

Hiring goals: Are they assisting more women to enter and remain in the building trades?

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women in the building trades. Tradeswomen work at demanding jobs while often having to deal with co-workers and a society who are hostile to their presence as women on construction jobsites or a society and co-workers simply indifferent to their struggles as women in a male-dominated industry. My hope is that this research honors tradeswomen's strength of character and perseverance, and that there is an immediate future where women can work in blue collar occupations without having to encounter and deal with any type of discrimination.

Abstract

Women comprise 3% of workers in the building construction trades—jobs often offering good wages and opportunity for advancement (USDOL, 2012). This research implemented a mixed methods collective case study to examine the creation, implementation, and results of setting hiring goals for tradeswomen on construction projects in order to assess whether these goals support and/or increase the number of women working in the building trades. Cases included the Green Line light rail project in Minneapolis/St. Paul, MN and projects implementing Portland, OR’s Model Community Benefit Agreement (CBA). Government documents, communications, news stories, 19 stakeholder interviews and Bureau of Labor Statistics data were analyzed to better understand the formation, implementation, and results of hiring goals, and their effects on women working in the building trades.

Findings show women who work in the building trades still struggle against numerous barriers including the lingering cultural ideal that women do not and/or should not want to work in the construction industry. Therefore, hiring goals appear to be one of only a handful of tools in place supporting women’s entry into construction careers. While appearing to support women’s entry into the building trades, they are not common enough nor generally employed in ways supporting women’s retention and promotion. Each of the examined cases implemented, not just hiring goals for women and minorities, but innovative features to support the meeting of those goals. These features including community involvement in oversight committees and supporting companies in recruitment of diverse employees, appear essential to meeting hiring goals.

Table of Contents

Acknowledgements.....	i
Abstract.....	iii
Table of Contents.....	iv
LIST OF TABLES.....	vii
LIST OF FIGURES.....	viii
CHAPTER ONE: THE RESEARCH PROBLEM.....	1
Background.....	1
Women in the construction industry.....	1
Affirmative action.....	2
Purpose of the study.....	5
Research questions.....	9
CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK..	11
Historical context.....	11
Civil rights and affirmative action.....	11
African Americans and the building construction trades.....	13
Civil Rights Act of 1964.....	15
The Philadelphia Plan.....	19
Women and affirmative action.....	22
Researching the experiences of tradeswomen.....	25
Policy analysis.....	31
Policy tool approach.....	31
Policy creation.....	35
From affirmative action to diversity.....	37
Community benefits agreement (CBA).....	39
Segmented Labor Market Theory.....	42
CHAPTER 3: METHODOLOGY.....	53
The research approach.....	53
Mixed methods.....	55
The qualitative approach.....	59

The quantitative approach	60
Case study.....	63
Data collection and analysis	64
Participants.	66
Interview method and content.	66
Conducting the interviews.	68
Data analysis procedures.....	69
Validity and reliability	71
Limitations of the study.....	73
CHAPTER FOUR: RESULTS	75
Setting the stage: Quantitative Data.....	75
Twin cities metropolitan area	80
Portland metropolitan area.....	81
Women working in the building construction trades	84
Individual Influences.....	86
Childcare.....	90
Self-confidence and self-efficacy.....	91
(not)Fitting in.....	93
Institutional Influences.....	98
Construction companies.	99
Government.	104
Unions.....	108
Advocacy organizations.	115
Socio-cultural Influences.....	123
Sexism.	127
The Cases	132
Case Study #1: Hiring goals on a light rail project in Minnesota.....	132
Case Study #2: Portland, Oregon’s Community Benefit’s Agreement.....	138
Should hiring goals exist?	146
Findings.....	149

CHAPTER FIVE: DISCUSSION AND POLICY IMPLICATIONS 156

- Connecting findings to previous research 156
 - Tradeswomen..... 157
 - Unions..... 159
 - Training 160
 - The Cases..... 161
- Policy Implications..... 163
- Future Research..... 166

REFERENCES 169

APPENDICES 181

- A. Informed Consent..... 182

LIST OF TABLES

TABLE	Page
1. A timeline of affirmative action policy in the United States	17
2. Contrasting theoretical frameworks	46
3. SLM Theory as a framework for understanding	51
4. List of participants	67
5. Statements in support of hiring goals	146
6. Statements of non-opposition of hiring goals, with reservations	148
7. Statements of opposition to hiring goals	148
8. Lived experiences in parallel universes	152

LIST OF FIGURES

FIGURE	page
1. 2014 race identification of construction industry workers	76
2. 2014 race identification of women construction industry workers	77
3. 2014 nation of origin of construction industry workers	77
4. 2014 ages of construction industry workers	78
5. 2004 nation of origin of construction industry workers	79
6. 2004 ages of construction industry workers	79
7. Twin Cities metro area 2012-2014 race	80
8. Twin Cities metro area 2012-2014 nation of origin	81
9. Twin Cities metro area 2012-2014 ages	81
10. Portland metro area 2012-2014 race	82
11. Portland metro area 2012-2014 nation of origin	83
12. Portland metro area 2012-2014 ages	83
13. Google query including the word “tradeswoman”	128
14. Google query including the word “tradesman”	128

CHAPTER ONE: THE RESEARCH PROBLEM

Background

Women now comprise slightly less than half of the United States' (U.S.) workforce (Lyles, 2013). The majority of U.S. households rely on women's wages to pay their bills (Lyles, 2013). Despite gains, full occupational parity has not been reached. On average, women make 19% less than men and are over-represented in low-paying and minimum-wage jobs (Lyles, 2013). Empirical data show, rather than a woman earning less for doing the exact same job as a man, the situation where women lose the most money, as far as earnings are concerned, is via occupational segregation (Mastracci, 2004). The jobs women most often hold (i.e., bookkeeping, office management, teaching, and retail sales) pay less and offer fewer opportunities for upward movement than occupations dominated by men, such as building trade workers, computer scientists, engineers, or executives (Mastracci, 2004). In fact, more than 80% of women are gainfully employed in only 71 of 400 Bureau of Labor identified occupations (Moccio, 2009). These disparities are disconcerting because women's economic parity in the workforce is a significant measure of women's status in society, and is vital to their economic security (National Women's Law Center, 2014; United Nations [UN] Women, 2013).

Women in the construction industry. Construction has been a male-dominated industry in the United States. Women comprised just over 13% of those employed in the industry in 2009, compared to 12% in 1984 (Maloney & Schumer, 2010). Second only to mining, the building trades (occupations within the construction industry such as carpenter or electrician) had the lowest percentage of female workers in 2012 at

approximately 1.2% of the total employed building trades' workforce (United States Department of Labor (USDOL), 2012). A tradeswoman is any woman working in the hands-on construction of the built environment. This could include work in residential, commercial, industrial, or highway construction. Women work in the construction trades because of good wages, the physicality of the job tasks, and tangible results of a day's labor (Latour, 2008; Martin, 1988; Schroedel, 1985). Yet, tradeswomen consistently struggle to acquire jobs and avoid layoffs, gain training opportunities and promotions, and find work environments free of gender and sexual harassment (Latour, 2008; Moccio, 2009; Moir, Thomson, & Kelleher, 2011).

There are race disparities when looking at tradeswomen experiences. The majority of tradeswomen are white and non-Hispanic (National Women's Law Center, 2014). Hispanic women are approximately 0.4%; African American women are approximately 0.2%; and Asian/Pacific Islander and American Indian/Alaska Native women are each approximately 0.1% of all construction workers (National Women's Law Center, 2014). Further, tradeswomen of color report experiencing discrimination because of their race and report higher rates of sexual harassment than white tradeswomen—noting all tradeswomen experience significantly higher rates of sexual harassment, on average, than women in the general workforce (Hegewisch & O'Farrell, 2014; Mansfield et al., 1991).

Affirmative action. Affirmative action is any measure beyond termination of a discriminatory practice adopted to prevent past or present discrimination as well as future injustice (The Leadership Conference on Civil and Human Rights, 2014). Affirmative-action measures attempt social restructuring (King, 2007). As such, affirmative-action

policies, or even attempting to put such a policy in place, can elevate social tensions and a clutching onto existing group identities and processes (King, 2007). Hiring goals (an affirmative action policy tool) refer to a percentage of hours worked by a defined, underrepresented group of building trades people. These hours generally include all trades from electrical to masonry to tapers and painters and beyond as well as direct supervisors i.e., a tradesperson who may be supervising other trades people. The goals do not include people such as project managers, engineers, architects, or estimators. Historically, the goals have been set for men of color and, subsequently, for women of any race or ethnicity. Hence, if the hiring goal for women is set at 10%, then all trades hours are tabulated for that job (sometimes for a phase or portion of a job), and at least 10% of those total hours should be worked by women. However, by law, there cannot be a penalty for contractors who do not reach goals.

In the construction industry, affirmative-action programs attempting to diversify the white male workforce have often led to workers' believing any person of color or white woman who shows up at a worksite has been hired because of affirmative action, and that any white male is hired because of merit (Paap, 2006). Paap, a former carpenter apprentice, relates an experience where she was at a jobsite working with one other member of her crew; a third person walked by and announced that they would be getting a new worker on Monday (Paap, 2006). Stated as a "joke," the man announced the worker would be a one-armed, black lesbian (Paap, 2006). Monday revealed the new worker to be a white man who was a favorite of his co-workers (Paap, 2006). In the above situation, the "joke" is that affirmative-action programs force the construction industry to get "stuck" with "bad" workers as opposed to the meritocracy that would be

in place without these “disruptive” programs (Paap, 2006). Myths about the easy lawsuit filed if any person of color or white woman is fired (hence, they cannot be for any reason) as well as the myth about increasing numbers of people of color and white women working in construction serve to “reproduce the meritocratic self-image of the industry while ensuring that white male workers retain the identity as the authentic construction worker” (Paap, 2006, p. 80).

Arguments have been made against affirmative action because of the side effect discussed in the previous paragraph: i.e., any person from a marginalized group who is hired is considered by people in the dominant group(s) to have been hired only because of affirmative-action requirements and not merit (Paap, 2006; Thomas, 2004). That is to say: affirmative-action detractors argue simply having the policy stigmatizes people who fall into “disadvantaged” categories, thus preventing them from having the opportunity to take full responsibility for their accomplishments (Thomas, 2004). Another argument against affirmative action could be that the gains acquired (often with affirmative-action policies in place) by people of color and white women in the construction trades have been marginal at best; either the policy does not work, or a best attempt has been made, meaning there may be some “intrinsic” reason the industry primarily draws white men to its workforce. Conversely, most advocates for tradeswomen would argue affirmative-action programs, such as the setting and enforcement of hiring goals, are still needed (Moir, Thomson, & Kelleher, 2011; Paap, 2006). Without the goals, some believe the industry would be even less diverse. Attorney Colette Holt, who specializes in affirmative-action law within the construction industry, states, “When you have no goals, women and minorities get nothing” (BPA Report, 2011, video file).

Handing out job assignments to each U.S. citizen in order to make sure every occupation has and maintains a diverse workforce would be ideologically abhorred and logistically difficult to implement. Then, where is parity or, at least, critical mass? With women at just under 50% of the U.S. workforce, one idea would be 50% female workers in the construction trades as the end goal. Noting the stagnant 3% current participation, pragmatism would suggest that approximately 26% of women working as building tradespeople in the U.S. construction industry would be a number where abolishing affirmative action interventions would be acceptable. The 26% is based on the following:

- The federal government defines a non-traditional occupation as one where women comprise less than 25% of the workforce.
- This goal (of approximate 26%) was set forth to be a result of the federal affirmative action programs instituted by the Carter administration as part of government guidelines in a 1978 blueprint laying out a path for women to enter building trade occupations (Eisenberg, 2011).

Thus, reaching a national average of 26% women working in the building trade's workforce would be a logical goal for the policy tool of hiring goal implementation.

Purpose of the study

The purpose of the research was to examine the policy tool of setting hiring goals for construction projects, and those goals' impacts on tradeswomen. Historically, the construction industry and unions have resisted change (Moir et al., 2011). Kris Paap, author of *Working Construction* (2006), reveals how recent efforts to diversify the construction workforce contain melancholy over not having an all-white male workforce:

This is done by centering the recruiting dialogue on the notion of scarcity, the oft-used phrase that there are “not enough white men” entering the field. This claim is made in many forms, including the following from a *New York Times* article, “faced with a shortage of trades workers . . . desperate builders and eager unions have begun aggressive campaigns to court new workers.” (p. 106)

As Paap discusses, it is common practice to claim that workers who are not white men are needed only because there is a shortage of white men to fill construction trade jobs (2006). The idea a man or a woman of color, or a white woman might be the best person for the job of brick mason, steel worker, or plumber is rarely considered (Paap, 2006). While equal employment opportunity was written into federal law in 1964, and both federal and local programs have been implemented to increase construction workforce diversity, the construction field remains a monoculture (Moir et al., 2011). The fact the industry is still such a monoculture should be disconcerting for people concerned about equity as well as workplace productivity; half the worker pool is essentially being disregarded because of assumptions concerning gender and competence.

Women who work in the building trades are tired of being studied (Moir et al., 2011). Issues faced today are frighteningly similar to the ones encountered in 1979 (Moir et al., 2011). Tradeswomen want to see more women hired and promoted along with less hostile working environments (Moir et al., 2011). In their 2011 report, *Unfinished Business: Building Equality for Women in the Construction Trades*, Moir et al. suggest an alternative for individuals who want to study, research, or investigate tradeswomen: “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” (p. 22). Moir et al. (2011) assert tradeswomen are the stakeholders who have done their job; women are continually attempting to enter and remain in the building trades. Considering the persistence of the building trades’ monoculture workforce and Moir et al.’s recommendation to probe structural, rather than individual, issues (2011), this research investigates two examples of the policy tool of setting the hiring goals for tradeswomen on construction projects.

The Office of Federal Contract Compliance Programs (OFCCP) sets tradeswomen and minority hiring goals for companies with contracts of more than \$10,000 for construction projects using federal dollars. The federal goal set for women is 6.9%. Executive Order (E.O.) 11246 (the E.O. establishing the goals) specifically states that contractors cannot be penalized for not meeting the hiring goals. State, local, and private entities can, and often do, set their own hiring goals for building construction projects. These hiring percentages can differ from the federal goals, and have various enforcement and compliance mechanisms.

This research looked at two localized cases for setting hiring goals. One case was the central corridor light rail, or Green line, which is the second light-rail line to be constructed in the Minneapolis/St. Paul metro area (the Hiawatha (or Blue) line being the first). Construction began in 2011 and was completed in 2014 (Metropolitan Council, 2014.). The 11-mile-long Green line links downtown St. Paul to downtown Minneapolis and the Blue (Hiawatha) line as well as to a commuter rail line (Metropolitan Council, 2014.). The Metropolitan Council (Met Council) implemented construction of the line, and will operate the light rail through their Metro Transit division. Met Council used the

Minnesota Department of Human Rights goal of 6% of working hours to be executed by tradeswomen on the project, and the goal was reached.

The second case was in Portland, Oregon. In September 2012, Portland's city council voted to pass a Model Community Benefit Agreement (CBA) that was the first of its kind in the state (S. Adams, 2012). CBAs, mostly used in urban areas, are legally binding contracts developers enter into with a community coalition (Musil, 2015). Some make a distinction between community benefit agreements and development agreements (Rosar & Stodolka, 2008). The stated distinction is that development agreements are between politicians and developers versus CBAs which are between grassroots organizations, i.e., community members, and developers (Rosar & Stodolka, 2008). While Portland's agreement would be considered a "development agreement," it is self-referencing as a CBA. Beginning in 2013, the CBA was piloted for two city projects (S. Adams, 2012). It included uniform standards for working conditions, wages, and benefits; and increased workforce training, employment, and contracting opportunities for women and people of color (S. Adams, 2012). A notable feature of the CBA was that it set hiring goals at both the apprentice and journey level in an attempt to thwart the claims that contractors only hire men and women of color as well as white women at the apprentice level for jobs with goals and then do not keep them on once the goal is reached or the company is not working on a project with goals them thus making it difficult for those individuals to reach journey-level status.

The scope of research was broad, incorporating two metropolitan areas, two methods of setting the hiring goals, and interviews from stakeholders in four groups: building tradeswomen, advocates, government officials, and construction-industry

personnel (those who were not tradeswomen, but could include women who were no longer working as tradeswomen but were still working in the construction industry; or women who work in the construction industry and have never worked in the building trades). While it could be argued depth was sacrificed with the research design, the findings offered insight about the range of issues and complexity regarding implementing affirmative-action policy tools in today's U.S. construction industry.

Research questions

The research questions for this study were answered with both qualitative and quantitative data. This is because one measurement of significance was the actual number of tradeswomen (as a percentage of the building trades' workforce), yet increasing the number of women working in construction is simply not enough (Paap, 2006). There needs to be changes in the construction work environment for women to reach their potential as tradespeople (Paap, 2006).

The central research question for this project was as follows:

Can the policy tool of setting hiring goals increase the number of women working in the building trades as well as support women's retention?

The sub-questions were as follows:

R₁: How and why, according to stakeholders, are hiring goals created, designed to be implemented, and actually implemented?

R₂: Do the creation and implementation of hiring goals create a more positive work environment for women in the building trades, including such things as hiring more women; more work hours (not consistently laying-off women first and hiring them last); promotions (not just having women work as apprentices and

laying them off once they could reach journey-level status); and higher levels of job satisfaction, including supportive work environments?

These research questions were asked within the context of policy analysis for setting of hiring goals by a state government and a community benefit agreement. This was done to gauge the effectiveness of hiring-goal setting in the construction industry to support the number and job retention of women working in the building trades. The findings will contribute to the small, but growing, body of research examining CBAs as well as bringing a current perspective to a policy tool (hiring goals) that has been in place in many variations across the United States for more than 30 years.

CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Historical context

In the article “Introduction: Understanding public policy through its instruments,” Lascoumes and Le Gales (2007) assert every policy instrument has a history. Although the phrase “affirmative action” is infamous in the U.S. cultural lexicon, few people know the history behind its creation or the intersections that affirmative action has had with the construction industry. When examining today’s building trades’ hiring goals and community benefit agreements, this information is vital because it allows for better comprehension of the current policies and, likely, a more informed perspective to make future policy recommendations and decisions.

The phrase “affirmative action” originated in 1961 (King, 2007). Vice President Johnson requested a young African American attorney, Hobart Taylor, Jr., develop a term for the work employers would need to do in realizing anti-discrimination regulations (King, 2007). Attempting to put an upbeat spin on the situation, Taylor described his decision to use “affirmative action”: ““I was searching for something that would give a sense of positiveness of performance under that Executive Order [10925]. I was torn between the words ‘positive action’ and the words ‘affirmative action.’ And I took ‘affirmative’ because it was alliterative”” (King, 2007, p. 119).

Civil rights and affirmative action. The United States includes people from around the globe having different reasons for traveling to and living in the country; or, in the case of Native Americans, having been here long before the creation of the United States. Groups of people experienced differing treatment under the law, and in society as well as differing levels of cultural acceptance. Marginalized people attempted to acquire

equality in different ways. For example, people of the Jewish religion and those of Asian heritage—primarily men—needed overt barriers removed (MacLean, 2006). In particular, Jewish people often immigrated to the United States with university educations and/or some professional training (MacLean, 2006). As soon as the barriers explicitly stating “people of the Jewish religion not allowed” were removed, Jewish men, specifically, made significant advancements into universities and other well-paid professions (MacLean, 2006). Also, as far as success with earning incomes, Asian Americans have consistently done well (DeNavas-Walt & Proctor, 2014). Since tracking the income of the “Asian” race category began with the U.S. census in the 1980s, the median income of Asian Americans has been and remains the highest average of any race or ethnic group (DeNavas-Walt & Proctor, 2014).

For numerous reasons, including “broken treaties, lost land, reservations, boarding schools, and the urban relocation program, as well as ongoing experiences with racial and ethnic discrimination,” Native Americans acquired a strong distrust in the federal (or any other local) government acting on their behalf, (Oropeza, 2002, p. 4). Meanwhile, Latinos forged an agreement with the U.S. government where they were defined by their ethnicity, not race (MacLean, 2006). The designation by the federal government keeping Latinos from being named as people of color—even though they experienced significant discrimination—often made Latinos more conservative in their activism. (For further discussion about this situation, see MacLean’s chapter “Are Mexican Americans ‘Whites’ or ‘People of Color’?” (2006).)

Finally, white women have made significant gains in the workforce specifically because of affirmative-action policies, yet polls consistently find high rates of white

women opposed to the concept of “affirmative action,” almost at the same opposition rates as white men (MacLean, 1999). Thus, African Americans, taking their chances with the federal government as a better option than its localized counterparts, have always been at the forefront agitating for national policy instituting equality of opportunity in the workplace (MacLean, 2006).

African Americans and the building construction trades. A number of African Americans were trained in valuable crafts when they were enslaved in order to have skills useful to the enslavers (Golland, 2008). With emancipation in 1865, these craftspeople, for the first time, were able to seek work in the marketplace (Golland, 2008). The entrance of an emancipated workforce caused a backlash from other U.S. citizens as well as recent European immigrants (Golland, 2008). The backlash against African Americans acquiring work as skilled crafts people was sometimes coercive and often violent (Golland, 2008). Consistently welcomed by business as strike breakers, once they were no longer needed, African American workers would be shunted (Golland, 2008; Reich, Gordon, & Edwards, 1973). For example, the American Federation of Labor (AFL), which included many construction trade workers, maintained a policy of egalitarianism but excluded African Americans from membership (Golland, 2008). This, in turn, led to a situation where African Americans were the likeliest candidates to work when union workers went on strike (Golland, 2008). Because of trade unions’ refusal to admit people of color, African Americans were forced into (lower-paying) residential construction work, most often being hired by other African Americans (Golland, 2008).

Beginning with the depression in the 1930s, the U.S. government began increasing the federally funded sector of the economy (Golland, 2008). Government

expenditure during World War II (larger than that of the depression) allowed labor activists to push the issue of discrimination in hiring (Golland, 2008). Responding to a threat by African American labor activists to march on Washington; on June 25, 1941, citing a need for all available workers, President Franklin D. Roosevelt issued Executive Order (E.O.) No. 8802 (See Table 1 for a list of federal affirmative-action policies; Golland, 2008). The order prohibited race discrimination in the defense industries and other federal contract work, and established the Fair Employment Practice Commission (FEPC; Golland, 2008). The above was, essentially, the federal government's first foray into anti-discrimination labor policy (Golland, 2008).

In post-World War II years, labor activists were kept in check by anti-communist baiting (unions being viewed as more socialist than capitalist), and gender and race discrimination remained workplace norms (MacLean, 2006). Nonetheless, the next non-discrimination federal policy arrived via an executive order. On December 3, 1951, President Truman signed EO 10308 mandating all federal contracts contain a non-discrimination clause and establishing the President's Committee on Government Contract Compliance (PCGCC) to enforce it (Golland, 2008). Implemented by Truman despite strong resistance from Congress, the executive order and the committee were basically established to oversee compliance of EO 8802 (Golland, 2008). However, in June 1952, the committee had failed to act against any government contractor (Golland, 2008).

When Dwight D. Eisenhower was elected president in 1952, racial discrimination was a propaganda issue (Golland, 2008). At the time, the government of the Soviet Union and other communists continually pointed out racial discrimination in the United States

when attempting to convert other nations to Marxism, especially when working in Africa (Golland, 2008). Overt racial discrimination was certainly easy to identify in the United States. To cite just one example, the southern manufacturing industries were known for refusing to hire African American women and for hiring a paltry number of African American men for a few, low-paying positions (MacLean, 2006). In response to communist claims of U.S. racism, President Eisenhower issued Executive Order 10479 prohibiting discrimination with federal contracts and establishing the President's Committee on Government Contracts (PCGC) to enforce the executive order (Golland, 2008). Vice President Richard Nixon was named the committee chair (Golland, 2008). Preceding the executive order were years of anti-communist commotion in the United States (MacLean, 2006). President Eisenhower was seen as a pro-free market, anti-communist president, hence the action was viewed less as sympathetic to labor and more as an anti-communist maneuver (MacLean, 2006).

In 1955, based on studies by the Urban League and the PCGC Committee, Vice President Nixon stated that hiring African Americans was not a problem; rather, the difficulty was getting employers to exercise equal opportunity for promotions (Golland, 2008). There was truth concerning the improvement in hiring African Americans (Golland, 2008). With the above executive orders, discrimination was reduced by those holding government contracts (Golland, 2008). However, three exceptions persisted: the petroleum, railroad, and construction industries (Golland, 2008).

Civil Rights Act of 1964. Of course, one of the major federal policies affecting workplace equity was the Civil Rights Act of 1964 (Public Law 88-352 (78 Stat. 241), including Title VII, the most contentious part of the act (National Archives, 2009). Based

on work initiated by President Kennedy, Section 703(a) made it unlawful for an employer to discriminate because of an individual's race, color, religion, sex, or national origin (National Archives, 2009). Conservatives, who were vociferously opposed to the act, argued individuals had a right to associate with and hire whomever they wanted as part of one's constitutional liberty (MacLean, 2006). On the other side, activists opposing discrimination of all forms were energetically engaged across the country during the 1960s. People were arguing that overt forms of discrimination were simply wrong and should not constitute part of one's individual freedom (MacLean, 2006). Because of the extensive work by civil rights activists, by the time the Civil Rights Act of 1964 became law, only 15% of Americans opposed equal employment opportunity (MacLean, 2006).

For the purposes of this study, another notable aspect of the Civil Rights Act of 1964 is the word "sex" being added to title VII by Virginia Representative Howard Smith (MacLean, 2006). Smith added the word as an attempt to kill the bill by making it seem ludicrous (MacLean, 2006). However, the bill passed with the category of "sex" included, thus allowing women to gain access to numerous occupations and educational institutions which had formerly excluded them. Title VII created the Equal Employment Opportunity Commission (EEOC) to implement the law (National Archives, 2009). With the EEOC in place, people experiencing discrimination in the labor market had their first law stating labor discrimination was illegal and had an enforcement body toward which to direct complaints (MacLean, 2006). The EEOC originally planned for grievances concerning discrimination to number in the hundreds; yet, 9,000 were filed in its first year of operation (MacLean, 2006). By 1975, the commission addressed about 77,000

Table 1

A timeline of affirmative action policy in the United States

Source	Description	Date
Executive Order 8802	Reaffirming Policy of Full Participation in the Defense Program by All Persons, Regardless of Race, Creed, Color, or National Origin, and Directing Certain Action in Furthering of Policy	June 25, 1941
Executive Order 9346	Further Amending Executive Order No. 8802 by Establishing a New Committee on Fair Employment Practice and Defining its Powers and Duties	May 27, 1943
Executive Order 10308	Improving the Means for Obtaining Compliance With the Nondiscrimination Provisions of Federal Contracts	December 3, 1951
Executive Order 10479	Establishing the Government Contract Committee	August 13, 1953
Executive Order 10925	Establishing the President's Committee on Equal Employment Opportunity. The first place "affirmative action" appears.	March 6, 1961
Executive Order 11114	Extending the authority of the President's Committee on Equal Employment Opportunity	June 22, 1963
Public Law 88-352 (78 Stat. 241)	The Civil Rights Act of 1964	July 2, 1964
Executive Order 11246	Equal Employment Opportunity	September 24, 1965
The Philadelphia Plan	The Labor Department, in an attempt to combat this blatant discrimination by contractors and unions, issued the Philadelphia Plan.	1967
The revised Philadelphia Plan	This plan added target percentages for hiring minorities.	June, 1969
41 Code of Federal Regulations 60-20	Expands Executive Order 11246 and establishing a separate goal for hiring women	1976
Executive Order 12086	Consolidation of contract compliance functions for equal employment opportunity	October 5, 1978
Executive Order 12608	Elimination of unnecessary Executive orders and technical amendments to others	September 9, 1987
Public Law 105-178	The Transportation Equity Act for the 21st Century reauthorizes the DBE program	June 9, 1998

Note. Sources for this table include Marcus, 1970; United States Department of Labor, (n.d); United States Department of Transportation, 2011; United States National Archives, 2009.

complaints annually, leaving many unanswered (MacLean, 2006). As Nancy MacLean stated in *Freedom is Not Enough*, “The insistence of so many ordinary workers on fair treatment helped create an innovative and effective national policy: affirmative action” (2006, 76). That is to say, while affirmative action was not actually spelled out in Title VII, the actions of thousands of U.S. workers describing the discrimination they experienced in the workforce helped to define what, in practical terms, non-discrimination actually was (MacLean, 2006).

As affirmative action policies were about to come into existence, activists kept pressure on the building construction trade unions to be more inclusive. In his dissertation, *Constructing Affirmative Action: Federal Contract Compliance and the Building Construction Trades, 1956--1973*, David Golland describes how and why the building trades became a focus of African American labor activism:

Most of the building construction trades had been organized under—and remained with—the AFL, and consisted of highly-skilled, well trained—and usually better-paid—workers. Most blacks working in unionized building construction were members of the less exclusive Laborers’ or Carpenters’ unions, requiring less skill, fewer years of training, and ultimately leading to jobs with less pay. Given the high visibility of public construction projects, the building trades became a focal point for civil rights leaders looking for symbolic as well as substantive victories against discrimination, especially as urban renewal swelled the number of federally-funded construction projects. In other words, young blacks were constantly being reminded of their second-class status every time they

passed one of the many construction sites in their cities and saw only white faces under hard hats, and that needed to change. (2008, p. 23)

With the Civil Rights Act of 1964 in place, African Americans were still seeing no progress in acquiring construction trade jobs. In fact, construction unions held so tightly to their “whites only” implicit and explicit policies that it was noted there were fewer African American plumbers and electricians than African Americans with PhDs (MacLean, 2006).

The Philadelphia Plan. Title VII had taken fair employment practices beyond those holding government contracts and placed these edicts on all employers. In order to get the new law passed, much compromise was made, causing weak enforcement, and containing within its contents a specific barring of any preferential treatment to correct an imbalance (MacLean, 2006). In an effort to advance the Civil Rights Act of 1964 and Kennedy’s EO 10925, President Johnson issued EO 11246 on September 24, 1965 (King, 2007). The order, monitored by the Office of Federal Contract Compliance Programs (OFCCP), now within the Department of Labor, required active responses by private firms receiving federal grants to address patterns of hiring discrimination (King, 2007).

From the outset of this order, the construction industry was in the Office of Contract Compliance’s sight. In 1967, observing that non-white workers were almost wholly excluded from membership in industrial and craft unions for the building industry, specific action was taken to target four urban areas (Marcus, 1970). These were called “special area programs” and included Cleveland, Philadelphia, San Francisco, and St. Louis (Fulton, 1970). The programs in San Francisco and St. Louis were unsuccessful, but the work in both Philadelphia and Cleveland showed promise for positive impact

(Fulton, 1970). The original Philadelphia Plan was put into effect on November 20, 1967 (Fulton, 1970). Although similar to the plan composed in Cleveland, the Philadelphia Plan required a “representative number” (without defining “representative”) of minorities in each trade rather than the unspecified increase written into the Cleveland plan (Fulton, 1970).

By the 1960s, the National Association for the Advancement of Colored People (NAACP) and other African American organizations had been in a long struggle with building labor unions (MacLean, 2006). In September 1969, these groups discovered a surprising ally in President Richard Nixon (MacLean, 2006). The Nixon Administration issued the Revised Philadelphia Plan (MacLean, 2006). The plan, meant to be implemented nationwide, included a provision to bypass union hiring halls if unions would not provide people of color to work and to decertify apprenticeship programs that did not admit people of color (MacLean, 2006). In fact, the policies of the Philadelphia Plan had been written by the Johnson administration but were not implemented because of fears about political fallout toward Democrats (the party of which Johnson was a member as well as the party that the majority of union members supported) (MacLean, 2006). President Nixon, on the other hand, saw implementing the Philadelphia Plan as a shrewd political move (MacLean, 2006). By supporting organizations such as the NAACP, Nixon could appear progressive on issues of race—veteran Civil Rights leaders commended Nixon’s action—while simultaneously dealing a blow to the left-leaning labor unions which held significant economic and political power at the time (MacLean, 2006). Furthermore, this move aggravated a divide among those generally in support of Democrats: union members and people of color (Golland, 2008).

From its inception, the Philadelphia Plan faced strong opposition, not just from people in the construction industry, but also from individuals in government. Comptroller General Elmer Staats became the leading opponent of the plan, declaring that it violated competitive bidding principles because, with the affirmative-action provisions, the lowest bidder may not be given the contract (Fulton, 1970). Further, Staats stated any prescribed requirements must be set in the invitation for bids (Fulton, 1970). In dealing with the comptroller's objections, the revised plan, issued on June 27, 1969, described target ranges for employing people of color within government contracts exceeding \$500,000 (Fulton, 1970). Specifically, the Department of Labor set employment goals for minority workers in seven trades: iron work, plumbing and pipefitting, seam fitting, sheet-metal work, electrical work, roofing and waterproofing, and elevator construction (Fulton, 1970). These began at 4-6% for the employer's 1970 workforce and increased to a high of 20% in each trade after 4 years (Marcus, 1970). The numbers needed to be met; otherwise, an employer needed to demonstrate that a "good-faith" effort had been made (MacLean, 2006). The plan also specified that workers had to be new hires and no white worker could be replaced (MacLean, 2006). Requirements actually followed the course courts had been taking in response to discrimination lawsuits (MacLean, 2006).

The comptroller general, again, found the plan to be invalid, interestingly, *because* of the specific hiring goals (Marcus, 1970). Staats argued the specified goals for hiring people of color violated two sections of the 1964 Civil Rights Act: Section 703(a) dealing with discrimination because of race—any race—and Section 703(j) outlawing preferential treatment for groups or individuals (Marcus, 1970). In contrast, the attorney general declared the plan to be lawful, stating it was basically concerned with broadening

the recruitment base (Marcus, 1970). Before the legality of affirmative action was, in essence, turned over to the courts, there was one final attempt in Congress to not allow the Philadelphia Plan to be implemented. An amendment supporting the comptroller general's interpretation of the Philadelphia Plan was introduced (Marcus, 1970). Although the debate was fierce, in the end, the amendment was defeated, and the comptroller did not carry through with his stated threat to refuse payment to any company which had complied with the plan (Marcus, 1970).

Women and affirmative action. The Philadelphia Plan was an effort to integrate men of color into the construction industry. "Sex" had likely been added to Title VII as a joke or, at minimum, a last-minute thought. Nonetheless, women began invoking Title VII to acquire entry and promotion into a number of occupations historically unwelcoming (MacLean, 2006). Women used Title VII to enter manufacturing jobs and to acquire positions as professors at universities (MacLean, 2006). Still, few argued women should work as building tradespeople (MacLean, 2006). Building-construction union jobs were considered to be the most desirable of all blue-collar work (MacLean, 2006). Good pay, good benefits, respect, and room for advancement were achieved by individuals who acquired such occupations, and these jobs had been carefully guarded for decades (MacLean, 2006). Another barrier for women wanting to enter the building trades was that the jobs were actually associated with masculinity itself (Paap, 2006). Women's desires to acquire construction jobs forced both men and women to re-examine "gender" (Paap, 2006). As stated by Nancy MacLean in *Freedom is Not Enough*, construction trades work produced a male, working-class bond: "These performances insinuated whiteness and maleness into definitions of skill, insider status, and labor

militancy” (2006, p. 93). The ties of technical competence in this industry to being white and male have historically been so strong that they led to a wider cultural conclusion that someone who is not white and male simply could not be a competent building tradesperson (MacLean, 2006; Paap, 2006). While Title VII made it illegal to discriminate against women when hiring, there was more than a 10-year lag from the signing of the Civil Rights Act of 1964 until women—even in small numbers—were admitted to building-construction unions.

In 1976, a consortium of women’s groups sued the U.S. Department of Labor for failing to provide enforcement for Title VII (Eisenberg, 1998). The lawsuit was dropped because President Carter subsequently issued affirmative-action regulations (41 CFR 60-20) expanding Executive Order 11246 and establishing a separate goal for hiring women (Eisenberg, 1998). This policy action was the first allowing women to gain entry into building-trade unions (Eisenberg, 1998). The Carter administration set a goal of increasing the number of women working in the construction industry to 6.9% of the workforce with the goal for women to be 24% of the building-trades workforce by 2000 (Eisenberg, 1998).

First elected in 1980, President Ronald Reagan was not a supporter of affirmative-action policy (MacLean, 2006). The Reagan administration cut full-time employees at the Office of Federal Contract Compliance Programs by one-third, and Reagan signed Executive Order 12608 of September 9, 1987: Elimination of Unnecessary Executive Orders and Technical Amendments to Others (USDOL, 2011a). Within this order, President Carter’s Executive Order 12086 was revised (USDOL, 2011a). The Reagan administration made affirmative-action numbers for government construction projects

unenforceable guidelines rather than mandatory goals (USDOL, 2011a). Today, states and municipalities may set more rigorous goals for hiring a diverse construction workforce, but as far as the federal government is concerned, a “good faith effort” remains policy.

Recently, two other federal policy efforts were implemented to increase the number of women in the building trades. Women Apprenticeships in Non-Traditional Occupations (WANTO) was part of a bill initially passed in 1991 (Mastracci, 2005). WANTO was awarded to grantees conducting innovative projects that improved outreach, recruitment, hiring, training, employment, and retention of women in apprenticeships for non-traditional occupations (NTO, occupations where women represent less than 25% of the workforce; USDOL, 2010). Tradeswomen’s advocacy groups in the Washington, D.C., area drafted the proposal (Mastracci, 2005). Republican Congresswoman Connie Morella guided it through Congress (Mastracci, 2005).

The original funding included a second grant—called Non-traditional Employment for Women (NEW)—also meant to encourage training women for work in NTOs (Mastracci, 2005). NEW was intended to jumpstart programs at the state level; the states were supposed to continue the funding (Mastracci, 2005). The majority of states acquiring NEW dollars discontinued programs when funding ended (Mastracci, 2005). WANTO and NEW were voluntary, competitive grants to states and community-based organizations appealing to Democrat and Republican policymakers as a way to move, in particular, single mothers and other low-income women into livable-wage jobs (Mastracci, 2005). In 2010, the WANTO-granting amount for the nation was \$1,800,000,

and this amount was released over a 2-year period (USDOL, 2010). This sum was the same amount as funding for 2014 (USDOL, 2014).

The previous description of the history of affirmative action at the federal level is a policy having made workplaces more equitable in the United States. However, the construction industry continued resisting attempts to create a diverse workforce. The current political climate will likely not permit federal enforcement of affirmative action. Some tradeswomen advocates thought President Barack Obama might make changes to the construction equal-employment policy (Eisenberg, 2011), but he has not. Attempts for diversifying the construction workforce are now conducted at the regional, state, municipal, organizational, or individual level.

Researching the experiences of tradeswomen

There are almost no written descriptions of women working in the U.S. building trades before the late 1970s. The lack exists because, beyond brief wartime work stints or the rare notable lone woman at a jobsite, without the enforcement of title VII by Jimmy Carter's administration, women were excluded from work in the building trades. Today, a number of noteworthy qualitative documents have been composed. These present the personal narratives of tradeswomen in addition to a number of studies about women in blue-collar professions (often including tradeswomen).

One of the earliest qualitative studies was Jean Reith Schroedel's *Alone in a Crowd: Women in the Trades Tell Their Stories* (1985). Schroedel earned her Ph.D. in Political Science from the Massachusetts Institute of Technology, and framed the document within a narrative considering how women's political empowerment includes the ability to work at the jobs they choose. Before going into academia, Schroedel held a

number of male-dominated jobs, including work as a machinist. (She also mentions being denied work as a paper boy when she was a child because she was a girl.) Chapters of the book are organized into sections by themes, including feminism, occupational safety and health, race, unions, and family. Each chapter presents a single woman's experiences finding her way to and working in the building trades. Schroedel notes the title of her book came from the overpowering theme of isolation female participants felt.

Next, and possibly more well-known, was Molly Martin's *Hard-Hatted Women: Stories of Struggle and Success in the Trades* (1988). From Seattle and trained there as an electrician, Molly Martin was (and still is) active in local and national tradeswomen advocacy organizations. She decided to compose the book as a way to let the tradeswomen's voices be heard, and to transmit the idea of acquiring building trades work to a younger generation of women. The text was written for a general audience by a tradeswoman. *Hard-Hatted Women* imparted the first-person accounts of 26 women working as welders, drywall hangers and tapers, ironworkers, and electricians. Although initially planned to focus on construction workers, Martin broadened the book's scope to include a miner, police officer, and subway conductor. Of note, one of the interviewees was Susan Eisenberg, an electrician in Boston and the author of *We'll Call You If We Need You* (1998).

Trudi C. Ferguson, an academic, and Madeline Sharples, a technical writer, published *Blue Collar Women: Trailblazing Women Take on Men-Only Jobs* in 1994. Neither worked as tradeswomen, and this book presented women in blue-collar jobs (many working in the building trades) as interesting, possibly unique individuals. For example, one chapter was titled "What Exactly Do These Women Do?" because,

apparently, it is perplexing. More compelling, the text also acted as a sort of manual for women who might be interested in blue-collar occupations. It combined blue-collar women's personal narratives with practical advice as well as examples of places or institutions that have made notable advances integrating women, e.g., the U.S. military.

In 1998, electrician and poet Susan Eisenberg published *We'll Call You If We Need You: Experiences of Women Working Construction*. Here, again, were voices of individual tradeswomen describing their experiences. Instead of organizing the book dedicating a chapter to each tradeswoman, Eisenberg titled her chapters by theme and brought the voices of a number of tradeswomen inside each theme. (Twenty-eight women's voices were included.) Themes included Chapter Four, "Ain't Got to Show You Shit"; Chapter Five "Marking Gender Boundaries: Porn, Piss, Power Tools"; Chapter Seven, "Exceptional Men"; and Chapter Nine, "Bucket or Bathroom?" As an activist, her book was an attempt to inform policy as well as to show how women struggle with similar issues in 1998 as they did in 1978, including harassment, hostility to a woman showing up to work, roadblocks to simply being hired, and consistently being the first in layoffs.

In 2006, two books related to tradeswomen were printed: *Blue-Collar Women at Work with Men: Negotiating the Hostile Environment* (J. A. Greene, 2006) and *Working Construction: Why White Working-Class Men Put Themselves—and the Labor Movement—in Harm's Way* (Paap, 2006). Both books were academic, scientific accounts. Greene, a social-scientist, approached the topic of women in blue-collar occupations purely as a researcher, and explored subjects via open-ended interviews. Her focus was to

better understand employment discrimination as it is defined by the Civil Rights Act of 1964 along with the women who should be protected within the scope of that legislation.

Kris Paap began her graduate work studying ways to encourage low-income women to acquire construction-trades jobs as an escape from poverty. Doing that work, Paap realized she almost always remained in female-dominated environments. Dropping out of graduate school, Paap subsequently acquired work as a union carpenter's apprentice. During her two and a half years as a carpenter's apprentice, she re-entered graduate school. Rather than study women, Paap decided to undertake an ethnography of men working construction. Because she was actually working in the field as a carpenter's apprentice, much of the ethnography illuminated her work days dealing with sexual harassment, differences in how she was (or was not) trained, and hearing the sexist and racist language consistently spoken around her.

Rounding out the qualitative studies describing women's experiences in the building trades are Jane Latour's *Sisters in the Brotherhoods: Working Women Organizing for Equality in New York City* (2008) and Francine Moccio's *Live Wire: Women and Brotherhood in the Electrical Industry* (2009). Each book has a more specific focus: women in New York City unions and women within the electrical union. Moccio's (2009) book highlights the ways that the craft traditions of fraternalism shape the rate of women's integration into construction trade jobs. Latour's (2008) book, meticulous in detail, contains a similar central theme. Still, Latour's final chapter is titled "Getting Past Pioneering,"—like Nancy MacLean's chapter on women in the building trades within her book about labor movements in U.S. history, "The Loneliness of Pioneering" (2006)

and Eisenberg's section "Pioneering" in her 1998 book. In the 21st century, the theme of women as pioneers within the building trades continues.

Beyond presenting personal narratives shared by women working in the construction industry, academic research commonly focuses on two other areas: personality traits as well as the health and safety of women who work in the building trades. Health and safety are often related to job satisfaction and/or self-efficacy. Research about women's health and safety at construction job sites includes studies regarding the fit and availability of work clothes and personal protective equipment for women. (See, for example, *Personal Protective Equipment for Women: Addressing the Need* from the Ontario Women's Directorate and the Industrial Accident Prevention Association (2006) or "Relationship Between Personal Protective Equipment (PPE), Self-Efficacy, and Job Satisfaction of Women in the Building Trades" (Wagner, Kim, & Gordon, 2013).)

Retention rates are low for women who enter construction-trades work (Moir et al., 2011), and research has looked into this issue, often describing it as looking at the work environment, but much of it contains research about women's psychological health and how that relates to job satisfaction. One study included a telephone survey of female construction laborers, finding, among other things, that sexual harassment and gender discrimination have negative effects on female laborers' health: perceptions of overcompensation and job uncertainty were positively associated with self-reports of insomnia, and sexual harassment and gender discrimination were positively related to reports of increased nausea and headaches (Goldenhar, Swanson, Hurrell, Ruder, & Deddens, 1998). Another inquiry asked female construction workers what concerns they

had about their health and safety on the job and then coded the responses into four main categories: exposure to chemical and physical agents; injuries from lifting/bending/twisting, falling, and lacerations; lack of proper education and training; and health and safety risks related specifically to tradeswomen (Goldenhar & Sweeney, 1996). The researchers concluded that these concerns could be abated through engineering, behavioral, or administrative interventions (Goldenhar & Sweeney, 1996).

While people are not extremely interested in the question “What kind of man decides to work construction?”, many feel this question is valid for women who do currently and would like to work in the construction industry. This discussion is seen as worthwhile both in the popular press (See, for example, Patel, 2006.) and in academia: “What personality traits bring women into construction work?” (C. K. Greene & Stitt-Gohdes, 1997). A concern with this type of “personality trait” research is that it generally, often implicitly, works from the idea that women in the building trades must be different from other (read: normal) women. Certainly, if people think about the existence of tradeswomen at all, non-feminine (read: negative) stereotypes come to mind (Ferguson & Sharples, 1994). Not using gender to define who works an occupation necessitates rethinking—for the sake of men, women, and any person wanting to associate with another or no gender category. If the above were accomplished, it seems more likely individuals would be able to choose a career best meeting their needs and interests without having ideas of “normalcy” questioned.

Considering the previous documentations of women working construction throughout the past 35 years, one commonality is either a discussion of policy or, at a minimum, mentioning changes in policy to readdress women still feeling like they are

“pioneering.” Although many tradeswomen and advocates cite President Carter’s EO 41 CFR 60-20 (creating the first federally enforced percentage goals for women to be at work on construction sites) as the only reason they were allowed entry into the building trades (See, for example, Eisenberg, 1998.); enforcement for affirmative action that took place under the Carter administration will likely not again materialize. Yet, research comprehensively presents a picture of women still facing many barriers when attempting to enter and remain in the building trades. The report *Unfinished Business: Building Equality for Women in the Construction Trades* summarizes the situation:

Women have been kept out and pushed out of the trades through discriminatory practices, overt discrimination from employers, sexual harassment on the jobsite and during training, and the lack of enforcement of legal policies 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. (Moir et al., 2011, p. 18)

The above statement leads to two important questions: What policy could, in today’s political environment, be implemented to cause an actual increase in women working construction? Is there anything currently being implemented that will increase these numbers in the near future?

Policy analysis

Policy tool approach. This study used hiring percentage goals (a policy tool) as a focal point to examine the policy instrument of current hiring goal and community benefit agreement composition, asking, how and why, according to stakeholders, are

these goals created, designed to be implemented, and actually implemented? At the end of the day, what are the results of implementing hiring-percentage goals? Inspecting public-policy instruments is a way of accounting for the processes of public-policy change, revealing the relationship between government and the governed, i.e., social control and the ways it is implemented (Lascoumes & Le Gales, 2007). Historically, a policy tool was thought of as a generic, neutral device used to carry out socio-political aims, yet these instruments (a map, a census, or a tax) all produce specific effects and point to power relationships along with the ways “legitimacy” is constructed (Lascoumes & Le Gales, 2007). Some effects are likely known (or desired) at their implementation, and some are not expected or intended. Lascoumes and Le Gales describe the process of implementing a policy-instrument approach:

Translation of and through technical instruments is a constant process of relating information and actors, and of regularly reinterpreting the systems thus created. Public policy instrumentation is therefore a means of orientation relations between political society (via the administrative executive) and civil society (via its administered subjects), through intermediaries in the form of devices that mix technical components (measuring, calculating, the rule of law, procedure) and social components (representation, symbol). (Lascoumes & Le Gales, 2007, p. 7)

Accepting the above, it would seem that a policy-tool approach to affirmative-action policy is valuable because one must acknowledge the civil society groups agitating for this policy, the reasons it's viewed as needed, the reasons it's resisted, and the government actors and actions making that negotiation.

Policy tools can be legislative and regulatory, economic and fiscal, agreement and incentive based, information and communication based, or any combination of the above (Lascoumes & Le Gales, 2007). Three terms defined by policy experts Lascoumes and Le Gales are important for this discussion. *Instrument* is defined here as a type of social institution, including census taking, map making, statutory regulation, and taxation; *technique* is a concrete device operationalizing the instrument and includes statistical nomenclature, graphs, a law, or decree; *tool*, in this context, is defined as a micro device within a technique, including a statistical category, the scale and scope of a map, and obligations provided by a legal text or sanction (Lascoumes & Le Gales, 2007).

Before “affirmative action” was part of policy, it was a concept. The original question was as follows: “What policy instrument could possibly compensate for decades of historical injustices and discrimination against African Americans and other minorities in the United States?” (King, 2007, p. 117). In his article “The American State and Social Engineering: Policy Instruments in Affirmative Action,” Desmond King (2007) used a policy-tool approach to better understand how and why affirmative action was constructed *in the way that it was*, i.e., with set hiring percentages for employers. Affirmative action was not automatically implied in the 1964 Civil Rights Act, yet affirmative action advocates could not escape the fact that measuring was crucial in evaluating success (King, 2007). Further, Executive Order 11246 stated contractors had to prove they were making an effort to hire more African Americans. Simply stated by Desmond King, “It is difficult to imagine how this compliance could be assessed without some resort to the compilation of statistical data about the racial (and ethnic and gender)

profile of a given firm's workforce, especially relative to the composition of the local workforce" (2007, p. 119).

King used an analysis of the policy tool of percentage goals to explain why many affirmative-action policies were constructed as they were. There was much evidence of the absence of African Americans and other underrepresented groups in hiring. One could simply observe the workforce. However, there was less available evidence for a tool fixing the preferential treatment historically given white males (King, 2007). A number of methods had been tried. (See the FEPC starting with Roosevelt—in response to a threat to march on Washington). While nebulous policies did bring transformation in some work arenas, the policies did not produce changes in the construction workforce (Golland, 2008).

Because affirmative action attempts to both redress past injustices and to establish barriers against future harm, measuring results is challenging; Desmond King describes:

The policy of affirmative action mixes several aims including bolstering barriers against racial and gender discrimination, fostering new practices in the workplace and in public institutions such as schools, creating social relations of a different character for America's future by modifying how groups perceive each other, and denuding historical injustices of their political salience. . . . In respect to affirmative action, this end is a daunting one—a social engineering of society to redress enduring historical injustices and to establish barriers against future harms. Such efforts are intended to redraw the boundaries of membership of the polity to strengthen the bases of citizenship. (2007, pp. 110-111)

Affirmative-action policy, unique and complex, must exist within the standard processes of policy creation in the United States. Policy creation follows a fairly specific route in its dance between the governed and the governing.

Policy creation. King describes six steps for forming policy (and, specifically, affirmative-action policy). The first step is the perceived problem (King, 2007).

Concerning affirmative action, it is defined as a historical inequality marginalizing many groups, including Native Americans, Latinos, and women of all backgrounds, but dominated by a discussion of structural oppression faced by African Americans recognizing the harms of slavery. Although overt discriminatory policies would be viewed by the vast majority of Americans as wrong at the present time, without some policy to address hiring discrimination in virtually all U.S. workplaces, overt discrimination would have likely persisted (King, 2007).

Second, within policy creation, experts are brought in to participate in the construction of policy (King, 2007). Generally, there are experts available to discuss most topics under consideration: supporting and opposing. This is certainly true with affirmative action where those supporting come from an equality perspective and those opposed cite the value of individual freedom. Third, and more important than “expert opinion,” is support (or not) of politicians and political entities (King, 2007). For example, the U.S. Supreme Court often has the final say about whether a policy will be implemented. In the past decade or more, rulings have gone against affirmative action (See, for example, 2013 *Fisher v. Texas* or 2009 *Ricci v. DeStefano*); yet, previously, a number of rulings decided in favor of affirmative action.

In *Griggs v. Duke Power Co* (401 US 424 1971), the court ruled against the use of intelligence tests, stating that, even if they were neutral, such tests often operated to uphold an exclusionary status quo (King, 2007). Subsequent to the judgment, employers had to demonstrate statistical parity between the racial makeup of their employees and the local population from which the workforce was drawn (King, 2007). In *Fullilove v. Klutznick* (448 US 1980), the court held setting a percentage of jobs for eligible minority candidates to be constitutional (King, 2007). The above examples, as well as a number of other cases, kept affirmative action policy on the books in numerous locations.

The nature of the target population and its political strength or weakness was the fourth part of policy creation (King, 2007). Concerning affirmative action, the target population historically occupied weaker positions in society, but due to the climate of political and social activism in the 1960s, the policy was able to be considered (King, 2007). King noted, “Critics of the use of quotas as a means to pursue affirmative action voiced concerns in the 1960s, but were muted by a political atmosphere in which such questioning quickly provoked charges of racism and discrimination” (2007, p. 114). Fifth is the practicality and validity of the available policy instruments (King, 2007). Here, advocates of affirmative action struggled. King states, “There was evident anxiety about using a racially based quota hiring system as the principal policy instrument for achieving equity of employment but no obvious alternative presented itself to monitor and demonstrate enforcement” (2007, p. 118).

Sixth was the political power of the opposition (King, 2007). Affirmative action always had detractors. As a new concept in the 1960s, it possessed just enough support to get written into federal policy. Since the 1980s, the tide turned strongly against any

affirmative-action policies (MacLean, 2006). The policy, over the past 30 years, was whittled away with many cases in court challenging the approach and some statewide efforts at ending it. For example, in 1996, California enacted Proposition 209 prohibiting any affirmative action programs in employment education and contracting and, subsequently, the state of Washington enacted the same prohibition (The Leadership Conference on Civil and Human Rights, 2014). Michigan (in 2006), Nebraska (in 2008), and Arizona (in 2010) all passed statewide bans on affirmative-action/equal-opportunity programs (The Leadership Conference on Civil and Human Rights, 2014). In 2012, New Hampshire and Oklahoma banned using any affirmative-action policy for college admittance (The Leadership Conference on Civil and Human Rights, 2014).

Attorney Margery Newman, who specializes in construction law and litigation, states there are four main reasons people in the construction industry oppose affirmative-action policies (1996). Objections fall into some or all of the following opinions:

- philosophical opposition to preferential treatment programs
- belief M/WBE firms are inexperienced, incompetent, and/or financially weak
- assertion that affirmative-action programs increase costs
- a notion programs discriminate against majority-owned businesses (Newman, 1996).

From affirmative action to diversity. Numerous private firms, whether because of altruism or fears of lawsuits, instituted their own versions of affirmative-action practices, thus expanding the reach of the policy and its impact on equitable hiring, pay, training, and promotions (King, 2007). Many of these programs are referred to as “diversity” efforts. The Stony Brook University Office of Diversity and Affirmative Action’s (2015)

stated one common refrain about the relationship of the terms (or concepts) “diversity” and “affirmative action” is that “diversity” is simply an attempt to put a new spin on the often controversial term “affirmative action.” But, their diversity office argues for a case of differences in “diversity” efforts that are unique as well as a valuable extension of affirmative-action efforts. Affirmative action stemmed from a need to right past wrongs. Of relevance to this paper, one of the past wrongs was discrimination in hiring. However, affirmative action did not consider existing workplace culture (Stony Brook University Office of Diversity and Affirmative Action, 2015). Individuals hired at places of work who were different from an existing monoculture were expected to do all the conforming to the presented workplace (an assimilation approach). Those working from a diversity approach expect the organization (as opposed to the individual) to change as it brings new, diverse people into its ranks. Individuals who support diversity efforts saw these changes as positive, something strengthening and improving a workplace, including increased profits and productivity, rather than something done to avoid a lawsuit (Stony Brook University Office of Diversity and Affirmative Action, 2015). Hence, although there are well-established distinctions between “affirmative action” and “diversity,” a pragmatic approach for people working on affirmative-action issues was to insert the word “diversity” and to use it interchangeably with “affirmative action.”

Esty, Griffin, and Schorr-Hirsch’s *Workplace Diversity* (1995) is written as a desktop reference tool containing advice for best workplace practices regarding 10 different dimensions of diversity. The authors discuss topics including older employees, religion, hierarchy and class, and white men. Useful to this study are the frameworks the authors provide for mapping an organization’s (or workplace’s) location regarding

diversity in its workforce. Esty et al. recognize that efforts making workplaces multicultural (diverse) are arrived at through two avenues: individual change and organizational change. To be the most effective, change must take place at both levels (Esty et al., 1995). A four-box model for systematic change is introduced in *Workplace Diversity* as a way to show what can happen if change takes place only at an individual level (change is short lived), or only at the organizational level (resources used to implement the change can be wasted) (Esty et al., 1995).

It is important for companies (whether to align with legal compliance or for altruistic or economic reasoning) to both have policies supporting equal opportunity and to actually implement them. Workplaces function through organizational and individual systems as well as both formal and informal rules (Esty et al., 1995). The informal system is the way policy and management decisions are actually implemented as opposed to what is written in the policies or stated at meetings (Esty et al., 1995). Esty et al. (1995) state what many people know: there is often a big gap between the way policy is written and how/if that policy is implemented. A number of policies can be created and always need to be evaluated by any company to better support a diverse workforce. These can include the following: orientation programs, training programs, decision-making processes, performance appraisal systems, feedback and coaching, work-assignment procedures, career-development systems, rewards and recognition, recruitment and hiring, and planning methods (Esty et al., 1995).

Community benefits agreement (CBA). One mechanism currently incorporating affirmative action and applied to construction projects is community benefit agreements (CBA). CBAs are legally binding contracts developers enter into with a community-

group coalition (Musil, 2015). Health, neighborhood, education, arts, environment, faith, and labor organizations could all be part of the coalition providing input toward the composition of a given CBA (Mulligan-Hansel, Owens-Wilson, & Beach, 2013). Community groups work from a localized advocacy vantage point, seeking to secure better jobs for community members and to have improved economic and environmental conditions both during construction and once a project is complete (Lavine, 2010). The developer receives support (including no open opposition) from the community (Lavine, 2010).

CBA's fill a void left by decades of decline in state and federal aid to cities as well as other issues that urban areas struggle with, such as losses in livable-wage jobs (Mallach, 2010; Salkin & Lavine, 2008). They are also seen as a tool for avoiding the destruction of neighborhoods and the displacement of residents that have previously taken place with a number of large-scale urban developments (Saito & Truong, 2014). The first completed, full-fledged CBA is considered to be that of L.A. Live, a sports and entertainment complex located adjacent to the Staples Center in Los Angeles, CA (Lavine, 2008). This CBA was created in 2001 (Lavine, 2008). Some provisions in that CBA were \$1,000,000 for the creation or improvement of parks and recreational facilities; a requirement that 20% of the residential units in the project be affordable; and developer cooperation with the coalition in establishing an advisory committee assisting with the agreement's implementation and enforcement (Lavine, 2008). This CBA was used as a template for communities across the country (Saito & Truong, 2014).

Musil (2015) analyzed 28 community benefit agreements. His research illustrated how community groups negotiating CBAs seek three general outcomes: distribution,

participation, and recognition (Musil, 2015). Setting hiring goals for the construction workforce fell under the “distribution” goal (Musil, 2015). This category can also include elements such as prioritizing local businesses, training programs, and paying prevailing wages (Musil, 2015). In the content analysis of the 28 agreements, Musil (2015) found that the 5 most common community benefits sought in the agreements were hiring directed (82%), developer/community communication required (57%), prevailing/minimum wage rates (53%), contracting directed to specific community groups (53%), and an affordable housing component (46%).

Construction careers approach. CBAs are now one vehicle used to encourage the hiring of tradeswomen by developers, contractors, and unions. CBAs are also being used as the policy vehicle for hiring female- and minority-owned subcontracting businesses. Words now used within these grassroots programs for affirmative-action hiring are a “construction careers approach” (Mulligan-Hansel et al., 2013). This approach looks at creating high-quality jobs (including livable wages, training, and safe working environments) and hiring people in the community where the project is being built who are typically left out of highly skilled, construction-trade job opportunities (Mulligan-Hansel et al., 2013). The “construction careers approach” can be implemented for a specific job or community wide. Content can vary significantly from agreement to agreement and from community to community (Mulligan-Hansel et al., 2013). Implementing a construction careers approach is, ostensibly, a way to support contractors who are providing better jobs for construction workers rather than only supporting the lowest bidder who may be attempting to cut costs in areas such as worker wages, training, and safety (Mulligan-Hansel et al., 2013).

Today's CBAs usually include targeted hiring goals. These goals could be for any number of groups, including people of color and white women, but could also include goals for hiring military veterans, people living in specific neighborhoods, and/or low-income job seekers. Agreements have been implemented with large infrastructure projects in Milwaukee and Los Angeles; as portions of a project, such as the site preparation of a redevelopment project in Denver; and for a series of projects on the Brown University campus in Rhode Island (Mulligan-Hansel et al., 2013).

All of the above are innovative steps (or the latest variations) of efforts over the past 20 years to not only diversify the construction workforce, but also attempts to keep construction jobs with livable wages and benefits (Mulligan-Hansel et al., 2013). Hence, rather than a national standard for construction work incorporating government money, there are localized actions attempting to provide construction careers for a more diverse pool of workers. Because of the policy instrument's newness, the grassroots nature of its design, and CBAs' multiple goals, research concerning the specific and overall impacts of CBAs is still sparse (Lavine, 2010).

Segmented Labor Market Theory

Attorney Colette Holt, of Colette Holt and Associates, specializes in affirmative-action and contract compliance within the construction industry. A Disadvantage Business Enterprise (DBE) is a for-profit small business of which at least 51% is owned by one or more individuals who are socially and economically disadvantaged. At a meeting concerning DBEs in Washington, D.C., Holt restates the question asked over the past 30 years about building construction workers:

It disturbs me to see state DOTs [Department of Transportation] with large minority populations who have single-digit DBE goals. It does not seem to me to reflect the ultimate remedial nature of this program and ultimately ask the question: What would DB availability look like in a discrimination-free world? That's your but/for determination. And I just don't understand how, in states that have 30, 40% minority populations—and half the population everywhere is female—that you could tell me that if discrimination were truly eradicated and everybody had a fair shot that still, oh, 92% of the dollars would still be going to white males. How's that real? (BPA Report, 2011, video file).

The way one views race and gender, the way one views the economy and occupational choices, the way one views progress and equality and fairness all impact one's answer to the question raised by attorney Colette Holt. This section summarizes a theoretical framework explaining how so much of the money paid to workers in building construction, now and historically in the United States, has been paid to white males.

This study used the Segmented Labor Market (SLM) Theory as the framework for understanding the current status of human resources in the construction industry. Labor-market segmentation is argued to have risen from both conscious strategies of monopolistic corporations around the beginning of the 20th century as well as systematic forces coming into play from the effects of industrialization (Reich et al., 1973). Defined as “the historical process whereby political-economic forces encourage the division of the labor market into separate submarkets, or segments, distinguished by different labor market characteristics and behavioral rules” (Reich et al., 1973, p. 359), SLM is an

economic theory illuminating how one's occupation—gainful or not—is not only economically, but also socially bound. When investigating women's work in the construction trades, an economic theory is useful for better comprehension and framing of a scientific examination of employment.

Classical economic theory asserts that people are rational actors who will find and take the best jobs. People are drawn to higher-paying jobs that offer more benefits. Individuals are motivated to acquire the skills to move into and succeed in those occupations. Subsequently, employers paying a substandard wage would have to raise it in order to attract workers, thus creating a self-adjusting market. Also, according to classical economic theories of labor, if a person happens to remain in a lower-paying occupation, it is because he or she does not have the capabilities for a higher-paying job or because he or she has a preference for the lower-paying occupation.

In contrast to classical economic theory, economist Sharon Mastracci describes a segmented (or dual) labor market. What Mastracci (and other SLM theorists) illustrate is a labor market of primary- and secondary-level occupations, and a critique of orthodox theory:

the dual labor market is based on qualitative aspects of individual jobs, where different norms apply in coexisting labor markets, and workers in each do not compete with one another. Primary sector workers enjoy greater upward mobility, higher pay, and fringe benefits, have more training, and more security than secondary sector workers do. Primary sector jobs tend to be autonomous, higher-ranking, white-collar jobs. Instability, lower pay and inferior working conditions characterize

secondary sector jobs; labor skills are lower and more exchangeable among other low-skilled workers. Career opportunities and the ability to ascend the ranks are not characteristics of secondary sector jobs.

(Mastracci, 2004, p. 17)

Within this structure of dual-labor markets, jobs in the primary sector are rationed; i.e., not everyone who is qualified to acquire work in the primary sector actually does (Mastracci, 2004). This means anyone can fall into the secondary labor market (which also includes not being gainfully employed), but only a portion of people ascend to or remain in the primary market (Mastracci, 2004). Further, because the barriers are so clearly in place, individuals choose to internalize those barriers and limit their job choices: “segmentation establishes ‘fire trails’ across vertical job ladders and, to the extent that workers perceive separate segments with different criteria for access, workers limit their own aspirations for mobility” (Reich et al., 1973, p. 364).

Historically, people in the construction trades, due to union wages and benefits, would be considered to work in the primary-tier (although within the “primary subordinate” as opposed to “primary independent” arena) (Mastracci, 2004). However, over the past 20 years, more construction labor resembles work in the secondary sector (Mulligan-Hansel et al., 2013; Paap, 2006). Nonetheless, on average, wages in the building trades are livable and often include some benefits and room for promotion. (See the U.S. Department of Labor information concerning construction occupations.)

Classical economic theorists posit that women do not work in any significant numbers in male-dominated jobs with higher earnings because they prefer not to do so (Mastracci, 2004). Table 2 compares the two theoretical frameworks’ explanations for

Table 2

Contrasting theoretical frameworks for understanding why women do not work in any significant numbers in the building trades

Classical Economic Theory		Segmented Labor Market Theory	
Reasoning	Source	Reasoning	Source
If a person remains in a lower paying occupation, it is because he or she does not have capabilities for a higher paying job or has preference for the lower paying occupation.	Mastracci, 2004	Historically primary-tier jobs are rationed. Rationing includes erecting barriers not allowing women to enter, remain, and be successful in the building trades.	Mastracci, 2004
Ergo	Mastracci, 2004; Paap, 2006	Barriers include	National Women's Law Center, 2014
1. Women do not want to work in the building trades 2. Women are not able to work in the building trades i.e., they are not capable of acquiring the skills required for these jobs		1. Procedures: recruitment, hiring, training, promotion policies 2. Facilities: examples include lack of rest rooms, changing rooms, properly fitting employer provided PPE, work clothes and tools 3. Culture: examples include harassment including pornography, no reporting procedures in place for grievances nor corrective actions, repercussions for reporting	
Solution		Solution	
Women who want to work construction need to be found (because they are rare)	Paap, 2006	Barriers need to be removed	Mastracci, 2004

why there are so few women working in the building trades. Those using classical economic theory would lament that the difficulty is, and always has been, finding women with a *preference* for trade work (Paap, 2006). Therefore, as former carpenter's

apprentice, Kris Paap illuminates how the “taste and preferences” theory guides discussion when the construction industry considers diversifying the construction workforce:

In almost all meetings and publications dedicated to the increase of diversity in construction, one can observe that those who represent the industry as either employers or union representatives raise similar if not identical questions about the process through which this increase in diversity should take place. Specifically, they argue that nontraditional workers need to be *found* and *recruited* [emphasis in original], not that the rules or practices of the industry need to be made more welcoming. As sincere as these comments may be, even a perfunctory review of the industry’s history suggests that these questions are more the *product* [emphasis in original] of the true problem than a path to effective solutions. . . . The historical record is clear on the fact that the gate has been and in fact is locked to those outside. Therefore it is important to note that these questions identify the problems as the opposite of what they are: systematic and ongoing insider actions that perpetuate an industry-wide climate hostile to outsiders. (Paap, 2006, pp. 103-104)

The continuing segregation of “groups” (identity categories of gender, nationality, race, etc.) within capitalist labor markets is not well explained by orthodox economic theory (Reich et al., 1973). Many white women as well as women and men of color who have attempted to acquire work in the building trades find perplexing union representatives’ and employers’ lamentations over not being able to find people other than white men who

want to work construction. (See, for example, Eisenberg, 1998; Mastracci, 2004; and Moir et al., 2011, which all include women discussing their extensive efforts to attempt to acquire work in the construction field.)

Using SLM theory to examine women's participation in the building trades emphasizes the structural, socio-cultural aspects of the job market. Mastracci writes that SLM theory acknowledges information flow structures and explains:

the occurrence and persistence of occupational segregation by gender by observing that there is no such thing as a single, freely competitive labor market; no big pot where all workers compete with one another and the only thing differentiating them is their human capital endowments, or education, experience, and skill sets. (Mastracci, 2004, pp. 16-17)

SLM theory, unlike free-market theories of employment, recognizes that labor markets are social structures just as much as economic; economics of labor cannot be separated from society and culture (Mastracci, 2004). People can be kept from the primary-job tier simply by a lack of access to information about job openings and the knowledge of best practices for getting hired (Mastracci, 2004). This has taken place in construction.

However, unlike men and women of color, a number of white women are related to a man (men) who work(s) in construction unions/the building trades. A father encouraging a daughter to enter in the building trades, for example, is still seen as an anomaly (Brown & Jacobsohn, 2008). In effect, women who theoretically have the best access to building-construction union jobs are either actively or passively kept out by people who could be their best allies (Moir et al., 2011). Hence, women who enter union construction jobs are often not those who have male family members in that union (Eisenberg, 1998).

Historically, this was not the case for men (Worthen & Haynes, 2003). Men were often steered to union construction jobs by a father or uncle (Worthen & Haynes, 2003). Why discourage a daughter from entering building-construction work yet encourage a son?

In construction, there is likely an increased cost for hiring and retaining female workers. These costs may involve more money spent training (because there is a greater chance the women hired have never done construction-trades type labor or assisted others in doing such work during their lifetimes). Extended costs may also involve implementing some additional services or changing some of the company culture to retain female workers. Therefore, affirmative-action programs or policies applied from the outside remove some of the employer's control with hiring and firing, and increase the firm's internal costs because it likely disrupts standard hiring practices (Mastracci, 2004). Even if a woman has significant prior experience working in the trade to which she applies, in the construction industry, employers often choose workplace stability rather than workplace diversity or a more qualified workforce. The less qualified, white, male worker may be the least disruptive to the existing workforce. In many fields, trade work depends on cooperation and collaboration among workers; the productivity of one worker depends on the productivity of and assistance from others. A common language, acceptable personality traits, discussions of work outside the 9-5 setting, and feelings of solidarity through prior knowledge or common heritage affect productivity. If workers are rejecting a new hire, this may cost a company money. Therefore, acknowledged or not, the quickest solution is to hire people who the existing company members will accept, even if the new people are not the most qualified or hardest working (Mastracci, 2004). It is easy to see how the above issue of possible increased costs (at least in the

short term) creates employer resistance. Thus, if an employer continues the practice of favoring white, male workers, Mastracci states, “the firm may not be acting in a deliberately prejudicial manner necessarily, but rather, may be responding to competitive pressures to minimize costs” (2004, p. 19). Employers use workplace stability as a means to optimize production (Mastracci, 2004).

In framing diversity efforts and recognizing the above economic situation of companies, Mastracci and other SLM theorists would argue that current cost accounting is not a valid reason to keep all hiring “business as usual.” Simply because there are barriers to enter primary-tier occupations does not mean the barriers must remain. According to Mastracci, policies dealing with workforce equity should include the following: address both the supply (employees) and demand (employers) side; spur demand for a diversified workforce by providing economic incentives or sanctions for not doing so, recognize the social aspects of employment; and be long term and systemic (institutional) (2004).

Do current affirmative-action policies of the state setting the hiring goals or those carried out in community benefit agreements recognize the above aspects of the labor market? Do they mitigate employers’ and unions’ preference toward hiring white men, instilling a merit-based system? Government money spent for construction is significant, usually one-third to one-fourth of total spending in the U.S. industry per year (Mulligan-Hansel et al., 2013). While government contracts for construction provide some portion, but, more often than not, not all of many construction companies’ income, how can affirmative action be implemented without hampering the competitiveness of one

company or a few companies? All of the above must be considered when looking at affirmative-action policies for the construction industry.

Table 3.

SLM Theory as a framework for understanding and evaluating the content of CBA's Construction Careers Approach

Segmented Labor Market Theory		Construction Careers Approach	
2 tiers of workers in the U.S.	Primary Tier: Workers enjoy greater upward mobility, higher pay, and fringe benefits, have more training, and job security. Jobs tend to be autonomous and higher-ranking.	2 tiers of construction industry workers	Some building trade jobs include: Good pay, benefits, opportunity for advancement, and stability. (Primary tier)
	Secondary Tier: Workers find instability, lower pay and inferior working conditions. Labor skills are lower and more exchangeable among other low-skilled workers. Virtually no opportunity to ascend the ranks.		Since the 1970s, job quality has declined in the industry: Many jobs offer low pay, little training, lack of safety and are temporary and seasonal. (Secondary tier)
Existing	Goals	Interventions	
Primary Tier Jobs Are Rationed: There are more workers trained for primary tier jobs than jobs made available.	Create more primary tier jobs	Place a premium on contractors who pay good wages and support worker training programs.	
Extensive barriers have been created keeping those working in the secondary tier from entering jobs in the primary tier.	Allow entry for those historically under-represented	Create hiring goals for underrepresented groups. Track and monitor compliance.	

Note. Sources include Mastracci, 2004; Mulligan-Hansel, Owens-Wilson, & Beach, 2013.

Primary-tier construction-trade jobs include good pay and benefits; job stability (not always being the first laid off); promotions (not only hiring women at the apprentice level, refusing to promote them to journey level); and safe working environments, including freedom from psychological stressors such as sexual harassment. In particular, the construction-careers approach implemented by many CBAs does appear to address two main issues keeping women and other underrepresented groups from good trade jobs (Table 3). First, it attempts to create more primary-tier jobs. Second, the policy

encourages hiring workers who have historically not been allowed entry to primary-tier jobs.

CHAPTER 3: METHODOLOGY

The research approach

Given that women comprise approximately half the U.S. workforce but less than 3% of building trades workers, the impetus behind this research was to explore methods supporting women's entrance and retention in the building trades. Prior research vis-à-vis tradeswomen largely focused on gathering personal narratives. Relating the experiences of women who choose what has been and remains an uncommon work path in the U.S. is important. However, the narratives have not set into motion growth in the numbers of tradeswomen, an erasure of gender discrimination in the industry, nor a change in the commonly held belief a tradeswoman's choice of work is hoydenish (Moir, Thomson, & Kelleher, 2011; Paap, 2006). In order to better address the above issues, systemic change, rather than just the behavior of a few individuals, needs to be implemented. Organizational, societal and cultural matters necessitate attention. For these reasons, the policy of setting hiring goals for tradeswomen on construction projects was chosen as the research topic.

Writing and enacting policy is essentially an attempt at social engineering (King, 2007). Hiring goals are an affirmative action policy tool. As discussed in chapter two, affirmative action policy is complex, making it difficult to measure outcomes. This is, in largest part, because of the following:

- “What are the best empirical measures of ‘equality’, ‘redressing past harms’, and ‘avoiding future discrimination’?” is a nuanced and complex, question to answer (Lascoumes & Le Gales, 2007).

- In the U.S. construction industry, affirmative action policy does not have a uniformity of content (King, 2007). Hiring goals can be set at different rates across locations. Generally speaking, they are applied to large-scale construction projects using some government money, but they can also be applied by a private entity.
- The tool is applied by different bodies (often simultaneously) including federal, state, and local governments.
- Policy created and approved is not necessarily policy enforced. Enforcement of affirmative action in the construction industry has varied over time and by location (Greene, 2006).

That is to say, the policy has outcomes complicated to measure, is applied without consistency, and has enforcement that, since the 1980s tends to be limited (see the 1989 U.S. Supreme Court decision *City of Richmond v. J.A. Croson* and the 1995 decision *Adarand Constructors, Inc. v. Peña*), but still requires (paper)work to meet ‘good faith efforts’.

Distained and inconsistent as the policy may be, there is evidence it has some effect on increasing diversity of hiring in the construction industry. Of note, when employers simply sign a contract related to hiring of women and minorities followed by weak enforcement and little oversight, workplace diversity does not increase (Moir, Thomson, & Kelleher, 2011). Inversely, when people associated with a construction project do implement extra initiatives to increase diversity of the workforce (including recruitment programs and on-site monitoring), women’s participation has increased—sometimes into double digit percentages (Brown & Jacobsohn, 2008; Moir, Thomson, &

Kelleher, 2011). Hence, an affirmative action policy tool is not a quick fix or magic device ensuring equality for women in the construction industry. Yet, given the continued monoculture in the construction trades workforce, the setting of hiring goals is worth investigating as a tool with possible unexplored potential to positively impact the creation of a diverse workforce in the building trades—including increasing the numbers of women hired and promoted.

One way to explore the policy of setting hiring goals would be to do a survey sampling locations, exploring how, when, and where the policy is implemented. This would be a worthwhile endeavor. However, to get beyond a minimalist reporting of percentages set and by whom, on what projects, and who enforces those, one would need extensive time and resources. Even then, with a survey, one could miss the human experiences relating to the formation and implementation of hiring goals. Affirmative action is, after all, a policy touching very personal chords with many individuals in U.S. society, and has taken on a substantial (most often derisive) life within the construction industry and on construction sites (Newman, 1996; Paap, 2006). An alternative (and the approach used in this study) is to look at the tool through the narratives of those who handle or are impacted by hiring goals in their work places. Exploring, practically speaking, what dealing with hiring goals means for government, non-profit, construction company, union, and tradeswomen employees. This type of investigation allows for better understanding of the behaviors of individuals who advocate for and against, create, implement, benefit from, and enforce hiring goals.

Mixed methods. There are researchers who deem qualitative and quantitative data incompatible to use in the same study (Johnson & Onwuegbuzie, 2004). However, to

conduct meaningful research in our complex societies, Johnson and Onwuegbuzie (2004) argue in, “Mixed methods research: A research paradigm whose time has come”, epistemological and methodological pluralism is what is best taught in the social and behavioral sciences. Further, Johnson and Onwuegbuzie suggest, qualitative and quantitative research, rather than mutually exclusive ways to collect and analyze data, have a number of common features (2004).

Quantitative (positivists) researchers may espouse the idea that research is an objective science consisting of confirmation and falsification (Johnson & Onwuegbuzie, 2004). Yet, this view disregards the fact that many decisions within quantitative research are human, subjective determinations such as topic choice, selection of tests and measurements, score and result interpretations (Johnson & Onwuegbuzie, 2004). On the other hand, qualitative researchers have likely embraced the idea of relativism (Johnson & Onwuegbuzie, 2004). However, qualitative researchers, by vast majority, cannot but accept that some statements are more truthful than others e.g., “a 2 year old child is not going to drive a car as well as most 25 year olds adults” could be agreed upon as a statement of truth (Johnson & Onwuegbuzie, 2004). These “facts” or even a priori assumptions are rife throughout qualitative studies (Johnson & Onwuegbuzie, 2004). Mixed methods research (the use of integrated qualitative and quantitative data), at its best, can use the strengths of each paradigm, acknowledge similarities, and negotiate the differences (Johnson & Onwuegbuzie, 2004). The concept is now often referred to as “mixed research” since more than methods are mixed—for example, philosophical assumptions or research questions (Frels & Onwuegbuzie, 2013).

Rather than setting out to use qualitative or quantitative data, Johnson and Onwuegbuzie suggest what is most fundamental is the research problem and that methods should follow problem definition (2004). After defining the research problem, researchers may find a problem best addressed via mixed methods (Johnson & Onwuegbuzie, 2004). Therefore, mixed methods can simply be viewed as a third paradigm of research (Johnson & Onwuegbuzie, 2004). John W. Creswell and Vicki L. Plano Clark's *Designing and Conducting Mixed Methods Research* informed the research approach for this study (2011). Mixed methods were implemented to better understand the policy tool of setting hiring goals for tradeswomen on construction projects. Within the mixed methods paradigm, an embedded design was used. The premise of embedded design—like all mixed methods design—is that one type of data is not enough to fully understand the research problem (Creswell & Plano Clark, 2011).

Embedded design employs both qualitative and quantitative data, but within what would traditionally be *either* a qualitative or quantitative study (Creswell & Plano Clark, 2011). Research assumptions are defined by the primary approach (in this case a qualitative, constructivist paradigm) (Creswell & Plano Clark, 2011). Specifically, within an embedded framework, one data set provides essentially a supportive, secondary role (Creswell & Plano Clark, 2011). Often, the “embedded” data is used to answer secondary questions within the study (Creswell & Plano Clark, 2011). Creswell and Clark (2011) state within the embedded design, the “—collection and analysis of the second data set may occur before, during, and/or after the implementation of the data collection and analysis procedures traditionally associated with the larger design” (Creswell & Plano Clark, 2011, pp.90-91).

In this study, quantitative data is needed because examining numbers of women as a percentage of the trades labor force is an important factor when measuring outcomes of setting hiring goals (King, 2007). Additional quantitative data about construction industry employees is useful as well. Information such as the percentage of the labor force that is union or average age or education level of a worker can inform general questions about tradesworkers, and how, when, or if tradeswomen differ from their male counterparts. Yet, when exploring the demographic aspects of a workforce and the policy of affirmative action, quantitative data is less helpful answering nuanced questions beginning with “how” or “why” (Frels & Onwuegbuzie, 2013). Since quantitative data reveals the number of tradeswomen has been stagnant for decades (Moir, Thomson, & Kelleher, 2011), the more compelling type of investigation at this time is to structure the research as a qualitative inquiry.

Qualitative data can help illustrate the intricate social negotiations continuously affecting policy outcomes. “Workplace culture” is a system of informal rules spelling out how people should behave or “the way we do things around here” (Esty, Griffin, & Schorr-Hirsch, 1995). This is seen in how people interact with each other, the way people dress, what is defined as “humor”, and what people do at lunchtime (Esty, Griffin, & Schorr-Hirsch, 1995). Impacting components of workplace culture in the construction industry are things such as attitudes held by those in the industry toward affirmative action and women workers; labor history; the economy; social and physical environments where tradespeople work; societal views of gender and work; hiring, training, and retention methods applied within the industry. The above impact the numbers of

tradeswomen, and the levels of effectiveness of affirmative action as well as future projections of women in the building trades' workforce.

Logically, this is information better gathered through interviews, observations, news stories, documents i.e., qualitative data. Collecting qualitative data through interviews of employees can reveal the narratives people tell about an organization, its myths and legends and tell researchers much about what a company values and attempts to reproduce in its current workforce (Esty, Griffin, & Schorr-Hirsch, 1995). Consequently, qualitative material was used to answer the research questions and numbers were used to expand knowledge about the topic and to support or refute perceptions and opinions presented by participants and other qualitative material such as observations.

The qualitative approach. Qualitative research is implemented, optimally, when a topic does not seem to have obvious variables or lacks a theoretical framework (Creswell, 1998). This type of inquiry stems from the premise that knowledge comes from people making meaning out of their experiences, and reality is in flux and can, simultaneously, take multiple forms (Merriam, 2002). Creswell defines the qualitative approach as, “—an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem...[build] a complex, holistic picture...[where researchers conduct] the study in a natural setting” (1998, p. 15). Throughout, ambiguity is part of the process, requiring the researcher make numerous subjective decisions concerning data collection, interpretation and presentation of findings (Creswell, 1998). Rather than being a prescriptive, inflexible practice, the research can change during implementation (Creswell, 1998). For example, inquiry methods or research questions

may be rethought or rewritten during the process of data collection as new themes and information emerge (Creswell, 1998). Though qualitative researchers have a number of ways to execute research and can situate the inquiry within a range of different philosophical stances, the common thread is a desire to understand meaning behind human narratives about the world (Merriam, 2002).

Within this case study a postmodern philosophical stance is taken. The stance means all aspects of reality are considered socially constructed, and there are no “natural” elements in our world (Merriam, 2002). Hence, gender is treated as socially constructed, malleable, and non-inherent (see Butler, 1999, for further discussion of gender and postmodernism). Occupational choice and success or failure is viewed in the same way. Therefore, while, in this study, participants may discuss differences between men and women in construction or the workforce or life in general, as per a postmodernist standpoint, these differences are viewed as current individual or group perceptions that have and can drastically change. This philosophical stance allows for an acceptance of the idea that policy tools can make marked changes in our societies i.e., hiring goals could potentially have the capacity to not only increase the numbers of women workers in the building trades, but also actually change definitions of “women”, “men”, “tradesperson”, or “occupational choice”.

The quantitative approach. The quantitative approach to research is based on rationalism. Knowledge is considered a priori and can be known by adhering to forms and rules of logic (Frankfort-Nachmias, & Nachmias, 2008). There are two underlying principles to rationalism: 1.) the human mind can understand the world beyond observable phenomena, and 2.) knowledge exists beyond our personal perceptions

(Frankfort-Nachmias, & Nachmias, 2008). Within quantitative research, scientific approach is the method held in esteem. It is a primary research approach in many academic disciplines. The scientific approach is based on six assumptions. They are as follows: 1.) nature is orderly, 2.) nature can be known, 3.) all natural phenomena have natural causes, 4.) nothing is self-evident, 5.) knowledge is based on experience, and 6.) knowledge is superior to ignorance (Frankfort-Nachmias, & Nachmias, 2008).

Practically speaking, one of the differences between qualitative and quantitative approaches is that, where both include defining a research problem as a first step, qualitative researchers next ask research questions, and quantitative researchers construct hypotheses. Hypotheses, similar to research questions, can be derived from observation, intuitively, and/or from theories or literature (Frankfort-Nachmias, & Nachmias, 2008). As opposed to the research question, a hypothesis is an “answer” and contains dependent and independent variables (Frankfort-Nachmias, & Nachmias, 2008). In order to produce “answers”, one must have a reasonable amount of information (accepted measures) since these “answers” are tested empirically and either rejected or accepted (Frankfort-Nachmias, & Nachmias, 2008). Also, given the research begins with the “answer”, only a hypothesis one can empirically test with available means and information is composed (Frankfort-Nachmias, & Nachmias, 2008). Quantitative research deals with prevalence rates, relationships (e.g., correlations), and cause-and-effect relationships (Frels & Onwuegbuzie, 2013). This mode of inquiry offers less flexibility in research design and process. New variables (themes, ideas), essentially, do not emerge since only the variables placed into the study are examined.

Social scientists attempt to understand, explain, and predict social phenomena, and many tools in the quantitative research (scientific) approach can assist with those tasks (Frankfort-Nachmias, & Nachmias, 2008). The use of statistics (and thus quantitative inquiry) has dramatically increased in social science research (Agresti & Finlay, 2009). This is, in largest part, because, with computer software and the internet, more social data is readily available, and there is a plethora of statistical software assisting non-statisticians with statistical analysis (Agresti & Finlay, 2009). While some investigators may be searching for universal laws, social scientists are more likely working toward probabilistic explanations (Frankfort-Nachmias, & Nachmias, 2008). For example, research findings could suggest there is a high probability that one type of social phenomena (earning a college degree) is in some way linked to another type of social phenomena (at least one parent having a college degree). Here, conclusions are not drawn with complete certainty (Frankfort-Nachmias, & Nachmias, 2008). Extending the above example, if a researcher were investigating whether a person earning a college degree had a parent with a college degree, he or she would likely not be able to conclude anything as absolute as: having a parent with a college degree is a prerequisite to earning a college degree. Rather, researchers would examine statistical significance or lack of and then may examine the economic, organizational, social, or policy implications of any findings.

Because, in this study, quantitative data is embedded in a qualitative study, the choice of data analyzed and presented was derived from concepts and assertions made within the qualitative data. This represents a blending of quantitative *methods* into a qualitative paradigm (Frels & Onwuegbuzie, 2013). Personal experiences (as described

by participants) and locally produced documents (qualitative data) were compared to a national survey (the Current Population Survey which collects data on U.S. workforce participation). Quantitative analysis was used in two ways: 1.) examining the numbers of women and other demographic information in the construction workforce and 2.) supporting or refuting (attempting triangulation) of statements of perceived fact produced in the qualitative data.

Case study. Case study methodology is a research tradition from the social and political sciences, as well as historically used in areas such as urban studies, psychology, and law (Creswell, 1998). It is rather a versatile methodology, and can be used to study an individual or a large complicated system. Case study research can help inform theory, evaluate programs or policy, and/or develop interventions (Baxter & Jack, 2008). It is implemented when one cannot manipulate the social participants and, just as much so, when one feels social context (the natural setting) is an important part of understanding the social phenomena under investigation (Baxter & Jack, 2008).

A case study is defined by 1.) research into a distinct case or set of cases; 2.) being “bound”—usually by time and location; 3.) use of multiple data sources; and 4.) use of considerable space to describe context or the setting of the case(s) (Creswell, 1998). The case or cases studied are actually a form of purposeful sampling (Creswell, 1998). As Merriam and Associates state in *Qualitative Research in Practice*, a case can be chosen because it is unique, typical, experimental, or highly successful (2002). This decision is made by the researcher depending on a number of factors including access, desired approach to the research questions, or comfort level with the content (Creswell, 1998). The number of cases must be decided, but, as Creswell points out in *Qualitative*

Inquiry and Research Design, every case beyond one dilutes the depth (Creswell, 1998). His recommendation is no more than four cases (Creswell, 1998). Creswell suggests a reason for choosing more than one case, and he counters with why one is enough: “What motivates the researcher to consider a large number of cases is the idea of ‘generalizability’, a term that holds little meaning for most qualitative researchers” (1998, p. 63). Once the case(s) is chosen, data are gathered, always through multiple sources. In fact, the use of multiple sources is one reason a case study lends itself well to mixed methods research—quantitative data is included as one more source adding depth to the study of the case. Finally, when deciding on the case, one has to be clear what one is not studying meaning the boundaries of the case must be well defined (Baxter & Jack, 2008).

Through data collection via multiple sources, a description of the case is presented. Categorical aggregation is one way to begin analysis of data in a case study (Creswell, 1998). The researcher establishes patterns, looking for connections between coding categories. Analysis is always situated within the context of the case, and results are conveyed through description, and presentation of themes and assertions (Creswell, 1998). According to Baxter and Jack (2008), reporting results of a case study can feel overwhelming due to the complex nature of integrating and analyzing large amounts of data from multiple sources. However, it is the job of the researcher to not get distracted or overwhelmed by the large amount of data; to keep focused on answering the research question(s); and present concise findings (Baxter & Jack, 2008).

Data collection and analysis

This study used two cases covering three construction projects in two states where the policy tool of setting hiring goals was implemented. A case study methodology was

implemented to examine hiring goals set by the state government of Minnesota and enacted on the central corridor (Green line) light rail construction project in Minneapolis and St. Paul and those set in the Portland, Oregon 2012 Model Community Benefits Agreement. Since more than one case is being studied for this research (two), this constitutes a collective case study (Creswell, 1998). It is bounded by time— the activities associated with the Green line light rail construction project where construction began approximately 2011 and ended in 2014 and the point at which Portland’s community benefits agreement was implemented in 2012 to the present day in 2015; and by location— within the physical location of the light rail Green line construction project (Minneapolis/St. Paul, MN) and within Portland, Oregon.

Here, the collective case study was implemented to examine both a more typical and a unique case. The light rail was included to show a project where more typical hiring goals had been applied i.e., the goals were set at a percentage of hours worked by any woman working in the building trades. Portland’s CBA was considered distinctive at the time of implementation in that it was approved by the city council and had goals for women of any race or ethnicity and men of color set at both the apprentice and journey level. The difference represented by the Portland CBA is that empirical evidence shows women are often put on jobs to meet these goals and remain at the apprentice (entry) level of the building trades workforce (Moir, Thomson, & Kelleher, 2011). The Portland CBA, because of the hiring goals set at the journey level, was viewed as something that could encourage the movement of women from apprentice to journey level i.e., supporting retention and promotion.

Sources of information included interviews of stakeholders (stakeholders within the cases consist of construction industry personnel, government employees, researchers, advocates, and tradeswomen), audio-visual material from web and/or other sources, observation (including a pre-apprentice trades training class for women in Portland), communications, documents, reports from news media, government, other parties involved in the setting and implementation of hiring goals, and Bureau of Labor Statistics/U.S. Census Bureau data regarding the construction industry workforce.

Participants. Purposeful and snowball sampling were used in this project. Men at work in the construction industry who were not advocates or government or union employees were the most difficult to recruit regarding this topic and are not represented here. Otherwise, tradeswomen, advocates, union employees, construction company employees, and government workers were recruited for interviews. Table 4 shows a list of participants.

Interview method and content. Though interviews were open-ended, guiding questions were used and tailored to the individual. Some of those guiding questions are listed below:

1. Tradeswomen

Guiding Questions: Why did you choose to work construction? What occupation in construction have you most recently worked? How long have you worked in this field? What do you like about the work? What do you dislike about the work? Describe the process you went through to acquire work in this field. Describe training you received. Who are your co-workers? Are they supportive?

Overall, do you enjoy working on this field? Are projects with hiring goals different to work on versus those without? Should hiring goals exist?

Table 4.

List of participants

ID	Gender	Race	Organization	TradespersonY/N
1	Female	White	Union	Tradeswoman
2	Female	AfricanAm	Union	Tradeswoman
3	Female	White	advocacy for industry	No
4	Male	AfricanAm	Government	No
5	Female	White	Union	Tradeswoman
6	Female	White	Union	Tradeswoman
7	Female	White	advocacy for industry	No
8	Female	AfricanAm	Government	No
9	Female	White	construction company	No
10	Female	NativeAm	Union	Tradeswoman
11	Male	AfricanAm	advocacy for trades workers	Tradesman
12	Male	AfricanAm	advocacy for trades workers	No
13	Female	White	construction company	Tradeswoman
14	Female	White	construction company	No
15	Male	AfricanAm	advocacy for industry	Tradesman
16	Female	AfricanAm	advocacy for trades workers	No
17	Male	AfricanAm	advocacy for trades workers	No
18	Female	White	workers	Tradeswoman
19	Male	White	Union	Tradesman

2. Key community activists/advocates who work toward increasing the numbers of women in the trades and getting hiring goals written into community benefit agreements, also industry advocates

Guiding questions: What is your occupation/role as an advocate? What is/was your involvement in the CBA/state set hiring goals? What is your

involvement with the construction industry? What is your opinion of the composition of the CBA/ state set hiring goals? What is your opinion of how the CBA/ state set hiring goals is carried out? What is your opinion of the results of the CBA/ state set hiring goals? What worked? What could be improved? How were stakeholders impacted by the CBA/ state set hiring goals —specifically the construction portion and hiring goals? Should hiring goals exist?

3. People in leadership in government and within the construction industry (e.g., union officers)

Guiding questions: What is your occupation? What is/was your involvement in the CBA/ state set hiring goals? What is your involvement with the construction industry? What is your opinion of the composition of the CBA/ state set hiring goals? What is your opinion of how the CBA/light rail project was carried out? What is your opinion of the results of the CBA/project? What worked? What could be improved? How were stakeholders impacted by the CBA/project project—specifically the construction portion and hiring goals? Should hiring goals exist?

Conducting the interviews. Interviews took place at a location suggested by the interviewee. Place of work or coffee shop were the most common meeting locations. During all interviews, notes were recorded on the researcher's laptop. Audio recordings were made for the slight majority of interviews and recordings that could be were transcribed. Time and situation prevented recording for some interviews—either the recorder was on but the background noise prevented a usable recording—outdoor café would be the most common situation when this occurred—one interview was conducted

while the interviewee was “on the go” and was only able to meet for a short time. Two individuals specifically requested not to be recorded and two, by decision of the researcher, were not recorded to add a layer of protection toward anonymity.

Data analysis procedures

Qualitative analysis. Transcribed interviews—or in the cases where a recording had not been made or was not usable, interview notes—were added into the software program R, specifically into its RQDA package (R Core Team, 2014). The first round of coding simply placed text into inductively created topic categories. Categories included the following: advocacy, economy, harassment, hiring, hiring goals, pre-apprentice, race, tradeswomen, training, union, what-do-at-work, why-lack-diversity-why-need-diversity, women, work-history-how-landed-job. Next, using RQDA, participant statements concerning women in the construction workforce were put into either the “barrier” category or the “intervention” category. Coding was done to describe how the participants discuss perceived barriers (i.e., anything that restrains or obstructs progress or access) and to describe what participants say about positive interventions, including their opinions concerning hiring goals. An outside reader was engaged at this point to review coding categories and the decision of whether a description could be considered a barrier or intervention concerning women at work in the building trades. This reader concurred with the vast majority of coding.

A third round of coding consisted of dividing the data into three sections that seemed logical emergent categories: 1. Women’s individual experiences in the construction industry; 2. Institutional actions, descriptions; 3. Social-cultural issues concerning women and the construction industry. Separated into other categories were

individual opinions of hiring goals, and descriptions of each case—that of the light rail in Minnesota and the CBA in Portland, Oregon. Other documents examined, such as email communications forwarded to the researcher or meeting minutes available on the web, were specific to either the light rail project or the CBA.

Quantitative analysis. Part of each case study included quantitative analysis of the construction workforce in both the Twin Cities and Portland. Used for this analysis was secondary data from the Current Population Survey (CPS) Merged Outgoing Rotation Groups (MORG) collected by the U. S. Bureau of Labor Statistics and the U. S. Census Bureau. Data sets were retrieved from those archived, and made available for public use, by the National Bureau of Economic Research (NBER). Also presented were project specific data concerning the construction labor force. These were data collected and provided by the Metropolitan Council concerning the Green Line light rail and data collected by those monitoring Portland's CBA implementation.

Descriptive statistics were used. Numbers of women working construction were examined in the Minneapolis/St. Paul metro area and the Portland, OR metro area. This information was culled from the MORG data. Information analyzed was guided by statements or issues raised by participants. These statements (or sentiments) included the following:

- The number of women working in the building construction trades is increasing.
- Unions are more (or less) supportive of women working in the building trades than the non-union sector.

- Building construction trades workers are aging (their average age has been increasing, suggesting a possible recruitment issue).
- The number of people born outside the United States working in the U.S. construction industry is increasing.
- The Twin Cities area has more women working in the construction industry than the U.S. average.
- Portland, OR has a more women working in the construction industry than the U.S. average.
- Increasing numbers of men of color are working in the construction industry.
- Increasing numbers of women of color are working in the construction industry.
- White men have been the group experiencing the biggest losses concerning job losses during the most recent recession (approximately 2008).

Data sets downloaded from NBER were transferred into SPSS version 22 and analysis was done with the SPSS software.

Validity and reliability

By the inherent nature of studying a case (or two cases in this instance), generalizability of the research—at least external validity—is something of which one needs to be wary (Merriam, 2002). As Merriam states regarding the generalizability of case study research, “It is the reader, not the researcher, who determines what can apply to his or her context.” (Merriam, 2002, p. 179). Often useful as a prototype (in the

instance where a case is showing positive results) or a study in what not to do (where a case is representing, for example, a misdirected strategy), or even a combination of the above, presenting the results of a case investigation simply distills aspects of a phenomenon within a clearly defined situation that may possibly have applications in similar situations. Conclusions from a case study are not something which can then be concluded about any and all similar situations (Merriam, 2002). Rather, they add information to a body of knowledge

Considering the above, the goal is to do research representing accurate information (Creswell & Plano Clark, 2011). Similar to external validity, reliability has limited use when analyzing qualitative data (Creswell & Plano Clark, 2011). One method used in assessing reliability in the qualitative design as suggested by Creswell and Plano Clark (2011) is triangulation, and triangulation was implemented for this research. Triangulation via media coverage and other community and government reports as well as using the body of previous research on tradeswomen and hiring goals and comparing that content to interviews is presented here. This method of checking for reliability is well suited to a case study research design as gathering data via multiple types of sources is an inherent part of the methodology.

Validity and reliability for the Current Population Survey (CPS). A benefit of using secondary data can be access to resources (dollars, time, and expertise) that the researcher would not have otherwise. Using government-produced data within this case study methodology offers entrée to national as well as local numbers helpful in creating a richer description of the cases. The U.S. Department of Labor (DOL) states that because the CPS is a random sample survey and not a census, there is room for sampling error

(Current Employment Statistics, 2015). In data published July 2, 2015, the DOL cites significance testing at a 90% confidence level for the CPS data (Current Employment Statistics). Because the survey covers approximately one-third of non-farm employment, over the past 10 years, the sampling error has averaged .03% (Current Employment Statistics, 2015). The reported confidence level and sampling error are within acceptable ranges for quantitative survey data.

Limitations of the study

The topic of affirmative action—or even diversity—in the construction industry tends to be tension filled, controversial. As a white woman who has worked in the building trades and made clear in my consent form that this research was looking at the notion of increasing the numbers of women in the construction industry; my identity categories and revealing of my transformative approach to the research questions are likely factors tempering or influencing participant responses.

Because applications of hiring goal policy in the construction industry are—like the construction industry itself—fractured, unique to a project, location and time relevant, reflecting ideology of those in power as to how they will set and enforce the policy; these results are not generalizable. In the same vein, CBAs are individually tailored documents. Using one CBA (or even two) to generalize about all or a majority of CBAs would be questionable to say the least. Rather, this research can only contribute a segment of knowledge to a growing body of research concerning outcomes of community benefit agreements and their uses on construction projects.

Specific to carrying out this research, a limitation was access regarding people composing, implementing, and working within the bounds of the two case studies. People

are busy; and this is certainly true for those in the construction industry. As a researcher who resided in the Twin Cities, more interviews took place in that location. However, individuals in Portland were fairly generous at sharing information about their work on the CBA and were more forthcoming with email communications and documents leading into the creation and implementation of the agreement. Certainly there are many more voices who have opinions about and experiences with hiring goals, in particular men who currently work in the building trades.

CHAPTER FOUR: RESULTS

Chapter four presents analysis of the Bureau of Labor Statistics Current Population Survey (CPS), 19 interviews, observations and informal conversations with those in the construction industry, and documents including review of items such as meeting minutes, email exchanges, and Portland's Model CBA. The chapter begins with a broad picture of the construction industry workforce presenting workforce demographics as collected in the Merged Outgoing Rotation Group data from the CPS. Next, issues that should be taken into account when considering women's work in the construction field and the ways hiring goals intersect with tradeswomen's daily jobsite realities are discussed. The above is followed by a presentation of the two case studies of projects with hiring goals—the Twin Cities light rail and projects implementing Portland's CBA. Last, are discussions of hiring goals and analysis of how the policy tool affects tradeswomen.

Setting the stage: Quantitative Data

The Current Population Survey (CPS) is the U.S. government monthly household survey of employment. Used for this research was the Merged Outgoing Rotation Group (MORG) portion of the survey. The MORG survey asks weekly earnings and hours worked (National Bureau of Economic Research (NBER), 2015). MORG data is often used when researching wage inequality, union wage effect, or employment discrimination (NBER, 2015). Analyzed was MORG data from 2014 (the most recent year data was available). Participants who worked in the construction industry (code 770) were culled from the data (N=12,671). Duplicate cases were removed.

There are no surprises in 2014's data. Women make up less than 10% of industry workers; white people are approximately 90% of the workforce (figure 1); culling women from the data, white women were 90% of female workers (figure 2); 82% of workers are U.S. born followed by those born in Mexico who make-up 9% of the workforce (figure 3). One stated concern was industry workers are aging. However, the average age for construction industry workers in 2014 was 43 (figure 4)—lower than the average age of workers in all occupations in the data set at 47 years. Union membership was also culled. About 16% of industry workers were union members. Some participants posed the idea that unions were better at recruiting and retaining women workers, and others posited the opposite sentiment. A chi-square test of independence was performed to examine the relationship between union membership and gender. The relationship between these variables was significant, $X^2(1, N=8054) = 75.6, p < .001$. This means being male appears to be a dependent variable in relation to being a union member. Thus, the *H₀*: *Women are more likely to be union members* is rejected.

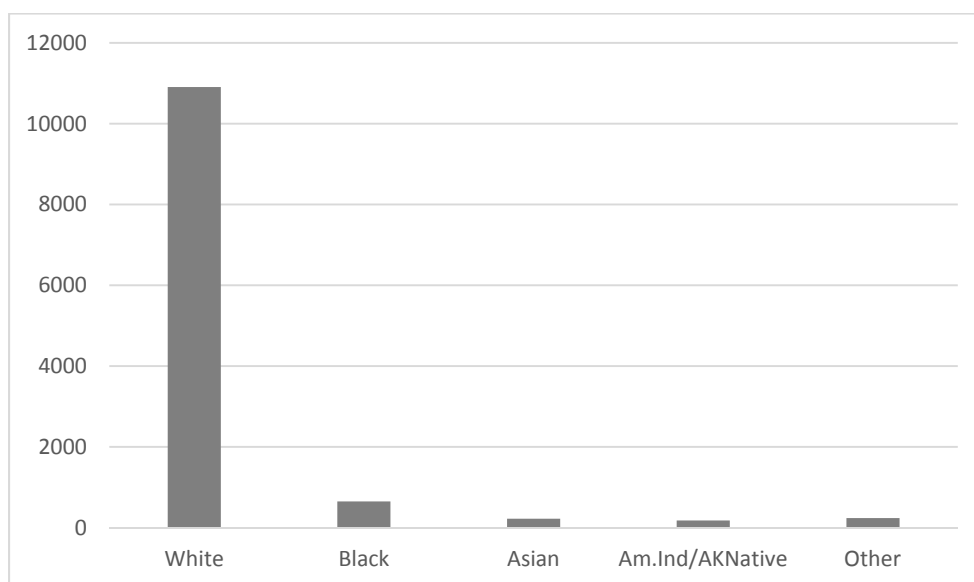


Figure 1. 2014 race identification of construction industry workers (frequency is shown).

Source: MORG data.

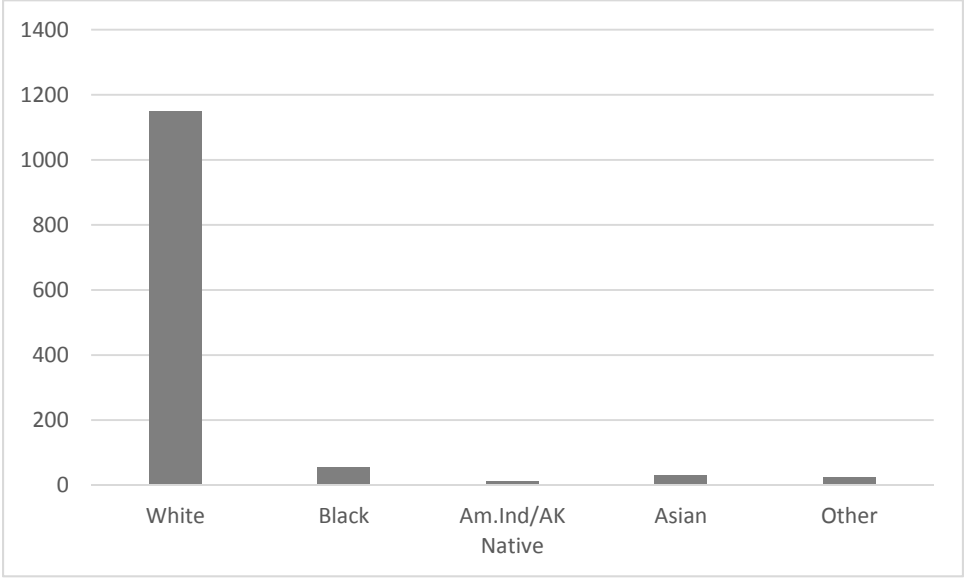


Figure 2. 2014 race identification of women construction industry workers (frequency is shown). Source: MORG data.

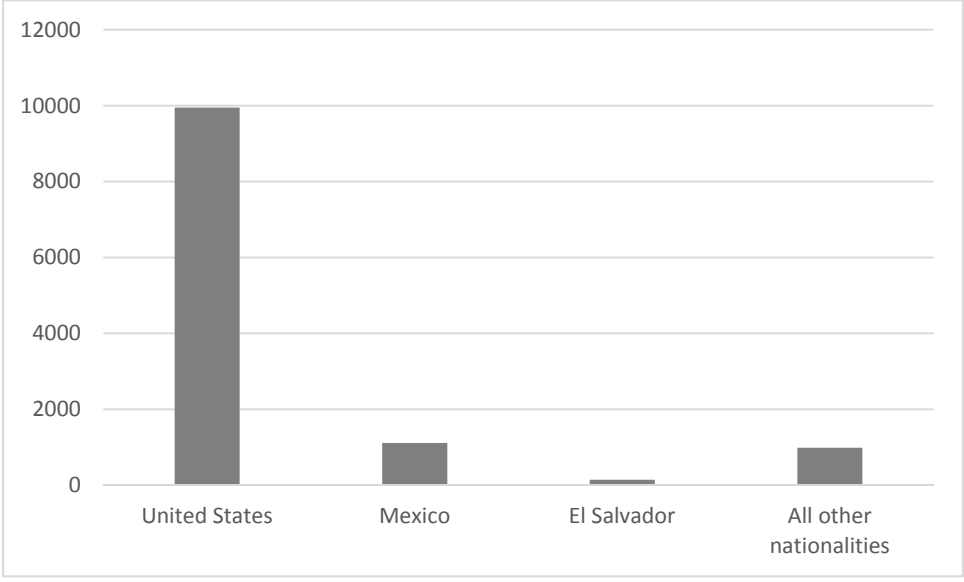


Figure 3. 2014 nation of origin of construction industry workers (frequency is shown).

Source: MORG data.

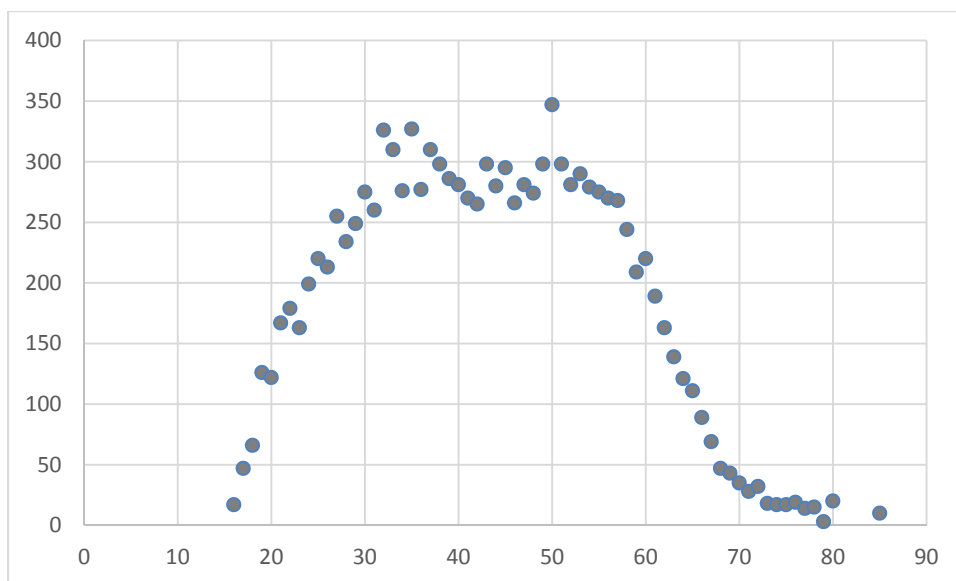


Figure 4. 2014 ages of construction industry workers (frequency is shown). The average age is 43. Source: MORG data.

The MORG data set from 2004 was also analyzed in order to compare two points in time—specifically to compare the workforce pre and post the most recent economic downturn within the construction industry (approximately 2008). Construction industry workers were culled ($N = 14,540$). Duplicate cases were removed. A claim by more than one participant was that more white men lost jobs in the 2008 downturn than any other group. In 2014, women were 9.1% of the industry and in 2004 women were 8.9%. In 2014, white people were 90% of the workforce, and, in 2004, white people were 90% of the workforce. These numbers do not show any disproportionate job losses for white men as a percentage of construction industry workers during the 2008 economic downturn. Nor do they suggest men and women of color or white women have made any gains in the construction industry workforce over the past decade—another common assertion. Union membership, at 16% in the 2014 data set, held fairly steady from 17% in 2004. In

2004, 86% of workers were born in the U.S. (see figure 5) compared to a slightly lower 82% in 2014. The average age of an industry worker in 2014 was 43 compared to a slightly lower 40 in 2004 (see figure 6).

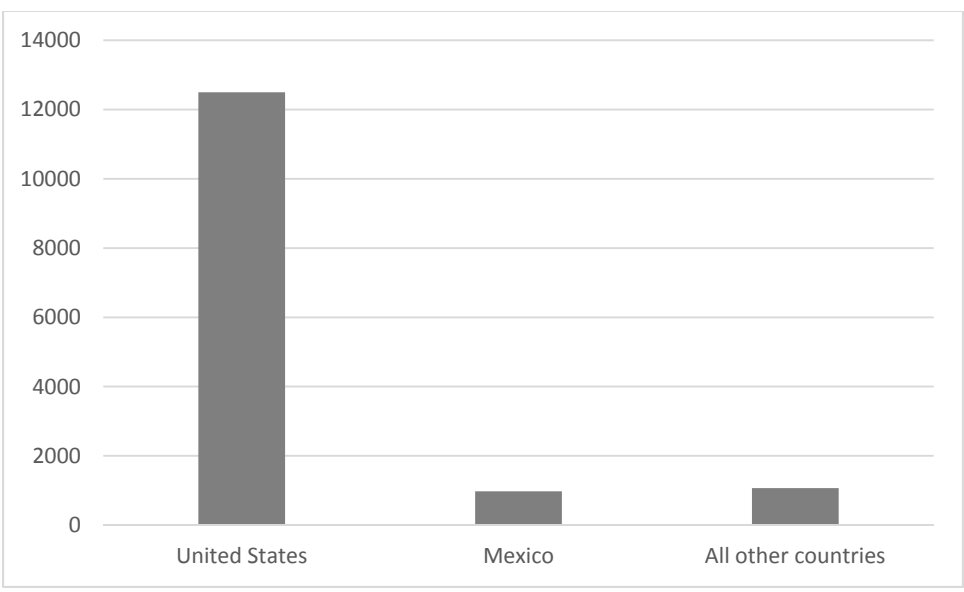


Figure 5. 2004 nation of origin of construction industry workers (frequency is shown).

Source: MORG data.

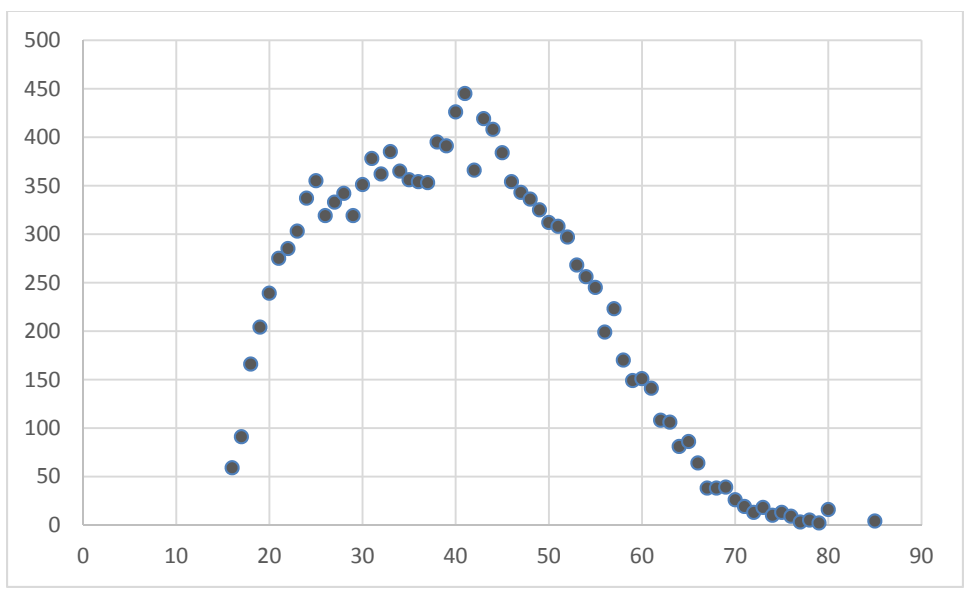


Figure 6. 2004 ages of construction industry workers (frequency is shown). The average age is 40. Source: MORG data.

Twin cities metropolitan area. CPS MORG data were culled for those living in the census designated Minneapolis/St. Paul metropolitan area (cbsafips = 33460). The years 2012 through 2014 were combined and examined (N=503). Individuals working in the construction industry were identified (industry code = 770). Duplicate cases were removed. Numbers were very similar to those in the national data set. Women represent 11% of industry workers; 95% of workers are white (see figure 7); 92% were born in the U.S. (see figure 8); the average age is 42 (see figure 9). One notable difference is that union membership is higher than the national average at 33% of eligible workers as union members.

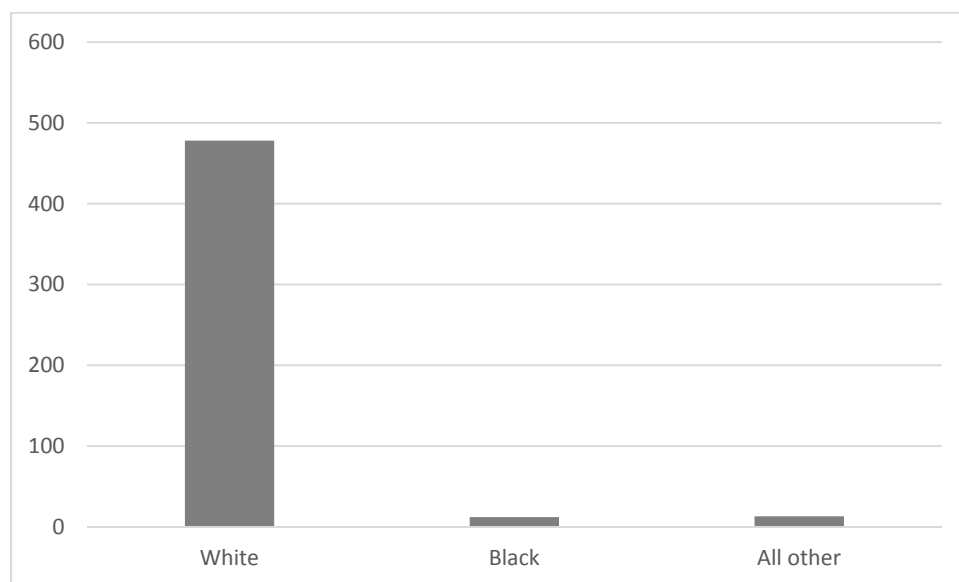


Figure 7. Twin Cities metro area 2012-2014 race of construction industry workers (frequency is shown). Source: MORG data.

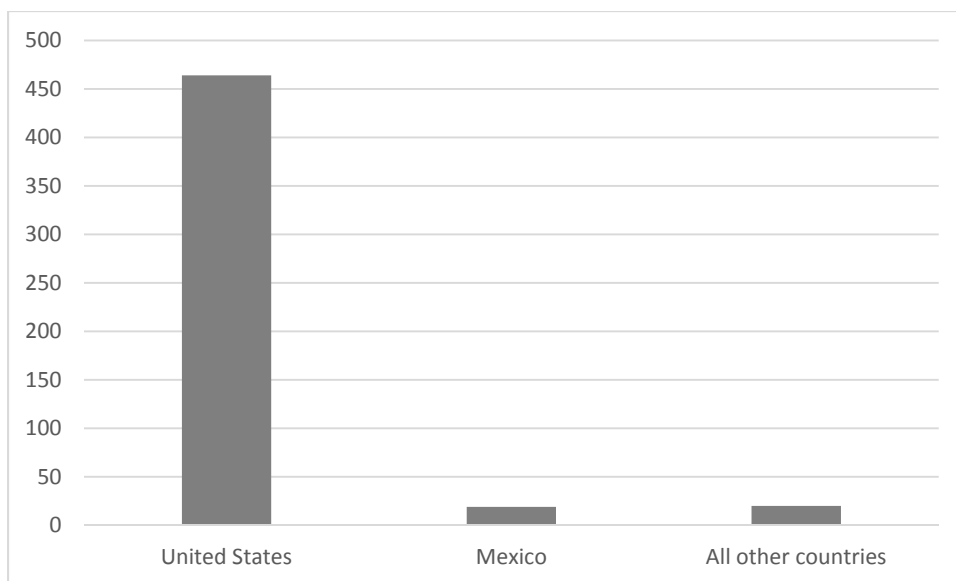


Figure 8. Twin Cities metro area 2012-2014 nation of origin of construction industry workers (frequency is shown). Source: MORG data.

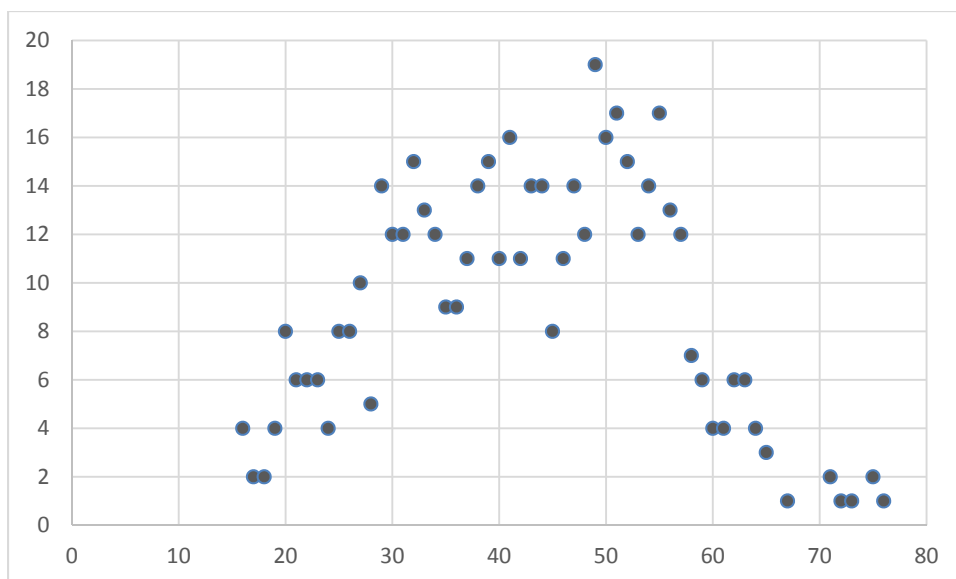


Figure 9. Twin Cities metro area 2012-2014 ages of construction industry workers (frequency is shown). The average age is 42. Source: MORG data.

Portland metropolitan area. CPS MORG data were culled for those living in the census designated Portland metropolitan area (cbsafips = 38900). Data from the years

2012 through 2014 were combined and analyzed (N=316). Individuals working in the construction industry were identified (industry code = 770). Duplicate cases were removed. As in the Twin Cities metro area, data showed very similar numbers to those in the national data set. Women were 9% of the industry workforce; workers were 93% white (see figure 10); 87% were born in the U.S. (figure 11); the average age is 42 (figure 12). However, in Portland, as in the Twin Cities, union membership is higher than the national average at 23%. One of the statements made about hiring goals and the construction industry is that companies and unions simply put all available women on projects with goals. In Portland, while the two projects with CBAs have 10% hours worked by tradeswomen, these numbers are not making an immediate impact on women's participation in the industry.

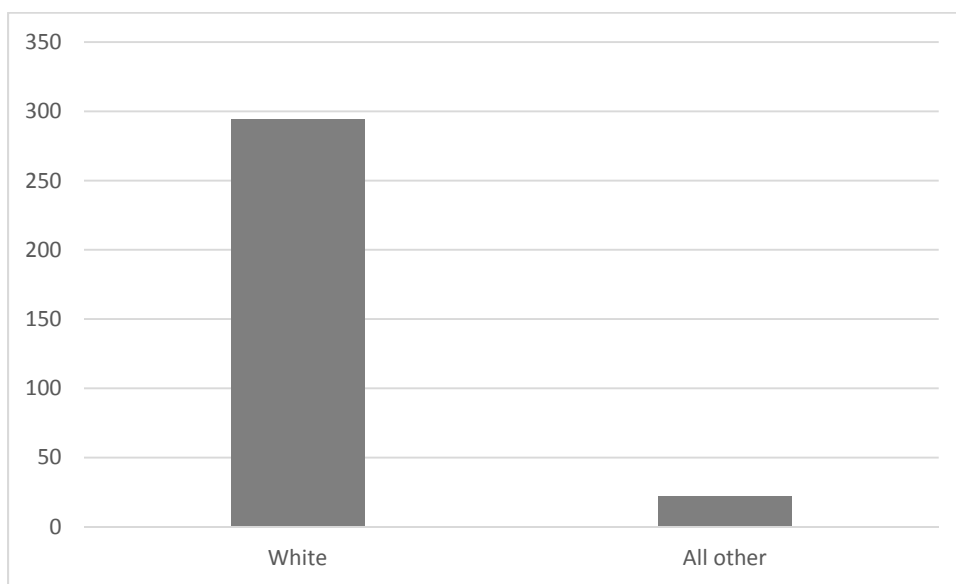


Figure 10. Portland metro area 2012-2014 race of construction industry workers (frequency is shown). Source: MORG data.

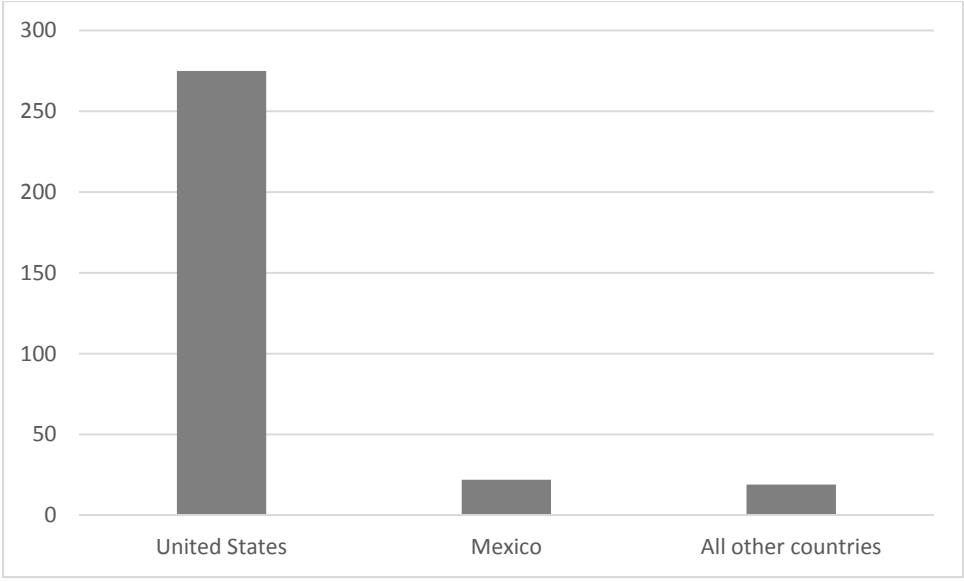


Figure 11. Portland metro area 2012-2014 nation of origin of construction industry workers (frequency is shown). Source: MORG data.

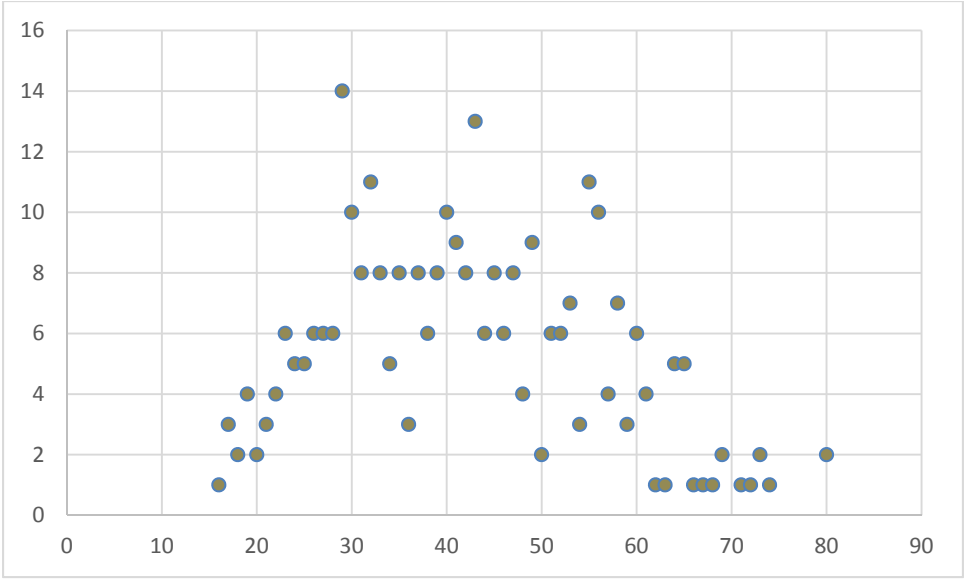


Figure 12. Portland metro area 2012-2014 ages of construction industry workers (frequency is shown). The average age is 42. Source: MORG data.

Women working in the building construction trades

In order to explore the results of the policy tool for hiring goals and women in the construction industry, interviews took place with tradeswomen, union and construction company employees, government officials, non-profit, and advocacy workers. Meetings resulted in thoughtful conversations about the construction industry, the current status of tradeswomen, and the environments in which they work. These conversations included opinions regarding what makes women successful and what hampers success through hiring, retention, and promotion practices. Although participants were connected to either the light rail project in the Twin Cities or Portland's CBA, for this initial discussion of tradeswomen's experiences, the data has been combined because 1.) it could be done rather seamlessly, and 2.) doing so created a more robust description of the issues underlying and surrounding the creation and implementation of hiring goals.

As described in Chapter 2, Segmented Labor Market (SLM) Theory posits primary-tier jobs are rationed and guarded. SLM theory outlines a two-tiered system of U.S. occupations with little or no crossover between the individuals who work in the primary-tier versus the secondary-tier. Within the context of SLM theory is the idea that barriers exist preventing many people who want to work in primary-tier occupations from doing so. Barriers for women who want to work in the building trades (historically, a primary tier occupation) include not knowing how to navigate entrance to a union apprenticeship, not being afforded good training, always being the first laid-off, and hostile work environments. Tradeswoman advocates, per an SLM framework, would suggest removing entrance barriers for primary-tier occupations as well as encouraging the creation of more primary-tier jobs i.e., jobs with good training, safety, livable wages

with good benefits, and opportunities for advancement. Moreover, this tactic is one advocated within the “construction careers approach” in the context of CBAs.

Framed in a context acknowledging impediments in place for women who want to work in the building trades, the first part of this section presents participant discussions about barriers and positive interventions regarding women working and wanting to work in the building trades. After an initial round of inductive coding, three overarching topics emerged. These topics could be contextualized in an existing framework: individual experiences, institutional regulations and norms, and societal and cultural customs and expectations. The presentation of data is organized into the following:

- Tradeswomen and their experiences in the construction industry
- Institutions involved with setting and implementing hiring goals analyzed through the voices of participants who work for or with those institutions
- Socio-cultural realities and ideals concerning women and work and how those views affect the numbers of women working in the construction industry and tradeswomen’s daily lives

The three categories, having emerged during the coding, were previously identified and discussed by Adams, Bell, and Griffin in *Teaching for Diversity and Social Justice* (2007). Adams et al. used the three categories—individual, institutional, and sociocultural—as the “contextual dimensions” of oppression.

Participants’ comments reflect both negative and positive aspects of their work life. Rather than describing the first dimension as *individual acts of oppression* like Adams et al. did, where the authors’ focus was on those who are considered “oppressors” and their individual acts such as, for example, an individual telling a racist joke; this

research simply coded *individual influences* or the experiences of tradeswomen (who, in this situation, would more likely fall into the “oppressed” group). The other two categories, *institutional influences* and *sociocultural influences*, match more closely with *Teaching for Diversity* in that they examine barriers (or oppression), interventions, and opportunities at the institutional and socio-cultural levels. Institutional influences can include government entities, business and industry, education, and the legal system (Adams et al., 2007). This research is primarily concerned with construction companies, government, unions, non-profit organizations, and education (or training systems) as well as how/when they promote barriers to tradeswomen and how/when they provide positive support (intervention to barriers). Meaning, how do institutional policies oppress or support tradeswomen?

Socio-cultural influences (or cultural/societal systems) include philosophies of life as well as definitions of words such as “normal,” “beauty,” “on-time,” and “family” to name just a few examples (Adams et al., 2007). These belief systems, often taken as “truths”, can contain oppression within them e.g., the “truth” that marriage should only be between a man and a woman historically excluded gay men and lesbians from obtaining marriage licenses (Adams et al., 2007). This research focused on belief systems concerning labor, occupations, family, and gender. Included were the societal definitions for those words; how those definitions are contextualized; and how those “norms” impose themselves on women who do, have, or would like to work in the building trades.

Individual Influences

A handful of tradeswomen, or women who worked as tradeswomen and had subsequently moved onto other jobs in the construction industry, were interviewed for

this research. All had established careers, mostly within the union sector. Overall, they had positive views of construction work as well as their experiences as tradeswomen. Not represented here are women who left the field for negative reasons or women who attempted to join the field but were unsuccessful. Although a small sample was represented, narratives can be connected to a modest, but growing, body of literature concerning building construction tradeswomen's experiences. For the most part, what was articulated by the study's participants support existing literature.

Tradeswoman participants found their way to the building trades through a few different paths. Two individuals had fathers in the construction industry, and both of them said they worked alongside their respective dads when young: "I worked in the construction field. My dad was a contractor, and I grew up helping him. During college I worked in the field." No longer a trades person, this individual still works within the construction sector. Another woman stated, "I used to go to work with my dad as a kid. It wasn't any jobsite that would hurt me. I'd put on receptacle covers, just stuff that kept me occupied and happy. I thought it was fun at 8 years old." When asked if, as a child, she thought she might want to work in the trades, she replied, "As a child, I did think I wanted to be [a building trades worker]. I was told 'No' by my father; he said absolutely not because of the wear and tear it does to the body." Considering the warnings and having some knowledge about what construction work entails, this participant decided to enter the building trades and now supervises jobsites for her trade.

Two women said they found the work "by accident." In answer to the question about how she landed in the building trades, one participant described acquiring the training from a trade school:

Accidentally. I signed up for culinary school at trade school and got sent to the wrong place [building trades program]. . . . That was in 1977. I was getting a low interest loan for school, and they said that they would only give that to me if I would go into nursing or foods or—what was the third one? Secretarial. So anyway, I just pushed it and got [into the building trades program].

Having been sent to the wrong location at trade school, this participant made a career out of the “accident” even after being told loans would only cover her education if she entered one of three training programs deemed acceptable for women. Initially, the participant worked non-union construction jobs, but she joined a union when a friend of her father revealed the union wage and that they were hiring women for union jobs: “I talked to [union construction worker], and he told me how much money they made, and it was huge compared to what I was making, and I said where do I go; what do I do? ‘Sign me up,’ is what I said, literally, on the phone.” This participant remained a union construction worker.

Another woman, who now owns a construction company, told about how a friend in the field encouraged her to apply:

I just took a summer job as a union apprentice. A friend of mine who was doing it said, “It’s great money. You’re a strong woman from the farm. You can do it.” And I said, “That’s nothing that I wanna be doing, but how much is [the pay]?” And I thought, “Well, it’s summer, and I can be outside.” So I went, and I did it, and I signed up, and it was a job where they had to hire—it was a county job.

Having a college degree and originally thinking of the work as a “summer job,” the participant continued working in the industry. She found that she “loved it,” in particular the combination of physical and mental challenges.

A different woman told of first meeting a tradeswoman because her children were at the same daycare. Encountering this tradeswoman inspired the participant to start thinking about construction work:

There was a young lady—well, we had our children at the same daycare facility, and I know that she was always dressed in construction clothes, and I would always ask her how did she get into it? And I really admired her. . . . In the morning, she’d be all clean. Then, when she’d come back to get [her children], there’d be dust and everything all over her. And I was just like, “Wow! I would love to do that.”

Originally working in the medical field, the participant looked for an avenue to enter the building trades, in particular for training programs, but she could not find much in Minnesota at that time. It took a move and a divorce before this participant found her way into construction work.

One woman recounted how she didn’t begin working construction until her 40s. She lauded the life-altering effects of union wages and benefits, how she will have a retirement pension, how her health improved, and the positive impact of all the above on her family: “I saw the fruits of my labor. I saw how I could transform space. I could do that with a smile on my face. I was releasing a lot of endorphins. I knew it was the right job for me.”

These individuals had different paths to becoming tradeswomen. Having a family member who is a construction worker, as is the case with many men, is certainly one avenue that leads women to consider the work. The situation depicted by the participant who went to trade school but had to fight her way into the program because it wasn't perceived to be for "women" would not occur today. However, women entering trade programs at technical schools would still find classrooms with a majority of white male peers.

The construction field has, like any career, baseline requirements. To do the work, participants stated, a tradesperson has to be in good health; to be able to get to and from work (in the vast majority of work situations, this means having a driver's license and a reliable car.), have at least a high school diploma or, in some trades, an associate's degree; and arrangements (and back-ups) for child and/or elder care. Without all of the above in place, a woman will simply not have a chance at success. In fact, these requirements exist for any man or woman entering the construction field with one exception that was brought up by a number of participants: women are more likely to be (actually or perceived as) primary caretakers of children.

Childcare. Childcare issues were discussed by a number of participants (in particular by people who are not tradeswomen). The requirements for taking care of one's children have been a reason women leave the field, and childcare challenges can increase when overtime is required. While many women do not have children or do not have children who need caretaking, i.e., having adult children; there are tradeswomen with young children at home. Yet, tradeswomen with young children have developed methods to address childcare. In many cases, complete childcare responsibilities do not necessarily

fall on the woman who works in the building trades. For example, one tradeswoman had a husband who was a stay-at-home dad. If a woman was the primary caretaker for her child(ren), ways to negotiate the demands of the trade work and child-rearing can be found. Another woman remained conscious of her commute. If she was sent to a jobsite that was too far away, she would quit/request a different worksite. Using this tactic, she was able to stay consistently employed while staying close to her home. Wanting to spend more time with family, the same individual turned down a supervisory job because it required more hours, for example, in taking work home at night. She stated that it was years before she first heard one of her male co-workers mention childcare: “I have to say the first time I heard a guy say, ‘No, I can't stay late, because I've got to pick the kids up at daycare,’ I literally stopped in my tracks because it just was like the world had changed.” This sentiment about an unfriendly work environment for parents was also stated by one union employee: “Construction is not historically that patient with those kinds of things. Construction—that whole work-life balance thing—doesn't seem to have traveled to construction yet. I think it's going to have to; I mean an incoming generation of people is going to insist on it, men and women alike.”

Self-confidence and self-efficacy. When navigating the hiring process as well as job tasks, participants who are advocates and tradeswomen discussed the need for self-confidence and self-efficacy. The tradeswomen who were interviewed were confident—or because they found they enjoyed the work, developed confidence—in their skills. The skills described as needed were being a “hard worker, arriving on time, working well with others, taking direction, giving direction, going above what is asked.” Women explained that they did not really work differently than male coworkers and often

observed peers gauging what level they needed to be working, e.g., how many boards should they carry or how fast should they be working? In some instances, even feeling they needed to be doing a little more than their male co-workers. One participant described her approach:

If I saw guys were doing it, I would just—I was a very—I can't think of what I'm trying to think of, but cognizant of how guys were working and would watch them to make sure that I did at least what they were doing, if not better. And so, if they were carrying two by tens and beams and headers by themselves, then I was gonna do it by myself and even more so.

The interviewed tradeswomen had a sense for the amount of work required in this occupation. They self-identified their physical strength, knowledge, and work ethic as reasons that they were successful. One woman stated, “I haven't been laid off that often. That sounds like bragging.” Tradeswomen likely need this confidence to negotiate male-dominated environments. Because the empirical and anecdotal evidence finds that tradeswomen do experience more layoffs (LeBreton & Loevy, 1992), the above participant statement was something to personally feel good about as well as being a statement from a person who beat the odds. This same tradeswomen identified her self-assurance: “I think I just always feel confidence. . . . I just worked really hard, and I just—I had a great partner and a really good boss when I first started.” Female participants identified a number of aspects of the work that they enjoyed, including the fact that they see tangible results for their labor and working outdoors. They described a passion for their respective occupations, and how they appreciate the combined use of

physical and mental skills required for job tasks. Phrases included, “I enjoy the work,” and “I have fun at work.” They discussed being able to acquire a valuable skill, and the majority of tradeswomen stated they plan to retire as construction-industry workers.

(not)Fitting in. Identifying as a “tradeswoman” rather than a “tradesman” creates trials in the construction field. Optimally, gender would not be a defining characteristic at work, and everyone would be treated equally. Yet, as trades workers, women often find themselves the only female at a job site or, at best, one of a handful of women working at a large site. One tradeswoman said, “At [one project], there were hundreds of workers, so maybe one to two other women were there. Some jobs, I don’t see any other women.” With men as about 97% of the building trades’ workforce, obviously, the vast majority of tradeswomen’s co-workers will be men. Noted by others (see, for example, Denissen & Saguy, 2014), because the presence of women can threaten the ideal of construction trades work as inherently masculine (or manly), women in this study sometimes discussed how they negotiate the issue of their female gender and being a building trades worker. One tradeswoman stated, “You have to fit in, but you don’t want to be manly or aggressive. You want to keep your own identity.” Another woman described balancing “not trying to be one of them” but needing to be “close enough” for some level of acceptance: “It took a bit—like I said, the time test. I would ride it out. As soon as they [men] got used to me, and that I wasn’t trying to be one of them and I was close enough that—and I could hold my own. I was a big, strong girl so they would accept me to a certain degree.”

Similar to how men working construction might be considered “tough,” the women who were interviewed also hold themselves and other women to a “toughness”

standard. One tradeswoman said, “I’m just thinking; there are literally some women who are so thin-skinned. What are they doing there? And there’s other women that will just do whatever they’re told and they’ll just keep, you know, they’ll never advance because they don’t speak up for themselves.” Having to “pull one’s own weight” as a tradeswoman and be good at one’s job were valued by these participants, not only for their own work, but also in evaluating other women at job sites.

One individual stated that construction sites are often “sink or swim,” and women discussed the struggles they had concerning an often less-than-cordial work environment. A participant described her first job:

I was pretty much a joke for a lot of people when I arrived to the jobsite. But they didn’t know my strength. They saw my appearance, and they assumed my ability. I’m a woman and I’m old and I’m heavy and I have some junk teeth and I’m from the city—which also defines you when you live in the city and my car was a piece of junk. I was told what to bring [by a training program] which was a source of laughter. They told me to bring a shovel, but not what type. I’d never been on a construction site.

I loaded a concrete hopper for the first months. Cleaning and tearing down scaffolding—but they didn’t know what I could do, so I was just in charge of clean-up, and then, almost everyone was young enough to be my son. I didn’t take my breaks with them so I have no idea . . . I was grateful to be there. It was a great exercise to be there. I had to dig deep. I’ve worked harder for a lot less money. I was 15 years as a battered woman; it’s not hard to dig deep. I felt so vital.

Because she enjoyed the work and had strength and perseverance, this tradeswoman was able to continue working in the construction industry even though she was not initially socially accepted by her co-workers and arrived at her first job site without finding any sort of welcoming or official orientation program.

The majority of the tradeswomen interviewed, at some point, mentioned “isolation.” Similar to the previous participant statement, a number of the women reported not sitting with the rest of their crew at breaks or lunch, and not necessarily having much to talk about with their co-workers. Another interviewee remembered her early years working construction and how, even if she was invited to socialize, she decided to keep her distance in order to maintain a certain level of respect:

I was invited out for beers. I didn't go. You don't fraternize. You just keep your distance, and then it seemed to keep a nice respect. But then you don't have any friends either. . . . I would come home pretty quiet and, not only stiff, but didn't have anybody to talk to all day long or not much in common. So that could be a little bit of a drag.

One woman mentioned that she often has little in common with the few other tradeswomen she meets: “They were brought into the trades by family or a friend. You aren't seeing people in high visibility vests getting out of their cars in [a predominantly African American neighborhood] at the end of the day.”

“Fitting in” on a crew usually requires an extra level of “proof” that a tradeswoman could do her job. One participant stated, “You have to show them [men] that you—whereas a man, they just assume that you can—they can do the job. And a woman, it's assumed that she's there, you know, filling some quota. That's definitely a big

difference.” Because the tradeswomen who were interviewed for this study were all in the midst or nearing the end of a successful construction career, they were able to “prove” themselves. Another tradeswoman acknowledged the extra layer of “having to prove” herself but then said that, once co-workers saw she was a good worker, she was accepted: “My experiences were not the same to begin with. That’s because most of them [men] think ‘here’s a girl.’ Women have to prove themselves a little more than most, but once we do, then it’s fine. But it takes a little more for that to happen than if I were a male.” Tradeswomen have to be good at their jobs because, if they are not, it is often not seen as just an individual failure but as a failure of all women’s capabilities as construction trade workers. One woman described how she would not show any fatigue or injury, “I never would take a hand, and I’d do it all by myself. I’d just go home really stiff. And if I cut myself or if I did anything, I was not gonna tell anybody. If I was stiff, if I was sore, if I was bruised, I was always fine.” One participant who works in the office side of construction, described a situation where one tradeswoman had not worked out for a company and the results:

I had a hiring manager. I gave him a resume, and he said, “Oh, that’s a woman. I’ve already done that. I’m not hiring a woman again,” and his objections to that particular woman that he had hired was that she was— she couldn’t carry a ladder, she was short, she was small of stature, she had childcare issues, she was a single parent, the crew didn’t take to her.

With few women in the field, any woman who enters the building trades and then quits, is laid-off, or is “let go” feeds the cultural narrative that women cannot or do not want to do this work.

As with any job, co-workers can have a significant effect on one's work experience. When negotiating this environment, tradeswomen may find they have to deal with co-workers' egos regarding their masculinity. The isolation a woman can feel, combined with the work being tied to ideas of masculinity, can make for some difficult situations as reported by one woman:

I think there's a lot of guys that don't want to be outdone by a woman, outworked, and so sometimes there—this sounds so cliché, and I don't mean to be sexist, but sometimes, there's an ego there that, if you bruise it, it just turns into like a competition or confrontation of some—I don't know. I have had some awesome partners. They're smart, and they've become really good friends. But if you ever have a bad partner, you don't forget it. It's a constant struggle every day because you're not in the center of things like he is.

The descriptions above illustrate the isolation and extra level of proof of ability faced by women at every new jobsite. The lingering requirement (unofficial but ubiquitous) to supply an extra level of “proof” that someone can be a woman and a construction worker speaks to a continuing rejection of women within the industry. One result of not “quite fitting” can be a feeling of precariousness. A participant confided, “I have spent many sleepless nights thinking, ‘Am I going to be able to hold onto my job?’ because there's a lot of people who don't want me there, and you start to wonder, why am I holding on to this? But sometimes, you just don't want them to win.”

Institutional Influences

Regarding research about the policy tool of setting hiring goals for tradeswomen on construction projects, four types of institutions are of interest: 1) unions, 2) construction industry and worker-advocacy organizations, 3) construction companies, and 4) government agencies. All these institutions play significant roles in the building trades' workforce. Although four types of institutions are of interest, unlike, for example, the auto industry which is dominated by a handful of companies, institutional participants within the construction industry are numerous and multivariate. Work expectations and environments can diverge significantly from one jobsite to the next, depending on the institution(s) involved with any particular project. One tradeswoman advocate stated of women's experiences, "I would say that the experience is widely varied. It depends on the general contractor. It depends on the owner of the project. It depends on the trade. It depends on the crew. And so women's experience can vary from the worst horror stories to the most welcoming and supportive atmosphere." Nevertheless, the participant acknowledged how research regarding women who work in the building trades finds that, as a group, tradeswomen experience more hardships and discrimination; she stated, "Women report that they experience more layoffs, less training, less opportunity for advancement. . . . So, even though each individual jobsite has unique characteristics, the experience of women is one of a group that is experiencing bias." Thus, one question is as follows: what is the institutional role in creating this overall experience of bias against women in construction? Then, a subsequent question arises: "What can institutions do to remove barriers and to promote the success of women in the building trades?"

Construction companies. Construction companies must make a profit, and their labor force needs to operate in ways supporting the company's goals and policies. One could argue that, as far as institutions go, it is construction companies having the least immediate and short-term payout in complying with hiring goals or working toward a diverse workforce. For many who manage construction companies, hiring goals are viewed as unwanted, unnecessary, stress inducing, and costly. When bidding on jobs where hiring goals exist, companies are often forced to deal with a situation for which they are neither interested in nor prepared. One industry advocate characterized that sentiment:

The establishment of goals is cause for concern because it's another piece of compliance, and, of course, there's always a fear of failure. Any contractor who finds themselves face to face with a hiring goal immediately starts to worry about, "What's going to be the repercussion if I cannot meet this goal?" Associated with that, then, is a whole new layer of cost and compliance, and as goals have become more and more—more and more prevalent, as good faith efforts have become more and more important, we've seen contractors add staff people, add processes, add paperwork, add compliance. All of these things, and it doesn't come free.

There's a cost associated with it.

Already dealing with environmental regulations, building codes, safety compliance, and the construction of often large and complex projects, having what can seem like a system in place telling companies who they should have in their workforce when other industries do not have the same level of workforce scrutiny can seem punitive.

Maintaining a workforce for which a company has a good idea of the productivity and skill level is, in particular, important for construction because companies are bidding on projects. This means their best guess (or prediction) of their workforce's performance on a project is something that can make or break a company or, at a minimum, decide profits and losses. In largest part, the construction industry has been satisfied with its white, male building trade workforce. As one construction company employee stated:

Our current staff, I wouldn't say we've seen a significant change in the amount of women or minorities yet. Applicants for sure. Here's where there's an issue: So we've had a workforce working for us, right? We know their work ethic. We know how well they work. We know what they're capable of. So we have a project and we've got—let's say we've got 20 people working on it. The project slows down; we slowly have to lay them off. Then we get a new project. What are we going to do? We're going to rehire those people we laid off. So we've had the same workforce for years. As we bring in apprentices, we are definitely seeing a lot more applicants that are minorities and females. . . . Our journeymen and our foremen are the workforce we've always had, so it still just is what it is.

It is rational to keep and maintain a known workforce. While any entity looking for bids could set hiring goals on the project, most private (non-government) owners do not.

Hence, getting rid of the goals or the next best option of requiring minimal compliance is, understandably, the preference of the people who manage construction companies.

However, companies do accept the use of a hiring goal if they have chosen to bid on a project that is government funded, and they understand the realities of using taxpayer

money. The construction employee quoted above acknowledged the company's choice to do state and federal work, but reflected on the difficulties of negotiating the hiring goals and hiring the most qualified candidate regardless of race, age, gender, or nationality:

Our goal is to hire the most qualified candidate period, and that's what we can legally do. I can't choose a woman over a man because she's a woman. I still have to choose the most qualified candidate. So it becomes harder in the fact of "Okay, I have two candidates. He's more qualified than her, but if I hire him, I'm not going to meet my hiring goals," and so it becomes a very hard decision. I don't know how other firms make their decisions, if they're going to say, "We're just going to pick the girl so we can meet—or the woman, so we can meet our goals." I don't know what other firms decide to do.

It's just not a fun position to have to be in. That's what it is. It puts us in a position that isn't fair because we should be hiring the most qualified candidate. Now, if the woman is the most qualified candidate, that's awesome, right? We do still also consider, "Okay, is he more qualified because he has the OSHA 10?" Well, if we can give her the OSHA 10 within her first week of working here, and she'll be just as qualified as him. Okay, then maybe that's something we consider. So that's a good faith effort.

Again, a company needs to follow anti-discrimination law including the fact that Title VII does not allow any worker to be displaced so that a company can fulfill hiring goals. As discussed above, this often leads companies feeling like they are in a catch 22 when

making a hiring decision. They need to be able to prove they hired the person they believed to be the most qualified for the job, and they need to meet hiring goals. Sometimes, those two issues align well, and at other times, they seem to conflict.

Because the portion of jobs a company acquires involving the meeting of good faith efforts could be only a portion of its work, the reality of a situation may be that, instead of looking for long-term hires who are men and women of color or white women, companies may end up in a place of simply needing to get employees who can help meet goals onto their jobsites. Again, this situation may arise for any company if the economy is strong and if the company has acquired a significant amount of work; i.e., even if there are no hiring goals, a company could be in a position of needing to get bodies onto a jobsite to fill an immediate need. In one sense, this situation is not exclusive to working on jobs with hiring goals. However, if a company is used to hiring white men for its trades workforce, then hiring goals add another layer of complexity because they likely require changes in recruiting and, possibly, worksite training and orientation adjustments. Thus, for these companies, a strategy of hiring to meet goals, while assisting with the immediacy of a situation, could cost money in having acquired workers a company is unable or does not intend to keep. One industry advocate discussed this possible downside to the goals:

I don't know what the attrition rate is. I don't know how many people are brought in to fulfill a goal or in pursuit of goal fulfillment that end up leaving the industry because they discover it's not for them or whatever, the environment wasn't what they expected, they met with discrimination or who knows why they might leave the industry. But it's expensive from

a company perspective; employee turnover is really expensive. So if goals have the effect of requiring a contractor to hire a cadre of people who will eventually turn over faster than the rest, you might get a couple of successful ones, but if you have the turnover expense on a whole bunch of other ones, then just from a dollars and cents perspective, it may not be worth it.

Attrition is a perception of the hiring goals' results, and there are some advantages to having a homogeneous workforce, including common behaviors and culture, which does often lead to good retention rates, in particular, as job tasks often require teamwork (Mastracci, 2004).

Once human resources screens and narrows down to the final candidates, another person, who may not be not informed of any protected categories, could be the individual hiring. In one discussion about having two equally qualified candidates where one is male, a person of color, and a veteran while the other applicant is a white male who is not a veteran, the company still needs to make a hiring decision that is only based on qualifications; sometimes, that can be a coin toss or just something where the hiring manager finds more in common with one candidate over the other:

The hiring manager, who is working on a project with goals, does not know that this gentleman here has veteran status and minority status, and doesn't know that this one doesn't, and says, "All right, well, let's just call them and talk to them." And we call them and talk to them over the phone, and maybe this [white] guy says something that is intriguing, like he likes to fish, and my project manager likes to fish, and they just connect over

the phone, personality-wise. He's going to hire the guy that he connects with, right? Okay, fine. So here we missed an opportunity where we could've hired somebody who has the equal experience, equal everything, and could've helped us meet our goals.

Construction companies, especially those choosing to work on government-funded projects, are often instituting better recruitment strategies, including participation with outreach programs targeting minorities, females, veterans, and people with disabilities. However, it is slow work because there is still a tendency toward and comfort with a white, male workforce.

Government. Similar to construction companies and union locals, government entities can vary significantly on how they view, and, thus, implement hiring goals in the construction industry. This variance depends on who has been elected into office and the individuals those elected officials—such as a governor—choose to assist with running a government and its agencies. In this section, the discussion of government institutions and their roles in creating or removing barriers for women in the building trades will spotlight the state-set hiring goals in Minnesota. Around the time interviews were taking place for this research, the hiring goals for minority men and women had been raised from a goal of 11% (or 18% on projects deemed substantial) to 32% for the Twin Cities Metro region. Taking into account the make-up of the population in different areas in the state, the Minnesota Department of Human Rights set the minority goal at 32% in the Twin Cities metro, but for counties in central Minnesota, the minority goal is 3% and in the vast majority of the state, the minority goal is 6%. The goal for women remained the same at 6% statewide.

The goals are set by the Minnesota Commissioner of Human Rights and can be changed at any time by this individual. Percentages refer to hours of training and work as a percentage of trade worker total hours on a project. In Minnesota, women of color count under both goals meaning their working hours count twice. The percentages determined for the hiring goals were explained by a representative from the Minnesota Commission on Human Rights. He stated the following:

Now, if you take a look at our administrative rules, you see within there is this notion of banning the practice of segregated facilities and the like and then also reaching out to schools, reaching out to community groups, reaching out to churches to identify people in which to recruit. That suggests, again, if you look at it from a historical basis, that you're not just simply looking at the pool of talent that currently exists in the labor market, but you're actually looking at the number of individuals within the adult working force that potentially could be eligible to get into the labor pool into a particular industry. I think this is an important issue, because, unfortunately, sometimes within the dynamic of talking about race and equity is that we have some people who want to narrowly define it as to all the individuals who are qualified at the time in which the question is asked as opposed to looking at it as it relates to all the candidates, if barriers to discrimination existing in the workplace, existing in the educational system, were removed. How many people would then be eligible to work?

That, I think, is a very significant viewpoint. And unfortunately it has happened historically too often that it also breaks down by racial lines

as to how we look at that equation. That's unfortunate, and it's also a huge challenge as we have dwindling numbers of workers who are of white, non-Hispanic origin, and we have more and more individuals who are adult working age that are going to be entering the workforce that are going to be identified as people of color. So with that kind of initial framing, the department looks at U.S. Census Bureau data, and it looks to who is in the workforce as it relates to construction workers.

The above-stated viewpoint at the Minnesota Human Rights department shows an understanding of the struggles, in particular, of men of color and what they have faced in terms of discrimination not just within the construction sector but in education and society currently as well as historically. This is an important understanding to have. Further, the goals are stated as aspirational, as a way to inspire significantly increased work in recruiting, per the spirit of the goal.

The increase in the minority goal was an issue most participants in the Twin Cities metro were interested in discussing. Goals were updated in April of 2012 meaning the 32% did not apply on the Green line light rail project; yet, the significantly raised goal was a contentious topic. One critique shared in an interview acknowledged it was understandable why the goals are there, “—but even then, it made no sense: ‘32%. Here you go.’ Well, just because somebody says they’re willing to work in construction doesn’t mean, ‘A’ that they actually can, and ‘B’ doesn’t mean they’ll stick with it.” The 32% seemed random to some and too large an increase for others. Another participant lamented: “You wouldn't take a sales person and say you did 11% last year and now do

32% this year. But you could look and do incremental changes.” Other suggestions were to have raised the goal by a small percent annually—such as 2%.

The goal was not changed for women in Minnesota and is 6% statewide. A couple participants of this research lamented the stagnant goal. Per the logic used by the commissioner, (and discussed by more than one participant), why wasn't the history and current status of occupational segregation experienced by women, especially in the construction industry, evaluated and then the question asked, “What could the potential eligible pool of tradeswomen be;” as was done for the minority goal? Would 6% be the answer to that question? In particular considering women are approximately half the population throughout the state. The Commissioner was asked about the 6% goal for women, and he cited less advocacy for tradeswomen as the main reason for not increasing the female goal:

I would say that while there are some advocates, very strong advocates of getting more women into the construction trades, it was easier when we initially set the goal to find more groups representing or connected with ethnic communities which were encouraging getting more ethnic communities' members involved in a construction trade. And, again, just so that we're clear, it's not to say that there weren't any groups advocating for more women to get into construction trades. It's just simply saying that there were more groups from various ethnic communities which were advocating for this. And I would probably say, from a national level, that also existed.

Hence, a lack of advocacy is given as the reason for not increasing the goal for women (again, women of color are also covered under the minority goal so, technically, the goal was raised for that group). Yet, its mission, quoted from the Minnesota Department of Human Right's webpage is, "to make Minnesota discrimination free." There is no caveat stating the department will make Minnesota discrimination free only for those who have the most advocates. Again, however, it should be restated that industry owner/manager advocates would like to see the goals neither increased nor decreased, but, optimally, terminated. The policy tool of hiring goals is one, as far as government agencies are concerned, no matter how adjusted, will upset groups of people.

Unions. Unions, at their best, advocate for the rights and well-being of workers. Ostensibly, the unions, through skills and safety training programs, produce capable and productive workers in exchange for good wages from employers. Unions, theoretically, have a system whereby they create the sufficient amount of trained workers for the marketplace by controlling entry into union apprenticeships. Individuals apply, and the union accepts apprentice applicants on an as-needed basis. This apprentice status varies by union, but usually lasts approximately 3 years. During an apprenticeship, the individual attends classes— typically in the evening after work—and, at the jobsite, must work with an experienced tradesperson, i.e., a journey-level worker. After the apprentice completes his or her apprenticeship, the individual can become a journey worker, earn higher wages, and be considered a trained and knowledgeable person in his or her craft.

Hiring goals are generally in place for large construction projects using government dollars. Because unions are often helpful with staffing such projects, the majority of the participants for this research were union members, former union

members, and/or could likely be labeled “pro-union.” At the same time, participants did offer critiques of unions and union worksites. Nonetheless, these critiques do not lead participants to anti-union conclusions; rather, the views are stated as areas needing improvement. In examining participant critiques of unions, some assessments were general. For example, anyone (male or female, apprentice or journey level) working union construction, in particular, on large projects, can find the tasks repetitious, sometimes more like work on an assembly line. One participant described the monotony of job tasks: “Cutting metal studs, I remember hating that. I remember there wasn’t finish work. It was all rough carpentry. I missed doing some of the finish work. It was all really crude, you know what I mean? Twenty-six stories of the same thing. I guess that’s what I hated—repetition.”

Construction jobsites are hierarchical. The participant who left union trade work to start her own company described her frustration with the hierarchy of job tasks and the response when she requested to work on more complex tasks: “It started to get boring ‘cause I wasn’t learning it fast enough. And that’s another comment I would hear, is, ‘You’ll get to do that when you get grey hair.’” Because of training and safety standards as well as the idea of earning your way up the job ladder at construction sites, the process of awarding job tasks can feel stagnant, requiring a person to work for many years in a low-skill task before being assigned the most “desirable” tasks. It bears noting that the repetition and jobsite hierarchy also exist at non-union jobsites.

When asked if a union is good for a tradeswoman to join, one participant answered “yes,” citing wages, training, and benefits:

I believe it is. Well, you can support yourself off the wages. You get an education, and education is always good. Some people, if they don't get to make it to college, I think it's a good alternative. And, like I said, the benefits are great. If you have children, you don't have to worry about the medical or the dental. Everything is right there for you. And if you stay at it and work hard, then when you retire, you get excellent—you get that annuity plan.

As an apprentice, one is typically required to spend a certain amount of time in classes, but another significant component of the training is on-the-job when a journey-level worker should be teaching/training the apprentice. Working with a journeyman and the requirements of that relationship were also discussed: “Three and a half years, you're with a journeyman for the majority of that time, especially your first year and part of your second year. So, you know, you learn how to lift things. You learn what to do. You learn what not to do—well, you're supposed to.”

Women have found allies in the unions. This has included a tradesman who is a union member encouraging a woman to join or giving advice about negotiating union membership. One woman described how she was told to negotiate entry into her local after moving to a new location:

I was a journeyman, and I had my papers from the East Coast. But then, when I had to take those two classes—when I started, [a union member] said that I'd be better off starting out as a third-year apprentice because, he said, “When you go in there, and you say that you're a journeyman, they're going to expect you to be able to do all of that work the way that

they do it.” He said it just would be better if I go in there and let them teach me how they do their work.

With guidance from someone in the industry, she entered as a third-year apprentice, which worked out well because there were some differences locally in how job tasks were executed. Subsequently, she (re)advanced to journey-level status.

People have, and still do, claim that unions guard construction-trade jobs for certain white men and, with that guarding, have kept the knowledge of their trades to themselves. While such exclusivity is often justified as a desire to keep the market from flooding, in fact, another explanation could be limiting access to those perceived as different. One participant, in particular, described the lack of African Americans in construction craft unions as a result of the dearth of knowledge sharing: “They can put together a workforce, and the union gives aid and token scholarships programs, and they go and have African Americans out front. Those front jobs are not the problem. The problem is in the skilled trades and the training. That’s what they do is keep training to themselves.”

On-site training is key for women to be successful in the industry. In fact, withholding knowledge, intentionally or inadvertently, is one way to keep women from advancing. One participant described how she refused to do certain aspects of a job if they were too menial when she had years of experience. She then added, “I think that’s a trap for women. They [co-workers, supervisors], a lot of times, give them [women] menial work, and then, they [women] don’t learn anything, and then, they [supervisors] say, ‘Well, she doesn’t know anything. She doesn’t know what she’s doing.’”

Being a union member is not a guarantee of work, even if work is available. A major area of controversy can be the staffing of construction jobsites. There are different ways to go about staffing a site for union jobs. Which individuals the unions send to a jobsite can often be a contentious discussion when exploring workforce diversity. In fact, there are a number of unions that do not, per standard, send their members to jobsites; rather, the worker must acquire his or her own work. One participant summarized the systems:

You need to understand there are different types of union systems. There are referral calls, and there are hiring calls. In the basic trades, people are hired by the contractor then sponsored by the union. Here, they can also call the hall and say we need someone, but that is less common. The other way is a hiring hall where individuals apply to the hiring hall and an individual cannot solicit their own work. Most of the specialty trades, electrical for example, operate that way.

While all unions decide whom they admit into apprenticeship and advance to the journey level, in essence, the specialty trades have direct control for who is sent to what construction sites and when. Therefore, one could argue that they need to figure out ways to integrate a more diverse workforce into their ranks. As explained by a participant who is employed with a union organization,

For those with the hiring halls, you could put specific language in a contract that the entire membership has to approve—which is not that popular—that women and minorities could be called up first in some situations. Another avenue that has been easier—that the IBEW

[International Brotherhood of Electrical Workers] has used—when they get a request for workers, they can request hiring-goal documents and the union can post the contractor-worded document and call for workers.

This same participant stated that, optimally, unions would have a diverse workforce so that they would not have to do anything differently when hiring goals are in place, which, of course, would then lead to the absence of a need for those goals. She recounted changes in strategy:

If you look at the number of females and minorities in apprentices now, we're doing a much better job on outreach, and we're targeting outreach.

It used to be people would say, "Well, we posted it in the newspaper." So I sat with our apprentice coordinators, and said, "We need to look at what's working and not, and do some things different so we're not all frustrated."

The participant who described changing the unions' outreach for apprentices also described her frustrations with the lack of positive change for women: "I believe that the unions can do all the recruitment and all the training, and if people don't have a comfortable work environment, then they're not going to stay."

Obviously, there are women working in the union. As discussed earlier, trade work can be isolating for women, and it can seem like little is actually being done to recruit and retain a diverse workforce. One participant revealed that she is the only African-American woman in her local union: "When I moved out here in 1997, I went to the union hall, and they hired me. At that time, they didn't have any black females in the union. In my trade, they didn't have anybody. Yeah. All these years that I've been there, I've been the only one. That's a long time." Considering that her interview took place in

2014, indeed, 17 years is a long time. She specified her hopes for and frustrations with her union:

I'm hoping that my union will reach out. I know a lot of them are saying that they're reaching out, but I don't believe that they are to the fullest that they should be. So . . . just like now, a lot of them are looking for excuses not to hire anybody. They're looking for something to be done wrong. And the same thing that one of the minorities might do that's wrong, they [white workers] do the same thing, but they [white workers] look over that, you know?

One perception was that people of color are judged more harshly on construction sites (also see, for example, Paap, 2006), thus making it more challenging to advance and be successful in the building-trade unions. Another tradeswoman, speaking specifically about the Twin Cities area and union work, suggested that the tools are there to increase diversity in the union workforce if the required effort was put into creating that diversity:

There is no one speaking in the building trades promoting more women. If you see women in leadership in building in the trades, they are community liaisons and diversity coordinators, and you will also find they don't have voting power. . . . We don't need any more committees formed. We need to take bold steps so that, once we are successful, that they [women] feel like they have a voice that they feel like they have representation and that they feel like they have a union who includes them.

This participant suggested the tools were available to create a more diverse workforce in order to surpass the hiring goals if best practices, including money and effort put toward

achieving diversity, were incorporated. In summary, the critiques from this study's participants were not, in largest part, anti-union. The participant speaking above was a union member who advocates from within her union to support women and other underrepresented people.

Advocacy organizations. This section focuses on people advocating for workers; industry advocates are represented in the "construction company" section. One significant tool created and often used to assist those who have not traditionally been represented in the building-trade occupations has been pre-apprentice training programs. Typically run by non-profit organizations, these programs are meant to provide an introductory level of training as well as assistance with job procurement for those interested in working in the construction industry or other blue collar occupations. Historically, one feature setting the programs apart from union or construction company recruitment is that they often accessed recruitment channels not traditionally used, including reaching out to and through neighborhood newspapers, churches, community groups, and other non-profit and social service organizations.

Pre-apprentice programs can vary significantly in duration and content. The Minneapolis-based Summit Academy's website describes its program model as follows: "designed to provide students with job readiness skills in the construction trade through classroom and hands-on training completed in two 10-week phases: Phase I (general industry training) and Phase II (hands-on training)." Similarly, Oregon Tradeswomen, Inc. (OTI) presents its pre-apprentice program as "a free, 7-week, pre-apprenticeship training class that helps women prepare for a high skill, high wage career in construction." OTI pre-screens applicants, giving a list of requirements for entry and

setting a cap on the number admitted (usually 25 per session). Requirements for entry include:

- The ability to get a driver's license before official enrollment (with priority given to students who have a valid license)
- GED or H.S. Diploma
- Basic English-speaking skills
- A stable living situation
- Stable mental health
- A physical fitness level that is sufficient to do physical labor all day (Applicants must pass a basic physical fitness test to be admitted.)
- The ability to pass a drug test

While OTI requires participants to be essentially work-ready, other programs, such as the Urban League in Minneapolis, support individuals in getting a driver's license and achieving other job-readiness requirements to enter the building-trade work. In the same vein, Constructing Hope, an organization in Portland, Oregon, integrates numerous certificates as well as a life-skills class into its pre-apprentice program. Each organization mentioned above has specific populations where it focuses recruitment and for whom it designs programming. One organization trains individuals who have been incarcerated, and an employee discussed how the organization adjusted its training to support self-confidence and positive life outlooks:

Because the number one thing for our group was building self-confidence for them to move forward because most of the people, after coming from incarceration, they don't—we would find that they would complete the

program, and they still didn't have the confidence to walk out the door and use the tools that we gave them. They had so many let-downs that even then they just didn't still believe in themselves.

Hence, working to encourage individuals by having them identify and set goals, and putting plans into place for transportation and childcare are often part of training curriculum.

Within pre-apprentice and other training programs, another educational focus has been telling people who have not traditionally been included in the building trades about the wide range of opportunities available as well as the training needed to pursue different occupations. One advocate commented on the content they introduce in order to simply broaden trainees' knowledge about career options. She recounted that women who are interested in the trades generally want to be carpenters or electricians:

That's what they see women doing on "This Old House" [television show]. They do definitely think of carpentry as being wood-based residential framing and finish work. And so part of our program is to educate them about careers of steamfitter and sheet metal worker and roofer and cement mason and what a commercial carpenter actually does and how technical and interesting and varied the career as a laborer is: You're not just digging ditches all day. You're doing all kinds of really cool and interesting things, and you're really the backbone of what happens on the job site. So by the time they leave, they are interested in all of those other things because we take them to apprenticeship training

centers and to job sites where they can see the wide range of available careers.

Simply discussing the variety of building trades is valuable because, as mentioned earlier, a majority of women in the United States are in the workforce, yet they are concentrated in a small percentage of the available occupations (Hegewisch & Hartmann, 2014). These courses assist women who may be interested in construction work, but who do not necessarily know what to expect at a jobsite or how to become a union member.

Pre-apprentice programs have been one way to channel women into the building trades, and one participant became a construction worker via such a program. She described her path-changing experience once she began the training:

I weighed over 200lbs, and I had just gotten done taking care of my father who had died. My self-esteem at the time was low. I went to [a pre-apprenticeship program], and I knew I wasn't their typical applicant. . . . After I'd gone to classes for 10 weeks, I told my husband that I thought I might actually get a job out of this. The second 10 weeks, I started walking 2 miles a day, and eating rice and tuna fish. At the end of the program, I had dropped 40 lbs, and I was the top student.

Virtually all pre-apprentice trade-training programs can produce testimonials from graduates who have found their way into successful careers in the building trades. For example, promotional videos on Summit Academy's website present pre-apprentice graduates who got jobs in the construction field describe how the increased wages and pride in their occupations have made them positive role models for their children and made their overall life quality better because they are less stressed and more financially

secure. Not surprisingly, these programs recruit by using graduates' word-of-mouth statements, thus building their outreach into the communities for which their programs are designed.

As part of the research, I attended an afternoon session of OTI's classroom instruction for a pre-apprentice program. The program consisted of three components: classroom, physical fitness, and hands-on skills training at an actual build site. There were approximately 20 women in the room at OTI's headquarters in Portland, Oregon, including 3 trainers/instructors. The topics of the day were as follows: sexual harassment and green building. The green-building lecture was cursory as is the case when trying to discuss "green building" in a couple hours. The sexual-harassment portion discussed legal definitions. Then, the women were divided into three groups, with each one given a different case study to analyze, discuss, and report on ideas about what to do in the situations where it appeared that sexual harassment was occurring.

A conversation developed concerning the inquiry about how much do you joke around with your crew members, specifically if they're telling lurid or mildly lurid jokes or jokes containing sexual innuendo or sexual content? Questioning, "What if you're a woman who has a sense of humor encompassing those types of jokes?" One trainer told about growing up with a number of brothers and being used to guys and their humor, but, she explained, as she thought about where that humor would go if she engaged in it on a construction site, it seemed like it might end up getting out of control. Another trainer mentioned a woman who was working in the construction industry who engaged in some of the lurid humor at work; subsequently, the shock-value of the conversations and jokes continued to escalate until she was feeling sick to her stomach to go to work.

Consequently, this individual called OTI for some ideas about how to deescalate the situation and was able to do so. One benefit of these classroom discussions would seem to be the trainers communicating the fact that there is support for women if they encounter job situations where they are uncomfortable and/or are experiencing harassment. Building a cohort of women through an organization seems to be one way to alleviate the feeling of isolation that so many tradeswomen across the country have expressed (see also, for example, Schroedel, 1985).

At the beginning of the observed session, an evaluation was being handed back to each pre-apprentice participant. When speaking with one of the trainers after the class, she explained the trainees get an evaluation from their worksite day. The trainer stated, and behavior appeared to bear it out, that participants were usually very interested in reading through their worksite evaluations. This seems logical as these women want to work in the building trades. When asked what was written on the evaluations, the trainer said the most common critique was that the individual needed to be working faster. The classroom trainers were aware of worksite assessments. If a participant is consistently getting inferior reviews, she may be removed from the program as the organization attempts to be conscientious about sending women who it feels will be successful into the field. One other element that is often used by the programs is to bring back successful graduates or bring in others from the industry with whom trainees can identify in order to talk about the realities of the work. An OTI employee stated, "Meeting women from industry is hugely important to hear their stories. Our students start to imagine themselves based on those women, and they see that they don't have to be superwoman. These are ordinary women like them who have developed their competency in this area."

Pre-apprentice programs also have critics. The programs have similar elements, but can vary significantly in terms of who is recruited and admitted, what is taught and expected of trainees during the program, and who is successful and why. Second, some pre-apprentice programs are specifically aimed at populations who are historically vulnerable in the job market, such as individuals who have spent time incarcerated or who may have dealt with addiction issues. Building-trade work can be an excellent career choice, but construction work is hard work—physically and mentally—for any individual. Entry to union membership can be challenging—again, for anyone. One advocate acknowledged, “One of the apprentice programs that we participated in last fall started with 300, and out of that, 71 made it through, and we sent about 20 people. And those are tremendous odds.” Bearing in mind the diverse populations served by these programs and the construction industry’s historical preference for white males, pre-apprentice programming requires dedication to identify the best practices as well as an acknowledgement of and mitigation for what trainees’ struggles might be in the industry.

Third, unions and construction companies have not necessarily understood what to expect when they admit or hire pre-apprentice graduates. One participant stated her observation of pre-apprentice program frustrations:

With this pre-apprenticeship program, that’s only a certain amount of weeks, and you’re taught a little bit of everything . . . I would expect—if I went through a pre-apprenticeship program, I would have the mindset—and I would hope that the instructor or the people that’s running the program would say, “This is just to get your feet in, just to see what you

like, and you decide upon which trade that you really want to go into, and then we'll direct you.”

The above issue is what unions and employers have not necessarily understood, i.e., that these prescreened applicants are interested in the building trades, but will need training. Another critique of these programs is that too many graduates get sent to the laborers' pool, and not enough graduates make it into the craft unions where pay is often higher, both in union and open-shop employment.

Advocacy organizations, by virtue of their work, act to remove barriers and create opportunities for people who, historically, have not been represented in the building trades. The organizations recruit where others have not thus building a pool of graduates who add diversity to the construction workforce. There seems to be a positive shift in the construction industry concerning the acceptance of pre-apprentice programs. In the past, relationships between the unions or construction companies and these programs could sometimes be antagonistic. More than one advocate stated that, recently, the industry is beginning to see the programs as partners who assist with recruiting needed workers. One advocate in the Twin Cities described the recent change: “We've had some companies really step up, and they've really made a commitment. There are companies who call us before we call them and ask for good workers. This year, those calls have been new—we've had to be in front of them, and now they'll call and say, ‘Send me your best five.’” Another advocate in Portland described a similar positive change:

At first, we were sort of a fringe organization. People thought it was weird that we wanted women to get into the trades and saw us as adversaries in some ways. But I think things have changed pretty dramatically over the

last 5-10 years, and so the unions generally see us as a good service, a valuable partner. And we try to be that.

With the recent improvement in the construction economy, many of these programs are experiencing good placement rates for their graduates. Their continued work would seem to be an important part of creating and supporting a more diverse workforce.

Socio-cultural Influences

Cultural and societal barriers are possibly the largest obstacles remaining keeping women from working in the building trades. There seems to be strong societal sentiment in declaring who should do construction work. One advocate recounted what he heard an individual say regarding the industry: “That construction is like golf, it’s for white men.” To some extent, because of the very specific ideal for employees and a history of being able to fill job openings with young white men, the industry is often perceived as not only having issues with sexism, but also with racism, homophobia, xenophobia, ageism, and insularity. The public perception of an unfriendly monoculture can be off-putting to anyone, including white men who want to work in more inclusive environments.

In the U.S. cultural context, women have gotten the message that building-trade work is for men. One common statement from participants is that women still do not think of construction-trade work as a possible career path. If women do consider it or if they are asked about it, they are often not well informed about what trade work is or requires. One tradeswoman said she found some young women thought the work might be too difficult for them. Another tradeswoman said she often found women “too idealistic” regarding what work at a construction site necessitates. While participants agreed the work is demanding, tradeswomen also concurred it was not too difficult for

women to do the tasks. Hence, many women, ill-informed, envision the work as either dreamy or impossible compared to the actual day-to-day job tasks that tradeswomen identified as challenging but doable.

Despite messages telling women they do not belong in the building trades, there are many women who want to work construction. Tradeswomen like being able to create something, the physicality of the work, and the wages and respect they find as construction industry workers. Hence, against the odds, women find ways to succeed, sometimes being encouraged by a woman who is already in the industry. One tradeswoman answered the question, “Do you tell women to enter this industry?” with the following statement, “I do. I just told one the other day. I had just met her. She has a bunch of student-loan debt. She was telling me how she was going to stay in this group—she's in advertising, marketing, or something right now, and she said if she didn't get a pay raise soon, she was going to have to look for another job.” This participant suggested that the woman call an individual at the union local and look into the carpentry trade.

An employee at Oregon Tradeswomen, Inc. answered the refrain that women aren't interested with the following statement:

When people say women aren't interested, I'd point to the numbers of women that come in our door every year saying they are interested. And then I point to the experience of our students, about 100 students a year, graduating 79, 80 students a year and helping about 75 of them really move on to the blue collar professions.

This non-profit alone (at a single location) has about 100 women a year going into its pre-apprentice program. Imagine what might happen if the message in society were that

construction work is a great choice for women and that women have the ability to be successful in this field.

Women who do not have family members in the industry, are older, are not originally from the United States, who are lesbian, are a person of color, and/or are “feminine” likely will have more barriers with which to contend when working (or even attempting to work) in the building trades. A European-American tradeswoman who is married to a man expressed her frustration with the culture of maltreatment of “difference” in the construction industry:

I see how African Americans are treated, how lesbians are treated, and it is criminal the way Latinos are treated. If people are brought into the trades, it's who you know, the connections you have, your social circles. . . . If there were more people hired from the city, I believe there would be a greater tolerance about people there, and if you're gay or lesbian—that you'd be judged on your work, on your output, but you don't see that out in the trades. You see people set up to fail.

An intolerance of mistakes or being “set-up to fail” for people who are not white men was mentioned by more than one participant. For instance, going from being an apprentice to a journey worker in the trades is a significant step that acknowledges an individual has put in the training hours and is a skilled person in his or her craft. This promotion has, sometimes, been elusive for people who are not white men. One African-American tradeswoman illuminated the challenge of getting this promotion, specifically for people of color:

After they've finished their apprenticeship program, for some reason, they're just not getting picked up, and then the ones that do get picked up, some are let go for—some, there's a valid reason, and then others, there's not. I think the biggest thing why they're not letting them in is because it's the white male syndrome, where they think that they're above and we're below, and that they just don't want us in those—they just don't want us working next to them. They don't want us making that same amount of money that they make.

The discomfort with difference so prevalent in the industry was discussed by the majority of participants. Advocates broached industry insularity, acknowledging that it's not necessarily malevolent; it's partially out of habit and fairly universal behavior. One discussion went as follows:

Construction hiring practices have been really insular for a really long time. People tend to enter the construction trades, particularly on the union side, if they know somebody who's in them. Dad was a carpenter, or Uncle Bob was an electrician or whatever. Part of that is that union apprenticeships, unfortunately, they don't get a whole lot of attention. So you almost have to know somebody to learn about them, but the other part of it is that it's just you tend to refer the people around you for work. If your company's looking for people, you refer people that you know, that you think would be good.

To a certain extent, the industry has functioned like any other industry in its hiring and promotion process. At the same time, this field has a monoculture that is more severe

today than many other industries (Hegewisch & Hartmann, 2014). One tradeswoman who also works as an advocate said that she attended industry meetings where she must declare, “Come on, this is 2014. What makes you think that women can’t do this work? At least give them an opportunity. Don’t just be shutting people out at the door. Give everybody that fair chance because you got that fair chance.”

Sexism. One participant stated, “I think there’s an insidious culture of sexism in our society, and so, of course, it goes into the construction industry. It’s not always malicious. It’s just you don’t quite fit.” The bias against tradeswomen can seem trivial. For example, a Google search with the word “tradeswoman” followed with the search engine asking if “tradesman” was the desired word. Then, when using Google to query a statement with the word “tradesman,” the search-engine finding does not ask if “tradeswoman” was actually meant (figures 13 and 14). The bias can be subtle. A participant employed in the office side of construction stated, “It’s things you wouldn’t think of, and it’s not always intentional. I just went on a tour of a site, and I brought my hardhat but forgot glasses. So they gave me a pair that was huge and falling down my face.” The bias can seem understandable, simply behavior manifesting as confusion when finding a woman at work in the construction field. Another female participant who works in the office side of the construction industry conjectured, “I think that’s a battle, that even the nicest people are perplexed when they’re confronted with something that’s not the norm.”

There are the common judgments, such as the one stated by an industry advocate: “The perception is that, if you’re a woman-owned business, that you’re a front for your husband. And that’s not the case.” A woman-owned business would qualify as a

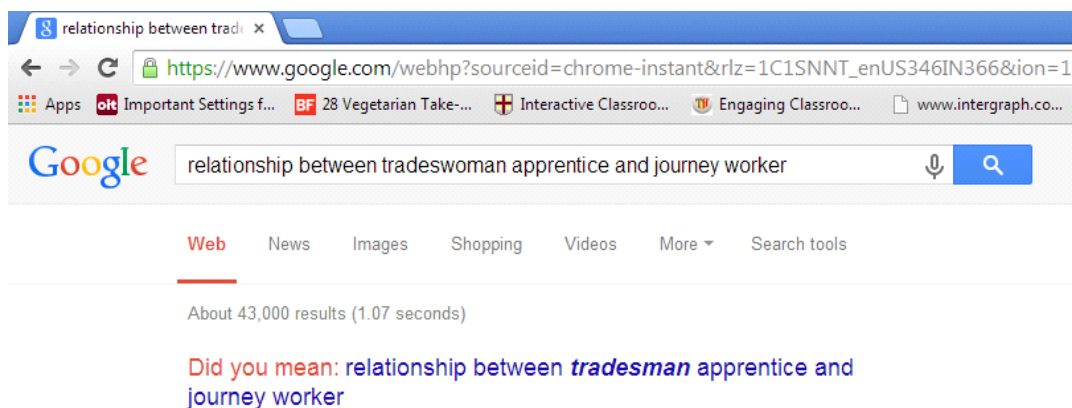


Figure 13. Google query including the word “tradeswoman” with a redirect to “tradesman”

(2015).

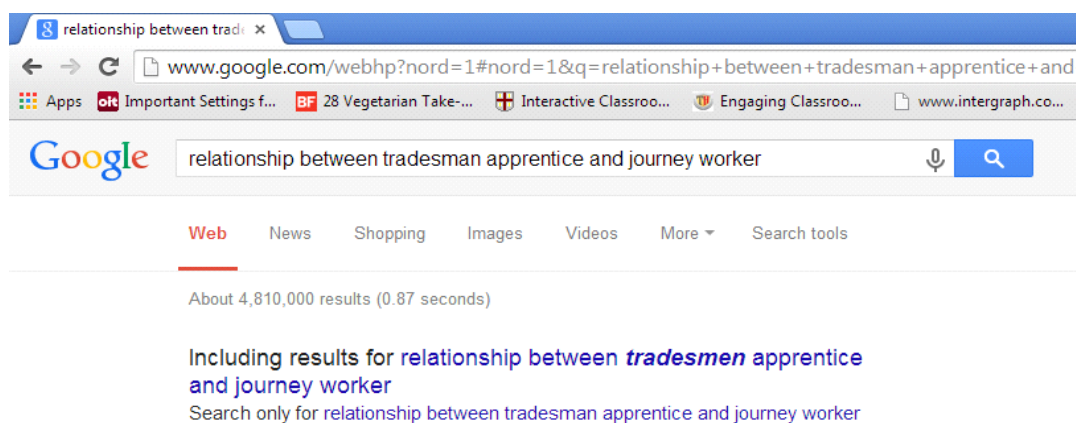


Figure 14. Google query including the word “tradesman” with no redirect to “tradeswoman”

(2015).

Disadvantaged Business Enterprise (DBE), another area within affirmative action programs in the construction industry. There are likely examples of men who have their wife, for example, down on paper as a 51% owner when she may not have much to do

with the business. There are also women who own all or part of a construction company, and run or help run that endeavor. One female construction-company owner said that people often assume government jobs are always being handed to her when that is not the direction she has taken her business:

The goals are there to get minority, women businesses and small businesses. So I was qualified for two of those three and there was—you needed to hire a person just to do that, to be able to get through the hoops to be able to get the jobs, to be able to follow-up with the paperwork during the jobs. It was a losing money thing for us. Their quotas were being filled by having us even bid on ‘em let alone—and the misconception out there is that we get the jobs ‘cause we’re women. I’m like, “Are you kidding me? The lowest bid gets the job.” . . . And so everybody during that time [recession around 2008] or even still thinks that we were just given jobs left and right.

Research into DBEs is another topic, but here, as with the companies working on projects with hiring goals, the paperwork and procedural requirements are significant. Projects with DBE goals tend to be large-scale, whereas female-owned businesses still tend to be smaller, making it less optimal to bid on projects requiring significant capacity or requiring a company to access a partnership with a larger firm, something many DBEs may not have or do not want.

Ageism, heterocentrism, and xenophobia were topics mentioned in the course of this research. They are worth further investigation. For example, those in industry discussed their exploration of how to market careers to specific immigrant populations.

Another topic concerned aging and that even women who have been successful in the field find themselves facing the often covert ageism in the industry. Per the statement of one tradeswoman, “I find, frankly, now that I'm older that there's more people—I kind of feel like an old lady out there. Seriously. They think you can't do it because you're older. They want young manly guys, a lot of them. I shouldn't say that. I mean, you need skilled craftsmen, but...” However, it was race and racism that were topics of significance with participants.

One African-American advocate recited the negative stereotypes, in particular, that African Americans face and how those negative narratives give rise to excuses for not hiring: “All the preconceived prejudices—you're on drugs, you'll steal—all those beliefs and fears are unfounded. There's not been that much of an effort to include African Americans to participate.” Another African-American tradesperson and advocate talked about experiencing higher rates of layoffs and how that discrimination has been generational: “Most of my family was trades or military, and I remember one uncle had credentials in 2-3 trades, and he was able to move around. My dad was a mason, and he was always the first let go and last hired.” One participant called-out white women for not being supportive of people of color in the industry: “White women are benefiting from these efforts, and they should be more supportive because minorities have been out there working for these benefits.” Again, as a group, white women oppose affirmative action at almost the same rates as white men, even though the building trades is clearly an area where this policy effort benefited them (MacLean, 1999).

Fighting the preconceived negative stereotypes and the mistreatment that can exist because of typecasting can be exhausting, leading some to be weary of joining the

industry. An advocate discussed this issue and why hiring, training, and promoting more people of color is vital for all people of color who work in the industry or even consider the work:

You would see that it would be an even greater workforce because it would be more diverse and those people would understand what a great culture it is because, right now, there's an ugly taste in the mouth of people of color in that I'm going into—why would I want to go into a job that doesn't want me there? The money may be good, but my mental health is that, every day, I'm enduring.

It may be that the culture (and the perception of the culture) of trades work is actually one of the components keeping diverse individuals outside the industry. For example, in entertainment media such as film and television shows, tradesmen, wearing their hardhats and working adjacent to public spaces, are often portrayed harassing women. Anyone who is different is expected to have to deal with the crassness of this culture. For example, one individual who attempted entry into a trades training program for women was not admitted and was told she did not seem “thick-skinned” enough. As opposed to the idea that anyone who is not white and male being the least capable worker, one tradeswoman broached the idea that those who are different may be a company's best option:

It really makes you wonder why you wouldn't hire women and minorities.

‘Cause they had to work their asses off to get to that point and they wanna be there. Versus a lot of the guys that you run into who are doing it just

‘cause. ‘Cause there was nothing else. That's what you do and they're

not—and so they don't have the same drive that women and minorities have had.

However, society—not just industry personnel—sees men and women of color and white women as individuals who likely could not be excellent construction workers, and such societal sentiment is a significant barrier that needs to be removed.

The Cases

This section examines the policy of hiring goals implemented within two different cases, at two locations, on different types of construction projects using government dollars, with each case having unique future projections.

Case Study #1: Hiring goals on a light rail project in Minnesota.

One set of interviews centered on individuals who had some part in the construction of the Green line light rail project in Minneapolis and St. Paul, Minnesota. Beginning operation in the summer of 2014, the Green Line is an 11 mile track with 18 newly constructed rail stations, and 5 stations shared with an existing Blue line (Metropolitan Council, 2014). The tracks run mainly along University Avenue connecting downtown Minneapolis to downtown St. Paul with construction costs totaling \$957 million (Metropolitan Council, 2014). Building the Green Line required coordinated efforts of many, but was led by the Metropolitan Council (Met Council) and Metro Transit (Metropolitan Council, 2014). The Met Council, a board consisting of 17 Governor appointees, is a regional planning agency for the seven counties considered to be within the Twin Cities metro area (Metropolitan Council, 2014). Met Council operates the regional bus and rail system, wastewater treatment, coordinates regional water resources, plans and funds regional parks, and administers federal housing funds

(Metropolitan Council, 2014). Constructing the Green line created approximately 150 design, engineering and management jobs and over 5000 construction jobs (Metropolitan Council, 2014). Post construction, 200 operations and maintenance jobs are required to run and maintain the light rail line (Metropolitan Council, 2014).

The Met Council includes an Office of Equal Opportunity (OEO) that led the Disadvantaged Business Enterprise (DBE) inclusion and diversity in hiring in the building trades efforts (Metropolitan Council, 2014). Constructing a light rail for public transportation requires significant amounts of taxpayer dollars and engagement with community members, neighborhood groups, and institutions along the line. The Met Council was required to answer to community and institutional concerns about the construction portion of the project and the subsequent operation of the rail. In part, since this was a government entity instituting a public transportation project, the Met Council attempted to be transparent and engaged with the communities involved in and affected by light rail construction and operation. In fact, according to the central corridor funding collaborative, one of the projects the OEO office looked at for best practices was the interstate MAX light rail project in Portland, Oregon which is considered a national model for community and DBE involvement.

Met Council used the state set goals at the time (6% for women) for Green line construction. These hiring goals were referred to as the “workforce inclusion goals”. Because federal money was used on the project, those goals and good faith efforts also applied (6.9% for tradeswomen participation hours is the Federal goal). The project met the 6% goal set for women with an overall project average of 7.2% hours worked by tradeswomen. The average overall percentage of hours coded under the minority goal

was 17.6% —slightly under the 18%, but these are “goals” and not “quotas”. The participation rates of women and minorities as well as DBEs were met (or nearly met) due to some unique efforts made by the Met Council. These efforts began with a day-long retreat labeled “Great Minds”. Here, stakeholders from a myriad of organizations, government entities, and businesses gathered including representatives from the cities of Minneapolis and St. Paul, from the Hmong American Partnership, WomenVenture, and the National Association of Minority Contractors. During the meeting, groundwork was put into place to not just encourage wider community involvement in the project, but to have programs in place to succeed. Initiatives formed and subsequently implemented were the following:

- A Joint Oversight Committee
 - Monthly meetings with an open agenda led by Met Council and the Department of Human Rights, requiring attendance of representatives of contractors and including community groups
 - Held in order to provide accountability and create relationships to assist with best practices in meeting DBE and hiring goals
- Pre/post contractor interviews and contractor meetings
 - Meetings held with low bidders before beginning construction in order to evaluate their workforce inclusion plan and offer assistance in meeting goals;
 - meetings focused on workforce inclusion and continued throughout the construction process
- LRTWorks.org

- Conceived at the Great Minds retreat, funded by the Central Corridor Funders Collaborative, and implemented by Ramsey County Workforce Solutions, an online site for those interested in working construction to post a resume and for construction companies to search for new employees
- Contracting for Success
 - A program of the Metropolitan Economic Development Association to assist Disadvantaged Business Enterprises (DBEs) working on the Green line including putting into place strategies for DBEs to take their work on the light rail and use it as a springboard for continued growth
- Lessons learned
 - These were conversations held with entities involved in the project including prime contractors and workforce advocates to gather feedback and best practices in order to move this learning onto the next project (Metropolitan Council, 2014)

Those outside of the Met Council did recognize the efforts put into place for inclusion.

One union employee gave the following evaluation of being able to participate in the pre contractors' interview panel:

I thought that was one of the most valuable things I've ever done because that panel said, "Don't just say you're going to meet the goals, tell us how." Some people made unintentional mistakes, and so we could help contractors with information, and it was good to have a diverse oversight committee. It was a real educational time, more than there's a lack of

willingness, there's a lack of knowledge on how to do this well and that was a panel of experts that could give people ideas. It sent a strong message to the contractors and they had no clue I worked for the building trades and when people said, "The union sends us who they send us." I could say, "Who did you talk to?" And it would turn out they hadn't talked to anyone.

As stated by this participant, the pre-qualification meetings were viewed as an excellent tool for getting contractors to be more informed and able to meet goals and less able to say they were making best efforts by doing business as usual. Also, mentioned more than once by participants as a positive for those involved with the project was the LRTWorks website where individuals interested in construction work could post their resumes and companies could then go to the site to find, in particular, entry level workers for the project. One participant described the void that the LRTWorks site filled:

The community would say, "Where are the jobs?" because the construction industry can be evasive about how to apply for jobs so to have that one point of contact if, for no other reason, you had an answer if a community person asked about jobs or a contractor asked about hiring and now there was that one site.

Another participant also stated a similar refrain concerning the LRTWorks site:

Here's something else that was different on the light rail. Ramsey County sponsored a database where job seekers could go in and enter their information, "Hey, I'm a job seeker. I want to work on the light rail. I have this experience or I don't have this experience or whatever." We had

access to that database, so I could go in and search for, “Okay, we need a carpenter apprentice and they need to have OSHA 10”.

What must be noted is the significant extra efforts put into place in order to begin to answer community concerns about having a diverse workforce for this project. Certainly, expectations were not exceeded. This issue is a testament to the myriad resources still needed when seriously working on diversifying the personnel working for construction companies. As mentioned earlier, working on projects with hiring goals requires extra paperwork. Concerning workforce inclusion, initially, companies working on the Green line had to fill out paperwork for three different entities: the Met Council, the state of Minnesota, and the Federal government—the same information required in 3 slightly different forms. While tracking information about diversity in hiring is important—and actually needs improvement—requiring companies to fill-out multiple forms to give the same information does not seem in any way useful for creating a more diverse workforce.

The plan is to build another light rail line in the Twin Cities. Hence, the efforts, innovations, and lessons learned from the Blue and Green lines should be able to be improved upon. One participant stated of the transparency efforts and community involvement in the Green line project and the learning that came out of it:

For the community it provided an opportunity for them to know exactly who they needed to train and when—which is really big because we don't really need any more laborers. We need people who have the skills to build a light rail line. And, yeah, some of those are laborers. There's no doubt about it. But we need some more skilled people. And for the new Southwest line that's what we're going to say.

The opportunity provided to the Met Council in constructing another light rail, as far as workforce diversity is concerned, is one where this government entity should have knowledge and capacity to improve upon its efforts and results from the Green line.

Case Study #2: Portland, Oregon's Community Benefit's Agreement

On September 5, 2012, Portland, Oregon city council approved the Model Community Benefits Agreement (Kowalczyk, 2012). The agreement had been introduced by the Metropolitan Alliance for Workforce Equity (MAWE), which was an organization representing a coalition of non-profits, community groups, organized labor and minority contractors (Kowalczyk, 2012). In fact, the CBA was the culmination of years of meetings and coalition building. Origins of the CBA are traced to sometime around 2008. One element bringing the groups together to work on the CBA was the Clean Energy Works Oregon program which was based in Portland. Clean Energy Works was assembled with federal stimulus monies and provided workforce development through a green retrofit program (making homes and other buildings more energy efficient through remodeling) (Kowalczyk, 2012). The groups working on Clean Energy Works built knowledge and partnerships around local workforce policy and advocacy (Kowalczyk, 2012).

Additionally, around 2008, local building trade unions wanted to implement project labor agreements (PLA) (Kowalczyk, 2012). A PLA is a collective bargaining agreement with one or more labor organizations establishing terms and conditions for a specific construction project. The unions set to put into place a PLA on the Edith Green-Wendell Wyatt construction project in downtown Portland (Kowalczyk, 2012). The Edith

Green-Wendell Wyatt is an 18-story federal building that was to undergo a major renovation beginning in 2009. Community groups opposed the PLA as it was originally written by the unions (Kowalczyk, 2012). Pressure from advocates of men of color and women resulted in an altered PLA that included changes such as a clause where a DBE did not have to be a union signatory to work on the project (Kowalczyk, 2012). Because of that PLA, the unions, community groups, advocates, and minority contractors found some common ground for successful negotiation and were inspired by that success (Kowalczyk, 2012). In the same timeframe, other projects were going-up in downtown Portland which the public could view. Citizens began asking why there was so little diversity among trades people on construction sites thus adding pressure to unions, government, and contractors to take diversity in hiring more seriously. One Portland participant stated:

I think there were \$2 or \$3 billion invested. We literally had a thousand people working on a daily basis, building these various buildings in this whole redeveloped Park Portland, in what people considered basically Portland's living room. I think it was the first time in a long time, and probably forever, that people could see that many people working on a job, and it was outside. People realized that most people working were white males, and a lot of people took umbrage to that.

All of the above efforts allowed advocacy groups, unions, and minority contractors to think about how they could work together to advance union and workforce diversity interests in a more sustained fashion (Kowalczyk, 2012). The community coalition knew they wanted to build capacity for minority contractors as well as pre-apprentice programs

and wanted contractors to be contractually obligated to meet workforce goals (Kowalczyk, 2012). Here is where discussions of a community benefits agreement began (Kowalczyk, 2012). The coalition expanded to include more community groups whose focus was not necessarily construction, but who worked with populations that could benefit from more workforce equity in the construction industry in Portland (Kowalczyk, 2012). For example, joining the construction industry groups was the economic and environmental organization Emerald Cities Collaborative whose leader ended up playing a significant role in organizing the CBA efforts (Kowalczyk, 2012).

The idea, in 2012, was that the agreement would apply to two Water Bureau projects and then continue to be applied to any subsequent range of applicable city projects (Kowalczyk, 2012). The two projects implementing the CBA were the Kelly Butte reservoir—replacing an above ground water storage tank built in 1969 with a buried 25-million-gallon concrete reservoir. The second is the renovation of the water bureau's headquarters called the interstate renovation project. In fact, one participant acknowledged, the CBA was brought to the general contractor by the city after they had been awarded the contract and the contractor agreed to implement it:

To be fair, for this project, the city had already contracted with Hoffman, and then the city went up and asked them to adopt this after the fact. So the good news is, that gave us two very good sized projects to sort of pilot the community benefit agreement approach to, but it also created a bunch of problems at the beginning in terms of [the general contractor sending the message that], "We're only doing this as a favor. We don't believe in it." And now I think they do believe in it. I think any sort of additional

administration or coordination, I think they feel is worth it, because “A” I do feel like the project managers from Hoffman realize they're doing good work, good community work, but also that their product hasn't suffered. If anything, it's making them a better builder. So that's been exciting to literally watch some of the Hoffman staff who were kind of blind to the lack of equity, or the lack of diversity go, "Man, we have all these women on the site and they're rocking it. I never noticed it before."

It is not difficult to imagine that not every contractor would be willing to implement a significant new diversity and equity policy placed onto a project subsequent to the company being awarded a bid. Hence, having the general contractor agreeing to the CBA stipulations would seem a significant good faith effort on the part of that contractor.

Another unique aspect of Portland’s CBA is that it added a collection of funds consisting of 1.5% of total project costs to be funneled into the Portland community for various workforce diversity efforts (Kowalczyk, 2012). One participant translated that 1.5% saying, “Through this current community benefit agreement, we've been able to secure \$700,000 for different funds. . . . So about \$360,000 going into the outreach and training.” Eligible recipients (according to documents prepared by the CBA Labor-Management-Community Oversight Committee) included the following: Organizations, businesses and consultants that have a strong record of serving communities of color and women, and building M/W/DBE business capacity; colleges, universities, training organizations, companies, and service providers that provide services, software or equipment related to M/W/DBE business development, capacity building , education, improved contracting conditions, and other barriers to M/W/DBEs. More specifically, a

portion of the fund went to established training programs including YouthBuild, Constructing Hope, and Oregon Tradeswomen Inc.

More than one employee of a pre-apprentice program cited these funds as extremely valuable. Discussing the funds during interviews also led to an assertion by one participant that consistent funding was needed to support pre-apprentice programs and capacity building for minority owned businesses. Non-profits running pre-apprentice programs acquire grants, private donors, and fees for services, but those income sources do not allow for a true scaling-up of their efforts. Yet, for their ability to recruit in communities traditionally left out of the construction industry and their work preparing those potential workers, a training fund coming as a portion of a publically funded construction project seems like a logical tool to assist the construction industry in their worker training and capacity building. Indeed, the 1.5% of construction costs going back to the community for training is considered innovative, even for a CBA agreement (Kowalczyk, 2012). It is also a point of contention concerning the CBA. The unions, after all, do fund training through their apprentice programs and have recruitment programs. Certainly, for a general contractor, it is a questionable expense. Even government entities could be called into question by individuals believing government should not be spending tax-payer money meant for a construction project on training funds for community groups.

Another significant feature of the CBA, as heralded by tradeswoman activists such as Susan Eisenberg, is the setting of goals at both the apprentice and journey level. The hiring goals for women in the CBA were 9% for apprentices and 9% for journeymen. This is a policy step taken to encourage not just hiring but promotion of

tradeswomen. Other research and anecdotal evidence has shown women, all too often, are not promoted beyond the apprentice level (Moir, Thomson, & Kelleher, 2011). This, again, is a unique aspect to Portland's CBA and a unique advancement in the application of hiring goal policy. Ben Kowalczyk (2012) wrote in his paper "Labor and community coalition building in local politics: Lessons from the Portland community benefits campaign", that past projects and local sources were used for the CBA language but, "—there was almost zero consultation of national CBA models for the Portland CBA policy, resulting in both positives, namely innovation, but also negatives associated with not incorporating established CBA language" (p. 47).

Zenthoefler (2015) authored, "Labor Agreements as a solution for increasing job opportunities for African Americans and females in the construction trades in Oregon;" a paper comparing five construction projects in Oregon highlighting women and African American trade participation. Kelly Butte Reservoir and the Interstate Maintenance project were both included in Zenthoefler's analysis. Comparing the five projects, Zenthoefler found Kelly Butte was the most successful in hours worked by women at 11.7% (2015). This was followed by the Interstate Maintenance project where overall hours worked by women was 10% (Zenthoefler, 2015). On the Interstate Maintenance project, women apprentices worked 32.1% of the apprentice hours compared to women at the journey level working 3.1% of the total journey hours, and 0 hours reported for women working as construction supervisors (Zenthoefler, 2015). Women worked 30% of the apprentice hours on the Kelly Butte project, but only 6.4% of Journey worker hours (Zenthoefler, 2015). Obviously, apprentice participation was more successful than those in higher level positions. Yet, on the Kelly Butte project, the journey level participation at

6.4% is respectable—especially given the high rates of women working at the apprentice level which, if the goals were to continue to be set at the journey level, seems likely more apprentices would earn their journey cards. Zenthoefer did note women on both projects were overrepresented in the laborer and carpenter fields—two of the lower paying trades (2015). A Portland participant touted the success of the project saying, “The numbers are amazing, and everybody's very happy. Now we're just trying to secure additional community benefit agreement projects.”

CBA's are historically, and, possibly, inherently project specific policy tools. This means that they are designed on an individual basis for a specific project with extensive input from a very localized community and may, as designed, not be the best tool for long-term, comprehensive policy regarding hiring diversity in the construction industry. However, Portland's CBA is one in name primarily. It is possibly completely singular in that it:

- Was a resolution passed by a city council and intended to be long-term
- Was supported by a unique coalition of unions, non-profits, and community groups
- Set goals at both the apprentice and journey levels for women and minority workers at 9% and 18% respectively
- Created a community oversight committee to help with success (or enforcement)
- Returned 1.5% of project costs to the community in order to create capacity and grow the building trades workforce among underrepresented groups of people

Kowalczyk, in 2012, wrote of the anticipated future success of the coalition: “In the last election cycle the mayoral candidates and council member candidates universally

supported the CBA. Those involved with MAWE unanimously agree that the coalition's capacity for future success is almost limitless" (pp. 48-49). Yet, according to participants of this study, one election cycle later, the support had waned suggesting policy can be fleeting, even policy supported by a broad-based community coalition. One participant stated in 2015, "This [CBA] was passed last time around through a very strong mayor who got it and supported it, and a couple of commissioners. Now we're needing to kind of get—rekindle our local elected champions pool." Kowalczyk, in 2012, also noted one of the challenges would be that the organizations involved are subject to leadership change, leaving a tenuous coalition in a place if new leadership wanted new direction. Some staff positions had changed since 2012. For example, a union representative who had been supportive of the CBA had left her job to be replaced by someone who was interviewed for this research and displayed some ambivalence toward the agreement. Where Kowalczyk (2012) cited the union rank and file needed to be brought on board with the idea of workforce diversity and equity efforts, and that some union leaders were working on those efforts, as stated earlier, union rank and file attitudes can be challenging to change.

As of 2015, the CBA appears to be stalled without a future project in which it could be applied. Kowalczyk (2012) declared that coalition partners stated their "greatest achievement, was moving, over a relatively short period of time, from oppositional positions" to advocating for shared coalition goals (p. 48). That idea was also a sentiment shared by participants in this study i.e., coalition building may have been the most important part of the CBA, even without the agreement being applied to future projects.

Should hiring goals exist?

Participants were asked whether hiring goals should exist in the building trades. Time constraint and desire to discuss other topics led to a couple participants not being directly asked the question. At least one person, as a representative of an organization, said they take no stance on whether the goals should exist. Participants had the opportunity to answer as a representative of a company or organization, and, separately, per their own personal opinion. However, most people gave one answer. Statements of support (table 5), support with reservations (table 6), and non-support (table 7) have some similar themes in acknowledging there has traditionally be a hiring process leading to the hiring of white males and changing this process takes effort i.e., resources—time, expertise and money. A number of statements discuss the idea of the “best worker for the job”, who that is, and how they perceive the goals to be affecting that concept.

Participants were identified by one of five identity categories, in part to help with protecting anonymity concerning direct statements about hiring goals. Not represented here are white tradesmen and white men who currently work in the field (for example, as civil engineers). Tradesmen and men in the field who identify as white or European American would likely represent extremely different responses to the question of whether hiring goals are needed. Acquiring those perceptions requires another research project.

Table 5

Statements in support of hiring goals

Construction industry, non-trade	If they're not there, they won't hire them [men and women of color, white women]. If there are no hiring goals, they will not hire them. That's historically—we historically know that. Yes, there should be hiring goals.
Advocate, former tradesperson	I think the hiring goals should exist because when presented—well, just historically, there seems to have been a lot of nepotism—

	<p>grandpa did this dad did this and now I do. Multi-generations have watched their parents so I like the idea of effort put forth to bring information to individuals who may not know about this industry.... Otherwise, as time goes on, if opportunities are not opened and no effort is made then I think people will just be passed by historically like it's always been.</p>
Advocate	<p>I just think altruism doesn't work. My friend's libertarian. He's like, "Oh, people will donate money." No, they won't. You will not get enough donations through the churches to replace subsidized whatever. So yeah, I think the reality is: goals are great. So it's just good business....Everyone's going to have a little bit browner skin tone or whatever....The trades, if they want to get back to their base, they need to diversify. But I think contractors understand that it's a specification. There are safety goals, so why wouldn't there be equity goals? . . . If you don't say anything, people are going to do what's easiest. What's easiest is to keep the father, brother in law things in play. What is hard is teaching your traditional male white workforce that yes, that's a woman, but she's a carpenter first and we expect you to treat her as a carpenter first.</p>
Advocate	<p>I certainly understand how the construction sector could feel, but that's a lot of state money and all of us are paying taxes and people of color are paying taxes and if 32% is not the right number, then what is? The time has come.</p>
Advocate	<p>Yes. Otherwise they're never going to be met because old habits die hard.... And so everybody is like, "Oh, I can't find enough people." You've never taken-in enough people to have that opportunity to know any different. And so "good faith" was just words, and now actually having accountability it makes people step beyond. I mean they've got to show that they really try it because before you could just say, "Oh, I called the hall and I didn't get anybody." You didn't have to prove it. It's not that rubber stamp anymore of to me the good old boy network of, "I checked. There wasn't anybody there so I brought in Sam." You've always been bringing in Sam, and Sam can go back door.</p>
Advocate, former tradesperson	<p>Yes, because otherwise it's going to be business as usual and the construction industry's typical ways of hiring are to hire the FBI system, father, brother, in-law. It's a very relational industry which is good in many, many ways and exclusionary in other ways.</p>
Construction industry, tradesperson	<p>It's bizarre to me that [the human rights commissioner] would have something like this in place [6% statewide goal for women], or that our state demographer would be comfortable with 6%. That's less than the federal standard [6.9%]. What's the words she used? The potential—she came up with these figures because she said she was talking about the "potential women workers." . . . If we set higher goals [for women], and if we do it now—because now we have an opportunity for work—we can create real opportunity.</p>

Table 6

Statements of non-opposition of hiring goals, with reservations

Construction industry, non-trade	I think the goals are okay. They just need to be increased in an incremental stage. I'm talking about the state goals....We agree this is a male-dominated industry—white male-dominated industry. No doubt, there needs to be more diversity. It would just be—there just needs to be a more meaningful way of doing it.
Advocate	Yes, I think they need to be achievable goals and that you increase them slowly that you need to build the workforce at a rate the journey apprentice levels allow. We need to make sure that we have skilled people. We can't just push everyone into this industry.... I think they [the goals] need to be there because there needs to be goals. I'd love not to have them. Without the goals, no one's going to hire them.
Construction industry, non-trade	I do see some benefits to hiring goals....I would say the thing the construction industry is guilty of is not being willing to go outside their comfort zone.
Construction industry, tradesperson	Unfortunately, I have to say, yes, they should have the goals because now somebody's watching them and there's a protocol out there. They have to have it because, if it wasn't there, you wouldn't even see as many people out there working as you do now.
Construction industry, non-trade	Maybe they need to change it to something with—instead of the hiring goals, something—how would—I don't know what. Should they exist? Yes, they should exist. The answer is "yes". I think that that will, eventually, maybe start to help the change 'cause then maybe more people—they've gotta make a concerted effort. And that concerted effort will get more people interested.
Construction industry, tradesperson	I don't know. I think that there has to be equal opportunity, and it just isn't there yet.

Table 7

Statements of non-support of hiring goals

Advocate	No, I don't think the goals should exist because they make the hiring process more cumbersome than it strictly needs to be, but at the same time, how else are you going to force people to move out of their comfort zone? I would like to live in a world where the goals weren't necessary, how about that?
Construction industry, non-trade	I like to think that even though there's a quota [hiring goal] that the best person for the job would be hired.
Construction industry, tradesperson	Hiring goals should not be there. I think people should be there staffed on their ability to work. Not on their color or gender— just whether or not they can do the work.

Findings

This analysis contributes to research on women's experiences in the building trades and the policy of designing and implementing hiring goals for women in the building trades. The central research question was as follows: Can the policy tool of setting hiring goals increase the number of women working in the building trades as well as support women's retention?

Answer: Today a combination of local efforts aimed at diversifying the workforce combined with retiring baby boom-aged workers and a societal push for everyone to earn a four-year degree (thus deterring individuals from entering the trades out of high school) are requiring the construction industry to look for new methods in locating its next generation of elevator engineers, plumbers, and steel workers. Many people in the industry accept that the future workforce will look and be different. Yet, even in the context of a construction field beginning to accept its changing workforce demographics, the importance of hiring goals to support women's entry into the trades cannot be overstated. An intolerance of women as building-trade workers in the United States has been so strong that the affirmative action policy seems to be the only reason women were able to join the building-trade workforce in any significant numbers during the late 1970s and early 1980s. Today, those goals are still one of the few methods supporting women, in particular, at least supporting women in acquiring their first job in the construction field.

Hiring goals 1) continue to support women's entry into building trade occupations and 2) have maintained the conversation regarding diversity and building trades

employees. More recently, due to re-invigorated efforts from outside the industry, and led by advocates as well as community members and government workers who are more diverse and more attuned to workforce diversity, renewed and improved conversations about diversity in the building trades workforce seem to be taking place. However, hiring goals, as currently instituted, while encouraging hiring of women for building trades jobs, do not appear to be encouraging retention. Women are overrepresented as apprentices on projects with goals and too few are making it to journey level. Those few women who are able to make a career out of building trades work still often feel isolated and are consistently stuck having to “prove” themselves at each new jobsite.

Sub-question #1: How and why, according to stakeholders, are hiring goals created, designed to be implemented, and actually implemented?

Answer: Individual views on hiring goals seem to exist on a spectrum between believing they should not exist to the view that the goals should be set at the percentage of the portion of the population a group occupies. These viewpoints seem to be most dependent on an individual’s lived experiences. Depending on one’s gender, race, or job in the construction industry, perceptions of hiring goals and women in the construction workforce can greatly diverge. With the multitude of views regarding the creation and implementation of hiring goals, government entities setting goals are often in a place of upsetting individuals on all sides of the issue. Someone who owns a general contracting firm may view the goals as punitive, something to get tripped-up on, and someone advocating for tradeswomen could view the goals as too low and unenforced. These perceptions are likely to exist whether the goal is 1% or 20% and irrespective of

enforcement methods. Meaning, when looking at diversity in hiring and hiring goals in the construction industry, it often seems people occupy either one of two parallel universes in their viewpoints of tradeswomen and hiring goals. These viewpoints align with whether a person sees the workforce and workplace through a Classical Economic framework (self-adjusting, open to all to compete for the best jobs) or a Segmented Labor Market framework (too few primary tier jobs that are difficult for most people in the U.S. to access). Table 8 shows these divergent viewpoints concerning both tradeswomen and hiring goals.

A common refrain found within the investigation, and represented in other research, posits hiring goals subvert the requirement that the most qualified person for the job is hired. Because companies need to be hiring the “most qualified” person for the job, ideas around the cultural concept of “qualified” need further scrutiny if not re-evaluation, especially considering that the majority of the historical knowledge about building-trade skills and revenue within the construction industry remains with white men. The concept of “most qualified”, as defined by industry personnel, can appear to have less to do with skills, work ethic or capacity and desire to learn, and more to do with having an identity as a young, white, male. Therefore, more transparency in hiring practices is necessary. Even giving feedback to rejected applicants about what skills are needed in order to be hired and where to acquire those would help to take some of the mystery out of acquiring building trades jobs for those lacking previous connections to the industry. Additionally, simply by looking at the rates of women in apprentices who continue onto journey level, it is apparent that women who have experience and training must still struggle to be hired or gain sufficient more work hours to be promoted beyond entry level trades jobs.

Table 8

*Lived experiences in parallel universes: perceptions of women in the building trades**workforce and hiring goals*

Industry management; white male trade workers; union employees	Advocates; women of any race, ethnicity, nationality; men of color
←	Government can be on either side depending on who is in office
→	→
Women are...	
<ul style="list-style-type: none"> • Not interested in this work • Hired only because of hiring goals • Unable to do this work • Likely to quit • Needing to take care of children • Overly sensitive, likely to sue • Part of an obviously changing workforce 	<ul style="list-style-type: none"> • Not hired • Often hired because of hiring goals • Not trained • Set up to fail • Not promoted • Likely to experience harassment, discrimination • Dealing with an industry resistant to women in the workforce
Hiring goals are...	
<ul style="list-style-type: none"> • Burdensome • Working against a history of trying to create a cohesive, trained, and knowable workforce leading to today's high construction standards • Unreachable • Punitive • Forcing companies to hire certain people because of their identity instead of hiring the most qualified 	<ul style="list-style-type: none"> • Needed at this time • There to alleviate a history of exclusion • Too low • Not enforced • One of the few tools to alleviate the extreme bias toward hiring white men

Sub-questions #2: Do the creation and implementation of hiring goals create a more positive work environment for women in the building trades, including such things as hiring more women; more work hours (not consistently laying-off women first and hiring them last); promotions (not just having women work as apprentices and laying them off

once they could reach journey-level status); and higher levels of job satisfaction, including supportive work environments?

Answer: Hiring goals are too sparse and random to impact work environments for women. Tradeswomen still feel isolated at work. Isolation can be felt not only through being the only woman at a jobsite, but also in having a crew (co-workers) remain aloof, having social invitations from co-workers but needing to maintain a distance, and/or in not finding much in common with the few other women a tradeswoman encounters at work. A woman is likely to be more socially isolated than her male counterparts (for example, the journey person she would be required to work with as an apprentice). As stated by more than one participant, a co-worker likely has the connections with the crew and supervisors a tradeswoman does not. Social connections mean a male co-worker, even a subordinate, rather than the tradeswoman herself, more often possesses the ability to shape the narrative about who the tradeswoman is as a worker and a person.

The society-wide cultural narrative that women cannot and do not want to do construction work feeds the idea of having to prove oneself, among other barriers in place blocking success. If more women worked construction, an individual failure could be viewed in the context as any man who doesn't succeed as a tradesperson i.e., an individual who does not become a tradesperson. Institutional efforts need to focus on societal messages about the success women can find in the construction industry. Changing the perception of women as lesser trades people is the largest campaign needing to take place so that, from a societal perspective, a woman who is a plumber, mason, or heavy-equipment operator is viewed as just as competent and valuable a

worker in her respective profession as a woman who is a kindergarten teacher, registered nurse, or cashier.

Training now and into the future needs to be supported for construction trades occupations and recruitment efforts need to be increased, evaluated, and innovative. Efforts need to be extended to increase gender participation in training programs at technical schools and with pre-apprentice programs in order to prepare a pipeline of workers that isn't most likely to get sent to the laborer's pool. As mentioned by participants of this study, community groups need to have a better understanding of training needed for the different and diverse building trades and put more efforts toward getting people trained. Union apprentice programs need to continue to improve their outreach as do trade and technical colleges. Even high schools could do a better job teaching students technical skills required in the building trades. Many secondary schools have cut their building or technical programs in favor of college preparation curriculums, but building construction courses could be considered excellent college prep courses. Constructing the built environment requires critical thinking, math and applied knowledge and reasoning useful in today's higher education learning environments.

Participants spoke highly of union wages and benefits, and, in largest part, felt union membership is good for women to acquire when working in the trades. Therefore, it seems important to focus on union sector efforts when promoting women's entry into the building trades. Community Benefit Agreements would do well to also focus on union inclusion—and often have. Generally speaking, because unions promote livable wages and good working conditions for all trade workers, they seem to be a worthwhile investment. Yet, the unions, slow in diversifying their workforce, have members and

employees who are comfortable with the status quo. This leaves a small group of frustrated members concerned with the lack of diversity in their ranks. Those frustrated individuals see benefits to being union members, and want more supportive, inclusive environments. Simply stating that the unions are open to all has not removed the barriers that result from decades of proprietary behavior around membership and about building knowledge and capacity.

CHAPTER FIVE: DISCUSSION AND POLICY IMPLICATIONS

This was a mixed methods inquiry into women working in the building trades, in particular, examining the policy tool of setting hiring goals for tradeswomen.

Implementing mixed methods provided more robust findings. While qualitative data from the two case study investigations led to a finding of some success in hiring goals supporting tradeswomen's entry into the construction industry, examination of the Current Population Survey data showed the stagnation of progress in increasing the numbers of women in the construction industry sector not only nation-wide, but in the two metropolitan areas of the case studies. Further, supporting the stagnation of numbers of women working in the construction industry, the qualitative data illuminated barriers remaining for tradeswomen as well as the issues people in the construction industry struggle with concerning diversity and hiring goals. The combined result illuminates the fact there is much work left to do in fully integrating women into the building trades workforce.

Connecting findings to previous research

Segregation of "groups" (identity categories for gender, nationality, race, etc.) within capitalist labor markets still exists (MacLean, 2006; Reich, Gordon, & Edwards, 1973). For example, the United States remains a society where occupations are regularly identified with a specific gender (Hegewisch & Hartmann, 2014). As the U.S. population becomes that of a white minority and women continue to participate in the workforce in high numbers, other occupations such as government employees have become more diverse (Hegewisch & Hartmann, 2014). Workforce changes happening all around the

construction industry are adding a small amount of momentum to a long-standing movement attempting diversity in building trades' personnel.

Affirmative action is a controversial topic acquiring an extra layer of fear in the construction industry. Rather than acknowledging historical inequities leading to workforce segregation, the building trades often portray lack of a diverse workforce as the *result* of a disinterest by all women or men of color in working in the trades (Paap, 2006). Published in 2006, Greene's conclusion in *Blue-Collar Women at Work with Men* asserts, "The overriding social message is that women do not belong and cannot succeed in traditionally male, blue-collar jobs" (p. 181). Data from this study suggest this ideology persists even in Minneapolis/St. Paul, Minnesota, and Portland, Oregon—two urban areas often thought progressive as far as women's status is concerned. The industry's desire for young, virile-looking, white males continues to pervade, especially in who is preferred for the hands-on construction of the built environment (Paap, 2006). For many individuals who are not young, white men, construction work can be, at best, isolating and, at worst, a place where they will never be hired; or if they do get hired, a location where they find constant harassment and mistreatment simply because of their differences (Greene, 2006).

Tradeswomen. There are women who overcome the obstacles and find their way into the building trades. Yet, as evidenced by the tradeswomen interviewed for this research as well as other studies (see, for one example, MacLean, 2006), women in the building trades remain individual triumphs without much collective change that could make building-trades occupations a "normal" career choice. Tradeswomen interviewed are successful and sincerely enjoy their work. They want to see more women in the field

and hold themselves and other women to high standards. When examining the experiences of tradeswomen, some topics from previous writings and research resonated with participants (feelings of isolation, not fitting in, and having to prove oneself). Revealed in other writings (see, for example Eisenberg 1998) and found here, was that because working construction is not initially presented to women when they are young, many find their way into the trades after earning college degrees or in mid-life when they need and are searching for a way to support themselves and family. In that fact alone, they are often different from their male peers. Having difficulty “fitting in” as discussed by participants of this research and by most previous research on tradeswomen (see, for example, Eisenberg, 1998; Moccio, 2009; and Schroedel, 1985) was not only because of the fact that the vast majority of their co-workers are male, but has much to do with the larger cultural idea that women should not or cannot do construction work or that a “normal” woman would not want to work construction. The covert and overt bias against women has an effect on those at work in the construction industry. Others have researched the psychological effects of negotiating construction’s male-dominated environment (see, for example, Goldenhar, Swanson, Hurrell, Ruder, & Deddens’ “Stressors and adverse outcomes for female construction workers” (1998)), and here, too, isolation, stress regarding keeping one’s job, or dealing with a hostile co-worker did affect women participants in this research.

Study participants did not necessarily have an interest in discussing some other issues consistently cited in the literature, e.g., restrooms/facilities or sexual harassment. Responses to a question about facilities included “When it comes to bathrooms, it all depends on the jobsite. I’ve never really thought about it.” or “It’s not—I mean, that’s—

who cares, frankly? I mean, come on, it's a construction site. You're dirty, you're sweaty, you're bleeding, you cut yourself and you're, you know, you stink.” A topic not discussed much in the literature, but consistently raised by non-tradeswomen in this research was childcare. The construction industry likely needs to find better ways to support men and women who have young children. However, because the workforce participation rate for women having at least one child 3 years or younger is approximately 61% in the U.S. (Hegewisch & Hartmann, 2014), tradeswomen, like mothers in all other occupations, find methods to negotiate the demands of work and family. Therefore, continuously citing an idea 1.) that all women have young children needing childcare, and 2.) that this fact is the reason women cannot work construction is perplexing as women with young children, most often, need to be in the workforce to support their family.

Unions. Having supported many improvements in workplace conditions, for any number of reasons (all of which could be argued or contentious), union membership has been in decline among U.S. employees over the past 50 years (Belman & Voos, 2006). This decline has, of course, also been taking place in the building trades. Today less than 20% of building trades personnel are unions members as opposed to about 40% in the 1960s (Belman & Voos, 2006). Even so, more unionized than the general workforce, unions remain a significant presence in the construction industry (Belman & Voos, 2006). As such, unions need to be part of the conversation concerning the policy tool of hiring goals since they often assist with staffing construction projects having those goals. Furthermore, although real wages at the union jobsite have declined by approximately 25% over the past few decades (Grabelsky, 2004), the wages and training are still

considered good. These advantages make union construction jobs desirable—including desirable for women who need to earn wages in supporting themselves and, often, family.

Building trades or craft unions have been overtly (until the Civil Rights Act of 1964 was passed) and covertly bastions for white men (Golland, 2008; MacLean, 2006). As such, the craft unions have been in the sights of people advocating for men and women of color and for white women to enter (Eisenberg, 1998; Golland, 2008). For those who are not white males and/or do not have family members in a construction-trade union, joining a union and advancing to journey level can seem confusing or elusive. Negotiating union membership has been written about elsewhere (see, for examples, Bilginsoy, 2007 or Worthen & Haynes, 2003), and noted in this research, but not extensively discussed. Yet, it seems one way to gain strength in an increasingly politically hostile environment toward unions would be to diversify their ranks—as opposed to the unions’ historical tactic of homogenizing membership. This diversity, reflecting and supporting those who will be making up the future of the U.S. workforce, seems an imperative goal for unions in the construction field.

Training. Onsite training is where the unwritten rules of work take over. Training occurs in what tasks are assigned to women at a jobsite. For example, is a tradeswoman only sweeping the floors and hauling garbage, or is she being assigned progressively more complex tasks when the opportunities arise and being shown best practices and “tricks of the trade”? Relationships between a new tradeswoman and a journey person can be key to whether women successfully complete their apprenticeship. Tradeswomen Tuesday (July 22, 2014), a blog sponsored by Equal Rights Advocates, comments’ section featured an observation from activist and former electrician Susan Eisenberg.

Responding to a statement in the initial posting that “women are only held back by shyness or aggressiveness”, she countered with the following:

I've come to feel that luck (a good job placement, a fair apprenticeship director, a union that doesn't tolerate harassment, enforcement of anti-discrimination laws, etc) is a very significant factor in separating those who create successful careers from those who don't. Those systemic problems need to change.

This statement and similar sentiments presented by participants positing women's experiences at construction sites vary significantly is one issue needing to be addressed by unions and construction companies. More uniformity across trades and across the nation in acceptance of diverse workers as well as professional training and worksite experiences for all building trades employees would likely go a long way in assisting with the success of recruiting diverse employees as well as attracting more employees who may have avoided considering work in the industry previously because of its reputation for being a monoculture of straight, hyper-masculine, inimical, white, U.S. born men.

The Cases. Recent surveys of projects finding success in hiring women for building trade jobs implement the following four actions: 1. Stating employment goals in the bid documents; 2. Holding initial meetings with contractors including guidance on how to find workers to meet goals; 3. Continuous on-site monitoring—projects with on-site staff to generate higher rates of women's participation; and 4. Separating reporting on the number of women apprentices and journey-level women to flag patterns of hiring only low-level women workers and not allowing them to advance to journey-level status

(Brown & Jacobsohn, 2008; National Women’s Law Center, 2014). Portland’s CBA accomplished 2-4 of the above actions listed, and the Green Line project accomplished 1-3. Both projects had higher participation rates for women than national averages numbers of women in the building trades workforce—specifically, Portland’s CBA had high women participation rates at the apprentice level. These findings further support the fact there is a need to implement the above four actions as a part of the strategy to successfully implement hiring goals.

The report “Unfinished Business: Building Equality for Women in the Construction Trades” (Moir, Thomson, & Kelleher, 2011) reviewed projects from across the country with the best female participation rates and one of the highest participation rates for women was the New York Times Building, built 2004-2007, having a 15% female participation rate. Hence, the 11.7% and 10% hours worked by women on the first two projects encompassing Portland’s CBA is not the highest female participation rate, but noteworthy. Considering women are currently less than 3% of building trades employees in the U.S., even the Green line project was able to more than double that number with participation in hours worked on the project by women at just over 7%.

As the Met Council prepares for the construction of another light rail line, the governing body appears to be in a good position concerning promoting and achieving some success in diversity amongst project employees including tradeswomen participation. They know how to institute the extra efforts, support, and creative thinking required. In fact, it seems, if the state of Minnesota raised the hiring goal for women to 8%, this would be easily achievable on the light rail as well as other projects using government dollars. The two projects piloted under Portland’s CBA showed some

excellent results for women's participation as far as what has been seen on major construction projects in the U.S. The biggest drawback with the CBA would, at this time, seem to be the fact that it may not get applied to future projects. This appears to be a significant loss for advancing best practices concerning the implementation of hiring goals, or, alternatively, a fascinating case study in seeing a policy tool acquire momentum and support and, in a matter of a couple years, lose that support.

The fact of the matter is: projects with hiring goals and support for achieving those goals such as the Green Line and those in Portland with the CBA do have more diverse workforces, including more hours worked by tradeswomen. The goals with concurrent programs assisting contractors with recruitment and community involvement in oversight of goal implementation, and, with people in authority—both within construction companies and in government—taking the goals seriously, without displaying derision seem to make for the most successful project as far as diversity in hiring. Concurrently, advocates and women interested in joining the building trades' workforce need to continue to improve their knowledge of the construction industry, job readiness, and skills acquisition.

Policy Implications

President Carter's first affirmative action policy aimed at incorporating women into the building trades went into effect in the late 1970s, and women, for the first time, entered building trade occupations in significant numbers (Eisenberg, 1998). Next was the era of minimal enforcement initiated by President Reagan, but continued beyond the Reagan era (Eisenberg, 1998). While the Carter administration projected women to be about 25% of the building trades workforce at this time (Eisenberg, 1998), simply

meeting extremely low goals—less than 10% of workforce hours—necessitate what are basically wrap-around services to the construction industry. In 2015, too many barriers remain for women to be successful in the construction industry and quantitative data confirms that, even though there are examples of success in diversifying the workforce, the white, male homogeneity persists. From the vantage point of supporting women's success in the building trades, no evidence suggests the policy tool of hiring goals should be ended at this time. Hiring goals as a policy tool, if not increasing worker diversity to date, have, at minimum, kept alive conversations about men and women of color and white women working in the construction industry.

Rather than being a burden, the construction industry could view their historical monoculture and the scrutiny it has put them under through an opportunities framework. Leaders in the construction field could aim to surpass other industries in order to become *the* industry where a truly diverse workforce feels supported and able to excel. In order to achieve this status, the following are likely good places to begin:

- Education and acknowledgement of the history of exclusion and discriminatory practices enacted by unions and construction companies in the United States
- Less defensiveness around business as usual; being open to innovative efforts for inclusion such as the institution of a CBA
- Rethinking the concept of “most qualified” including making needed training more transparent and onsite training consistent, fair, and professional
- Innovative, directed recruitment
- Transparency in hiring practices and union membership

Now, with baby boomers retiring and women working in a wider range of occupations, the time seems ripe for a significant renewed push for recruitment and promotion of success of women in the building trades.

Additionally, hiring goals could be more effective and less punitive. For construction companies, creating methods for reducing paperwork, and hoop-jumping relating to diversity in hiring would be a worthwhile endeavor. Recognizing good faith efforts required by the federal government and government at other levels cost construction companies money—even for minimal compliance and minimal gains at diversity in the workforce—one reasonable alternative at this time might be to create a buy-out option for companies interested in bidding on projects with hiring goals. Like the Portland CBA which includes an amount of money coming from the project to be funneled back to the community in order to support diversity in hiring in the building trades and DBEs, the buyout could be along the lines of putting a certain amount of money into recruiting and training men and women of color and white women, military veterans, and people with disabilities. Funds could be paid to non-profits or to scholarships at trade and technical colleges to support men and women of color, white women, veterans and those with disabilities in acquiring building trade skills.

The buyout could be three years with one annual audit showing an annual increase in hours worked by those who are not white men in their building trade workforce and release the company from the extensive steps required under good faith efforts. In order to make substantial steps toward increasing diversity, the buy-out amount would have to be that equal to or exceeding the costs of complying with current hiring goal requirements, but, in return, instead of having money go toward staff people filling-

out paperwork, the money would go directly to creating a larger hiring pool of workers with a baseline of training. Non-profit organizations existing across the country promoting women in the building trades and community and technical colleges preparing students for careers in the building trades could put funding to good use. One more option, as suggested by an individual in the construction industry, could be an incentive (cash) placed into the contract for those companies exceeding the goals. These could be structured similar to clauses included in contracts for early completion on a project. This tactic could also remove some of the feelings of negativity surrounding the goals and seems likely to be defensible in court.

Future Research

A culture of mistreatment of difference in the construction industry (as a societal narrative and, more importantly, in actuality) needs re-evaluation, in part, due to the public-relation issues the field has and, more importantly, for the lived realities of those out on worksites. The business case in favor of diversity for the construction workforce tends toward the anecdotal or uses studies from other fields, applying those results as evidence to encourage the construction industry. Yet, a construction company designing and constructing infrastructure projects at locations around the globe or even within the U.S. has a very different culture than an insurance company, a global value-added food company, or a retailer. There are a few people gathering data on diversity in the construction industry and the workforce composition's economic impact. One example of work in this area is the Colorado-Minnesota Disparity Consortium which has done work exploring policy encouraging the use of DBEs. Yet, there is still a dearth of econometric work on the topic of how diversity adds value to the building trades and the construction

industry. Economic analysis within the construction industry for the possible long- and (especially) short-term gains of hiring a more diverse workforce needs to be further investigated. A comprehensive business case based on empirical evidence of the value added by hiring a diverse workforce would be a powerful tool in promoting best practices and sound policy.

Finally, because societal feelings and views are so ingrained against the idea and actuality of women working as building construction trades people, it may be of use for tradeswomen advocates and researchers to join narratives and forces with those not necessarily grouped together with tradeswomen in labor studies i.e., other marginalized workers. Two groups that could be seen as fighting similar societal-wide issues of marginalization are: sex workers and those working in the U.S. who are designated “illegal aliens”. Like tradeswomen, both groups face societal and cultural condemnation for the jobs they work—noting, of course, differences for each occupational group as to *why* there is societal and cultural condemnation. Subsequently, because there is society-wide condemnation of these workers, the ways they are treated by their employers is often different—often more exploitive, more violent, more disrespectful. These behaviors are acted out against workers who have few avenues for reporting employer abuses and against those sometimes having difficulty finding an alternative occupation or simply enacted against those having a desire to work in the occupation, but desiring improved conditions. Linking the narratives of marginalized workers may assist with creating wider societal discussion about how workers in different occupations are treated, and what can be done to improve conditions for all workers. Thus, in a SLM framework, this means

engaging in research and advocacy assisting with moving all, or at least most, occupations into the primary tier sector.

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APPENDICES

A. Informed Consent

Protocol Title: Construction project community benefits agreements: Are they assisting more women to enter and remain in the building trades?

Please read this consent document carefully before you decide to participate in this study. The researcher will also go over this form verbally with you in a line by line fashion.

Purpose of the research study: This is investigating a policy tool's ability to increase the number of women working in the building trades and whether this tool creates a better working environment for tradeswomen. Since currently women are 1.2% of the building trades workforce and struggle to get hired, retained and promoted within the building trades, this study is aimed at finding ways to alleviate barriers to these livable wage jobs for women.

Who is conducting and funding the study: This is research conducted by Heidi Wagner, a PhD candidate in the Housing Studies program at the University of Minnesota.

What you will be asked to do in the study: You will be asked to participate in an interview where you will be asked questions about your participation in a Community Benefits Agreement construction project.

Time required: This interview will take no less than ½ hour and no more than 2 hours. There may be a follow-up contact to clarify content from the interview. There may be a follow-up interview where a summary of findings will be shared with you. The follow-up

interview could take between ½ hour and 2 hours. The total time of participation in this research project should not exceed 5 hours and will likely be less.

Risks and Benefits: The information you share in this interview will be used in a research project. Names and contact information will be recorded from this interview. This is done so that the researcher can contact participants subsequent to the original interview for any follow-up needed such as clarification of content and to share a summary of findings. Information shared will be analyzed and incorporated into a PhD dissertation and may subsequently become part of published material on this topic. Benefits are that you will contribute to a better understanding of how Community Benefit Agreements affect the hiring and retention of women working in the building trades.

Compensation: No compensation will be offered for participating in this project.

Confidentiality:

Your identity will be kept confidential to the extent provided by law. Your information will be assigned a code number that is unique to this study. The list connecting your name to this number will be kept in a locked file within a locked office at the University of Minnesota and only the Study Director and committee members (of which there are 4) will be able to see the list or the interview you participated in. No one at your place of work or union will be able to see your interview or even know whether you participated in this study. When the study is completed and the data have been analyzed, the list will be destroyed. Study findings will be presented only in summary form and your name will not be used in any report.

Voluntary participation:

Your participation in this study is completely voluntary. If you choose not to participate in this study, this will have no effect on the services or benefits you are currently receiving. You may refuse to answer any of the questions and you may stop or end the interview at any time.

Right to withdraw from the study:

You may choose to stop participating in the study at any time during the interview or prior to the presentation of the completed dissertation. This will have no effect on your current or future employment.

Recording: This interview will be recorded. The interview can take place without recording it, but in order to gain the most accurate representation of your words, recording is recommended. The recording can be stopped at any time during the interview, either permanently or temporarily. State who will have access to the recordings, where they will be stored, and when they will be destroyed.

The recording will be downloaded to a password protected computer and the recording device will be kept in a locked drawer within a locked office on the University of Minnesota Campus. The recording will not be used for any purpose other than the research study. A typed version of the recording will be created.

Who to contact if you have questions about the study: Heidi Wagner email:

wagn0184@umn.edu

Who to contact about your rights as a research participant in the study:

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Research

**Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis,
Minnesota 55455: (612) 625-1650.**

**YOU WILL BE GIVEN A COPY OF THIS FORM WHETHER OR NOT YOU
AGREE TO PARTICIPATE.**

If you agree to participate in this study please sign on the next page. Thank you.

Agreement:

I have read the procedure described above.

I voluntarily agree to participate in the procedure.

I have received a copy of this description.

I understand that this interview will be audio-recorded.

Name (Printed) _____

Signature: _____

Date: _____

Principal Investigator: _____ Date:

IF RECORDING IS USED BUT IS OPTIONAL, ADD: I agree to allow this interview to be (audio-/video-) recorded. I understand that I can request that the recording be stopped at any time.

Signature: _____