

CHIPS *for* AMERICA



CHIPS Women in Construction Guide

CHIPS for America

September 2024



CHIPS
for AMERICA

NIST | NATIONAL INSTITUTE OF
STANDARDS AND TECHNOLOGY
U.S. DEPARTMENT OF COMMERCE

OVERVIEW

The Biden-Harris Administration’s Investing in America agenda – including the CHIPS and Science Act, Bipartisan Infrastructure Law, and Inflation Reduction Act – has spurred job creation and increased the demand for skilled construction workers across the country. Job openings in construction are near record highs, and CHIPS-supported projects alone are expected to create up to 100,000 construction jobs.

Expanding the construction workforce is important to ensuring that semiconductor construction projects have an adequate number of skilled workers to complete projects successfully. At a time when the industry is facing a labor shortage, women make up only 11 percent of the construction industry overall, and under 5 percent of workers in skilled trades occupations.

The [CHIPS Women in Construction Framework](#) (the “Framework”) is part of a broader Department of Commerce initiative, [Million Women in Construction](#), aimed at doubling the number of women in construction over the next decade. Through the Framework, CHIPS awardees voluntarily adopt a set of five best practices modeled after the efforts of dedicated construction partners including tradeswomen’s organizations, construction trade unions, employers, and government and education entities that have worked collaboratively to increase the participation of women and in the construction industry over the past several decades. Once a company has adopted the Framework, it works with regional stakeholders to develop actionable plans to implement it.

This document provides an overview of the Framework and serves as a guide for companies to implement it: from kickoff meetings to hosting productive stakeholder engagements

and developing actionable plans. Through these efforts, the CHIPS Women in Construction Framework will help create new opportunities for women in the construction industry while setting CHIPS-funded projects up for success – ultimately serving the CHIPS and Science Act’s goals of strengthening the country’s economic and national security.

This guide is for informational purposes only and is intended solely to assist CHIPS awardees that voluntarily adopt the CHIPS Women in Construction Framework. The guide does not and is not intended to supersede, modify, or otherwise alter applicable statutory or regulatory requirements, or the specific application requirements set forth in the Notices of Funding Opportunity (NOFOs). In all cases, statutory and regulatory mandates, and the requirements set forth in the NOFOs, shall prevail over any inconsistencies contained in the below guide.

Any reference to a non-federal organization or corporation does not convey endorsement or approval by the Department of Commerce of the entity or their programs or resources. All examples provided are for illustrative, non-exhaustive purposes only. The Department of Commerce does not guarantee the accuracy or completeness of the information contained therein.

WHAT IS THE CHIPS WOMEN IN CONSTRUCTION FRAMEWORK?

In October 2022, Secretary Gina Raimondo announced the Million Women in Construction initiative, which aims to expand the American construction workforce to meet demand, bring more women into the construction industry, and double the number of women in construction over the next decade.

As part of this initiative, in May 2024 the Department of Commerce launched the CHIPS Women in Construction Framework, a set of five best practices aimed at expanding the construction workforce by increasing the participation of women and economically disadvantaged individuals.

Because a skilled workforce is critical to the construction, expansion and modernization of semiconductor fabrication, supplier, and research and development facilities, all of CHIPS for America's Notices of Funding Opportunities (NOFOs) require applicants to submit a construction workforce plan that addresses recruitment, training, and retention activities. This includes activities that will expand the workforce by reaching economically disadvantaged individuals and women. Applicants requesting funding over \$150 million must also submit a plan to provide their facility and construction workers with access to child care.

As project owners, semiconductor manufacturing companies play an important role in setting goals for the contractors and sub-contractors working on their construction projects. Companies that have signed non-binding preliminary memorandum of terms with the CHIPS Program Office (CPO) may voluntarily adopt the CHIPS Women in Construction Framework as a way to bolster their workforce efforts and publicly commit to growing the construction workforce.

Companies that voluntarily adopt the Framework collaborate with contractors, trades unions, and other community and workforce partners to implement the following practices:

- 1. Set goals and monitor progress** towards increasing the participation of women on CHIPS-funded construction projects.
- 2. Build community partnerships** with community organizations with a track record of increasing women and economically disadvantaged individuals' exposure to and recruitment into the construction industry.
- 3. Develop training pathways** such as training investments, apprentice utilization goals, or apprentice readiness program partnerships that serve women and economically disadvantaged individuals.
- 4. Provide access to supportive services** such as child care or transportation that will increase retention of women and economically disadvantaged individuals in the workforce.
- 5. Maintain healthy, safe, and respectful workplaces** and prevent and address harassment, discrimination, retaliation, and violence through workplace training, policy, and practice.

While companies who voluntarily adopt the Framework may have already implemented some of these practices, the Framework is a way to both build on existing efforts to expand into new areas of opportunity with key stakeholders.

ROADMAP TO IMPLEMENTATION

When a company is interested in voluntarily adopting the CHIPS Women in Construction Framework, companies are encouraged to work closely with CPO on steps leading up to implementation. Should a company decide to engage with CPO on implementing the Framework's best practices, the estimated timeframe from kickoff meetings to announcing planned actions, would be approximately 3-5 months. This would include the company: holding meetings with CPO staff; working with internal and external stakeholders; identifying an internal point of contact to lead implementation;

identifying and publicly announcing the voluntarily commitment and planned actions.

The following are recommended steps that a company can consider taking leading up to and following its voluntary adoption of the CHIPS Women in Construction Framework. CPO remains available to answer questions and discuss the Framework throughout each company's process.

1. Kickoff

- Company representatives meet with CPO to discuss the Framework.

2. Socialize

- Once the company has expressed interest in voluntarily adopting the Framework, it works with internal stakeholders to get any needed sign-off and involve critical partners.
- The company also identifies a point-of-contact to be the company's lead on Framework implementation.
- The company and CPO continue ongoing conversation regarding the Framework.

3. Commitment

- The company publicly announces that it is voluntarily committing to the Framework.

4. Implementation

- The company engages in stakeholder meetings with local and regional contractor, labor, and community partners.
- Stemming from these stakeholder conversations, the company refines its planned activities by developing a set of actions under each best practice.
- Moving forward, the company works to implement their planned activities with support from CPO.

STAKEHOLDER ENGAGEMENT

Engaging with relevant stakeholders is key to the successful implementation of the CHIPS Women in Construction Framework. These stakeholders include the construction contractors leading the project, local building trades unions, tradeswomen's groups, and other community partners, such as education and training providers, government partners, child care providers, and community-based organizations.

CPO recommends two primary options for engaging stakeholders: large group convenings and ongoing conversations. Companies that voluntarily adopt the Framework are encouraged to utilize both options to have the greatest reach to a range of stakeholders while fostering meaningful, actionable input that sets the stage for long-term collaborations. CPO is available to work with the company to develop an engagement approach that works best for the company and region.

LARGE GROUP CONVENINGS

Early adopters of the CHIPS Women in Construction Framework utilized large group convenings to gather a range of stakeholders in one place. This format allows for companies to convey their workforce goals and needs, hear from a wide range of stakeholders, and for these stakeholders to exchange ideas with one another. Another benefit of this format is that it can serve as a formal on-the-ground kickoff to this effort, rallying key stakeholders, helping to build momentum, and solidifying partnerships.

Successful convenings often feature a co-hosting organization. Having a state, regional or local co-host, such as a state government agency or a local building trades union, can be particularly useful for identifying locations to hold the

event and providing input on attendees. Federal entities, including CPO, may also serve as co-hosts. The company could choose to co-host the event with other project owners in the region, if applicable.

Even if the company hosts the convening on its own, CPO recommends working closely with a local partner to ensure all relevant perspectives in the region are represented.

Recommended attendees

Companies should consider representation from a range of regional organizations, including:

- Project owner(s), including CHIPS applicant(s) and potentially other project owners in the region
- Contractor(s) and/or contractor associations
- Local building trades councils and affiliates
- Community groups, such as tradeswomen's organizations
- Education and workforce partners
- Local, state, and federal government representatives

Sample agenda

During the event, it is important to give time to a variety of organizations and set aside time for open discussion. A sample agenda could include:

- Welcome (5 mins)
- Overview of CHIPS Women in Construction Framework (10 mins)
- Stakeholder presentations (45 mins)
 - Project owner(s)
 - Contractor(s)
 - Union(s)
 - Community group(s)

- Breakout sessions and group discussion focused on the five best practices (60 mins)

While an in-person convening is recommended, a virtual session may also be a logistically easier way to assemble stakeholders, especially for work that spans larger geographic areas. Consider using options such as breakout rooms to ensure all participants get a chance to provide input.

Regardless of the format, it is helpful to designate at least one person as a notetaker to capture ideas shared during the event for follow-up. These ideas will go on to shape the company's actionable next steps. The next section provides examples of planned activities.

ONGOING CONVERSATIONS

Organizing a large group convening may not always be logistically feasible, or a company may prefer to engage in smaller settings. CPO recommends continuing group or individual conversations on an ongoing basis.

Companies should conduct proactive outreach to relevant organizations in their regions to learn more about existing efforts and gather ideas for partnership. Meetings could be held one-on-one with key representatives from organizations or could be held in small groups with numerous partnering organizations.

As with the large group convenings, it is important to document any insights gained from these meetings and ensure follow-up on any ideas discussed.

PUBLISHING PLANNED ACTIVITIES

Following robust stakeholder engagement, companies should next develop and publicize

specific actions to implement under the Framework. Companies should share planned specific actions with relevant stakeholders (contractors, unions, etc.) for input. CPO is also available to work with companies developing specific actions and may be interested in highlighting companies' actions.

When drafting specific actions, it can be helpful to categorize them under each of the five best practices. Types of actions could include developing training programs, expanding supportive services, implementing measures to improve job site culture such as mentorship programs, and working with community partners to improve outreach. The following section contains a set of resources that can be used to inform the development of company activities.

Examples of potential actions that could be executed by owner, contractor, labor union, and community education and workforce partners

1. Set goals and monitor progress.

- Measuring progress and tracking outcomes related to hours worked and/or workers employed.
- Setting goals for the number of training and recruitment programs to launch, the number of participants to enroll, and the number of participants hired on project sites.
- Setting apprenticeship utilization goals for specific sites, or across all sites.
- Organizing a monthly check-in with construction contractors, building trades unions, and relevant community organizations to track progress towards these goals.

2. Build community partnerships.

- Partnering with a community-based organization to develop a marketing strategy for recruitment.
- Organizing a certain number of career fairs with community organizations and building trades unions.
- Working with tradeswomen's organizations to set up career exploration visits at local high schools and trade schools.
- Investments in and partnerships with K-12 school districts to expose more students to a career in construction.
- Collaborating with building trades unions to launch new tradeswomen's circles across specific local trades.

3. Develop training pathways.

- Committing a certain amount of funding to expand a building trades union's pre-apprenticeship program.
- Seeking complementary state investments in apprenticeship or training programs.
- Investments in and partnerships with career and technical education that prepare workers for careers in construction.
- Contributing to a registered apprenticeship program as a component of a collective bargaining agreement or project labor agreement.
- Developing new registered apprenticeship pathways that intentionally recruit from economically disadvantaged individuals and communities.

- Assisting with access to required equipment for training, such as PPE or program materials/tools.

4. Provide access to supportive services.

- Expanding employer-provided child care benefits to construction workers.
- Working with community partners to expand non-traditional hour care options for construction workers who work early hours and late nights.
- Working with municipal government to modify public bus routes or schedules to meet worker needs.
- Developing company van or carpool programs and incentives for workers.
- Assisting workers with obtaining driver's licenses and other transportation supports.

5. Maintain healthy, safe, and respectful workplaces.

- Developing and publicizing a clear policy and reporting process to address harassment, discrimination, retaliation, and violence based on gender or other protected statuses.
- Implementing an equal set ratio of women's and men's bathrooms on site.
- Ensuring worker access to lactation rooms as necessary.
- Working with construction contractors and building trades unions to build mentorship programs to improve retention.
- Implementing a trauma-informed anti-harassment training program in collaboration with building trades unions and organizations with expertise in this area.

- Designating an independent ombudsperson for the purposes of confidential reporting.
- Providing resources and information about obtaining supportive services to address experiences with harassment, discrimination, retaliation, and violence.

RESOURCES

In conjunction with stakeholder input, the following resources can be used to help inform the development of company activities under the Framework.

- [Million Women in Construction Initiative \(Department of Commerce\)](#)
- [Good Jobs Principles \(Department of Commerce & Department of Labor\)](#)
- [CHIPS Workforce Development Planning Guide \(Department of Commerce\)](#)
- [CHIPS Building a Skilled and Diverse Workforce Fact Sheet \(Department of Commerce\)](#)
- [Women in Apprenticeship and Nontraditional Occupations \(WANTO\) Grant Program \(Department of Labor\)](#)
- [Spotlight on Women in the Construction Industry \(Department of Commerce - OUSEA\)](#)
- [Tools For Building An Equitable Infrastructure Workforce: Gender Equity Strategies as a Model \(Department of Labor - Women's Bureau\)](#)
- [5 Ways Construction Employers Can Create Safer Workplaces for Women \(Department of Labor\)](#)
- [Building for the Future: Advancing Equal Employment Opportunity In the Construction Industry \(U.S. Equal Employment Opportunity Commission\)](#)
- [Promising Practices for Preventing Harassment In the Construction Industry \(U.S. Equal Employment Opportunity Commission\)](#)