



Women in Construction Executive Order

Progress Report: October 2024

In May, Governor Mills [signed an executive order](#) to increase the representation of women in construction careers. The Maine Department of Labor (MDOL) has been partnering with the Maine Permanent Commission on the Status of Women to conduct stakeholder interviews with workers and employers to understand the current landscape for women in construction today, as well as convening key agency partners – including MaineDOT and GEO, in a monthly cross-agency Infrastructure Workforce Alignment group to identify key actions to advance the executive order.

The following represents a progress update of work from July-October 2024.

1) Baseline data collection

As reported in the July progress update, slightly more than 15% of construction workers in Maine identified as women in 2022 (a total of ~5,000 workers). Nationally, it's reported that only about 4% of those women are working in the skilled trades.

To better understand the occupational breakdown of women in the skilled trades, a gender lens was added to the Maine Department of Labor's Bureau of Labor Standards Construction Wage Survey. The survey is required by all construction firms operating in Maine leveraging public funds to set the prevailing wage rate. This, for the most part, does not include residential construction companies so is not fully representative of the construction sector. The data collection is ongoing and final results will be shared in the coming months. However, there are some early findings from the survey that shed light on skilled trades occupations where women are more or less represented in the sector:

- Based on the responses of 295 construction companies in Maine, **only 3% of skilled trades workers employed by survey respondents are women**—mirroring the national trend of 4% ([US Dept of Commerce](#)).
- This **varies significantly by occupation** (see appendix). For example, according to employer survey respondents, women represent 20% or more of the light truck driver and flagger workforce today. There is room to grow in other key high-wage, in-demand occupations where women workers represented in the survey constituted less than 2% of the reported workforce including carpenters, electricians, pipefitters, HVAC installers, and plumbers. No women workers were identified by survey respondents in fields such as: Electrical Power Line Installer and Repairer, Cement Masons and Concrete Finisher, Pipelayers, and others.

The construction wage survey also asks about the availability of non-salary benefits to employees. The majority of workers are offered vacation benefits as well as healthcare, while retirement contributions, per diem benefits, and other benefits are less common. Interestingly, **every benefit was less likely to be offered to female employees** as compared with male counterparts. While nearly 67% of male workers were offered healthcare benefits, only 56% of female workers were. The same trend can be seen for retirement, vacation, and per diem benefits. This may be due to the occupation, hours worked, or other factors.

Benefit offered through employer	Female	Male
Healthcare	56%	67%
Retirement	48%	54%
Vacation	81%	87%
Per Diem	2%	5%
Other benefits	10%	20%

2) Industry and worker consultation

Industry input on promising practices, barriers, and needed supports

In partnership with Associated General Contractors of Maine (AGC), HR leaders from some of Maine's largest construction employers convened to discuss current best practices and barriers in recruiting and retaining women workers. Key themes from the conversation included:

- **Workplace culture transformation is a work in progress:** Employers recognize there is a reputation challenge within the construction sector but attribute some of this to perception versus reality. Several employers are investing in training their staff and supervisors on acceptance, fairness, and camaraderie to promote retention. AGC has developed a Culture of Care training that includes toolboxes, training modules, and other resources to invest in promoting a positive workplace culture and is exploring how to share with construction employers more broadly.
- **There can be stronger linkages to workforce programs and wraparound supports:** One employer shared the success they'd had in retaining new staff members by creating a direct link with WIOA workforce partners who are assessing for and providing wraparound support needs to new hires (e.g., childcare, equipment, uniforms, transportation supports). Other employer respondents asked for more assistance in making these connections with workforce partners in order to support their new hires and staff.
- **Pre-apprenticeship is an effective recruitment tool:** Some employers are leveraging pre-apprenticeship programs as successful recruitment tools for women. One shared that more than 33% of their interns are women this year, which they attributed to new pre-apprenticeship programs creating pipelines for young adults as well as effective outreach through schools.
- **Mentorship and leadership development are important tools:** Smaller companies shared that they strive to have more women on staff but struggle in recruiting more women if there is only one woman on the job site. One company shared that they have invested in a leadership development program and really focused on highlighting the women staff participants as a recruitment tactic. Others recognized the importance of mentorship in supporting retention but cited challenges in balancing workload with staff development, saying, "We try to have a formal mentoring program and all of our new hires have a mentor—but then we all get busy, and it's not available when they need it."
- **Childcare is a barrier for all working parents:** Employers discussed shifting priorities of working parents who are prioritizing family obligations and balance more than previous generations. In particular, employers are having challenges staffing night and weekend work as staff aren't interested despite offering various incentives. Others shared that traditional childcare hours are not conducive to worksite hours. Many are working on educating staff supervisors and leadership about changing preferences to make accommodations where possible. One stated, "we are being flexible; if they can't show up on a jobsite until 8am, we try to accommodate because we'd rather have them for 8 or 9 hours than not at all."

Worker input on challenges, priorities, and needed supports

MDOL and the Permanent Commission on the Status of Women conducted focus groups and interviews with 50+ women and young girls working in or interested in trades-related careers. The group represented women ranging in age from 13-70 years old, and included electricians, engineers, project managers, ironworkers, carpenters, business owners, and more working across southern, central, and northern Maine. Some were industry veterans with 30+ years of experience while others were just exploring career opportunities in middle and high school. A summary of key themes from these stakeholder conversations is below.

Motivations for entering and staying in trades careers

- Many women entered the trades because a **relative or friend** worked in the trades—though some were discouraged by family members due to the challenging workplace culture. Others were seeking a more **hands-on** career with a **problem-solving** lens.
- Some transitioned to construction fields because it provided more **flexibility**, while others cited the shifting schedules and work site as a key challenge in the work, particularly with balancing childcare.
- Many shared that finding other women on the worksite through **women’s support groups** or more informally through **supervisor advocates** was essential in navigating difficult workplace cultures.
- The ability to **combat climate change and other mission-driven challenges** through construction jobs seems to resonate with younger women. One young woman shared that she wanted to become an engineer after seeing the flooding in her community during the 2024 winter storms, while another entered construction to combat the housing shortage.

Barriers encountered

- Many respondents discussed **feeling supported** by their coworkers on a work site—but some described **challenges when working with individuals outside of their immediate company**, such as subcontractors or even challenging customers, not treating them with respect. One smaller construction business is seeking to address this issue head-on by including language in subcontractor agreements about the need to create and promote a respectful work environment.
- Others discussed feeling safe on the worksite but encountering microaggressions from coworkers that leads to **constantly feeling the need to prove themselves**. One interviewee shared that after decades in the field, male coworkers still question her ability to lift certain items and complete basic tasks, despite her track record and demonstrated expertise. Some of the interviewees described this dynamic starting early in the education pipeline. One young woman described having a teacher who was supportive of her goal to become a carpenter, but who still offered some tasks to male students first, describing her as “fragile.”
- Some women pointed out that despite the progress made, workplace culture in the construction industry still has a **bad reputation**, especially if there’s only one woman on the worksite. One experienced engineer shared “If there’s two women engineers on the site, they will stay. If there’s one, they may look for something else to do.”
- Others shared they feel respected on worksites but would appreciate **more professional development support**. Many respondents discussed forging their own career path by finding additional training, apprenticeship or career opportunities but did not feel clear advancement opportunities were presented to them. One woman summed up her view that her supervisors “are respectful but may not be investing in growing new talent.”
- Several women workers shared that **managing changing worksite schedules with differing hours and locations while managing a family is very challenging**. This challenge is exacerbated by current childcare barriers. Others shared their employers and coworkers were not very supportive of women workers trying to balance family and work priorities, with one sharing that she was very intentional about how she rolled out the news of pregnancy so that she wouldn’t be fired, saying “male coworkers can get very weird about pregnancy; it can change working relationships.”
- Several interviewees talked about the **limited opportunities for exposure to these careers at the middle and high school level**. Several young women talked about being the only female student in their high school pursuing education in the trades. One referred to her guidance counselor as being “pretty anti-trades,” and not encouraging her to pursue a career in construction despite her interest. Another shared that she was

interested in finding a job that would allow her to help and support people in a practical way. Though she was originally interested in a career as a CNA, she shifted her focus to welding after a high school class allowed her to try it.

- One key theme throughout the interviews was a **need to overcome stereotypes** about the types of work that exist in the construction industry—the idea that these careers are not just about brute strength, but that there are many different career paths and opportunities within the sector.

Priority actions

Women respondents prioritized the following areas of focus to increase representation of women in construction:

- More **trainings on workplace culture** that promote being more welcoming without creating shame
- Expanded **childcare and transportation** supports to help women get to worksites and find flexible, high-quality care for their children
- Increased **training supports** for smaller contractors who can't afford to invest the necessary time in staff training
- Change the **cultural narrative** around construction jobs by highlighting Maine women who have gone through training and advanced in their careers
- Increased opportunities for **early exposure** for women and girls to try out various construction careers and break down stigma that everyone needs to go to college
- Expand **pre-apprenticeship and registered apprenticeship** opportunities to allow for more career exploration and on-the-job-learning, with specific emphasis on dedicated women cohorts to build confidence and energy in a safe space
- **Clearer pathway** connecting participants from various outreach events (NAWIC, New Ventures, Girl Scouts) to next step training programs and into jobs

3) Public-Private Coordination

Based on input from working women and industry partners, and informed by [US EDA's CHIPS Women in Construction Framework](#), State of Maine agency partners have identified four key strategies on which to focus over the coming year to advance the Governor's goal of increasing the representation of women in construction: 1) Raise career aspirations, 2) develop industry-aligned skills, 3) connect to jobs and wraparound supports, and 4) retain women in respectful, safe, inclusive workplaces. A full summary of key agency actions and target metrics to advance these strategies in 2025 is provided in the appendix.

The following initiatives are underway to advance each of the four identified key strategies:

a. Raise career aspirations

- o **Maine Career Construction Days** is hosted by the National Association of Women in Construction (NAWIC) and AGC to increase exposure of young people to construction careers through hands-on demonstrations. This year, the event ([coverage by WGME](#)) attracted nearly 1,000 local high school students and had an explicit focus on promoting career opportunities to young women in the field.
- o Maine Discovery Museum partnered with Sargent to host 13 middle schools in a **Girls Build the Future Camp**, supported by DECD. The girls learned how to use various tools, built model bridges, learned about the impacts of climate on infrastructure and heard about many careers. The camp is currently

partnering with NAWIC for smaller events this fall, and looking to scale the camp to two locations next summer.

- The Habitat for Humanity of South Portland holds specific **Women Build Days** every fall to provide the opportunity for women in the community to learn about home construction and contribute to building a house for a family in need. Typically, these events are for corporate volunteers through large employers such as WEX. This year, MDOL Portland CareerCenter is partnering with Habitat to pilot a Women Build Day for 10-15 unemployed and underemployed, lower-income women enrolled in CareerCenter, FedCap and other workforce training programs. The opportunity will provide exposure to a career in construction and create a bridge to relevant training and work opportunities in the field through on-site CareerCenter consultant support. If successful, the pilot may be scaled to other regional Habitat for Humanity's across the state.
- The Maine Apprenticeship Program has contracted with marketing partner Ethos to launch a **dedicated outreach campaign highlighting women in non-traditional occupations** in 2025. The campaign will spotlight Maine women working in construction and infrastructure sectors as apprentices and pre-apprentices, sharing testimonials about their experiences to encourage others to consider construction and other non-traditional careers.

b. Develop industry-aligned skills

- Numerous **construction pre-apprenticeship** programs engaged Maine women over the summer. The AFL-CIO launched a dedicated women-in-trades program, serving 9 women in the Newport area—including one woman who moved from Virginia to Maine to participate in this unique program. Additionally, AGC's Maine Construction Academy served 150+ young adults over the summer, with 40+ identifying as young women. In addition, two new pre-apprenticeship programs focused on bringing more women into the trades will be launching in coming months: one focused on welding careers with the People's Inclusive Welding and another focused on carpentry with Maine Passive House.
- The Governor's Energy Office [awarded \\$2 M in federal funding](#) to bolster clean energy workforce among local education, training, and community partners—with some awardees explicitly focused on **engaging women in clean energy careers**. Grantees include Maine Math and Science Alliance who will support 100+ high school women in preparing for STEM careers through an out-of-school leadership program and passivhausMAINE who will provide training to 145+ women working in building construction in energy efficiency code training.
- MaineDOT is partnering with MDOL and Adult Education to fund **women-specific training cohorts of CDL drivers** in 2025, with a goal of training at least 40 women in key regions that are high priority to fill MaineDOT job vacancies.

c. Connect to jobs and wraparound supports

- Maine Adult Education and Vocational Rehabilitation programs are **conducting targeted outreach** to current unemployed and underemployed women enrolled in workforce programs to raise awareness of high-wage, in-demand construction jobs. Through a revamped intake processes, nearly 100 women with disabilities in vocational rehab indicated an interest in learning more about construction careers and are working with their counselors to connect with training and jobs in the field. This will be complemented by upcoming outreach webinars targeting teachers who support students with disabilities, profiling various construction career pathways and employers.
- While Maine was not awarded a US DOL Women in Apprenticeship and Non-traditional Occupations (WANTO) grant, MDOL was awarded an extension of its **QUEST grant**, which specifically targets unemployed individuals to connect to jobs in infrastructure and energy. Thus far, the program has

connected 29 women to infrastructure jobs and several more to training, and plans to intensify efforts focused on women in infrastructure careers in 2025.

- The Permanent Commission on the Status of Women is partnering with DHHS and the Children’s Cabinet to host informational sessions in the coming months for **construction employers on existing childcare subsidy supports** as well as explore pilot opportunities in partnership with CEI for more flexible childcare arrangements to support women in construction.

d. Retain in respectful, safe, inclusive workplaces

- MDOL is hosting an inaugural [Maine Apprenticeship Summit](#) on **November 18th** to kick off National Apprenticeship Week. US DOL Women’s Bureau will be hosting a dedicated breakout session for infrastructure sector employers during the event focused on recruiting and retaining women in non-traditional occupations, highlighting [national and state best practices](#).
- State of Maine agency partners as well as key industry and union partners in the construction field will be invited to participate in a training and conversation with **US DOL Women’s Bureau on gender-based violence and harassment as a workplace safety issue**. The goal will be to develop a shared understanding of the issue and commit to specific actions each player can take to mitigate how gender-based violence and harassment shows up in the construction field.

5) Grant funding

While Maine was not awarded a US DOL Women in Apprenticeship and Non-traditional Occupations (WANTO) grant, additional federal grants submitted by agency partners with explicit focus on engaging women in trades careers over the past quarter included:

- **US EDA Good Jobs Challenge grant**, submitted by MDOL and GOPIF, would provide \$7 M in funding to serve 1,000 pre-apprentices and apprentices for occupations aligned with the Maine Forest Bioproducts Tech Hub. If awarded, the grant would target connecting women and under-represented communities in Central Western and Northern Maine regions to construction and manufacturing careers.
- **US DOT Charging Fueling Infrastructure grant**, submitted by MaineDOT, would provide up to \$2 M in funding to build the EV charging workforce through expanded pre-apprenticeship and apprenticeship opportunities for women and under-represented communities to connect with electrician careers.

Appendix A: 2025 State of Maine Strategic Plan to Support Women in Construction Executive Order

Key Strategy	Key activities in 2025	2025 Targets
Raise career aspirations	Public outreach campaign: <ul style="list-style-type: none"> Create workforce storytelling videos featuring women, highlighting infrastructure careers Revamp and promote dedicated women in trades webpage to share stories & connect to jobs (building on current MDOL Women in Construction landing page for this work) 	5,000+ unique visitors to campaign website
	CTE and K-12 outreach <ul style="list-style-type: none"> Reach out to young girls in CTEs to raise awareness about broadband careers Expand MaineDOT outreach in high schools Prepare and support young women (grades 9-12) to address challenges they may face upon entering STEM fields such as CE&EE through an out-of-school leadership program supported by local mentors (MMSA) Partner with schools to bring VR clients to trades career fairs 	500+ young women reached in outreach events & programs
	CBO partnership and outreach <ul style="list-style-type: none"> Conduct broadband career info sessions for women's groups and community partners Expand engagement with Women in Transportation (WTS) and partnership opportunities to highlight opportunities Offer "Why The Trades?" Workshop at both women's facilities Host employer panels at Southern Maine Re-entry Center 	1,000+ adult women engaged in outreach events and programs
Develop industry aligned skills	Expanded training <ul style="list-style-type: none"> Expand the fiber optic training course to more community college campuses Launch training cohorts with Adult Ed to train women to obtain CDL Deliver short-term trainings for builders and carpenters on Maine's Uniform Building Energy Code and High-Performance Building, and other education and outreach (phME) Continue MCCS and DOC partnership to train 100+ women in re-entry in infrastructure careers Develop and support cohorts of women to gain industry recognized credentials and enter infrastructure jobs 	350+ women trainees in trades courses through community college & Adult Ed
	Pre-apprenticeship cohorts <ul style="list-style-type: none"> Pursue grant funding opportunities to launch Women in Energy Efficiency and Electrical careers pre-apprenticeship program to increase representation of women in EE and electrical careers Dedicate funding for women and under-represented populations pre-apprenticeship cohorts in trades 	250+ women pre-apprentices in trades cohorts

Connect to jobs & wraparound supports	Childcare supports <ul style="list-style-type: none"> • Provide employer education through webinars and focus groups on existing child care subsidies • Explore opportunities for further child care investment, including for rural, BIPOC, and immigrant women 	<i>20+ employers provide childcare resource info</i>
	Job matching and navigation services <ul style="list-style-type: none"> • Train career advisors to promote construction careers with women participants in vocational rehabilitation, adult education, and other workforce programming • Offer 1:1 career counseling to all fiber optic technician training graduates to connect to broadband careers • Partner with construction employers to interview and place trained women in jobs after prison release • Continue to instruct Release and Work Ready courses and workshops for women preparing for release from prison • Organize and promote regional women-focused construction job fairs featuring hands-on trade exhibitions, in coordination with seasonal training and employment opportunities 	<i>750+ adult women engaged in career advising or job fairs</i> <i>300+ women connected to jobs or apprenticeships in trades</i>
Retain in high-quality, safe & respectful jobs	Employer Education on Worker Safety & Inclusion <ul style="list-style-type: none"> • Design, create, and launch online training badge for construction employers that supports culturally responsive, safe, and inclusive workplaces • Incorporate safety training into all MCA-affiliated programs to increase retention • Develop a code of conduct for inclusion in contractor awards • Provide Windmills training on disability inclusion to top construction employers & train apprenticeship mentors at top construction apprenticeship sponsors as job coaches to support individuals with disabilities • Coach employers in using gender-neutral language for construction job postings 	<i>50+ employers / contractors participate in inclusion training</i>
	Expand Upskilling and Apprenticeship <ul style="list-style-type: none"> • Incorporate apprenticeship into broadband training programs to increase retention • Continued support for residents after release to provide up-skilling opportunities through community college workforce programs • Create new registered apprenticeship program at MaineDOT for employees 	<i>300+ women connected to jobs or apprenticeships in trades</i>
	Workforce Data Collection <ul style="list-style-type: none"> • Exploring how to collect additional information from contractors and subcontractors including total number of workers, percent of women workers, median wages, and availability of benefits such as training and childcare 	

Appendix B: Maine Construction Wage Survey – Occupation by Gender

Preliminary Data on Construction Workers in Maine <i>from BLS Construction Wage Survey (N=298 employer respondents)</i>			
Trade	Female	Male	Grand Total
Brickmasons and Blockmasons	1	79	1.3%
Carpenter	8	534	1.5%
Construction and Maintenance Painters	11	80	12.1%
Construction Laborer	50	1377	3.5%
Flaggers	28	92	23.3%
Electricians	19	673	2.7%
Elevator Installers and Repairers	1	20	4.7%
Loading Machine Operators	2	116	1.7%
EXCAVATOR OPERATOR	1	201	0.5%
HVAC Mechanics and Installers	2	137	1.5%
Heavy and Tractor - Trailer Truck Drivers	9	344	2.6%
Highway Maintenance Workers	1	33	2.9%
Insulation Worker - Mechanical	4	88	4.3%
Light Truck or Delivery Services Drivers	7	20	25.9%
Millwrights	2	75	2.6%
Operating Engineers and Other Equipment Operators	3	105	2.8%
PIPE/STEAM/SPRINKLER FITTER	1	156	0.7%
Plumbers Pipe Fitters and Steamfitters	3	271	1.1%
Reinforcing Iron and Rebar Workers	1	48	2.0%
Roofers	6	219	2.7%
Structural Iron and Steel Workers	4	113	3.4%
Telecommunications Line Installers and Repairers	1	29	3.3%