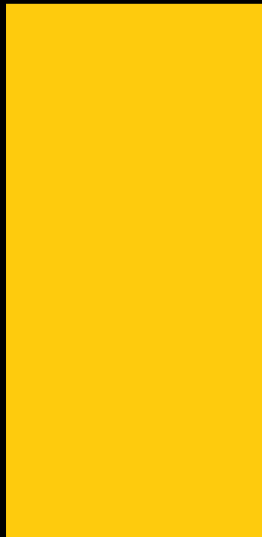


WOMEN'S EQUITY STUDY

MC3 APPRENTICESHIP READINESS PROGRAM



VALLEY BUILD

Acknowledgements

Women's Equity Study: MC3 Apprenticeship Readiness Program March 2023

PREPARED FOR THE FRESNO REGIONAL WORKFORCE DEVELOPMENT BOARD

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Executive Summary

Operating in a 14-county region, the ValleyBuild MC3 Apprenticeship Readiness Training Program prepares individuals for high-paying and stable careers in the building and construction trades. However, participation by women in the MC3 (Multi-Craft Core Curriculum) program remains low – a fact that correlates with the small percentage of women working nationally in the construction industry.

Against this backdrop, the Fresno Regional Workforce Development Board (FRWDB) – the fiscal agent for the state-funded ValleyBuild program – commissioned a research study to better identify obstacles, real and perceived, that may deter women from entering the training program and the trades. The goal is to improve inclusion of women in the trades and the training program by understanding and addressing barriers or challenges to their participation.

The research team conducted 30 personal interviews with working tradeswomen and women who applied for, enrolled in, or completed an apprenticeship readiness program. An additional survey conducted via email invitation was answered by 71 women from those same backgrounds as well as those who had never heard of ValleyBuild.

All of the survey and interview respondents had some connection to the Fresno Regional Workforce Development Board, which operates the America's Job Centers of California Workforce Connection. The women surveyed and interviewed were not required to answer every question.

The research team reviewed and analyzed the data to develop findings. Those findings were discussed by the research team and then with an advisory committee composed of female experts in construction, workforce development, and gender equity. The group included representatives from Fresno and throughout California.

The study's major findings, connected to recommendations, are provided in the table below.

FINDINGS

Over 70% of women said compensation for training hours would provide significant help, including all who completed the training.

Nearly a third of those who completed the program said a non-workday schedule would have provided major support.

Childcare or family care was identified as a support need by 62% of the 42 respondents who completed the training. One in four identified it as a major need.

Sixty percent of women who hadn't applied for training said they had never heard of the program despite prior contacts with FRWDB "Workforce Connection" Job Centers.

More than half the women who gave personal interviews believe having more women in the program, or an all-female cohort, has a positive effect.

Though it was a small sample size (6), 100% of women who applied but didn't enroll believed having more women instructors or coordinators would be positive.

The vast majority of respondents perceived some level of discrimination against women working in the trades. Nearly three in four identified the level of discrimination as major.

Most women who completed training were unclear on a trade preference – an increase over those who hadn't taken the program.

RECOMMENDATIONS

Provide compensation for all program participants sufficient to defray the cost of child care, transportation, or to replace lost income.

Offer an alternative class schedule option outside of standard business hours.

Provide stipends for childcare/family care and transportation, based on need, to supplement compensation and reduce financial strain.

Expand awareness of the training by ensuring that women who contact Workforce Connection are informed about the program and the high pay/benefits of working in the trades.

Provide the option of an all-female cohort, at least once a year, to encourage participation of women who may prefer that learning environment.

Include at least one female instructor or coordinator in each training program.

Address perceptions by expanding practical guidance on confronting discrimination and sexual harassment, and inform women that the training program provides guidance on managing these challenges.

Expand support for selecting and entering a trade through tools such as job-shadowing, mentorships and sharing more information about apprenticeship availability and labor demand.

Introduction

The U.S. Bureau of Labor Statistics estimates the construction and extraction industry employs about 7.7 million workers, and only 4% are women.¹ In California, women also constitute only about 4% of the construction industry. An even smaller percentage are women of color², and the number of people with disabilities in building trade apprenticeships or pre-apprenticeships is strikingly small.³

According to the Institute for Women's Policy Research, women in the building trades are paid well relative to other jobs available without college degrees: more than 40% of tradeswomen reported earning at least \$50,000 a year. These wages are generally significantly higher for women who complete union apprenticeships and work at union rates.⁴ With good pay in an economy flush with infrastructure work, why aren't more women turning to careers in the building and construction trades?



ValleyBuild is a state grant-funded program that provides training to meet the strong need for a diverse construction workforce in California. The Fresno Regional Workforce Development Board is the fiscal and administrative agent for the program and the primary model is a training program launched in Fresno more than a decade ago.

Partners in ValleyBuild include the Building Trades Councils in a 14-county area; Joint Apprenticeship and Training Committees throughout the region; MC3 providers; seven workforce development boards in the region; The Rios Company; Tradeswomen, Inc.; and community-based organizations that help recruit for the program.

A particular focus of ValleyBuild is increasing the number of women in the trades. The goal is in line with Governor Newsom's 2018 commitment to tackle growing income inequality in California using apprenticeship and pre-apprenticeship as a key strategy. The aim is to expand California's apprenticeship and pre-apprenticeship systems, already the largest in the United States, to serve 500,000 apprentices by 2029.⁵

In the effort to reach such an ambitious goal, it is important to recognize that while there is room for growth in the building trades, there are significant structural limitations to expanding the number of construction trades apprentices in California. This is due in large part to the perception that the construction trades are male-only professions. The recently passed federal infrastructure bill could lead to some growth in construction trades (apprentices and pre-apprentices). But, for the most part, the number of active construction trades apprentices and pre-apprentices is likely to remain steady unless steps are taken to expand the number of women and members of underserved communities entering such programs.

California has invested significantly in apprenticeship and pre-apprenticeship via the 2022-2023 state budget, including an additional \$15 million to augment the 2021-2022 investment of \$15 million into a Women in Construction Priority Program at the Department of Industrial Relations.

Despite these policy efforts, many women never consider working in construction. The lack of women in trades correlates with the lack of an effort to recruit them, an outgrowth of stubborn stereotypes that posit construction as a male-only business. It is our hope that this equity study will help clarify what barriers prevent more women from entering the construction industry, and particularly the ValleyBuild program.

There is ample opportunity for women to access well-paying construction jobs through better access to career advice and appropriate training. Providing childcare, supportive services, and expanding targeted outreach to women and underserved populations should support access and equity in the construction industry. However, because we can't rely on assumptions for program development, we reached out to women who have been a part of apprenticeship readiness, pre-apprenticeship and apprenticeship training programs. We asked what

they needed to pursue a construction career and how the process could be made easier and information more readily available.

We hope that the issues raised in our study, and the recommendations we offer, will help make building and construction trades and apprenticeship and apprenticeship readiness programs more inclusive, accountable, and informative for women. These programs are effective preparation for the rigors of a trades career, and also provide a realistic picture of what women encounter in the field and how they can deal with challenges.



Methodology

This study was proposed by the Fresno Regional Workforce Development Board in late 2021 with goals of supporting greater enrollment, equitable participation, and career success for women in construction trades and training. The Board hired The Rios Company to conduct the study, which then contracted Allysun Walker (Walker Community Ventures, LLC), Cyndee Fontana-Ott (independent consultant), and Keith Brower Brown (UC Berkeley) to join the study team.

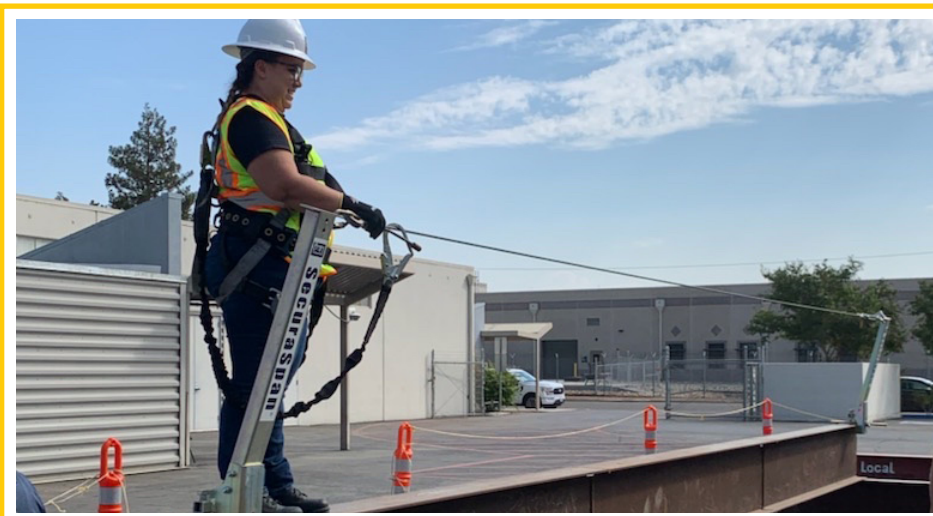
The Rios Company also recruited and convened an advisory committee, comprising women experts in construction, workforce development, and gender equity from Fresno and greater California. This committee met with the study team repeatedly, from the study beginning until end, to help guide study design and analysis.

STUDY PHASE 1: PLANNING & INTERVIEWS

After initial planning, the study team conducted in-depth, one-on-one interviews (n=30). The goals were to gather qualitative data on women’s perceived and experienced barriers and support for program participation, and to guide survey design for the second, broader phase of the study. The study team conducted interviews with three subject groups (categories of respondents), including:

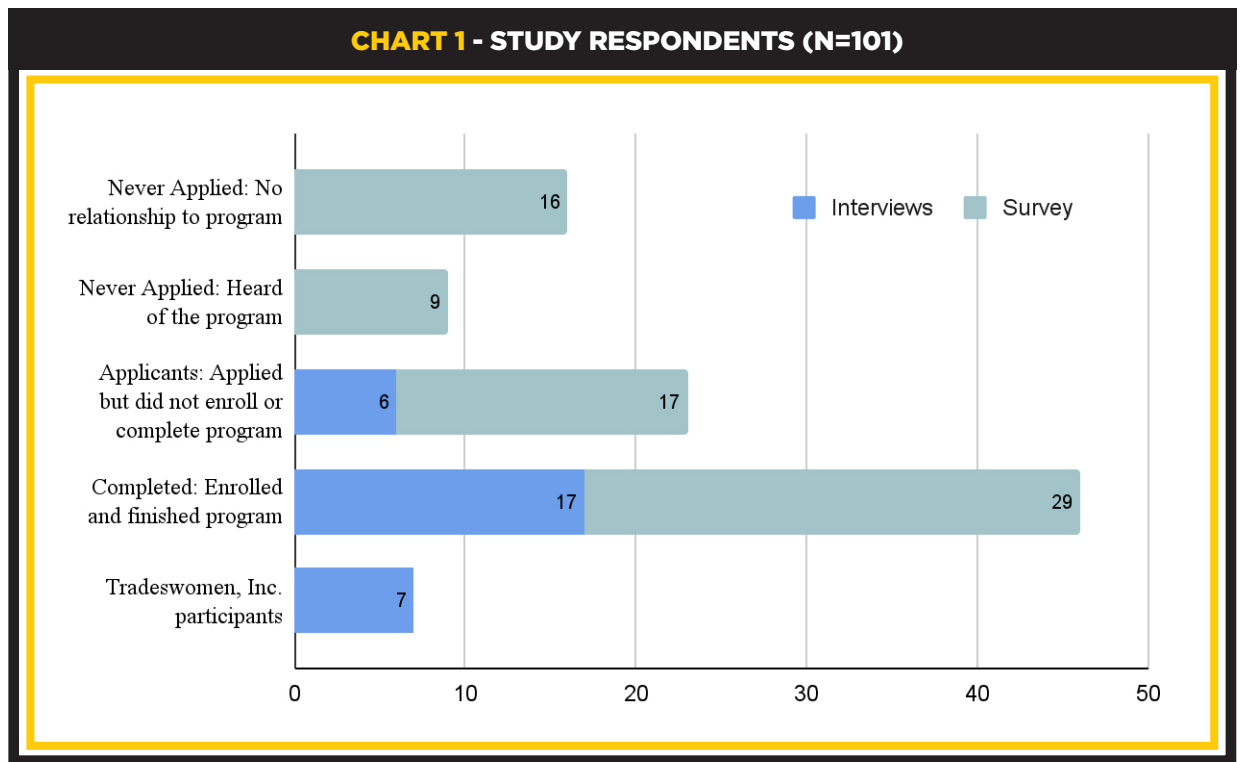
- A)** Women who completed or were currently enrolled in a FRWDB-affiliated apprenticeship readiness program (n=17; including n=11 currently enrolled in an all-women’s cohort)
- B)** Women who applied but did not enroll or complete the program (n=6)
- C)** Women working in construction trades in the Fresno region who are contacts of the Tradeswomen, Inc. network (n=7)

Subjects for groups A and B were identified from contact data provided by the FRWDB, based on past program applicants, enrollees, and graduates. Subjects for group C were identified from contact data provided by Tradeswomen, Inc. For all groups, the study team used phone calls, personal contacts, emails, and text messages to recruit participants from the provided contact data. Prospective participants were informed about the study purpose, anonymity of any findings, and that they would be provided, as an incentive, a \$50 gift card to a local grocery store after their interview participation. Respondents are visualized in Chart 1, below.



For subjects who provided informed consent, interviews were conducted over Zoom audio sessions or in person. Each interview session included one subject, one study team member asking questions, and one study team assistant on standby for technical support for Zoom calls. Interviews were conducted with the semistructured interview method, based on a shared set of questions for each subject group (a link to all questions is included in the Appendix), and with the option for the interviewer to ask improvised follow-up questions on relevant themes. Interviews typically required 30 to 45 minutes each.

Findings from these interviews were anonymized, coded, and analyzed by the study team, with input from the Advisory Committee. These findings were used to design a survey, for a broader group of subjects, in the second phase.



STUDY PHASE 2: SURVEYS

The study team conducted a set of surveys (n=71) over the online SurveyMonkey platform, for three subject groups:

- A)** Women who completed a FRWDB-affiliated training program (n=29; with an additional n=2 who were also interviewed in Phase 1, so not double-counted in the figure)
- B)** Women who applied but did not enroll or complete the program (n=17)
- C)** Women who never applied to the program (n=25)

Subjects for all groups were recruited via email from contact data provided by FRWDB from past applicants and graduates of the apprenticeship readiness, or, for C, from women who contacted FRWDB for other workforce development and recruitment programs. Prospective survey respondents were informed of the study purpose, its anonymity, and offered a \$25 gift card to a local grocery store as an incentive for survey completion.

Surveys were conducted with a consistent set of survey questions within each group (a link to all questions is included in the Appendix). Surveys generally required 15 minutes for completion, and did not require responses to every question. Surveys included both multiple choice questions and a limited set of open-ended written response questions.

After over a month open to responses, findings from the surveys were anonymized, coded, and analyzed by the study team. Where interviews and surveys asked the same or highly similar questions, analysis connected these questions to show responses from both. Together, survey and interview findings were used as the basis for analysis and recommendations in this report, under guidance from the Advisory Committee.

Together, survey and interview findings were used as the basis for analysis and recommendations in this report, under guidance from the Advisory Committee.

DISCUSSION OF METHODS

By collecting survey and in-depth interview data from 101 respondents across four distinct subject groups, this study provided the best known available evidence on the perceptions, experiences, and support needs for women pre-apprentices. With a study design that began with semi-structured, open-ended interviews, the study team was able to make informed decisions about survey design to address needs of the broadest and deepest relevance for prospective women pre-apprentices.

A few limitations of the study design were identified in practice. These are noted, when specifically relevant, in the findings below. All subjects, with the exception of Tradeswomen, Inc., interviewees, were identified through FRWDB Workforce Connection contact lists. Since this subject pool reflects women seeking workforce development programs, it is a relevant basis for recommendations that affect future, prospective program participants. The Findings and Analysis section notes one chart (Chart 14, on whether or how women learned of the program) where the study team believes this subject pool may have disproportionately affected the answers, relative to the general pool of future potential participants.



The largest group of survey and interview respondents were from women who completed or were currently enrolled in the program (n=46). By design, this ensured the strongest set of response data was from women with the greatest direct experience of the program. However, given that all of these women succeeded in enrolling and, largely, completing the program, their responses can not be taken as repre-

sentative for the women who face the greatest barriers to applying or completing the program. When “Completed” subjects identified challenges and support needs, their graduation itself shows these needs were not decisively necessary elements for their program completion. However, whether or not they prevented program completion, these challenges and needs of women apprenticeship readiness graduates provide crucial insights on supporting equity in the program and beyond.

Minor complications result from the general inclusion of women currently enrolled in an all-women’s training cohort (n=11) in the same interview category as those who completed the program. Overall, this was conducive to a more succinct analysis, and reflected the study team’s assessment that all enrolled and completed women participants shared direct experience in the program; a unique difference from other subject groups. For one area of the Findings & Analysis section (Chart 12, on perceived effects of an all-women’s cohort), the current enrollees are discussed separately, to reflect their unique existing experience of such a cohort.

Where the study identified potential additional questions or subjects for future research, these are briefly shared in this report’s Recommendations.



Findings & Analysis

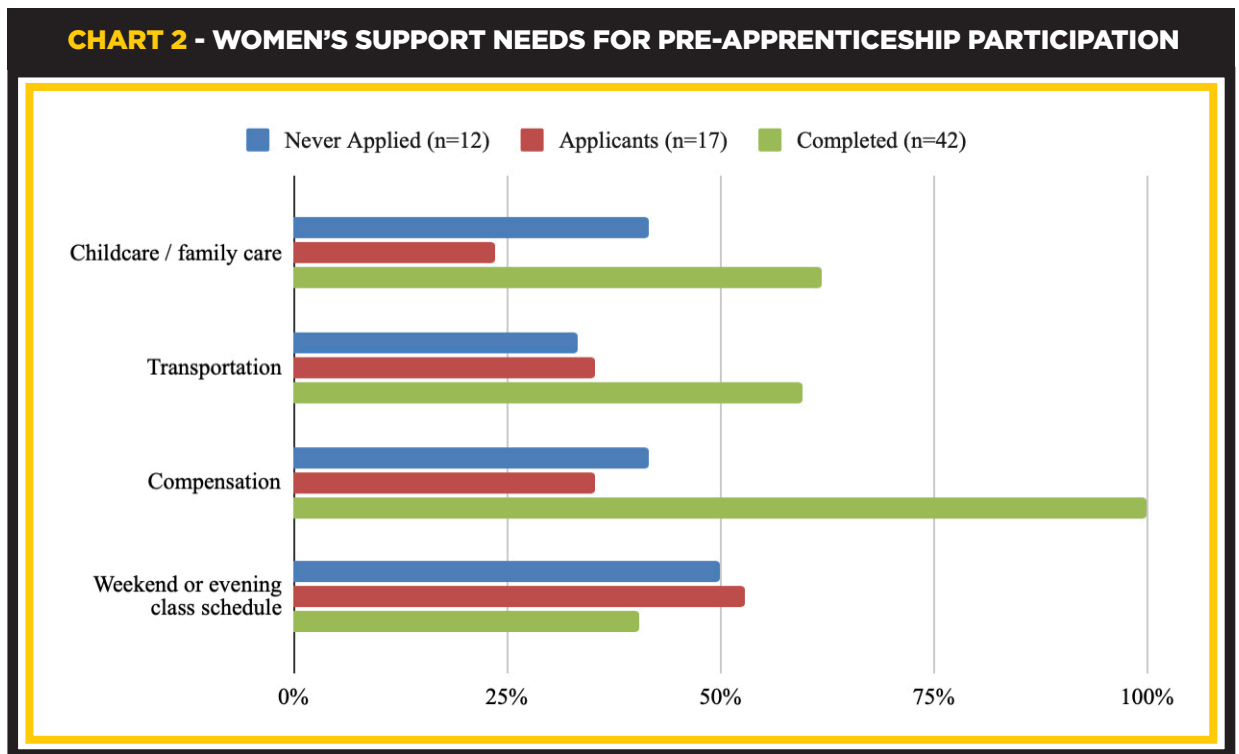


Chart 2 compiles responses from survey and interview questions that asked women about their perceived or experienced challenges to program participation, and potential kinds of support to help them participate further. Charts 3-6 below, based on interviews and “Completed” surveys, show whether subjects classified these support needs as “major” (potentially decisive for their participation) or “minor” (significant, but not make-or-break needs).

From this overview in Chart 2, initial findings stand out on each type of “support need”. However, a pattern of disparity between “Completed” and other groups reflects a difference in question wording for the survey; for example, the former group was asked, “If you were paid for the hours spent in pre-apprenticeship training, would that have improved your ability to participate?”, while for others, it asked “What challenges or issues might make it difficult for you to enroll and attend the training?”, providing “Unpaid training” as an answer option. As a result of the positive versus negative survey framing, we infer that “Completed” subjects were more likely to respond positively across

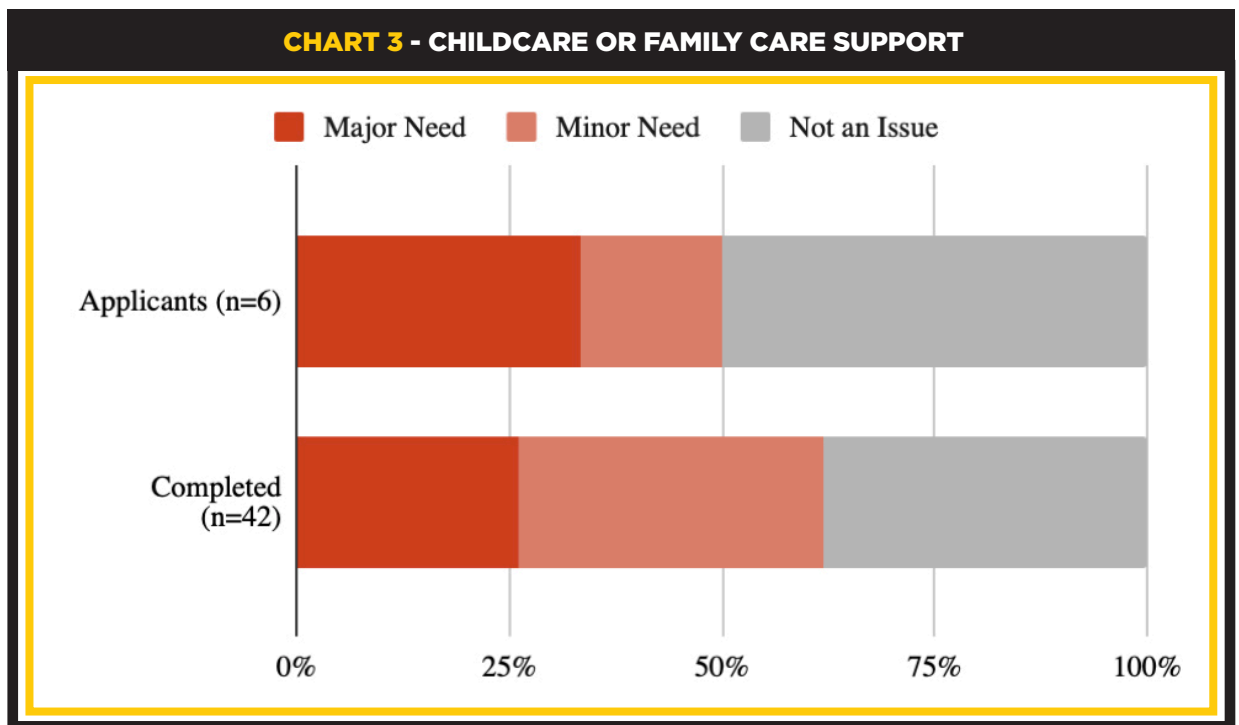
the board. The balancing presence of interview data (where each group was asked the same way), as detailed in Charts 3-6 below, helps adjust for this oversight in survey design.

Of the total respondents (n=71) shown in Chart 2, more than 70% of women said compensation would provide significant support, more than any other category. For context, Fresno’s training programs to-date are typically scheduled from Monday through Friday for 6 to 8 weeks, from 8 a.m. to 4 p.m., during traditional working hours. Providing a stipend during the program would replace income lost from ceasing other jobs during the training, reduce the need for extensive part-time work during the training, and help women to meet their daily needs to participate. From this data, we can infer compensation would encourage more women to apply, enroll, and complete the program.

In a close second place, Chart 2 indicates an option of a weekend or evening class schedule would have been helpful support, ranking highest for women who never applied and those who applied but did not enroll. Multiple respondents noted in interviews and written responses that the current weekday schedule was in conflict with their job prior to training, or with their need to provide childcare or family care (such as for an elderly or disabled family member). This indicates offering an alternative weeknight or weekend schedule could encourage more women to enroll and complete the training.



A need for childcare/family care support was identified by over half of women who had completed the program, and about a third of those who had not. Similarly, transportation was a support need identified by more than half of those who completed the training but was least reported among those who never applied, and marginally reported by those who enrolled but did not complete the program. While in part this reflects the aforementioned differences in question wording, we believe this also indicates that women who completed the program may have found it challenging to balance with care roles and transportation demands, in ways that women who had not enrolled could not equally foresee. Reviewing the more detailed support need findings, below, leads to more precise recommendations.



For Charts 3-6, both interviews and surveys for the “Completed” subject group distinguished between “major” (potentially decisive for their ability to attend) or “minor” support needs (significant, but not make-or-break for ability to attend). Only interviews from the “Applicant” group asked this question. Despite a small number of respondents, these subjects are included in these charts for perspective and an initial comparison.

Of the 42 respondents who completed the program, 62% cited childcare or family care as a need, with over 25% identifying it is a “major need.” Given our assumption the household and community labor of childrearing and eldercare is inequitably borne by women, this finding was anticipated by the study team. Though the questions did not provide additional data, many respondents shared their need for financial support to pay for childcare. Others noted they were not aware of childcare providers who were open or available at the early program start times. Some respondents noted that program start times prohibited them from being able to drop off children early on school grounds, either because there was no supervision or because of strict rules about the timing.

One woman, a single parent of three, talked about the stress of balancing class time with her children’s school schedules and the strain of finding money for child care. “It was a challenge for me because I said, okay, now I’m gonna stop my job. I’m not gonna have any income. How am I gonna pay for child care? What am I gonna do?”

Future programs could provide childcare coverage, different scheduling, and/or general compensation that helps women participate in the program while continuing their commitments to care.

CASE STUDY 1
CHILDCARE

Joanne (not her real name) was a single mother of three children (ages 2, 3, and 7) at the time of her enrollment in ValleyBuild NOW (Non-traditional Occupations for Women), the pioneering all-female training cohort.

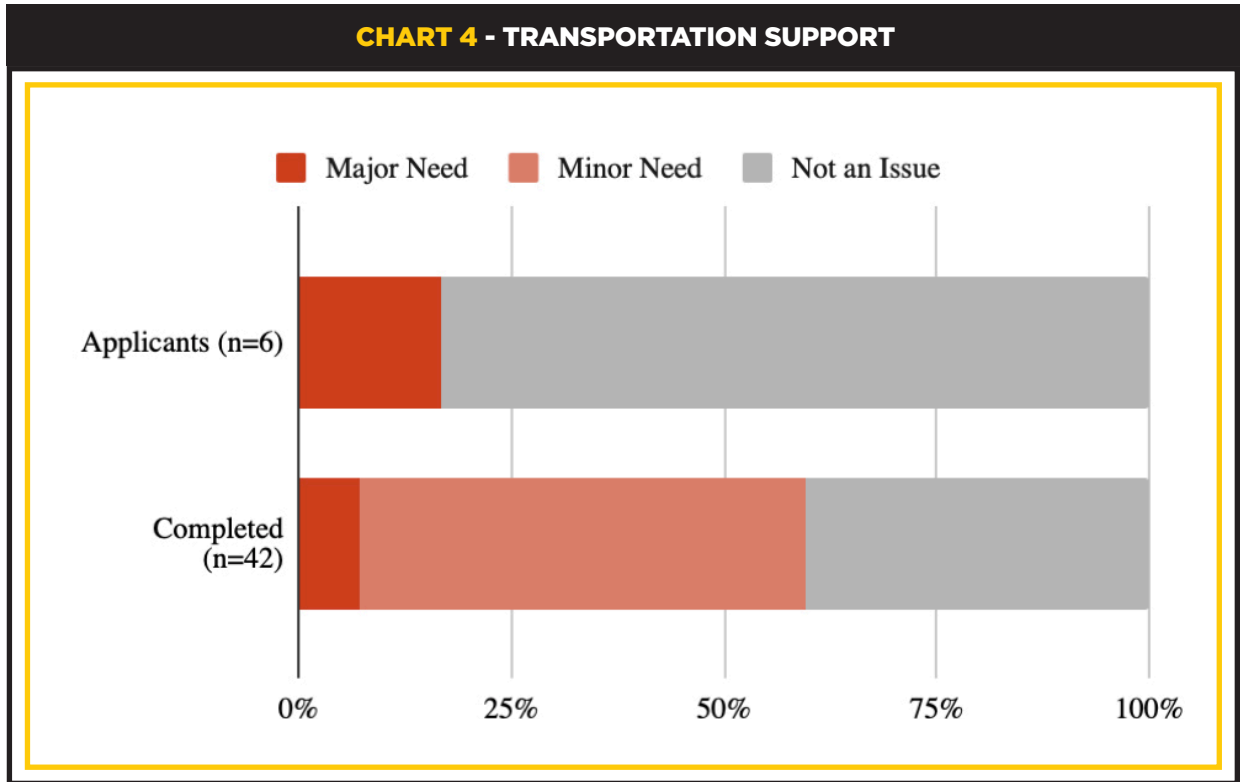
Childcare was one of the biggest obstacles to her joining the program. “Balancing who’s going to take who to where, because we all start at school and the program at the same time,” Joanne said. “And then my daughter gets out of preschool in the middle of the day, so who’s going to take her to daycare after? The logistics is the hardest part of all of it.”

Joanne had help from her mother, who took the oldest children to school and pre-kindergarten while she took the baby to daycare. Her mother, and the daycare provider, transported the two oldest children to day care after school.

Joanne said she was fortunate to have family to rely upon and access to a program that helped pay for daycare. “Not everybody has that,” she said. “I know I’m lucky ... I think (childcare) could be a huge obstacle for other women or other moms that they don’t have that resource set up.”

“I know I’m lucky ... I think (childcare) could be a huge obstacle for other women or other moms.”

- ValleyBuild NOW student



Of the 42 respondents who completed the program, 62% cited transportation support as a need, but overwhelmingly indicated it was a “minor need.” This indicates transportation issues – like access to public transit, carpooling, a personal vehicle, or gas costs – did not interfere greatly with their ability to complete the training. Of those who applied but did not enroll, very few indicated transportation was a need and for the majority, transportation was not identified as an issue/impediment for their enrolling in the program. However, in a small number of cases, transportation was occasionally a serious struggle.



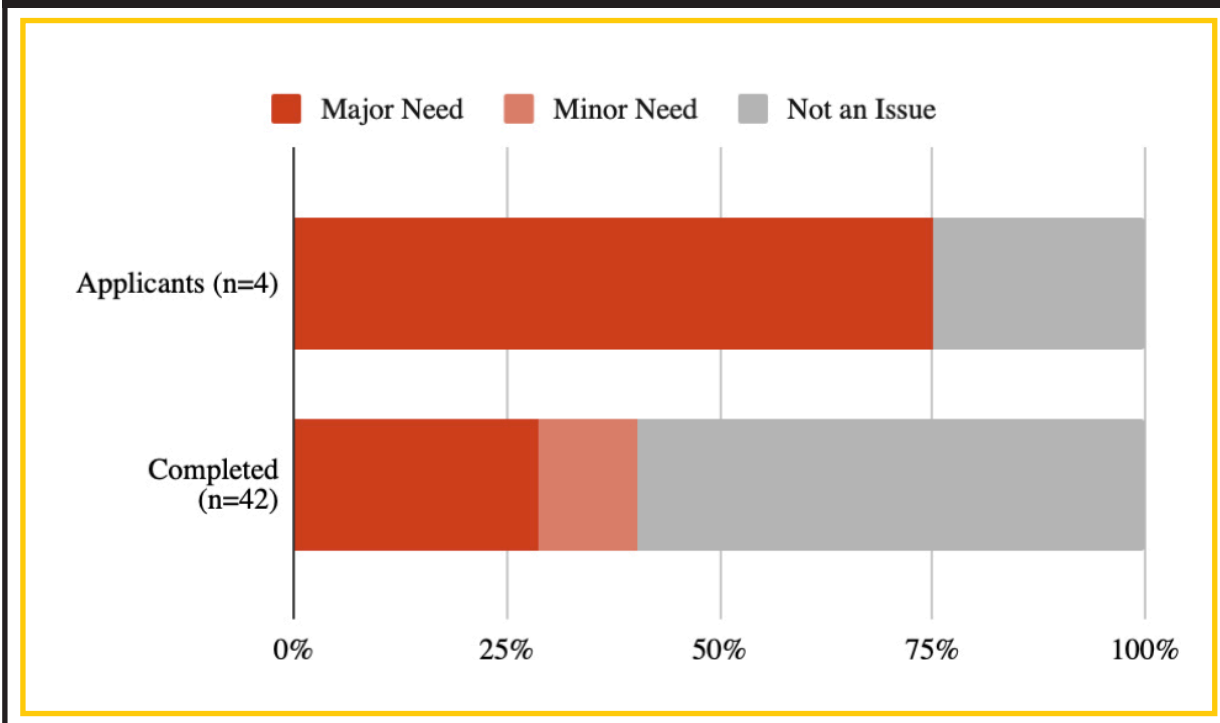
CASE STUDY 2
TRANSPORTATION

A mother of five, who completed the training and now works for a union, recalled the challenges of getting to class. At the time of her program, she was working part-time and also juggling the schedules of her children.

"It was a very desperate moment," she said. "Sometimes you have to rely on support from family to get a little ride or to just make it to class ... Even just the bus pass would help out a lot."

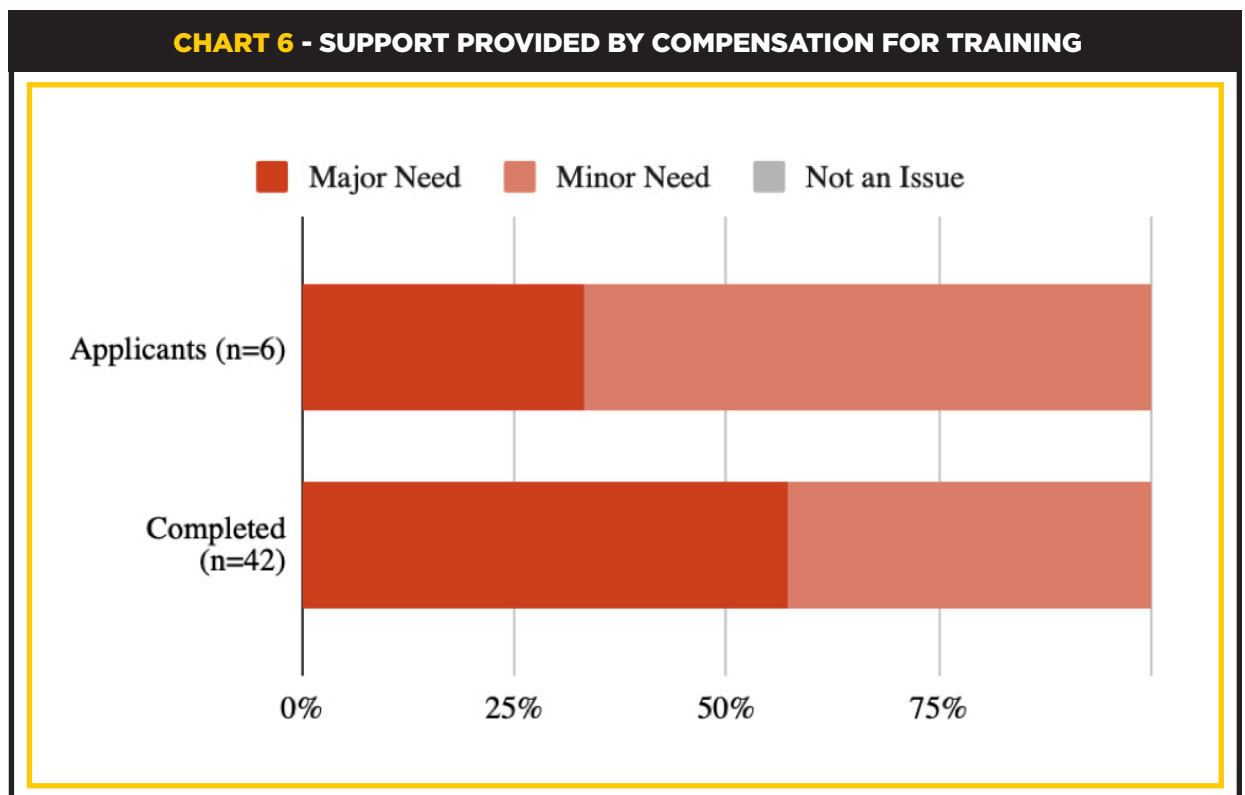
Barriers to transportation for those who completed the program are noteworthy and can be addressed through general compensation, or with transportation stipends like bus passes, emergency funds for repairing tires, or covering costs of an Uber/Lyft if personal transportation breaks down or a car is being repaired.

CHART 5 - NEED FOR A NON-WEEKDAY PROGRAM SCHEDULE



As illustrated in the chart, for those who completed the program, more than 60% stated the current program schedule was “not an issue.” Yet, for nearly a third of those who finished the training, having a non-weekday program schedule would have offered “major” support. Meanwhile, from a small number of applicants interviewed, three out of four identified the need for an alternative schedule as “major,” enough to have made a difference in their decision to enroll in the program. As indicated from the overall findings in Chart 2, childcare and work obligations may have impeded the ability of many non-applicants and applicants alike to enroll in the weekday program during standard business and school hours.

For example, one woman who enrolled in the training had to quit her job because it conflicted with the class. “These were their open hours, so I couldn’t maintain the job or get a different shift,” she said. The financial uncertainty was scary.



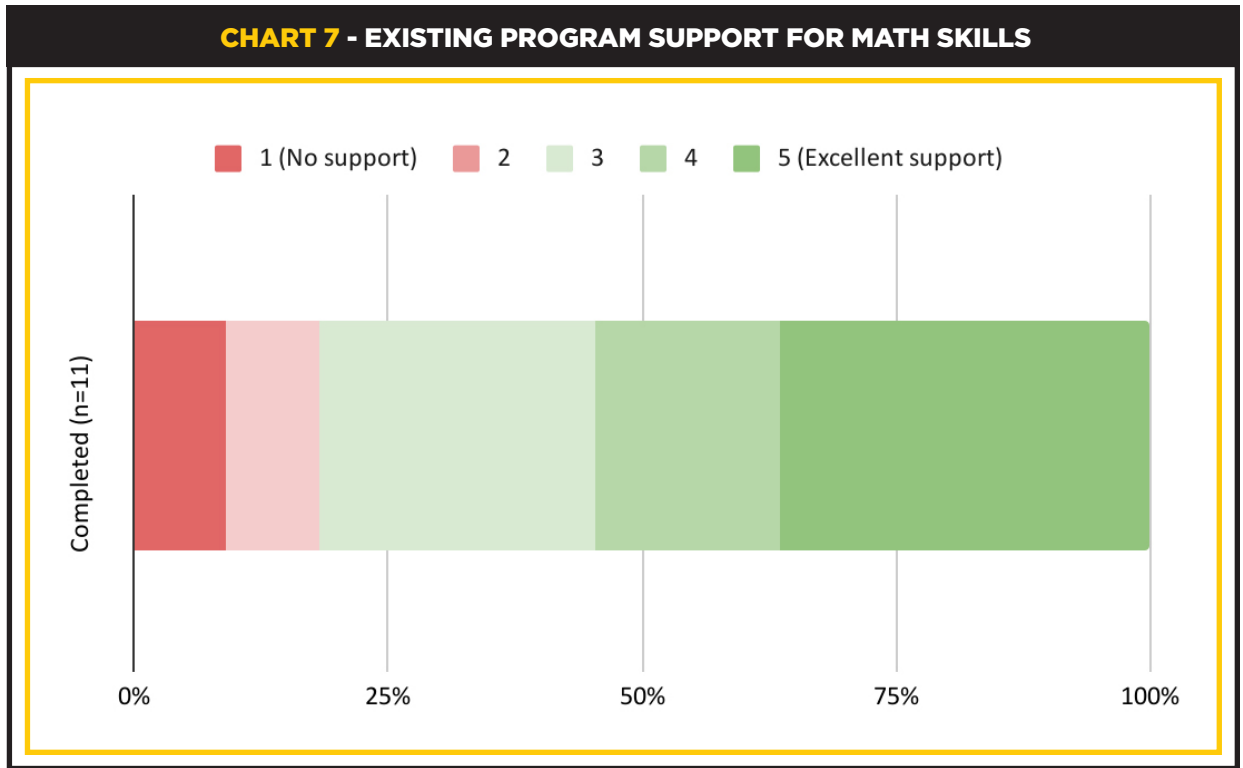
Every single “Completed” respondent, and every interviewed applicant said direct financial support during the 6 to 8 weeks of training would have provided meaningful support. Of those who completed the program, many cited needs like childcare or transportation that could have been addressed through compensation as well as the mental health and morale benefits of being paid during the rigorous training. These payments could take the form, for example, of weekly stipends or hourly wages.



Given that all “Completed” subjects graduated the program despite a lack of compensation, their responses indicated how compensation would affect the quality of their participation, by reducing stressors and hardships. Multiple interviewees shared that they left or gave up their employment and paying jobs to enroll in the training program. Others relied on family support during the program. Both options, at times, created financial hardships for their families. All respondents were informed that the program would not offer compensation in advance. Their commitment to complete the training despite the lack of compensation indicates their depth of interest in the well-paid trades work they hoped for upon completion.

However, the lack of compensation was a firm barrier for some. One woman who applied for the program but didn’t enroll said she couldn’t afford to go without an income. “For me, what it came down to is being able to financially take that time off,” she said.

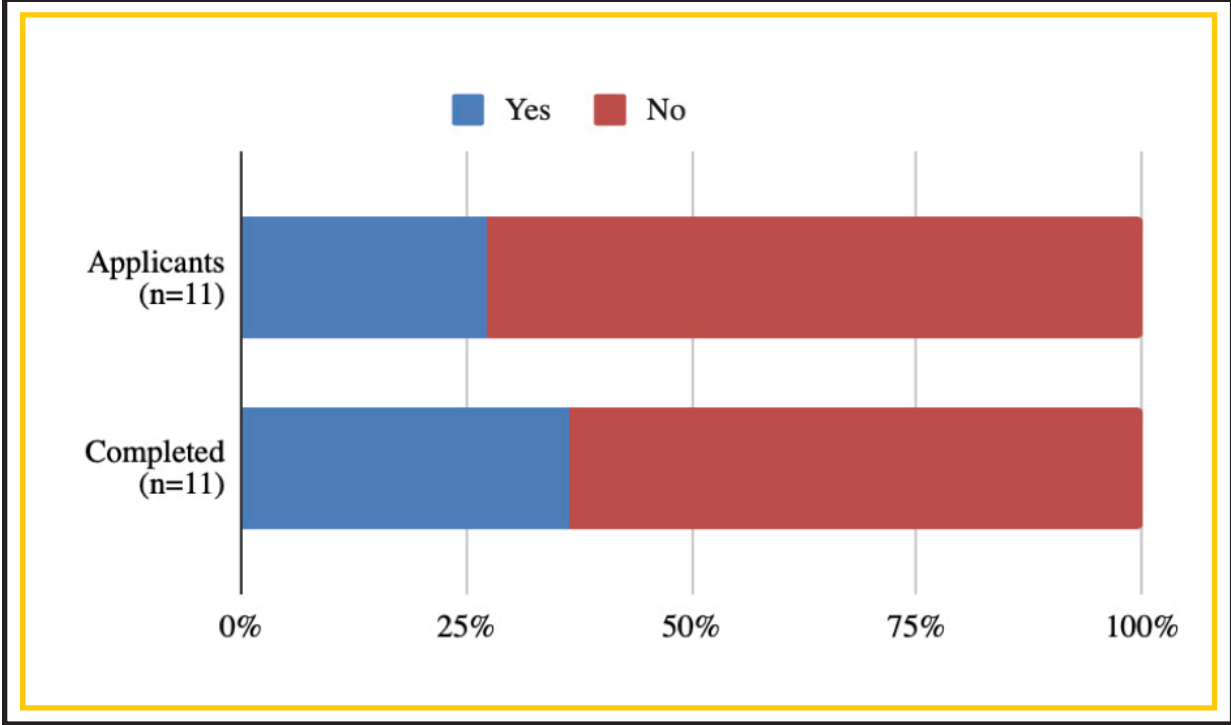
Compensation would have been extremely helpful to another woman who completed the program. “There were a lot of us that were struggling during that time,” she said. “And at the end of the day, we were all trying to get a job. And none of us ... had employment. So that (compensation) would’ve been a great help.”



This survey question, for women who completed the program, found the large majority were satisfied with the math skills support they received. For a minority of participants, this indicates an additional, optional math class would have been helpful, without adding unnecessary math work for the majority. However, these answers may not reflect the math support needs of women who did not enroll or complete the program, which could be greater.



CHART 8 - AWARE OF FREE FRESNO CITY COLLEGE MATH SKILLS COURSE FOR PROGRAM PARTICIPANTS (SURVEY ONLY)

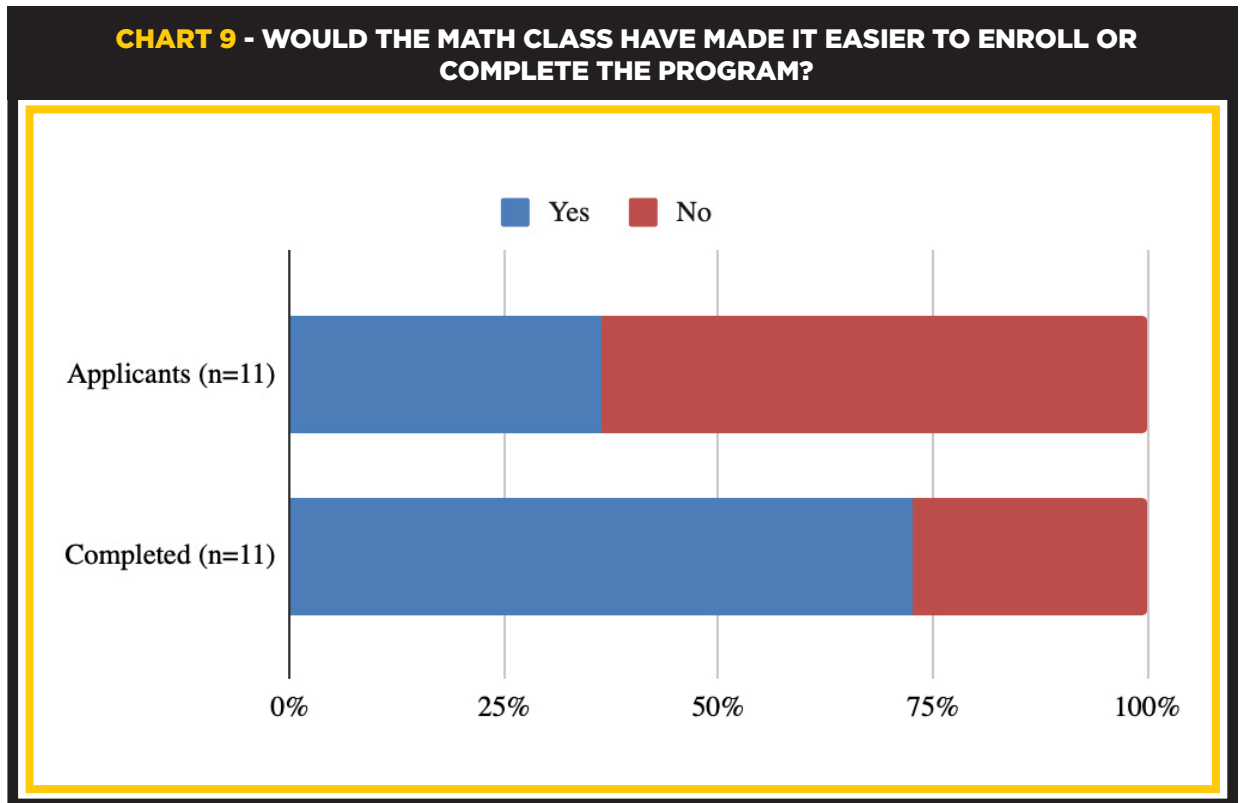


For the 22 respondents to this question, less than half were aware of the free math skills course offered to applicants or students through Fresno City College.

One woman who completed a pre-apprenticeship training program believes a lack of math skills hindered her career progress. “I’ve never really been good with numbers and I just feel like this is the one, it is like the one thing that’s keeping me from moving forward,” she said, adding that she has since enrolled in a math class. “I’m looking forward to that ... I feel like if I did it more then maybe I would’ve been able to pass some of the tests.”

For many, math is an intimidating subject. Just the thought of needing to take a math class could be enough to discourage someone from enrolling in the training. That those who applied, and did not enroll, were not aware of the free math skills course is both unfortunate and important. That those who applied, and did enroll, share this lack of awareness clearly indicates a crying need to better share the availability of this ValleyBuild resource.

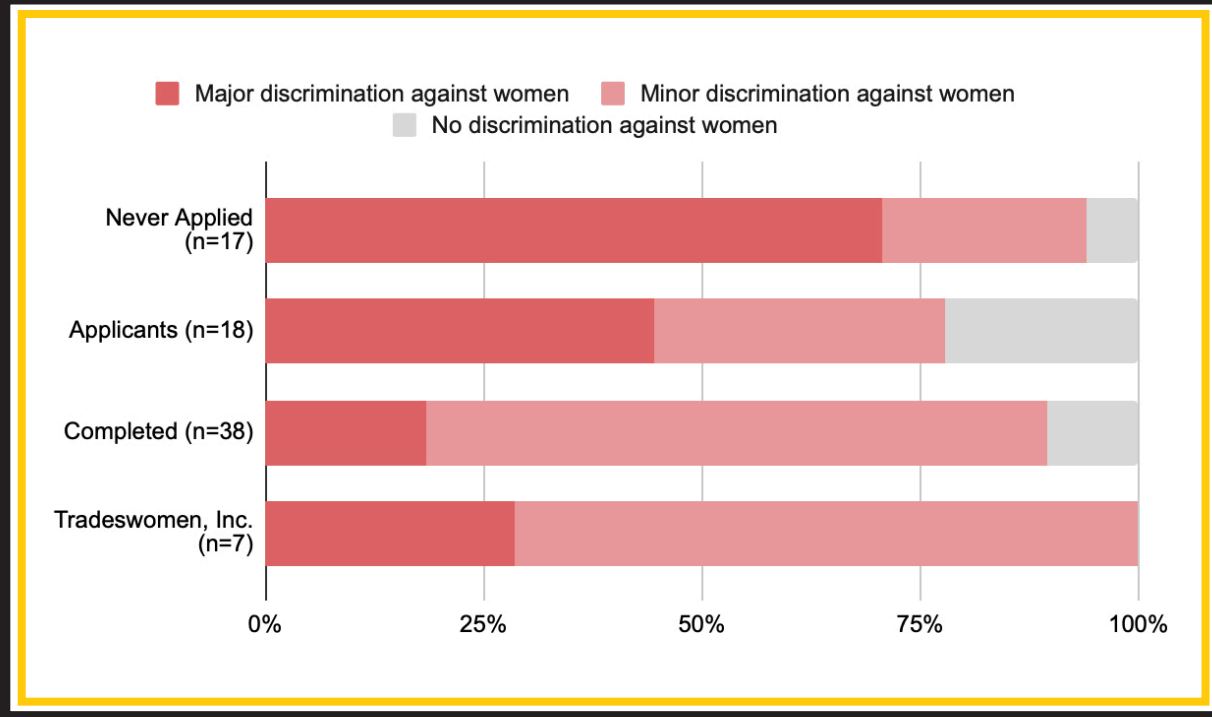
Ensuring participants' awareness of all the support offerings easily can be done at the beginning of each program cohort, as part of orientation, particularly for those who are enrolled in the program.



For the 22 respondents to this question, approximately 50% felt that the free math class would have better enabled them to enroll in or complete the program.

Only a third of those who applied believed the course would only have made it easier for them to complete the program, suggesting that there were other factors that influenced their decision not to enroll. However, for the 11 who completed the program, almost 75% noted that the math class would have benefited them. Clarifying the availability and utility of the math course for the ValleyBuild program would likely help its participants more readily succeed.

CHART 10 - WOMEN'S PERCEPTIONS OF DISCRIMINATION IN CONSTRUCTION WORKPLACES



Among the 80 respondents, almost 87% perceived some level of discrimination against women in construction work settings. For those who never applied, that perception stands out especially, with almost 75% of them perceiving major discrimination. As the level of interest and experience increased among the respondents, we see a precipitous drop in those believing that there are major biases against women.

Those who completed the training or were established tradeswomen reported very low perceptions of major bias, but a wide perception of minor bias. Compared to “Applicants” and “Never Applied” subjects, the movement of the “Completed” subjects to a similar perception as the Tradeswomen, Inc., group indicates possible effects of the program – either by helping women perceive discrimination as a more surmountable challenge, or by providing useful experience to temper pre-existing concerns about the seriousness of discrimination in the industry.

Despite that apparent effect of the ValleyBuild program, this study is an incomplete guide on how to reduce discrimination itself. These findings show that perceived discrimination against women remains a widespread, significant factor discouraging women from considering con-

struction, and a minor but widespread perceived hindrance for women in the field.

One apprentice interviewed talked about the realities of being a woman on the job site. "It just gets a little discouraging when you're out there ready to work and sometimes they want to judge you because you're not a man in the industry," she said. "A lot of people are against that. So there have been times where I went to a job and I only was there for about a week and they turned me around. They just let me go, laid me off."

"It just gets a little discouraging when you're out there ready to work and sometimes they want to judge you because you're not a man in the industry."

- Female apprentice

Another apprentice faced a sexist response when calling in sick. "My foreman was like, oh, she's probably sleeping around. And I'm like, okay, so you don't say that about a guy that calls out ... So it's just little things like that. It's the comments and just the attitude of like the males.

"You can't say that about all of them - some people do support women being in there and they give them a lot of props for doing the work and stuff. But you definitely have to have a thick skin if you're a female."

CHART 11 - EFFECT OF A DEDICATED, ALL-FEMALE PRE-APPRENTICESHIP TRAINING PROGRAM? (SURVEY ONLY)

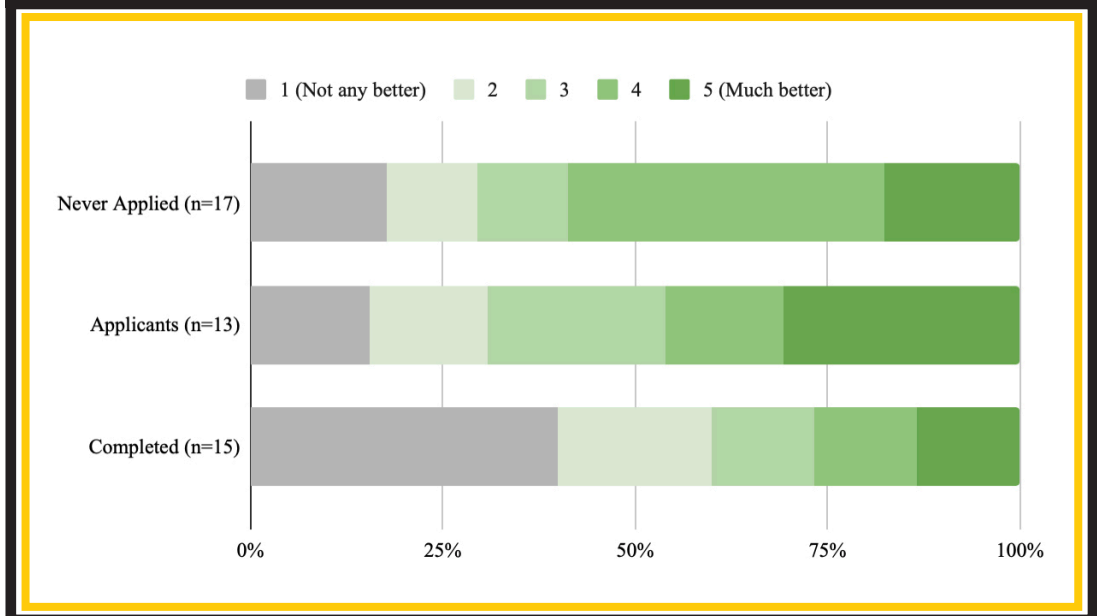
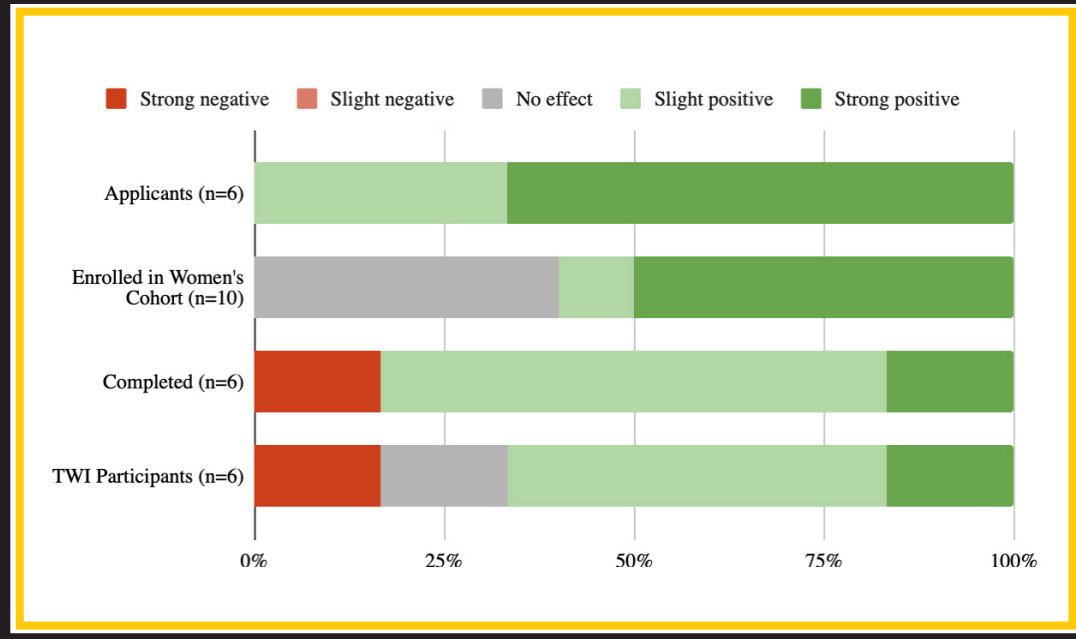


CHART 12 - EFFECT OF MORE WOMEN IN PROGRAM, OR AN ALL-WOMEN'S PROGRAM? (INTERVIEW ONLY)



Charts 11 and 12 show findings from related, but distinct questions. Chart 11 shows women’s perceived effects of an all-female program. More expansively, Chart 12 shows the perceived or actual effects of either an all-female program or more women participants.

Chart 11 shows that women’s perceived benefits from an all-women’s program diminished with experience. For those who never applied and expect major bias against women in the trades (see Chart 10), they expect that an all-female class would have a much better effect on class outcomes for themselves and other women. For those who applied but did not enroll, their perception is similar, with over 80% believing an all-female class would have a positive effect. Interview data similarly showed applicants strongly believed that more women – or all women – in a cohort program would be beneficial. Those who completed the class had less belief that a dedicated all-female class would improve outcomes. Approximately 60% of survey respondents believed this would have a positive effect on women’s success, but the remainder felt this would have a negative or insignificant effect.

Enrollees in an all-female cohort of the training program, in summer 2022, were similarly divided. As shown in Chart 12, while half believed a gender-specific class provided major benefits, based on experience, nearly as many felt there was no positive impact.

In general, how respondents were more positive about the Chart 12 question versus the Chart 11 question reflects a broader support for bringing more women into the program, compared to lower – but still significant – interest in an all-women's program.

One student who enrolled and completed the all-women's ValleyBuild NOW cohort wasn't sure whether a traditional training program – all genders – would have caught her eye. The fact that it was an all-female class was a strong factor in her decision and could represent a benefit to the program that is difficult to measure.

Interviewees stated that an all-women's cohort might provide more community support among women, and that a "sisterhood similar to the brotherhood" could be created.

On the contrary, for the women who completed the program and the Tradeswomen, Inc. (TWI) interviewees, 1 in 6 respondents each indicated an all-female cohort would have a "strong negative" effect. About eighty percent of those same respondents who completed the program indicated that this all-female class would have a positive effect; and 70% of the TWI respondents indicated the same.

Interviewees stated that an all-women's cohort might provide more community support among women, and that a "sisterhood similar to the brotherhood" could be created. For example, an apprentice accustomed to working and attending classes almost exclusively with men said she would appreciate having more women around in both environments. "You wouldn't feel as alone. You wouldn't stand out as much. I have class next week and I know I'm gonna be the only girl in the class."

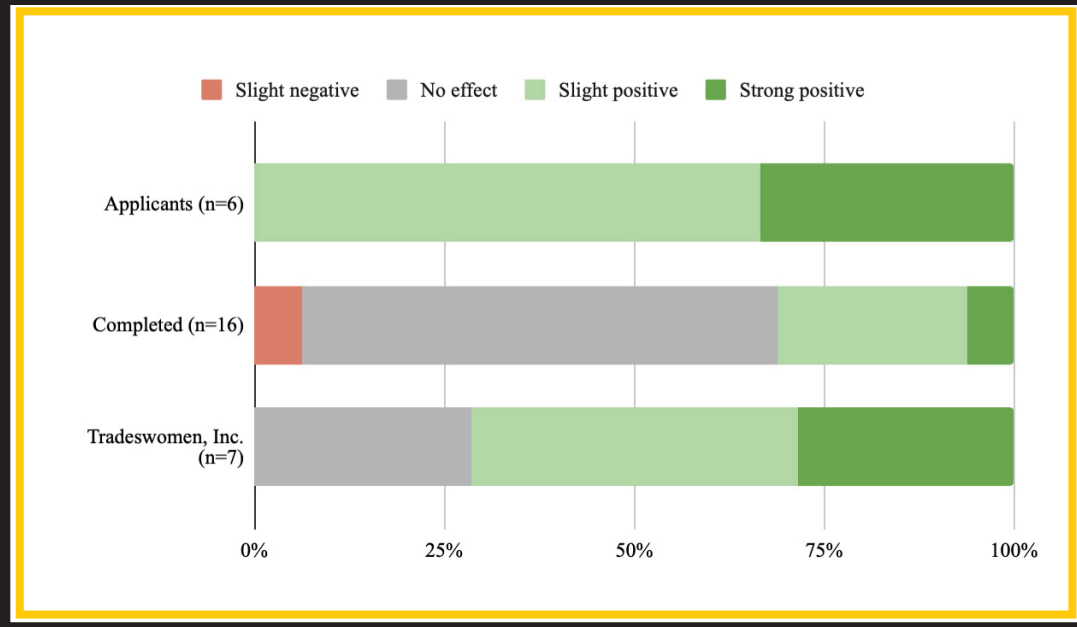
Another apprentice also saw the value of a predominantly female, or all-female, training program. "I could definitely see how it would be beneficial so people can talk and they can see, oh, other women are doing this. I won't be alone when I might be alone at the job site — but I'm not alone overall. It would give you people to talk to that are actually in it or else you just have to wait to run into women on a job site or in the apprenticeship. And I'm the only woman in my apprenticeship class."

One apprentice – one of two women in her training program — said an all-female cohort might be right for some women but it wasn't for her. "I don't think I would've preferred it because when I go into the workforce,

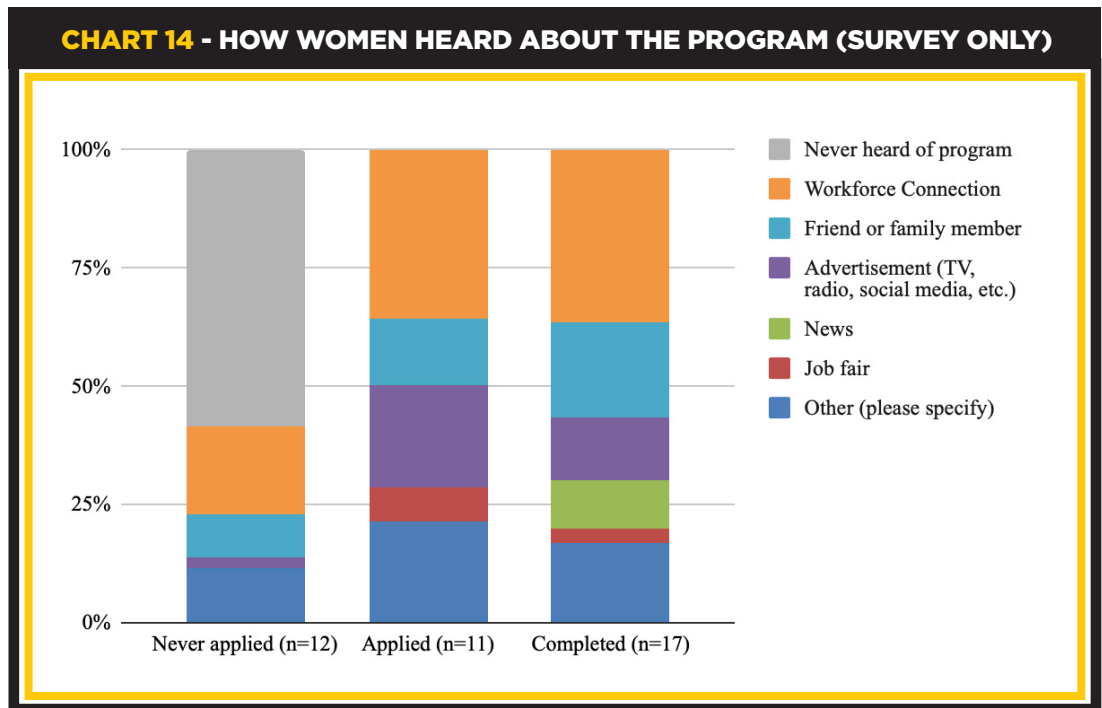
it’s not all women,” she said. “I think I benefited from being in the cohort with everyone because that’s how it’s gonna be in the field.”

Others commented that the biases perceived and experienced might be reduced in an all-female cohort.

CHART 13 - EFFECT OF MORE WOMEN COORDINATORS OR INSTRUCTORS FOR PROGRAM (INTERVIEW ONLY)



All of those who applied but did not enroll (100%) believed that having more women coordinators or instructors would be slightly or strongly positive. This indicates that advising applicants of the existence of some female staff for the program may encourage their participation. Of the 16 women who completed the program, 70% believed adding more women instructors or coordinators would have no effect, or a slightly negative effect. This likely indicates their satisfaction with existing program staff, at least on a personal level. The study gathered limited data for a complete picture of existing staff and women’s experiences with them, but the interviews indicate the importance to applicants to know women staff will be available in the program when needed.



Workforce Connection is the source from which most of the 39 respondents to this question received information about the training program. Because all the contacts originated from women in contact with Workforce Connection previously, this origin presumably had the most outsized effect on the questions reflected in this chart, compared to any other. This finding indicates a much greater role for Workforce Connection than what should be expected of the general, public pool of prospective applicants who have not previously contacted the agency.

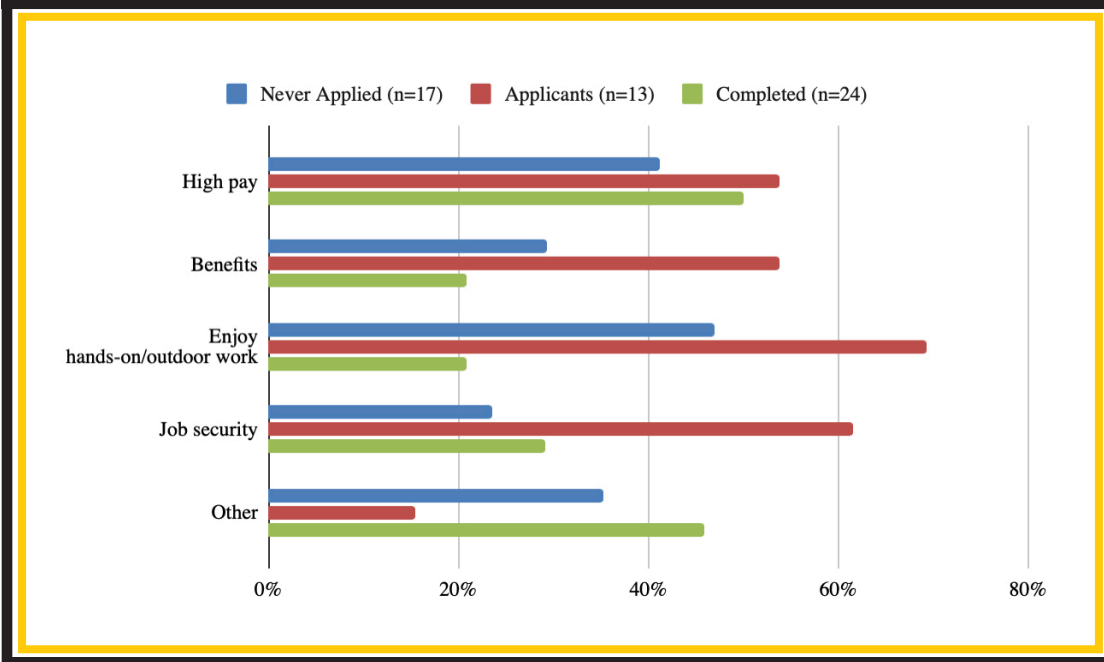
For those that never applied, 60% had never heard of the program previously, despite having prior contacts with Workforce Connection. Increased outreach or marketing to women job seekers contacting Workforce Connection would increase women’s awareness.

For all groups, ads (TV, radio, and social media) were significant sources for program information. One graduate who was working a low-paying, part time job said she would have applied earlier if she’d known about the training program. She enrolled after hearing an ad on the radio and because “I knew that guys in construction made money, so I wanted to make money.”

“People are looking for these types of opportunities,” said this graduate now working in the trades. “But you just don’t know that there’s actually apprentice programs, that there’s trade programs that will help you get there. The information is not out there as much as it is about how you go to college and you do this and that.”

Referrals from friends and family or “word of mouth,” are also a solid source from which women received information about the apprenticeship readiness program. News and job fairs were generally minor sources. These findings could be compared with budget expenditures on ads, news outreach, job fairs, and Workforce Connection outreach about the training program, to make informed estimates about which have been most cost-effective.

CHART 15 - WOMEN'S INTERESTS IN CONSTRUCTION WORK BEFORE PROGRAM



Prior to the 54 respondents’ enrollment in the program, there were many reasons for their interests in seeking jobs in the construction trades. For those who did not apply, they were most interested in the program because of the high pay it offers and because it matched their interest in hands-on or outdoor work. For those who applied to the program but did not enroll, their primary interests reflected in more than 60% of their responses were enjoyment of hands-on/outdoor work, followed by job security, high pay, and benefits.

Women applicants were roughly equally drawn by the promise of hands-on/outdoor work, high pay, great benefits and job security offered by careers in the trades.

For the 24 women who completed the training, high pay stands out as their primary interest before the program, with commensurate job security as their second highest level of interest. The fact that women who successfully completed the program were three times less interested in outdoor and hands-on work, compared to applicants, is striking. This could indicate multiple findings: that women in the program learn that construction work opportunities are less enjoyable, hands-on, or outdoors than they expected; or, that those relatively motivated by pay are especially driven to complete the program.

This data indicates that women applicants were roughly equally drawn by the promise of hands-on/outdoor work, high pay, great benefits and job security offered by careers in the trades. Each of these would thus be useful as program points to emphasize to prospective women applicants, but pay and job security appear to have been the most meaningful motivations for sustained participation.

CASE STUDY 3 VALLEYBUILD INTEREST

Lori (not her real name) is a single mother of two who had worked in the same industry for more than 15 years. Though the job was her original love, she had no hope of promotion or a pay raise.

A friend sent her a flier advertising the ValleyBuild NOW program. At first, she saw it only as an opportunity to advance her knowledge of hands-on skills like carpentry and welding.

But when forced to choose between her job and the training program, she chose the program and its opportunity for a better-paying career. That was a true leap of faith for the sole breadwinner in the family.

"I know I can make this program work," she said prior to completing the program. "I know I can make it grow one way, shape or form."

CHART 16 - TOP APPRENTICESHIP CHOICES OF WOMEN WHO NEVER APPLIED (N=12)

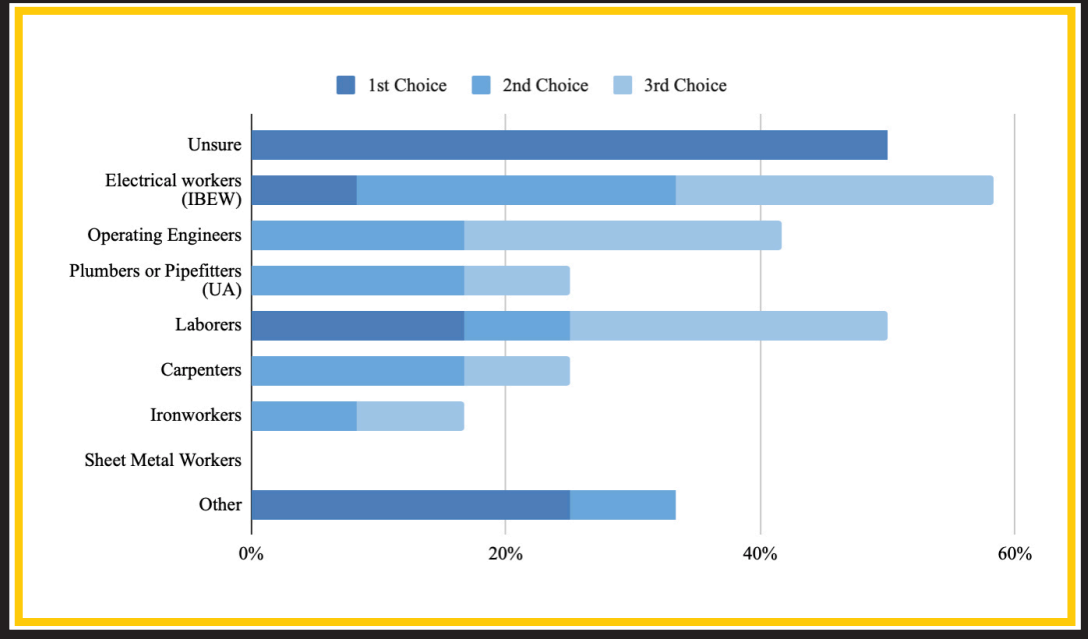
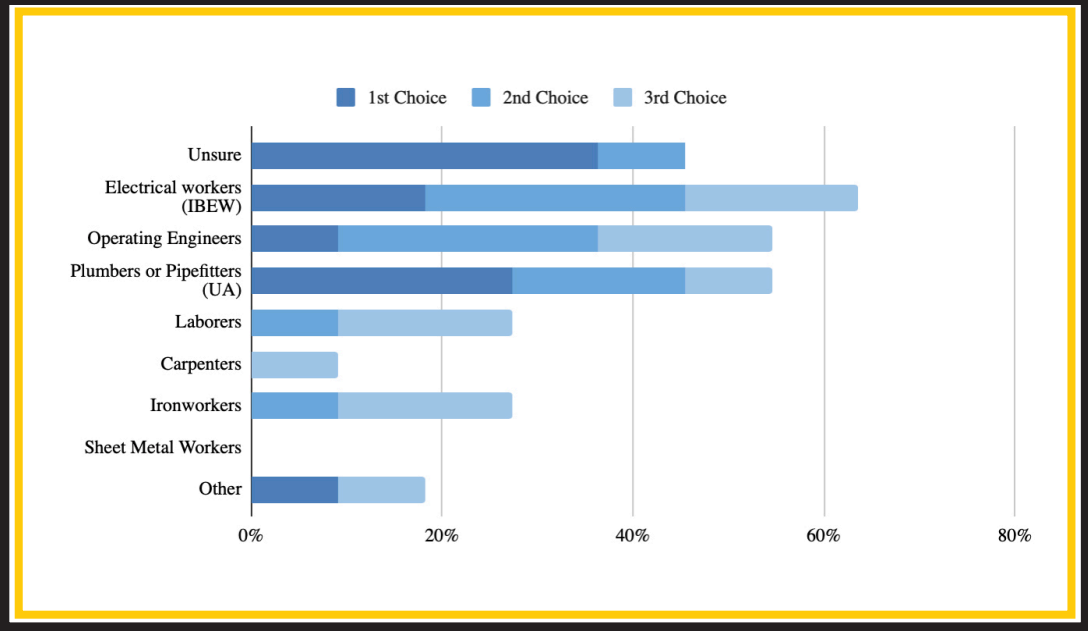
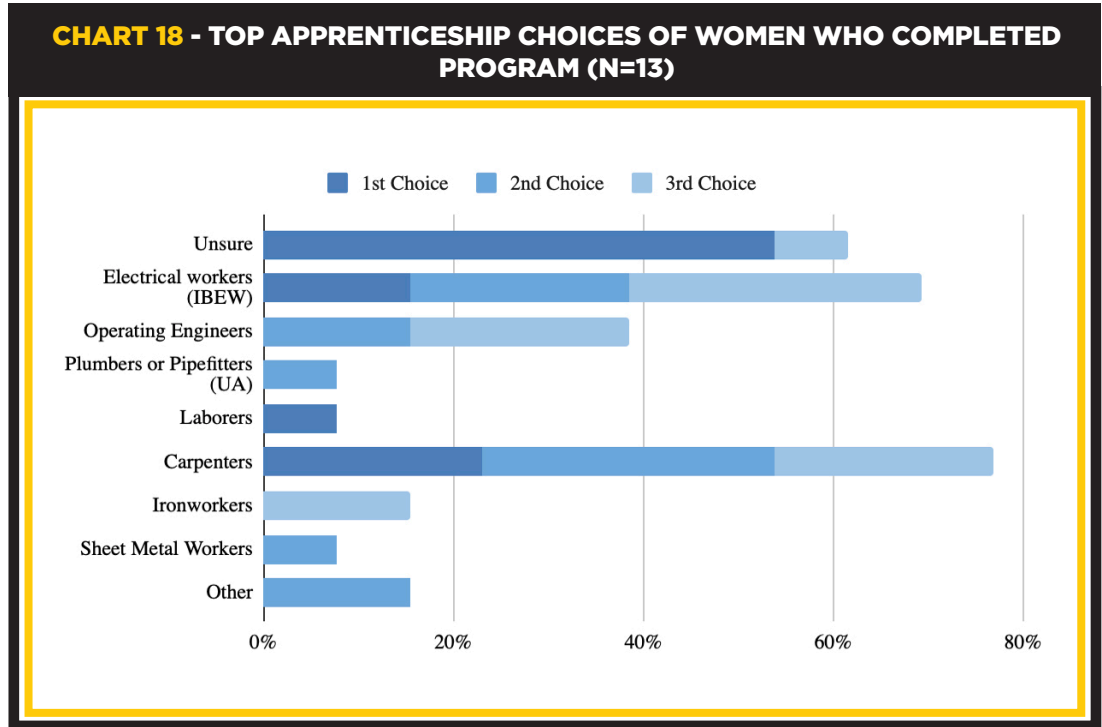


CHART 17 - TOP APPRENTICESHIP CHOICES OF WOMEN WHO APPLIED, BUT DID NOT ENROLL/COMPLETE PROGRAM (N=11)





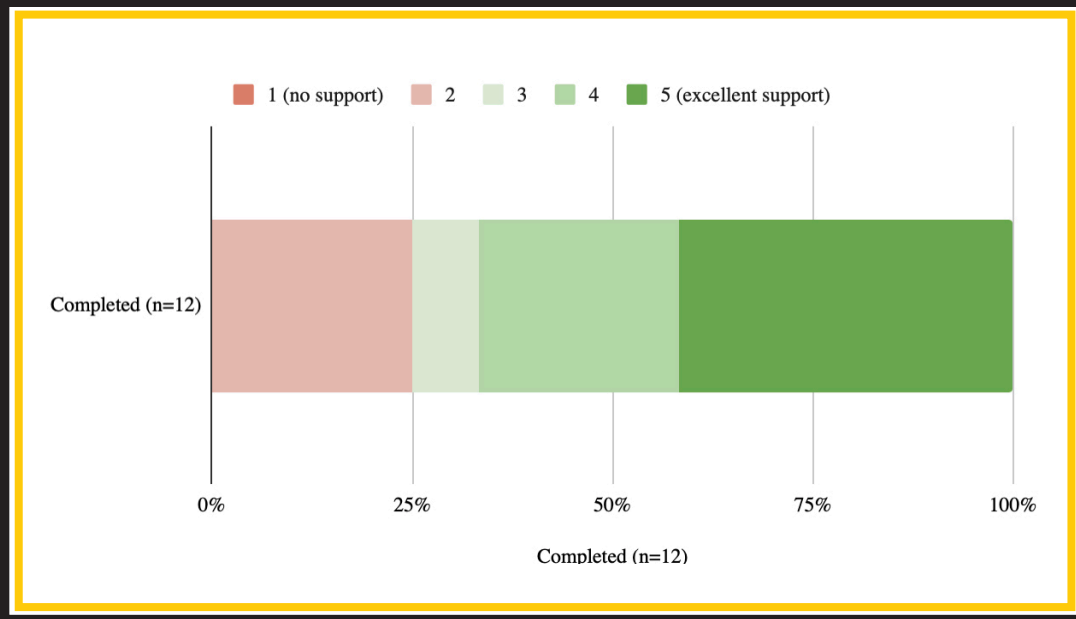
Charts 16 through 18 compare the apprenticeship preferences of each subject group surveyed. As might be expected with a lack of experience, women who have never applied or enrolled in the program were predominantly unsure as to their first preference for a trade. Surprisingly, “Completed” subjects were even more unsure of their preferences, with over 50% giving this answer as their first choice. This implies that the program could provide additional experience, perspective, and connections with specific trades to support women’s decision-making and entry into apprenticeships. Guidance on the projected local availability of apprenticeships and jobs in various trades might be particularly useful.



Among those in the “Never Applied” group or were “Applicants” only, relatively strong interests were indicated in apprenticeships with the electrical workers, plumbers or pipefitters, and operating engineers. This likely reflects the relatively high pay and often lesser degree of heavy lifting in these trades. Comparatively, women who completed the program showed a greater interest in the carpenters and sheet metal workers, with a reduced interest in plumbers, pipefitters, and laborers apprenticeships. This may reflect the benefits of hands-on experience and exposure in the program.

Since no option for written responses for “Other” was provided with the survey, it is unknown precisely what preferences women had in mind with this significant share of responses. Some of the trades not named include painters, pile drivers, millwrights, and elevator constructors. Some “Other” responses may be women interested in moving on to non-construction/union roles altogether. In one interview, a woman who completed the training expressed her goal of moving on to medical school after a career stint in construction.

CHART 19 - PROGRAM SUPPORT IN FINDING A CONSTRUCTION APPRENTICESHIP (SURVEY ONLY)



Respondents were asked about the level and quality of support they received to bridge between the apprenticeship readiness training and apprenticeship placement. More than 70% who completed the program indicated they received very good or excellent support in finding a construction apprenticeship.

However, 25% of the women claimed they received “no support” which indicates an area for improvement, given the training aims for all graduates to gain a construction apprenticeship as they choose. Additional support might be provided with further direct connections with trades members or representatives, where possible, or with more targeted preparation for specific apprenticeship applications and exams for participants' preferred trades.

Recommendations

Based on the most significant findings presented above on women's support needs, challenges, and degree of information in the ValleyBuild program, we issue the following recommendations for future programs.

1. Compensation for all program participants

This would include a base stipend at least equal to the minimum hourly wage. By providing a baseline level of compensation to all participants, the program would provide a flexible kind of support that addresses many other challenges. This includes limiting the challenge of lost income from another job during program hours, while supporting necessary living expenses, family care responsibilities, transportation, and other urgent costs for women to participate.

2. Provide an alternative class schedule option

This could include a cohort offered weeknights or weekends to avoid standard working hours, or a modified weekday option of 9 a.m. to 2 p.m. or so to accommodate those with childcare responsibilities for school-age children.

3. Need-based stipends for childcare and transportation

This would include a stipend, in addition to the base stipend for all participants, for which participants could apply to cover significant costs associated with childcare, family care, or transportation. We suggest a short, simple written application process with minimal requirements or verification for approval, to reduce strain on program staff and applicants alike. Since women generally shoulder disproportionate responsibility for child and family care roles, which can be costly to replace with paid help, financial support for these roles would allow more women to participate.

4. Expanding the awareness of prospective applicants

- Inform more women who contact Workforce Connection about the program
- Inform potential applicants of the prospect of construction trades to provide high pay, job security, benefits, and hands-on work
- Inform potential applicants of the compensation and needs-based stipends offered during the program
- Inform potential women applicants that training includes women instructors, staff, and fellow students
- At the program orientation, inform participants of additional support for improving math skills (in particular, the free Fresno City College class)
- Further embrace the use of media along with other outreach/public education strategies, and especially target older teens and younger adults to share information about the opportunities and realities of the trades

5. Provide the option of an all-women's cohort

This option could be provided occasionally, perhaps annually, to encourage participation from approximately a quarter of women who would find this a major support.

6. Include at least one women instructor or coordinator for each program

This would encourage prospective women applicants to apply, if made aware, and support women participants to address and overcome their challenges in the program.

7. Expand guidance on confronting harassment and discrimination

To address the widely-perceived problem of discrimination in construction, conversations with concerned potential applicants should acknowledge this can be a challenge, but the program has a record of making this challenge feel significantly more manageable for women. The program itself should provide practical guidance for confronting sexual harassment and discrimination in the moment, and seeking accountability afterwards, for both during the program itself and in construction workplaces after. This guidance should be provided to participants of all genders, setting an expectation that stopping discrimination and harassment is a shared responsibility.

8. Expand support for selecting and entering a trade

Given how a majority of women who completed the program were unclear on their trade preferences — an increase over those who had not taken the program — there is a need for the program to further support deciding preferences and entering a trade apprenticeship. The best methods for this support deserve further research and experimentation. We suggest the following possibilities:

- Jobsite visits with work shadowing among different trades
- Guidance comparing trades on projected apprenticeship availability and labor demand
- Direct connections, ideally a mentorship contact, with existing members in trades
- Expanded curriculum to include more exposure to the apprentice occupation through class field trips to apprenticeship training centers, presentations by apprentice coordinators or tradeswomen panel discussions

9. Further research on reducing gender discrimination and effective trade connections

Based on the findings that many women completing the program continued to perceive discrimination in the field, and a majority were unsure of their trade preferences, these are important areas for interventions. However, because comparing different interventions on those issues was outside the scope of this study, we recommend future research on:

- Potential approaches to reduce discrimination against women in construction workplaces, possibly through additions to the training for both men and women
- Additional methods to support women participants to learn about, select, and successfully enter a trade of their choice

End Notes

1. U.S. Bureau of Labor Statistics, *Labor Force Statistics from the Current Population Survey 2022*
2. State of California Department of Industrial Relations, *Women in Construction Apprenticeships 2023*
3. U.S. Department of Labor, *Apprenticeship USA 2023*
4. Hegewisch, Ariane, and Eve Mefferd. 2021. "2021 IWPR Tradeswomen's Retention and Advancement Survey." *A Future Worth Building: What Tradeswoman Say about the Change They Need in the Construction Industry*. Washington, DC: Institute for Women's Policy Research. <https://iwpr.org/wp-content/uploads/2021/11/Tradeswomens-Retention-Advancement-Survey_2021.pdf>.
5. State of California Department of Industrial Relations, *Advancing Apprenticeship in California, July 2022*.

Appendix

1. **One-on-One Interview Questions:** <https://valleybuild.net/online-survey-questions.pdf>
2. **Online Survey Questions:** <https://valleybuild.net/one-on-one-interview-questions.pdf>



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