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# Unfinished Business: Building Equality for Women in the Construction Trades

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# UNFINISHED BUSINESS

**Building Equality for Women in the Construction Trades** 

By Susan Moir, Meryl Thomson and Christa Kelleher

A Research Report from the Labor Resource Center, College of Public and Community Service, and the Center for Women in Politics & Public Policy, McCormack Graduate School of Policy and Global Studies



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COVER PHOTO: "WOMEN ON THE RISE," (c) 2011 DavidAllenStudio.com

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#### **Executive Summary**

This review and analysis of over one hundred and twenty published and unpublished sources on the unfinished business of increasing women's participation in the construction workforce over the past thirty-plus years aims to:

- Provide a definitive assessment of the consistency of evidence on the daunting challenges facing women who seek to enter and advance in the construction workplace and
- Examine the failure of a critical social policy intended to address occupational segregation and ensure access to high-paying jobs to women.

Using the wide array of available sources, this report provides a historical overview of policy efforts to integrate women into construction and documents the gateways and gatekeepers that control access to construction work. Scholarship on gender socialization informs this in-depth analysis of the pervasive forms of sexism and discrimination in the industry. The report examines the labor needs of the construction industry and identifies sources of female workers who will be a good match for the industry's needs. Finally, the history of compliance and enforcement is reviewed and includes the rare and instructive projects where affirmative efforts were made to ensure a welcoming work environment and an increase in women's participation.

This research demonstrates that the story of women in the construction trades in the United States over the past thirty years has two narratives:

- The well-documented tale of persistence by women entering and staying in the trades in the face of immense individual and institutional barriers; and
- The under-documented story of the failure of institutional stakeholders to implement the change in social policy that has been law since 1978.

In addition to reviewing and analyzing the literature, we describe a model for regional collaboration of stakeholders working together to develop strategies to overcome the persistent exclusion of women from the construction trades. Participants in Boston's Policy Group on Tradeswomen's Issues (PGTI) have included tradeswomen, regional political and union leaders, representatives from regional Department of Labor agencies, and staff from area pre-apprentice programs. Participants are building relationships as well as sharing information and expertise across stakeholder silos to identify points of intervention that will get women into training and jobs. The group is currently working with Boston city officials to ensure compliance with the 25-year-old Boston Resident Jobs Ordinance, which established goals for women, people of color, and Boston residents on construction projects in Boston.

The following recommendations for policy implementation have evolved both from the literature reviewed for this report and from over twenty-five hours of group discussions by participants in the Policy Group on Tradeswomen's Issues.

#### Ensuring Equal Opportunity for Women: The Industry

The peculiarities of the construction workplace have been used to excuse the industry's failures to implement equal opportunity for women. But construction industry leaders who have succeeded in integrating women have shown that the same diversity "best practices" that work in other industries work in the construction environment. When owners and executive management set corporate goals and commit adequate resources, the following practices will work in the construction industry:

- Monitoring for equal employment opportunity must be clearly defined, not combined with other responsibilities and staffed by trained and qualified individuals.
- Diversity training that promotes acceptance and respect of differences among groups and individuals is essential to corporate culture change.
- Tracking and reporting, as in any other business function, is essential to maintenance of an effective equal opportunity program.
- General contractors must set and monitor corporate standards among their subcontractors.

The building trades unions are vital to the recruitment and retention of women in the construction industry. Commitment to equal employment opportunity from leadership can be implemented through the following practices:

- Disprove the myth that women do not want to enter the construction trades by formally partnering with community-based organizations to bring women into the trades.
- Ensure that business agents and others responsible for job placement get women onto worksites and that they hold contractors to the standard of workplaces free of discrimination, harassment, and coercion.
- End the past practice of moving women from job to job to meet compliance goals.
- Institute quality diversity education into all levels of union training programs from apprenticeship to leadership development.
- Actively encourage the establishment of Women's Committees at all levels from apprenticeship training centers to the national union.

#### The Role of Government: Ensure Effective Enforcement

Effective government enforcement of the equal opportunity laws for women entering the construction trades can be the "game changer." We recommend the following steps to get enforcement in motion:

- Explicitly make enforcement of equal employment opportunities an agency-wide priority.
- Make the industry aware of this priority by bringing industry leaders on board to promote the benefits of increasing access to women to the economy and the construction industry.
- Be transparent in enforcement. Go beyond high-level industry contacts to build relationships with local tradeswomen's organizations, union Women's Committees, and others who are organizing for industry change.
- Make processes and results public and accessible, including web-based reporting of public data.
- If regulatory change is undertaken:
  - Develop bid incentives for industry leaders who consistently comply with equal opportunity standards.
  - Raise the standard of "good faith efforts" to "maximum efforts."
  - Tie training funds to formal partnerships with appropriate community-based organizations.

#### Focusing the Efforts of Research and Advocacy Organizations

Do not study what has been well-documented but do support efforts related to compliance and enforcement:

- Share resources for increased collaborations with tradeswomen's organizations.
- Serve as a neutral convener bringing stakeholders together and facilitating cross-union activities with tradeswomen.
- Give appropriate weight to the expertise of tradeswomen.
- Encourage student projects that break new ground regarding this persistent problem.
- Assess strategies and approaches taken by the U.S. military to successfully integrate women into the military.
- Encourage efforts to ensure that government agencies make data public and accessible.

The time for change is now. Setting high equal opportunity goals is a proven strategy for success. Employing this strategy, we recommend that that all parties committed to equal employment for women in the construction trades join in setting a goal of 50% women in the construction workplace by 2028, the 50th anniversary of the 1978 amendment to Executive Order 11248

"Only seven years before, Jenny, a single mother of two, had moved from Georgia to New York City, breaking a three-generation family pattern of relying on public assistance. Soon she was inducted into electrical apprenticeship. On her way to an \$85,000-plus job as a journeyman electrician, she ignored the girlie pinups and the wisecracks of the guys keeping her eyes on the prize, a middle class existence for herself and her children."

From Live Wire: Women and Brotherhood in the Electrical Industry by Francine A. Moccio (2009, p. 4)1

#### Introduction

Jenny's story exemplifies both the tremendous opportunities that come with employment as a tradesperson in the construction industry and the problems that so many women have faced when entering this industry. Research on the topic of women in the trades and countless first-hand stories document how women who have turned to the trades as a means of accessing better-paying and personally rewarding work have endured discrimination, harassment, and other barriers on the road to becoming journeyworkers,<sup>2</sup> staying in the industry, and advancing their careers.

#### This report aims to:

- Provide a comprehensive review and analysis of the published and unpublished literature on women in the building trades in the United States, including ethnographic studies and memoirs of women and men involved in the construction industry. The consistency of description and findings across these rich qualitative sources supports their validity. They paint an unassailable picture of the daunting challenges facing women who seek to enter the construction workplace, receive all necessary training and experience, stay gainfully employed, and advance their careers in an industry inhospitable to women.
- Examine the failure of a critical social policy intended to address occupational segregation and open up higher paying jobs to women. The goal of 6.9% hours by tradeswomen on federally-funded construction projects and the mandate that construction contractors "ensure and maintain a working environment free of harassment, intimidation, and coercion" has been US federal law since 1978. Except on a handful of projects scattered across three decades, the number of wom-

en in the construction trades has been and is today less than half the goal. The women who have succeeded have been on their own in a hostile environment while the industry- contractors, owners and unions- has largely not complied with the law and government enforcement agencies have fallen far short of their obligations to implement equality for women in the construction trades.

The report first provides a historical overview of the policy efforts that were intended to increase women's participation in the construction workforce over the past thirty-plus years. This is followed by a discussion of why the construction industry needs women and the discrepancy between the availability and inclusion of women in the trades. A discussion of the gendered nature of the industry and pervasive forms of sexism that support ongoing discrimination against women will clarify how women have been prevented from achieving parity within the trades. This analysis will demonstrate how rigid gender roles and expectations influence key access points including apprenticeship, union membership, employment and retention. We will show how the literature supports the conclusion that discrimination and sexual harassment experienced by the few women who have successfully overcome the barriers and are employed in the industry shapes construction's negative image and deters women from even considering it as a potential employment option.

The report will review the history of compliance and enforcement, including brief descriptions of increased participation by women on projects when affirmative efforts were made to ensure a welcoming work environment. We conclude with a set of recommendations for regional collaboration by stakeholders and allies based on a model emerging from the work of

the Policy Group on Tradeswomen's Issues (PGTI) in Boston.

Given its ability to provide sustainable, living wages and the potential for job satisfaction, the building trades have the capacity to be an important conduit for women's economic and social parity.

As Brown and Jacobsohn wrote in their 2008 report, "From the Ground Up: Building Opportunities for Women in Construction," the time for change is now. As the United States comes out of a severe economic downturn, the construction industry will again become a key route for economic stability for many individuals and families. It is vital that women have equal access to these well-paying jobs. Research suggests that families will have greater dependence on women's earnings in the future<sup>4,5</sup> Therefore, policymakers and others are focusing attention on nontraditional occupations that have historically been considered "male" and that have the potential to provide women with higher earnings and career ladders. Despite the cyclical nature of the construction industry, the building trades represent a key area where women can gain substantial economic benefits.

#### Women in the Trades in the United States

The Fair Employment Practices Committee, established in 1941, was the first significant effort to address discrimination in employment.<sup>6</sup> The Committee required all defense contractors and vocational training programs that were administered by federal agencies to provide for "full and equitable participation of all workers, without discrimination, in defense industries."<sup>7</sup> The order establishing the Committee explicitly did not include sex as a protected category although 30% of the complaints received by the Committee were from women.<sup>8</sup>

Non-traditional occupations represented a major employment sector for women during World War II as industries needed women to build the war economy<sup>9,10</sup> Immediately after the war, women were turned out of non-traditional fields to make room for returning male veterans. In 1962, women were again left out when an Executive Order extended protection against

discrimination to all government contractors and direct employees of the federal government, but did not include women.<sup>11</sup> Women - particularly women with children—began entering the workforce in record numbers during the 1960s and 1970s. 12 The women's movement resulted in laws mandating equal pay, prohibiting employment discrimination and harassment, and setting up institutional structures and processes to promote equality in employment settings. 13,14 Title VII of the 1964 Civil Rights Act extended federal protections to include discrimination on the basis of sex. In 1965, Executive Order (EO) 11246 specifically prohibited "federal contractors and subcontractors and federally-assisted construction contractors and subcontractors that generally have contracts that exceed \$10,000 from discriminating in employment decisions on the basis of race, color, religion, sex, or national origin."15

On April 7, 1978, the Carter administration amended EO 11246 to set a goal for women of 6.9% of contractors' work hours. 16 This goal was "extended indefinitely" in 1980. 17 The Office of Federal Contract Compliance Programs (OFCCP) is responsible for enforcing the 1978 Carter amendment to EO 11246. In addition to the oft-cited goal set by EO 11246 of 6.9% women in the construction workforce, the OFCCP's Federal Contract Compliance Manual (FCCM) specifies that compliance with EO 11246 as amended requires contractors to:

- "ensure and maintain a working environment free of harassment, intimidation, and coercion..."
- "[w]here possible, the contractor, will assign two or more women to each construction project"

"specifically ensure that all supervisory personnel are aware of, and carry out, its obligation to maintain such a working environment" 18

Also in 1978, the U.S. Department of Labor amended the federal regulations covering apprenticeship (Equal Employment Opportunity in Apprenticeship and Training, 29 CFR Part 30) to prohibit discrimination on the basis of race, color, religion, national origin, or sex. The amendment requires sponsors of apprenticeship training programs to establish goals and

timetables and to undertake positive recruitment efforts for increasing the numbers of minority and women apprentices. Patterns or practices of noncompliance by apprenticeship programs may be grounds for sanctions. Enforcement of 30 CFR 30 lies within the U.S. Department of Labor's Office of Apprenticeship and with State Apprenticeship Councils.

Both EO 11246 and 29 CFR 39 (as well as other regulatory requirements for equal employment opportunity) rest on the broad and ambiguous principle of "good faith efforts" by the covered parties rather than objective and measurable outcomes of the reduction of discriminatory practices.<sup>19,20,21</sup>

Following the 1978 regulatory changes and riding the wave of feminism, a small number of women entered the building trades in the 1980's believing that they were pushing through barriers that would result in a significant presence of women in the construction trades.<sup>22</sup> However, women's employment participation rates and working conditions in the construction industry have never approached the goals of the policy efforts or the dreams of the women pioneers who opened the doors. Thirty-three years after the federal government established the target of 6.9% and mandated an end to hostility to women in the construction work environment, women are less than half that target at 2.7% of the construction trades workforce<sup>23,24</sup> and harassment, discrimination and intimidation continue to be common experiences among women who are in the trades or are seeking to enter them.

Construction work can be difficult and tedious; it is often dirty and dangerous and the industry is hostile to women's entry. Why do women want to enter this environment?

The obvious reason women want to enter any non-traditional occupation is the relatively high wages in fields dominated by men. The mean hourly wage of close to \$21 an hour in the construction industry is nearly three times the federal minimum wage (\$7.25) and translates into a more livable wage for workers and their families than is available through many other occupations.<sup>25</sup> Construction employment, especially the unionized sector, often

comes with health care coverage and pension benefits. The wages of women employed in the construction industry are comparable to their male counterparts.<sup>26</sup> On average, both male and female tradesworkers earn an annual salary of \$43,350.<sup>27</sup> In fact, women working in construction are closer to wage parity than women across all fields nationwide<sup>28</sup>

But it is not all about the money. In a recent article in the Journal of Career Development, Ericksen and Schultheiss closely examined research on tradeswomen to identify gaps through which individual women fall in the career process, the personal qualities which make it easier for some women to succeed, and job qualities that drive career choices. After monetary rewards, they identify psychological success, including career satisfaction; job success; interpersonal success; and job balance, as fundamental driver careers choice.<sup>29</sup> Construction work embodies the first three of these four qualities. In essence, women want to work in construction for the same reasons men do. From digging holes to topping skyscrapers, building our cities, schools, highways and homes can give construction workers great personal satisfaction.<sup>30</sup> In an economy where many blue collar jobs have been de-skilled and routinized, tradeswomen and men have a high degree of autonomy on the job; they retain a "pride of craft" and can take satisfaction in working with their hands to produce a finished product. 31,32,33,34, 35,36

• Although it is widely acknowledged that Ericksen and Schultheiss' fourth characteristic, job balance, is a barrier to greater participation by women in the construction industry, it is rarely noted that the lack of balance and demands of the worksite are also problematic for men in the trades and for the families of tradespersons.<sup>37,38</sup>

Given its ability to provide sustainable, living wages and the potential for job satisfaction, the building trades have the capacity to be an important conduit for women's economic and social parity. We examine the critical points of access in the next section.

#### Gateways and Gatekeepers: Points of Entry for Success in the Construction Industry

Research on women in the trades has largely focused on three gateways into the industry and the structural barriers to success for women inherent in each gateway:

- Apprenticeship and pre-apprenticeship training
- Labor union membership
- Job placement and retention

#### Apprenticeship and Pre-Apprentice Training

As the main formal means of entry into the building trades, much of the research on women in the trades has focused on women's access to and experiences in apprenticeship programs. <sup>39,40, 41,42,43,44,45,46,47</sup> Until the 1978 policy change that set explicit targets for women's employment, women, with few isolated exceptions, were excluded from entry into apprenticeship programs due to the structure and culture of the trades. <sup>48,49,50</sup> The culture was essentially an exclusive men's club in which apprentice positions were often held for sons, nephews, male neighbors and others who had connections to journeymen in the trades. <sup>51</sup>

As Table 1 indicates, in recent years, the number of female apprentices has fluctuated between roughly two and four percent.

Because of the structure of the apprentice-ship process, there are multiple points at which women and minorities can be blocked from entry either directly (despite anti-discrimination laws and regulations) or indirectly through biased processes.<sup>52</sup> These points include the interview process, skills tests, and sponsorship.<sup>53,54,55,56,57</sup> Sponsorship, in the case of the building trades, occurs when an experienced tradesman (often a family member or family friend) will formally offer to back or "vouch" for an apprentice.

Once admitted to apprenticeship, women often face greater disadvantages than men.<sup>58,59,60</sup> In addition to hazing-like rituals that cross gender lines, women are usually alone among men

who may see them as intruders in a man's world. Gocial factors, including gender role socialization, can contribute to women being less prepared than their male counterparts, particularly in regard to their math and technical abilities. Gocialization women may lack familiarity with tools, have had less math coursework in high school and in college, and lack general knowledge about the trades. Furthermore, women often recount that it is particularly hard to secure jobs as apprentices within their trades in order to earn on-site job training and skills – something that is almost always a requirement of the apprenticeship program. Gocial Goc

Table 1. Percentage of Female Apprentices in the Construction Trades	
Year	% Female
2000	4.15
2001	3.70
2002	3.49
2003	3.38
2004	2.87
2005	3.14
2006	2.72
2007	2.39
2008	2.28
2009	2.32
2010	2.19
Source: Department of Labor, Office http://www.doleta.gov/oa	e of Apprenticeship,

Following the amendment to EO 11246 in 1978, pre-apprenticeship programs were established around the country to address some of these deficits experienced by women. Studies have shown the value of women participating in pre-apprenticeship training programs that provide knowledge and skills needed to succeed in apprentice programs. <sup>68,69</sup> One study found that female students who had participated in pre-employment training were more likely to be successful in being accepted to apprenticeship. <sup>70</sup>

Young men entering the trades without family connections are often graduates of high school vocational education programs, but this has not been a common pathway for young women. Research on vocational education has shown an historical tendency for occupational

segregation within the education system as a whole, with girls most often training in fields that will translate into traditionally female jobs such as cosmetologist, nursing aide, administrative assistant, etc. 71,72,73,74 Federal requirements that career and technical schools meet six core indicators, including one that requires student participation in and completion of nontraditional programs has lessened the occupational segregation that had previously characterized vocational education training programs.<sup>75</sup> This positive trend could be enhanced through additional training for school personnel responsible for guiding girls and women into non-traditional options.<sup>76</sup> External factors, such as peer pressure and teachers ascribing to gendered norms continue to inhibit entry and retention of girls in secondary-level trades programs.<sup>77</sup> While vocational technical schools have made efforts to make nontraditional programs more accessible to girls and engage in many activities to improve retention, there remains resistance on the part of employers to offer cooperative placements during high school and to employ female graduates. The barriers faced by women seeking employment in nontraditional blue collar fields also impact girls graduating from vocational technical schools.<sup>78</sup> These barriers to successful job placement and retention for women of all ages will be discussed further below.

#### **Labor Union Membership**

In addition to higher wages and greater benefit coverage in the unionized construction sector, <sup>79</sup> membership in a construction union can provide an added advantage for women who may not have connections within the industry. Acting as a labor market intermediary, unions partner with employers and, in exchange for improved wages and working conditions, the unions provide a stable and well-trained workforce. In theory, unions provide the institutional apparatus that could facilitate women's entry into the industry.

In reality, unions have both facilitated and hindered women's employment in the trades. Despite their history of ensuring rights and access to work, unions have been characterized as actively discouraging women from entering the trades.<sup>80</sup> The formal procedures and anti-dis-

crimination policies of unions and joint labor management programs have, at times, allowed women to use union resources to gain greater access to the trades. 81 While these protections have aided individual women, they have had no substantial impact on breaking through the ceiling on women's participation. In 2005, membership of women in the various building trades unions ranged from 4% of painters to less than 0.5% of plumbers. 82

The formal procedures and anti-discrimination policies of unions and joint labor management programs have, at times, allowed women to use union resources to gain greater access to the trades

Unions have the potential to do more to enhance women's opportunities for sustained, gainful employment in the trades. Skidmore and Moir recommend that unions take a more active role in bringing family issues, such as child care, to the attention of coworkers and employers during contract negotiations.83 The lack of child care is often cite as a reason women have to turn down jobs or show up late to work and has been used as a reason not to hire women.84 Building trades unions have shown little awareness that changes in family structures over the past fifty years mean that work practices that are incompatible with family needs also affect their male members.<sup>85</sup>

In addition to advocating for greater access to child care, recommendations to unions for improving women's chance of success in the construction industry have included:

- Support for pre-apprenticeship programs in order to ensure sponsorship of women during the apprenticeship process.
- Support for on-site female workers by making sure that job leaders, such as stewards and foremen, are aware of the unions' backing of the women.
- Support for the creation of Women's Committees in the unions.
- Support for cultural change through the provision of union-based sensitivity and diversity training.<sup>86,87</sup>

Labor union membership in the construction field begins with apprenticeship. Comparisons of non-union apprenticeship programs and apprenticeship programs jointly sponsored by a trade union and contractors have consistently shown higher participation and graduation rates for women in joint union/management apprentice programs. 88,89,90 Women who complete their apprenticeships and succeed in their trades may be highly committed members who have overcome barriers that others do not face. Full integration of women into the construction trades will be enhanced when joint/labor apprenticeship programs increase the share of women in apprenticeship training. 91 advacce

#### Job Placement and Retention

As shown in Table 1 on page 8, the number of women in construction apprentice programs has hovered around 3% for many years. <sup>92,93</sup> If the percentage of women in apprenticeships equals 3% year after year, why are there no more the 3% women in the trades today? Can 3+3+3=3? The disconnect between the numbers of women in apprenticeship over time and the lack of accumulation of women journeyworkers indicates a breach between training and successful long-term employment in the industry. <sup>94,95</sup>

Building trade apprenticeships require on-the-job training in addition to classroom time. For instance, operating engineers' apprentices must complete 6,000 hours of work in three years, electricians' apprentices 8,000 hours of work in four years, and pipefitters 8,750 hours. <sup>96</sup> In some unions, the business agent or manager secures the jobs and distributes them among the apprentices. In others, the worker must go out and find his or her own job. In either case, women are at a disadvantage due to the prevalence of discrimination and their lack of personal connections in the industry. <sup>97</sup>

Once a woman has a job, it might be difficult to keep it. Tradeswomen have described a practice they called "checkerboarding." They have been sent out to worksites solely to fulfill a requirement to fill a quota for women and, in the case of women of color, often to fill both the gender and race quota. When the quota was filled or the hours counted, they were laid

off regardless of their skills or work history. Women described being laid off when the contractor realized that there was no requirement for "women's hours" on that particular job. One participant stated that she was told, "We thought we had to hire women, but we don't so 'bye." This practice and others that move women from job to job negatively impacts skill development. The women who participated in this research felt that they were never able to finish a job or develop the longstanding partner relationships that are key to learning the trade from a more experienced worker.

Among journeyworker tradeswomen, there is the danger that a contractor trying to fill a requirement for "women's hours" would prefer to have a lower paid apprentice. <sup>99</sup> This problem has become more acute in the current recession when unions with high levels of unemployment may be willing to help contractors cut costs in exchange for work.

The persistent under-representation of women and the failure of existing public policies to mitigate discrimination on the basis of sex in the construction industry point to a larger social problem. The next section provides a synopsis of the scholarship on how sexism and gender role socialization have had serious consequences for the full integration and of women in the trades.

#### Sexual Harassment and Hostile Workplaces

A businessman/politician is exposed in the media for forwarding sexist and racist emails. His response is, "I apologize... I'm in the construction industry. We get all kinds of nonsense like that on a daily basis."<sup>100</sup> This is the perceived culture of the construction industry by insiders and outsiders. It is a culture that supports antiwomen attitudes and actions.

... sexism and gender role socialization have had serious consequences for the full integration and advance of women in the trades.

Both the culture and the physical structure of the construction site enable sexual harassment. A construction site may have dark corners, trenches, and small spaces that are

secluded from other work areas. The organizational structure also lends itself to situations that could enable sexual harassment. 103 Many tradespersons have a high degree of autonomy on the job and are left to do their respective assigned tasks without a great deal of supervision. These structural components lead to an environment of seclusion with limited supervision, which can result in a very dangerous situation for women.<sup>104</sup> In a report to the Occupational Health and Safety Administration, the Health and Safety of Women in Construction (HASWIC) Workgroup reported that 88% of women construction worker surveyed had experienced sexual harassment at work.<sup>105</sup> In a second survey, 41% of tradeswomen reported that they had been mistreated by co-workers and/or supervisors because they were female. The report details how one woman often had tools dropped on her, including hammers and wrenches. 106 The combination of real physical danger inherent in the hazardous nature of the work as well as the potential threat of physical harm from coworkers threatened by women in "their" environment create a particularly stressful work environment for women.<sup>107</sup> While experienced tradeswomen often say that "it is nowhere near as bad as it used to be," recently published reports continue to chronicle the day-to-day stress of working in a hostile environment. 108,109,110

Recent research examining how women working in the trades perceive and react to sexual conduct at work has suggested that there is a continuum in terms of women's interpretation of and reaction to sexual conduct.<sup>111</sup> What might legally be defined as sexual harassment may not be interpreted as such by women and may go unreported. Women alter their reactions according to their perceived level of threat. Initially, women tend to respond to unsolicited and unwanted sexual conduct in ways that would maintain or improve relationships among coworkers. 112 These actions can be seen as self-protection when we remember that a tradesperson's ability to get along with other construction workers is crucial to economic and career survival. 113 Women may escalate their reaction to violations of their rights or "crossing the line" only after continued misconduct.<sup>114</sup> An informal reaction may include publicly rebuking the offender or a formal reac-

tion may result in filing a complaint with the supervisor, union representative, or the company. Yet men may isolate women even further for fear of a sexual harassment lawsuit. 115,116 Wanting to avoid added isolation, women may feel the need to be less reactive to sexual misconduct. 117 The present context of relatively few women in the trades means that women are often the only woman or one of few women on the worksite. 118,119,120,121,122,123 There is evidence that women typically avoid interaction with co-workers while on the job, and women are isolated during work even if other tradeswomen are present. 124 Clearly, sexual harassment on the job site remains an important issue that shapes women's experiences of work in the industry, as well as employment opportunities and career advancement. The problem is complex and requires a nuanced analysis of the culture of the construction industry a culture that is largely defined by the active prescription of gender roles. 125

#### The Masculine Workplace

Both men and women, of course, internalize socially appropriate gender roles long before they enter the construction industry. Through the process of socialization, individuals learn the meanings associated with being a "man" and "woman." These meanings often have direct economic consequences, as these definitions often include the proscribed and differential economic roles men and women should take in society as a whole. The Gender roles at work may affect women in many ways including:

- women's own willingness to enter a "male" field:
- women's acceptance of other women in a male field;
- men's acceptance of women in a typically male field. 128,129,130,131

Socialization factors influence women's familiarity with and acceptance of nontraditional occupations. The ways in which girls are socialized can result in a lack of familiarity with the tools and language surrounding construction and the trades. Moreover, all three aspects interact to create a social environment that

women must negotiate in order to work as a woman in the trades. 133,134,135

A tradeswoman captures this sentiment as she responds to male coworkers' jeers, "I reminded them that it was not a man's trade, merely a male-dominated trade."136 Carpentry, electrical work, painting, etc. are occupations that originally were characterized only by the nature of the work with norms and standards set around the practice and quality of the work. These occupations only became "male" based on society's definition of masculinity – the trades are "masculine" because the majority group men have set rules and norms surrounding the entry process based on their identities as "men." A woman carpenter says, "The hardest thing to fight is the presumption that traditional male qualities like suppression of emotion are the skills or qualifications needed to be a competent carpenter. Carpentry skills have nothing to do with cultural perceptions of ... male and female genders." As Erikson explains, a community maintains its identity through the maintenance of boundaries as set by group members. 138 Thus, it would follow that the trades remain male-dominated, because men continue not to suppress or control women per se, but to maintain "maleness." The deep and most pervasive prejudice against women entering the building trades can only be understood when we confront the causal role of maleness in defining the culture. 139

The association of masculinity with the building trades and women's reluctance to be perceived as masculine creates a barrier for many women wishing to pursue a career in the building trades. 140,141,142 The trades remain "a man's world" where women are often caught between expected roles such as sexual object or lesbian. 143,144,145 In his book, Royal Blue: The Culture of Construction Workers, Applebaum highlights how workers on construction sites bond through their masculine identities. The culture is, in essence, defined by its attitude toward women and how women are different from men. Further, being a member of the group is vital to journeyworkers for several reasons.<sup>146</sup> First, these workers are often in very dangerous working environments, which require a high degree of trust among the workers. Tradesmen can facilitate the building of the trust through

commonalities among them such as the norms of the trade. Knowing that one's co-worker follows the norms and values ascribed by the trade helps to facilitate this trust. Second, workers often rely on each other to hear about jobs and, in this particular industry, which often has sporadic or seasonal workers, connections to those with employment opportunities can mean economic survival. Tradesmen are members of both the construction community and the community of a given trade. Much of the culture of both of these communities is centered upon masculinity. Thus, women can never truly fit in with the group, as they are perceived as different from men. Often this camaraderie and member status is gained through group discussion of women in a sexualized manner. 147 Moreover, there is some evidence that women avoid interaction with one another as to avoid being perceived by their male coworkers as lesbians. 148 This climate of strict gender norms and homophobia contributes to an uncomfortable and often hostile work environment. The group dynamics in the trades that are based on strict gender roles also influence the experiences of social capital that is an essential aspect of gainful employment in this industry.

The association of masculinity with the building trades and women's reluctance to be perceived as masculine creates a barrier for many women wishing to pursue a career in the building trades.

Social capital can be understood as having access to relationships with people that an individual can use to invest in their labor. 149 Historically, in order to join a building trades union, a tradesperson often needed social capital in the form of a sponsor. Apprentices and others who sought union membership were the male relatives and family friends of other tradesmen and had no difficulty in getting sponsorship. 150 For women, however, gaining such sponsorship has often been challenging. Furthermore, even for those women with male relatives in the trades, these relatives were often hesitant to support or endorse their female relative. 151 Sexism and discrimination reduce women's social capital and, consequently, limit women's chances of knowing the "right" people to gain access to union membership. An important function of periodic government review of apprenticeship programs is the need to "level the playing field" for those who do not enter the field with equal social capital.<sup>152</sup>

Therefore, both sexism and social capital play a role in hindering women's ability to enter apprenticeships and find the jobs that are a requirement of successful apprenticeship or maintain employment and advance in their careers. 153,154,155

Tradeswomen have a long history of creating formal and informal networks to counter the negatives of working in the masculine environment. 156 In advocacy groups, women's committees and social gatherings, women have found the support and encouragement of other sisters in the trades. These networks give women a place to share both work experiences and their knowledge of employment opportunities. They reduce isolation and enable mentoring relationships to develop both formally and informally between journeyworker women and women just beginning their careers in the trades. 157,158,159,160 Mutual support can also affect retention. In at least two reported cases, formal mentoring programs resulted in a significant decrease, from about a third to under 10%, in the percentage of women who left construction apprenticeships.<sup>161</sup>

# The Importance of Women's Labor

Women are an important source of construction labor. <sup>162</sup> This will be especially true as the United States emerges from an economic downturn, begins to focus on green industry, and incorporates returning military veterans into the labor force. <sup>163,164,165,166,167</sup> Women's growing significance as an important segment of the construction workforce may be understood in the context of four economic factors:

- the projected labor shortage in the construction industry
- the growing importance of women's earnings
- post-military employment
- the emerging green industry

# Projected Labor Shortage in the Construction Industry

Although it is hard to imagine in these days of 20% and higher unemployment in the construction industry, the long-term workforce projection is for severe labor shortages. 168 Due to an aging workforce, early retirement levels in the industry, and other social and economic factors, there is an undersupply of labor skilled in the trades. 169,170 The average age of construction workers is now 39, three years older than it was in 1985; the baby boomers are leaving the industry and the proportion of younger workers has decreased over the same period. 171,172 The Bureau of Labor Statistics (BLS) projects that the construction industry will grow by 19% over the next eight years. The BLS also projects that the specialty trades are expected to experience the greatest share of growth in new jobs as a result of aging buildings and infrastructure.<sup>174</sup> Women, especially low wage women striving to improve their economic position, will be an important source of the new construction workforce.<sup>175</sup>

#### Growing Importance of Women's Earnings

The increase in female-headed households and the growing importance of women's wages in dual-earner homes has amplified the significance of women's paid wages to family and community economic stability. 176,177 Genderbased impacts of the current recession have accelerated this trend. Many of the industries that experienced significant job loss were dominated by men and women have been somewhat insulated from the recession due to occupational segregation.<sup>178,179</sup> When men lose their jobs, families may lose the "traditional breadwinner."180 Reliance on the relatively lower wages of women can place families at a higher risk of financial vulnerability. 181,182,183 Furthermore, since men often serve as the primary provider of benefits as well as wages, families relying on women's employment could now also be at risk in terms of benefits such as health insurance. 184 Between 1970 and 1999, the percent of women's contribution to family income increased from 26.6% to 32.8%. 185 Given that women's wages average out at only 80% of men's wages, this results in a 0% net gain in family income. Increased dependence upon women's wages for families' economic stability may serve as an

impetus for increased interest in employment in the building trades – which means better wages for women than would be available in other occupations.

As the role of women in the military continues to grow, the influx of female veterans will result in increased numbers of women who are capable, trained and ready to enter the building trades.

In addition to families' increased dependence on women's wages, the increase in femaleheaded households could also contribute to women's emergence as a potential source of labor in the trades. Much of the initial ethnographic research on women in the building trades demonstrates that women entered the trades as a result of needing to support their families, often as the single earner. 186,187 As of 2008, female-headed households with children under 18 represented roughly 7% of the population.<sup>188</sup> However, female-headed households account for 36.5% of families living below the Federal Poverty Level. 189 As providers, women have a strong incentive to seek employment with higher wage potential.

#### Post-Military Employment

Women veterans are another source of future construction workers. The building trades have a history of incorporating returning military veterans. Most trades have preference policies for veterans and many policies such as age limits have in the past often been modified to encourage veterans' employment in the building trades. <sup>190</sup> Fourteen percent of the veterans returning from the current wars in Iraq and Afghanistan are women. These women veterans will need to be integrated into the domestic workforce with attention to their skills and training. <sup>191</sup> Female veterans seeking employment in the civilian labor market will have several advantages in nontraditional occupations:

they have experience working in a male-dominated field and many will have been exposed to the technical and mathematical knowledge and skill set needed to feel comfortable with the trades' vernacular and tools. Finally, these women will have had experience working in highstress situations, which may reflect the kinds of physical, mental, and interpersonal demands found on construction sites. As the role of women in the military continues to grow, the influx of female veterans will result in increased numbers of women who are capable, trained and ready to enter the building trades. The Helmets to Hard Hats program, established to connect veterans with construction industry employers and apprenticeship programs, has recently begun to develop outreach strategies and programs aimed at providing women veterans with the resources they need to transition into a career in the trades. 192,193

#### **Emerging Green Industry**

With the country's increased focus on green industries, the construction industry is adapting to include more green technologies and practices. 194 New jobs will be created, opening up opportunities for women. 195 The American Recovery and Reinvestment Act of 2009 (ARRA) emphasized a renewed focus on the relationship between the economy and the environment. 196 The U.S. Department of Labor's report, The Greening of Registered Apprenticeship, outlines how apprenticeship programs and the industries they represent, including the building trades - have already begun to incorporate green building methods and materials into their curricula. The shift toward a greener economy could provide a new employment sector within the trades and women, as a key component of potential tradespersons, can help respond to this demand. It will be important, however, to ensure that the shift toward a greener industry does not result in another tiered-employment structure where women and minority workers find employment in lower skilled and lower paid jobs. 197,198

The combination of these economic drivers, the projected labor shortage in construction, the growing importance of women's earnings, returning women veterans, and the expansion of the green economic sector, if combined with the political will to confront and diminish widespread discrimination against women across the construction industry, can both push and pull women into better paying construction jobs. With the recession acting as a focusing event, exposing the cost of occupational segregation to women and their families and with the influx of female veterans, women are positioned to have perhaps unprecedented interest in trades jobs and to demand them. Given the labor needs forecasted and the importance of ensuring that women are employed in jobs that provide sustainable, livable wages, it is imperative that remaining barriers to women's participation be explored and eliminated.

#### A Failure of Enforcement

Enforcement of the existing legal protections (including sexual harassment, affirmative action and equal employment opportunity policies) for women entering or working in the industry remains a significant issue. This is a complex industry and there are many corners where discrimination can hide.<sup>199</sup> Without weighing the relative effects of industry complexity and political will, there is a growing consensus that, in the past, laws and regulations on training and employment for women in the construction industry have rarely been enforced. 200,201,202 There is very limited data and research on compliance by the industry, including apprenticeship programs, unions, and job sites, with policies and laws regarding women's participation or enforcement government agencies. While these entities are often required to report employment statistics, the structure of reporting limits the data's effectiveness. For example, apprenticeship programs often report program completion rates, but do not report employment rates post-graduation. If they do, it is often within the first few months of graduation, rather than long-term follow-up.<sup>203</sup> Since

construction work is often temporary, having been employed at one point does not ensure employment in the future.

By emphasizing reporting over other forms of enforcement, oversight agencies, such as the Office of Federal Contract Compliance, have in the past encouraged shallow commitments to women's recruitment and women are too often selected only for the numbers rather than for true labor supply needs. In theory, this does not present a problem since it gets women employed, however, it only encourages the acceptance and employment of "just enough" women.<sup>204</sup> This reinforces the practice of accepting the minimum number of required women in order to fulfill reporting requirements, rather than accepting increasing numbers of qualified women.

It will be important... to ensure that the shift toward a greener industry does not result in another tiered-employment structure where women and minority workers find employment in lower skilled and lower paid jobs.

Regulations governing equal opportunity have generally relied on the commercial law concept of "good faith effort" of the developer, contractor or union not to intend to discriminate. This broad and abstract term, based on motive and belief, is nearly impossible to prove without concrete evidence of blatant discrimination.<sup>205</sup> It has been suggested that this term would be strengthened if redefined as "maximum possible effort."<sup>206</sup>

Aggressive enforcement remains an important avenue for ensuring more equitable participation of women in the industry, safe working environments, and advancement for women in the trades.

# "Bright Spots:" Promising Practices that Increase Women's Participation in the Construction Workforce

"Where are the bright spots? Where are the ... companies that have truly integrated women onto their workforce? What can we learn from those companies and their apprenticeship programs and unions?"<sup>207</sup>

-Connie Ashbrook, Oregon Tradeswomen, Inc.

The term "best practices" has been described as methods and processes that "have performed exceptionally well and are widely recognized."208 While there are examples of practices that have resulted in increased participation by women in the construction workforce, they are rare, largely unrecognized within the industry and infrequently replicated. The stories of promising practices, times when participation of women has exceeded two to three percent levels in apprenticeship programs and on construction sites, are the folklore of tradeswomen, passed around by word of mouth, through newsletters and, more recently, on the internet. The cases described below reflect stories collected primarily through personal contact and networks. The following are among the documented cases.

#### The Portland Maine Bridge Project

Over the four-year span (1994-1998) of this \$157 million bridge replacement project, the Maine Department of Transportation's (DOT) Office of Equal Opportunity/Employee Relations contracted with a private compliance consultant to provide oversight and monitoring of the DOT's civil rights goals. The DOT sought to increase the number of women on the project through making it "women friendly." They accomplished this through aggressive and daily monitoring of access and participation goals from the planning process to completion of the project. In addition to these aggressive efforts to make opportunities available to women, the Portland Bridge project is most famous among tradeswomen for funding nearsite childcare during the construction phase.<sup>209</sup> In addition to standard hours, the contractor, the Portland YMCA, provided early morning, evening and overnight care which made it possible for women, and men, with young children to work on the job.<sup>210</sup> More than 60 women worked on the project.<sup>211</sup>

## The Moakley Federal Court House in Boston

The federal judges who oversaw the construction of the new Moakley Federal Court House in Boston in the mid 1990's insisted that the project be in compliance with all federal laws, including the 1978 amendment to EO 11246 mandating 6.9% participation of women. At one point, 13 women electricians were on the job and 30% of the crew were women and minorities.<sup>212,213</sup>

#### The Century Freeway Project in Los Angeles County

In 1979, the Century Freeway Consent Decree settled a community lawsuit against construction of a highway in LA county. The settlement addressed the destruction of African American middle class neighborhoods and provided jobs and training for residents, including minorities and women. After tradeswomen and advocates called the court's attention to the poor record of women's employment and recruitment, the goals for women's employment were raised in 1988 and the Women's Employment Program (WEP) was instituted and funded. WEP monitored jobs and met regularly with union officials, apprenticeship coordinators, job superintendents, and foremen, and contractors. WEP also provided a fund for women to get childcare stipends, union initiation fees, tools, boots, and transportation funds; organized a support group for women; provided one-onone guidance to women workers; and conducted media outreach for recruitment of women. The support of the court and funding for this agency was integral to its success. Women's employment on the freeway went from 0.5% of all hours in the first years of construction to 8.2% of all hours in the last years (1992-1994).<sup>214,215</sup>

# Enforcement of New Haven's Local Workforce Participation Ordinance

New Haven Connecticut's Commission on Equal Opportunities (CEO) administers the city's ordinance, "Hiring Practices In The Construction Trades." The CEO requires all city entities involved in construction to designate an internal Compliance Officer who will work with the CEO for the length of the project.<sup>216</sup> All contractors and sub-contractors are required to attend a meeting to discuss hiring of women and minorities prior to the start of a project. In contrast to the standard language requiring contractors and developers to make their "best effort" to hire women and minorities, the New Haven ordinance requires "maximum effort." The city reports women's annual participation rates ranging from 7%-10%,218

#### Impact of Women's Leadership

Individual women have seldom been in positions of power where they could make a substantial and long-term impact on the construction industry's exclusion of women. However, a few exceptions have been documented. New Haven's successful enforcement efforts are led by the woman who serves as the Executive Director of Commission on Equal Opportunities. In the 1990's in Washington State, a woman electrician became the director of the labor/ management apprenticeship program. The number of women in the program increased to 27% while a woman was in charge.<sup>219</sup> The United Brotherhood of Carpenters recently hired two women – experienced carpenters –to head up the union's outreach efforts to women. This follows a ten-year effort by Sisters in the Brotherhood, the carpenters' women's organization, to increase visibility and the numbers of women in the union. Participation of women carpenters as delegates to the union-wide convention increased from 18 to 105 between 2000 and 2010.220

As reported above, mentoring from experienced female journeyworkers has been shown to significantly increase the retention of women in apprenticeship programs (by 25% in Oregon and 18% in Massachusetts).<sup>221</sup> In addition to addressing the problems associated with isolation, formal mentoring programs have pro-

vided opportunities for the exchange of practical skills such as dealing with harassment on the job, time management, work/family issues and obtaining residential sidework.<sup>222,223</sup>

#### New York City's Promising Experiments

- In 2005, Mayor Michael Bloomberg of New York City and the City Building Trades Council signed an agreement to reserve over 40% of apprentice slots for women, veterans, minorities and disadvantaged New Yorkers. The apprenticeship programs committed to reserve 10% of slots for women. 224 Partnering with NEW (Non-traditional Employment for Women) the city commissioned public service advertising to recruit women to the trades. NEW's inquiries from women interested in the trades jumped from and average of 145 a month to 485 a month. 225,226
- The New York Times Building, built between 2004 and 2007 in New York City, had a 15% women participation rate. The developer, Forest City Ratner Companies, has a strong corporate commitment to diversity in its workforce. The company makes compliance a priority through (1) stating employment goals in its bid documents, (2) holding pre-job compliance meetings with contractors and sub-contractors, (3) continual on-site monitoring. A partnership with a community labor exchange provides access to women seeking work in construction.<sup>227</sup>
- In an effort to increase the number of women entering and staying in their fouryear apprenticeship program, the New York City District Council of Carpenters Apprenticeship Program, established a partnership with NEW with goal of recruiting 20 women at a time. This cohort model proved very successful at increasing support and lessening the possibility of isolation and harassment for the women apprentices in school as well as on the job site. Although the economic downturn has reduced the numbers of new apprentices overall, the Carpenters were able to report 15% women in their apprentice program in 2008. 228,229

The examples above are not "best" practices because few of the cases have been tried more than once; they are promising because something worked and it might work again. Moving from anecdotes to strategies will require looking beyond the construction work environment.

# From Bright Spots to Best Practices: Proven Corporate Diversity Strategies

Researchers who examined equal opportunity data on over 700 companies – largely outside the construction industry and focused on management-level positions, grouped organizational interventions into three categories:

- 1. Establishing organizational responsibility for diversity through written plans, diversity committees and diversity staff positions;
- 2. Targeting stereotyping through diversity training and evaluation;
- 3. Addressing social isolation through mentoring and networking.<sup>230</sup>

Their data showed a clear pattern: the most powerful intervention was establishing organizational responsibility for diversity. Furthermore, they found that:

- mentoring and networking had only a modest effect on change; and
- diversity training, when not supported by organizational changes, did not result in greater diversity.

However, the effects of diversity training and mentoring/networking activities were enhanced when they were embedded in an organization that had established responsibility for diversity. The authors are specific in their description of "establishing responsibility." What works is assigning responsibility for creating equal opportunity to individuals and company structures that do not have other jobs to do.<sup>231</sup>

These findings are consistent with the literature and the anecdotal bright spots for tradeswomen. Women's participation has increased above the critical two to three percent threshold when concerted organization measures have been instituted and when individuals in leadership positions have made recruitment and retention of women in the trades a priority.

A second finding from Kalev et al illuminates another problem in the construction industry. Their data showed that employers who signed a government contract that made them subject to legally mandated workplace participation goals for women and minorities, did not have increases in diversity. However, enforcement did increase diversity. The 32% of government contractors in the dataset who had been subject to compliance reviews increased the diversity of their workforces.<sup>232</sup> In the construction sector, the failure to enforce all the requirements of EO 11246, not simply the 6.9% target as it applies to women's participation, may have critically undermined other efforts to increase the number of women in the trades.

#### Conclusions and Recommendations

This review of the scholarly and rich ethnographic literature by and about women in construction has revealed great consistency and supports a causal narrative as to why women rates of participation in the building trades have rarely exceeded three percent. As documented here, women have been kept out and pushed out of the trades through discriminatory apprenticeship practices, overt discrimination from employers, sexual harassment on the job site and during training, and the lack of enforcement of legal policies that are now over three decades old. This narrative has been told not only by researchers, but also by the women themselves since the mid-1970s, when women first began re-entering the trades after being forced out in the post-World War II era.<sup>233</sup>

The women who have succeeded in the trades, overcoming colossal barriers, are not tokenistic pioneers; they represent the uncounted women who want this work and have been kept out. The industry is changing and new populations will be needed to fill the labor shortages that will come with the recovery of the economy. The failure to open the doors of the industry to women now will not only perpetuate the social disease of sexism and discrimination; it

will slow down the growth of the industry and affect the national economy.

This is, in fact, two stories. One is the tale of persistence by women entering and staying in the trades in the face of immense individual and institutional barriers. Both the barriers these women have faced and the strategies that have worked for those who have succeeded despite the barriers are well-documented and demonstrate that individual tradeswomen—with their tools and as writers, artists, bloggers, and more—and their grassroots organizations are the "stakeholders" who have done their job. In fact, they are more than stakeholders; they are the holders of the promise of equal opportunity for women in the construction industry.

The less-documented story is the failure of institutional stakeholders to implement the change in social policy that was initiated by the 1978 amendment to Executive Order 11246. Increasing access and career opportunities for women in the construction trades is the law of the land — a law that has been flouted by most of those who are legally bound to comply with it — and one that has been largely ignored by those charged with enforcing it.

# The failure to open the doors of the industry to women now will ... perpetuate the social disease of sexism and discrimination and slow down the growth of the industry ..

In an effort to help move this persistent problem forward we offer the following suggestions. First, we describe a model for regional collaboration that is bringing together stakeholders committed to implementation of equal employment opportunity for women in the New England construction markets. Second, we propose a set of recommendations that have coalesced through both the literature review and the regional collaboration. These are organized by and addressed to those who are accountable for implementation of the various components that collectively will create equal employment opportunities for women in the construction trades.

#### A Model for Regional Collaboration: Boston's Policy Group on Tradeswomen's Issues (PGTI)

In early 2009, the chair of the Women's Committee of the New England Regional Council of Carpenters (NERCC) approached the Labor Resource Center (LRC) at the University of Massachusetts Boston with a request for assistance in understanding the policymaking aspects of efforts to increase women's access to work in the construction trades. A pending draft research report, commissioned by Legal Momentum in New York and carried out by Northeastern University law students, was raising interesting questions about compliance and enforcement strategies. Concurrently, federal agencies were proposing changes to regulations affecting equal employment opportunities for women in construction. The LRC convened initial meetings of interested parties, including tradeswomen, local and federal government representatives, and researchers.

In early meetings, participants realized that, although most had been involved with this issue for many years and all shared a passion for the cause, few had a complete picture of the various facets of the problem. All were experts in their own silos and there was no consensus on what should happen next. Most participants recognized the need for greater information sharing, relationship building across stakeholder interests, and development of a long-term collaborative effort to solve this problem on a regional level. In the first year, the group's composition and participation levels changed often as some left the group when they felt it did not meet their needs and others joined as the initial circle widened.

By the end of the first year, the group had a name — the Policy Group on Tradeswomen's Issues —which clarified that it was not a tradeswomen's or advocacy organization and that its focus was on policy implementation. PGTI also had a slogan: "We will never, never, never give up." This reflected the sentiment of many participants that the struggle had been long and frustrating and had often left participants feeling defeated. Not this time.

Over the past year and a half, PGTI has shared information, built relationships between re-

gional stakeholders, and had success working with the Boston City Council and the Mayor of Boston's administration to get data from the Boston Resident Jobs Ordinance (BRJO) online and accessible to women, people of color, and Boston residents seeking construction jobs in Boston. The group continues to work with the city to implement compliance with the 25 vear old BRJO mandate to have 10% women's work hours on construction in Boston. As a result, the City has recently convened a series of meetings on "The Status of Women in the Trades." The BRJO Policy Office, City Councilors, Boston Women's Commission, and community-based organizations have met with unions and subcontractors from the major trades to get to the root of barriers for women entering and staying in the trades in Boston and to get commitments from companies to hire more women. The results have been promising as an increasing number of women are working and are in the pipeline for jobs and apprenticeships as the construction economy begins to recover.

Participants in PGTI have included tradeswomen, including union staff and Women's Committees members; researchers; a Northampton MA City Councilor and aides to Boston City Councilors; a representative of the Mayor of Boston's administration; the vice-president of a regional Central Labor Council; representatives from regional Department of Labor agencies including the Office of Federal Contract Compliance Programs, the Office of Apprenticeship, the Women's Bureau; a contractor compliance officer; and the staff of two pre-apprentice programs. Regions represented by those in the group include both eastern and western Massachusetts, Rhode Island, and New Hampshire.

The following recommendations for policy implementation have evolved from the literature reviewed for this report and from over twenty-five hours of group discussions by participants in the Policy Group on Tradeswomen's Issues.

#### **Increasing Industry Compliance**

First and foremost, do not reinvent the wheel. While workplaces across the occupational spectrum in the U.S. have implemented equal employment opportunity standards since the passage of the 1964 Civil Rights Act, the peculiarities of the construction workplace have been used to excuse the industry's failures. But those construction industry stakeholders who have committed to living by the law have discovered that the same practices in other industries work in construction. Legal Momentum has published a set of checklists, readily available on the web, for "Ensuring Equal Opportunity for Women in Construction." To that valuable resource, we add the following:

The construction worksite is where the rubber meets the road on this issue. **Construction contractors**—the employers of record on construction sites—have the legal responsibility for increasing the numbers of women on the job and providing workplaces free of discrimination, harassment, and coercion. **Developers and construction** owners do bear the same legal responsibilities as contractors. However, many of the documented success stories were driven by developers and owners who demanded high standards from their contractors. Decades of practice and evaluation have shown the effectiveness of the following best practices:

- Commitment to equal opportunity starts at the top. Owners and executive management must set the corporate goals and commit to the resources needed for success.
- Responsibility for monitoring for equal employment opportunity must be clearly defined, not combined with other responsibilities and staffed by trained and qualified individuals.
- Diversity training—not the antiquated and discredited anti-lawsuit training of the past—but workplace education that promotes acceptance and respect of dif-

- ferences among groups and individuals is essential to corporate culture change.
- Tracking and reporting, as in any other business function, is essential to maintenance of an effective equal opportunity program.
- As in all of the growing number of industries that involve sub-contracting (subs), the general contractor must set and monitor the same corporate standards among its subs. Penalties and incentives that keep subs to cost and time standards should be applied to equal opportunity standards.

"The challenge is getting acceptance by trade unions, contractors, developers, builders, so that they in their mind can imagine and see a workforce which is 50% women and 50% men."

--Bruce Ratner, President and CEO, Forest City Ratner Companies

Access to jobs and training are critical components of both the recruitment and retention of women in the construction industry. **The building trades unions** are both a major supplier of the construction workforce and an important source of training through labormanagement training programs administered jointly with signatory contractors. Commitment to equal employment opportunity from leadership is no less important in unions than it is in management and written policies are meaningless unless backed up by effective programs and practices. Unions must take the lead on the following issues:

- The myth that women do not want to enter the construction trades is exposed by the success of the rare projects that have actively recruited women. The key to successful recruitment is partnerships which match the women with the opportunities. Apprentice and pre-apprentice programs will find that match when they formally partner with community-based organizations (e.g. anti-poverty agencies, public housing authorities, etc.) to bring women into the trades.
- Women apprentices must have equal opportunity for employment. Union leaders must ensure that business agents and

- others responsible for job placement get women onto worksites and ensure that contractors maintain a workplace free of discrimination, harassment, and coercion.
- Unions must end the all-too-common past practice of moving women from job to job ("checkerboarding") to meet compliance goals. In addition to being illegal, checkboarding severely impacts any worker's development and cheats them of the skills of their trade.
- Quality diversity education must be built into all levels of union training programs from apprenticeship to leadership development. Union stewards are the face of the union on worksites. Some unions are moving towards requiring diversity training for all stewards. All building trades unions should adopt this policy.
- Union leaders should actively encourage the establishment of Women's Committees at all levels from apprenticeship training centers to the national union. In addition to support for individual women, Women's Committees serve a consultative function in organizations committed to change and also as a base for developing the union's female leaders of the future.

## Improving the Effectiveness of Government Enforcement

If there is a "game changer" in this effort, it may be effective enforcement of the law of the land by the agencies holding statutory responsibility. At the federal level, the ultimate penalty for egregious violations of government regulations by private contractors, including equal employment opportunity requirements, is debarment, or a banning from bidding on government contracts. This process has never been applied to a construction contractor who has discriminated against women.<sup>235</sup> Short of debarment, government agencies have many options including suspension, termination, and cancellation of existing contracts. It is unclear why penalties have not been imposed while discrimination has been so blatant for so many years. Whether due to bureaucratic inefficiencies, fears of lawsuits attacking affirmative action, other causes or, most likely, a combination of factors, the current comprehensive and detailed regulations can be effective if enforced. We recommend the following steps to get the process of enforcement in motion:

- Explicitly make enforcement of equal employment opportunities an agency-wide priority. This will require devoting training and additional resources to increasing and targeting investigations and follow-up on violations.
- Make the industry aware of this priority through publications, trade press, social media, and other communications. Bring industry leaders — both management and union—on board to promote the benefits to the economy and the construction industry of increasing access to women.
- Be transparent in enforcement. Stakeholders want to know what is being done and where. Go beyond high-level industry contacts to build relationships with local tradeswomen's organizations, union Women's Committees, and others who are organizing for industry change.
- Make processes and results public and accessible. Web-based reporting of public data should include, but not be limited to, names and addresses associated with investigations, violations, show cause notices, penalties, and dispositions.

All of the above can be done now and without a single change in regulation. We offer the following recommendations if regulatory change is undertaken:

- Develop bid incentives for the good actors. Industry leaders who consistently comply with equal opportunity standards should be given preference in contracting.
- The requirement that contracts and unions make "good faith efforts" is a weak link in affirmative action. "Maximum efforts" raises the bar on those seeking to evade compliance.
- Agencies involved in workforce development and funding for training should require that those receiving funding are partnering with, and budgeting for, appropriate community-based organizations

that can ensure a good match of training with the women who have strong economic motivation to succeed in the construction trades.

# Focusing the Efforts of Research and Advocacy Organizations

While researchers and advocates have no legal responsibility for policy implementation, their choices can may accelerate or delay change. Many tradeswomen, and especially activists, are righteously resentful of being studied by so many while their working conditions go unchanged. As one tradeswoman wrote, and many have said, "We don't need any more research; we need action from the federal government."236 We propose a reframing of that sentiment: researchers and advocates who are working to increase access to construction jobs for women should focus their work on compliance by contractors and enforcement by government agencies. With that frame, we make the following recommendations:

- University-based researchers and nonprofit advocacy organizations have greater resources than tradeswomen's organizations and those resources, such as meeting space, copying, minute taking, archiving, etc., should be used to staff and support collaborations.
- Research and advocacy organizations can serve as a neutral convener, both bringing stakeholders together and also for facilitating cross-union activities when tradeswomen are trying to go beyond jurisdictional antagonisms between the trades.
- Uneven resources should not lead to unequal power. Tradeswomen are the experts on this issue and their experiences and positions need to be given appropriate weight.
- There has been a tremendous number of important student-initiated projects investigating the state of women in construction. Students should be discouraged from studying what has already been amply documented and encouraged to break

- new ground that will move the persistent problem.
- Research into the causes of the failure of policy is needed in addition to action research into strategies that will move the issue forward.
- Researchers can better do their jobs if government agencies make data available and, therefore, can play an important role in pressuring the government to make data public and accessible.

To all stakeholders — industry, government, researchers, advocates and tradeswomen — we recommend a major shift in focus and resources from training to retention and advancement of women in the industry. The number of women who have been recruited to the trades, received training and achieved entry level status is exponentially higher than the number who have stayed in the trades and made it a career. Yet the time and resources spent on recruitment far outweighs that spent on retention. Keeping women at work and in the industry is critical to success.

Finally, we recommend that all parties committed to equal employment for women in the construction trades join Bruce Ratner, President and CEO of Forest City Ratner Companies, in setting a goal of 50% women in the trades.<sup>237</sup> We recommend that the target date for reaching our goal be 2028, the 50th anniversary of the 1978 amendment to EO 11248.

# Appendix: Organizations Providing Training, Advocacy and Support for Women in the Trades

Chicago Women in the Trades (CWT) www.chicagowomenintrades.org 4425 S. Western Rear, Chicago, IL 60609 ph: 773.376.1450; fax: 773.376.1456

Chicago Women in Trades (CWIT) is celebrating 25 years of supporting, encouraging, and training women in high-skilled, high-wage nontraditional careers. Originally established by tradeswomen as a support network, CWIT addresses the barriers that prohibit women and girls from entering and succeeding in male-dominated industries by creating opportunities and promoting equitable workplaces and conditions.

Hard Hatted Women www.hardhattedwomen.org 4220 Prospect Ave, Cleveland, Ohio 44103 info@hardhattedwomen.org ph: (216) 861-6500; toll free: 1.877.353-1114; fax: (216) 861.7204

Hard Hatted Women works to empower women to achieve economic independence by creating workplace diversity in trade and technical careers. It pursues its mission through the following goals:

- Encourage and prepare women for nontraditional employment through outreach, education, training, support, and job placement assistance
- Advocate for and implement systems which promote equity in recruitment, training and hiring
- Work to eliminate harassment and discrimination against workers on the basis of gender, race, sexual orientation or age
- \* Create equitable work environments for women and minorities through education, training and resources
- \* Advocate for systemic change on issues which impact our region's economy on workforce development issues and economic access on local, state, and regional levels

#### Legal Momentum www.legalmomentum.org 395 Hudson Street, New York, NY 10014 ph: (212) 925-6635; fax: (212) 226-1066

Legal Momentum is a leader in promoting opportunity and equality for women in non-traditional job sectors, such as the construction trades and in law enforcement, many of which are high-paying, have career tracks, and provide job security, annual leave, and other benefits. We advocate for policies that improve women's access to such jobs, support and organized constituency of tradeswomen, and engage in litigation challenging rampant employment discrimination in these jobs.

Missouri Women in Trades (MoWIT) www.missouriwomenintrades.org 8300 Manchester Rd, Brentwood, MO 63144 ph: (314) 963-3200; fax: (413) 963-3284

Missouri Women in Trades (MOWIT) promotes and supports women working in the construction trades by building awareness of the trades as a career choice and providing a support network for tradeswomen.

# NEW - Nontraditional Employment for Women www.new-nyc.org

243 West 20th Street, New York, NY 10011 ph: (212) 627-6252; fax: (646) 486-2293

Nontraditional Employment for Women (NEW) trains women and places them in careers in the skilled construction, utility, and maintenance trades, helping women achieve economic independence and a secure future.

Oregon Tradeswomen, Inc www.tradeswomen.net 3934 NE Martin Luther King Jr. Blvd. #101, Portland, Oregon 97212 ph: (503) 335-8200; fax: (503) 249-0445

Oregon Tradeswomen, Inc. is dedicated to promoting success for women in the trades through education, leadership and mentorship.

#### Sisters in the Brotherhood (SIB) www.ubcsisters.org Liz.Skidmore@carpenters.org jwilliams@carpdc.org

Founded in 2002, the Sisters in the Brotherhood (SIB) is an organization of women carpenters working to build a stronger union by increasing the numbers, diversity, participation and leadership of women in the United Brotherhood of Carpenters and Joiners of America (UBC). SIB has held three international conferences for women carpenters from throughout the US and Canada, and has assisted in the formation of over 15 local chapters of Sisters in the Brotherhood, with more being developed. SIB authored a "Blueprint for Increasing the Number of Women in the UBC," which was adopted by the 2005 UBC General Convention.

#### Tradeswomen Archives www.tradeswomenarchives.com vprice@csudh.edu

On-line archive linking with our friends in the US and around the world to document the history and present of women in non-traditional blue collar jobs.

#### Tradeswomen, Inc. www.tradeswomen.org 1433 Webster Street, Oakland, CA 94612 ph: (510) 891-8773 ext. 315, fax: (510) 891-8775

California's first organization for women in the trades was founded in 1979 as a grass- roots support organization. We build community among the growing numbers of women in blue collar, skilled craft jobs. Tradeswomen, Inc. has three goals:

- · Recruit more women into building and construction trades.
- Promote retention of women in the trades
- Develop tradeswomen's capacity for leadership and career growth, on the job and in their unions

#### Tradeswomen Now and Tomorrow www.tradeswomennow.org/index.html TNT c/o CWIT, 1455 South Michigan, Suite 210, Chicago, IL 60605 info@tradeswomennow.org

A national organization bringing together tradeswomen, their organizations, and advocates to increase women's access and sustained employment in high-skilled, highpaying trade and technical occupations.

#### Vermont Works for Women www.nnetw.org info@vtworksforwomen.org 32A Malletts Bay Ave., Winooski, VT 05404 ph: (802) 655-8900; toll free: (800) 639.1472 fax: (802) 655-8922;

A 501c3 nonprofit organization founded in 1987, Vermont Works for Women has an extensive record of accomplishment in working with women, young adults, educators and employers and in developing, implementing, and growing innovative programs. VWV helps women and girls recognize their potential and explore, pursue and excel in work that leads to economic independence; works to address the needs of women in Vermont to earn a livable wage and to http://www.bbb.org/charity-reviews/ boston/toc/vermont-works-for-women-in-winooski-vt-8559succeed despite numerous personal, educational and economic barriers to employment; and to educate women and girls about the wide array of nontraditional career opportunities available to them, many of which may have never occurred to them to pursue. We serve women and girls from all over the state, from a wide variety of races, ethnicities, economic backgrounds, sexual orientations and physical abilities.

#### Washington Women in the Trades www.wawomenintrades.com/ PO Box 24972, Seattle, WA 98124 ph: (206) 903-9508

Washington Women in Trades (WWIT) is a community based, non-profit 501 (c)(3) organization whose mission is to improve women's economic equity and self-sufficiency through access and success in high-wage, high-skilled careers in the construction, manufacturing and transportation sector.

Wider Opportunities for Women (WOW) www.wowonline.org/ 1001 Connecticut Avenue, NW, Suite 930, Washington, DC 20036 ph: (202) 464-1596

Wider Opportunities for Women (WOW) works nationally and in its home community of Washington, DC to build pathways to economic independence for America's families, women, and girls. WOW has a distinctive history in changing the landscape of women and work.

## Women's Bureau, U.S. Department of Labor www.dol.gov/wb/welcome.html

One of the Women's Bureau's Priority Issues is Higher Paying Jobs for Women-Many jobs in the skilled trades, the green sector and other nontraditional industries for women, including STEM (science, technology, engineering & math) can be lucrative and are pathways for women and their families to remain or move into middle-class status.

## Women In Non Traditional Employment Roles (WINTER)

www.winterwomen.org 3655 South Grand Avenue, Suite 210 Los Angeles, CA 90007 ph: (213) 749-3970; fax: (213) 749-3918

A non-profit economic development agency and a national leader in diversity workforce development and education. WINTER is the only non-traditional employment organization for women and youth serving Southern California since 1996. Environmental remediation, infrastructure rebuilding, and green building construction are all fields currently poised for growth. But if women are going to benefit from the growth within these highly technical industries, they must be trained. WINTER fills this mission, not only offering the right training programs and opportunities but also partnering with employers, and registered apprenticeship programs to level the non traditional employment playing field.

#### Women Unlimited www.womenunlimited.org/ 103 Winthrop Street, Augusta, ME 04330-5510 ph: (207) 623-7576; toll free: (800) 281-5259 fax: (207) 623-7299

Offering basic and advanced training, job-placement assistance, advocacy, and networking opportunities. Find up-to-date information on careers in construction and related fields, and assistance for employers looking for a twenty-first century workforce. Partner with the Maine Department of Transportation and the Federal Highway Administration to place Job Bank members into On-The-Job Training (OJT) positions.

#### References

- Moccio, F. A. (2009). Live wire: Women and brotherhood in the electrical industry. Philadelphia, PA: Temple University Press.
- The term "journeyman" has historically been used to describe a worker who has completed his or her apprenticeship. In a final rule in 2008, the Department of Labor ruled in 2008 stated, "With regard to the use of the term 'journeyworker,' the Department of Labor is committed to avoiding the use of terms that are or may appear to be gender-specific, even if the historic usage of the term has not been so. We disagree with the assertion that the term journeyman is not gender-specific. Accordingly, the final rule retains the term 'journeyworker.'" Federal Register, Employment and Training Administration 29 CFR 29 Apprenticeship Programs, Labor Standards for Registration, Amendment of Regulations, Final Rule, October 29, 2008.
- <sup>3</sup> Brown, J. & Jacobsohn, F. (2008, July). From the ground up: Building opportunities for women in construction. New York, NY: Legal Momentum.
- Boushey, H. (2009, January). Equal pay for breadwinners: More men are jobless while women earn less for equal work. Washington, DC: Center for American Progress.
- Albelda, R. & Kelleher, C. (2010, March). Women in the down economy: Impacts of the recession and the stimulus in Massachusetts. Boston, MA: Center for Women in Politics & Public Policy.
- Siverberg, H. (2009). Fair employment practices. In W. Mankiller et al. (Eds.) Reader's companion to U.S. women's history. Retrieved October 8, 2010, from http://www.bibliobase.com/history/readerscomp/ women/html/wh\_012600\_fairemployme.htm
- <sup>7</sup> Ibid.
- 8 Ibid.
- <sup>9</sup> Cuda, C. (1986). The development of a training program to prepare women for a career in non-traditional employment. (Unpublished Dissertation). University of Pittsburgh, Pittsburgh, PA.
- Rabalais, F. X. (1991). Women, hard hats, and the building trades. (Unpublished Master of Arts Thesis in Occupational Studies). California State University, Long Beach, CA.
- 11 Ibid.
- <sup>12</sup> Renzetti, C. M. & Curran, D. J. (1999). Women, men, and society. Boston: Allyn and Bacon.
- <sup>13</sup> McCann, M. (1994). Rights at work: Pay equity reform and the politics of legal mobilization. Chicago, IL: University of Chicago Press; Rowland, D. (2004). The boundaries of her body: A history of women's rights in America. Naperville, IL: Sphinx Publishing.
- 14 Rowland, D. (2004). The boundaries of her body: A history of women's rights in America. Naperville, IL: Sphinx Publishing.
- United States Department of Labor. (2010, October). Executive order 11246. Retrieved October 9, 2010, from http://www.dol.gov/compliance/laws/comp-eeo. htm
- <sup>16</sup> United States Office of Federal Contract Compliance Programs. (2010). Federal contract compliance manual: Chapter 4 construction. Retrieved October

- 9, 2010, from http://www.dol.gov/ofccp/regs/compliance/fccm/ofcpch4.htm
- <sup>17</sup> United States Department of Labor. (1980). Construction contractors, affirmative action requirements (Report No. 41 CFR Part 60-4). Retrieved October 9, 2010, from http://www.dol.gov/ofccp/TAguides/fedreg12301980.htm
- <sup>18</sup> United States Office of Federal Contract Compliance Programs, Federal contract compliance manual: Chapter 4 — construction, op.cit.
- Dobbin, F. & Sutton, J.R. (1998). The strength of weak state: The rights revolution and the rise of human resources management divisions. Journal of American Sociology 104, (2).
- <sup>20</sup> Edelman, L. B. (1992). Legal ambiguity and symbolic structures: Organizational mediation of civil rights law. American Journal of Sociology 97, (6).
- <sup>21</sup> Edelman, L. B., Krieger, L. H., Eliason, S. R., Albiston, C. & Mellema, V. A. (2006, June 21). When organizations rule: Judicial deference to institutionalized employment structures. Retrieved December 1, 2010 from http://ssrn.com/abstract=910940
- <sup>22</sup> Rabalais (1991)
- <sup>23</sup> Higher percentages of women's participation in the industry have been reported, but these percentages include the employment of women in professional positions within the trades such as those in the office settings. For example, in the Center to Protect Worker's Rights (CPWR) December 2007 publication, The construction chart book: The U.S. construction industry and its workers (http://www.cpwr.com/ pdfs/CB%204th%20Edition/Fourth%20Edition%20 Construction%20Chart%20Book%20final.pdf), The industry is divided into three sub-sections: clerical and support, manager and professional, and production occupations. Women comprise 52%, 27%, and 21%, respectively. This is an important statistical distinction demonstrating occupational segregation within the construction industry. Women in the industry are highly concentrated in more traditionally female, and lower paid, occupational positions.
- <sup>24</sup> United States Bureau of Labor Statistics. (2008). Women in the labor force: A databook. Retrieved October 8, 2010, from http://www.bls.gov/cps/wlf-table10-2008.pdf
- United States Bureau of Labor Statistics. (2009, May). Occupational employment statistics: Occupational employment and wages. Retrieved October 8, 2010, from http://www.bls.gov/oes/current/oes470000.htm
- United States Bureau of Labor Statistics. (2008). Median usual weekly earnings of full-time wage and salary workers by detailed occupation and sex, 2007 annual averages. Retrieved October 12, 2010, from http://www.bls.gov/cps/wlf-table18-2008.pdf
- <sup>27</sup> United States Bureau of Labor Statistics. (June, 2010). An overview of U.S. occupational employment and wages in 2009. Retrieved October 8, 2010, from http://www.bls.gov/oes/highlight\_2009.pdf
- <sup>28</sup> United States Bureau of Labor Statistics. (2008). Median usual weekly earnings of full-time wage and salary workers by detailed occupation and sex, 2007 annual averages, op.cit.

- <sup>29</sup> Ericksen, J.A., & Schultheiss, D.E.P. (2009). Women pursuing careers in trades and construction. Journal of Career Development, 36 (1), 68-89.
- Mansfield, P.K., Koch, P.B., Henderson, J., Vicary, J.R., Cohn, M. & Young, E. W. (1991). The job climate for women in traditionally male blue-collar occupations. Sex Roles, 25 (1/2), 63-79.
- 31 Ibid.
- 32 Eisenberg, S. (1998). We'll call you if we need you. New York, NY: Cornell University Press.
- 33 Ahearn Greene, J. (2006). Blue-collar women at work with men: Negotiating the hostile environment. Westport, CT: Praeger Publishers.
- 34 Moccio, F. A. (2009).
- Marshall, N. L. (1989). Women in the trades: Final report of a survey of Massachusetts tradeswomen. Working Paper No. 195. Wellesley College, Massachusetts Center for Research on Women.
- <sup>36</sup> LaTour, Jane, Sisters in the Brotherhoods: Working Women Organizing for Equality in New York City, Palgrave Macmillan, NY, NY, 2008
- <sup>37</sup> Goldenhar, L.M., Hecker, S., Moir, S., & Rosecrance J. (2003). The "goldilocks model" of overtime in construction: not too much, not too little, but just right. Journal of Safety Research, 34(2), 215-26.
- Moir, S., & Azaroff, L. (2008). The Boston-area HASWIC research circle: An innovative participatory method for coloring in the picture of a special work environment. In C. Levenstein (Ed.), At the point of Production: The social analysis of occupational and environmental health: Baywood. Amityville, NY: Baywood Publishing Company, Inc.
- <sup>39</sup> Weiss, L. (2010). Opening doors: How to make the workforce investment act work for women. Center for American Progress, Washington, DC.
- <sup>40</sup> Mastracci, S.H. (2004). Breaking out of the pink-collar ghetto: Policy solutions for non-college women. Armonk, NY: M.E. Sharpe Inc.
- <sup>41</sup> Byrd, B. (1999). Women in carpentry apprenticeship: A case study. Labor Studies Journal, 24(3), 3.
- <sup>42</sup> Rabalais (1991)
- <sup>43</sup> Haignere, L., & Steinberg, R. J. (1990). Nontraditional training for women: Effective programs, structural barriers, and political hurdles. In S. L. Harlan, & R. J. Steinberg (Eds.), Job training for women: The promise and limits of public policy (pp. 333-358). Philadelphia, PA: Temple University Press.
- <sup>44</sup> Glover, R. W. (1990). Apprenticeship: A route to the high-paying skilled trades for women, In S. L. Harlan, & R. J. Steinberg (Eds.), Job training for women: The promise and limits of public policy (pp. 269-289). Philadelphia, PA: Temple University Press.
- <sup>45</sup> Harlan, S. L. (1990). Women and federal job training policy. In S. L. Harlan, & R. J. Steinberg (Eds.), Job training for women: The promise and limits of public policy (pp. 55-90). Philadelphia, PA: Temple University Press.
- <sup>46</sup> Kane, R. D., & Miller, J. (1981). Women and apprenticeship: A study of programs designed to facilitate women's participation in the skilled trades. In Apprenticeship Research: Emerging findings and future trends proceedings of a conference on apprenticeship training held April 30 and May 1, 1980, 83-105.

- <sup>47</sup> Briggs, N. (1974). Women in apprenticeship, Why not? Manpower Research Monograph, No. 33. Washington, DC: U.S. Government Printing Office.
- 48 Eisenberg (1998)
- <sup>49</sup> Kane & Miller (1981)
- 50 Briggs (1974)
- 51 Ibid
- Price, V. (2002). Race, Affirmative Action, and Women's Employment in US Highway Construction. Feminist Economics, 8 (2).
- 53 Eisenberg (1998)
- 54 Glover (1990)
- 55 Kane & Miller (1981)
- <sup>56</sup> Moccio (2009)
- <sup>57</sup> Moir & Azaroff (2008)
- <sup>58</sup> Glover (1990)
- <sup>59</sup> Byrd (1999)
- 60 Eisenberg (1998)
- 61 Schroedel, J.R. (1985). Alone in a crowd: Women in the trades tell their stories. Philadelphia, PA: Temple University Press.
- 62 Haignere & Steinberg (1990)
- 63 Byrd (1999)
- <sup>64</sup> Byrd, B. (2001). Great work if you can get it: Women in the skilled trades. In M. C. King (Ed.), Squaring up: Policy strategies to raise women's incomes in the United States, pp. 200-225. Ann Arbor, MI: University of Michigan Press.
- 65 Byrd (2001)
- 66 Byrd (1999)
- 67 Eisenberg (1998)
- 68 Cuda (1986)
- 69 Byrd (2001)
- <sup>70</sup> Kane & Miller (1981)
- For example, the National Center for Education Statistics reports that, in 2005, among male graduates of public high school graduates, 4% were 2-credit occupational concentrators in construction and architecture. Another 2.3% of male public high school graduates in 2005 were 3-credit occupational concentrators in construction and architecture. Among female public high school graduates, however, only .4% were 2-credit occupational concentrators in construction and architecture, and only .2% were 3-credit concentrators Retrieved from http://nces.ed.gov/surveys/ctes/tables/h84.asp
- Vetter, L. (1990). The vocational education option for women. In S. L. Harlan, & R. J. Steinberg (Eds.), Job training for women: The promise and limits of public policy (pp. 91-113). Philadelphia, PA: Temple University Press.
- Giese, E. (1990). Expanding occupational choices in Michigan's secondary vocational education. In S. L. Harlan, & R. J. Steinberg (Eds.), Job training for women: The promise and limits of public policy (pp. 316-332). Philadelphia, PA: Temple University Press.
- Moore, K. (1977). A study of two-year college women in New York City: Characteristics, career determinants and perceptions. New York Institute for Research and Development in Occupational Education, New York

- State Education Department, Bureau of Two-Year College Programs, Cornell Institute for Research and Development in Occupational Education.
- <sup>75</sup> Carl D. Perkins Career and Technical Education Improvement Act of 2006, Public L. No. 105–332.
- <sup>76</sup> Gaudet, J. D., & Savoie, I. (2007). Gender stereotypes and the role played by guidance counselors in accompanying girls in atypical career choices. The International Journal of Diversity in Organisations, Communities and Nations, 7, 19-26.
- <sup>77</sup> Iowa Commission on the Status of Women. (2010, October). Women and non-traditional occupations in central Iowa: Attitudes and opinions. Retrieved December 2, 2010, from https://21stcenturyapprenticesh ip.workforce3one.org/view/2001029479251873453/ info
- <sup>78</sup> Russell, M. (2010, October). Massachusetts Department of Elementary and Secondary Education Office for Career/Vocational Technical Education, personal communication, October 5, 2010.
- <sup>79</sup> United States Bureau of Labor Statistics. Industries at a glance: About the construction sector. Retrieved December 1, 2010, from http://www.bls.gov/iag/tgs/iag23.htm.
- Freeman, R. & Leonard, J. (1987). Union maids: Unions and the female workforce. In C. Brown and C. Pechman (Eds.), Gender and the Workplace (pp. 189-212). Washington, DC: Brookings Institution.
- <sup>81</sup> O'Farrell, B. & Moore, S. (1993). Unions, hard hats, and women workers. Ithaca, NY: ILR Press.
- 82 Center to Protect Workers Rights. (2007). The con struction chart book: The U.S. construction industry and its workers.
- Skidmore & Moir, S. (2004, September). Pre-apprenticeship model for women entering and succeeding in the construction trades: A report to YouthBuild Providence. Retrieved October 8, 2010, from http://www.bfri.org/Portals/0/Uploads/Documents/Public/Designing%20a%20Pre-Apprenticeship%20Model%20 for%20Women.pdf.
- 84 Eisenberg (1998)
- 85 Goldenhar L.M. et al. (2003).
- 86 Moir & Azaroff (2008).
- 87 Skidmore & Moir (2004).
- Argyres, A. & Moir, S. (2008). Building trades apprentice training in Massachusetts: An analysis of union and non-union programs, 1997-2007. Retrieved October 9, 2010, from http://www.cpcs.umb.edu/lrc/documents/BTApprRptOct08\_001.pdf
- <sup>89</sup> Berik, G. & Bilginsoy, C. (2001). Do unions help or hinder women in training? Apprenticeship programs in the United States. Industrial Relations, 39 (4), 600-623.
- <sup>90</sup> Berik, G., and Bilginsoy, C. (2002). Unions and women's training for the skilled trades in the United States. Review of Black Political Economy, 29 (4), 97–122.
- <sup>91</sup> Berik, G. & Bilginsoy, C. (2001).
- <sup>92</sup> California Department of Industrial Relations. (2006). Blue ribbon committee on women in apprenticeship. Retrieved October 9, 2010, from www.dir.ca.gov/das/women%20in%20apprenticeship%20final.pdf.
- <sup>93</sup> Berik, G. and Bilginsoy, C. (2006) Still a wedge in the door: women: training for the construction trades in

- the USA. International Journal of Manpower, 27(4), 321-341
- <sup>94</sup> Houser, J. Regional Director, Region I, Office of Apprenticeship, personal communication, September 14, 2010.
- <sup>95</sup> United States Department of Workforce Development. (2010, September). Minorities and women in construction trade apprenticeships. Retrieved October 14, 2010, from http://www.legis.state.wi.us/lab/reports/10-12highlights.htm
- <sup>96</sup> United States Bureau of Labor Statistics. (2010). Occupational Outlook Handbook 2010-11 Edition. Retrieved October 9, 2010, from http://www.bls.gov/oco.
- 97 Eisenberg (1998).
- 98 Moir & Azaroff (2008).
- 99 Skidmore, E. New England Regional Council of Carpenters, personal communication, September 14, 2010.
- <sup>100</sup> Cooper. A. (2010, September). Anderson Cooper 360: Paladino Apologizes for Offensive E-mails [Video file]. Retrieved October 12, 2010, from http://ac360.blogs. cnn.com/2010/09/17/video-paladino-apologizes-for-offensive-e-mails/?iref=allsearch
- 101 Cuda (1986)
- 102 Byrd (2001)
- <sup>103</sup> Applebaum, H. A. (1981). Royal blue: The culture of construction workers. New York: Holt, Rinehart, and Winston.
- <sup>104</sup> Mansfield et al. (1991)
- <sup>105</sup> United States Department of Labor Advisory Committee on Construction Safety and Health. (1999, June). Women in the construction workplace: Providing equitable safety and health protection. Retrieved October 9, 2010, from http://www.osha.gov/doc/accsh/haswicformal.html
- <sup>106</sup> Goldenhar, L.M., Hurrell, J.J., Swanson, N., Ruder, A., and Deddens, J. (1996, September). Effects of on-thejob harassment: Outcomes for women construction workers. Preliminary Survey Findings. Presented at APA-CDC Conference on Women's Health, Washington DC.
- <sup>107</sup> United States Department of Labor Advisory Committee on Construction Safety and Health. (1999, June). Women in the construction workplace: Providing equitable safety and health protection. Retrieved October 9, 2010, from http://www.osha.gov/doc/accsh/haswicformal.html
- 108 Greene (2006)
- <sup>109</sup> Dabke, S., Salem, O., Genaidy, A., Daraiseh, Nancy. (2008, March). Job satisfaction of women in construction trades. Journal of Construction Engineering & Management 134(3), 205-216.
- Welch L.S., Goldenhar L.M., Hunting K.L. (2000, Spring). Women in construction: Occupational health and working conditions. Journal of the American Medical Women's Association 55(2), 89-92.
- <sup>111</sup> Denissen (2010)
- <sup>112</sup> Denissen, A. M. (2010a). Crossing the line: How women in the building trades interpret and respond to sexual conduct at work. Journal of Contemporary Ethnography, 39(3), 297-327.

- <sup>113</sup> Applebaum (1981)
- <sup>114</sup> Denissen (2010, p. 297)
- 115 Eisenberg (1998)
- <sup>116</sup> Denissen (2010a)
- <sup>117</sup> Denissen (2010a)
- <sup>118</sup> Nissimov, R. (1993, August 3). Singing the blue-collar blues; ending isolation of non-traditional working women. Plain Dealer (Cleveland, Ohio), pp. 4C.
- <sup>119</sup> Eisenberg (1998)
- 120 Byrd (2001)
- 121 Martin, M. (ed.). (1988). Hard Hatted Women: Life on the Job. Seattle, WA: Seal Press.
- 122 Byrd (2001)
- <sup>123</sup> ACCSH/HASWIC. (1997). Health and safety of women in construction workgroup: Occupational health and safety administration. Advisory committee on construction safety and health (ACCSH), United States Department of Labor. Retrieved September 5, 2010, from http://www.elcosh.org/en/document/582/d000561/ women-in-the-construction-workplace%253A-providing-equitable-safety-and-health-protection.html-
- 124 Denissen, A.M. & Saguy, A.C. (2010). "I'm not free porn" Lesbian tradeswomen and the contradictions of workplace discrimination. Unpublished manuscript.
- <sup>125</sup> Renzetti & Curran (1999)
- 126 Ibid.
- <sup>127</sup> Ibid.
- <sup>128</sup> Denissen, A. M. (2010). The right tools for the job: Constructing gender meanings and identities in the male-dominated building trades. Human Relations, 1,1-19.
- <sup>129</sup> Goldin, C. (1994). Understanding the gender gap: An economic history of American women. In P. Burstein, Ed., Equal employment opportunity: Labor market discrimination and public policy, pp. 17-26. New York, NY: de Gruyter Inc.
- 130 Dabke et al. (2008)
- <sup>131</sup> Papp, K. (2006). Working construction: Why white working-class men put themselves – and the labor movement – in harm's way. Ithaca, NY: ILR Press.
- 132 Byrd (2001)
- 133 Denissen (2010)
- <sup>134</sup> Rabalais (1991)
- <sup>135</sup> Moccio, F. A. (1992). Contradicting male power and privilege: Class, race and gender relations in the building trades. Unpublished dissertation, New School for Social Research.
- <sup>136</sup> Martin (1988, p. 43)
- <sup>137</sup> Padin, M., United Brotherhood of Carpenters, Local 8, Philadelphia, personal communication, November 23, 2010.
- 138 Erikson (1999)
- <sup>139</sup> The important question of why women have been more successful at integrating professional fields is beyond the scope of this paper. However, research has shown that (1) isolation reduces the chance that women or minorities will take action against discrimination and (2) the higher the wage, the more likely a worker will seek legal redress against discrimination. (See Donohue, J.J., III, & Seigelman, P. The changing

- nature of employment discrimination litigation. Stanford Law Review 43(983) 1991.)
- <sup>140</sup> Rabalais (1991)
- <sup>141</sup> Saucedo, L. M., Morales, M.C. (2010, Summer). Masculinities narratives and Latino immigrant workers: A case study of the Las Vegas residential construction trades. Harvard Journal of Law & Gender 33.625.
- <sup>142</sup> Braid, K. "The Culture of Construction, or Etiquette for the Non-Traditional." IN Cohen, M. G. ed. (2003) Training the Excluded for Work. Vancouver, BC: BC Press.
- <sup>143</sup> Denissen (2010)
- 144 Denissen & Saguy (2010)
- 145 Papp (2006)
- <sup>146</sup> Applebaum (1981)
- <sup>147</sup> Denissen & Saguy (unpublished)
- 148 Ibid.
- <sup>149</sup> Coleman, J. (1988). Social capital in the creation of human capital. The American Journal of Sociology, Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure, 94, 95-120.
- 150 Eisenberg (1998)
- 151 Ibid.
- <sup>152</sup> Houser, J., Office of Apprenticeship, personal communication, October 20, 2010.
- 153 Eisenberg (1998)
- 154 Byrd (2001)
- 155 Marshall (1989)
- 156 Price, V. "Roots of Tradeswomen Activism in Seattle," Working USA, forthcoming.
- 157 Skidmore & Moir (2004)
- 158 Byrd (2001)
- 159 Marshall (1989)
- 160 Shewring, F. (2010) The Future's Rosie: Initiatives and pathways for tradeswomen in the United States of America – an Australian Perspective. NAWIC International Women's Day Scholarship research, 2010.
- <sup>161</sup> McCormack, S. (1998). Reflections on Affirmative Action. Boston Tradeswomen's Network Newsletter, 3 (2), p. 1.
- <sup>162</sup> Menches, C., & Abraham, D. (2007). Women in construction: Tapping the untapped resource to meet future demands. Journal of Construction Engineering and Management, 133 (9), 701-707.
- 163 Boushev (2009)
- 164 Albelda & Kelleher (2010)
- Prokos, A. & Padavic, I. (2000). Earn all that you can earn: Income differences between women veterans and non-veterans. Journal of Political and Military Sociology, 28 (1), 60-74.
- <sup>166</sup> Segal, M. (1995).Women's military roles cross-nationally: Past, present, and future. Gender and Society, 9(6), 757-775.
- <sup>167</sup> United States Department of Labor. (2009). The greening of apprenticeship. Washington, DC: Government Printing Office.
- <sup>168</sup> Ireland, B. (2007, January). Skilled labor shortage in America. Electrical Construction & Maintenance

- (EC&M) magazine. Retrieved October 13, 2010, from http://ecmweb.com/mag/electric wanted skilled labor
- <sup>169</sup> Menches & Abraham (2007)
- <sup>170</sup> Skidmore & Moir (2004)
- 171 The Center for Construction Research and Training (2007, December). Section 12: Worker age in construction and other industries. In The construction chart book 4th edition. Retrieved October 13, 2010, from http://www.elcosh.org/en/document/54/1314/d000038/sect12.html
- <sup>172</sup> Chini, A., Brown, B., & Drummond, E. (1999). Causes of the construction skilled labor shortage and proposed solution. The ASC 34 annual meeting (187-196). San Luis Obispo, CA.
- <sup>173</sup> United States Bureau of Labor Statistics. (2010). Career guide to industries, 2010-2011 edition: Construction. Retrieved October 9, 2010, from http://www.bls.gov/oco/cg/cgs003.htm#related
- <sup>174</sup> Ibid.
- <sup>175</sup> Menches & Abraham (2007)
- <sup>176</sup> American Household Survey, 1997, 2009. Retrieved December 1, 2010 from http://www.census.gov/hhes/ www/housing/ahs/nationaldata.html
- <sup>177</sup> United States Congress Joint Economic Committee. (2010, August). Women and the economy 2010: 25 years of progress but challenges remain. Report by the U.S. Congress Joint Economic Committee. Retrieved December 1, 2010 from http://jec.senate.gov/public/?a=Files.Serve&File\_id=8be22cb0-8ed0-4a1a-841b-aa91dc55fa81
- <sup>178</sup> Boushey (2009)
- 179 Albelda & Kelleher (2010)
- 180 Boushey (2009)
- <sup>181</sup> Sandu, T.G. "A vital economy give access to women,: Cleveland Plain Dealer, March 6, 2011.
- <sup>182</sup> Ibid.
- 183 Albelda & Kelleher (2010)
- <sup>184</sup> Boushey (2009)
- <sup>185</sup> United States Bureau of Labor Statistics. (2010, October). Contribution of wives' earnings to family income, 1970-2003. In Labor force statistics from current population survey. Retrieved October 9, 2010, from http://www.bls.gov/cps/wlf-table24-2005.pdf
- 186 Eisenberg (1998)
- <sup>187</sup> Martin (1988)
- <sup>188</sup> United States Census Bureau. (2008). Selected social characteristics in the United States: 2006-2008. Retrieved October 9, 2010, from http://factfinder.census. gov/servlet/ADPTable?\_bm=y&-geo\_id=01000US&-qr\_ name=ACS\_2008\_3YR\_G00\_DP3YR2&-ds\_name=&-\_ lang=en&-redoLog=false&-format=
- 189 Ibid.
- <sup>190</sup> Haignere & Steinberg (1990)
- <sup>191</sup> United States Department of Defense. (2010). Active duty military personnel by rank/grade. Retrieved October 9, 2010, from http://siadapp.dmdc.osd.mil/personnel/military/rg1003.pdf
- <sup>192</sup> Helmets to Hardhats. Retrieved September 12, 2010 from www.helmetstohardhats.org
- 193 Skidmore, E. United Brotherhood of Carpenters, personal communication, September 16, 2010.

- <sup>194</sup> United States Department of Labor. (2010). The greening of registered apprenticeship.
- 195 Ibid.
- <sup>196</sup> Recovery.Gov. (2010). Track the Money. Retrieved September 12, 2010, from http://www.recovery.gov/ Pages/home.aspx
- 197 Skidmore & Moir (2004)
- <sup>198</sup> Moir, S. (2009). Women in the construction industry in the United States. In Stevens, C. Green jobs and women workers: Employment, equity, equality. Spain: International Labour Foundation for Sustainable Development (Sustainlabour).
- <sup>199</sup> Dainty, A. and Lingard, H. (2006) Indirect discrimination in construction organizations and the impact on women's careers, Journal of Management in Engineering, 22: pp. 108-118.
- <sup>200</sup> Price V. (2000). Hammering It Out: Community Pressure and Judicial Overview in US Highway Construction. Unpublished dissertation, UCI Political Science.
- <sup>201</sup> Byrd (2001)
- <sup>202</sup> Various participants. (2010, October 25). Women In Construction Round Table with United States Department of Labor Directors P. Shui (OFCCP) and S. Manzano-Diaz (Women's Bureau). New York, NY.
- <sup>203</sup> Cuda (1986)
- <sup>204</sup> Murphy, E., & Graff, E. J. (2005). Getting even: Why women don't get paid like men--and what to do about it. New York: Simon and Schuster.
- <sup>205</sup> Good Faith. (2010). Legal-dictionary.thefreedictionary. com. Retrieved October 10, 2010, from http://legaldictionary.thefreedictionary.com/Good faith effort
- <sup>206</sup> Policy Group on Tradeswomen's Issues. (2010, October 23). Recommendations to the Office of Federal Contract Compliance Program. New York, NY.
- <sup>207</sup> Ashbrook, Connie, Oregon Tradeswomen, Inc. Retrieved from http://www.youtube.com/watch?v=6o0fRkpFbo. On December 8, 2010.
- <sup>208</sup> Government Accounting Office's Business Process Reengineering Glossary of Terms. Retrieved from http://www.gao.gov/special.pubs/bprag/bprgloss.htm#sectB on December 13, 2010
- <sup>209</sup> Skidmore & Moir (2004).
- <sup>210</sup> Brown, J. & Jacobsohn, F. (2008).
- 211 Portland Women's History Trail, Retrieved December 13, 2010 from http://www.usm.maine.edu/history/ newtrail.html.
- <sup>212</sup> Fortino, V. (1998). Reflections on affirmative action. Boston Tradeswomen's Network Newsletter, 3(3), p. 1.
- <sup>213</sup> GSA awards contract for Boston courthouse construction.Retrieved December 13, 2010 from http://www.thefreelibrary.com/GSA+AWARDS+CONTRACT+FOR+BOSTON+COURTHOUSE+CONSTRUCTION-a015835976">GSA AWARDS CONTRACT FOR BOSTON COURTHOUSE CONSTRUCTION</a>
- <sup>214</sup> Price, V. personal communication, October 13, 2010.
- <sup>215</sup> DiMento, J. et al (1991, September). Court intervention, the consent decree, and the century freeway. Working Paper No. 381.. Berkeley, CA: University of California Transportation Center.
- <sup>216</sup> Welcome to the New Haven Commission on Equal Opportunities. Welcome to the City of New Haven Connecticut. Retrieved December 13 2010 from

- http://cityofnewhaven.com/EqualOpportunities/ContractCompliance.asp
- $^{217}$  New Haven CT Code of Ordinances, Art 2, Sect. 12  $\frac{1}{2}$ -25(a)(1).
- <sup>218</sup> Workforce participation goals: Promoting women in the construction industry. (2010, November) Northeastern University School of Law, Legal Skills in Social Context Social Justice Program.
- <sup>219</sup> Abaffy, L. (2010). Skilled trades are tough to crack; women fight to gain ground. | McGraw-Hill Construction. Engineering News-Record. Retrieved October 14, 2010 from http://enr.ecnext.com/coms2/article\_bmwf101013WomenGainGro-1
- <sup>220</sup> Skidmore, E., personal communication, December 1, 2010.
- <sup>221</sup> McCormack(1998).
- <sup>222</sup> McCormack(1998).
- 223 Skidmore, E. (2000). Mentoring works:: Report of the Boston Tradeswomen's Network to the Massachusetts Bureau of Apprenticeship and Training.
- <sup>224</sup> New York City Mayor's Office. (2005, October). Objectives to improve access to employment for minorities, women, veterans and high school graduates (Public Record No. 383-05). Retrieved October 10, 2010 from http://www.nyc.gov/portal/site/nycgov/menuitem.c0935b9a57bb4ef3daf2f1c701c789a0/index.jsp?pageID=mayor\_press\_release&catID=1194&doc\_name=http%3A%2F%2Fwww.nyc.gov%2Fhtml%2Fom%2Fhtml%2F2005b%2Fpr383-05.html&cc=unused1978&rc=1194&ndi=1.
- <sup>225</sup> Nontraditional Employment for Women. Celebrating the women who build our city. Retrieved December 13, 2010from http://www.new-nyc.org/pages/ninyc/ videos/Celebrating.wmv.
- <sup>226</sup> Correal, A., (2007, November 26). New York's construction boom puts more women in hard hats, New York Times.
- <sup>227</sup> Covington, S., Vice President, Forrest City Ratner Companies (2010, October 25). Women In Construction Roundtable with United States Department of Labor Directors P. Shui (OFCCP) and S. Manzano-Diaz (Women's Bureau). New York, NY.
- <sup>228</sup> Brown, J. & Jacobsohn, F (2008).
- <sup>229</sup> Spicer, E., Carpenters Labor Management Corporation, personal communication, October 14, 2010.
- <sup>230</sup> Kalev, A., Dobbin, F., Kelly, E. (2006). Best practices or best guesses? Assessing the efficacy of corporate affirmative action and diversity policies. American Sociological Review 71, 589-617.
- <sup>231</sup> Ibid.
- <sup>232</sup> Ibid.
- 233 Cuda (1986)
- <sup>234</sup> Brown and Jacobsohn (2008)
- 235 Excluded Parties List System, https://www.epls.gov/epls/search.do, accessed March 29, 2011.
- <sup>236</sup> Laura Kelber, electrician, personal communication, March 13, 2011.
- <sup>237</sup> Ratner, D., President and CEO, Forest City Ratner Companies. "Celebrating the women who build our city," a production of Nontraditional Employment for Women. Available at http://www.new-nyc.org/pages/ ninyc/v.html.

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The mission of the Center for Women in Politics & Public Policy is to promote women's leadership by providing quality education, conducting research that makes a difference in women's lives, and serving as a resource for the empowerment of women from diverse communities across the Commonwealth, the nation and the world. Recognizing the talent and potential of women from every community, and guided by the urban mission of an intellectually vibrant and diverse university in the heart of Boston, the Center seeks to expand the involvement of women in politics and their influence on policies that affect them, their families and their communities. Founded in 1994, the Center is located at the University of Massachusetts Boston's McCormack Graduate School of Policy and Global Studies and oversees two graduate certificate programs: the Program for Women in Politics & Public Policy and the (online) Program for Women's Leadership in a Global Perspective.

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