Women in Construction and the Economic Recovery
Results from 2013 IWPR Tradeswomen Survey

Summary

“Let women know that there are women out there in nontraditional jobs.
I did not know.”

“None of the construction jobs are meeting the requirement to
recruit, train and hire women.”

2013 Tradeswomen Survey Respondent

The construction industry is showing job growth after several years of decline. In 2012, the U.S. Bureau of Labor Statistics predicted that employment in construction and extraction occupations would grow by 21.4 percent until 2022, more than double the job growth across all occupations.¹ Unlike other rapidly growing fields, construction occupations, through ‘earn-while-you-learn’ apprenticeships, provide opportunities to train for high wage jobs without the need for a college degree.² In the spring of 2014 the president has announced a $100 million initiative to double the number of apprentices over five years.³

New training initiatives and projected job growth provide opportunities to increase the diversity of the construction workforce and open opportunities for more women to become skilled workers and earn family sustaining wages. Construction occupations employ 185,000 women. Despite this substantial number, in relative terms, women are fewer than 3 percent of all construction workers, and fewer than 3 percent of apprentices in construction trades.

This research-in-brief draws on the 2013 IWPR Tradeswomen Survey, an exploratory survey on the opportunities and challenges for women working in construction trades. The survey, distributed online to tradeswomen organizations and networks yielded responses from 219 U.S.-based tradeswomen from 33 states. The survey results present a mixed picture for women in construction. While many respondents are earning good wages, unemployment and underemployment are still high and nationally higher for women than men. The majority of respondents report that they feel largely treated equally to men, yet far too many report unequal treatment in hiring, training, assignments, and promotions. Three in ten respondents report high levels of harassment, and more than one in ten experienced severe enough employment discrimination to make a formal charge to the Equal Employment Opportunity Commission.

Fewer than five respondents in total reported having learned about opportunities in the trades through school or career counselors; schools and career counselors are failing to alert women to opportunities in construction even though construction jobs offer much higher potential earnings than most occupations that do not require college level education. These findings suggest that contractors, unions, and the government are failing to recruit, train, and ensure a safe workplace free of harassment for many women.
The survey results point to the need for the expansion of strategies to improve access to training opportunities, recruitment, and improvements to workplace practices that can help increase women’s representation in construction. Such strategies include targeted career counseling, funding for training and technical advice for employers and unions on improved retention and recruitment of women, and more assertive enforcement of non-discrimination laws and affirmative action rules and can help improve women’s share of construction jobs.

Overview: Women in Construction Trades

“I chose to be in a male dominated trade. I love my choice of my profession.”

“I have a passion for driving and equipment operation.”

“Harassment and discrimination are a normal part of my job.”

2013 Tradeswomen Survey Respondents

At their peak in 2006, construction and extraction occupations employed close to 300,000 women, and more women worked in construction occupations than worked as medical doctors. The recession severely reduced employment for both women and men in the construction industry, although women lost proportionately more jobs than men. In 2013, construction occupations employed approximately 185,000 women (U.S. Bureau of Labor Statistics, 2014a). As a proportion of all jobs, while some fields, such as medicine, have made significant progress at integrating women in recent decades, the construction industry has made little if any progress. Fifty years ago women’s share of medical doctors and construction workers was less than 5 percent in both fields; today, one in three doctors but still fewer than one in twenty construction workers are women.

The construction industry has been subject to hiring targets to tackle women’s underrepresentation for the last thirty-five years—the goal set in 1978 for construction companies with federal contracts was to employ a minimum of 6.9 percent women. At the same time, the goal for women’s share of registered apprenticeships was set at half of women’s share of the workforce, 21 percent at the time. The industry has consistently failed to meet these targets. Today, women range from less than 1 percent of brick masons and roofers to a high of 5.7 percent of construction painters (U.S. Department of Labor 2014a). Only 2.2 percent of apprentices in the industry are women, yet apprenticeships are a key entry point for the most skilled trades (National Women’s Law Center 2014).

Women in the construction field have consistently shown that they enjoy the work and are capable of performing highly skilled jobs, but barriers remain. The experiences of today’s tradeswomen provide insights to help ensure that projected growth in employment during the coming decade provides equitable opportunities for women to increase their share of skilled, well-paying construction occupations.

The 2013 IWPR Tradeswomen Survey

The 2013 IWPR Tradeswomen Survey was designed to study women’s post-recession experiences in construction overall, with an additional focus on attitudes and experiences with green jobs training and
green construction. Responses to the study were collected in the spring of 2013. This research-in-brief is based on the replies of 219 US-based construction tradeswomen about their experiences in the trades. A second paper will present findings on tradeswomen and green jobs.

**Who Are Tradeswomen?**

“I worked side by side with my father.”

“I have an MBA in Project Management.”

“I was a Communications Tech in the Army”

2013 Tradeswomen Survey Respondents

Responses came from a wide range of women with different backgrounds living in over 30 states. A roughly equal number of respondents were younger than 45 years old, and 45 years old and older. This age distribution provides an opportunity to examine whether the experience of women in the industry has changed over time. A quarter of respondents had children under the age of 18. A third were single and 28 percent were divorced, separated, or widowed. Almost three in ten had a college degree or more. Slightly under one in five (19 percent) responses came from women of color, slightly more than one in five (20.5 percent) respondents identified as LGBT, and one in ten respondents was a military veteran.

The majority of respondents (72 percent) were journey workers (that is, they had completed an apprenticeship in their trade) while 15 percent were apprentices, and another 13 percent replied “other.” Respondents reflected a broad range of trades, with the largest response coming from electricians, carpenters, iron workers, and laborers. While the large majority of survey respondents were union members (80 percent), the 20 percent of respondents who were not provide some insights into the experience of non-union women in construction. According to the Bureau of Labor Statistics, in 2013 just 21 percent of women working in construction and extraction occupations were union members (U.S. Department of Labor, Bureau of Labor Statistics n.d.).

**Work and Earnings**

“Been a single parent all my life.”

“I am the only provider in my home. My husband is terminally ill.”

2013 Tradeswomen Survey Respondents

A large majority of respondents (79 percent) were the main wage earners in their households whether married, single, divorced, separated, or widowed. Construction jobs enabled some women to adequately support their families while others struggled to make ends meet. Some women maintained steady work with high earnings: 50 percent of respondents had work for at least 37 weeks/1440 hours or more during 2012, and more than 40 percent of respondents with at least some earnings from construction work made more than $50,000 that year (Figure 1).
Figure 1. Respondents’ Annual Earnings from Construction Trades Work, 2012

Note: Only respondents who reported earnings from working in their trades are included (n=186).
Source: 2013 IWPR Tradeswomen Survey

More than one in five (21.5 percent) respondents, however, were unemployed at the time of the survey, although close to nine in ten (88.5 percent) had at least some work and earnings in their trade during the previous year. Other women were unable to find any work in their trade (13 percent) during 2012 and close to three in ten (28 percent) earned $25,000 or less during the year.

Getting In and Staying On the Job

“If more women would put themselves out there and get into the construction trades I think the opportunities are available.”

“The rigger said, ‘I don’t want her, don’t you have anyone else.’”

This survey presents a mixed picture for women working in construction. Finding out about opportunities in construction trades continues to be a rather haphazard affair. Of all respondents, only one said she learned about the trades through her high school counselor, and only two through a counselor at an American Job Center. For the majority, friends and family were their source of information about trade jobs. In addition, several women reported coming across flyers, newspaper ads, and even a television ad for pre-apprenticeship programs that highlighted training opportunities.
Isolation

“If you mean another electrician, there never is another woman. I am joined by other women when the cleaning brigades arrive.”

2013 Tradeswomen Survey Respondent

Almost a quarter of all respondents reported that there is never another woman with them on the job. A striking 46 percent of non-union respondents reported this isolation compared to 16 percent of union members. Non-union women were much more likely to be self-employed (39 percent) than union women (2 percent). This suggests that non-union women may be working more independently on small residential projects, rather than large commercial or industrial jobs, which are more often unionized.

Younger respondents are somewhat more likely than those ages 45 and older to say that they work with other women (25 percent of respondents under 45 say they ‘always’ or ‘frequently’ work with another woman, compared with 19 percent of older respondents).

Equal Treatment

“At my job men and women get equal training.”

“Gender discrimination is rampant, constant, and considered normal in the industry.”

2013 Tradeswomen Survey Respondents

For some aspects of work, respondents reported that being a woman working in construction does not mean that they are treated differently from men, whereas in others they perceived substantial inequities. More than 90 percent of respondents said they are ‘always’ or ‘frequently’ treated equally with respect to safety on the job, while 78 percent felt they ‘always’ or ‘frequently’ receive equal treatment in relation to formal training, and 75 percent ‘always’ or ‘frequently’ experience equity in relation to use of tools (Figure 2).

Perceptions of equal treatment were lower when it came to respect (64 percent), hiring and hours of work (63 percent), and assignments (57 percent). Access to tools, challenging assignments, and the allocation of job opportunities/hours are of course crucial for women to become as skilled in their trades as male workers, yet one-third (36 percent) to almost half (43 percent) said they are never or rarely treated equally. Respondents were least likely to report equality when it came to promotions: only 40 percent said they were always or frequently treated equally with respect to promotions (Figure 2).

Fewer than half of the women reported “always” being treated equally on all but the ‘safety’ measure. Younger women, however, are at least somewhat more likely than older respondents to say they are ‘always’ rather than ‘frequently’ treated equally in response to almost each aspect of work and training surveyed. Half (49 percent) of younger women report always being treated equally when it comes to formal training, compared with a third of older women (32 percent); 37 percent of younger women, compared with 26 percent of older women, say they are always treated equally in relation to the use of tools; 34 percent, compared with 27 percent, when it comes to hiring and hours of work; and 27 percent, compared with 16 percent, feel always treated equally in relation to assignments.
“[…] many barriers and setbacks and once again UNEMPLOYED and trying to finally set up my own business because I can’t stand the application and hiring process anymore at my age.”

“The union says they stand behind you and….then there is reality.”

2013 Tradeswomen Survey Respondents

There was no difference by age in the number of respondents who reported that they ‘always’ or ‘frequently’ experience sexual harassment: this response was given by 31 percent of respondents. Thirty-seven percent of those who identified as LGBT reported to ‘frequently’ or ‘always’ experiencing discrimination or harassment based on sexual orientation, 32 percent of women of color reported such levels of racial harassment, and 30 percent of women 45 years and older reported age discrimination (Figure 3). Examples of discrimination\textsuperscript{15} included being demoted or not promoted because men didn’t want to work for a woman, being assigned the hardest work, being last to get work and first to be laid off, being hit with cranes, and having tires flattened. Sexual harassment ranged from inappropriate touching and unwanted and derogatory comments to intimidation in isolated areas. One woman feared for her life.
Figure 3: Experience of Harassment or Discrimination on the Job (Percent of Respondents* answering ‘Frequently’ or ‘Always’)

<table>
<thead>
<tr>
<th>Type of Discrimination</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual harassment</td>
<td>31%</td>
</tr>
<tr>
<td>Racial harassment/discrimination</td>
<td>32%</td>
</tr>
<tr>
<td>Discrimination/harassment based on sexual orientation</td>
<td>37%</td>
</tr>
<tr>
<td>Age discrimination</td>
<td>30%</td>
</tr>
</tbody>
</table>

Notes: For ‘sexual harassment’ responses for all US construction trades respondents; for racial harassment, only respondents identifying as a person of color; for sexual orientation, only respondents identifying as LGBT; for age discrimination, only respondents aged 45 years and older.
Source: 2013 IWPR Tradeswomen Survey.

Tackling Discrimination and Harassment

Most who reported experiencing harassment and discrimination said it was something they have been able to sort out themselves, or by turning to colleagues and union members.

“...I have a solidarity based method for coping with harassment [...]. My union brothers have helped me without resorting to legal reporting.”

“There is usually at least one jerk per job, but the majority of my coworkers are decent humans.”

2013 Tradeswomen Survey Respondents

Foremen, co-workers, and union representatives were identified by some as the problem and by others as part of the solution. Some respondents put up with harassment for fear of being labeled negatively (14 percent) and perhaps losing future jobs. Two percent reported leaving their jobs because of harassment.

More than one in ten respondents had taken claims to the U.S. Equal Employment Opportunity Commission (EEOC); only a minority of these felt that the claims were successfully addressed. One woman had a case pending for over two and a half years before the Office of Federal Contract Compliance (OFCCP). Only 25 percent of respondents said they worked for federal contractors. This is likely to be a significant underestimate given that four in five respondents worked mainly for union contractors; union contractors are more common on large construction projects at least partly funded with federal funds.16 Contractors performing on federally funded contracts are subject to higher affirmative action standards than other contractors regarding the employment of women, minority men, veterans, and workers with disabilities (U.S. Department of Labor, Office of Federal Contract Compliance Projects 2009).
Improving Employment Opportunities for Women in Construction

The 2013 IWPR Tradeswomen Survey finds that women in construction can earn a good living (although unemployment is still far too high) but that they experience substantial inequities, as well as discrimination and harassment along the way. This is cause for great concern, especially considering that the survey only captures responses from women who are still working in construction, and does not reflect the experiences of women who may have left or never entered the trades in response to discrimination, harassment, or lack of opportunities.

The survey results suggest, as does earlier research, that failure to improve women’s share of construction jobs will not be due to women’s lack of satisfaction with the work or capacity to perform, but because the necessary steps to improve career advice and end discrimination and harassment have not been taken. Policy makers, employers, unions, educators and workforce developers must remove the barriers for women’s equal access to construction careers.

Career Advice, Outreach and Supports: Schools, career counseling services, and job centers are still failing to inform women about the potential of careers in nontraditional fields, such as construction. Programs providing apprenticeship readiness training and outreach on nontraditional occupations for women have successfully helped women enter construction trades (Westat 2003). Funding for such programs, which has not been increased since 1992, should be increased. Funding is also needed for retention services to help women and minority apprentices complete their apprenticeships (Helmer and Altstadt 2013).

Dissemination and Technical Assistance: The U.S. Department of Labor and state workforce development agencies should expand technical advice and build on successful models of pre-apprenticeship and community training programs as well as technical assistance programs for employers and unions on improving recruitment and retention of women in construction.

Enforcement and Updating of Non-discrimination and Affirmative Action Rules: Increased monitoring, investigation, and education by the Equal Employment Opportunity Commission, the Office for Federal Contract Compliance Programs and state enforcement agencies are needed to end discrimination by contractors and unions. Agencies need to take a more proactive role in identifying and pursuing violators because individual women are in danger of retaliation, low awareness of federal contractor status, and the lengthy nature of the complaints process. The Department of Labor Mega Construction Project initiative begins to address these problems (White House, 2014). Affirmative action rules for the construction industry, which have not been updated since 1978, need to be revised to reflect the 21st century workforce.

Research: While there are several excellent studies on women working in construction, this remains a largely under-researched field. Most research focuses on women in the unionized sector, while the majority of women in construction work in the non-union sector. Studies are needed to gain a better understanding of why many women leave the industry and what, if any, interventions may have persuaded them to stay. Last but not least, more evaluations are needed to document effective employer and workplace practices.
Notes

1 Construction occupations are one of four occupational groups with growth projections above 20 percent; the others are healthcare support occupations (28.1 percent), healthcare practitioners and technical occupations (21.5 percent), and personal care and service occupations (20.9 percent; U.S. Department of Labor Bureau of Labor Statistics 2013). Projections were for 1.6 million additional construction jobs between 2012 and 2022.
2 The median weekly earnings for fulltime work in ‘construction and extraction’ occupations in 2013 were $732; in healthcare support occupations they were $491 and in personal care and service occupations $481 (U.S. Department of Labor, Bureau of Labor Statistics 2014b).
3 Apprenticeship in construction is a three-to-five year progression from apprentice to journey-level, combining on-the-job and classroom instruction. For more information on the American Apprenticeship Initiative see U.S. Department of Labor Employment and Training Administration 2014.
4 Before the recession and the dramatic decline of construction employment, in 2006, there were 295,000 women in ‘construction and extraction’ occupations (3.1 percent of all workers in these occupations) and 278,000 women ‘physicians and surgeons’ (32.2 percent of these occupations); the corresponding employment levels for 2013 were 331,600 women ‘physicians and surgeons’ (35.5 percent) compared to 185,380 women in ‘construction and extraction occupations’ (2.6 percent); U.S. Bureau of Labor Statistics 2007, 2014a).
5 Employment in construction and extraction occupations declined by 25 percent between 2006 and 2013, but employment of women in these occupations declined by 37 percent (U.S. Department of Labor 2014a). The reasons for women’s disproportionate job loss are not clear; they may include less seniority, as well as discrimination in job assignments and layoffs.
6 The goal of 6.9 percent, set under Executive Order 11246, refers to women’s share of hours worked, not to a simple head count (U.S. Department of Labor Office of Federal Contract Compliance 2009). The goal has not been updated since.
7 Under the Equal Employment Opportunity in Apprenticeship and Training regulations for federally registered apprenticeships (28 CFR 30; available at <http://www.law.cornell.edu/cfr/text/29/30.4>) women’s share of apprentices should be no less than at half of women’s share of the workforce; in 1978 women were 41 percent of the workforce, hence the goal was 20.5%; now women are 48% of the workforce, translating into a goal of 24 percent. The expectation moreover was that as this goal was reached, each year women’s share would increase until gender parity was reached. The apprenticeship regulations have been unchanged since 1978; in 2010, the DOL announced its intention to revise the regulations (U.S. Department of Labor 2010). At the time of writing, new recommendations have not yet been published.
8 Research studies on women’s success in the trades, as well as problems, were most recently reviewed by Susan Moir, Meryl Thompson and Christa Kelleheer (2011). A recent in-depth look at one city is provided by Jane LaTour (2008), and in one industry by Francine Moccio (2009). For an historical perspective and policy analysis see Susan Eisenberg (1996).
9 The survey was conducted as part of a research project on women and green jobs, funded under the Rockefeller Foundation’s ‘Evaluation of the Sustainable Employment in a Green US Economy’ (SEGUE) grant program.
10 Invitations to fill in the survey were distributed through the ‘Women Building California and the Nation’ conference, through pre-apprenticeship programs, union women committees, websites targeting women in the trades, as well as word of mouth. Survey responses were collected via SurveyMonkey between April and June 2013. The sample is not random, data are unweighted, and while responses come from a cross-section of women, data are not representative of the national population of women working in construction. For more detail on the survey see Hegewisch and O’Farrell 2014.
11 The survey was also answered by 20 respondents based in Canada, and 23 U.S. respondents working in other nontraditional fields (e.g. truck drivers). These responses were not included in the analysis for the purposes of this paper.
12 In 2008-2010, white non-Hispanic women were 67 percent of women in construction occupations, and 67 percent of the total female workforce; Hispanic women were 19 percent of construction occupation workers, compared to 12 percent of the total female workforce, black women were 9 percent, compared with 12 percent of the total female workforce, while Asian women were 7 percent, compared to 6 percent of the total female workforce (Hegewisch, Hayes, Bui and Zhang 2013).
13 The composition of the sample is a reflection of networking among tradeswomen; while there are organizations for women working as construction managers and women owners of construction firms, in skilled trades occupations, unions or union related organizations are the primary vehicle for networking among women.
Promotion opportunities after journey-level might include first line supervisor, inspector, or construction manager. In 2013 these occupations were 2.1 percent, 7.1 percent, and 7.3 percent women, respectively (U.S. Department of Labor, 2014a).

Open responses to survey questions from respondents.

Under Executive Order 11246, any construction contractor in receipt of a federal contract or federally assisted contract of $10,000 or more must make good faith efforts to ensure that at least 6.9 percent of hours are performed by women; the 6.9 percent goal applies to all of a contractor's construction sites not only those involved in performing the federal contract (U.S. Department of Construction Office of Federal Contract Compliance 2009).

See also note 8 above.

For an overview of programs and effectiveness see Mastracci (2004). For a specific example see Wider Opportunities for Women (2013).

See for example note 8 above.

References


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