



# BRIDGING THE GENDER GAP: CREATING A NATIONAL PRE-APPRENTICESHIP PROGRAM TO PREPARE WOMEN FOR THE IRONWORKING INDUSTRY

Ironworkers work on bridges, structural steel, ornamental, architectural, and miscellaneous metals, and rebar.

A highly skilled trade, unionized ironworkers begin their careers as apprentices, benefiting from a combination of on-the-job training and related classroom instruction. Over the course of a three-year apprenticeship, an ironworker in Chicago will go from an hourly wage of \$27.72 to \$46.20. A hefty benefit package adds almost another \$35 per/hr. to cover health and retirement benefits. Like many construction trades, the ironworkers face a challenge when it comes to diversity and ensuring a trained workforce into the future. There are 2,850 women ironworkers in North America, and more than 100,000 men; meaning women comprise just 1.5 percent of ironworkers and fewer than 2% of ironworker apprentices.



Participants of the 3rd National Ironworkers Pre-apprenticeship Program for Women, University of Iron, Benicia, CA, April 2017

In 2015, with the leadership and commitment of a California State Apprenticeship Director to increasing women's participation, the Ironworkers launched a new and innovative national pre-apprenticeship program for women, becoming the first construction trade to do so. Local ironworker unions and apprenticeship programs from across the country identify eligible candidates from their area to participate in the program who, if successful, earn direct entry to the apprenticeship program.

Diversity is an increasingly important business goal for both the union and the contractors. In an industry with a high share of publicly funded contracts,

## IRONWORKERS' PRE-APPRENTICESHIP TRAINING PROGRAM FOR WOMEN

- 20-24 women per cohort; four cohorts, starting in 2015.
- Three-weeks full-time (180 hours instruction) residential program.
- 95% graduation rates.
- Over 90% placement into apprenticeship through direct entry
- Over 90% of retention of graduates

“Ironworkers are building America’s infrastructure –we need to look like America if we want to build for America and stay competitive and credible as a union.”

**VICKI O’LEARY**  
*The Ironworkers U.S. Safety and Diversity Coordinator*

there is considerable pressure to be representative of the broader population. Bill Brown, President and CEO of Ben Hur Construction and Management Co-Chair of IMPACT -the Ironworker Management Progressive Action Cooperative Trust- points out that pressure for a more diverse workforce is also increasingly coming from private developers, who expect their contractors to work with diverse teams. “Now it is also private and institutional buyers, not just the public sector, who are looking for diversity - those firms want to be good corporate citizens, and they want their vendors and business partners to have a workforce that is reflective of the population.”

Brown is also quick to add that while bringing more women into the trade is the right thing to do, the critical shortage of skilled workers is another motivating factor. Brown states that, “Coming out of the recession we are facing a big demand for new workers – we are not going to be able to fill it the old way- we are going to fill it by using every person that we can reach out to and touch.” Knowing that many of the industry’s current workers are approaching retirement he recognizes that “this (national pre-apprenticeship) program makes a great contribution” to expanding the industry’s outreach to a previously untapped pool – women – to fill the demand.

While outreach is an important part of the International Union’s strategy to increase diversity, they are also working to address retention of women in the field. The Ironworkers have become the first building trades union to offer paid maternity leave. As Ironworkers Union General President Eric Dean said at the time of launching that policy, “It’s about time we make our industry a level playing field for women and make diversity and inclusion a priority.”<sup>1</sup> Described as better than what many of the progressive high-tech firms like Google or Facebook offer, the policy is a landmark moment for women seeking equity in nontraditional jobs.

Another testament to the Ironworkers commitment to bringing more women into the industry is the appointment of Vicki O’Leary as District Representative Safety/Diversity for the Ironworkers International in 2016. An ironworker in Chicago’s Local 1 for over 30 years, in her new position she championed the new maternity policy, is leading the Tradeswomen’s Committee for North America’s Building Trade Unions and provides guidance and support for female ironworkers across the country as well as to their local unions, employers and apprenticeship programs. Committed to her trade and to women’s equity, O’Leary states, “Ironworkers are building America’s infrastructure –we need to

look like America or we will lose credibility.”

## A National Strategy to Support Gender Diversity at the Local Level

While IMPACT and the International Union are providing leadership from the top, most of the change will happen at the local union level. Some district councils and locals have made significant progress in increasing diversity among their apprentices. For example, the proportion of women among apprentices is over 9 percent in Local 7 in the Boston area, and around 7 percent in Local 86 in the Seattle and Locals 377 & 378 in Northern California, all well above the national average.<sup>2</sup> Each of these regions benefit from their cooperation with pre-apprenticeship programs and organizations focused on improving women’s access to the trades, such as ANEW in Washington, Building Pathways Inc. and the Policy Group on Tradeswomen’s Issues (PGTI) in Massachusetts, and Tradeswomen Inc. in California. Yet many other locals have no women apprentices at all. The national pre-apprenticeship program for women is designed to increase numbers across the country and help locals with recruitment, training, and retention of women ironworkers.

Selection procedures for new apprentices vary across the country; in some locals applications are only accepted once a year or less, others accept them year-round. Selection processes may also award points for experience, a system that favors applicants who already have some related work experience. Gaining work experience in construction, however, is much harder for women than for men- just walking up to a building site and asking for work may be a feasible strategy for men, particularly if they already have family or other connections in the trades, but because of discrimination and historical underrepresentation, it is much less effective for women. The pre-apprenticeship program helps women overcome this gap by giving participants the experience they need to help level the playing field. Graduates are also guaranteed direct entry to an apprenticeship and do not have to compete for entry upon completion.

## Decentralized Selection, Centralized Funding

Locals put forward candidates for the program. There are 14 Ironworkers District Councils nationally, each with between 10 and 15 locals; broadly, each District Council can put forward up to two participants who must be sponsored by the business manager and district council president. The goal is for different locals to put forward candidates each time. Participation in the program is free for the local; the District Council

“We are doing this program- trying to get more women in- because it is the right thing to do. But also because we are coming out of the recession, we are going to have such a demand for new workers- we are not going to fill it in the old way. We are going to fill it by using every person that we can reach out and touch-and this program makes a great contribution.”

### WILLIAM BROWN

*President and CEO of Ben Hur Construction and Management  
Co-Chair of IMPACT*



“I called everywhere-  
for three years I have  
been trying to find a  
sponsor-impossible. Then  
someone told me about  
an ironworker boot camp-  
I was the only woman  
among 30 men- and after  
that my local put me  
forward for the Benicia  
program.”

**PARTICIPANT**

*National Ironworker Pre-apprenticeship program for women*

carries travel costs, and IMPACT pays for accommodations and food during the three week residential program.

Though participants attend at no cost, they are not paid during the program and must have the resources to leave their jobs and families during the three weeks. The most important criteria for a local to be able to send someone is having work for the graduate when she comes back. Dick Zampa, Ironworkers State Apprenticeship Director for Arizona, California, and Nevada, and the architect of the program, explains, “The program is a big investment for us [the Ironworkers] and for the woman – leaving her job and family for three weeks, arranging childcare, getting ready for the program – it only makes sense if there is work for her when she graduates. We do not want to train women that do not get the opportunity to work when they complete the course. We are working closely with the Local Unions and the Apprenticeship Programs to ensure there is placement.”

**The Program Design**

The 3- week residential pre-apprenticeship program provides 180 hours of class and shop and is taught 6 days a week from 6:30am to 4pm. Each cohort has up to 24 women participants. Programs are held at the University of Iron in Benicia, CA; the first cohort was held in 2015, a second in 2016, and two cohorts are planned for 2017. A third of the program focuses on welding, a third on rigging, and a third on more a general orientation to their trade. Graduates obtain the basic certificates that are required for working safely on sites, including



“You have to know your knots – practice a little every night, you will have a leg up on a lot of people.”

**DICK ZAMPA**, *Ironworkers State Apprenticeship Director*, shows the ropes to pre-apprentices in Benicia

OSHA 10, first aid/CPR, and Sub-part R (the construction industry safety standards that regulate the steel industry). On completion, the women will know the basic tools, will be familiar with basic health and safety requirements, will have had some hands on welding and rigging experience, and will have an idea of what to expect on their first day on the job. As Dick Zampa tells participants during introduction to the program, "After this program you won't be the lady from Mars when you turn up on a job first time- your shoes will be broken in, your overalls will be used, and you will know how to wear your tool belt - you will be fine."

Orientation includes basic behaviors required in the trades – such as regular attendance and punctuality, doing one's best to meet contractor expectations of high quality work, and being prepared for the cyclical and irregular nature of ironwork. As Dick Zampa put it, "This is construction- not the post office where you can expect a check each month.

In construction, contracts come to an end and you will get laid off. You will earn good money and part of that is for you to save for the times when you don't have work." The program also emphasizes fitness and participants are advised to get ready for the program by doing 100 push ups per day.

Each participant receives a starter pack of commonly used tools worth several hundred dollars. The pack includes a safety harness; finding a safety harness in a woman's size can be tough - and an excuse for contractors, who are responsible for providing safety equipment, for not hiring a woman. The harnesses are donated by a construction supply company (3M); a company manager was at a talk where he heard how hard it is for women to find a harness that fits- within a week the company offered to donate harnesses in appropriate sizes to the program.

The class openly addresses what to expect as a woman in the trades- coping with being an object of curiosity as the only woman among a lot of men, learning to speak up and using one's 'iron workers' voice, building a network of other women (and sympathetic men) for mutual support, and knowing what to do in cases of harassment and hostility. The



**"Am I going to give up my well-paid job because a guy is a jerk? Hell no!"**

**CARRIE STEELE**, *Ironworker instructor*, with pre-apprentices in Benicia

**"After this program you won't be the lady from Mars when you turn up on a job first time- your shoes will be broken in, your overall will be used, and you will know how to wear your tool belt the right way- you will be fine."**

**DICK ZAMPA**  
*Iron Workers State Apprenticeship Director for Arizona, California, and Nevada*



Participants at National Ironworker Pre-apprenticeship program for women during orientation

“I feel so privileged to be on this program- they always say ‘women and minorities welcome’ but in practice it is very hard - I looked for a very long time for this opportunity.”

**PARTICIPANT**  
*National Ironworker  
Pre-apprenticeship  
Program for Women*

program is taught jointly by Dick Zampa, California’s apprenticeship director, and Carrie Steele, a journeyworker with many years of experience as an ironworker. Instructors and guest speakers are open about the fact that being a woman ironworker is likely to be tough- it is a strenuous job, and on top of that, women will be under particular scrutiny. Yet hundreds of women have made ironworking their career and are receiving excellent pay and benefits and graduating from the pre-apprenticeship program will be a big step towards making it as an ironworker for the participants, too. Journeywoman and instructor Carrie Steele sums up the attitude, “I know I have the skills. Am I going to give up my well-paid job because a guy is a jerk? Hell no!”

## A Diverse Range of Women Participate in the Program

Participants of the third cohort show the range of women interested in careers in ironwork. Women travelled from 16 states (Arizona, Alaska, California, Indiana, Kansas, Missouri, New Mexico, Wisconsin, Illinois, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, and Washington); they ranged in age from 18 to 36; a quarter had kids; slightly more than a quarter came from an ironworker family. At the same time, more than half said that they had not known about apprenticeships when they grew up. Women came from fields as diverse as hospitality, healthcare, finance, and security and a small minority had worked in construction or welding and were looking for more challenging and better paid work. Several women had completed college, including one with a Master’s degree, but found it hard to find jobs that paid enough to pay back their college debt.

Finding their way to the program was long and hard for some women, including active discouragement in high school when they wanted to join construction skills programs, or for others, many visits to One-Stops who were either ignorant of apprenticeship opportunities or did not encourage women to pursue such opportunities. Others faced a string of rejections from contractors when they were trying to find a sponsor to employ them. Yet for others the road to Benicia was more straightforward, showing perhaps that times are changing. Two women had just reached 18 and were still a couple of months away from graduating high school; they learned about the program from their CTE instructor, who had also encouraged them to get a welding certificate as part of their high school curriculum, and had put them in touch with their Ironworker local. Another one learned welding on a Jobs Corps program, completed an Ironworker’s Rebar Gladiator

Boot camp, and was put forward by her local to attend the pre-apprenticeship program. One woman, an 8-year military veteran, joined through Helmet to Hard Hats (H2H), the program set up to help veterans to successfully transition into civilian life; she had learned about H2H through her One Stop. However they got there, all were determined to succeed as ironworkers and all of the participants from this cohort have graduated and transitioned into an apprenticeship.

Several women had completed general pre-apprenticeship programs for women in the trades, including at Chicago Women in the Trades and Oregon Tradeswomen. Having women in the program who have already completed a general introduction to working in the trades is a big plus for the Benicia program, because these women already have a familiarity with construction and know that they want to make the trades their career. Jayne Vellinga, director of Chicago Women in the Trades, explains: “Four of our graduates went to the Ironworkers pre-apprenticeship program; they are now happily working in an ironworker apprenticeship and credit their success to the investment the iron workers made in preparing them for the industry. Apprenticeship programs have to do something intentional to ensure they reach women, and this program succeeds. It provides a clear pathway for women to apprenticeship, it ensures that they are not completely green when they show up for their first day on the job site, and it connects them to peer network that they can rely on as they all return home to begin their careers as apprentice iron workers.”

## From Pre-Apprenticeship to Apprenticeship

Of the 2015 and 2016 cohorts, 95 percent of the participants completed the program, and over 90 percent were placed into an apprenticeship through direct entry. Finding apprenticeship positions for graduates is a high priority. George Butz, Apprenticeship Coordinator for Ironworkers Local 63 (Architectural and Ornamental) in the Chicago area, emphasizes, “We can provide a great training program but if we cannot put these ladies into a job after they made the commitment, we have done them and us a big disservice.” Local 63 has taken and placed one graduate from the first program, and two from the second one (which means that they are now unlikely to be able to have another graduate for a while). All three had previously completed programs at Chicago Women in the Trades (CWIT). One graduate of the second



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**JAYNE VELLINGA**, *director of Chicago Women in the Trades*, with Sally Perez and Lisa Sablicki, ironworker apprentices and graduates of the National Ironworker Pre-apprenticeship program for women

“We can provide great training program but if we cannot put these ladies to work after they made the commitment to the program, we have done them and us a big disservice.”

**GEORGE BUTZ**

*Apprenticeship Coordinator for  
Ironworkers Local 63*

“The Benicia program was fantastic. I was probably over-prepared but let’s face it—that is not the worst thing when you start a new job as the only woman working with a lot of guys.”

**2ND YEAR IRONWORKER APPRENTICE  
AND GRADUATE OF THE NATIONAL  
IRONWORKER PRE-APPRENTICESHIP  
PROGRAM FOR WOMEN**

cohort, who had three days’ notice of acceptance into the program, and gave up her job (in a bank) to attend, recalls her panic when she came back to Chicago without having a job, “I felt pretty antsy- I had always had a job since I left high school, and now I could not even claim Unemployment Insurance.” It took two months until she was called- during which she volunteered at CWIT to keep up her skills and connections- but she has been working steadily ever since.

George Butz recalls how hard it was to place the very first graduate because she was petite and contractors just could not imagine how she would be able to do the work. Once she found a company that was willing to take her for what she was able to do rather than what she looked like, she excelled at her work, to the extent that contractors are now willing to pay her more than they have to. George Butz acknowledges that women apprentices are under considerable additional pressure. “When a guy messes up, it is just: Joe did this – when a woman messes up, it is ALL women can’t do this. Now that we have at least 7 women apprentices in our local- all of them excellent- the walls have come down a little bit, but the pressure on them is definitely still there.”

In Seattle, where several years of concerted efforts have contributed to a 7 percent participation rate for women in apprenticeship, it has become easy to place graduates of the program. Greg Christensen, apprenticeship coordinator from Local 86, says, “I typically have no problem at all with placing women after a pre-apprenticeship program; the contractors are like: where can we get more of these— because they are doing so well.”

## **An investment in the future**

Contractors and the union invest a lot of time and resources into the training of apprentices; every time someone starts and then drops out of the program, that investment is lost. For Lee Worley, Executive Director of Apprenticeship and Training for the Ironworkers, one of the key benefits of the program in Benicia is that it gives participants a realistic idea of the trade before they enter an apprenticeship. “Ironwork is tough and dangerous work. Once these women complete this program, they know what they are getting into.” Judging by retention rates from the first cohorts- around 90 percent compared with 75% for all apprentices- the strategy is working.



## ENDNOTES

1. "Iron Workers and Contractors Announce Paid Maternity Leave Benefit", Ironworkers news Magazine, April 24, 2017, <<http://www.ironworkers.org/news-magazine/news/2017/04/24/iron-workers-and-contractors-announce-paid-maternity-leave-benefit>> (accessed August 8, 2017).
2. Data for Local 7 from Massachusetts Division of Apprenticeship Standards ([www.mass.gov/lwd/labor-standards/das/](http://www.mass.gov/lwd/labor-standards/das/)), provided by Policy Group on Tradeswomen's Issues (PGTI); data from other locals provided by programs during interviews for this brief.



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