



Women in Construction Executive Order

Progress Report: July 2024

In May, Governor Mills [signed an executive order](#) to increase the representation of women in construction careers. The executive order outlined five action items including collecting baseline data, consulting with industry about opportunities and barriers to hiring women, strengthening the connection between workforce program participants and construction employers, gathering workforce data from contractors and pursuing grant opportunities.

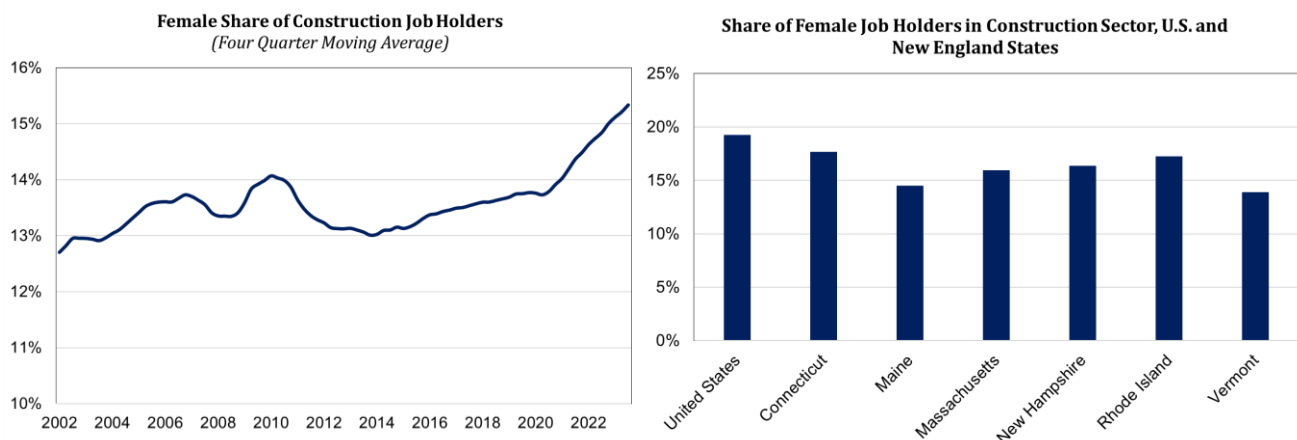
MDOL has been convening key agency partners – DOT, GEO, DECD among others in a monthly cross-agency Infrastructure Workforce Alignment group to understand the current landscape and relevant initiatives to women in construction. In the coming months, MDOL will partner with Maine Permanent Commission on the Status of Women to gather input from women workers and employers on key challenges and needed supports to inform next steps.

By fall 2024, MDOL, in partnership with the Infrastructure Workforce Alignment group, will leverage stakeholder input and baseline data to prioritize key agency actions **to increase the representation of women in construction from today's 15% to a target of 18% by connecting 1,000 additional women to construction careers over the next three years**. This ambitious goal will require additional resources, which this cross-agency group has sought out via federal grant opportunities detailed below and will continue to explore.

The following represents a progress update of work from May-June 2024.

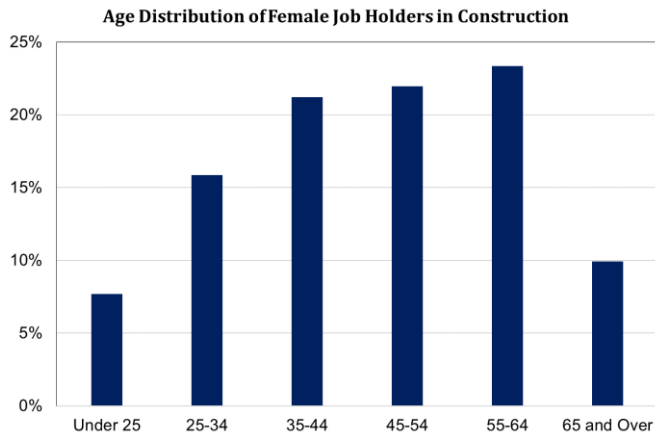
A) Baseline Data Collection

According to quarterly Census Bureau indicators, slightly more than 15% of construction workers in Maine identified as women in 2022 (a total of ~5,000 workers). This has increased in recent years, from below 13% in 2002. Nationally, approximately 18% of construction workers identified as women in 2023.* Only 8 states in the U.S. exceed 20%, led by Nevada at 24%, and Connecticut leads the way in New England at 18%.



Source: Census Bureau Quarterly Workforce Indicators, Female share of job holders in the construction sector over time, female share of job holders in the construction sector by county, one year average through 2023 Q3. *Note: The American Community Survey, based on a sample of surveyed households in the U.S, reports slightly lower numbers of women in construction—11% nationally and 9% in Maine—however, the Census Bureau indicators are based on employer wage records and may be more accurate.

The majority of women construction workers in Maine are younger than 54 years old, however, nearly 34% are 55+ with likely retirement in the coming years and only 8% are young adults (under the age of 25). Females are more represented in the construction industry in Lincoln and Waldo counties, at nearly 20% and 18% respectively, and less represented in Piscataquis and Somerset counties, where women make up less than 14% of the construction labor force.



County	Female Share	Female	Total Job Holders
Lincoln	19.9%	161	809
Waldo	17.9%	140	780
Knox	17.1%	196	1,148
York	16.9%	752	4,438
Sagadahoc	16.5%	187	1,130
Cumberland	15.3%	1,554	10,161
Hancock	15.2%	275	1,810
Franklin	15.2%	121	797
Oxford	14.8%	175	1,183
Androscoggin	14.8%	515	3,483
Washington	14.5%	63	433
Kennebec	14.3%	472	3,299
Penobscot	14.1%	589	4,169
Aroostook	14.0%	146	1,046
Piscataquis	13.8%	37	269
Somerset	13.6%	182	1,336

Ongoing outreach and recruitment efforts

The data points to opportunities to engage women more deeply in construction careers overall, with a focus on younger women and those in rural rim counties. The following is a snapshot of ongoing outreach efforts targeting women in trades careers:

- **New Ventures Trades for ME program**, administered under the University of Maine system, and supported by MaineDOT and Department of Education, runs 3-4 regional conferences annually aimed at increasing awareness among young women, primarily high-school aged, about careers in the trades. Events in spring 2024 were held in Waterville and Lewiston, with over 100 attendees at each from nearby CTE and K-12 schools, and a Biddeford event is slated for the fall.
- **Maine Career Construction Days**, hosted every fall in the Bath region, in partnership with National Association of Women in Construction (NAWIC) and Associated General Contractors (AGC), brings together students from regional high schools and CTE schools along with construction employers to do hands-on demonstrations and learn about careers in the trades. In October 2023, 600+ students were in attendance in West Bath learning about construction careers from several employers, unions and other organizations.
- Additional annual outreach efforts include Habitat for Humanity's **Women Build** event, which engages 50-100 women annually in Southern Maine in building a home over the course of several weeks to expand the inclusion of women in the homebuilding industry, and **Girl Scouts Unplugged** events in partnership with companies like CMP host 50+ young women in connecting with STEM and trades careers through hands-on demonstrations and activities.

Upcoming actions

- The **Maine Construction Wage Survey**, which is administered by MDOL's Bureau of Labor of Standards, added "Gender" to this year's survey. This information will help identify a clearer baseline of the number of women employed in Maine's construction industry, the occupations in which they are working, their wages, and non-salary benefits (healthcare, pension, paid time off). The survey will be sent to construction companies in July with preliminary results to share in fall 2024.

B) Industry Consultation

MDOL partnered with MaineDOT in summer 2023 to understand contractors' primary workforce needs to inform BIL/IRA infrastructure workforce priorities in a brief survey. More than 40 employers responded to the survey, sharing their top workforce challenge was finding new workers along with combating demographic shifts and the top workforce supports requested were funding for training and connection to young people.

Increasing the representation of women in the sector will advance recruitment goals and help address demographic challenges, while investing in scaling effective training programs such as short-term training with MCCS and Adult Ed, pre-apprenticeships in partnership with unions, industry associations and CTE schools, and registered apprenticeship will help address both training and talent pipeline needs.

What is your organization's biggest workforce challenge? (N=41)	
Finding new workers (recruitment)	36%
Finding skilled workers (training & recruitment)	33%
Retention of workers	12%
Competition/wages	12%
Demographics	7%
Lack of awareness	5%
Housing	2%
Travel	2%
Lack of training	2%

What supports or resources would be most helpful in addressing these challenges? (N=41)	
Funding for training	34%
Connecting with young people	18%
Other	16%
Awareness building / recruitment	13%
Apprenticeship	8%
Housing	5%
Licensure	5%

Barriers and Accommodations Needed

The U.S. Equal Employment Opportunity Commission reported that nationally:

- Harassment is pervasive on many jobsites and poses a significant barrier to the recruitment and retention of women and workers of color in the industry. For example, in a [2021 survey of over 2,600 tradeswomen across the US](#), **nearly 1 in 4 women reported experiencing near constant sexual harassment**, and 1 in 5 women of color reported “always” or “frequently” experiencing racial harassment on the job.
- Construction workers who experience discrimination, particularly those on temporary assignments or in apprenticeships, often **do not know to whom or how to report violations**. In many instances, workers are not provided adequate anti-discrimination policies and training that includes this information. In addition, there may be multiple employers (both subcontractors and primes) active on a particular jobsite, and multiple federal, state, or local agencies with jurisdiction to receive complaints.
- Women apprentices and apprentices of color report **lack of access to on-the-job training and mentoring, fewer work hours, being unfairly assigned tasks** not related to the skills of their trade, and problematic jobsite culture.

The [US DOL Women's Bureau](#) recommends the following promising practice and policies for employers, general contractors, unions and apprenticeship sponsors to change workplace culture:

- Ensuring that a zero-tolerance policy prohibiting discrimination, gender-based violence, harassment and retaliation is widely communicated and easily and equally accessible to all;
- Providing worker-led and worker developed ongoing training, education and awareness programming on identifying and responding to gender-based violence and harassment;
- Affirmatively preventing gender-based violence and harassment by prohibiting retaliation; and
- Establishing an independent, responsive, consistent, and transparent process for reporting concerns and/or remedying complaints that includes support for those impacted, active ongoing review of workplace structures, and clear consequences for both harassment and retaliation.

Upcoming actions

- MDOL is partnering with the **Maine Permanent Commission on the Status of Women** to conduct focus groups and interviews with women who are currently working in or who have left careers in the trades, as well as industry and union partners in August – September. The goal of these conversations will be to identify barriers preventing women from entering and staying in construction jobs as well as supports that have helped women to stay in the field, while also **gathering employer input to further explore, highlight and promote implementation of promising practices that create more inclusive workplaces for women** cited above such as anti-harassment policies, employee codes of conduct, clear complaint reporting processes, worker-led training, childcare supports, and more.
- MDOL is exploring the creation of a **pilot online training program for employers** focused on creating a more gender-inclusive workplace. MDOL is exploring how to partner with the Maine Community College System (MCCS) to host the online training content, and US DOL to leverage content from the Women’s Bureau and OSHA to promote among Maine employers.

C) Public-Private Coordination

Ongoing landscape

- The **Maine Apprenticeship Program** currently has registered apprentices in all industries and has grown to 1,372 participants overall, with women representing approximately 22% of active apprentices, an increase from 15% in 2021. Of the **297 women Registered Apprentices**, 84 are in non-traditional occupations (NTOs) in the trades, fishing/forestry/farming, computer/mathematics, production, and transportation/material moving.
- Department of Education’s **CTE programs** have seen increased enrollment in technical programs overall in recent years and, in that time, there have been modest increases in the number of young women participating in many trades programs. Nearly 25% of students enrolled in engineering-related CTE programs identify as young women. Other programs, including masonry, plumbing, and electrician, have seen lower rates of participation from young women.

Female Share of CTE Enrollments by Topic	2022	2023	2024
Brickmason, cement mason, and concrete finisher	0%	0%	0%
Carpenters	11%	11%	12%
Civil, industrial, environmental, software engineers	19%	18%	24%
Construction trades	7%	9%	9%
Electrician	4%	5%	6%
Plumbing Technology/Plumber	3%	3%	5%
Machine Tool Technology/Machinist	7%	12%	7%
Welding Technology/Welder	8%	11%	11%

- Additionally, DOE's **Adult Education** system offers programs in HVAC, CDL and welding across 14 counties. Through 14 of Adult Ed's 68 centers in the state, programs offered last year translated to 109 CDL trainees, 63 welding trainees, and 31 HVAC trainees. In addition, multilingual learner cohorts for solar installation and HVAC careers trained 30+ New Mainers in a pre-apprenticeship and contextualized English learning model. Additional data on enrollment trends and gender is currently being collected and will be reported in the next report.
- In the last two years, **MCCS and DOC have partnered to support women in re-entry** in obtaining their welding certifications (22 participants) and obtaining their National Center for Construction Education and Research certification (17 participants), which is essential to construction careers. In the past 12 months, over 100 women in re-entry have participated in workshops highlighting trades and technical careers in Maine and 12 participants received CDL training in partnership with Eastern Maine Community College.
- **CareerCenters** statewide are strengthening connections between women and construction careers including setting up local **career fairs between FedCap/ASPIRE participants and local construction employers**, as well connecting industry associations such as Associated General Contractors and employers like Cianbro with women in re-entry and recovery to job and apprenticeship opportunities.
- **FedCap** is offering a three week On-Ramps programs to **TANF-ASPIRE** participants (who are primarily female) focused on providing information about educational opportunities and careers in the trades and manufacturing.
- Education partners such as University of Maine System have explicit targeted efforts at increasing representation of women in engineering through initiatives such as **Girls Engineer Maine** outreach events for middle school and high school students.
- The **Maine Connectivity Authority (MCA)**, in partnership with **MCCS**, is running initial cohorts of a fiber optic technician training program, with an explicit focus on recruiting women and people of color into the program. MCA and MCCS have developed marketing materials intentionally featuring women to strengthen representation, and they are partnering with **Eastern Maine Development Corporation, In Her Presence, and FedCap** to recruit women.

Upcoming actions

- The Maine AFL-CIO is leveraging DOL-MJRP funds to launch a **Union Construction Academy exclusively for women** in the Newport area starting at the end of July. The program will serve approximately 10-15 women over 6 weeks. Participants will be trained in multi-trades core curriculum, obtain their OSHA and other certifications, and be guaranteed interviews with union trades registered apprenticeship programs.
- DECD is funding a pilot in partnership with Sargent and the **Maine Discovery Museum's Girls Construction Camp** in August, which will bring middle school girls together to learn hands-on skills and gain exposure to engineering and construction careers.
- DOC and MCCS are partnering with the Women's Re-Entry Center in Southern Maine to launch a cohort of 13 women who will be trained in September as **CNC machinists** in partnership with local employers and York County Community College.

D) Workforce Data Collection and Reporting from Contractors

- The **Governor's Energy Office (GEO)** is awarding \$2M in grant funds (from a congressionally-directed spending request) to workforce programs focused on clean energy careers. All grantees will be required to set target metrics to recruit and retain under-represented communities in their programs, with a focus on women. Progress on these metrics will be included in future updates.
- The **Department of Transportation (MaineDOT)** regularly collects workforce information from its contractors and subcontractors through federal reporting. As a recipient of federal USDOT funding, MaineDOT is required to develop and administer the **Disadvantaged Business Enterprise (DBE) Program** that, in part, targets increasing participation on contracts to registered women owned businesses. This program is intended to remedy past discrimination against DBEs, ensure a “level playing field,” foster equal opportunity in USDOT-assisted contracts, and reduce burdens on small businesses. For Federal Fiscal Year (FFY) 2022-24 (October 1, 2021 through September 30, 2024) MaineDOT has established an annual DBE participation goal of 1.97%, however for the upcoming reporting period FFY 2025-27 the goal is increased to 2.31%. Additionally, MaineDOT manages an **On-the-Job Training (OJT) program** that helps women, minorities and other disadvantaged communities gain experience on road and bridge construction jobs. For the most recent reporting period ending December 2023, there were a total of 15 participants, three of which were women.

Upcoming actions

- **GEO** is exploring how to collect additional information from contractors and subcontractors in upcoming procurement processes for offshore wind and grid resilience grants, including total number of workers, percent of women workers, median wages, and availability of benefits such as training and childcare.

E) Grant Funding Opportunities

The following grants targeted at bolstering the infrastructure workforce with an explicit focus on increasing representation of women have been submitted in May-July 2024:

- MDOL co-developed a statewide application for the US Department of Labor's **Women in Apprenticeship and Non-Traditional Occupation (WANTO)** grant, in partnership with lead applicant Central Western Maine Workforce Development Board (CWMWDB). If awarded, the \$750,000 grant would support 100 women enrolling in pre-apprenticeship and apprenticeship for trades occupations with at least 70% from under-represented communities, including rural counties, disability and re-entry communities, along with 80 employers receiving training on supporting women in the more inclusive workplaces.
- MDOL partnered with the Governor's Energy Office, Maine Connectivity Authority, MCCS and University of Maine System to apply for a **US DOL Building Pathways to Infrastructure Jobs grant** focused on building a more resilient smart grid by bolstering line worker and IT trainings. If awarded, the grant anticipates serving 377 participants in lineworker, trades and IT occupations—with a significant focus on specifically targeting outreach and enrollment efforts to women.
- MaineDOT recently submitted a **FY24 Port Infrastructure Development Program Grant** that included \$500,000 in requested funding for workforce development activities related to offshore wind. If awarded, MaineDOT and MDOL will leverage existing partnerships and workforce development activities

and tailor them specifically for the port and marine transportation network related to offshore wind—with a focus on under-represented communities including women.

Upcoming actions

- GEO anticipates partnering with MDOL to apply for the **Training for Residential Energy Contractors Grant** in winter 2025, with an explicit focus on creating a Women in Energy Efficiency and Electrical careers pre-apprenticeship or other training program to increase representation of women in energy efficiency and electrical careers.