spawn new apprenticeships and workforce development programs to help meet demand for semiconductor production.

Semiconductor Incentives

The U.S. Department of Commerce will oversee a competitive grant program to fund private, non-profit, and consortia organizations for semiconductor fabrication, assembly, testing, and advanced packaging. Critically, eligible applicants are required to secure commitments from regional educational and training entities and institutions of higher education to provide workforce training, including programming for training and job placement of economically disadvantaged individuals. Grantees will also be required to dedicate a portion of their award to expanding employment opportunities for economically disadvantaged individuals and to provide training and education benefits to workers. This new program for which employers are required to offer training provides an opportunity for state workforce policymakers to play a key role in CHIPS implementation.

Research and Development

National Semiconductor Technology Center

The U.S. Departments of Commerce and Defense will establish the National Semiconductor Technology Center – a public-private consortium to strengthen the domestic supply chain of semiconductors. As a part of this effort, the Technology Center is required to work with the U.S. Departments of Labor and Energy, the National Science Foundation, institutions of higher education, workforce training entities, and other relevant parties to develop apprenticeships and other workforce development programs in advanced microelectronic design, research, fabrication, and packaging capabilities.

Workforce and Education Fund

Treasury will establish a $200 million CHIPS for America Workforce and Education Fund. The National Science Foundation will put this investment towards workforce development activities in the semiconductor industry.

Opportunities for state workforce systems to consider

- Identify employers in your state that are pursuing these incentives
- Leverage your business outreach efforts to raise employer awareness about the workforce requirements and your services that can help them access, establish, or improve training programs to better meet demand
- Help employers increase access to training and employment opportunities so underrepresented populations and those with barriers to employment can benefit
- Share best practices for increasing job quality and access to wraparound services
- Align proposals with activities and principles from successful Good Jobs Challenge grant applications, including regional competitiveness and inclusive economic growth; equitable job opportunities for underserved populations and communities; worker-centered, employer-led workforce training systems; and integrating diverse, local stakeholders into workforce training partnerships
- Align these efforts with those of your economic development partners
- Engage with the activities of the National Semiconductor Technology Center as it develops apprenticeships and other workforce development programs and replicate best practices
- Monitor the activities being funded by the Workforce and Education Fund at the National Science Foundation and replicate best practices

Guidance for applications to the Semiconductor Incentives program

Workforce development policymakers and other stakeholders may take into account the following principles when developing an application for the Semiconductor Incentives program:

- *Regional collaboration:* develop regional sector partnerships that are responsive to employer needs, include employer commitments to hire and provide on the job training, center worker equity and inclusion, and prioritize industry-recognized competencies and registered apprenticeship
- *Supplementary state investment:* consider state-funded incentives that catalyze private sector investment through integration, cooperation, and collaboration, including new and existing workforce-related incentives
- *Stakeholder and community engagement:* support employers in their efforts to reach out to stakeholders and communities, including historically marginalized groups that stand to benefit from these investments

Additional Resources

- CHIPS for America Strategy Paper
- CHIPS for America Brief on the National Semiconductor Technology Center

Engaging Employers in the Apprenticeship System through IRA Tax Incentives

The Inflation Reduction Act (IRA) of 2022 is the largest federal investment in clean energy in U.S. history and includes substantial tax incentives for employers who pay prevailing wages and employ registered apprentices on qualifying energy projects (construction, alteration, or repair projects including solar, wind, geothermal, carbon sequestration, and electric vehicle charging stations).

State workforce development leaders are well positioned to partner with energy sector employers by developing and scaling apprenticeship programs so employers can meet the IRA's apprenticeship requirements and qualify for more tax credits. These new tax incentives made available by IRA mean state workforce development systems can play a proactive role in establishing mutually beneficial public-private partnerships to expand opportunities for workers and boost employers' bottom line.

Tax incentives that encourage adoption of registered apprenticeship

The full tax credit benefit from IRA requires meeting prevailing wage and apprenticeship requirements. The tax credit benefit decreases to 20% of the maximum credit if those requirements are not met by a qualifying project.

Apprenticeship requirements apply to the following tax credits in IRA:

- Alternative Fuel Vehicle Refueling Property Credit (26 U.S. Code § 30C)
- Credit for Electricity Produced from Certain Renewable Resources (26 U.S. Code § 45)
- Credit for Carbon Oxide Sequestration (26 U.S. Code § 45Q)
- Credit for Production of Clean Hydrogen (26 U.S. Code § 45V)
- Clean Electricity Production Credit (26 U.S. Code § 45Y)
- Clean Fuel Production Credit (26 U.S. Code § 45Z)
- Investment Tax Credit (26 U.S. Code § 48)
- Qualifying Advanced Energy Project Credit (26 U.S. Code § 48C)
- Clean Electricity Investment Credit (26 U.S. Code § 48E)
- Energy Efficient Commercial Buildings Deduction (26 U.S. Code § 179D)

Apprenticeship requirements [Section 45(b)(8)]

- ***Workhours:*** for projects beginning:
  - before January 1, 2023, **10%** of total workhours for a qualifying project must be completed by a registered apprentice.
  - between January 1, 2023, and December 31, 2023, **12.5%** of total workhours for a qualifying project must be completed by a registered apprentice.
  - after December 31, 2023, **15%** of total workhours for a qualifying project must be completed by a registered apprentice.
- ***Ratios****:* Employers must comply with federal or state requirements for **apprentice-to-journey worker ratios**, and employers with four or more employees dedicated to a qualifying project must employ **at least one qualified apprentice** for that project.
- ***Exemption****:* Employers that do not meet the apprenticeship requirements can still be eligible for the increased credit if they **pay a fine** or if they **make a good faith effort to employ apprentices** but fail due to denial by a Registered Apprenticeship program, or due to the Registered Apprenticeship program failing to respond to the employer's request within five business days.

Opportunities for state workforce systems to consider

- Identify employers in your state that are pursuing or have already established qualifying projects
- Leverage your business outreach efforts to raise employer awareness about the apprenticeship requirements and your services to help them access, establish, or strengthen apprenticeship programs
- Strengthen and publicize pre-apprenticeship and youth apprenticeship programs
- Help employers increase access to these apprenticeships so underrepresented populations and those with the greatest barriers to employment can benefit
- Align these efforts with those of your economic development, energy, and infrastructure partners and policymakers

Additional Resources:

- Department of Labor FAQ on the apprenticeship requirements
- Department of Treasury Initial Guidance on apprenticeship requirements