Enhancing the Retention and Advancement of Women in Trades in British Columbia: Final Report

February 2017

Project Partners

SkillPlan managed the *Enhancing the Retention and Advancement of Women in Trade in British Columbia* project in partnership with the Social Research and Demonstration Corporation (SRDC), which led research activities, and with IBEW 213 (Build Together), which served as a key source of support for the implementation and recruitment of the study's participants. The project was overseen by a Steering Committee of 19 members, representing a variety of stakeholders in the construction industry. See below for background on project partners.

Management

SkillPlan is a nationally recognized leader in workforce development programs and training. SkillPlan has over 25 years of experience providing workforce development consulting services and resources to the construction and mining industries, as well as other sectors.

Kyle Downie, CEO
Denyse Welwood, Administrator

SkillPlan
405 – 3701 Hastings Street
Burnaby, BC V5C 2H6
604-436-1126
info@skillplan.ca | www.skillplan.ca

Research

The Social Research and Demonstration Corporation (SRDC) is a non-profit research organization, created specifically to develop, field test, and rigorously evaluate new programs. SRDC's two-part mission is to help policy-makers and practitioners identify policies and programs that improve the well-being of all Canadians, with a special concern for the effects on the disadvantaged, and to raise the standards of evidence that are used in assessing these policies. SRDC has completed over 300 projects and studies for various federal and provincial departments, municipalities, as well as other public and non-profit organizations.

Authors
David Gyarmati, Research Director
Basia Pakula, Research Associate
Cam Nguyen, Research Associate
Dominique Leonard, Research Associate

Social Research and Demonstration Corporation
55 Murray Street, Suite 400
Ottawa, Ontario K1N 5M3
613-237-4311 | 1-866-896-7732
info@srdc.org | www.srdc.org

Implementation Support

IBEW 213 on behalf of Build Together provided implementation support for this project. Build Together is a national Canadian Building Trades program that promotes, supports and mentors women in skilled construction trades. They have built partnerships and created a sponsor recognition program of like-minded organizations who have goals to further the success of women in the trades. Build Together National has rolled out Build Together Chapters in several provinces across Canada with a goal to have chapters in every province.

Lisa Langevin, Assistant Business Manager

For more information on BC Build Together, please contact:

BC Building Trades
#207 - 88 - 10th Street
New Westminster, BC V3M 6H8
778-397-2220
bcytbctc@bcbuildingtrades.org | www.bcbuildingtrades.org

Funding Provided By:

Steering Committee

Project directional support for the *Enhancing the Retention and Advancement of Women in Trade in British Columbia* initiative was provided by 19 Steering Committee members, representing a mix of employers/contractors, journeyworkers, apprentices, associations, unions, government, crown agency, and other stakeholders in trades.

Women on the Tools		
	Julia Ballantyne	Apprentice Refrigerator Mechanic
	Sandra Brynjolfson	Journey Electrician
	Ashley Duncan	Apprentice Mechanical Insulator
	Kirsten Ratzlaff	Journey Longshore Electrician
	Louisa Robinson	Journey Aircraft Maintenance Engineer
	Nicole Wiet	Journey Elevator Mechanic

Build Together		
	Lindsay Amundsen	Workforce Development Coordinator Canada's Building Trades Unions
	Brynn Burke	Director of Campaigns and Policy BC Building Trades
	Joann Greeley	Journey Electrician Contractor

Contractor		
	Brian Beddow	General Superintendent Western Pacific Enterprise
	Corry Belcourt	Owner Veridis Plumbing and Heating Ltd.
	Ron Fettback	Vice President, Operations Western Pacific Enterprise
	Brooks Patterson	Vice President, HSE and Loss Control Norland Limited
	Kirsten Wilson	President Jack Cewe Ltd.

Association or Union		
	Dave Earle	Vice President, Government Relations and HR Services Construction Labour Relations Association of BC
	Bruce Lund	Lead, Special Projects BC Construction Association
	Adam Van Steinburg	Business Manager, Financial Secretary, International Brotherhood of Electrical Workers Local 213 Vice President, BC Building Trades President, Bargaining Council of BC Trade Unions
	Karen Walsh	Executive Director Office to Advance Women Apprentices

Government Extension		
	Tara Fong	Manager, Canada Job Fund Programs Industry Training Authority

Thank You

The *Enhancing the Retention and Advancement of Women in Trades in British Columbia: Final Report* is the result of the collaboration of individuals and organizations representing a mix of women journey workers and apprentices, employers/contractors, associations, unions, government, crown agency, and other stakeholders in the construction industry.

Our sincerest thank you goes out to all those who were involved in making this research project a success and providing invaluable guidance to support retaining women in the construction trades in the province of British Columbia.

Our deepest gratitude goes to the women in trades who gave freely of their time – the nearly 90 focus group participants, and over one hundred women in trades who responded to the survey – your input was truly key to helping identify issues and shape the recommendations for the future of women in the trades.

We would also like to acknowledge the many program practitioners who offered their expertise and insights; and to the project Steering Committee members, identified within this report, who gave their time and expertise generously to help guide this initiative.

Finally, to Ministry of Jobs, Tourism, Skills and Training through the Canada-British Columbia Labour Market Agreement, we would like to thank you for funding this opportunity.

Table of contents

Tables

Figures

Executive summary

Shortage of skilled labour has become a pressing challenge in most skilled trades industries across Canada, and British Columbia (BC) is among the jurisdictions most affected. In many sectors, the increasing participation of women in the labour force would tend to help mitigate these shortages. However, this is not the case for the trades. While many initiatives have been launched in various jurisdictions across Canada to encourage women to consider the trades as a viable career option, relatively few investments have been made to retain women already working in the trades.

This study aims to develop an enriched understanding of the systemic and structural factors that present **barriers** to women's participation in the trades, as well as the types of **supports and services** that would enhance entry and retention rates – and respond to these needs specifically in the unique context of British Columbia. This will lead to a series of **recommendations relating to the structure and scope of services** for a Women in Trades (WIT) program in BC.

The study focuses on BC to position its recommendations in the provincial context and to align with the unique needs of tradeswomen in the province. The study has significant *breadth* in its lines of evidence and key informants, with extensive engagement with women working in the trades, women who have left the trades, employers, and unions. It also integrates a comprehensive review of existing WIT programs along with consultations with managers and leaders of exemplary WIT programs.

Most notably, this study uses a *holistic* approach to integrating the knowledge from these wide-ranging sources. We aim to understand the barriers facing tradeswomen at multiple levels, including **individual, interpersonal, organizational, and macro/system-wide,** and how they manifest themselves at different stages of women's careers, including **pre-apprenticeship, apprenticeship, and journey.** While the focus of the study is on women *currently* working in the trades, the full spectrum of challenges and supports is considered. Utilizing a holistic conceptual framework ensures that the recommendations for a future WIT program in BC encompass the full breadth of supports and services needed – while leveraging, not duplicating, activities and resources from other programs – in order to address **system-wide challenges** facing tradeswomen in BC.

Key findings

Levels of barriers and enabling factors

The underlying causes to the barriers that women experience are systemic in nature, trickling down through the layers of barriers. In order to mitigate the effects of these systemic barriers, a full spectrum of enabling factors and supports spanning each of the four levels is needed. The following diagram summarizes the barriers faced by women in the trades and the enabling factors required to mitigate them at every level of the framework.

Challenges and Barriers

Enabling Factors

Biased societal attitudes and beliefs about gender roles and expectations related to the trades.	**Macro**	**Advocacy**, government and industry **leadership** to break down negative societal beliefs, build critical mass in the industry and facilitate organizational changes.
Gender-biased organizational practices, policies, norms and standards.	**Organizational**	**Equitable hiring and advancement practices. Organizational capacity** to address bullying and harassment. **Employer services and supports** to implement policies and best practices.
Discriminatory attitudes and detrimental behaviours of others on job sites, including bullying and harassment. Negative influences and discouragement from immediate social circles.	**Interpersonal**	**Strong professional networks**, including supportive mentors and welcoming supervisors and peers.
An individual's knowledge, beliefs, self-perception, and self-confidence – can be exacerbated by interpersonal barriers.	**Individual**	**Supports** to address individual needs and concerns, and **tools and resources** to improve employment fit and readiness.

Challenges and barriers

Pre-Apprenticeship

The participants we spoke to consistently referred to formative experiences during their pre-apprenticeship, in particular, the prevailing attitudes and ideologies around gender roles and expectations. The trades are generally not seen as a field for women: it does not fit with what is expected of girls early on.

This inherent gender bias translated into systematic *under-promotion of* and *under-exposure to* trades for young women and girls at a family- or peer-level. At an individual level, this compounded into two key barriers for women entering the trades:

1.   They often start on an uneven footing compared to their male peers, and

2.   They have relatively more misconceptions and misinformation about the trades.

Apprenticeship

This period was often described as pivotal but painful. Women gave multiple examples of discriminatory recruitment and hiring practices at the organizational level that prevented them from "getting their foot in the door" and advancing in their careers. On an interpersonal level, women tended to find the lack of mentors and supportive networks to be particularly challenging. They also described experiencing loneliness, especially when faced with discrimination, bullying and harassment, with few or no resources available. In many cases, women described not being adequately prepared for the realities of working in a male-dominated industry.

While many of the barriers experienced in apprenticeship were common to both pre-apprenticeship and journey, the effects of some of the barriers appeared most pronounced during the apprenticeship period. As a result, the majority of women who leave the trades tend to do so at this stage.

Journey

By the time women reach journey-level, they are well-aware of the realities of working in their trade, have already experienced some of the interpersonal barriers, and developed appropriate coping strategies. At this stage, organizational-level barriers proved to be the most challenging. In particular, discriminatory hiring and advancement practices continue to be most challenging. The other most prominent organizational themes related to policies and practices to address harassment as well as gender-specific health and safety concerns on job sites.

Enabling factors and supports

Similar to the barriers, enabling factors are interrelated and trickle down the levels of the conceptual framework. Because of their interconnectedness, the experts and stakeholders we consulted often advocated for *system-wide* changes to effectively level the playing field for women working in the trades.

Pre-apprenticeship

At this stage, women often identified the importance of promotional and advertising materials to address societal attitudes around gender roles and expectations; combat negative perceptions of the trades; and communicate accurately the benefits but also the realities of working in the trades. Other important support factors at this stage include tools and resources that help tradeswomen become both well-informed and well-prepared before they enter an apprenticeship. Examples of such resources included exploration training programs with practical, hands-on components.

Apprenticeship

Employment services and job counselling were the most frequently identified supports required during apprenticeship. According to our participants, the most effective programs not only helped them secure long-term employment but also served as a channel to give them access to guidance and resources when problems arise. Another theme in apprenticeship related to equitable recruitment and better job matching practices, including more personalized approaches. Finally,

women consistently identified safe, supportive, and inclusive environments as an important factor, emphasizing the importance of building and maintaining organizational capacity to support diversity in the workplace. Employers echoed this theme and identified the need for more tools, resources, and other employer-directed services to assist them in recruiting and supporting tradeswomen in their organizations.

Journey

Journeyed tradeswomen often talked about the crucial role that organizational infrastructure can play, as workplace policies and practices are the main drivers that shape an inclusive and positive workplace culture. Exemplary employers also highlighted the importance of maintaining standards of excellence, codes of ethics, and consistent safety practices to support their female workforce. At this stage, flexible workplace practices to help women balance work-life responsibilities also emerged as important enabling factors, contributing to help women build *long-term* careers in the trades.

Scope and structure of a Women in Trades program matrix in BC

We are recommending a program matrix with four fundamental service delivery domains, corresponding to strategies to address macro, organizational, interpersonal, and individual level barriers.

Macro Level

Our qualitative results suggest that strong partnerships with multiple stakeholders are key to effectively target **macro-level barriers.** It is important not only to engage with current and future generations of tradeswomen, but also to foster collaboration and develop leadership among policymakers, industry stakeholders, and other trades service providers.

Our recommended program components in the macro domain fall into three major categories.

1. **Outreach, engagement, and education** campaigns are needed to build and maintain relationships with a wide-range of communities, raise awareness, contribute to shifts in attitudes, and strengthen the next generation of tradeswomen in BC.

2. **Advocacy**, including financial and regulatory advocacy, and **leadership development** is an important area to help build government and industry champions, and facilitate system-wide changes.

3. **Strategic engagement of target populations** such as Aboriginal women in alignment with the unique needs of target groups.

Outreach, engagement and education

Advocacy and leadership development

Strategic engagement of target populations

Employment services and supports

Organizational analysis and action planning

Upskill: technical and soft skill training

Supports to implement organizational policies and best practices

Continual wrap-around supports

Workplace training interventions to support organizational practices

Addressing Macro-level Barriers

Addressing Individual Barriers

Program

Addresing Organizational Barriers

Addresing Interpersonal Barriers

Events management

Professional networks

Formal and informal mentorship

Organizational Level

To effectively respond to **organizational barriers**, WIT programs and services need to fulfil the following key roles:

1. **Support organizational analysis and action planning,** including to demonstrate the business case for hiring tradeswomen.

2. **Offer expertise and supports to assist organizations in building capacity to**:

   - Implement equitable recruitment, training and advancement practices,

   - Enhance organizational policies and practices to address bullying and harassment,

   - Strengthen health and safety programs and policies, and

   - Develop flexible workplace policies and practices.

3. **Provide services and assistance to implement workplace training interventions** to build respectful workplaces and help create supportive peer networks in the workplace.

Interpersonal level

The recommended program components to address interpersonal level barriers include activities designed to:

1. **Build and strengthen professional networks** including through networking events and professional conferences in order to build a system through which tradeswomen can connect with one another, access professional development opportunities, and to mitigate feelings of isolation.

2. **Event management:** In addition to larger scale events, networking is also critical at the local level. A great number of programs in our review provide their participants with social events on a regular basis, bringing tradeswomen together in an informal setting. This will require at least some regional and local presence of staff to effectively stage and manage events.

3. **Enhance formal and informal mentorship** opportunities for tradeswomen. While there is a wide range of models for mentorship, support for informal approaches appears to be strongly desired. Tracking of participation in local, regional, and provincial events could be used to support the development of a mentorship registry in order to facilitate informal mentorship between interested tradeswomen.

Individual level

Supports for women working in the trades cannot follow a one-size-fits-all approach. An individual's circumstances, interests, strengths and weaknesses play important roles in determining their success in the trades. Therefore, to address barriers on an individual level, is essential that women be provided with:

1. **Employment services and supports**, including job search, job matching, job maintenance and career counselling.

2. ***Upskill to provide technical and soft-skill training***, including professional development, leadership, small business skills.

3. ***Continual, individualized, wrap-around supports***, including needs-based aids, as women progress through their careers.

Staffing and Management

The success of such a comprehensive program depends on the active engagement, collaboration and partnership of multiple stakeholders in the industry. Therefore, ***a strong and broad staffing structure*** is absolutely critical to make sure that adequate human resources are dedicated to all program domains.

At the management level, it is recommended that a senior-level ***Executive Director*** leads the partnership development efforts. The Executive Director should not only be knowledgeable about the trades but should also have the skills and knowledge to navigate the system to build and maintain partnerships with government, industry, service providers, and other stakeholders. The daily operation of the program is best managed by ***Operational Leaders*** who have established their credibility in the field through their professional success as tradeswomen.

It is important to align ***service delivery staffing structure*** with program objectives, organizing strong teams of delivery staff dedicated to key functional areas of the overall program. To make the operationalization of the program more feasible and practical, we also provide recommendations regarding office locations and regional staffing structures based on unique BC context.

We suggest a ***governance structure*** that includes a diverse representation of stakeholders from government, industry, unions, tradeswomen, and other major partners. The key here is to bring on board those who are most likely to be in a position to support change – and to actively engage and drive change – in a positive direction consistent with short and long-term objectives. ***Rotating term positions*** for governing committee membership should be considered in order to allow for proper flexibility in committee composition, aligning the needs of the program and its evolving progress, or lack thereof, with particular objectives based on changing sectors' priorities.

Evaluation Strategy

It is critical for strategic planning, and for ongoing program monitoring and evaluation to have a robust informational system. We recommend the development and integration of a participant database with a full management information system (MIS) and data collection strategy, guided by an evaluation framework. This system should track participant information and, more importantly, implementation indicators of all program activities, which can be linked to a series of intermediate and longer-term outcomes of women working in the trades and employers. We provide a preliminary yet rich framework for these indicators including:

▪ **Implementation indicators** to monitor the development and roll-out of information resources, promotional campaigns, conferences, workshops, counselling, training, advisory services, and other practices and activities designed to address each of the four levels of barriers identified in this report (i.e., macro-level, organizational, interpersonal, and individual).

- **Intermediate outcomes** to evaluate the short-term results for participants targeted by these activities – including women at various stages of a pathway to the trades and with employers implementing supportive policies and practices – but also industry and union representatives, policymakers, and other stakeholders. Intermediate outcomes may include awareness, satisfaction levels with services received, and shifts in attitudes, as well as the development of strategies and action plans at the organizational level and gains in skills, self-efficacy, trust, and availability of networks at the individual level.

- **Longer-term outcomes** to evaluate whether intermediate outcomes are associated with sustained gains in indicators of employment and job quality among tradeswomen, as well as positive business outcomes for employers.

This will serve dual objectives of supporting ongoing strategic planning for the WIT program as well as planning for its sustainability by collecting data that can help demonstrate its effectiveness to industry stakeholders and potential funders.

1. Introduction

Shortage of skilled labour has become a pressing challenge in most skilled trades industries across Canada. It is estimated that the construction sector alone will need to replace more than 250,000 retiring workers in the next ten years, in addition to hiring 11,000 new employees. British Columbia (BC) is among those most affected by this labour shortage, as construction in the province is on a growth path through 2020 that will carry labour demand for the trades to new highs, while about 23 percent of the current workforce are expected to retire between 2016 and 2025 (BuildForce, 2016).[1]

Although increases in the participation rate of women in the labour force tend to help mitigate labour shortage in many sectors, there has been no significant change in women's participation rates in the trades. Across most jurisdictions in Canada, participation rates have remained flat for decades. In British Columbia, the percentage of women in the skilled trades has increased only slightly from 3.0 per cent in 2001 to 3.1 per cent in 2006, inching up to 4.4 per cent in 2015, according to the latest data from the Labour Force Survey.[2]

A range of initiatives has been launched in various jurisdictions across Canada to encourage women to consider the trades as a viable career option, with significant government investments in promotional awareness campaigns and entry-level training for women considering a career in the trades. However, relatively few investments are being made for women already working in the trades – and the challenges of low retention and lack of career advancement remain largely unaddressed. Despite the compelling work done to date by the Industry Training Authority (ITA) and various service providers to support women interested in entering the trades, there is still significant room for improvement as well as for concerted efforts to support women who are *currently* working in the trades.

Through the Sector Labour Market Partnership Program, the BC Ministry of Jobs, Tourism and Skills Training (JTST) has provided support for a thorough examination of the barriers and constraints that women working in the trades across British Columbia face, as well as the types of services that would best facilitate higher rates of entry and retention. The ultimate goal is to collect information and provide analysis that will guide the future design and implementation of a BC-specific program for women already working in the trades.

SkillPlan managed the project in partnership with the Social Research and Demonstration Corporation (SRDC), which led research activities, and with IBEW 213 (Build Together), which served as a key source of support for the implementation and recruitment of the study's participants. The project was overseen by a Steering Committee of 19 members, representing a mix of employers, journey workers, apprentices, and other stakeholders in trades.

---

[1] BuildForce (2016). *Construction and Maintenance Looking Forward: Construction trades outlook for major projects in Canada's territories*. Ottawa, ON: BuildForce Canada.

[2] Statistics Canada. Table 282-0141 - Labour force survey estimates (LFS), by National Occupational Classification (NOC) and sex, unadjusted for seasonality, monthly (persons unless otherwise noted).

Purpose and scope of this report

This study aims to develop an enriched understanding of the systemic and structural factors that present barriers to women's participation in the trades, as well as the types of supports and services that would enhance entry and retention rates – and respond to these needs specifically in the unique context of British Columbia. This will lead to a series of recommendations relating to the structure and scope of services for a WIT program in BC. The following six lines of evidence are used to provide a comprehensive perspective on these issues:

- focus groups with women currently working in the trades;

- an online survey of women in the trades throughout BC;

- depth interviews with women who have left the trades;

- employer consultations to explore workplace policies and practices;

- a comprehensive review of related programs serving women working in the trades; and

- consultations with key stakeholders and other experts in women in trades (WIT) programming.

Several critical distinctions between this study and earlier research are worth noting. First, the study is focusing on BC in order to position its recommendations in the unique provincial context and to align with the unique needs of tradeswomen in BC. Second, the study has significant *breadth* in its lines of evidence including extensive engagement of women working in the trades, women who have left the trades, employers, unions, and other stakeholders. It also integrates a comprehensive review of existing WIT programs along with interviews with managers and leaders of exemplary WIT programs. Third, this study uses a *holistic* approach to integrating the knowledge from these wide-ranging sources. We aim to understand the barriers at multiple levels, including **individual, interpersonal, organizational, and macro/system-wide,** and how they manifest themselves at different stages of women's career including ***pre-apprenticeship, apprenticeship, and journey.***

This report presents the final results of the study and is organized as follows. Section 2 reviews the background and rationale. Section 3 outlines the study objectives, target groups, and key research questions. Section 4 provides a summary of the lines of evidence and the completed data collection efforts including the final sample sizes. Results are then presented in sections 5 through 7, integrating analyses from all data sources to address each objective. Section 5 outlines the barriers facing tradeswomen including discussion of their relative importance and how they manifest themselves at different levels and stages. Section 6 reviews the enabling factors and supports, which would facilitate enhanced entry and retention of tradeswomen. Section 7 provides a series of recommendations for the structure and scope of services for a future WIT program including several lessons learned from existing WIT programs. Section 8 provides a concluding summary.

2. Background and Rationale

British Columbia is estimated to lose approximately 40,000 skilled tradesworkers to retirements over the next decade (BuildForce, 2016).[3] At the same time, a surge in demand for non-residential construction will result in increasing demand for new tradesworkers, approximately 12,600, by the end of 2025 (Ibid). As a result, BC is facing significant labour shortages – at unprecedented levels. In many sectors, the increasing participation of women in the labour force would tend to help mitigate these shortages. However, British Columbia has seen the percentage of women working in the trades increase only slightly from 3.0 percent in 2001 to 4.4 percent in 2015 according to the latest Labour Force Survey data released in 2016.[4] Looking closer at the distribution of these rates across occupations presents a consistent picture of concern: women represent less than three percent of the workforce in the large majority of trades in British Columbia – and further still **women reach 5 percent in only five of 38 unique trades** based on the National Occupational Classification (NOC).

Table 1   Number and percentage of women working in trades in British Columbia (2011), by NOC

	N Women	% Women
1. Machining, metal forming, shaping and erecting trades		
Machinists and machining and tooling inspectors	45	1.4
Tool and die makers	0	0.0
Sheet metal workers	40	1.5
Boilermakers	0	0.0
Structural metal and platework fabricators and fitters	35	2.4
Ironworkers	60	3.9
Welders and related machine	220	2.7
Total	**400**	**2.3**
2. Electrical trades and electrical power line and telecommunications workers		
Electricians (except industrial and power system)	305	2.4
Industrial electricians	100	3.8
Power system electricians	0	0.0
Electrical power line and cable workers	0	0.0
Telecommunications line and cable workers	95	4.6
Telecommunications installation and repair workers	265	9.3
Cable television service and maintenance technicians	25	8.1
Total	**835**	**3.8**

	N Women	% Women
3. Plumbers, pipefitters and gas fitters		
Plumbers	160	2.1
Steamfitters, pipefitters and sprinkler system installers	30	1.4
Gas fitters	20	1.7
Total	**210**	**2.0**
4. Carpenters and cabinetmakers		
Carpenters	500	2.1
Cabinetmakers	210	7.1
Total	**710**	**2.5**
5. Masonry and plastering trades		
Bricklayers	90	4.7
Concrete finishers	15	1.0
Tilesetters	85	5.0
Plasterers, drywall installers and finishers and lathers	185	3.9
Total	**375**	**3.7**
6. Other construction trades		
Roofers and shinglers	90	2.2
Glaziers	65	3.1
Insulators	50	4.7
Painters and decorators (except interior decorators)	995	12.5
Floor covering installers	35	1.3
Total	**1,235**	**6.9**
7. Machinery and transportation equipment mechanics (except motor vehicle)		
Construction millwright and industrial mechanics	115	1.5
Heavy-duty equipment mechanics	55	0.8
Machine fitters	0	0.0
Elevator constructors and mechanics	15	2.0
Refrigeration and air conditioning	60	2.2
Railway carmen/women	0	0.0
Aircraft mechanics and aircraft inspectors	95	3.4
Total	**340**	**1.6**
8. Crane operators, drillers and blasters		
Crane operators	75	3.9
Drillers and blasters	0	0.0
Water well drillers	0	0.0
Total	**75**	**2.8**
TOTAL, ALL TRADES	**4,180**	**3.2**

Source: Statistics Canada - 2011 National Household Survey. Catalogue Number 99-012-X2011033.

Why don't they stay? Barriers to women's entry and retention in the trades

Women working in the trades face a number of pervasive, systemic barriers that make it difficult for them to enter and remain in the trades, as well as to advance in the sector. As the data shows, most skilled trades are male-dominated, with a lack of critical mass of female workers in the workforce.

A prevailing factor that negatively influences the participation of women in the skilled trades is the widespread, ingrained gender bias within the sector.[5] Although more subtle and less visible than overt sexism, racism, or other kinds of discrimination, this form of prejudice can still affect recruiting and hiring decisions and hinder the professional development and advancement opportunities. Existing research in this area points to a series of factors including, health and safety concerns, fewer mentorship opportunities, and inflexible workplace policies and practices. [6,7,8] The lack of social capital and professional networks poses another challenge to tradeswomen, as this limits the mentoring opportunities they may receive, either on-the-job or in a more formal setting. This affects their career very early on and can continue to put them at a disadvantage compared to their male peers throughout training and employment.

Together, the ingrained gender bias and the inadequate access to professional networks create another barrier to steady employment for women working in the trades, making it difficult for them to connect with employers to secure ongoing work. Other factors that exacerbate this gender imbalance in the skilled trades industries include inflexible workplace practices and policies that may not support tradeswomen's parenting and family responsibilities outside of work; exclusion, harassment, bullying, or other incivilities in the workplace; and on-the-job working conditions that may translate into health and safety concerns.[9] Figure 1 summarizes some of these key factors that challenge the entry, retention, and advancement of women in skilled trades.

---

[5] Construction Sector Council (2010). The State of Women in Construction in Canada. Ottawa, ON: Construction Sector Council.

[6] Vojakovic, D. (2008). Women in Trades: Discussion Paper. Vancouver, BC: Industry Training Authority.

[7] Construction Sector Council (2010). The State of Women in Construction in Canada. Ottawa, ON: Construction Sector Council.

[8] Mayer, H. and Braid, K. (2007). A Winning Ticket: Women in Trades in British Columbia and Yukon. Vancouver, BC: Simon Fraser University.

[9] Construction Sector Council (2010). The State of Women in Construction in Canada. Ottawa, ON: Construction Sector Council.

Figure 1   A preliminary framework: Barriers to entry and retention of women in the trades

Early experiences	More likely to be first in family		Less awareness/exposure to career choices in trades
Pre-apprenticeship	Relatively less prior exposure in construction	Relatively less prior knowledge/skills	Relatively less access to networks—i.e., social capital in construction
Apprenticeship	Gender biases in recruiting	Difficulty remaining steadily employed	Inflexible workplace policies/practices
	Difficulty finding sponsors	Workplace exclusion, harassment, discrimination	Early departure from apprenticeship programs
	Ongoing lack of access to networks, mentoring	Health and safety concerns	
Journey	Ongoing exclusion, harassment, discrimination	Ongoing gender biases affecting advancement	Departure from trade
	Ongoing lack of access to networks, mentoring	Ongoing health and safety concerns	

RETENTION

ACCESS

Enduring gaps in supports for women working in the trades

Government agencies and educational institutions in Canada have been asking why women are not entering and staying in trades and technology sectors for over 40 years. Over the years, a range of initiatives has been launched in various jurisdictions across Canada to encourage women to consider the trades as a viable career option, with significant government investments in promotional awareness campaigns and entry-level training for women considering a trades career. These efforts have included local and provincial interventions, federal employment equity legislation, front line worker/manager education, integrations with the apprenticeship system, and political advocacy. Notably, exploratory WITT programs across Canada provided training, financial assistance and support for eligible women considering a career in the trades. These initiatives have received high praise for their contributions in making careers in trades more accessible to women. However, while the decades-long efforts in several provinces helped to open some doors, they did not address systemic barriers to the ongoing employment of women and minority groups. As evidenced by the small and largely unchanging numbers of women working in the trades over the years, women have made limited inroads into the trades due to persistent barriers, including employer resistance to hiring women, as well as gender discrimination and sexual harassment.[10],[11],[12]

Furthermore, **relatively few investments have been made for women *already working* in the trades – and the challenges of low retention and lack of career advancement remain largely unaddressed**. This is not simply an issue of low rates of entry into the trades. Low completion rates among female apprentices entering skilled trades also translate into strikingly low retention rates. According to Statistics Canada (Mueller and Laporte, 2011), four to twelve percent of registered male apprentices in most major trade groups completed their training, while the completion rates of female apprentices generally lagged behind, varying from two to eight percent during the same period. In fact, women represent about 4.4 percent of all registered apprentices who completed their training in 2013 in British Columbia. However, when female-dominated trade groups such as hairstylists and estheticians are excluded from the calculations, the rate falls to 3.1 percent, according to the latest data available in the Registered Apprenticeship Information System. This training completion rate is lower than expected, even when we take into account the lower entry rates for women in the trades.

---

10 Braundy, M. (Ed.) (1989). Surviving and Thriving – Women in Trades and Technology and Employment Equity. Winlaw, B.C.: Kootenay WITT Kootenay Women in Trades and Technology.

11 Construction Sector Council (2010). The State of Women in Construction in Canada. Ottawa, ON: Construction Sector Council.

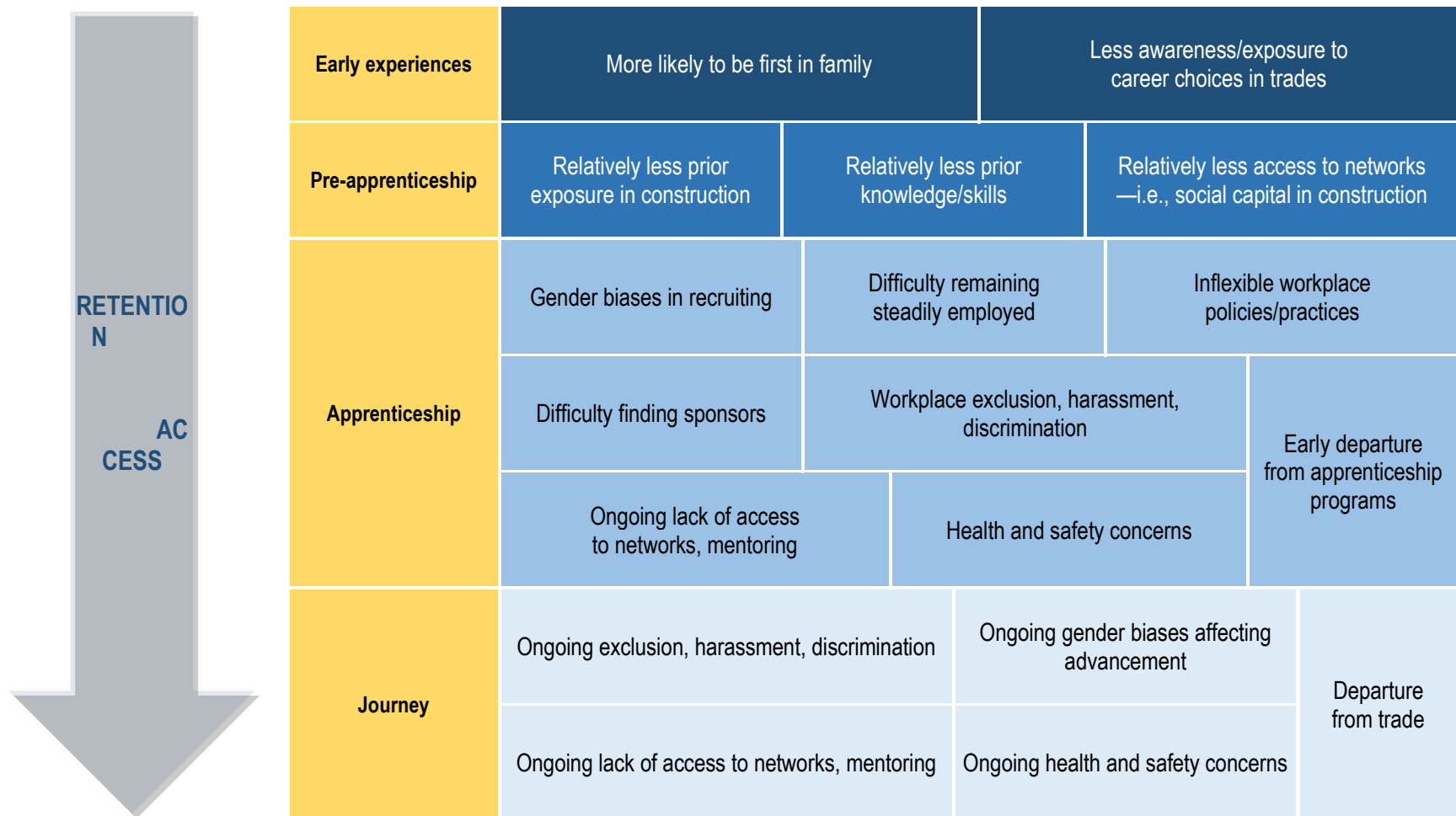**12** Government of Yukon (2010). Yukon Women in Trades and Technology Evaluation Report. Prepared for: Advanced Education, Department of Education, Yukon Government.

Promising programs yet limited evaluation on progress

Recently, initiatives designed to support women working in the trades in Canada have broadened their scope to focus on issues impacting retention. Preliminary assessments of such programs show promising results. For example, the success of the comprehensive program model of the Office to Advance Women Apprentices (OAWA) in Newfoundland and Labrador has been recognized and even replicated by other service providers. Another success story was documented by Women Building Future (WBF), an organization specializing not only in workforce attraction, but also in essential skills and basic trade skills training, workforce coaching, and job retention for tradeswomen in Alberta. Evaluating the social returns on investment of its Journeywomen Start program, WBF found that for every dollar invested in a 16-week program that combines academic upgrading with hands-on learning, work experience, and job retention supports, a six-dollar societal benefit is realized – a substantial amount (Bubel, Kain, and Kerr, 2009).[13]

That said, existing evaluations of programs for women currently working in the trades are still limited. Additionally, as these programs are implemented in other provinces, it is unclear if findings from their evaluations are relevant to the BC context, given the lack of background research. Therefore, before potentially effective strategies to support women already in the trades can be implemented, further research examining the experiences of tradeswomen is needed - specific to BC. Major gaps have been identified in the research literature with respect to the types of barriers that women face and the types of supports that would best facilitate longer-term retention (Kelly et al., 2015). Furthermore, only a handful of studies focuses specifically on the experiences of women in the trades, who can face a complex set of barriers beyond gender discrimination.

One notable exception is a recent Canadian study conducted by the Construction Sector Council (2010) involving focus groups with female construction workers and industry employers to qualitatively analyze the experiences of Canadian women in the trades. While this study sheds some light on the employment conditions of Canadian women working in the trades, it was based on a fairly limited sample of only three focus groups held in British Columbia and New Brunswick. As a result, no trade-specific implications could be drawn, and no analysis of regional or sectoral variations could be rigorously conducted based on the findings. Another limitation is that – as the majority of key informants interviewed were from New Brunswick and Ontario – stakeholders from the construction industries in British Columbia were insufficiently represented, further limiting the applicability of the findings to the BC context. The present study aims to address some of these knowledge gaps and add value in several key areas, as detailed below.

---

13   Bubel, A., Kain, J., & Kerr, K. (2009). *Women Building Futures: Journeywoman Start Program: Social Return on Investment Analysis.* Available at http://www.womenbuildingfutures.com/Portals/49/pdf/reports/Final%20WBF%20SROI%20Report.pdf

Need for further research and its value-add

Aiming to fill these research gaps, this project seeks to provide a more thorough understanding of the barriers and constraints that tradeswomen across British Columbia face, as well as the types of factors that would best facilitate higher rates of entry and retention. However, this study will not simply duplicate prior research. It aims to extend earlier research in several key ways, with the goal of collecting information and providing analysis that will ultimately guide the future design and implementation of a program for women already working in the trades – one specifically tailored to support tradeswomen in BC.

To achieve this goal, the study extends previous research in several critical ways.

First, the study is ***focusing on British Columbia*** in order to position its recommendations in the unique provincial context and to align with the unique needs of tradeswomen in the province.

Second, the study has **significant *breadth* in its lines of evidence and key informants**. Our focus group sample is larger and more diverse than any earlier studies. We also added a survey of tradeswomen to quantify the relative importance of different barriers and their desire for different types of supports, while also examining the ways these factors may vary across regions, sectors, and occupations. We have included a significant number of interviews with employers to support a richer review of effective workplace practices that support tradeswomen. As well, we have conducted a comprehensive review of existing WIT programs, putting our findings in the context of what has already been achieved – in an effort and to extract practical recommendations to guide the future design and implementation of WIT programs in BC.

Third, this study uses a ***holistic* conceptual framework** to understand the barriers and constraints facing women working in the trades – **at multiple levels including *individual, interpersonal, organizational, and macro/system-wide* – and how they manifest themselves at different stages of women's career journey including *pre-apprenticeship, apprenticeship, and journey.*** While the focus of the study is on exploring supports for women *currently* working in trades, one cannot do this sufficiently unless the full spectrum of challenges is considered. Utilizing a holistic framework will ensure that the recommendations for a future WIT program in BC encompass the full breadth of supports and services needed – while leveraging, not duplicating, activities and resources from other programs – in order to address ***system-wide challenges*** facing women working in the trades.

3. Objectives, Target Groups, and Research Questions

Objectives

The objectives of our research can be summarized as follows:

- Through consultations with a diverse sample of tradeswomen, gain a better understanding of the ***barriers and challenges*** that women face and explore the types of ***enabling factors and supports*** that would best enhance rates of retention for women working in the trades given the unique context in British Columbia;

- Through consultation with a sample of BC employers, explore and review best and promising practices in the provision of ***workplace supports*** for women working in the trades; and

- Through a review of existing programs for tradeswomen in other jurisdictions, identify ***best practices and lessons learned*** to help guide the design and implementation of a future program supporting women employed in the trades in British Columbia.

Target groups

The samples of participants for this study are drawn from three primary target groups:

1. **Tradeswomen:** The primary sample for this study comes from the population of women *currently* working in the trades. The majority of women in this sample were employed at the time of the focus groups though a small subset was unemployed but actively seeking work in the trades. We also consulted with a secondary sample of women who have left the trades.

2. **Employers:** We identified and consulted with a sample of exemplary employers who have demonstrated a commitment to hiring tradeswomen to explore the implementation of their supportive practices.

3. **Other stakeholders, experts, and service providers:** A range of other stakeholders was consulted including a sample of experts and service providers in the provision of existing WIT programs and supports.

Research questions

The main research areas of this study and their corresponding research questions are highlighted in Table 2.

Table 2   Main research areas and key research questions

1. CHALLENGES AND BARRIERS

What kinds of challenges or barriers do women working in trades in British Columbia face?

- Is there regional, sectoral, or occupational variation in these barriers?

- Are some more important than others in their effects on low entry and retention?

2. ENABLING FACTORS AND SUPPORTS

What are the factors and supports that would make it possible for more women working in trades in BC to remain in the trades?

- What supports will potentially have the biggest impact?

- Should these priorities vary at all across region, sub-sectors, or occupations?

3. BEST PRACTICES AND IMPLEMENTATION LESSONS

What are some of the critical factors that underlie successful programming for women working in the trades and effective workplace supports?

- What can be learned from existing programs for women working in the trades to inform the implementation of a solution for British Columbia?

- What can be learned from exemplary employers about effective workplace practices?

4. OUTCOMES

How will you measure the success of future WIT programming in BC?

- How do you define success in the long-run?

- What are some of the critical intermediate outcomes and milestones that would precede these longer term success?

5. CONTEXT

What elements of the BC context have a bearing, now or in the future, on the implementation of new WIT programming?

- Are there any critical policy, economic, or labour market changes to consider?

- In light of this, where are some of the most pressing gaps and opportunities for WIT programs in BC?

4. Research Design, Data Collection, and Analytic Plan

Consistent with an emerging area of research and one with fundamental questions involving the exploration of personal experiences and challenges, the research design utilizes a qualitative research methodology based on an inductive, reflexive, and interactive approach (Maxwell, 1996). In practice, this means that while our understanding of the issues has been informed by a review of the relevant literature, we are not using a *pre-established theoretical* framework to determine the precise direction of data collection and analysis. Rather, we have built a *broad conceptual* framework that serves as a guide for collection and analysis, which– on the one hand, ensures alignment with the study's core research questions – while on the other, provides sufficient flexibility to allow for emerging themes to be iteratively explored. This helps make certain that we are, indeed, building on existing knowledge in a way that addresses the core research questions but does not constrain the design from uncovering new and unexpected findings.

Another important principle of the qualitative approach relates to triangulation. Addressing similar research questions with multiple stakeholders can increase our confidence that the emerging themes are meaningful and accurate when they recur and are consistent across multiple lines of enquiries. By consulting with women currently working in the trades, those who have recently left the trades, and with a sample of employers, this study aims to develop an enriched understanding of the systemic and structural factors that present barriers to women's participation in the trades, as well as the types of supports and services that would enhance entry and retention rates – and respond to these needs specifically in the unique context of British Columbia. To provide a comprehensive perspective on these issues, we have engaged not only stakeholders on both the demand and supply sides of the labour market (i.e., tradeswomen and employers), but also a range of relevant service providers that are committed to retaining and advancing the careers of women working in the trades. These additional consultations were completed in parallel with a review of successful WIT programs and services.

Data collection

SRDC developed a variety of research instruments consistent with the various lines of evidence to collect data from employers, tradeswomen, and relevant service providers. The qualitative inquiry for this study was conducted through focus groups with women currently working in trades and depth interviews with all other sample members including employers, women who have left the trades, and service providers. Given the lack of a reliable sample frame and the dynamic nature of the population, we used a purposive snowball sampling approach to recruit participants for all lines of evidence (further details for each line of evidence are provided below). This allowed us to focus recruitment on sources that were most likely to provide relevant data. In addition, we supplemented our data sources with findings from program reviews, stakeholder/program consultations, an online survey, and depth interviews with women who have already left the trades.

The six lines of evidence and data sources are discussed in further detail in the next section.

Lines of evidence

Program review

We reviewed WIT multiple programs and related services, with a focus on programs offered in Canada. The goal of the program review is to shed light on the common practices and lessons learned from existing service providers, providing a better understanding of what works and what needs to be improved in order to effectively facilitate the retention and career advancement of tradeswomen. Findings from this review will help inform the design and implementation of future a WIT program in BC.

Table 3 presents the programs that were considered as part of the review and the types of supports and services that each offers (see Appendix C for further details). A subset of these was selected (with input from the project steering committee) for further follow-up and analysis. These included:

1. Build Together (National)
2. Office to Advance Women Apprentices (Newfoundland and Labrador)
3. Women Unlimited (Nova Scotia)
4. Women Building Futures (Alberta)
5. Skilled Trades Employment Program (STEP) (Northern BC; Interior BC; Vancouver/Lower Mainland)
6. Oregon Tradeswomen Inc. (Oregon, USA)

In addition to comprehensive reviews of each program based on available documentation, the research team also completed a series of interviews with selected managers and program delivery staff in all six programs with at least one per program (see below).

Consultations with key stakeholders, program providers, and other experts

Consultations with stakeholders included a series of depth interviews with steering committee members (14 interviews completed), selected staff from exemplary service providers (9 interviews completed), and other experts (3 interviews completed).

Interviews with steering committee members were largely completed during the first two months of the project as we solicited advice and feedback on the objectives, scope, and methodology. In addition to these formal interviews, ongoing feedback was sought from the committee and partner organizations throughout the study to support data collection and analysis.

Consultations with service providers and other experts with experience in WIT services (including support staff from each of the six providers noted above in the program review) focused on several issues including coordination of different program components and service delivery models that have proven effective in mitigating barriers to retention and career advancement for women working in the trades. Key informants were also asked to comment on innovative and promising practice in policy development, program design and implementation, and community engagement.

Table 3   Summary of main program components in existing Women in Trades programs

Program	Location	Mentorship		Career Counseling	Events	Services for Employers			Financial Supports	Policy advocacy
		For those in trades training	For women currently working	Job search for those ready to work	Conference, networking events	Job placement, matching	Database registry	Organization supports		
BT	National		✓					✓		✓
OAWA	NL	✓	✓	✓	✓	✓	✓	✓	✓	✓
WITT	BC	✓		✓		✓			✓	
YWITT*	YK				✓			✓	✓	✓
WITT	SK	✓	✓		✓					
WBF**	AB			✓		✓		✓	✓	
WIST/IT	ON									
Women Unlimited	NS	✓	✓	✓	✓	✓		✓		✓
WRDC	NL	✓	✓	✓				✓		✓
Trade HERizons	PEI	✓	✓			✓	✓	✓		✓
OTI	OR	✓	✓	✓	✓	✓				✓
Chicago WIT	IL				✓	✓		✓		✓
ANEW	WA	✓	✓	✓	✓	✓	✓			
NEW	NY					✓	✓			✓
PGTI	MA				✓	✓		✓		✓
SBT	WA		✓		✓		✓			✓
MN WIT	MN				✓					✓
MO WIT	MO			✓		✓				
Number of programs providing this service		**7**	**9**	**8**	**10**	**12**	**6**	**8**	**3**	**11**

*: A program evaluation of this initiative was conducted and is available here: http://www.education.gov.yk.ca/pdf/YWITTProgram_Evaluation2010.pdf

**: A program evaluation of this initiative was conducted and is available here: http://www.womenbuildingfutures.com/Portals/49/pdf/reports/Final WBF SROI Report.pdf

When conducting these interviews, we used a semi-structured, in-depth interview protocol that encouraged key informants to reflect on the issues, but also to extrapolate from these to provide new information. Given the diversity of the key informants, the breadth and complexity of the issues involved, and the focus on developing an in-depth understanding of these, we adapted the line of inquiry in each interview to the specific interest and expertise of the key informant. One of the advantages of qualitative methodology, this flexibility allowed us to "drill down" and explore certain issues in depth as the opportunity presented itself, at the same time as gaining information on a number of issues and from a wide variety of perspectives.

Focus groups with women working in the trades

Focus groups are well suited to explore the *nature* and *meaning* of specific experiences of women currently working in trades. In contrast to survey methods, which are helpful to quantify the prevalence of specific challenges or barriers, focus group discussions are better suited for an in-depth exploration of an issue to understand the nature and dynamics of a specific experience, and how this may vary among different sub-groups. The goal of the focus group was to seek participants' own perspectives on working in the trades, based on their personal and broader experience. As with other data collection, the focus was on the barriers and enabling factors to participation in the trades, to identify the promising services and supports that may facilitate longer-run retention, and how these may vary across key subgroups of interest.

SkillPlan, Build Together and SRDC reached out to about 75 organizations to support the recruitment of focus group participants. Organizations were provided project background information and focus group promotional materials to circulate to their membership, and when initial contact attempts were unsuccessful, multiple follow-ups as necessary were done by email, by phone and/or in person, to encourage broad dissemination of focus group invitations.

Response

Table 4, below, presents a summary of the location, number of participants, and trade composition of the completed focus groups. A total of 10 focus groups with 87 participants were successfully completed. The composition of the focus group sample is well balanced, and a high degree of saturation on emerging themes across groups was observed including consistency across trades and regions.

Table 4   Focus Groups

DATE	REGION	CITY	STATUS	TOTAL participants	NUMBER OF PARTICIPANTS, by trade category							
					Machining, metal forming, shaping, erecting	Electrical trades, electrical power line, tele-communications	Plumbers, pipefitters gasfitters	Carpenters, cabinet-makers	Masonry/ plastering	Other trades*	Machinery, transportation, equipment mechanics	Crane operators, drillers, blasters
Jul 19	Interior	Kelowna	Completed	9		3	1	4	1			
Jul 20	Interior	Kelowna	*Cancelled*									
Jul 21	Interior	Kamloops	Completed	12	2	7				1	2	
Aug 2	Lower Mainland	Port Coquitlam	Completed	9	2	1	2	1		1	1	1
Aug 3	Lower Mainland	Abbotsford	Completed	7	2	2		1		1	1	
Aug 4	Lower Mainland	Vancouver	Completed	8	1			1	1	1	2	2
Aug 29	Lower Mainland	Vancouver	Completed	8	1			3	1	1	1	1
Aug 30	Vancouver Island	Victoria	Completed	9	2	4	2			1		
Aug 31	Vancouver Island	Campbell River	Completed	7	1	1	2	1		1		1
Sep 7	North	Prince George	Completed	8	3	1		1		1		2
Sep 8	North	Kitimat	Completed	10	3	3				3	1	
Overall				**87**	**17**	**22**	**7**	**12**	**3**	**11**	**8**	**7**

Employer consultations

Our aim was to conduct depth interviews with approximately 8-10 employers leading to a comprehensive review of workplace policies and practices, for a subset of these organizations, who have successful and innovative practices that support tradeswomen. Our goal was to review best and promising practices for *at least one of these progressive employers though additional* innovative approaches are highlighted from *several others* (the original scope of work and methodological report included a review for only a single workplace; however, results may warrant highlighting several others). Recruitment and selection of these employers aimed to maximize diversity across company size, sector, union status, and region. However, for the purposes of analyzing best practices, we primarily focused on recruiting *exemplary* employers, with a secondary focus on diversity in company size and regional representation.

A preliminary list of exemplary employers was compiled with input from the steering committee members and focus group participants. The original list had about 20 candidates, which was subsequently reduced to the six interviewees listed in Table 5 below.

Table 5   Exemplary employers

Employers	Industry	Location	Size
Display Fixtures	Refrigerating equipment - commercial	Burnaby	Small
Harris Rebar	Steel fabrication and distribution	National	Large
Houle Electric	Electrical	National	Large
Mott Electric	Electrical	Lower Mainland	Large
Vancity Electric	Electrical	Lower Mainland	Small
Veridis Plumbing	Plumbing	Vancouver Island	Small

Response

Six interviews were completed with exemplary employers including two workplace site visits. Given a high degree of saturation on workplace themes, rather than conducting more exemplary employer interviews, we supplemented these with interviews from representatives from two unions.

Build Together helped compile the list of unions to consider (consistent with those that tradeswomen have identified as exemplary over the course of the research) including Elevator, Electrical, Brick, and HVAC. Build Together then provided referrals and contact information for two locals (IUEC 82 and IBEW 213) and interviews were completed with both.

In addition to exploring best practices through interviews with exemplary employers and unions, we also explored hiring decisions more broadly, leveraging multiple additional interviews with

contractors as part of the BC Mentorship Project and also funded by the BC Ministry of Jobs, Tourism and Skills Training (JTST) who supported leveraging of project resources. These interviews included the perspectives of multiple individuals within the respective firms (e.g., owners/ senior management, project managers, foremen), covering select questions on factors affecting the recruitment and retention of tradeswomen.

Depth interviews with women who have left the trades

A series of depth interviews were also completed with women who left the trades to explore barriers and challenges for a group of women who had already made the decision to exit. Recruiting women who left the trades was identified from the very beginning as a difficult undertaking. Finding the women would not only be challenging but also, once found, their motivation to participate was far lower than that of women currently working in the trades. The recruitment strategy relied heavily on snowball sampling by asking focus group participants if they know of women who have left the trades. In addition to referrals through other tradeswomen, we also sought assistance from all our targeted groups including the ITA, the WITT programs, the BCCA, STEP, and the Lower Mainland Career Counsellors. The online survey also generated names of women to approach for an interview.

Response

In total, 8 interviews were completed with women who had left a trade and a high degree of consistency was observed on key themes. A total of only 15 possible candidates were brought forward to the research team. Given the highly disengaged target group, a 50 percent response rate seems reasonable. While no interviews for this group were originally included in the scope of work, the research team subsequently added this line of evidence in the methodological report with an initial estimate of 12-15 women who left the trades. However, this would be highly dependent on recruitment success and theme saturation given the significant challenge for the project partners in engaging and recruiting for this group.

Online survey of women in the trades in B.C.

While a qualitative approach is critical for a study aiming to explore personal experiences and challenges of tradeswomen, there is also significant value from incorporating an online survey, with the aim of:

- providing additional options for tradeswomen to engage with the project and offer their opinions, beyond focus groups; and

- quantifying the broader prevalence of their challenges and desired supports within the province.

This online survey is a supporting component of the design rather than a primary feature (and a late addition, emerging from recommendations from steering committee members), as the sampling was completed in parallel with the recruitment for the focus groups (see the next section) and presented as an alternative for women who had difficulty attending a group session but who

wished to engage with the project and offer their opinions. *While efforts were made to reach a broad sample as possible, the primary aim of the survey is to provide a flexible means of engaging in the project.*

The survey was designed and pre-tested in parallel with the initial round of focus groups and depth interviews in July, in order to ensure it is well aligned with group content and highly functional before wider distribution. It was developed and administered online through SRDC's survey infrastructure. The content focused on key aspects of the framework that are quantifiable and measurable with the aim of validating the prevalence of certain experiences and factors. While the survey results contribute indirectly to answering all of the study's core research questions, it focuses on the first two involving barriers and supports (see the evaluation matrix, in the section below on the analytic plan).

Response

The survey was launched in August with early outreach efforts focused on women who could not participate in the earlier focus groups. The outreach strategy in September focused on broader marketing through social media channels as well as announcements through partner networks.

A total of 104 responses has been received. An analysis of survey response shows a reasonable distribution of respondents across trades and the four primary regions of the province (see Appendices). In order to maximize response, the survey will remain in the field until the final report is prepared in early December.

Integrated analysis

The integration of each of the above data sources was guided by both the initial conceptual framework and the evaluation matrix presented in Table 6, below, which implicitly relates each component of the analysis with the core research questions for the project.

It is important to note that the sequence of analytical activities and data sources summarized in Table 5 do not dictate the organization and presentation of results in subsequent sections. The presentation of results is structured by each research question while the sub-themes and data sources from which they emerge are embedded throughout in an effort to communicate results in a clear and compelling way. More specifically, we have organized the results into three primary sections: challenges and barriers, enabling factors and supports, and program recommendations, with the latter integrating results from all lines of inquiry.

Table 6   Evaluation matrix

EVALUATION QUESTION	SUB-THEME	DATA SOURCE					
		Program review	Stakeholder consultations	Focus groups	Online survey	Employer consultations	Depth interviews
1. Challenges and barriers What kinds of challenges or barriers do women working in the skilled construction trades in British Columbia face?	Variation by region, sector, occupation		✓	✓	✓		✓
	Relative importance to entry, retention			✓	✓		✓
2. Enabling factors and supports What are the factors and supports that would make it possible for more women working in construction trades in BC to remain in the trades?	Supports expected to have the largest impact on entry, retention	✓		✓	✓	✓	✓
	Priority supports across region, sub-sectors, occupation			✓	✓	✓	
	Existing program delivery models	✓				✓	
3. Best practices and implementation lessons What are some of the critical factors that underlie successful WIT programming and effective workplace supports?	Evidence, lessons learned from existing programs	✓		✓	✓	✓	
	Lessons learned about effective workplace practices	✓		✓	✓	✓	
4. Outcomes How should future WIT programs in BC measure success?	Defining, measuring program outcomes	✓	✓	✓			
	Availability of existing data	✓	✓				
5. Context What elements of the BC context have a bearing, now or in the future, on the implementation of new WIT programs?	External: system complexity, politics, social trends, system trends	✓	✓			✓	
	Internal: other related projects, finances, human resources	✓	✓				

5. Key Findings: Barriers and Challenges

Summary

The study's findings underscore the importance of the underlying, most often systemic, causes to the barriers that women experience in their careers. The barriers and challenges we heard described by women, employers, and other stakeholders "trickle down" from the macro-, through organizational-, to interpersonal and individual- levels. Therefore a holistic, ecological framework is well-matched to organize and make sense of the factors that affect women's entry, retention and advancement in the trades and, in turn, possible strategies for addressing those factors. Organizational-level barriers appeared to have the greatest impact on women, their experiences, and career trajectories. The most commonly quoted barriers included:

- **Trades as a male-dominated industry** – unwelcoming and non-inclusive environments; ingrained gender bias within the sector; lack of a critical mass of women

- **Common and pervasive bullying and harassment** – experienced regardless of the stage in a woman's career – and limited organizational practices and capacity to address it

- **Discriminatory recruitment, hiring, and advancement practices** – that prevent women from getting their foot in the door or obtaining the necessary skills and tools to advance

- **Lack of role models, mentors, and networks** – directly affecting the resources, supports, and capital available to women from pre-apprenticeship through to journey

Overview

We asked women about the barriers and challenges they faced that made it more difficult for them to finish their apprenticeship, find and keep a job in their chosen trade, and to advance in their career. Likewise, we asked participating employers, unions, and key stakeholders to identify the biggest challenges or barriers they thought women in the skilled trades typically faced, especially those tied to the workplace.

Overwhelmingly, the themes we heard echoed those from previous studies across Canada and the U.S. In particular, the trades were described as unwelcoming to women, with bullying, discrimination and exclusion as persistent occurrences. But, in addition to confirming what is already known about the challenges and barriers tradeswomen face, this project's findings pointed to the importance of the underlying, most often systemic, causes the barriers that women experience in their careers from pre-apprenticeship through apprenticeship to journey. In short, women's professional and personal trajectories occur in and are shaped by larger interpersonal, organizational, and macro-level (e.g., cultural, socio-political) contexts.

Multiple interviewees have told us that "we already know what those barriers are." As one stakeholder put it: "We've been doing this research for 40 years and we all come up with the same stuff, and the number of women working in the trades has not changed in 40 years. That tells me we're *doing* something wrong." To paraphrase, too often WIT initiatives focus on individual-level

considerations (e.g., increasing confidence) rather than the driving forces behind those barriers (e.g., unwelcoming environments).

Consequently, we adopted an ecological conceptual framework (see Figure 2) to provide a holistic way of organising and thinking about factors that affect women's entry, retention and advancement in the trades and, in turn, possible strategies for addressing those factors.

Figure 2   Multi-layered barriers and challenges: Conceptual framework
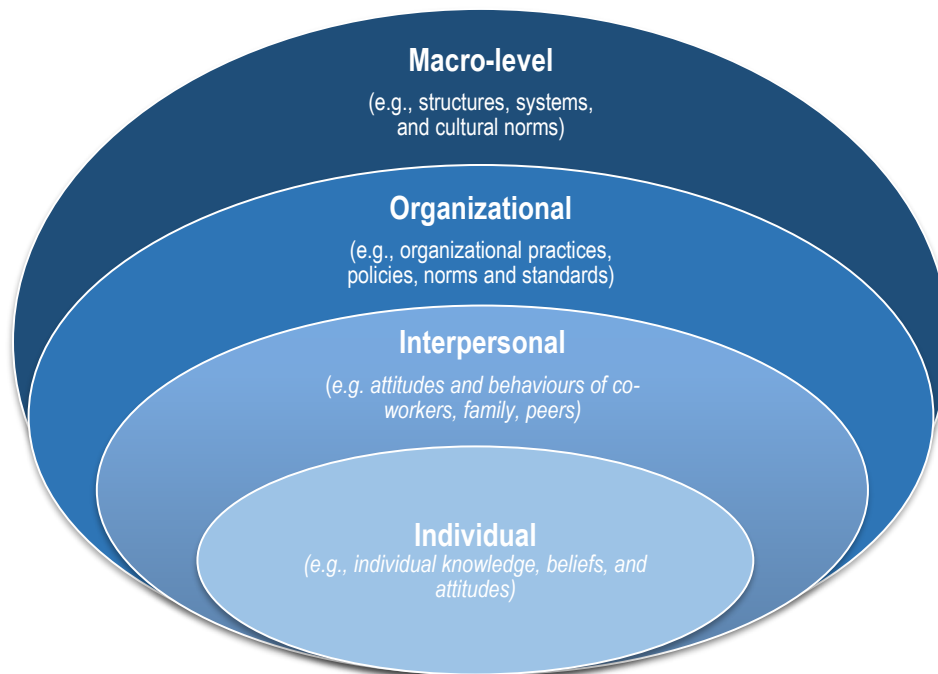
Macro-level barriers refer to structures, systems and cultural norms (e.g., on a societal or industry-level, such as gendered roles and expectations). Organizational barriers refer to organizational practices, policies, norms and standards (e.g., hiring practices, safety standards). Interpersonal barriers refer to attitudes and behaviours of co-workers, peers and family (e.g., bullying and harassment; informal networks). Individual-level barriers refer to an individual's knowledge, beliefs and attitudes (e.g., self-confidence, personal capital).

Our analysis placed at the forefront the stories and experiences we heard from women. Framing our analysis squarely in women's experiences ensures every subsequent piece of our analysis, including implications and recommendations for potential program design, is grounded in a holistic, person-centered perspective.

Our analysis also focused on the relative importance of reported barriers across the ecological layers as women progress through various stages of their careers. We were able to place and quantify the relative importance of these challenges using the results of the survey. Understanding the relative importance of challenges and barriers at different career stages and across the different layers can guide the development of timely, appropriate, and relevant supports for tradeswomen.

Figure 3 summarizes the barriers and challenges using the ecological framework. The barriers and challenges tend to be systemic in nature and to "trickle down" through the levels. For example, due in part to societal attitudes around gender roles and expectations, girls and young women systematically receive less exposure to the trades (tools, knowledge and skills) in schools and at home, and, consequently, often have relatively less social capital and resources available to them when they enter training and apprenticeship programs. Similarly, the lack of critical numbers of women in the trades restricts the availability of professional networks and limits the mentoring opportunities, either on-the-job or in a more formal setting. This often affects women's careers very early on and can continue to put them at a disadvantage with respect to social capital compared to their male peers throughout training and employment. Furthermore, note that the same barrier can have a different impact depending on the stage in the woman's career. For example, based on women's descriptions, experiences of discrimination, bullying and harassment tended to take a different form in pre-apprenticeship (e.g., being ignored/ not being taken seriously), in apprenticeship (e.g., being tested; sexist and vulgar comments), and in journey (e.g., persistent exclusion and isolation).

Before describing in detail the barriers that women working in the trades experience, we begin by briefly outlining the key themes across the stages of a woman's career, from pre-apprenticeship through apprenticeship to journey.

When reading the findings on barriers, it is important to stress that – despite the many challenges we heard about from all lines of evidence – women have overwhelmingly talked about their love for the trades, using words like "empowering," "rewarding," "independence" and "pride" to describe their work. A number of women followed up difficult stories with examples of support and kindness they received from individual mentors and colleagues; others talked about the "phenomenal" pay and benefits available in the trades. As one woman put it: *"I am a tradesperson and will say that quite proudly."*

Pre-apprenticeship

Despite the focus of this project on retention and advancement of tradeswomen, the participants we spoke to over the course of the research have inevitably referred to formative experiences pre-apprenticeship, in particular, the prevailing attitudes and ideologies around gender roles and expectations. The trades are generally not seen as a field for women: it does not fit with what is expected of girls early on (e.g., expected interest in the caring professions). The inherent gender bias translated into systematic under-promotion and under-exposure of trades to young women and girls and, at a family- or peer- level, and in the negative influences of parents in teachers. At an individual level, this compounded into two key barriers pre-apprenticeship: women entering the trades 1) often start on an uneven footing (e.g., trades-related knowledge, tools and skills) compared to their male peers and 2) have relatively more misconceptions and misinformation about the trades. In general, the barriers pre-apprenticeship were viewed by the study participants as exerting an influence on the earliest exposure to trades, the effects of which reverberated throughout the women's careers.

Apprenticeship

The apprenticeship period was overwhelmingly identified by women as a pivotal but painful period to get through. Across all the focus groups, for example, there was a strong sense of having to bear through the apprenticeship period and of wanting to tell other women apprentices to "stick it out": "Don't give up!" "Don't be deterred" "Stick with it!" As described by one woman: "there is not a lot of power as an apprentice [but] as soon as you get that ticket, it gets better." Unfortunately, the majority of women who leave the trades tend to do so during the course of their apprenticeship.

While many of the barriers experienced in apprenticeship were common to both pre-apprenticeship and journey, the impact of some of the barriers appeared more pronounced during the apprenticeship period. First, women described multiple examples of discriminatory recruitment and hiring practices that prevented them from "getting their foot in the door" and advancing in their careers. Second, women tended to emphasize the impact that the lack of mentors, networks, and supports (e.g., from employers or unions) can have during apprenticeship. Women have described the dominant feeling of loneliness, especially when faced with discrimination, bullying and harassment, with few or no resources available. As one woman who left the trades described: "I was so worried about being a female in trades that I thought I needed to be tougher than anyone else, and couldn't cause any problems, and needed to just roll with it. I think I kind of imposed that on myself. And I bet you a lot of people do that (…)." In many cases, women described not being adequately prepared for the realities of working in a male-dominated industry. The barriers women witness and experience during the apprenticeship period reinforce in them the belief that no matter how hard they try or how good they are in their trade, they will continue to face challenges in their ability to advance their careers and, consequently, many women chose to leave the trades in pursuit of other professions.

Journey

By the time women reach journey-level, they are well-aware of the realities of working in their trade, have already experienced some of the interpersonal barriers, and developed coping strategies for dealing with them. At this stage, organizational-level barriers were those most frequently brought forward in interviews and focus groups in reference to journey. In particular, discriminatory hiring and advancement practices continue to serve as key barriers as tradeswomen often struggle to find employment and advance on the job. As one journeywoman with multiple years behind her belt put it: [When you apply for a job] "they don't even ask if you have a ticket. They just ask, do you have experience. They automatically assume [that you don't have a ticket] and give you a cold shoulder." The other most prominent themes related to the policies and practices to address harassment as well as gender-specific health and safety concerns. One journeywoman who left the trades after over a decade of residential and industrial work summarized it: "I'm pretty tough and when they guy was bullying me, I could stand it cos I'm patient. [But after many years of inhaling fibreglass and having my back messed up], I was tired of all the bullshit."

Figure 3   Barriers to women's entry, retention and advancement in the trades

Level	Barriers	Pre-Apprenticeship	Apprenticeship	Journey
Macro	Negative image and attitudes to the trades	✓		
	Societal attitudes and ideologies around gender roles and expectations	✓	✓	✓
	Trades as a male dominated industry	✓	✓	✓
Organizational	Lack of role models and networks at an organizational level	✓	✓	✓
	Less awareness & exposure to career choices in trades	✓		
	Less exposure to trades in general (tools, knowledge, and skills) in schools	✓		
	Lack of mentors in the workplace		✓	✓
	Discriminatory recruitment, hiring and advancement practices		✓	✓
	Limited organizational practices and capacity to address harassment and discrimination		✓	✓
	Gender-specific health and safety concerns		✓	✓
	Inflexible workplace policies and practices		✓	✓
Interpersonal	Bullying and harassment	✓	✓	✓
	Lack of role models, mentors, and informal networks	✓	✓	✓
	Negative influences of parents, teachers and counsellors	✓		
Individual	Starting on an uneven footing	✓	✓	
	Misconceptions and misinformation about trades	✓	✓	
	Financial barriers	✓	✓	
	Work/ family balance		✓	✓

Entry   Retention   Advancement
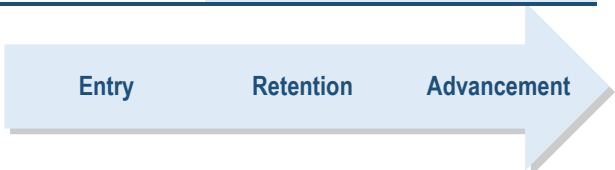
Macro-level barriers

Societal attitudes and ideologies around gender roles and expectations

At the macro-level, societal beliefs around gender roles and expectations serve as a driving force behind women's trajectories in and out of the trades. Being a tradeswoman is often seen as an oxymoron: you cannot be both because what is expected of a woman and a tradesperson are perceived to be two different things. Many interviewees described the culture of trades as one that is at odds with the "female culture":

> *"[He] said I was a great worker, but he just couldn't get over the fact that I was a woman doing that kind of work."*

> *"The culture of construction is 'You shut up and you fit in.' Men are socialized into competition. That's what it's like in the trades. It's all about competition, it's all one-upping, it's sort of in fun but you give little jabs whenever you can, and then you get points because you give jabs, that's the culture (…).Women's culture is a circular culture: that sense of mutual support. There are pluses and minuses to both of these cultures, we can learn from each other."*

> *[If a woman is on the site, she's], "always assumed to be the first aid attendant."*

These gendered ideologies are a barrier early on, starting from family's influences with respect to what girls are taught (e.g., less exposure to tools and trades-related tasks and knowledge by parents compared to boys) and expected to do and be, through influences of school counsellors and peers (e.g., trades schools as a career option), to women's interpersonal experiences on the job (e.g., managers skepticism around women "being there in the long run" translating into fewer training opportunities). Many women indicated they have to continually shape and re-shape their identity in order to fit in and prove they belong in the trades.

Many interviewees suggested that the goal of increasing the numbers of women in the trades is, at the core, about a cultural shift. As one interviewed expert put it:

> *"It doesn't matter how well the woman is trained. Her gender, it's just like colour, those things that we cannot change are in their faces (…). What we're doing is changing the culture and that's really slow."*

Right now, the numbers of women in the trades are extremely small; they are still considered the "token" or the "exception." Women described multiple situations of being let go from jobs because employers and workplaces "didn't know what to do with them." Whether it's about a lack of women's washrooms, lack of tools and resources for management to deal with bullying and harassment, or inadequate workplace policies to deal with gender-specific health and safety concerns, the general conditions are such that they reinforce – rather than address – those gender roles and expectations.

Negative image and attitudes to the trades

Related to the first barrier is the theme of negative image and attitudes to the trades: we heard from participants that the trades as a whole are often perceived as a hard, dirty, and unattractive profession. Employers, in particular, suggested that the advantages of the trades as a career are not

adequately communicated, especially to women, such as the financial rewards, being able to take pride in one's craft, and the learning opportunities available. While women tended to link this prevailing image of the trades to the male-dominant culture of the trades, employers were more likely to attribute it to the lack of information by parents and teachers around the benefits of the trades, who consequently discouraged young women and girls from taking it up as a profession. In either case, interviewees were quick to identify attitudinal barriers to working in the trades (one's own attitudes as well as those held by other significant people in their lives) as a key reason for delaying their entry. Once women do enter the trades, however, they often have relatively more misconceptions and misinformation about the trades compared to their male peers. In focus groups, we heard many women give advice that encouraged their younger selves to challenge prevailing attitudes about gendered work in the trades, evident in advice soundbites such as: "Don't let anyone tell you what to do in life." "Don't let anyone tell you [that] you can't do it!" "Buck the female stereotype!" "You can do more than you ever thought!"

Trades as a male dominated industry

It is undeniable that the skilled trades are male-dominated. The lack of a critical mass of female workers in the workforce makes it challenging for any sector to produce outcomes that reflect the diversity of the workforce. We heard from our participants that the industry as a whole is slow to adapt to the needs of the changing workforce as a whole, be it women or visible minorities. Women face what's been described as "the old boys' club mentality" of the trades, dealing with pervasive exclusion and isolation:

> *"Some journeys and foremen just don't want women there."*
>
> *"The problem is partly misogyny, the men are threatened very deeply with our presence there."*
>
> *"I've seen the mentality of guys in school and on job sites, and it can be quite unpleasant."*
>
> *"I think that's going to be a hard one to change, that stigma, old way of thinking (…). I never hesitated for a second to hire a girl, but I know how old trades guys think, and I know it's sort of ingrained in them."*

While some companies and workplaces are leading the way in implementing policies and practices to respond to the increasingly diversifying workforce, in almost all of the interviews, the industry as a whole was described as "not welcoming" to women. As a result, there is a widespread, ingrained gender bias within the sector. Although more subtle and less visible than overt sexism, racism, or other kinds of discrimination, this form of prejudice can still affect recruiting and hiring decisions, making it more difficult for women to enter the skilled trades workforce. Furthermore, this bias can hinder the professional development of women already working in the trades, as it may limit their access to on-the-job tasks that require higher skills and that would eventually lead to advancement opportunities.

Organizational-level barriers

Organizational-level barriers are in large part driven by the macro-level barriers described above. Importantly, our findings underscore that schools, companies, and worksites overwhelmingly lack the tools and resources to change the underlying conditions that would allow more women to enter, stay and advance in the trades.

Less awareness and exposure to career choices in trades

Less awareness and exposure to career choices in trades were identified as initial organizational-level barriers in pre-apprenticeship. High schools in general (including teachers and counsellors) were described as systematically underexposing girls to the trades in schools. Girls not only do not realize the full range of options around possible careers in the trades but what they do know is often not in line with the reality of the industry as a whole or of the specifics of each trades. Women in the focus groups identified this barrier as one that affected their overall pre-apprenticeship experience: *"I don't think a lot of girls in high school are aware what kinds of things you can be in the trades world. I think more women would be rather interested if they heard it's not just a bunch of dirty work."* Many women also perceived the lower awareness and exposure to career choices in trades in schools as limiting their ability to develop important trades skills and knowledge throughout pre-apprenticeship.

Less exposure to trades in general (tools, knowledge and skills) in schools

Less exposure to trades was described as a top barrier in pre-apprenticeship and one that exerted a high impact, directly affecting individual women's trajectories in the trades. Specifically, women were repeatedly described as having relatively less exposure to trades-related tools, knowledge, and skills compared to their male peers – both in high schools, but also during pre-apprenticeship programs. For example, women gave multiple examples of not being given equivalent learning opportunities as their male students in pre-apprenticeship programs, as instructors "did not take the women seriously," automatically put them in the slow group without regard for ability, or limited their choice of projects to work on. Most participants attributed this gap as resulting from the macro-level factors, as described above.

However, many women also said that schooling and pre-apprenticeship programs do not effectively communicate and/or prepare to women for the realities of working in the trades or the challenges of the job market. Some felt the push to get more women in the trades was happening at the expense of finding the right match for women and equipping them with the right tools. This organization-level barrier was seen as resulting in starting on an uneven footing at the individual-level, and once women enter the trades, the surprising realities of working in the trades affect their ability to stay and advance in their careers. Women identified a number of informational barriers, including lack of information and knowledge about: (a) practical experience of the day-to-day work in their chosen trade including its physical demands; (b) workplace culture, including day-to-day realities of bullying, harassment and isolation, and tools to deal with them; and (c) job and labour market information, including gender-based barriers to employment.

> *"I wasn't ready for the reality that it was going to be like that. When I was doing exams for the schools, I wish somebody told me this was the reality. But they are trying to get more women into the trades, so they're not really going to tell them, look the reality is that when you're done school (…), it doesn't matter what skills you have, you're going to pull cables for two years."*
>
> *"I've never met a woman who can't do the work, but they don't know what the workplace culture and environment is really like when she goes to work every day."*

Lack of role models and networks at an organizational level

Lack of role models and networks was identified as an organizational-level barrier occurring at all three phases, from pre-apprenticeship to journey. In many ways, women described this barrier as exacerbating the effects of other barriers they experience. Overwhelmingly, the lack of supportive networks prevented women from being able to access resources and information at critical points in their careers. Women repeatedly described being "the only woman in school, the only woman at work" and not having role models to draw from or peers to connect with who may have had similar experiences. In pre-apprenticeship, women felt that not having "successful women in the trades" be part of their program (e.g., as an instructor or guest speaker) prevented them from having full information and therefore making more informed career choices. In apprenticeship, the pivotal period for women's retention, the lack of networks at an organizational level was most felt as women experienced struggles with bullying and discrimination, as they navigated those experiences "alone." The existing literature has amply described the pressure tradeswomen early in their careers feel to "fit in" and "be better," such that they tend to leave any incidents unreported, often for the fear of being further alienated and unable to secure another job. The lack of networks, at an organizational level, effectively limit women's social capital and their ability to reach out to supports and resources during critical times, most often resulting in leaving the trades. The lack of networks continues to impact women's journeys, limiting their job and learning opportunities, and putting them at a systemic disadvantage throughout their careers.

Lack of mentors in the workplace

Related to the lack of networks is the theme of the lack of mentors in the workplace, which serves as a barrier for women in two ways. Firstly, the general lack of mentoring programs in the workplace negatively affects tradeswomen more than men, because women already begin their careers at a disadvantage compared to men (e.g., limited networks, lower social capital). The lack of mentoring programs may further exacerbate any gaps in skills and knowledge. Secondly, where mentorship in the workplace does exist, our findings suggests that it may not be available and accessible to women. Women described numerous experiences during apprenticeship and in journey where they were not afforded the same learning opportunities as their male peers. Starting from the general resistance to having women be part of the trades industry at the macro level, at an organizational level it is often assumed that the woman (as she is frequently the sole woman on the crew) "is not in the trades for the long haul" and therefore what is the point of training her. The inequitable access to mentorship opportunities in the workplace was often conveyed through the language managers and supervisors used, such as "crew and Joan," which provided subtle cues that the tradeswomen are in a different category from the rest of the crew.

Discriminatory recruitment, hiring and advancement practices

Beginning at the earliest stage in their apprenticeship, the majority of women said they've experienced some difficulty finding and securing work, often as a result of limited networks. However, the top barrier to employment women identified were discriminatory recruitment, hiring and advancement practices at the organizational level.

Women expressed frustration that they were not treated like everyone else; that they were not judged on the basis of their skills and abilities; that there was a systemic gender bias in hiring. In the most overt cases, interviewees mentioned employers who were "known not to hire women." In the more covert cases, women gave multiple examples of learning about job openings and being told the openings were not there once they came in to apply. Many women talked about never hearing back to their applications and suspecting a gender bias. Others described situations where employers explicitly said not to leave a resume and not even asked about their skills and experience. Women and stakeholders whom we interviewed said that one of the hardest things was just "getting their foot in the door" – both with employers and unions. To this end, some women identified certain policies or practices of their union – such as targets for female membership – as positive factors for both assisting women in getting their foot in the door and retaining women, particularly during the first two years of apprenticeship. Stakeholders also talked about companies "known to be bad environments for female employees" where women were discouraged from applying in the first place.

> *"I had a previous supervisor give an extremely good recommendation to another company, and they told him they would hire me. When they called me and found out that I am a woman, they did not call back. I'm a First Nations woman as well, and so naturally I thought I'd be a priority at the mines going on in my area. They've told me they aren't hiring at their job fairs."*

> *"The biggest barrier is trying to get jobs and convincing contractors to hire women. Contractors don't want to make the jump for the most part."*

> *"That employment piece is the piece that tends to get missed a lot. In my opinion is that it's actually a tricky piece, it's not easy. You can control what's in a training program, but can't control what an employer is going to do."*

The early experiences with gender-biased hiring practices led quite a few focus group participants to employ strategies to blend into the male-dominated field not only by modifying certain aspects of their personality but also by masculinizing their first names on their resumes or going by their initials only. Even so, calls from interested employers who would assume they are speaking to a man would often "go cold" once it was clear the apprentice was female. Many women talked about the frustration at sending out their resumes and not hearing back (or hearing there are openings, calling to inquire, and being told there are no openings).

The discriminatory recruitment and hiring were not just specific to apprentices. We heard from journeywomen who described similar experiences. Initially, many tried to explain away their challenges with finding employment. As one experienced red seal journeywoman told us, *"When I started looking and couldn't find work thought at first that maybe it's the economy (…); maybe it's just a fluke* [that he didn't want my resume]*."*

In terms of advancement, discriminatory on-the-job practices were often described as affecting women's ability to gain work experience and advance in their careers. Women reported they are less likely to be exposed to the full range of trade skills, because of gender-biased decisions made about what women apprentices "can and cannot" do in terms of the work:

> *"You're not getting enough experience to feel confident to write ticket [because] the bulk of your experience or tasks are focused only on one particular aspect of trades. For example, most of my apprenticeship I did lots in working with plastic, not steel because my journey was uncomfortable with a woman working around steel."*

Starting in apprenticeship, some women spoke about getting only one type of work experience or exposure to only a limited set of tasks (e.g., women being assigned to clean up jobs or paperwork). We heard from women who had been passed over for apprenticeship openings or offers in favour of younger, less experienced men. We also heard there was a serious shortage of full-time hours available to apprentices, especially in some instances that accumulating hours in upper year apprenticeship was particularly challenging as a result of employers preferring to hire less expensive 1st and 2nd-year apprentices. Other even reported taking pay cuts or working for free in order to gain work experience in their trade.

For some women, not being given the same opportunities as male colleagues meant being unable to complete their apprenticeship or remaining under-skilled. For others, inequitable advancement meant limited training, lack of mentorship, and being less likely to be promoted. One woman who has left the trades after being unable to find a job where she would have been able to apply her skills summarized her experience: *"Disappointment. Massive disappointment. Because I loved it and I was good at it, and it definitely was the life that I wanted. Heartsick. Exhausting."* Many other women echoed these feelings of constantly fighting an uphill battle to enter, remain and advance in their trade due to organizational practices they felt were discriminatory based on gender.

Limited organizational practices and capacity to address harassment and discrimination

One expert emphasized that the key to having more women in the trades is not more training programs, it is retention: *"If you have happy women in the trades, then you'll get the women."* Unfortunately, our findings suggest that bullying, harassment, and discrimination are ever-present and that employers generally do not have the organizational capacity to deal with it. Limited organizational practices and capacity to address harassment and discrimination were described as a top barrier for women in both apprenticeship and journey. In general, workplaces were described as "not knowing what to do with the women" when problems arise, with the lack of training and tools for management as a key factor.

We heard multiple examples of women being subjected daily to sexualized comments, peer-exclusion, harassment, and, in the extreme, physical or verbal assaults. These experiences are described in detail in the section on interpersonal barriers. At the organizational-level, however, the company or management response (or lack thereof) to such events was identified as a key barrier to keeping women in the trades, because of its strong impact, not just on individual women, but the perceived culture of the industry by both men and women.

The absence of enforced workplace policies around bullying and harassment created many troubling examples of tradeswomen being victims of clear cases of inappropriate conduct without appropriate recourse. In cases of bullying and harassment, many participants described receiving no or inadequate support from foremen, supervisors, or apprentice sponsors and – most importantly – no or inadequate support from individuals in a position of power or authority. For example, one women said that after complaining about sexually explicit language being used at work, the foreman removed pornographic materials from the site, but the men continued to use sexually explicit and derogatory language, with no further action from management. Again and again, we heard that instances of harassment or problem behaviours were typically dealt with the woman being moved – rather than the person responsible for the behaviour being reprimanded or moved) – to deal with the problem. As one person put it, management lets the woman go "because they don't know how to handle the crew." Women also described countless examples where complaints were either ignored or resulted in few positive changes to their work environments.

Importantly, what we heard in the course of this study is that the way in which instances of bullying and harassment are addressed at the organizational-level more often than not creates a climate where women are reluctant to complain and bring issues forward. Women have shared with us their fears of retribution from co-workers and peers; fears of being let go or fired; fears of being "blacklisted" as the one who complained or "caused trouble;" and fears of having limited employment opportunities in the future. Consequently, we heard that women overwhelmingly under-report instances of harassment and discrimination. In some cases, women have told us that they were *"saving the one time I go to the union [with a grievance] for the really big instance."* In other cases, they were outright discouraged by peers from launching complaints: *"You know [name of town] is a small town, so you may never be able to find a job [if you do report this]."* In general, when working in unionized environments, women felt safer and more comfortable bringing up complaints through the union.

At an organizational-level, this barrier was described as both not wanting to deal with the problem, but also not knowing *how* to deal with it. In some cases, policies and procedures existed "on paper," but were not actively enforced and communicated by leadership. Beyond setting codes of conduct and implementing policies, the tone set by leadership was also identified as a driving factor, trickling down to supervisors, crews and individual workers, and further reinforcing the culture of treatment and inclusion of female employees.

Gender-specific health and safety concerns

Women we spoke to raised several troubling health and safety concerns that served as barriers to their continuing on in the trades. Most notably, women talked about:

- Lack of safety equipment or improper equipment

- The trades being hard on their body due to unsafe workplace practices

- Unsafe work environments, particularly exposures to chemicals and particles

The bulk of the concerns raised over physical safety while on the job revolved around poor fitting personal and protective equipment – harnesses, gloves, and other equipment that companies are responsible for providing to employees that are often ill-suited for women. In several instances,

poor fitting of protective equipment was identified as the main reason behind a number of accident near-misses – including near-miss falls and accidents with machinery. Importantly, women described several instances where not being given proper materials and equipment to work with was used by the foreman and other crew members as a form of bullying, in essence, sabotaging the women and their work.

Many women expressed concerns arising from lack of access or inadequate access to proper washroom facilities, despite these being mandated by law to provide women employees. Health concerns revolved mostly around bathroom facilities not being within a reasonable distance or being unhygienic. In some instances, female bathrooms were the site of degrading and sexualized graffiti, some of which made a few women fear for their safety.

On the other hand, some interviewees indicated that hiring tradeswomen often resulted in positive health and safety changes in the workplace. There was a general sense that health and safety is sometimes compromised by a masculine culture of competition (i.e., "who can carry more"):

> *"Trades, in general, are really male dominated, so being a woman in trades is already nerve wracking, because of all these men around you all the time, and they are all used to this environment where they can be all rowdy and everything. And then suddenly there is a woman in that environment and they have to actually follow code, workplace safety, and all that."*

Multiple participants said that this type of workplace culture was hard on the men too, with many workers feeling the pressure to stay silent rather than raise concerns.

Finally, a major area of concern expressed by women was the exposure to toxic chemicals on worksites or physical demands of their job if and when contemplating pregnancy/family planning. Some women described having made the decision not to have children *as a direct consequence of their choice to work in their trade*, whereas other had many unresolved questions regarding their rights to request specific supports or whether it would even be possible for them to remain in their trade after having children. For many, there appears to be a very difficult choice to be made: either they choose their trade or they choose to have a family.

Inflexible workplace policies and practices

The final theme related to inflexible workplace policies and practices, which women identified as a barrier to retention, especially as women navigated their work and family responsibilities. The key challenges were:

- Having to work full-time; no ability to reduce hours of work

- 7am-3pm schedules

- Frequent travel and out of town work; frequent scheduling changes

- Lack of childcare support; inability to find childcare to fit work arrangements

Women talked about the fact that more often than not the bulk of the home and family responsibilities falls on them and therefore the inflexible workplace policies and practices affect them more or in different ways than they do their male colleagues. In some cases, women uprooted

their families to "follow the work," but in others, women were unable to travel because of children and family considerations, and were either limited to local opportunities or risked being let go if they refused to travel. The inability to find childcare to fit their workplace arrangements and an overwhelming lack of workplace supports to allow women to better balance their work and family responsibilities was a key barrier.

Finally, we heard that many women leave the trades either when they plan on having a family or immediately after. Some women identified both a lack of information as well as a lack of support around parental leave from employers as a barrier to staying in the trades. They described a desire to come back to work part-time as they transition off of parental leave EI, so that they don't lose their tickets, but not being allowed to do so. In some cases, "it was easier not to renew [the ticket]." As one woman put it when describing the realities of working in the trades and the lack of flexible workplace practices to address them: *"I'd leave too if I planned to have children."*

Interpersonal-level

Negative influences of parents, teachers and counsellors

While the school system as a whole was perceived to systematically underexpose and under-inform women about the trades, the negative influences of parents, teachers, and counsellors was also felt by women and affected them on an interpersonal level. We heard countless examples of the lack of support women received from teachers to active discouragement from counsellors, family and friends from entering the trades. The women who chose to enter training programs despite these barriers continued to face negative comments from instructors (e.g., sexist comments, being ignored) or from family and peers (e.g., not being taken seriously). In short, from very early on, women described feeling isolated, often being the first and only woman in family or school.

Lack of role models, mentors, and informal networks

Closely related to the theme above, women experience a lack of role models, mentors and informal networks, which serve as a key barrier that begins early on, and continues to affect women throughout their careers. There is an overwhelming sense that women feel of isolation and loneliness, and a lack of role models or mentors on an interpersonal level to draw on for social supports or social capital. We heard again and again that women *"don't feel welcome," "have no one to talk to,"* and struggle to build *"bonds"* at work. While this barrier is in some ways a by-product of the low number of women in the trades, many of the participants talked about this barrier as resulting or "trickling down" from organizational-level policies and practices. In particular, the type of culture that is set by leadership largely affects women's ability to find mentors and networks at an inter-individual level. If a supervisor turns a blind eye to verbal harassment or a foreman openly undermines the tradeswoman, so do other crew members. This further limited women's opportunities to be mentored and to build networks.

Women also described the continued isolation and alienation from other women working in trades. Many women highlighted a chilling effect after being forewarned – usually by male colleagues – about the dangers of being seen to associate with certain other female tradeswomen. As described by one participant, *"I was told by someone from the union that getting associated with a certain*

*person [a woman] could be detrimental. This was a highly educated tradeswoman and was perceived
as a threat because she could cause problems because she doesn't back down."* The general consensus
was that this can cause a sense of alienation among tradeswomen and in some instances self-
imposed isolation. Some women may be reluctant to be associated with a women-specific group,
out of concern for being labeled as difficult, a feminist, or *"one of those women"* and out of fear for
the negative consequences this may have for them on an interpersonal level. For some women, the
desire to remain unaffiliated with a women's initiative is deeply embedded in a sense of desired
independence and, for some, a philosophical opposition to having their gender be used in any way –
whether positively or negatively – as a basis for judging their merit as a tradesperson or to receive
specialized supports.

Bullying and harassment at work

Bullying and harassment were the most frequently referenced and highly impactful barriers women
discussed at the interpersonal level, experienced from pre-apprenticeship through to journey. The
majority of women reported experiencing bullying and harassment on a regular basis:

> *"You literally feel degraded daily."*
>
> *"You can't even take it for a second, you've got to be brave to go to work."*

Highly sexualized work environments (e.g., colleagues watching pornography while at work,
sexually explicit language used often and daily) also appeared to be the norm for most women.

In addition to the daily exposure to sexist behaviour and sexually explicit language, many women
said they experienced unwanted physical contact by colleagues. In one group, almost half of the
women reported being sexually assaulted by a colleague, with one commenting that this is
"probably one of the reasons a lot of women leave [the trades]."

The bullying women described tended to take many different forms: women described being
sabotaged; experiencing intense jealousy from male co-workers; being continually tested; "not
being taught"; male co-workers "finding joy" when you have made an error; being made example of;
being emotionally bullied. Some suggested that *"when physical abuse decreases, emotional and
mental abuse increases."* In many instances, women described the work environment they faced as
"proving grounds" in which male colleagues would *"test you physically first, and then if you pass, they
test you psychologically."* On the other hand, some women also described the difficulty in striking
the right balance between demonstrating their skills and aptitudes in their work while remaining
unthreatening to male colleagues. According to one participant, *"you outwork, you outperform them,
so now you're a threat."*

Two seasoned journeys described their experiences with bullying and harassment, and the impact
it has had on them:

> *"You have to be very strong, you have to be like one of the men. If you reject them or say that they are assholes, you will be isolated, and it will be hard to work. So you joke and speak with them, but don't go in their games. I was joking and having fun. You have to go with it to survive. The guys don't have too much respect or class."*

> *"I have a thick skin, and it still affects me. I think of quitting every day."*

Alongside sexism, some interviewees pointed to racism as another driving force underlying bullying and harassment. As one woman described:

> *"Daily pervasive racism, that's so hard and so exhausting. You can't let it go. If you're picking it up, you're always at odds with your co-workers (…). In many ways, you're a lot more likely to get sexism addressed than racism addressed."*

Likewise, employers also identified bullying and harassment as a major barrier to women's retention in the trades, as well as a challenge for them to respond to:

> *"It's the subtle, quieter thing that the bullies do to women that are the worse because they happen slowly over time and they wear people down. The more blatant bullying that goes on, that's easier to deal with, because you can see it and it can be dealt with quickly, but the things behind the scenes when somebody's back is turned that you see that's really troubling. It's not fun to have to go to work and deal with that kind of shit."*

In general, the presence of *"guys who treat women like dirt"* or *"unruly journeymen"* was exacerbated by the lack of organizational practices and capacity to address bullying behaviours. As already described, we heard about women having to navigate these interpersonal experiences within unwelcoming and unsupportive, and sometimes outright hostile, work environments.

Finally, women regularly described the need to develop skills and strategies to deal with ongoing bullying and harassment. Several women expressed that succeeding in the male-dominated workplace culture demanded that change or hide certain aspects of who they are: *"we need to change who we are to fit in."* Often, this was expressed in terms of becoming "harder" or "colder" in order to hide from co-workers and supervisors any perceived weaknesses as a result of being a woman. For one woman:

> *"My coping strategy was to emasculate them using humour, so that instead of them degrading you, you're degrading them instead – they're pointing and laughing at him instead of them laughing at me. But this strategy doesn't change the underlying problem, and not everyone has that coping strategy."*

Individual-level

Starting on uneven footing

Many focus group and interview participants noted the long-lasting effects of the macro- and organizational-level barriers they encountered on their career trajectories. For example, with the exception of those few who had a family member or other close contact to introduce them to a trade in the early formative years, many of the women described entering the trade with relatively less prior knowledge of and exposure to the trades (tools, knowledge, skills), having few role models and mentors, and limited supports from family and friends. At the individual level, these barriers

resulted in lower self-confidence, as well as lower social supports and capital, in effect, causing women to "start on an uneven footing" as they began their careers in the trades. Women often felt this was a key barrier for them in advancing and completing their apprenticeships, as they lacked the needed resources, information, and supports, especially during pivotal periods.

Misconceptions and misinformation about trades

A related theme to the above was one of misconceptions and misinformation about the trades, which was identified as a barrier that prevented women from continuing on with schooling and through their apprenticeships. Whether because of formative early influences from parents, teachers, and counsellors, many women described having unequal access to information about careers in the trades or having very limited or incorrect information about the trades in general. Employers and service providers also echoed these comments, especially as related to the need to provide an accurate description of the trades to women, including information about the realities of the trades and having the full awareness of the practical requirements of the work. In many cases, these informational barriers resulted in women entering the trades to face disappointments, experiencing what they did not expect or were not prepared for, or making the wrong choice of trade altogether.

A strong subtheme was one of knowledge regarding the physical demands of the work, with women do not realizing the full extent of impact working in the trades would have on their bodies: "Trades don't make you stronger, they deteriorate" [your health, body] and men to put their bodies on the line even more." Women often linked this challenge to the overall lack of health and safety practices that would help them mitigate the physical demands of the work.

Although there was a general consensus among women that things were getting better in terms of access to information about careers in the trades, information barriers were still identified as one of the largest barriers to women accessing the trades. One specific aspect that women would come back to was their disappointment upon learning that they couldn't do what they thought they would (and could) do when they entered the trades. Many women talked about the lack of a personal approach, both at the union and at the employer-level, that would have allowed them to be better matched to apprenticeships and therefore succeed in their chosen career:

> *"If there was a personal approach to it (…). If I could speak to the company and say, this is what I enjoy, I've tried it I'm good at it. Pulling cables hurts my back, I'm not that strong. I have a lot of experience from my former life, I have education, so I can put this into certain areas of electrical apprenticeship. I can be really good at it, trust me, I don't want to just be a number through the system."*
>
> *"I feel like they advertise how much they want apprentices, but they don't really do anything to help you get there. They'll just go down the list with your marks and not your experience. You're just a name on the list. They have no idea of who I am."*

Finally, many women also cited a general lack of knowledge about access to the apprenticeship system and programs, as a barrier.

Financial barriers

Several participants indicated the challenge of remaining financially afloat during their training periods in apprenticeship. Though post-apprenticeship wages may be more attractive than alternative occupations, there is a short-term opportunity cost of pursuing a trade during periods of apprenticeship in the form of comparatively lower wages. Women with families, and especially single mothers, were almost unanimous in describing the financial hardships during their training periods, with some saying they were currently contemplating whether or not to return for their next training period. Some also noted examples of unequal pay (i.e., getting paid less than men at the same level; taking a pay-cut to stay) and challenges they face with maintaining funding levels in the face of changing conditions (i.e., when funding stops after level 1; long waits to get EI when laid off; lost wages for each funding period).

Work/ family balance

Women described the challenges they experienced at the individual level with maintaining work and family balance. Some of the specific challenges related to finding daycare; not having kids because of health risks; seen by others on-site as jeopardizing an unborn baby by being pregnant on site; lack of info on MDSD on pregnancy; and leaving children when working out of town. In general, participants related these challenges to the larger organizational and workplace contexts (e.g., inflexible workplace policies and practices; discriminatory practices; lack of networks).

Regional, sectoral, or occupational variation in these barriers

Our findings suggest there is little variation in these barriers by region, sector or occupation. One woman described her perceptions of a tradeswomen group she used to take part in: *"We used to tease each other about the [different] materials that we each loved to work with, but the incidents, the conditions, and the way we felt, and the things that made it hard for us to carry on, I never noticed any difference."* Some differences participants identified related to the barriers being more pronounced or being prevalent to a higher degree in the North or on industrial projects. For example, some interviewees suggested that the lack of washroom facilities was more common in the North, and that bullying and harassment tended to be more prevalent on large sites, industrial projects, and on sites with fewer safety officers. Some women believed that unionized worksites tend to be *"safer, kinder, gentler, more inclusive and with less bullying"* while some employers have suggested that bullying and negative attitudes more often come from other trades (and not from company employees). Finally, with respect to differences by occupation, while some employers believed that certain trades had a better reputation than others, women largely did not report differences in barriers.

Validating the significance of barriers: survey responses

A survey was distributed to a sample of tradeswomen to ask (among other things) about the most common and challenging barriers they had encountered over the course of their careers. One hundred responses were received, and the results are summarized below.

The relative importance of different barriers was assessed by asking about both a) the degree of challenge each barrier represented (ranging from not at all challenging or not applicable, to extremely challenging), and b) the frequency at which each barrier was encountered. A particular barrier was defined as a significant challenge if it was rated as moderately or extremely challenging, or if it happened often or always. Thus, in addition to barriers that were both challenging and frequent, we classified barriers that were intensely challenging even if they happened rarely, and barriers that were less challenging but happened frequently, as significant challenges. A barrier was classified as not challenging if the respondent answered that it was not applicable to them, or not at all challenging.

Using this quantitative methodology, we found considerable alignment between significant challenges identified by survey respondents and the barriers just described, as identified in focus groups and interviews. As they did in the focus groups and interviews, most significant challenges identified by survey respondents reflect a lack of organizational capacity to address discrimination, harassment, and health and safety issues in the workplace as well as to offer mentorship. Discriminatory recruitment, hiring, and advancement practices were also identified, as well as challenges in the area of work/life balance.

In some areas, the survey measures do not provide the richness of detail that emerged in the focus groups and interviews; however, in others, the survey may provide a more confidential way for women to identify specific areas of concern they may have been less inclined to communicate in a group setting. Thus survey measures may provide not only a means of aligning and validating the themes that emerged in the focus groups but also a potential source of complementary information.

Lack of role models, networks and mentors

Lack of female co-workers to learn from and exchange information with was identified by the highest percentage of survey respondents as a significant challenge (Figure 4). The lack of female role models and networking opportunities with other tradeswomen were identified as significant challenges to their work by 67 and 60 percent of respondents respectively. Furthermore, only 14 percent of respondents felt that they had no challenges in either of these areas. In addition, over 50 percent of respondents identified lack of mentors and lack of role models in general as significant challenges, while only a little over 20 percent felt that these areas were not a challenge.

Figure 4   Lack of role models, networks, and mentors
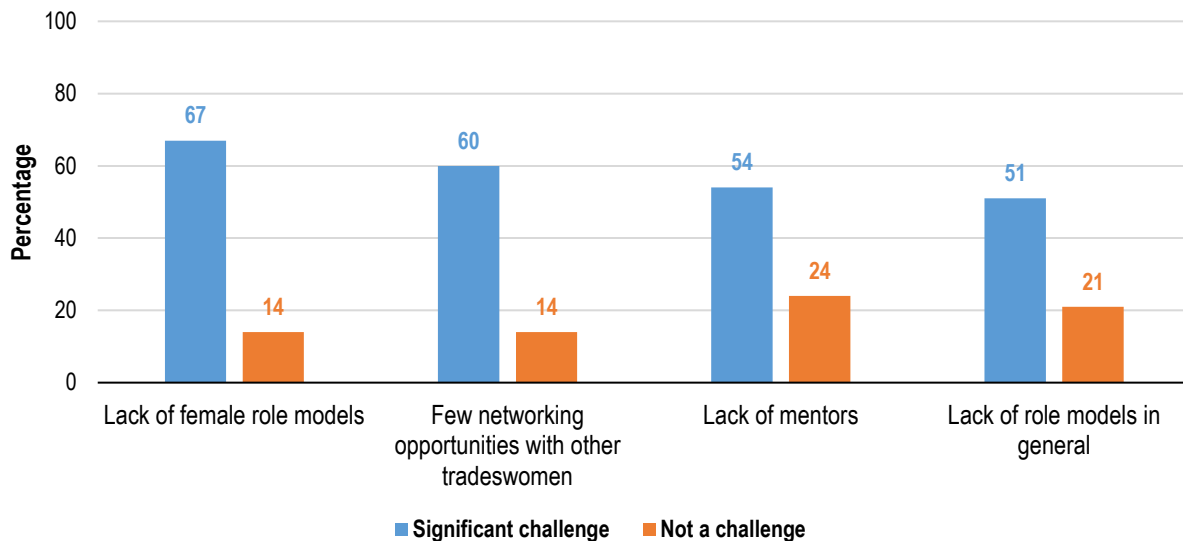
Limited organizational capacity to address discrimination, harassment, and health and safety

Relatively high percentages of survey respondents identified significant challenges associated with an organizational inability to support safe, harassment- and discrimination-free workplaces (Figure 5). For example, 53 percent of women said they felt their work was affected by gender-specific health and safety concerns, while only 16 percent felt that this was not a challenge. Similarly, about half of survey respondents felt challenged by a lack of personnel to address concerns from female workers, and lack of or little enforcement of zero-tolerance policies on bullying/harassment while only about a quarter of respondents felt that these areas were not a challenge. Limited conflict management skills among supervisors were also viewed as a significant challenge by 42 percent of women surveyed while only 30 percent said that they felt this area did not represent a challenge.

**Figure 5   Limited organizational capacity to address discrimination, harassment, and health and
safety**
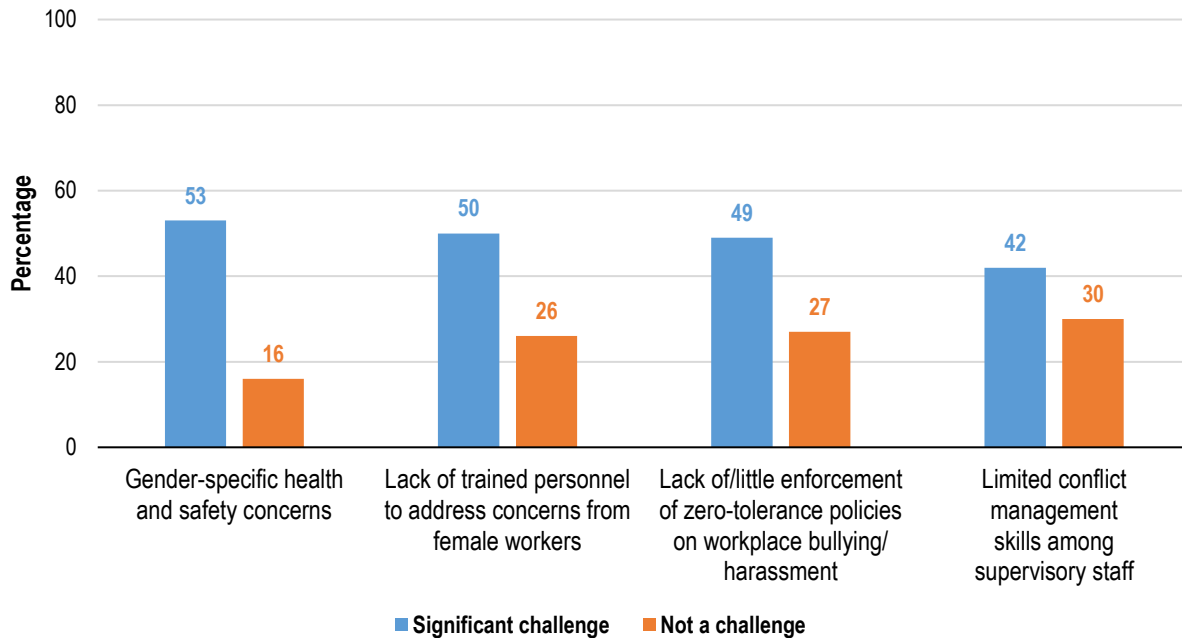
Gender bias, bullying, and harassment in the workplace

A relatively high proportion of women reported significant challenges arising from interpersonal problems related to communication, bullying and harassment, likely stemming from a lack of effective responses to these areas at an organizational level (Figure 6).

Forty-seven percent of women reported significant challenges arising from gender differences in communication styles while only 19 percent said they had no issues in this area. In addition, between 40 and 42 percent of respondents identified gender-based bullying, harassment, and exclusion as well as exposure to a sexualized work environment as significant challenges, while only a little over one-quarter said they had no challenges arising from these kinds of issues. Thirty-eight percent of women reported gender biased treatment from customers and clients, compared to 30 percent who said they did not face such challenges.

Finally, while the large majority of women reported no challenges arising from sexual or physical assault, it is concerning that 14 percent identified sexual assault – and 6 percent physical assault - as a significant challenge.

**Figure 6   Gender bias, bullying, and harassment in the workplace**
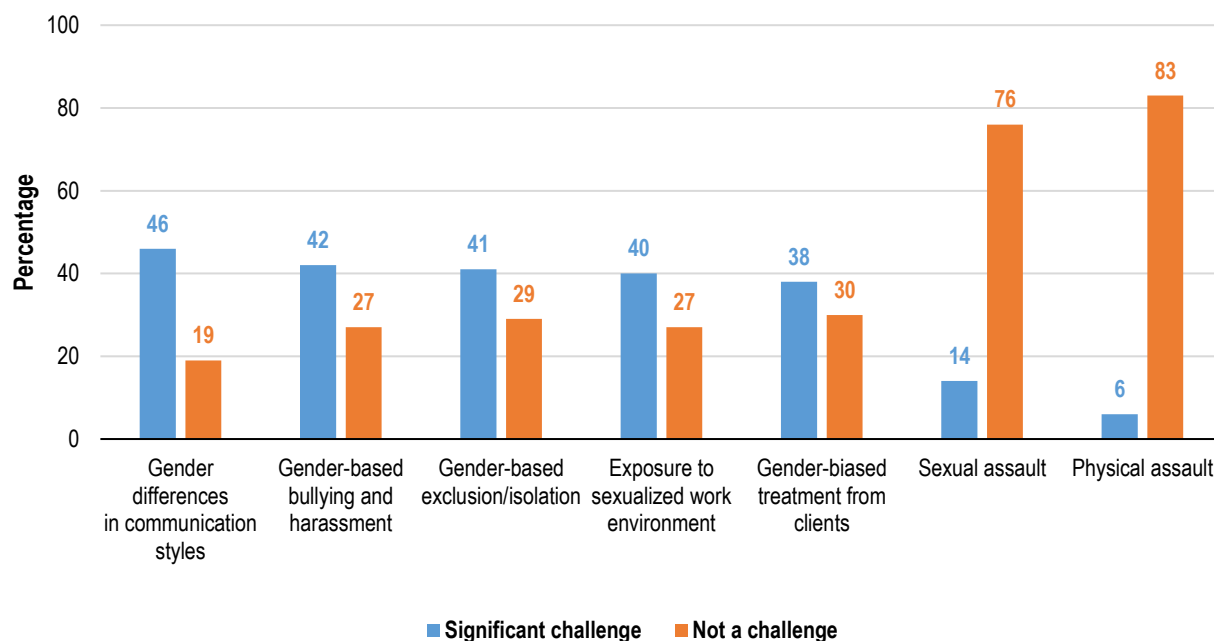
Discriminatory recruitment, hiring, and advancement practices

Survey respondents also identified a few challenges associated with discriminatory recruitment, hiring, and advancement (Figure 7). For example, about 45 percent of women said they had encountered significant challenges as a result of gender-biased recruitment and hiring, as well as underutilization of their skills once they were hired, while only about one-quarter of respondents reported no challenges in these areas. In addition, 41 percent of women reported that their work was affected by an absence of (or lax enforcement of) policies to support workplace diversity, and 36 percent reported few opportunities for promotion – only about one-third of respondents reported no challenges in these areas.

Other areas such as opportunities for on-the-job training, difficulty keeping stable work, and equal pay were less likely to be seen as barriers, with a greater proportion of women reporting no challenges than those who said there were significant challenges in these areas.

**Figure 7   Discriminatory recruitment, hiring, and advancement practices**
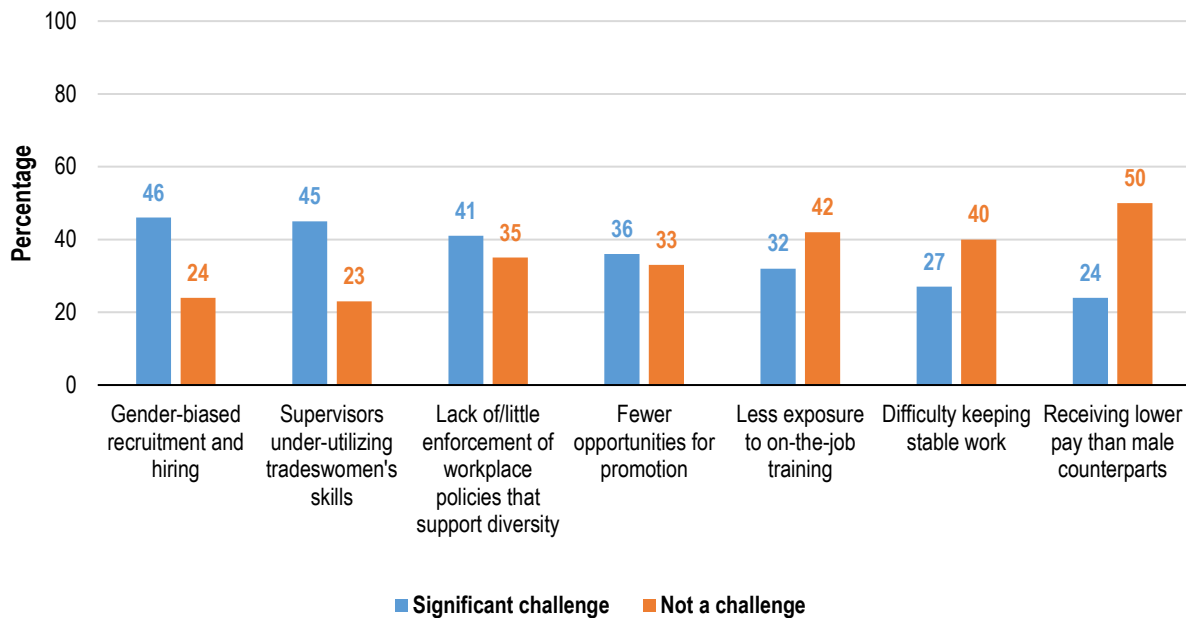
Inflexible workplace practices

A considerable proportion of respondents – 44 percent - reported significant challenges in achieving a balance between work and other family responsibilities, while only one-third said they had no challenges in this area (Figure 8).

In addition, while relatively small proportions – a little over 20 percent - reported significant challenges arising from needing to arrange for child care or plan for pregnancy and parental leave, and only 14 percent report challenges related to a lack of accommodation for pregnancy and breastfeeding in the workplace. However, this likely understates the number of women who do not report challenges in these areas because (a) many choose not to have children as a direct consequence of working in the trades, including the working conditions, and (b) many others reportedly leave the trades once they start a family.

The findings regarding the enabling factors and supports are detailed in the next section.

Figure 8   Inflexible workplace practices
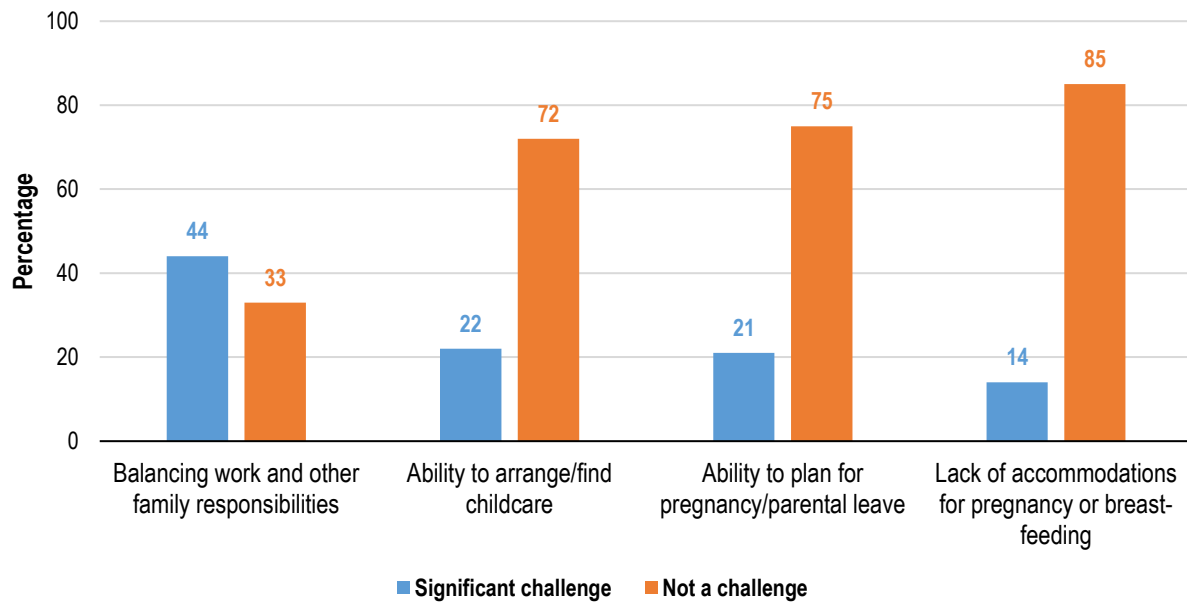
6. Key Findings: Enabling Factors and Supports

Overview

We asked tradeswomen, employers, union managers, and other stakeholders what factors and supports make (or would make) it possible for more women working in the trades in BC to remain and advance in the trades. We also asked about the relative importance of these factors and supports, as well as the impact their receipt has (would have had) on women. In addition, we asked employers what makes a company a good and attractive place for tradeswomen to work at.

These factors are summarized below using the ecological framework described in section 5. We found that this holistic approach was well suited for the enabling factors and supports, and in many cases, corresponded directly to the barriers and challenges. The enabling factors were similarly are inter-related and trickle down the levels of the framework. The quote below, describing an example of a manager letting a woman go, because "he didn't know how to handle his crew" is one of many illustrations of the ways in which the effects of enabling factors can trickle down from the system- and organizational-levels through to interpersonal and individual levels:

> *"Usually they lay off the woman, she's the trouble. And that's why we only have 3 percent women 40 years later after all this work we've done. If the men were trained, if there was leadership. If the company makes the company policy clear, and it's not just a policy, but they actually have follow-up, like if you do or don't do this you're out. If every guy on that job had just a few words from the foreman before the woman came saying, if there's any trouble, I want to hear about it, she's expected to do her job, we're not setting any special criteria, she's going to work just the same as you, and if you give her a hard time, you're out of here."*

The findings across our lines of evidence echoed a number of consistent themes around factors that enable women's entry, retention and advancement in the trades, as well as the supports that address the barriers that women face. Many of the voices we heard advocated for a change in the underlying factors, specifically the need for equal opportunities and levelling the playing field:

> *"I think that women are incredibly skilled and capable and passionate about what we do. We are really there because we want to be and almost more so because it's a non-traditional job for women. So to do that you really need to want to do that, have a real desire to do that. And you have to work really hard, in school and physically (…). I think just knowing that women who are in [the trades] are very capable and very passionate. We really just need to be given a chance to show that we have these skills and we have a good work ethic, and should be able to get the same opportunities as all the guys out there."*

Below we highlight the key themes in pre-apprenticeship, apprenticeship and journey.

Pre-apprenticeship

Promotional and advertising campaigns were frequently noted as enabling factors in pre-apprenticeship. Specifically, interviewees suggested that such campaigns are needed to address societal attitudes around gender roles and expectations, combat negative perceptions about the trades, and to accurately communicate the benefit as well as the realities of working in the trades. Addressing informational barriers, in general, was mentioned as a key to ensuring the right match, but also providing women with the tools and resources to be adequately prepared for the day-to-

day experiences on the job. A key theme revolved around the importance of pre-apprenticeship factors and supports to retention; specifically, that women need to be both well informed and well prepared before they enter apprenticeships. Recommendations included that exploration training programs include a strong practical component with the view to increase exposure to trade-based skills and to ensure a good match. Employment services and supports emerged as another key factor in pre-apprenticeship, along with better matching to apprenticeships and employers.

Apprenticeship

Based on the data we gathered from all sources, including existing programs and research, organizational-level supports and enabling factors may have the greatest impact on women's retention and advancement, as they directly address and target many of the key barriers women described. While these were the most frequently identified and recommended as enabling factors and supports during both apprenticeship and journey, they were also the least available at the organizational-level, requiring that women rely on the often negligible personal and professional networks for supports.

The strongest theme in apprenticeship was employment supports and job counselling to help find jobs and be able to access guidance and resources when problems arise. Another theme in apprenticeship related to equitable recruitment and better matching practices, specifically building a level playing field for women and setting them up for success, including through more personalized approaches. Finally, women consistently identified safe and supportive environments as an important factor, focusing on organizational culture and capacity to build and support such environments. Employers echoed this theme and identified the need for more tools, resources, and other employer-directed services to assist them in recruiting and supporting tradeswomen in their organizations.

Journey

Many of the same themes emerged in journey as they did in apprenticeship. Most notably, we heard about the need to build an infrastructure of policies and practices in the workplace that drive and shape an inclusive and positive workplace culture. One strong theme that emerged as an enabling factor specific to journey was the presence of companies that maintain a standard of excellence and are known to be safe and inclusive environments for women – where women can build and advance their careers in the long-term. Exemplary employers recognized this factor and highlighted it as something that they do consciously – taking pride in being exemplary by maintaining standards of excellence, codes of ethics, and consistent safety practices. They felt if they created a positive working environment, women would come and women would stay. This was further echoed in stakeholder comments: if you have happy women in the trades, you will get more women coming into the trades. In journey, the importance of flexible workplace practices and individualized approaches also emerged (e.g., modified duties, modified scope of work, ability to work part time).

Figure 9   Enabling factors and supports

Level	Factors and Supports	Pre-Apprenticeship	Apprenticeship	Journey
Macro	Promotional and advertising campaign	✓	✓	✓
	Advocacy	✓	✓	✓
	Government and industry leadership	✓	✓	✓
	Critical mass		✓	✓
	Wage subsidies and incentives		✓	✓
	Policies and guidelines (e.g., health & safety regulations; hiring practices)		✓	✓
	Fines/penalties for non-compliance with policies and regulations		✓	✓
Organizational	Mentorship programs	✓	✓	✓
	Vocal and active leadership	✓	✓	✓
	Employment supports and job counselling	✓	✓	✓
	Employer services and supports	✓	✓	✓
	Networking, conferences and events	✓	✓	✓
	Better matching practices	✓	✓	
	Exploration training programs	✓		
	Equitable recruitment, training and advancement practices		✓	✓
	Organizational capacity to address bullying and harassment		✓	✓
	Standard of excellence/Safe and inclusive environments		✓	✓
	Health & safety programs and policies		✓	✓
	Flexible workplace policies & practices		✓	✓
Interpersonal	Strong support & professional networks	✓	✓	✓
	Good and supportive mentors	✓	✓	✓
	Supportive and welcoming peers	✓	✓	✓
Individual	Supports to address individual needs and considerations	✓	✓	✓
	Strategies to increase knowledge and improve match	✓	✓	

Entry   Retention   Advancement →

Macro-level

Promotional and advertising campaigns

Interviewees identified the need for promotional and advertising campaigns to address the knowledge and attitudinal barriers that may exist at various levels (e.g., societal attitudes around gender roles and expectations; less awareness of the trades; misconceptions and misinformation) and for different groups (e.g., women interested in a trades career; parents; employers). In particular, interviewees recommended:

- Promoting the trades in general, including the benefits of a career in the trades

- Promoting women in the trades, including showcasing female role models

- Providing complete and accurate information about the trades, including describing the realities of trades work as well as the tools and resources that exist to support women

- Providing current labour market information

It is important to note that while interviewees saw promotional and advertising campaigns as enabling, few (if any) such campaigns have previously been implemented on a macro-level. Furthermore, existing campaigns were often seen as emphasising the "feel good" to encourage women to enter the trades, but not giving an accurate portrayal of the trade, and therefore setting them up for failure (e.g., do not provide accurate information about the labour market [i.e., the jobs available and where] or the day-to-day requirements of the job (e.g., out of town travel; male dominated workplaces).

In terms of campaigns targeting women who might be interested in a trades career, we heard that better information and provided early are key supportive factors, as women tend to have limited exposure to positive images of the trades as a career choice and little prior exposure to the work itself. We also heard the need for informational campaigns to be directed at the industry as a whole, including employers and other tradespeople *"to change people's attitudes out there so they look at me like the next guy, I am just as qualified."* Others indicated that some messages need to come from the industry itself, showing a real commitment to welcome women in the trades:

> *"We want women to feel welcome and that they are needed and wanted. We want them to get into the trades. We need trades people in this province. And there is a lot of trades that are out there that I've seen women be better at than the men are. They need to know that it's an option for them, a good option for employment, a career choice."*

In short, promotional and advertising campaigns were seen as having an impact on retention through (a) better-matching women to the trades (as early as possible); (b) increasing awareness of existing resources and supports for women; (c) breaking down societal, family, and peer attitudes around gender roles and expectations (including through showcasing competent and successful tradeswomen); and (d) educating employers and other industry players around the benefits of hiring tradeswomen and the resources available (e.g., employer services; advice on organizational policies).

Advocacy

Another enabling factor that was identified, but currently not available, or not consistently provided, is advocacy. We heard about the need for advocacy across the system, preferably offered by a central "advocate," "advisor," "ally," or "navigator":

> *"If I could go to them and they could give me insights or a list of places that are looking for workers and that are open to women. This might even help employers be more aware that there are qualified women out there. If this organization/ program could show case us: look at this person, they are experienced."*

Women, in particular, talked about the need for advocacy at the policy level, but also an advocate to help point them in the right direction when they have a question or need support. Employers too indicated they would benefit from such a resource. Tradeswomen identified multiple and very specific areas for advocacy, including dispute resolution services; advocacy around contracts, labour agreements, pay equity, wage subsidies; highlighting exemplary employer practices; and liaising across organizations, employers and unions.

Government and industry leadership

Overwhelmingly, we heard that for meaningful changes to take place in BC for women working in the trades, be in for entry, retention or advancement, the leadership needs to come "from the top" – both at the government and industry levels:

> *"The government has to make a real commitment to this. This is all nice to have these committees and things, and research getting done (…). It's just a matter of, put the money up and if they want to get serious about training people and having enough tradespeople for all this work (…), then they better be willing to spend the money and get it done."*

Many interviewees emphasized that this type of leadership drives system-wide changes, as it trickles down to managers, supervisors, foremen and, ultimately, individual crews:

> *"It's a mindset thinking. I think the leaders in various organizations have to push this more themselves. I probably don't ask that question enough, how many ladies are working for us? (…) We need to think more about this and have it more in our mindset to make sure it happens. Only a manager can actually push it, top down, and then it can come up from the bottom when others see it happening. If managers are not thinking about it, others are not thinking about, they'll stick with traditional things."*

Some industry members we interviewed recognized that this process has been and will be met with challenges. One male industry leader who has been advocating for increased presence of tradeswomen in BC described the resistance he has encountered:

> *"I know a lot of people in this industry, and I have a lot of respect for a lot of people in this industry on every side of the table, and the hardest thing for me as an individual was when I really started to push this was the push back I got from industry and the disrespect I received because of what we were doing. I thought [what we were doing] was pretty simple stuff (…) and [when] I had some pretty uncomfortable situations (…), it just reminded me that this was even more important to push through. But that's been the hardest part (…) and I hate saying this about my industry, so it's tough, but their unwillingness to support me, who I*

thought had some credibility in this industry. I was pretty surprised when I found out that they were just as willing to kind of beat me up over it."

Many stakeholders emphasized the need for political will to be followed up with the necessary resources in order to address the issue of women's retention at the system-level, suggesting the need for "real leadership across the board," and "real training" to support the management in implementing policies and supports at the organizational level.

Critical mass

The need for a critical mass of women in the trades was identified as a driving factor at the macro-level, with direct effects on addressing multiple barriers. For example, interviewees talked about the need for more women in leadership roles to help break stereotypes and "pave the way" for others; the need for more female peers to address feelings of alienation and isolation; as well as the need for a critical mass to change the rampantly sexualized culture in their trade. Some male interviewees also noted the profound changes that an increasing number of women in the trades has had on the culture of the trades:

"When women started entering our job sites, it allowed me to talk about my wife in a positive way with my co-workers; it allowed me to talk about my children in a positive way with my co-workers. It allowed me to talk with my employer about things happening on the job site that wouldn't be seen as something a man would talk about before, around daycare issues and around other things that we never talked about until our sisters entered our world. And that's the positive part that women in the trades do for our industry is they allow conversations to happen that never would have happened before."

One key informant interviewee highlighted research that suggested groups are tokens, or exceptions, until they reach about 15 percent at which point they become minorities, and become acknowledged by the larger culture (necessitating shifts at the policy- and organizational-levels). [14] The interviewee paralleled this research to the need for women to reach a critical mass in the trades for system-level changes to fully take shape. This view was echoed in multiple other comments from interviewees who believed the task of retaining women in the trades is ultimately about a cultural shift within the trades. It is worth noting that in general quotas were perceived as a "last resort" to build that critical mass, because of the backlash and resentment they tend to create, which ultimately, may result in strong negative effects on women on an interpersonal level.

---

[14] Although the interviewee did not specifically cite a research study, a brief scan of the literature revealed that generally, critical mass threshold ranges from 15 to 30 percent. The idea is that once women reach the requisite threshold between 15 to 30 percent, they can begin to stimulate a chain reaction to lead to more woman-friendly processes and outcomes. See for example, Abu-Laban, Y. (Ed.). (2008). *Gendering the nation-state: Canadian and comparative perspectives* (pp. 1-18). Vancouver: UBC Press.

Wage subsidies and incentives

A number of women identified wage subsidies and incentives for employers as an enabling factor. This was mentioned as a particularly useful strategy in the early stages of women's careers to help them get their foot in the door. Some specific recommendations included:

▪ Supporting employers that take women apprentices, whether financially or through other incentives (e.g., tax incentives when % targets hit, offering a free "trial" period (3 days) with a new woman hire)

▪ Providing targeted incentives to employers (e.g., smaller companies) tied to retention for duration of apprenticeship, such as transferability options if one is laid off because of slower business

▪ Wage subsidies for apprentices in general (male or female), such paid practicums, paying ½ wage for 6 months, Red Seal Completion bonuses, or wage subsidies for paid work experiences to build skills

▪ Grants to employers to provide appropriate facilities and Personal Protective Equipment (PPE) that is gender based

Policies and guidelines

Policies and guidelines, set at the macro level, were identified as another enabling factor. While many *policies* are indeed in place, interviewees discussed the need for public policy level *initiatives to assist* organizations in building internal capacities to implement these policies into practice (e.g., training programs; guidelines for addressing bullying and harassment; health and safety regulations).

Fines and penalties

In addition to setting policies and guidelines as well as providing incentives (described as the carrot approach), we also heard suggestions that fines and penalties can serve as an effective method for ensuring compliance and implementation. Specifically, we heard multiple recommendations of fining and penalizing companies (in meaningful ways) found not to be compliant with health and safety regulations.

Organizational-level

Mentorship programs

Working in a traditionally male field and male-dominated workplaces has meant that women's mentorship opportunities, starting from early on, are limited. The lack of critical numbers of women has also meant that few champions and role models exist on industry and organizational-levels to help women build alliances, access "trade secrets," or serve as a "safe space" for advice and support. These challenges are compounded by the general lack of mentorship programs while informal mentorship opportunities are also limited for women.

We heard that mentorship programs are needed to address the key barriers women experience (e.g., fewer trades-based tools, knowledge and skills; starting on an uneven footing). The availability of mentorship, particularly during the formative periods in a woman's career, was seen as key to retention and advancement. Women had some very specific recommendations on how mentoring could be implemented, both formally and informally, including:

- Long-term buddy system lasting at least one year (could be done by text or email)

- Offering financial or other incentives for mentorship

- Registry of mentors and champions willing to be an ally to a woman in trades on specific work sites

- Workplace practices to pair female apprentices with journeys who were identified or vetted as supportive of women and willing to be a mentor

- A website where apprentices can get connected to supportive mentors

Some interviewees pointed out that because of the small numbers of tradeswomen within individual organizations, mentorship programs may have to be implemented at community- or regional-levels in order to be able to connect women with mentorship supports. It may also necessitate keeping a database of women who are entering the trades or are early in their careers, including their key needs and characteristics, to be able to effectively match them with willing and supportive mentors.

Networking, conferences and events

A related theme was one of networking, conferences and events to strengthen women's personal and professional networks and help build their social capital. In particular, this enabling factor was considered to be directed at: (a) addressing the feeling of isolation in the industry and one's workplace; (b) increasing exposure to trades-based tools, knowledge and skills, including through access to continuing education; (c) increasing awareness of and access to opportunities, including scholarships and bursaries; and (d) building a resource- and knowledge-base, specific to the needs of tradeswomen in BC. Many interviewees mentioned the need to address the region and trade specific considerations, but also to link women up to Canada-wide and other broader networks.

Vocal and active leadership

The importance of vocal and active leadership cannot be understated. Just as macro-level leadership was identified as setting the tone system-wise, organizational or company-level leadership was consistently mentioned as trickling down and shaping the company culture.

In multiple examples mentioned by women, we heard about the impact that company owners or bosses had on women's day-to-day experiences by being vocal, and in many cases – being visibly present, and "setting the tone" for foremen and journeys. This has a particularly profound impact on reducing instances of bullying and harassment, and creating an inclusive environment for women:

> *"Employers that are doing things right they have the real leadership, owners or superintendent come on-site quite often and provide these types of discussions and leadership on job sites. It needs to come from the top down. Employers who have these issues [around bullying and harassment] usually don't know they have them. There needs to be a commitment from them to show up and show they're there. When they are visible, people act differently."*

Other women said that when someone is being bullied or harassed, most employees typically know it is taking place, but that a lack of leadership creates a culture of silence that implicitly allows these types of behaviours to take place. Many women described the powerful effect that one person "speaking up" – particularly someone in a position of leadership – can have on the behaviour of colleagues and crews (e.g., suddenly being helpful; other guys also being vocal). Interesting, this seemed to translate to other areas as well, such as health and safety. Importantly, vocal and active leadership appeared to give women the permission to speak up, knowing it is safe to do so.

Finally, we also heard that active leadership means being pro-active. Employers, in particular, talked about the importance of creating welcoming and inclusive workplaces through active and vocal leadership:

> *"We wouldn't sit around and watch that kind of thing happen; would take a leadership role and help anyone who is not treated fairly."*

> *"Employers who are responsive. Employers who are proactive. You don't have to be a rocket scientist to figure out this kind of behaviour is going to happen. If this was addressed right up front that this kind of behaviour is not going to be tolerated, so it's not on women to go complaining about it, but it's on the employer to be watching their employees and making sure everything is okay. If it is tolerated up front, it makes women feel they could bring it up if it happens, because they've been given permission to."*

Employment supports and job counselling

Employment supports and job counselling emerged as a strong theme from pre-apprenticeship through to journey. Indeed, some felt that this support should be available at any time throughout a journeywoman's career, whenever she is looking for work. However, it seemed to play a particularly vital role during apprenticeship when women struggle to find welcoming and supportive employers, get their foot in the door, and to build their skillsets.

The tradeswomen we talked to had very clear and detailed ideas on what employment supports and services would assist them in staying and advancing in the trades. Most often, they described a need for active employment supports, such as finding and securing employment (especially open and supportive employers) as well as job counselling to assist them with maintaining employment when issues arise. While some of these services are available through WorkBC, they are generic neither targeted nor aligned with the unique sets of barriers and constraints that women in trades face. Some specific supports and features women noted as enabling were:

- Support in finding placements; connect women coming out of pre-apprenticeship with employers willing to hire women

- Job brokering, job development, and fostering local job opportunities

- A job bank; a list or database of positive employers willing to hire women (including a list of websites to start a job search)

- An employer database with a rating system based on women's experiences with employers

- Assistance with resume writing, interview skills, cover letters job readiness

- Liaising with employers (including follow up to learn why women did not get hired, what they can do to improve, ensuring follow through from companies with promised work)

- Create a database/ keep resumes on file for potentially interested employers

- A job hotline for all trades workers so employers can call and get workers for specific trades or projects (e.g., get third- or second-year welders, without having to hire them permanently. No name requesting, but if you hire from this "job bank" more than 10 times a year, you need to create a position at your firm)

- Counselling services for on-the-job issues; someone to help navigate moving career forward; support in career transitions

Employer services and supports

Employer services and supports were mentioned as mirroring some of the above employment supports but directed at employers. Some employers stated their desire to hire women but indicated that either no women were being sent through the union, or women typically did not to apply to non-union positions. Indeed, we know from existing research that women and other minorities tend to not apply to jobs, assuming they are not welcome unless they are specifically mentioned in job listings (Griffin Cohen & Braid, 2000)[15] – something that was echoed in interviews. In general, we heard that employers often wanted to hire women (or hire more women), but did not know where to start, or how to prepare for female employees or address any potential issues that may arise:

> *"In defense of the employers they haven't been given the ability and the skillset. The industry piece has to be set up so they can compete and do the things we're asking them to do and not get their ass kicked on job sites."*

More specifically, employers discussed the need for tools and resources to assist them in preparing their workplaces (both at the organizational and interpersonal-level) for hiring women (e.g., advice on policies and procedures; implementing diversity training; assistance with individual cases of bullying and harassment). Other suggested components included employer education, employer networking, and awards and recognitions highlighting employer best practices.

---

15 Griffin, M. & Braid, K. (2000). Training and Equity Initiatives on the British Columbia Vancouver Island Highway Project: A Model for Large-Scale Construction Projects. *Labor Studies Journal*, *25*(3), 70-103.

Better matching practices

Better matching practices as an enabling factor was mentioned in three different ways: (a) better matching women to trades; (b) better matching women to employers, and (c) better matching women to specific crews and tasks. With respect to matching women to trades – while this factor was largely mentioned in reference to knowledge barriers (i.e., underexposure or inaccurate exposure of the trades to women) that trickle down to individuals (i.e., misinformation and misconception) – some interviewees emphasized the need for better matching practices up front and early on before women enter the trades.

Better matching to employers was most frequently mentioned as an enabling factor. Women consistently discussed poor matches with an employer, particularly during apprenticeship, as a reason for them leaving the trades. In particular, some of them expressed frustrations that they were not better streamlined to employers at the union level. They acknowledged that, on the one hand, applying for jobs through the union is advantageous in that the company does not know if the person is male or female, so the potential for gender bias is reduced. Indeed, this union process has been described by some interviewees as safeguarding against discrimination. On the other hand, however, they felt that the lack of assessment of match between employer and employer often led to a poor fit. Women reported that unions themselves varied greatly in terms of the level of support and advocacy towards their women members, noting that *"the strength of individual unions is really important."* It is important to note that the need for better matching was directly linked to two barriers. First, some women entered the trades without the full information available to them about the dispatching process for apprenticeships through the union, increasing their disappointment at the lack of matching. Secondly, the need for better matching was largely driven by the general lack of supportive employers across the system, so that once women were placed, they often found themselves navigating challenging work environments, with little to no support or recourse.

Finally, better matching practices to individual crews and tasks were mentioned as an important factor to women's retention and advancement:

> *"You've got to pair up women with the right people, the right superintendent, the right foreman. Not everybody is created equal so let's give them the best opportunity that you can. I tell that to our superintendent, too (…) Give them a chance, but give them an opportunity to be successful (…). And then follow-up, right? See how people are doing."*
>
> *"You hear that welding is good for women. The whole trade can be good. You just have to pair people up with what their skills and abilities are."*

Exploration training programs

Exploration training programs were seen as an enabling factor, and addressing some key barriers, such as starting on an uneven footing, reducing misinformation, and ensuring the right fit with the trade. As women described receiving little to no guidance on navigating the complex decision-making process of choosing to enter the skilled trades, much recognition was given to the invaluable exposure provided by exploratory WITT and similar programs, as well as funding initiatives dedicated to making training in trades more affordable to women.

Many women, especially those who have left the trades, talked about how different their career trajectories may have looked had they accessed exploration training programs early on:

> *"It would be really helpful to have a program for women where you could try it for a day, how is it to be an electrician or a carpenter for a day. You will be paired up with an electrician on a job site like an apprentice or somebody, and see what it's like. So that people have a real idea how it works. Before you invest into schooling. I understand the school wants to make money [so perhaps they don't share those realities] (…). The most important thing is to provide as much information as possible about how the real work looks like."*

We also heard about the importance of having a strong practical component to such programs in order to provide an accurate portrayal of the physical demands of the work and to address learning needs with respect to trades-based skills, knowledge and tools to level the playing field. Importantly, we heard from women that they would have wanted to know about the typical workplace culture they can expect (including bullying and isolation), so that they can access resources and prepare for those situations, or so that they can make decisions based on the best information available about whether a career in the trades is indeed a good match for them. Similarly, women also described the desire to have better labour market information, so that they can be better prepared once they begin looking for work.

Equitable recruitment, training and advancement practices

As we overwhelmingly heard, discriminatory recruitment, hiring and advancement practices are a real and pervasive barrier for women. Therefore not surprisingly we found that equitable practices were seen as a strong enabling factor.

However, in our interviews, we repeatedly heard an underlying tension between, and often a misunderstanding of, equality and equity. Under the equality lens, the focus is on non-discrimination and the same treatment. Women often report that they are not treated in the same way as their male colleagues. At the core of this are discriminatory hiring practices: from outright exclusion from applying to jobs; through being denied training and advancement opportunities on the job available to male counterparts; to women's skills and abilities not being evaluated in the same way as men's. Many of the employers and unions we spoke with tended to focus their activities on same treatment, which in their words, is being fair to everyone. At the core, this constitutes an equality-based approach.

> *"A journeyperson is a journeyperson"*

> *"Not all workers are the same. You need to look at individual needs and adapt"*

On the other hand, women have talked to us about their struggles and frustrations with achieving equity. In recognizing the differences between the genders (e.g., pregnancy, family responsibilities, physical attributes), this approach allows for different treatment of male and female tradesworkers in order to achieve equity (e.g., through providing flexible work hours and arrangements; rotating to different scope of work for pregnant women; assigning different work duties to make adjustments in line with skills and attributes; providing properly fitted equipment). Only two exemplary employers we interviewed had an explicitly equity-based approach, saying that: *"Not all workers are the same. You need to look at individual needs and adapt."* The remaining employers,

even if they had some strong best practice elements, took the *"a journeyperson is a journeyperson"* approach and said that *"there is no different treatment for men and women."*

There is often the perception that equity and equality are contradictory. Employers may be afraid to treat workers differently (though equitably) for the fear of being accused of discriminating. In general, we found the need for education (or clarification) of how strategies to address the entry, retention and advancement of tradeswomen may require both equality and equity: there is a need for non-discriminatory recruitment and hiring practices while, at the same time, the treatment workers receive may sometimes require different approaches depending on individual characteristics (including but not limited to gender).

Organizational capacity to address bullying and harassment

Our findings point to the importance of building organizational capacity to address bullying and harassment, something that is currently lacking. As mentioned in other areas, interviewees including employers, identified the need for more resources to build that internal capacity. Some specific examples we heard about repeatedly were:

- Building an infrastructure of policies and procedures to address bullying and harassment

- Training programs for management

- Diversity in the workplace training programs for crew members

- Zero tolerance policy (i.e., with real consequences): *"React very quickly, not always quietly as long as the person is okay with sharing"*

- Whistleblower line: *"Available for everyone for whatever kind of incident"*

- Policies and practices that are explicit and well-communicated; entrenched in the culture of the company

- Proactive approach and safe environments to bring things up: *"The girls know that it's a safe, respectful environment to work at. They feel comfortable bringing things up. They know they can knock on my door and tell me what the problem is."*

To be clear, we heard that the solution is not in having individual policies, but in building an entire organizational capacity to be able to address bullying and harassment, specifically through providing leadership and management with the tools to "know what to do" and shifting workplace culture.

It is interesting to note that in our research, exemplary companies stood out in this regard. While non-exemplary companies tended to move the woman to a different site rather than addressing the source of the issue, exemplary employers addressed harassment complaints openly and directly. For example, men who acted inappropriately were either fired, reprimanded, or demoted (in one case an apology was issued), which sent a clear message to the crew. Furthermore, expectations were communicated explicitly to everyone: *"This type of behaviour is not acceptable. Period. Any type of harassment [is not acceptable]."*

Standard of excellence/ Safe and inclusive environment

A closely related theme was one of holding a standard of excellence and creating safe, inclusive, and welcoming environments. Women often talked about companies that are known to be "good for women" – there was a standard of excellence or a reputation that reverberated through the company and that was known in the field. We heard this theme echoed when speaking with exemplary employers. They consciously and deliberately worked towards building a culture of making people *"feel part of the company"*:

> *"[We are exemplar] because of our core values: we work safe, we are customer focused, we treat people with respect, and we are accredited to do the right things, we are honest and act with integrity. And that's what we expect from our employees: Be productive, be safe, do quality work, and be proud of it."*

Interestingly, exemplary companies tended to define business success differently: offering good wages and benefits, treating people well, and maintaining a good safety record were seen by exemplary employers as an integral part of their reputation (beyond doing "good quality work"). Furthermore, they saw hiring women as part of that reputation and their success.

Health & safety programs and policies

The theme of health and safety was reiterated by both women and employers though sometimes in different ways. Women highlighted the need for good rehabilitation programs as an enabling factor for retention, as well as supports to access gym and other resources to maintain their strength and overall health. For women, safety practices and standards were also a way to level the playing field with respect to the physical demands of the job (e.g., lifting practices versus workers "showing off" who can lift more). Some women suggested that they may be more likely to be let go from jobs, because companies are focused on profits over safety: *"if you have to carry a 50 pound ladder across the site, [companies] will choose the most efficient way of paying for that."* Interestingly, we heard women say that more regulation around health and safety would benefit women as well as men because *"men put their bodies on the line even more."* A couple of the exemplary employers appeared to address directly some of these comments mentioned by women. For example, one stated that they try to address the *"bravado that men have through our safety program."* Other exemplary employers discussed the importance of health and safety to keeping women in the trades:

> *"Safety is key to retaining women and to be continually going forward, building that culture, that family that you want to have."*

> *"We want to enforce that culture: we work safe; that comes before anything (…) Safety before production is preached and done."*

Flexible workplace policies and practices

Providing flexible workplace practices and policies was identified as another enabling factor, and was seen as allowing women to stay in the trades, particularly during and after pregnancy, but also during other critical times. Some recommendations we heard about in this area included:

- **Part-time or job sharing** (for example, two workers share a job): This was seen as supporting women with family responsibilities or those who do not have access to childcare during the typical 7am-3pm work hours.

- **Work adjustments** (such as having pregnant women working in a panel shop, modifying duties or job rotation): It is worth noting that these strategies were seen as effective for any workers with different physical abilities or strength. As one employer said: *"So there are physical demands, yes, but with proper instruction, proper mentoring, we can adjust that, so we're doing a good job of it. It should be the same for men."* However, some interviewees acknowledged that some of these workplace practices may be challenging to implement for smaller companies.

- **Pairing** (for example, pair 2-3 women together or with supportive male colleagues): This practice has the potential to reduce bullying and harassment, or increase links to informal supports, particularly early in a woman's career or when entering a new site or workplace.

In terms of workplace practices, most employers we interviewed said there is no different treatment for men and women, but indicated that they would move women to different tasks or offer flexibility for women with children or pregnant women. While many employers said that women often drop out from the trades due to pregnancy, others said that pregnancy is not an issue because "guys take paternity too" and "duties can be modified" in some of the ways listed above. In general, while providing flexible workplace practices was perceived as having a particularly important to retaining women, they are increasingly being viewed as a "worker issue."

Interpersonal-level

Strong support and professional networks

Building and fostering strong support and professional networks that women can access on an interpersonal level can be seen as a direct result of the macro- and organizational- level factors previously described. In short, building a critical mass of women in the workforce, having female leaders in the trades, as well as making available and accessible mentoring programs and networking events, trickles down to women being more likely to find personal and professional supports among supervisors and colleagues. In the absence of these higher level factors, women have tended to seek out informal networks and one-on-one supports. We heard that these supports on an interpersonal level are critical for women during pivotal times in their careers; they also help mitigate the effects of various barriers they experience and help open up opportunities to level the playing field. In particular, women emphasized being able to connect with other tradeswomen – those who walk the same journey, understand the system, know how to deal with problems – as making a difference to them in their ability to stay in the trades.

Good, supportive mentors

Women repeatedly described the role that good, supportive mentors have played in their lives and careers, and saw them as an enabling factor on an interpersonal-level. Mentors included peers and colleagues, both male and females, as well as school counsellors and supportive teachers who offered encouragement during difficult times, supports in finding employment or provided links to networks and resources. Here is how one tradeswoman described her foreman who was a mentor

to her early in her career, and how she wanted to pay forward the same treatment and mentorship to others:

> *"My last work in Edmonton was perfect: open, welcoming. Never had any sort of discrimination. When I started out, I was learning, they got me to do basic stuff. Then they saw I was getting better so they started giving me more responsibility. There was no belittling, but when I did something wrong, they told me how to fix it. I was getting the same opportunities as everyone else, like overtime or something. It was very fair. Always welcoming, I was treated well. This attitude came from the foreman, he was awesome, and the other co-workers were great too. When new people were hired, I would do the same: I wanted to pass on that too to people who were new."*

Unfortunately, we heard that women often struggle to find mentorship resources at various levels and throughout their careers. For this reason, and in the absence of supportive organizational-level structures, interpersonal relationships tend to play a larger role than they likely otherwise would have (e.g., ability to fall back on existing mentorship networks rather than individual mentors when one is moved to a new site or project).

Supportive and welcoming peers

As with personal supports and professional networks, being able to find good and supportive mentors – as well as supportive and welcoming peers – in women's lives or in the workplace largely stemmed from higher-level factors that set the conditions and encouraged mentorship and peer supports to take place on an interpersonal level. One key theme we heard emphasized was the impact that individual co-workers have on women's experiences on the job. Below, an example is given by one woman who talks about the impact having one supportive colleague in one situation has had on her continued experience on the job:

> *"When anyone is harassed in any way on the job, everyone knows. Woman, man of colour, the weakest person on the job. Why doesn't anybody say anything? I worked for 15 years and in that time only 1 man spoke up for me. There was a labourer, who was harassing her, not bringing materials, making comments. The guy behind me, who was a foreman, he happened to be behind me when the guy made a comment, and all he said to the labourer was 'bug off.' To that labourer, it was like God has spoken. He couldn't do enough for me. **It was such a gift that my ex-foreman did, with just two words.'"***

What is important in the above quote is the way in which the factors at the macro- and organizational-level operate in this example, effectively setting the conditions for a culture of silence through a lack of leadership. And, inversely, how the presence of supportive, welcoming peers – and their leadership – can trickle down to positively impact individual crew members.

Individual-level

Supports to address individual needs and considerations

At the individual level, supports to address individual needs and considerations were seen as enabling as they help to address barriers, such as inflexible workplace policies and work/family balance, and to level the playing field in ways that are tailored to the individual:

> *"Women don't just get up in the morning, go to work and become somebody else for 8 hours. (...) They have all sorts of other issues that they may be dealing with."*

We heard about the additional demands that many tradeswomen face in balancing work with family responsibilities, for example, struggling to find flexible childcare arrangements to accommodate work schedules or frequent travel. Individualized supports in the workplace, such as allowing flexible schedules or modifying duties, can set women up for success and help them stay in the trades. We spoke with a couple of exemplary employers who did this explicitly and consciously for all workers. As one of them said: "*Not all workers are the same. You need to look at individual needs and adapt.*" The WIT programs we reviewed also paid particular attention to individualized supports, based on needs financial, regional, and other considerations.

Strategies to increase knowledge and improve match

Finally, the comments we received regarding strategies to increase knowledge and improve match largely echoed those related to individualized supports. At the employer-level, enabling strategies included modifying duties or matching tasks to better suit women's skills and attributes. Interestingly, employers tended to discuss the latter as an issue of matching workers – both male and female – to tasks, pointing out that most tasks can be modified to better suit any worker. Women, on the other hand, tended to mention safety regulations as an effective strategy to improve match based on physical attributes. At the program-level, enabling strategies to increase knowledge and improve match included working with individual women through job coaching and job counselling to increase self-confidence, provide information, and help women make informed decisions about their trades careers.

Regional, sectoral, or occupational considerations

With respect to regional, sectoral, or occupational considerations in implementing enabling factors and supports, two key points require highlighting.

First, we heard that while some of the issues raised are women's issues, many are "workplace or worker issues," with interviewees pointing out industry-wide challenges with **diversity** in general. When discussing training programs, for example, stakeholders emphasized the need to incorporate a diversity lens, ranging from racism to bullying based on perceived differences. Some have also suggested that many of the enabling factors (e.g., policies and procedures) that are currently lacking at the organizational-level are human resource (HR) related gaps that affect all workers. Consequently, many interviewees emphasized the need to recognize diversity-related considerations over and above gender-specific issues (e.g., differences *among* women as well as *between* workers) when designing and implementing strategies and supports to increase women's entry, retention and advancement in the trades, with the potential to benefit different groups of tradespeople.

Secondly, we heard about the importance of meaningfully engaging with Aboriginal partners in order to develop programs and supports that have cultural relevance to Aboriginal women. Some of the programs we reviewed reiterated that "you cannot just apply the same model" to working with Aboriginal communities and expect it to be effective. In fact, interviewees stressed the need to develop and offer strategies and supports specifically designed to meet the needs of Aboriginal

women. Importantly, different approaches to how enabling factors and supports are both designed
and implemented may be needed, requiring dedicated resources (e.g., face-to-face delivery,
culturally relevant training, Aboriginal engagement teams).

Validating the significance of supports: survey responses

Results from our survey of 100 tradeswomen show that though some women have benefited from
several of the organization-level enabling factors and supports identified above – namely strong
leadership, initiatives to support equality and diversity, workplace safety, and flexible policies – a
higher percentage of women reported that they had found individual or interpersonal factors to be
helpful.

For example, 84 percent of women reported that their own personal strength had been moderately
or extremely helpful to them, while 79 percent cited supportive co-workers (Figure 10). In addition,
62 percent felt that they were helped by skills and experience acquired from previous employment,
and 56 percent identified lifecycle factors such as age and family circumstances as helpful.

**Figure 10   Individual and interpersonal enabling factors and supports**
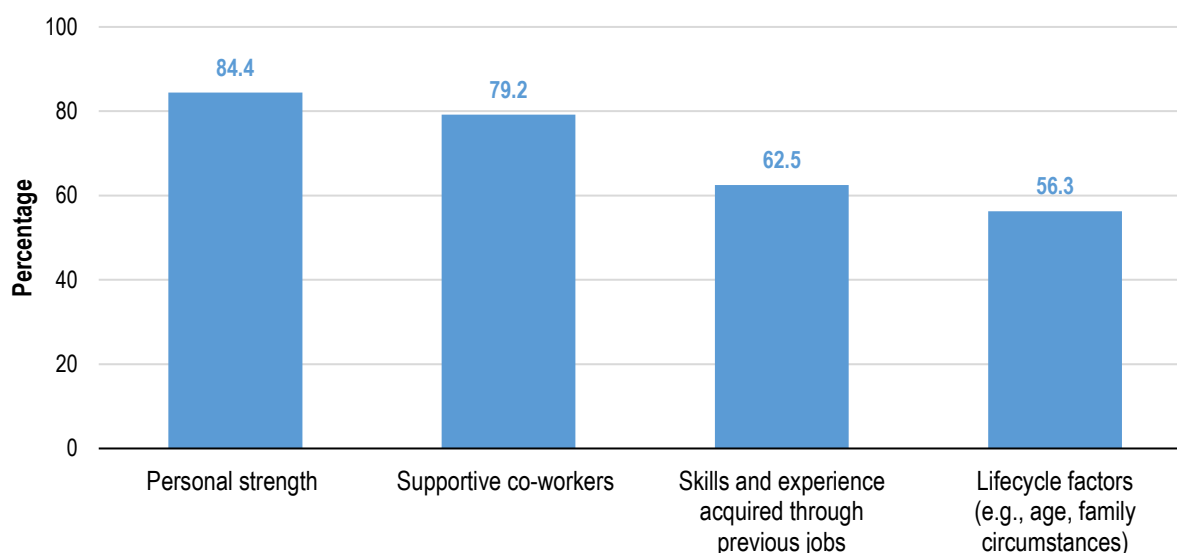
In contrast, the organization-level factors we asked about were cited by half or less of the survey
respondents as being helpful. For example, just over 50 percent reported being helped by gender-
neutral human resources practices and strong leadership by employers (Figure 11). Under 50
percent cited company-wide initiatives to promote equality and diversity as being helpful, and a
similar percentage cited workplace safety. Under one-third of respondents said they had been
helped by flexible family-friendly policies.

These findings are consistent with those reported in the section on barriers and challenges, where
significant proportions of women identified challenges such as gender-biased recruitment and
hiring, lack of organizational capacity to deal with workplace bullying, lack of policies to support

diversity, gender-specific health and safety concerns, and balancing work with other family responsibilities.

These findings also confirm that – in the absence of organizational support in these areas – tradeswomen have to rely more on supportive coworkers as well as their own resilience and experience.

Figure 11   Organizational enabling factors and supports
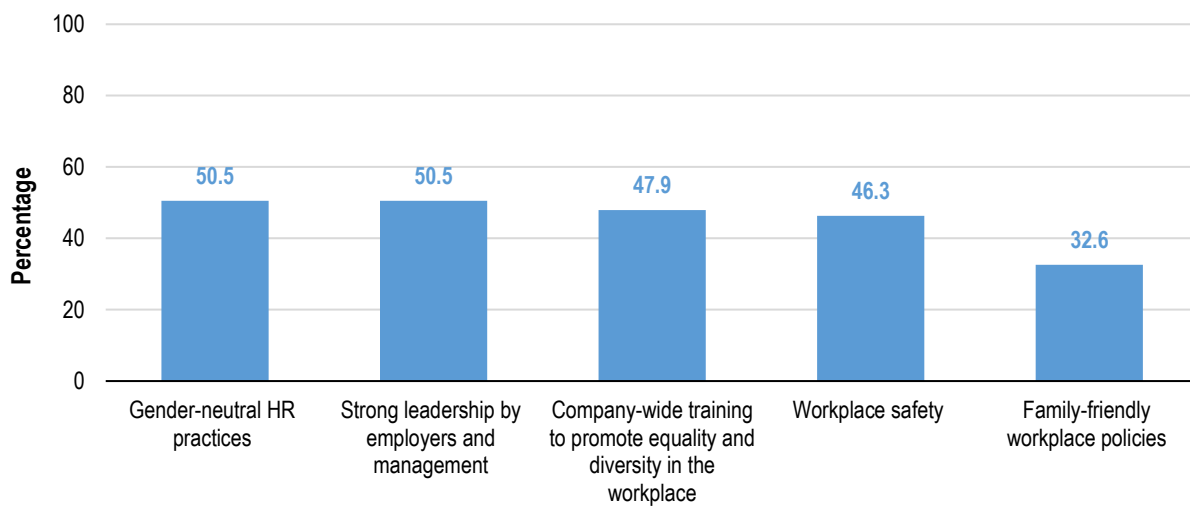
The gap between supports and services that are currently available at an organizational level and what tradeswomen would ***like to be available*** is evident in the next set of survey results. For example, about three-quarters of women said that services to support networking events and mentorship would be moderately or extremely important for retention and advancement in their trade, yet less than half reported that they had access to networking events to meet with successful tradeswomen, and less than one-third reported availability of networking events with employers and mentorship from senior tradeswomen (Figure 12).

**Figure 12   Services and supports to facilitate networking and mentorship**
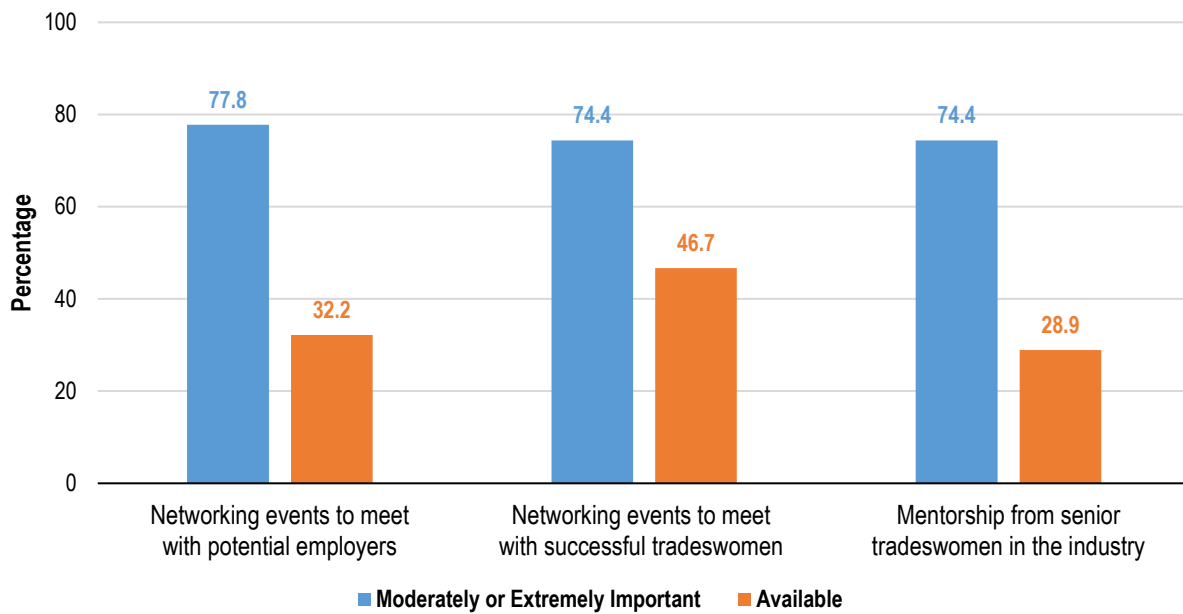
Similarly, over two-thirds of survey respondents said that diversity and equality initiatives and training to promote diversity and equality would be important for retention and advancement in their field, yet less than one-third said such services were available to them (Figure 13).

**Figure 13   Services and supports to facilitate diversity and equality**
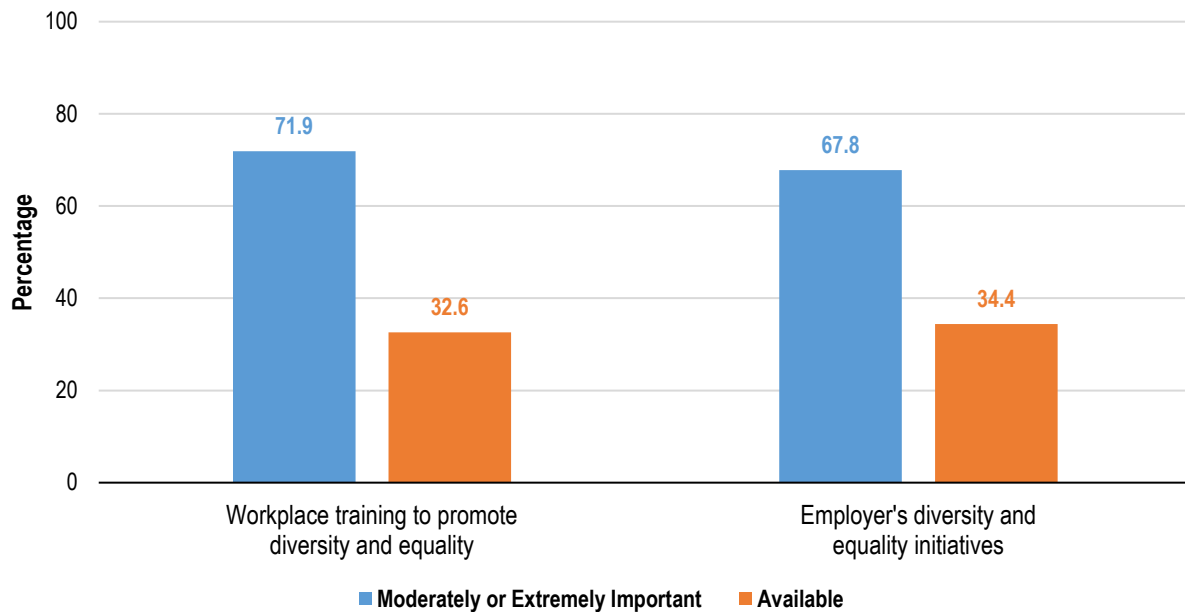
Women also indicated that services and supports to help them explore employment fit and readiness were likely to be important for retention and advancement in their trade. For example, two-thirds cited training on what to expect from jobs in the trades as important, yet only 30 percent reported that such training was available to them (Figure 14). Similarly, two-thirds cited career counseling and job search supports as key, yet less than half reported that such services were available to them. Over 60 percent said that job placement or matching programs would be important, yet only 34 percent said these kinds of programs were available. Sixty-two percent identified job coaching services as important, but only 18 percent cited the availability of these services. Finally, 63 percent said that supports should be offered to employers to motivate them to hire tradeswomen, yet only 28 percent reported that such services were available.

Figure 14   Services and supports to facilitate job fit and readiness
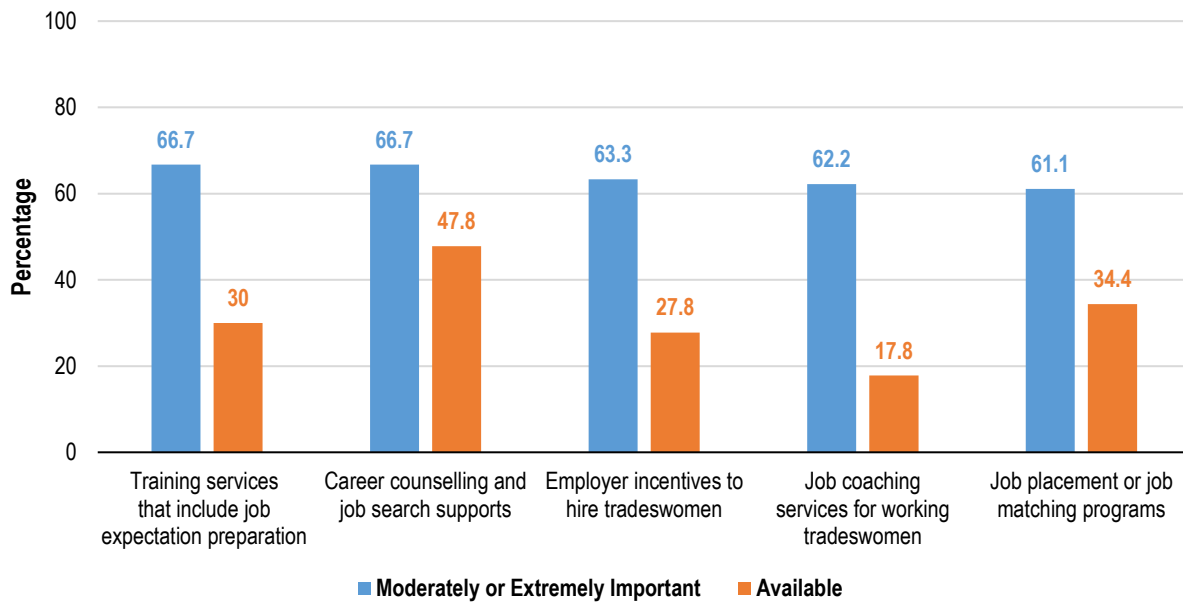
Survey respondents also identified wraparound supports, such as childcare and financial aid to cover the cost of specialized equipment, as important. Over three-quarters of women cited the need for child care support in order to stay and advance within their trade, yet less than one-quarter said that such supports were available to them. Similarly, three-quarters said that financial supports for equipment would be important, but only about one-third said that such supports were available.

Figure 15   Wraparound supports
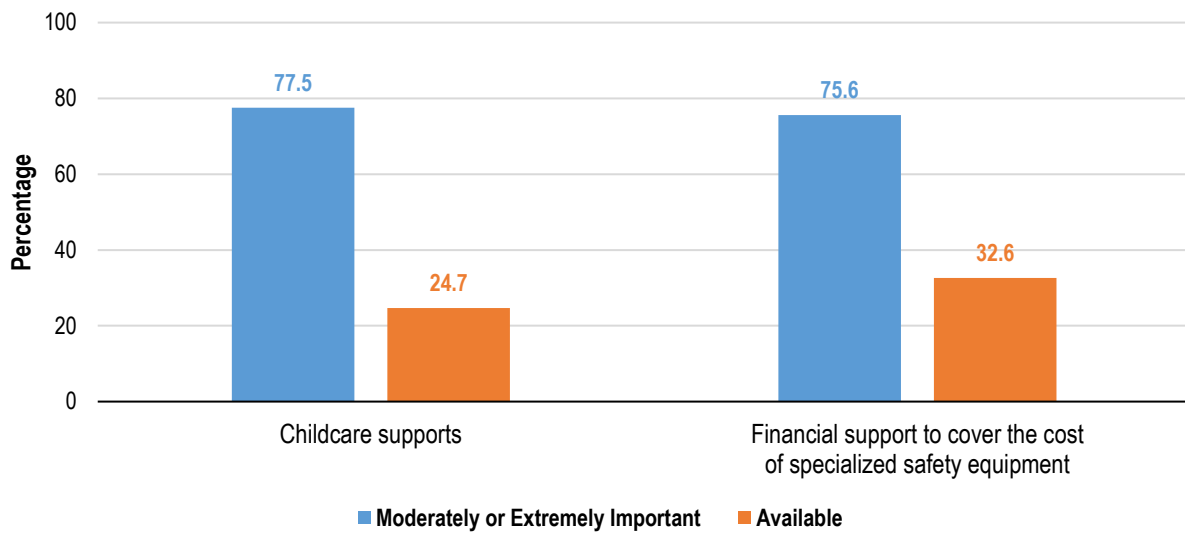
7. Recommendations: Scope and Structure of a Women in Trades Program for British Columbia

Through consultations with stakeholders and interviews with staff from exemplary programs, we collected and documented valuable insights that could be used to inform the design and implementation of an effective WIT initiative in British Columbia. As outlined in section 4, programs selected in this review are those that have made considerable progress in advancing tradeswomen's careers, with substantial contributions to long-term changes in the sector. To reiterate, multiple staff from the following programs were interviewed:

- Build Together (national)
- Office to Advance Women Apprentices (Newfoundland and Labrador)
- Women Unlimited (Nova Scotia)
- Women Building Futures (Alberta)
- BC STEP regional service providers (Northern BC; Interior BC; Vancouver/Lower Mainland)
- Oregon Tradeswomen Inc. (Oregon, USA)

These conversations helped to conceptualize a WIT program within the context of British Columbia – one that would respond to a full spectrum of barriers (discussed in section five) drawing on the full range of supports (discussed in section six) (see Figure 16). Generally, respondents seem to agree that the most effective types of programs are those with a built-in capacity to address barriers throughout *all* career stages of tradeswomen – several program staff recalled building their services from a *holistic* model. Another emerging theme related to the importance of contextualizing delivery to suit local community characteristics, as staff saw larger social and economic environments having an influence on program structures and operations.

Besides this strategic advice, experts in the field shared insights on specific elements underlying successful WIT programs. Suggestions on the kinds of services and supports that are foundational to tradeswomen's success were offered, helping to identify key program components that future initiatives in BC should consider. Interviewees also gave recommendations related to staffing and operational logistics, as well as high-level governance and program structure.

Finally, speaking from experience, staff from exemplary programs highlighted that having well-defined outcomes is critical to the success of a program. Understanding the kinds of achievement a program is designed to work toward makes sure that program activities are well-targeted, helping to monitor program performance and framing program evaluation. Crucially, the program needs to target outcomes not only for tradeswomen but also for employers in the trades. Showing the business benefits of hiring women and diversifying the workforce is a convincing way to demonstrate that the program is effective, which can enhance industry commitment and ensure its long-run sustainability. Although extensive organizational and individual needs analyses may be required to properly identify key performance indicators for this purpose, at this point the qualitative findings from our research offer strong indications of overarching short-term and long-term outcomes that can help shape the direction of a future program in BC.

Figure 16   Women in Trades Programming within BC Context
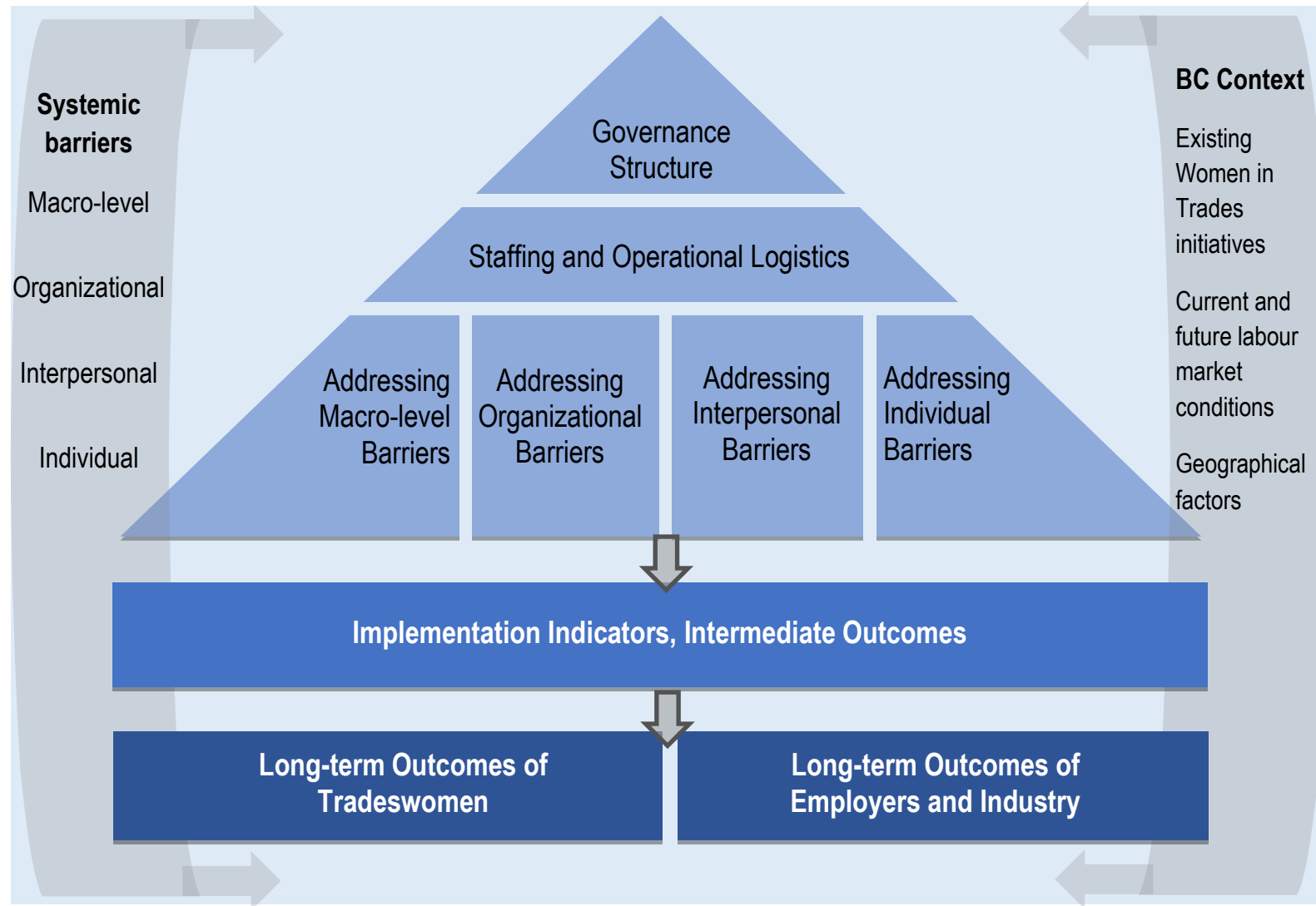
Overview

The rest of this section is organized as follows. Systemic barriers that challenge the entry, retention, and advancement of tradeswomen are reiterated. BC-specific contextual factors that are relevant to the design and implementation of a WIT program are discussed next. Following this discussion are three subsections on key elements of a successful program. These are:

1. **Specific program components** developed based on four levels of enabling factors and supports, with the aim of addressing a full range of multi-layered barriers facing tradeswomen;

2. **Operational and staffing logistics** that outline leadership structures, functional roles of program staff, as well as program database infrastructure; and

3. **A governance structure** that provide program direction and identify program goals.

   Embedded within each of these subsections are discussions of potential design and implementation challenges that are either commonly found in similar programs in other jurisdictions or are anticipated to arise due to the unique characteristics of the province. Based on lessons learned described by program staff, suggestions on how to overcome these challenges within the context of British Columbia are discussed.

Recap of Systemic Barriers

> *"Fix the system, not the women!"*

As highlighted in previous sections, barriers hindering women's entry, retention, and advancement in the trades are entrenched in the system. We were able to examine these barriers from the perspectives of not only the tradeswomen themselves, but also employers, union representatives, service providers, researchers, and other stakeholders in the trades. **Our findings suggest it is not that women in the trades bring along with them a multitude of barriers that need to be solved. Rather, it is the way the sector has functioned for so many years that makes it systemically challenging for women to develop a career in trades**. One respondent in our study highlighted the systemic nature of these barriers with a call to action, asking stakeholders to come together to "fix the system, not the women."

These barriers are inherent in the macro, organizational, interpersonal, and individual contexts throughout the sector. At the macro level, general societal beliefs that the trades are not a fitting nor desirable career path for women can lead to an overarching negative effect. These kinds of beliefs serve to discourage young girls from aspiring to become successful tradeswomen and make it harder for those who do enter the sector to overcome obstacles along their journey. In subsequent sections, we review what program experts recommended to target these macro-levels/system-wide factors.

Multiple barriers are reported to be present at the organizational level. Within the schooling system, during the pre-apprenticeship and apprenticeship stages, lack of exposure in trades generally puts women at a disadvantage compared to male classmates. In the workplace, lack of critical mass translates into tradeswomen's feeling of isolation, which can further exacerbate other

difficulties they have to deal within their work. Finally, multiple organizational issues, including discriminatory recruitment and advancement practices, limited organizational capacity to address harassment, and limited workplace supports for gender-specific health and safety concerns, play a role in making the experience of tradeswomen unbearably tough, leading many to quit despite their strong passion for the work itself. In several subsections that follow, we analyze the insights program staff shared regarding strategies to engage employers and employees in trades to alleviate these organizational barriers.

The interpersonal level barriers illustrate how the ingrained macro beliefs, as well as various organizational practices, affect tradeswomen more directly. Women reported having limited supports from people around them, from trades instructors in schools, colleagues at work, to even friends and family. This lack of supportive networks means women often do not have people to turn to when they experience bullying and harassment in the workplace, and they have few if any mentors to ask for advice in challenging situations. In subsequent sections, we review best practices learned from the staff of exemplary programs to address these barriers, providing tradeswomen with other kinds of support networks.

Finally, entrenched difficulties in the system combined with inadequate supports for tradeswomen further accentuate the kinds of barriers they may face on an individual level. With the multitude of higher-level barriers reviewed above, it is not surprising that women tend to start on an uneven footing when they enter the trades, with many having unrealistic expectations of a career in the trades, and not being well-equipped to handle financial and other barriers. The lack of supportive networks also makes it more challenging for them to balance their work-family responsibilities, a problem numerous participants in our focus groups highlighted. In the program review section, we summarize the recommendations we received from experts in the field regarding strategies to target barriers on an individual-level.

Relevant BC Context

Before elaborating on the design of a WIT program in BC, we review relevant provincial characteristics that can determine the success of a program. According to experts and stakeholders in the industry, the following three factors need to be taken into consideration:

- **Availability of other WIT service providers in the province**: Multiple stakeholders noted that the province is at an advantageous position to make substantial progress, as there have been multiple initiatives supporting female workers in the trades in BC. Most notably are programs under the WITT umbrella by ITA, which have increased the number of female apprentices registered in the province. Another key program funded by ITA is the Skilled Trades Employment Program (STEP), which delivers services across BC. With offices in all of the seven economic regions (Northwest/Nechako; Northeast; Cariboo; Thompson/Okanagan; Kootenays; Lower Mainland/Southwest; Vancouver Island/Coast), STEP has provided excellent and well-targeted services to minority groups in trades, including but are not limited to women.

- The majority of existing programs in BC tend to focus on pre-apprenticeship training and apprenticeship supports, with a wide range of opportunities for women to explore and learn more about the trades. It is therefore necessary for future programs to communicate with

existing service providers, identifying and filling any gaps in service provision, in an effort to build a comprehensive system of supports for BC women working in the trades. It will be critical for each program to mutually leverage each other's activities and resources while avoiding duplication. At the same time, program administrators need to be vigilant to avoid "turf wars." There is a role for a new women trades program to support and extend existing services throughout the full spectrum of service areas.

- **Current and future labour market conditions in the sector**: Obtaining relevant and updated labour market information is important to the success of a program whose objectives include enhancing employment experience. Staff from exemplary programs voiced the ongoing need to align training provisions with labour market demands, emphasizing the importance of integrating such information in the strategic planning of the program. Specific to the context of BC, volatility of labour demands in the Northern areas due to the nature of regional projects was also highlighted by several interviewees.

- **Geographical characteristics and community differences:** Program staff noted the importance of maintaining close relations with local tradeswomen and stakeholders. Having a province-wide presence to engage in face-to-face discussions with all local parties is crucial. Moreover, variability in demographic concentration across regions in the province is another reason for region-specific programming. For example, multiple interviewers highlighted the importance of meaningfully engaging with Aboriginal communities, with the need to tailor services and supports in alignment with individual community needs. To accommodate geographic and community differences, experts suggested setting up multiple regional offices and recruiting staff with strong capability to leverage community ties.

These unique provincial characteristics are integrated into subsequent discussions on best practices and lessons learned, offering applied recommendations on the implementation of a new program in BC.

Program components

The following sections are aligned with our analysis of barriers and enabling factors and have been informed by interviews with staff from exemplary programs in Canada, our review of documents from a broader set of programs in Canada as well as the U.S., interviews with other experts, and consultations with industry stakeholders. Our findings revealed several successful program models, most of which share similar components. We present these program services according to the four layers of barriers, integrating all levels of enabling factors and setting the groundwork to build a system of targeted supports that is holistic in nature – in order to respond to the full spectrum of needs and to address systemic long-standing barriers. Ultimately, we aim to contribute to the design of a program tailored to the context of BC, making effective contributions to the province's efforts to attract, retain, and advance tradeswomen. Table 7 provides an overview of all possible program components.

Table 7   Barriers and possible program components

Level of barriers	Program components
MACRO-LEVEL	**Outreach, Engagement, and Education** ▪ Broad outreach to build relationships, raise awareness, and shift attitudes ▪ Targeted outreach to strengthen next generations of tradeswomen **Advocacy and Leadership Development** ▪ Financial advocacy: for the use of hiring incentives, grants for equipment ▪ Regulatory advocacy: promoting pay equity, health & safety, anti-discrimination policies ▪ Provide mechanisms and support to build industry and government champions **Strategic Engagement of Target Populations** ▪ Dedicated team to ensure engagement, outreach, and support for targeted groups, such as Aboriginal women, are culturally appropriate and aligned specifically to the unique needs of these communities
ORGANIZATIONAL	**Organizational Analysis and Action Planning** ▪ Engage employers and other organizations, and demonstrate the business case for hiring women ▪ Support and facilitate organizational analysis and action planning **Supports to Build Organizational Capacity** ▪ Provide expertise and resources to build organizational capacity to implement: 　○ *Equitable recruitment, training and advancement practices* 　○ *Organizational policies and practices to address bullying and harassment* 　○ *Health and safety programs and policies* 　○ *Flexible workplace policies and practices* ▪ Ongoing follow-up and supports **Workplace Training Interventions to Support Organizational Practices** • Implement workplace training interventions to build respectful workplaces and help create supportive peer networks in the workplace
INTERPERSONAL	**Events Management** ▪ Smaller-scale local and regional event management **Professional Networks** ▪ Build and strengthen professional networks through large-scale conferences, career fairs, and networking events **Formal and Informal Mentorship** ▪ Facilitate formal and informal mentorship opportunities for women

Level of barriers	Program components
INDIVIDUAL	**Employment Services and Supports** ▪ Provide job search, job matching and job maintenance supports ▪ Provide career counselling services **Upskilling** ▪ Provide technical and soft skill training, including professional development, leadership, and small business skills training opportunities **Continual Wrap-around Supports** ▪ Offer flexible, timely, and individualized wrap-around supports as women progress through their careers

Addressing Macro-level Barriers

Outreach, engagement, and education

Staff of exemplary programs shared that outreach efforts are generally structured around two main objectives:

▪ **Broad outreach to build relationships, raise awareness and shift attitudes**: While a new WIT program would not be responsible for changing societal attitudes – it can, indeed, play a pivotal role in supporting outreach campaigns of other stakeholders (e.g., government, other provincial WIT programs) as well as leading their own. They can offer a significant value-add in providing the connection to highly personalized content (e.g., success stories) that form the basis of powerful communication tools. Staff from many existing programs often found directed communication materials that are customized to the community they serve to be most effective. Some programs dedicate a team to ongoing relationship development within local communities and associated knowledge translation activities. It is through these local relationships that staff can collect and consolidate local knowledge, case studies, and other rich content from successful tradeswomen to support the development of promotional and educational materials. This type of content tends to paint a realistic picture of the trades, embedding career success within the local community context, enhancing the public image of the trades as a meaningful and long-lasting career for women. The key here is to have content developed with input from local champions, who are recognized by the community – celebrating local successes not only makes the work of WIT programs legitimate but also effectively motivates other women in the community to consider working in the sector.

▪ **Targeted outreach to strengthen next generations of tradeswomen**: Targeted outreach efforts to promote the trades for girls in secondary schools, for example, emerged as an important program component from our interviews. Some programs collaborated with local high schools to organize speaker series to connect students with strong female role models in

the industry. Others have delivered Women in Trades Days to secondary school students, providing venues for girls to gain hands-on experience in the trades. Generally, these campaigns provide clear and accurate information about the trades to young generations, not only increasing girls' interests in the trades but also enhancing their understanding of the realities of working in the trades – showing both the positives and negatives. This early exposure to the trades can help level the playing field for future generations of tradeswomen. The goal is to gradually change next generations' way of thinking so that, ultimately, careers in the trades may no longer be seen as *non-traditional* for women.

Staff commented that they needed to think outside the box in order to make substantial impacts on their outreach efforts. Besides the usual locations such as trades training schools, advertisements and posters were also placed on buses, in metro stations, even in grocery stores, daycare centres and doctor's offices. Staff indicated that when outreach campaigns deliver realistic and relatable success stories of local tradeswomen, substantial changes could take place across the community.

For British Columbia, it is important to note that outreach is one of the areas where existing service providers, including WITT programs and STEP, have been champions. It is likely that staff from these programs are armed with broad experiences developing and distributing quality materials to raise awareness, and have made considerable progress to change perceptions of local communities. This is an implementation advantage, presenting ample opportunities for partnership. Specifically, a designated team from a new BC program could focus their efforts on active engagement with existing service providers, identifying common objectives and building relationships. The aim is to bring staff from all major programs in the province together, leveraging resources and networks to enhance each other's capacity to achieve shared goals around outreach, engagement, and education.

Advocacy and leadership development

One of the key roles that leaders of exemplary programs play is to facilitate a long-term partnership between government and industry, providing a vehicle for them to lead changes at the macro level. Program experts recognized the following fundamental advocacy goals:

- **Financial advocacy:** Program experts highlighted the importance of advocating for financial incentives to encourage employers to hire and promote tradeswomen. Government-supported incentives are especially crucial when the industry is in the process of building critical mass of tradeswomen and rolling out large-scale change. Expert opinions on the most effective types of subsidies tend to vary, ranging from wage subsidies, tax breaks, to grants for gender-specific facilities and equipment purchases. The variation likely arises due to differences in the political environments of the provinces in which the programs operate. Therefore, it is important for leaders of a new BC program to work with industry stakeholders and policymakers to identify financial strategies that can be well-suited to the political context of the province.

- **Regulatory advocacy:** Managers of multiple programs recognized that their active involvement in fostering top-down regulatory changes is crucial – this viewpoint was echoed by experts in the field as well. They highlighted engagement efforts with government to create policies and guidelines to support tradeswomen, focusing on issues such as gender-based health and safety and equity hiring practices. Simultaneously, they have worked closely with industry leaders to

encourage broad adoption of guidelines and ensure compliance with regulations. Ultimately, the program can act as a bridge between government and industry, helping both to develop and enact macro changes that can trickle down to make a direct impact on tradeswomen's career.

▪ **Leadership Development:** Key informants echoed that change needs to come "from the top" – both in government and industry. Without leadership and champions to drive change at all four levels - macro, organizational, interpersonal, individual – change will be slow and difficult to achieve. A new WIT program can play a significant role in providing mechanism and support to build leaders and champions, particularly, in industry. This can be achieved not only through general advocacy and promotion of women working in the trades but also in providing the actual channels and venues for industry champions to *demonstrate* leadership to others (e.g., employer exemplars highlighted in case studies, outreach campaigns, speaker series at conferences or professional networking events). The key is to not only highlight current employer exemplars but also those who exhibit small positive steps and then provide a clear path for further leadership development.

The biggest challenge staff often cited here is the reality that, as one interviewee put it, "change cannot happen overnight." Most of them saw this as a long process that requires substantial resources to make gradual impacts. It is therefore not surprising to hear that having a strong team of program leaders has been the key factor behind their progress thus far. These leaders have to bring clear visions and solid skills to navigate the complex system, building vital relationships to effectively engage both government and industry representatives.

Strategic engagement for targeted populations

Strategic engagement and education of particular disadvantaged target populations such as Aboriginal women is a top priority for several of the program experts we consulted. While the overriding engagement strategy and objectives may be similar, the outreach, communications, and educational tools all need to be culturally appropriate and aligned specifically to the unique needs of these communities. One program has resourced an entire Aboriginal team to inform the whole organization and ensure cultural relevance to Aboriginal women throughout all service areas. The job of this engagement team is to ensure the whole organization understands their unique barriers and that the organization is not contributing to the problem. Engagement is achieved through local partnership and regular information sessions within communities. Individual team members also engage directly with every single Aboriginal woman in the program from beginning to end.

Addressing Organizational Barriers

Organizational needs analysis and action planning

Most program staff acknowledged that initially, efforts to push for major shifts in organizational practices are often met with resistance. Program experts recalled allocating plenty of time and resources to work closely with upper management of companies to promote the business case for hiring women. This is a crucial first step – once employers realize the business benefits of diversifying their workforce, program staff can provide proper tools and resources to help them

lead the process of change. A detailed look at best practices in this area was provided by multiple staff from major WIT programs:

- **Engage employers and other organizations, and demonstrate the business benefits of hiring women using local business case studies:** One program started the process by designating a team working closely with industry partners, talking to owner-managers, HR personnel, shift supervisors, managers, trades workers, apprentices – male and female. They collected evidence from employers describing the benefits and challenges of employing tradeswomen, documenting their findings in a report titled *On the Level*.[16] Their research demonstrated to employers that "workplaces that are respectful and healthy for women are respectful and healthy for all employees." Using actual examples of local employers hiring women, the research team built up a credible business case by linking a company's diversity strategy to its business plan. This is one of the reasons why the program was able to generate substantial buy-in from employers, getting both large firms and small and medium-sized enterprises to support their missions.

- **Support and facilitate organizational analysis and action plan development:** The second step of the process is to provide employers with necessary tools to lead the design and implementation of organizational changes. In the same report, program staff outlined specific action items, offering steps that employers can take to gather data and conduct organizational analysis to better understand their workplace. The team also summarized practical guidance to help employers interpret the results and develop action plans accordingly, helping them make workplace policies and practices more supportive of women working in the trades.

Supports to build organizational capacity

- **Provide expertise and supports to build organizational capacity:** One of two most common types of services offered to employers are resources and supports to help improve workplace policies and practices to better support women working in the trades. These can equally apply to other organizations such as unions or other labour or industry groups. Program staff generally aimed to make an impact by building organizational capacity and providing support to employers in each of the following areas:

  o *Equitable recruitment, training and advancement practices:* Some programs actively share the responsibility with employers in recruiting and hiring tradeswomen, matching their participants with employers to fill job vacancies. Other programs provide guidance to help employers build internal human resources capacity, working closely with them to address covert and overt gender-based discrimination in HR management processes.

  o *Organizational policies and practices to address bullying and harassment:* All program staff acknowledged that bullying and harassment still happen in the workplace, and not just

---

[16] This quote is taken from a published guideline by one exemplary program. Available online at:
http://womenunlimitedns.ca/images/uploads/OnTheLevel.pdf

to women. Most programs appeared not to have the resources to directly address this problem, choosing instead to avoid placing subsequent cohorts of tradeswomen in these unwelcoming workplaces. That said, one program stood out for its written guidelines to help employers implement diversity strategies, which include zero-tolerance policies toward bullying and harassment.

o *Health and safety programs and policies:* Using their expertise in health and safety regulations, program staff generally played a major role in helping employers adapt their practices to meet with specific characteristics and concerns of women. Some programs even went a step further, equipping their female participants with fitting tools to help improve health and safety compliance at the individual level. One area of concern that needs more resources to address is the limited availability of gender-appropriate facilities such as women-designated washrooms and changing rooms on job sites.

o *Flexible workplace policies and practices:* While providing flexible workplace policies and practices is increasingly acknowledged to be a worker issue, many employers have not contemplated or prepared to introduce flexible workplace practices in part given the perceived absence of "demand" for them with a lack of critical mass of female employees. Many WIT program staff we interviewed indicated that employers will often require support with introducing policies and then navigating circumstances around specific practices such as flexible hours to accommodate childcare schedules.

▪ **Maintain close ongoing follow-up with employers, unions, and tradeswomen:** Almost all respondents stressed the need to provide constant supports before and after tradeswomen join the crew, making sure that all parties can work together to address any problems that may arise. This also helps develop a long-term relationship with various groups and stakeholders, strengthening program's relationship with industry. For example, staff from one program shared that over time, employers actually would come into the office to ask for advice and recommendations on ways to hire more women and to support existing female employees, which proved that a huge shift in industry culture has started to take place in their community.

It is important to note that only one program in our review has provided all four types of services listed in this section, while the rest tended to focus on the latter two without going through the first steps with employers. An interesting trend emerged from our interviews: staff from the program that has provided the complete package seemed to have made relatively more progress in terms of building a partnership with employers, compared to other programs. Particularly, they took pride in the strong connections they have made with multiple strategic industry partners across all four regions, highlighting progress made even with small and medium-sized enterprises. Staff shared that the credibility of their program is so impressive that in recent years, employers have started paying for their recruitment support services, contracting program staff to train and prepare tradeswomen for their workforce. They also reported that employers have proactively adopted their guidelines and standards to make tradeswomen feel more inclusive on job sites, showing commitment to improving workplace policies and safety practices. This is wonderful news – clearly, this program is doing something right, and their service delivery model could be adapted to a new WIT initiative in BC.

Several interviewees noted another challenge in relation to the BC context: the difficulty of obtaining updated labour market information to align program services with labour demand. As a program manager observed, "no one anticipated what would happen with the Northern projects, or with Alberta. Right now schools are running all these welding courses, but there are no jobs." Having a better match between job demands and training provision is necessary to focus program resources on the sectors that are best suited for change, maximizing the benefits of these organizational supports. The staff of future programs in BC can work with partners to establish a system to obtain updated labour market information on a regular basis.

Workplace training interventions to support organizational practices

Interviewees could not stress enough the importance of changing the mindset of people who directly work with tradeswomen on a daily basis. A program manager shared the anecdote of conducting a workshop for one employer who had 53 male workers in the crew and wanted to diversify and hire women. After giving them an overview, she shared her personal experience as a tradeswoman and how feelings of isolation on the job impacted her. She then asked the audience, "what would you do differently if this was the story of your sister, your wife, or your daughter?" She recalled that the room "exploded with ideas of ways to handle the situations better." The company ended up hiring two tradeswomen, both of whom are well-supported and are developing long-term, fulfilling careers.

This is an example of when raising awareness and changing the mindset of the workers *before* a tradeswoman comes on board makes all the difference. One expert we interviewed stated that "if you wait until after women have joined the crew to start changing the men's ways of thinking, you already lose half the battle." Furthermore, it is important to note that upper management needs to be willing to make time for such info sessions to take place in order to drive changes within their workforce – the lack of enthusiasm from upper management was cited as a kind of resistance that program staff tend to face. That said, a new BC initiative, if holistically implemented with strong components of partnership and organizational supports, is expected to have no problem generating interest from upper management in this area.

Addressing Interpersonal Barriers

Facilitating events and building professional networks

Staff from all programs emphasized the necessity of expanding tradeswomen's professional networks, mitigating feelings of isolation and lack of support.

- **Smaller-scale events:** A great number of programs in our review provide their participants with social events on a regular basis, organizing BBQ day, pizza nights, sports days, etc., bringing tradeswomen together in an informal setting. Innovatively, a well-established program in the US has been organizing annual Dads and Daughters Workshops, engaging current trades workers in encouraging their daughters to explore high-paying careers in the trades. Staff from this program explained that "a dad's support and encouragement is vital for young women considering a career field that is non-traditional. A dad can help young women work through

their self-doubts, learn important skills, counteract social stereotypes of the kind of work women perform, and help them make important connections in the world of trades work."[17] We found this idea to be fascinating and has the potential to make great impacts, not only in terms of attracting the next generations of tradeswomen, but also in terms of encouraging the current generation of tradesmen to think of the trades as a suitable career for women, possibly improving the way they interact with their female colleagues on the job sites.

- **Large-scale conferences:** Managers of multiple exemplary programs proudly talked about the success of their large-scale, annual conferences and trades shows for women. These conferences tend to bring together women at all stages of their trades careers – pre-apprentices, apprentices, newly-certified journeys as well as those who have been active in the field for a long time. Some programs extend their attendant pool to include high school girls interested in the trades as well. The purpose of these conferences is to provide a place for tradeswomen to come together to celebrate their work, connect with others and expand their professional and support networks.

- **Build and strengthen professional networks:** Some programs organize events to connect tradeswomen with employers, unions, and other industry representatives, providing a venue for all parties to connect and discuss issues and opportunities around employment. We expect this to be one of the crucial events of future WIT programs in general, as this could be key in establishing a forum for both sides of the labour market to come together to discuss and achieve long-term employment outcomes.

Formal and informal mentorship

There seems to be a consistent preference among program staff to develop mentorship relationships among tradeswomen on an *informal* basis (e.g., through social networks in-person or online). One respondent explained "mentorship is about fit and reach," and the trust that is developed informally and naturally tends to be stronger and more long-lasting than any formal matching algorithm. Another program compiled a registry of about 50 volunteer mentors who can be contacted by phone or email, as needed. A representative from this program elaborated the way the registry has worked: "If a woman is having a hard day, she can send an email or give a phone call to one of the volunteer mentors and say, 'how do you deal with this, what do you think?' Things that are said to mentors are often very private and personal – the mentors have to be someone they know well and feel comfortable sharing." This can be an implementation best practices, as having an online network of mentors helps overcome the challenge of coordination in provinces that are spread out like BC.

---

[17] This quote is available online from the program's website: http://www.tradeswomen.net/

Addressing Individual Barriers

Employment services and supports

The core components of employment services specifically aligned to support tradeswomen are:

- **Job search, job matching, and job maintenance supports**: Program staff often found it critical to devote resources to helping women find and secure employment – one interviewee noted that "there needs to be a major program focus on the employment side." Staff from one program briefly described the process: a team of Job Coaches connects regularly with employers and unions to be aware of employment opportunities for women. They then help apprentices send out resumes, prepare for job interviews, and follow up with employers. They constantly track employment progress of women to identify and work on any areas for improvements. Basically, program staff leverage their partnership with employers to help women "get a foot in the door," as one expert put it. At the same time, they work with tradeswomen to enhance their employment readiness, which in turns increases employers' hiring confidence and strengthens employers' commitment to the partnership.

- **Career counselling services**: Program staff felt that expectation management is often an overlooked part of career counselling services. For example, it took the team of one well-established program by surprise that female apprentices might not come out of training classrooms with sufficient, realistic expectations of job sites. The team spent about five years designing the right expectation management services, eventually delivering group seminars and one-on-one counselling discussions to provide accurate information on trades work cultures. Another program collected best practices from experienced tradeswomen who are well-advanced in their careers, creating guidelines filled with real-life examples and concrete recommendations that tradeswomen can apply to their workplace.

Inherent in a number of our interviews was an important staffing lesson: the team delivering employment supports to tradeswomen need to be knowledgeable about the trades, knowing all "the good, the bad, the ugly," while at the same time having the ability to connect with employers and other key partners to align services with labour needs. This requires deep knowledge of the local area in which the program operates.

Upskill

- **Technical training:** A common theme was one of increasing skills and knowledge through technical training specific to women's circumstances and aligned with their needs. Skills training was also viewed as key to leveling the playing field for tradeswomen. Program interviewees also described examples of how specific technical training, such as a short-term forklift training course, can make a substantial difference in helping women obtain and maintain employment.

- **Soft skills development:** Staff from multiple programs shared that they have been building up capacity to deliver classroom sessions focusing on soft skills development such as professional

development, leadership, small business skills, and communication. These were seen equipping women with critical tools to navigate the workplace and advance in their careers.

One word of caution from program staff on implementation related to in-house training is to make sure that it does not pose an increased burden for tradeswomen. Staff from one particular program gave examples of scheduling training courses after school breaks to avoid additional childcare issues or avoiding making participants travel to class during the worst winter conditions.

Continual wrap-around supports

Flexible, timely, and individualized supports should be offered to women as they progress through their careers. The specific examples of such supports vary from program to program, ranging from childcare supports through work-related aids to the provision of affordable housing. With respect to work-related aids, for example, some program interviewees noted that "sometimes providing a pair of boots helps." These supports are effective because they are individualized and well-aligned with the needs of the program participants. As one respondent described:

> *"All of the supports are about making them job-ready on day one. So if a woman gets onto a job site, knowing they have the right tools and attire gives them that boost of confidence, so they can focus on the job. It levels the playing field."*

The key theme that emerged from this is that the program needs to be built with an inherent flexibility to respond to tradeswomen's evolving concerns. One program staff commented: "One of the really good things about our program is that we continually ask the women: What is it you want to see? How can we do more? Where have we fallen short? We are constantly communicating with the women to modify our services according to their concerns." A manager of another program explained:

> *"You don't just come in and say, 'this is what we have, this is what we're offering, and that's it. This is all that's on the menu' (…). Our program needs to be fluid enough to be able to make those decisions without being bogged down with bureaucracy."*

Finally, managers of many programs noted that building up the level of flexibility could be challenging if staff are not always on the ground to be in constant contact with tradeswomen. Without building a high level of trust and rapport with tradeswomen, it would be hard for staff to identify and respond to issues in a timely manner. That said, one of our respondents reflected that it could be helpful to set up a 1-800 helpline to which women could call and discuss their issues on an as-needed basis. This helpline could be supported by someone knowledgeable about the system, with the ability to provide prompt and accurate advice or direct them to other services if necessary. This is an idea that emerged spontaneously from our discussion but could be a useful tool that future program staff could consider.

Other considerations: Assessment of fit

Assessment of fit is another service that some programs we reviewed provide. While assessment of fit occurs in pre-apprenticeship, it emerged as a strong theme through the course of the research as important to retention, and therefore bears describing here.

Individualized supports were reported to be needed right when women start to consider a trade career. Program staff found it extremely crucial to have a career decision-making tool in place to help women explore the trades in the most realistic manner. One program manager expressed:

> *"It is our responsibility to deliver the right message, the good the bad the ugly, the realities of the trades. You have to say the realities of it, and where you can and cannot support them in this process (i.e., be realistic about the service you can and cannot provide). There is so much feel good out there and sometimes service providers are guilty of that – it is a disservice sometimes."*

Such career decision-making tools should provide straightforward information of the trades in the context of participants' personal circumstances, help them self-evaluate if 1) the trades is the right career path, and 2) which types of trades fit well with their ability and interest. This could be structured as discussions with career counsellors within the program, or a-day-in-the-trade job-shadowing programs with partnering employers. In addition, some service providers offer a variety of assessments, including physical endurance assessments, math tests, and drug tests to examine participants' ability to thrive in the trades. Staff indicated they would then work with participants to interpret the results of these assessments, giving them advice as to which trades fits best with their personal circumstances. Staff would work with participants to strengthen key skills areas to help them succeed or redirect them to alternative paths if the trades are not the best career fit for them. The main goal of these activities is to help participants make informed career decisions before starting their journey in trades. One program manager specified: "Our job is to get the right people into the right training program and hired by the right employer. You have to have all three pieces because it is not one-size-fits-all."

The majority of program managers interviewed conveyed the challenge of creating a single career decision-making tool, which on the one hand could be used by all participants, while on the other hand, is flexible enough to recognize and accommodate individual differences. Rather than a single tool, a set of instruments would allow practitioners to cater and customize solutions for each participant in a way that ultimately leads them to the most suitable career path. Staff from one program described that effective tools are far from one-size-fits-all – instead, the assessment process looks carefully at individual circumstances, collecting detailed inputs from individual participants to help customize supports for them.

Within the context of BC, multiple service providers, including the WITT programs of ITA, have offered pre-apprenticeship and trades exploration programs to help women gain better insights into the trades. This results in a wide range of opportunities for new initiatives in BC to collaborate with existing service providers, building on one another's strengths and coming together to address any weaknesses.

Staffing and Operations

Staffing structure

Results in this section are informed not only by the overview of the staffing structure that interviewees gave as a direct response to our interview questions but also by our analysis of other information they shared including:

1. **Their brief introduction about the work they do**: We looked at their job title, as well as how involved they have been in founding and managing the program, using these introductions to shed light on the expected responsibilities of someone in their role; and

2. **Their comments on limitations in their human resources capacity**: Often, WIT programs are initiated by a small team of people passionate about advancing the careers of tradeswomen. These people often wear multiple hats and play a generalist role – depending on how long the program has been in operations, people may switch the focus of their role from forming partnerships with industry and government to giving talks at local schools to motivate students. They often expressed that, in hindsight, they wished their program had staff dedicated to these key functional areas. This offers further insights into the desired staffing structure that a new BC program can look into.

In the following subsections, we described the roles of program leaders at multiple management levels, as well as job responsibilities of key delivery staff.

Executive Director

Generally, senior-level executive leaders would be in charge of building partnerships with government, industry, services providers, and other stakeholders during the development of the program. Once the program is established, they would engage with partners on an ongoing basis as the program grows.

> *"The person leading the program needs to be well-equipped to handle stress, confrontation, opposition, and challenges in a really diplomatic manner, to maintain a positive attitude, and to work with allies."*

There seems to be an agreement among respondents that this is a political position, in terms of providing both strategic direction and diplomatic engagement with stakeholders. This person needs to be "well-equipped to handle stress, confrontation, opposition, and challenges in a really diplomatic manner, and be able to maintain a positive attitude." Leaders of exemplary programs shared their feeling of frustration at times, commenting that as a result, it is important for these executive leaders to recognize the complexity of the system and understand that changes could not happen overnight. They also need to appreciate the importance of working with others, as one program team recommended in a report: "Find and grow your allies…one step at a time. You may be the "expert" in what you do, but recognize you need the expertise of others to accomplish your

goals. Respect different ways of knowing, being and doing."[18] Overall, these findings suggest that the ones best suited for this position are those not only knowledgeable about the trades, but more importantly, also have the skills and knowledge to navigate the system to build and maintain collaborative partnerships.

Operational leaders

All interviewees shared the same opinion that the person in charge of the daily operations of the program should be someone who has worked in the trades, has been through the journey, and has a clear understanding of the barriers as well as support factors needed along the way. One respondent explained: "Having the point person be a tradeswoman gives it validity. It makes it legitimate." Another specified: "You need someone who has been there in the trades for 10-15 years. They've been there, they've heard it all, and they've seen it all, and that's how you'd have success because people would show up for them." These ideas indicate that in general, it is advantageous to have successful tradeswomen with established professional credibility lead the operations of a WIT program.

Functional areas of delivery staff

Managers of multiple programs viewed it as essential to their success that staff on their teams were each dedicated to key functional areas of the overall program. Figure 21 illustrates these areas and their link with the four categories of systemic barriers. These areas would help align staffing structure with program delivery objectives:

- **Outreach, engagement and education:** Dedicated staff members would work closely with partners in related WIT programs to coordinate outreach, engagement, and educational efforts to shift attitudes towards the trades and women's roles in them. While coordination could take place in the lead office, regional staff or contractors would be required to support local outreach engagement and education efforts.

- **Advocacy and leadership development**: the CEO and Operations Manager would likely lead advocacy efforts around the regulatory and financial changes to address systematic barriers. They would also support leadership development efforts within the industry and public sector including providing channels for employers and other industry players to demonstrate leadership (professional networking, conference venues, etc.).

- **Strategic engagement of target populations**: A dedicated support staff should be established for strategic engagement and education of disadvantaged target populations such as Aboriginal women. While the overriding engagement strategy and objectives may be similar, the outreach, communications, and educational tools all need to be culturally sensitive and aligned specifically to the unique needs of these communities.

---

[18]   This quote is taken from a published guideline by one exemplary program. Available online at:
       http://womenunlimitedns.ca/images/uploads/OnTheLevel.pdf

- **Organizational analysis and action planning:** This team would have responsibility for educating employers on the business benefits of hiring women, providing guidance to help them conduct organizational analysis and plan for change. Program experts recommend allocated sufficient time and resources to work closely with the upper management of companies to promote the business case for hiring women.

- **Support organizational capacity:** The team is likely to require extended expertise in helping build organizational capacity to implement policies and practices that are supportive of tradeswomen. This can include practitioners with expertise in anti-bullying and harassment policies; equitable recruitment, training and advancement practices; health and safety practices; and flexible workplace practices.

- **Workplace training interventions to support organizational practices:** Skilled facilitators will likely be needed in providing support to employers for the coordination and delivery of workplace training interventions for all employees – male and female – to build respectful and inclusive workplaces and create supportive peer networks in the workplace.

- **Professional networks:** Staff working in this area would be responsible arranging the larger-scale, annual conferences and trades shows. These conferences help build social capital, bringing together women at all stages of their careers. This function requires unique expertise in event planning as well as in building and strengthening professional networks.

- **Event management:** In addition to larger scale events, networking is also critical at the local level. A great number of programs in our review provide social events on a regular basis, bringing tradeswomen together in an informal setting. This will require at least some regional and local presence of staff to effectively stage and manage events.

- **Formal and informal mentorship**: All event participation should be tracked with appropriate consent obtained from participants, in order to facilitate future follow-up and engagement. In addition, this information would support the development of a mentorship registry, which program staff could use to facilitate informal mentorship between interested tradeswomen. Depending on the level of interest in mentorship and scale of activities, dedicated staff may be required to coordinate.

- **Employment services and supports:** Staff in these positions, titled "Job Coaches" by one program, offer a range of functions, including job search, job matching, and job maintenance. At the same time, the team works closely and connects regularly with tradeswomen, employers and unions, including to identify employment opportunities, and address issues and provide supports as needed. They also support apprentices in their readiness to work, providing career counselling and, in some cases, assessment of fit and expectation management.

- **Upskill: technical and soft skill training**: Program staff facilitate access to training offered by a third party. They also provide additional needs-based in-house skills training and workshops for tradeswomen to prepare them for the workplace.

- **Continual wrap-around supports:** The team also maintains close contact with tradeswomen throughout all career stages, being aware of any issue they may face. Staff work closely with women to find proper and timely solutions that best meet their individual needs.

Location

It was viewed as an important lesson learned that the program needs to have a presence throughout BC. One program manager reflected that because of their limited personnel, staff spent a lot of time travelling and re-engaging with stakeholders in different communities across the province. Looking back, having more staff on the ground would be something she wished she could do differently. Another manager thought that by having offices embedded in major areas of the province, her program was able to generate local enthusiasm and input, which represented some of the key ingredients for the success of the program.

Recognizing the geographical characteristics of British Columbia, several respondents suggested setting up a main office in a major metropolitan area and a few satellite offices, including one in the North. The goal is to create a harmony of services provided across the province while allowing for modifications of program and service delivery models based on local uniqueness. Ideally, there would be one office in each of the four regions of the province (Lower Mainland, Vancouver Island/Coast, Interior, and the North) and the full scope of service delivery staff can be replicated in each regional office, with at least one staff member responsible for each key service area depicted in Figure 21.

The ultimate aim is to have regional teams that can leverage local knowledge and understanding to align service delivery strategies to best meet regional needs. Practically, however, it is important to recognize the necessity of building and strengthening the program over time, and thus be more strategic and targeted in allocating resources when rolling out the program. Based on our interviews and consultations, certain service areas emerge as absolutely foundational to the program and should be delivered across all four regions, while others can be more selectively implemented and rolled out over time depending on regional labour market characteristics. Although further design and implementation research may be needed to figure out the exact regional staffing structures for a future WIT program, our preliminary scan of regional labour market conditions allows us to provide some general staffing recommendations.
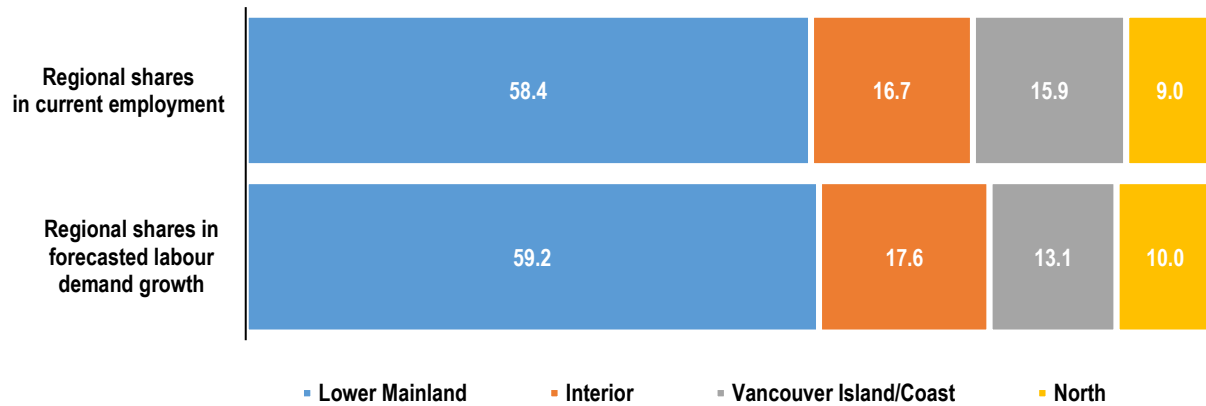
Based on our discussions with experts and staff from exemplary programs, outreach, engagement and education, as well as professional network building activities, are fundamental building blocks that set the groundwork for longer-term services and supports for tradeswomen. Therefore, we suggest that all regional offices should be staffed with teams specializing in the areas of 1) outreach, engagement and education, 2) local events organization, and 3) professional network development, including mentorship coordination for tradeswomen.

Our analysis of publicly available labour market information across the Lower Mainland, Interior, Vancouver Island/Coast, and the North of BC provides useful implications for regional staffing structures. Based on our scan, we found that labour market activities in the sector are heavily concentrated in the **Lower Mainland**. This area accounts for about two-thirds of the current trades workforce of the province and is expected to remain a key area with huge labour demand growth

over the next few years (see Figure 17). Furthermore, 57 percent of construction businesses – many of which are major employers in the sector – are located in the area (see Figure 18). These findings suggest that the Lower Mainland is a promising location for the head office of a future WIT program in BC. This office should be fully staffed with strong delivery teams in all four programming areas. Besides managing and delivering services to regional communities, staff in this office are also well-positioned to *lead* the advocacy and leadership development efforts across the province. In the early phases of the program, frequent travel of staff in these teams are expected, as they need to create and maintain a province-wide partnership to generate momentum for longer-term work in advocacy and leadership development.

Figure 17   Regional shares in trades employment, current employment (2015) and expected growth (2010 to 2020) (%)

	Lower Mainland	Interior	Vancouver Island/Coast	North
Regional shares in current employment	58.4	16.7	15.9	9.0
Regional shares in forecasted labour demand growth	59.2	17.6	13.1	10.0

Source: Current employment is calculated based on Table 282-0157 - Labour force survey estimates (LFS), employment by economic region based on 2011 Census boundaries and National Occupational Classification (NOC); Forecasted labour demand growth is calculated based on BC Trades Outlook (2011).
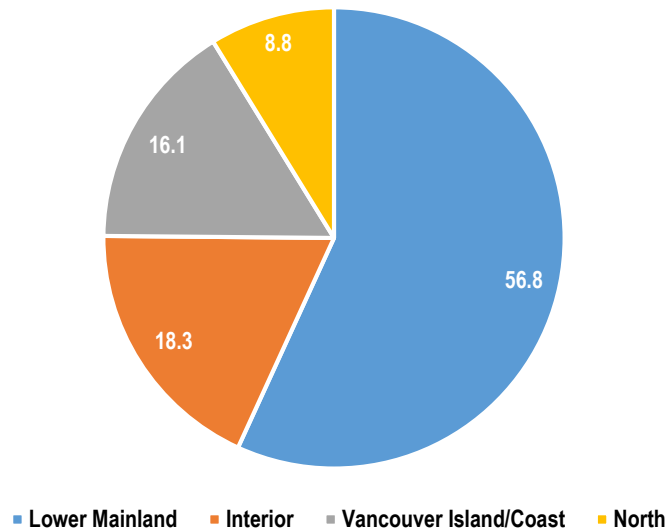
Figure 18   Regional distribution of construction employers in 2015 (%)

Source: BC Stats. Business Locations by Employee Size.

Note: These employers are in the Construction industry, as defined by the North American Industry Classification System (NAICS). Businesses in this industry are key employers of workers in the trades sectors examined in this study. Businesses with no employee (i.e., single-operator businesses) are excluded from the calculations.

The **Interior**, comprised of the Thompson-Okanagan and Kootenay areas, has the second largest regional share of the labour force in BC trades sector (see Figure 17). Furthermore, about one-fifth of employers are located in this region, which translates to substantial labour demand. However, according to the 2015 Apprenticeship Student Outcomes Survey, 7.2 and 9.1 percent of apprentices in Thompson-Okanagan and Kootenay, respectively, could not find a job after completing their training (see Figure 19). These are relatively high unemployment rates, especially compared to the Lower Mainland (6 percent) and Vancouver Island/Coast (5 percent). The findings suggest that helping ease the transition between training and employment for tradeswomen in the Interior is critically needed. Specifically, employment supports for tradeswomen as well as organizational supports for employers should be provided simultaneously to facilitate better employment outcomes. Recruiting competent delivery team working to address organizational barriers should therefore be a staffing priority for this regional office.

**Figure 19   Unemployment rates upon apprenticeship completion**
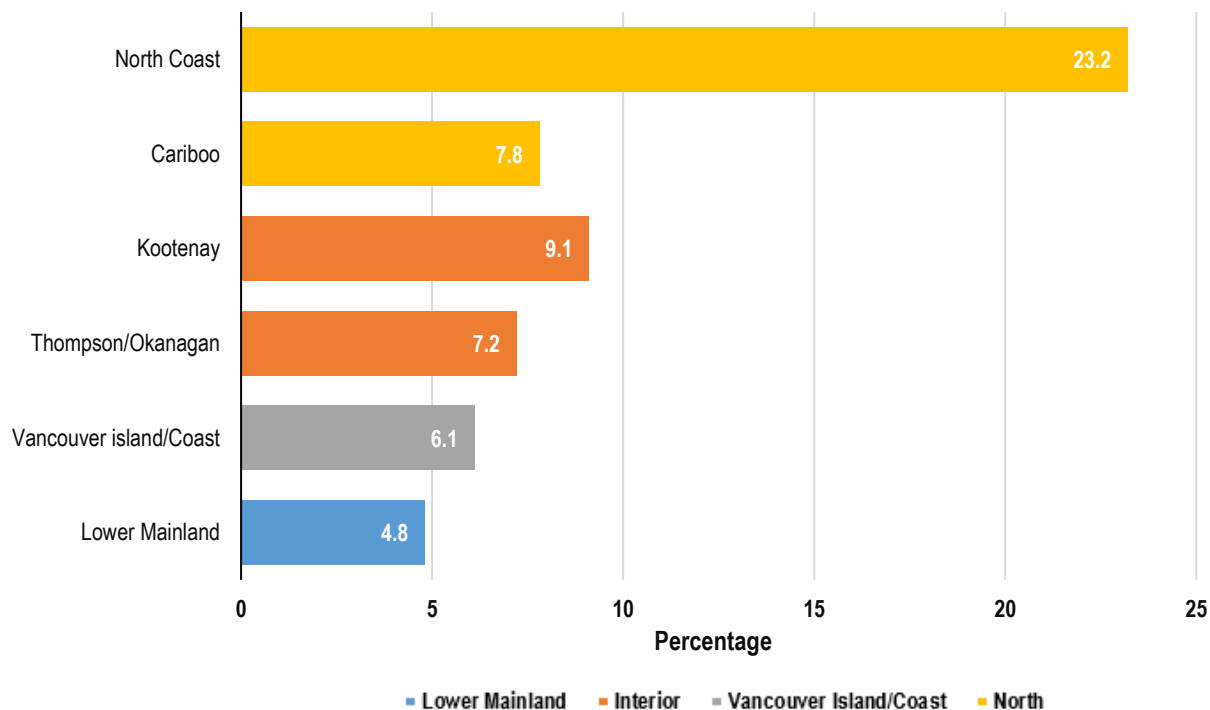
Source: 2015 Apprenticeship Student Outcomes Survey Report of Findings.

Notes: Unemployment rates of Nechako and the Northeast – two areas in the North – are masked to preserve confidentiality. For the purpose of our report, only traditional apprenticeship students are included in the calculations. Progressive credential apprentices are not included because programs eligible for this apprenticeship route are generally not male-dominated (almost half of respondents from the progressive credential apprenticeship stream are from the Culinary Arts and Personal Services).

The labour market conditions in the **Vancouver Island/Coast** seem to be relatively healthy. Compared to the Interior, this region has slightly smaller shares of the current workforce and forecasted labour demand (see Figure 17 and 18). However, unemployment rate among its apprentices is considerably low – at 6.1 percent – indicating a relatively tight trades community. Coupled with its geographic advantages, we expect this regional office to not only organize local events but also provide province-wide networking venues to connect tradeswomen with key employers, industry leaders, and other stakeholders in the industry. Success in this service area should give the team ample ammunitions to develop regional industry leadership and to support the province-wide advocacy efforts of the head office.

Generally speaking, employment opportunities in the trades in the **North** are not as plentiful as the rest of province – as shown in Figure 17, this region accounts for only about 10 percent of the trades workforce. Illustrated in Figure 19, unemployment rates among graduated apprentices in the North are particularly high, especially in the North Coast (23 percent). Advancement opportunities for pre-apprentices are also limited here, with 16 percent of graduates finding it necessary to relocate to other parts of the province upon completion of pre-apprenticeship training to pursue further trades opportunities (see Figure 20). These labour market conditions indicate that the delivery team of this regional office should focus on providing career assessment, counseling, as well as wrap-around supports to tradeswomen in these areas. It is especially essential for them to communicate the reality of the trades to those interested, highlighting the possibility that they may need to relocate to other regions in order to pursue a career in the trades.
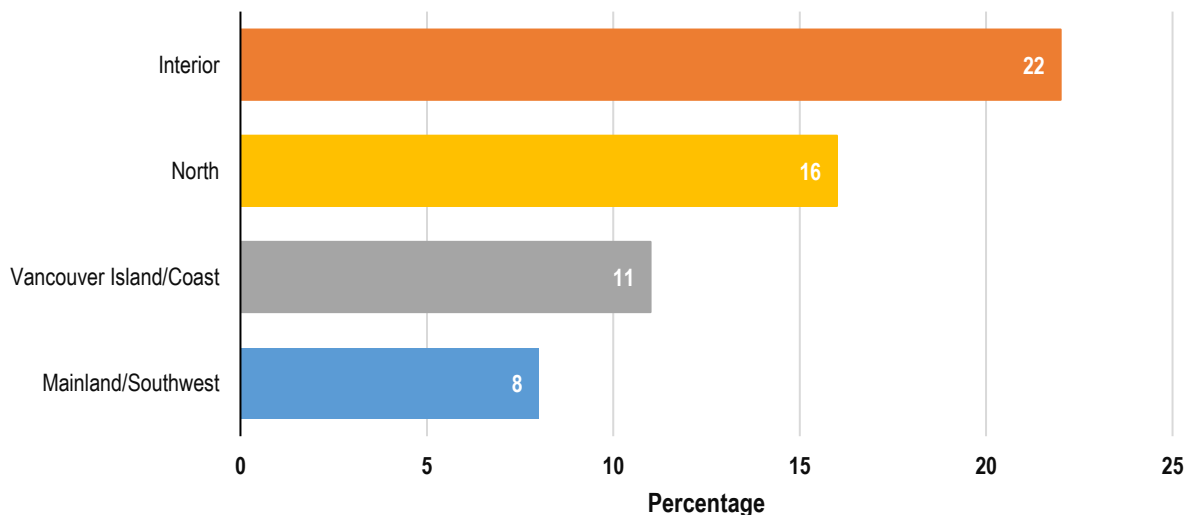
Figure 20   Percentage of tradespeople moving out of region upon pre-apprenticeship completion

Source: BC Student Outcomes (2014/15). Start Me Up: Outcomes of Trades Foundation Students.

Management information system, tradeswomen database

The use of a database to track key indicators for tradeswomen is an innovative feature of one successful program we examined. This was expressed by staff as a vital core component underlying the sustained success of the program. Even though it is not commonly found across all programs reviewed, it should be considered as a key element for future BC programming.

Program staff recommended that this data registry track the following types of information:

- **Basic information**: name of participant, trades, preferred sectors, educational pathway to trades, level, location in province, preferences regarding travelling to work, union status;

- **Information to support program operations and implementation:**

  o **Related to hiring process**: updated resume, number and status of job applications sent out, outcomes of job interviews, areas for improvement identified by employers during the hiring process;

  o **Related to continual employment supports**: employment history and advancement.

- **Information to support program evaluation:**

  o **Intermediate outcomes:** program participation rates, training enrollment rates, event turnouts, etc.

  o **Long-term outcomes:** employment rates, employer satisfaction, reductions in injuries, increases in business productivity, etc.

Staff managing this database recalled that when the registry was first set up, it was challenging to identify measurable indicators to track, especially those related to continual employment supports. That said, interviewees also felt that the activities that are already happening to support women working in the trades in BC put the province at a much more advantageous position to develop a comprehensive database for this purpose. Data related to apprenticeship completion has already been documented by ITA, and STEP utilized an internal system to collect essential information, including employment history, training plans, barriers and solutions, as well as basic demographic information. This suggests that when the new database is developed, program staff can look to existing service providers, including ITA and STEP, cooperating to make sure the different registries are compatible with one another, building the capacity to thoroughly document tradeswomen's career progress.

The recommendation is to integrate a participant database with a full management information system (MIS) that tracks not only participant information but implementation indicators of all program activities, which can be linked to a series of intermediate and longer-term outcomes of tradeswomen and employers (see section below, Evaluation Framework). Evaluators and IT expertise should be engaged in the design and implementation phases to ensure a robust system for tracking is linked to the underlying program objectives and that it supports ongoing program monitoring and strategic planning.

Governance Structure

Leadership and Partnership

A consistent message heard throughout all our interviews is that establishing strong partnerships with multiple stakeholders is one of the keys to the long-term success of a WIT program. Input from government, employers, unions, colleges, and high school representatives are all needed to contextualize and align program design and delivery with the needs of the sector. More importantly, **collaboration among stakeholders** is absolutely critical to ensure meaningful change can happen. A director of an exemplary program we reviewed had succinctly summarized that "government, industry, and unions have to be equal partners for this to take off. You can put on as many women's courses as you like, but unless you have the major players all participating, it's not going to work."[19]

Another strong theme that emerged is the significance of **engaging employers and tradeswomen** right from the start of the program. One respondent viewed the mission of a program is to "make inroads with contractors," creating the kinds of influence that "individual tradeswomen would never be able to make," due to the lack of critical mass of female workers in the industry. Building credibility with employers in order to become the voice that tradeswomen so often need is a major way a program can make an impact, encouraging substantive changes to happen right in the workplace.

> *"Government, industry, and unions have to be equal partners for this to take off. You can put on as many women's courses as you like, but unless you have the major players all participating it's not going to work."*

Establishing and cultivating trust among partners is not an easy task. On the one hand, the work that existing service providers in the province have done lay the foundations for a comprehensive Women in Trades program to thrive. On the other hand, the multitude of WIT initiatives in the province can make it challenging to streamline services across providers. It is important to build and maintain a system of **open and continual communication** to connect service providers together, making sure that services are not duplicated and supports for tradeswomen are well-coordinated.

Given the context of BC, several respondents in our interviews envisioned the program to work as a hub formalizing alliances among unionized and non-unionized employers, governments, funders, tradeswomen, and educators in the province. Details on the suggested governance structure will be discussed in the next section, but the key point of continual dialogue between program staff and partners could not be emphasized enough. One respondent recalled holding numerous focus groups with employers, unions, colleges, and tradeswomen during the early days of the program, facilitating discussions to solicit input, finding ways to align service provision with the needs of the local community. After these initial discussions, program staff tend to have ongoing conversations

---

with partners on a regular basis. Notably, connections with employers are needed most frequently, often several times a month, to gauge their interests, address their concerns, and solve any problems they may have regarding recruiting, employment, and advancing tradeswomen in their organizations.

> *"We need a system that allows cross-pollination across programs: Once a woman becomes registered, there needs to be a system to help nurture her career development throughout."*

Finally, solidifying open and transparent lines of communication with staff from similar WIT programs across the province is crucial in order to establish a system that "allows cross-pollination across programs," as one respondent nicely put it. Several experts we interviewed saw this as a chance to create a system of supports comprised of multiple programs that are compatible with one another. The new WIT program in the province was envisioned as a coordinator facilitating cooperation across existing initiatives, ensuring services provided complement rather than compete with other organizations' work. Such concerted efforts to support women working in the trades would also mean that best practices from one program can be easily adapted to another, which in turns facilitates the multiplication of success stories across the province.

Implications for Governance Structure

Given the critical role of strong *partnerships* in the success of a WIT program and the necessity of *collaboration across diverse sets of stakeholders*, it will be critical to establish a governance structure that is not only *inclusive* but one that facilitates **active engagement** of these stakeholders. Whether the program is established within a new or existing organization it will be important to create a guiding body – e.g., a steering committee or board of directors – for not only oversight but more importantly to facilitate active engagement and collaboration across these diverse stakeholders and partners.

The composition of this group needs to be considered carefully to maximize its effectiveness and alignment with the strategic goals of the program. Not only should it include diverse representation of stakeholders from government, industry, unions, and other key partners, but it should also aim to include those who are most likely to be in a position to support change – and to actively engage and drive change – in a positive direction consistent with short and long-term objectives. This must include **employers, tradeswomen leaders, and other key industry stakeholders** who have their "hands on levers of change" and can facilitate the critical functions of outreach, advocacy, and leadership development among those their organizations and broader networks. Similarly, it must include some representation from programs with existing services for tradeswomen in order to help facilitate the required coordination of activities and leveraging of resources.

Rotating term positions for committee membership should be considered. Periodic changes in the committee's composition could help resource the program with expertise based on emerging needs and strategic objectives.

Figure 21   Program elements to address systemic barriers
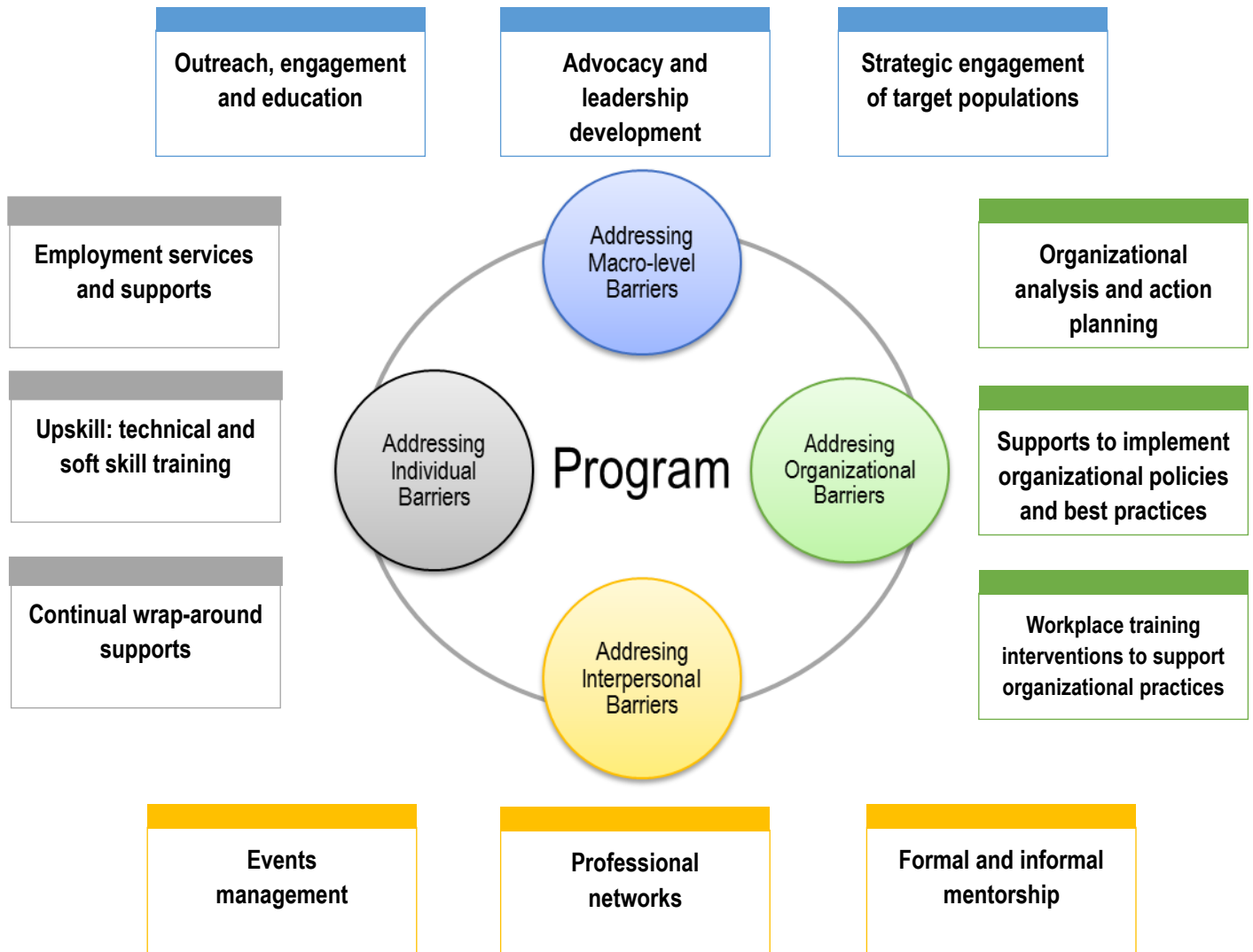
Evaluation Framework: Indicators for strategic planning and sustainability

In the previous section, recommendations were briefly outlined to develop a database for the purpose of monitoring implementation of program activities and supporting program evaluation by linking these activities with intermediate and long-term participant outcomes. This will serve dual objectives of supporting ongoing strategic planning for the WIT program as well as planning for its sustainability by collecting data that can help demonstrate its effectiveness to potential funders. More detail is provided below, in terms of a suggested range of outcome indicators to support a rigorous monitoring and evaluation framework, as well as a data collection strategy for the measurement of these indicators. [20]

Three kinds of outcome indicators are defined:

1. **Implementation indicators** to monitor the development and roll-out of information resources, promotional campaigns, conferences, workshops, counselling, training, advisory services, and other practices and activities designed to address each of the four levels of barriers identified in this report (i.e. macro-level, organizational, interpersonal, and individual).

2. **Intermediate outcomes** to evaluate the short-term results for participants targeted by these activities – including women at various stages of a pathway to the trades and with employers implementing supportive policies and practices – but also industry and union representatives, policymakers, and other stakeholders. Intermediate outcomes may include awareness, satisfaction levels with services received, and shifts in attitudes, as well as the development of strategies and action plans at the organizational level and gains in skills, self-efficacy, trust, and availability of networks at the individual level.

3. **Longer-term outcomes** to evaluate whether intermediate outcomes are associated with sustained gains in indicators of employment and job quality among tradeswomen, as well as positive business outcomes for employers.

An overview of possible implementation indicators, as well as intermediate and long-term outcomes are provided in Tables 8 and 9. This overview–expanded upon in greater detail below–is intended to initiate and facilitate the development of a comprehensive data tracking system to support ongoing program monitoring, evaluation, and strategic planning.

Data collection requirements associated with each kind of outcome are also described below. Most implementation indicators could be captured as part of a **management information system** that tracks resources developed and services delivered, and who the users (participants) were. Intermediate and longer-term participant outcomes, however, would likely require the use of

---

[20] This section focuses on the recommended types of indicators and data collection methods needed to measure outcomes, rather than the overall methodology and analytic strategy for isolating the effects of Women in Trades program services. Any future evaluation will need to incorporate a specific set of methods for isolating effects and estimating returns.

supplementary data collection methodologies such as **exit surveys**, **focus groups**, **key informant depth interviews**, and, for longitudinal indicators of change, **baseline** and **follow-up surveys**.

Macro-level Outcomes

Implementation indicators

Activities at the macro-level could be monitored by using a management information system to record:

1. **Tools or information resources** developed to promote or communicate diversity-positive messages, along with the realities of trades work;

2. **Organized events** (such as a meeting or conference) during which these tools and resources are communicated;

3. **Participation levels** (online or in person) and **participant type** (for example, women who might be interested in a trades career, employers, and other stakeholders both within and outside the industry) of those who use the resources and/or attend events; and;

4. **Partnerships** developed to support the macro-level activities of other stakeholders.

An example of a targeted outreach effort might include the development of labour market information tools as well as in-person demonstrations of selected trades, with hands-on exposure for girls and women interested in exploring a trades education or career. A broad outreach initiative could also incorporate a conference with panels and interactive presentations targeting a wider audience, including girls and women at various stages of the trades pathway (e.g. high school girls in skilled trades classes and their parents, women taking a college trades program or working in the trades, as well as those simply interested in learning about a trades career), employers and industry representatives, union representatives, government officials/policy makers, and employment counselors, among others.

Tools and services could also be developed to lead or support advocacy efforts or public policy level initiatives in specific areas such as financial assistance for students, apprentices, and journeys, wage subsidies for employers, guidelines for addressing bullying and harassment, health and safety regulations, labour agreements, etc. In addition, resources could be developed, events organized, or partnerships formed around the theme of demonstrating leadership, for example through compilation and dissemination of best practices or highlighting of exemplary employers.

Intermediate outcomes

Along with participation levels at macro-level activities and events, basic participant identifiers and information could also be captured on the **management information system** (for example, through registration forms). A participant inventory would allow for participants to be re-contacted in order to evaluate intermediate outcomes such as:

1. **Levels of satisfaction** associated with tools, resources, and activities, and the extent to which participants found them useful and would recommend them to others;

2. **Increased awareness** of the benefits associated with women working in the trades, as well as the tools and resources available to support women, employers, and other stakeholders;

3. **Attitudinal shifts** around gender expectations and roles that often act as barriers to women working in the trades; and

4. **Continuing participation** in other activities designed to address organizational, interpersonal, and individual barriers.

In some cases, intermediate outcomes can be captured quickly, for example by assessing post-event satisfaction through short participant **exit surveys**. Changes in awareness and attitudes though would likely require more intensive forms of data collection, such as **focus groups** of women and **key informant depth interviews** of employers and other industry stakeholders who have used resources or attended events.

Organizational Outcomes

Implementation indicators

Activities at the organizational level would focus on providing supports to build organizational capacity and shift organizational practices, policies, norms and standards towards increased diversity, not necessarily just for employers but also unions, industry associations, and educational institutions.

Because some organizations may be resistant to changes in workplace composition and practices, successful development and implementation of diversity-based transition plans likely depend on strategically communicating diversity-related initiatives so that resources and supports provided are aligned with organizational needs and business goals.

With these objectives in mind, supports could be provided at each step along a capacity-building pathway, including:

1. **Providing assistance with building a diversity strategy** by:

   a. Developing tools and information resources to help organizations build a business case for diversifying;

   b. Providing advice on building databases to track diversity indicators;

   c. Supporting organizational needs assessment and analysis;

   d. Helping to develop action plans for concrete steps to better prepare the workplace for women.

2. **Supporting the development of organizational capacity in specific areas**, by providing information, consultation, and/or training related to:

   a. Equality and equity initiatives and requirements in recruitment, hiring, training, and advancement;

b. Prevention of bullying and harassment;

c. Promotion of inclusive workplaces;

d. Health and safety standards and practices; and

e. Flexible workplace policies and practices.

3. **Providing employment supports**, to assist organizations with hiring, job matching, and retaining female employees, for example:

    a. Building partnerships with employers, unions, or industry associations to develop job banks or registries that can be used to link female job seekers with employers;

    b. Developing organizational tools and resources to enable better matches of women to trades and employers; and

    c. Assisting with the development of initiatives to support the onboarding and retention of new hires, such as ongoing needs assessment for workplace training.

4. Assisting with the development of **organizational supports for mentoring, coaching and networking initiatives**, for example:

    a. Practices to pair apprentices with mentors;

    b. Development of mentoring registries and databases;

    c. Practices to organize or otherwise give employees access to professional networking events.

The resources developed and services delivered could be tracked as part of the **management information system,** along with participation levels (number of organizations, as well as the number of participants within each organization) and participant types (types of organizations and types of staff who receive the services).

Intermediate outcomes

Indicators of success in the short-term should measure not only resource and service use, but also the extent to which services provided were aligned with organizational needs. At the most immediate level, alignment with needs could be evaluated in terms of:

1. **Satisfaction levels** of staff who used the resources and services, and the extent to which participants would recommend them to others. These could be assessed through short participant **exit surveys**.

In addition, indicators of capacity growth, such as new tools and practices developed as a result of the services outlined above, and the extent to which they are aligned with need. For example:

2. **Diversity strategies** developed tied to business goals;

3. **Data tracking systems** implemented;

4. **Organizational needs assessments** completed;

5. **Diversity action plans** completed;

6. **Guidelines, policies, standards, and practices** developed in specific diversity-related areas outlined above;

7. **Participation in an employment registry or job bank**;

8. **Matching and retention tools** developed; and

9. **Mentoring and professional networking initiatives** developed.

In each case, successful implementation would be indicated by the ability of organizational staff to articulate the ways in which their capacity grew as a result of services delivered, and the ways in which the growth was tied to organizational need and business goals. Evaluating these kinds of outcomes would require **focus groups** and/or **key informant depth interviews**.

Interpersonal Outcomes

Implementation indicators

Activities at the interpersonal level would focus on providing supports directly to tradeswomen, to address interpersonal barriers such as lack of mentorship and networking opportunities and workplace bullying and harassment.

These supports could be coupled with some of the organizational supports described above – for example, coaching and mentoring initiatives could be designed to work with both employers and apprentices. Alternatively, services could be provided to tradeswomen directly to help them cope with lack of organizational supports.

Examples of supports at the interpersonal level could include:

1. **Tools and resources to raise levels of diversity awareness** among men in the trades (including those still in school), to support the development of more welcoming workplace environments for women;

2. **Initiatives to develop mentorship opportunities**, either as part of formal organizational initiatives, or on an informal basis (e.g. online registries of those who need or can provide mentorship, targeted at girls and women thinking of entering the trades, as well as those already in the trades);

3. **Events and initiatives to help build professional networks**, such as social events in an informal setting, as well as conferences, trade shows, and career fairs that allow tradeswomen to connect with peers, mentors, employers and other industry stakeholders; and;

4. **Tools and resources to facilitate interpersonal communication and conflict resolution**.

Tools and resources developed and events organized could be tracked as part of the **management information system**, along with participation levels and participant types (men, women, still in school, currently working, etc.).

Intermediate outcomes

Intermediate outcomes could evaluate the usefulness of tools, resources, and events by measuring:

1. **Levels of satisfaction** associated with the tools, resources, and activities, and the extent to which participants would recommend them to others;

2. **Increased awareness** of interpersonal barriers to diversity, and ways to counteract these barriers; and

3. **Attitudinal shifts** around gender expectations and roles that often lead to interpersonal barriers.

   Satisfaction can be captured through short participant **exit surveys**, while changes in awareness and attitudes would likely require **focus groups**; alternatively, measures of longitudinal change in these indicators could be incorporated into longer **baseline** and **follow-up surveys**, in conjunction with the other change indicators described below.

   Another set of intermediate outcomes could be developed to capture gains along a range of psychosocial indicators that previous research has revealed are linked with better workplace performance. These include gains in:

4. **Social capital and support** (including mentorship and networking connections);

5. **Career adaptability** (i.e. confidence in making career and job search decisions);

6. **Trust**;

7. **Work-related confidence and self-efficacy**; and

8. **Reduction in workplace stress**.

These indicators are measured by combining the answers to a series of survey questions that represent validated self-report scales taken from the research literature and used extensively by SRDC in other projects as part of evaluations of work-related training and education. Each set of questions is asked at least twice, once as part of a pre-training **baseline survey** and then again as part of a post-training **follow-up survey**. The outcome of interest is the change from baseline to follow-up.

Individual Outcomes

Implementation indicators

Activities at the individual level would focus on providing resources and supports to help prepare women for a smooth transition into the trades, and increase their likelihood of succeeding. Some of these supports could be coupled with organizational level supports – for example, compiling a

registry of women seeking work (e.g. those in pre-trades or apprenticeship programs) in conjunction with a list of employers as part of a job bank initiative.

Examples of supports at the individual level could include:

1. **Trades exploration programs**, offering brief work exposure prior to intensive training or schooling;

2. **Career counselling and job search resources and programs**, such as providing help with career decision-making, resume and interview preparation, and regularly updated registries to connect job seekers with employers;

3. **Expectation management services** to provide women with accurate information on what to expect in the workplace;

4. **Tools and resources to assess occupation-relevant skills and occupational fit**, and identify possible skill gaps;

5. **Skills enhancement training to improve likelihood of success**;

6. **Counselling to support career advancement** and transition; and

7. **Providing information and assistance on wraparound supports**.

Tools, resources, and services developed to address individual-level barriers could be tracked as part of the **management information system**, along with participation levels broken down by participant type.

Intermediate outcomes

Intermediate outcomes could evaluate the usefulness of tools, resources, and events by measuring:

1. **Levels of satisfaction** associated with the tools, resources, and activities, and the extent to which participants would recommend them to others;

2. **Increased awareness** of what to expect and what it takes to succeed in the trades; and

    Satisfaction can be captured through short participant **exit surveys**, while changes in awareness and would likely require either **focus groups** or measures of change incorporated into longer **baseline** and **follow-up surveys**, in conjunction with the other change indicators, described below.

    Participants might also be expected to develop gains along the same range of psychosocial indicators described for interpersonal outcomes, including:

3. Social capital and support;

4. Career adaptability (i.e. confidence in making career and job search decisions);

5. Trust;

6. Work-related confidence and self-efficacy;

7.   Reduction in workplace stress; and

8.   Participants with skill gaps may also develop skill gains.

Psychosocial gains are evaluated by measuring the difference between responses on a pre-service **baseline survey** and then again as part of a post-service **follow-up survey**. Skill gains may also be evaluated through self-report survey indicators, though it is preferable to use **skill assessments** if available.

Table 8   Implementation indicators and intermediate outcomes

MACRO-LEVEL	ORGANIZATIONAL LEVEL	INTERPERSONAL LEVEL	INDIVIDUAL LEVEL
Implementation indicators			
Tools and information resources developed (incl. promotional campaigns/materials) to support broad/targeted outreach, advocacy efforts, leadership development Events (e.g. conferences, meetings) organized around these themes and utilizing the tools/resources Event participation levels (incl. online), and participant types (girls/women at different stages of the trades journey, employers, industry leaders, policy makers, etc.) Partnerships developed to support the efforts of other stakeholders in these areas.	Resources and services to help organizations: ▪ build a diversity strategy and action plan ▪ develop capacity in specific diversity-related areas, based on need ▪ employ, job match and retain female employees Organizational consultations/advisory services, training, workshops delivered Organizational employment support partnerships established Participation levels and participant types (employers, unions, industry associations, etc.)	Information/diversity awareness workshops for tradesmen delivered Tradeswoman mentorship tools and information resources developed Networking events organized (informal socials, conferences, trade shows, career fairs) Workshop and event participation levels and participant types	Pre-apprenticeship and trades exploration programs developed Career counselling and job search tools and resources developed Expectation management training and supports delivered Occupational fit indicators and skill assessments developed Skill enhancement training delivered Assistance with wraparound supports Supports for career advancement and transition Participation levels and participant types

MACRO-LEVEL	ORGANIZATIONAL LEVEL	INTERPERSONAL LEVEL	INDIVIDUAL LEVEL
Intermediate outcomes			
Satisfaction levels	Satisfaction with services received	Satisfaction levels	Satisfaction levels
Increased awareness	Indicators of capacity growth; tools and practices aligned with organizational need. E.g.,:	Increased awareness	Increased awareness
Attitudinal shifts		Attitudinal shifts	Attitudinal shifts
Continuing participation at lower levels	▪ needs assessments and action plans,	Mentorship connections made	Career adaptability gains
	▪ data tracking systems,	Social capital/support gains	Confidence and self-efficacy gains
	▪ policies, and standards,	Trust gains	Skill gains
	▪ employment and job matching practices,	Career adaptability gains	Social capital/support gains
	▪ mentoring and networking initiatives	Confidence and self-efficacy gains	Reduction in workplace stress
		Reduction in workplace stress	

Long-term Outcomes

Services and supports provided at the macro-level are mainly expected to produce shifts in awareness and attitudes, and in doing so motivate participation in initiatives at the organizational, interpersonal or individual levels. Activities and services delivered at these lower levels may produce a variety of long-term outcomes, for both individual tradeswomen and organizations (see Table 9).

Measuring these outcomes would require a reliable and updated participant inventory, in order to reconnect with organizations and individuals who received supports. Long-term outcomes at the individual level could be assessed by using **longer-term follow-up surveys** (e.g. at least 12 months post baseline), though **focus groups** would help to add qualitative detail and context. At the organizational level, evaluation of long-term outcomes would likely require **key informant depth interviews**.

Table 9   Long-term outcomes

Long-term outcomes for tradeswomen	Long-term outcomes for organizations
Sustained gains in psychosocial outcomes (social capital/support, trust, career adaptability, confidence and self-efficacy, reduction in workplace stress)	Diversity gains (women recruited, hired, retained, promoted, in senior positions)
Employment and retention rates, and wages	Gains in usage of flexible work practices
Greater availability of mentors and professional networks, reduction in challenges associated with lack of mentorship and networking opportunities	Increased availability of diversity/discrimination/harassment training
Gains in job quality indicators: ▪ Awareness and usage of benefits and flexible workplace practices ▪ Fewer challenges associated with gender-based discrimination/harassment ▪ More opportunities for skill use, training, advancement ▪ Job fit ▪ Fewer health and safety concerns	Reduction in discrimination/harassment complaints More inclusive workplace culture Reduction in costs associated with turnover, health and safety issues, absenteeism, grievances Gains in productivity, skill level, proportion meeting performance standards

8. Concluding Summary

This study aims to develop an enriched understanding of the systemic and structural factors that present *barriers* to women's participation in the trades, as well as the types of *supports and services* that would enhance entry and retention rates – and respond to these needs specifically in the unique context of British Columbia. The ultimate goal is to provide a series of *recommendations relating to the structure and scope of services* for a Women in Trades program in BC.

Challenges and barriers

The underlying causes to the barriers that women experience are systemic in nature, trickling down through the following layers of barriers:

- **Macro-level barriers**, which includes biased societal attitudes and beliefs about gender roles and expectations related to the trades;

- **Organizational-level barriers**, which refers to gender-biased organizational practices, policies, norms and standards – some of which are results of the macro-level barriers;

- **Interpersonal-level barriers**, or the discriminatory attitudes and detrimental behaviours of others on job sites, including bullying and harassment, as well as negative influences and discouragement from immediate social circles, e.g., family, teachers and peers;

- **Individual-level barriers**, or barriers related to an individual's knowledge, beliefs, self-perception, and self-confidence – the negative effects of which can be exacerbated by some of the interpersonal barriers.

This whole system of barriers affects all stages of a tradeswoman's career – from pre-apprenticeship, apprenticeship, to after she has achieved journey level – with varying levels of intensity.

Despite the focus of this project on retention and advancement of tradeswomen, the participants we spoke to consistently referred to formative experiences during their **pre-apprenticeship**, in particular, the prevailing attitudes and ideologies around gender roles and expectations. The trades are generally not seen as a field for women: it does not fit with what is expected of girls early on. This inherent gender bias translated into systematic under-promotion and under-exposure of trades to young women and girls at a family- or peer-level. At an individual level, this compounded into two key barriers: women entering the trades 1) often start on an uneven footing compared to their male peers and 2) have relatively more misconceptions and misinformation about the trades. In general, the barriers during this stage exerted an influence on the earliest exposure to trades, the effects of which reverberated through later stages of tradeswomen's careers.

The **apprenticeship** period was often described as a pivotal but painful. Women gave multiple examples of discriminatory recruitment and hiring practices at the organizational level that prevented them from "getting their foot in the door" and advancing in their careers. On an interpersonal level, women tended to find the lack of mentors and supporting networks to be particularly challenging. They have also described experiencing loneliness, especially when faced

with discrimination, bullying and harassment, with few or no resources available. In many cases, women described not being adequately prepared for the realities of working in a male-dominated industry. While many of the barriers experienced in apprenticeship were common to both pre-apprenticeship and journey, the effects of some of the barriers appeared most pronounced during the apprenticeship period. As a result, the majority of women who leave the trades tend to do so at this stage.

By the time women reach **journey-level**, they are well-aware of the realities of working in their trade, have already experienced some of the interpersonal barriers, and developed appropriate coping strategies. Barriers at the organizational-level were those most frequently identified challenges faced by women during their journeys. In particular, discriminatory hiring and advancement practices continue to be most challenging. The other most prominent organizational themes related to policies and practices to address harassment as well as gender-specific health and safety concerns on job sites.

Enabling factors and supports

A full spectrum of enabling factors and supports spanning all four levels were identified as mitigating the effects of systemic barriers that tradeswomen often face, including:

▪ At the **macro level**, advocacy, as well as government and industry leadership, are crucial to break down negative societal beliefs, help build critical mass in the industry and facilitate organizational changes;

▪ At the **organizational level**, building organizational capacity to address bullying and harassment, ensuring health and safety policies are in place, and equitable recruitment, training and advancement practices were identified as key enabling factors;

▪ At the **interpersonal level**, strong professional networks, including supportive mentors and welcoming supervisors and peers, are pivotal to the success of women working in the trades;

▪ At the **individual level**, supports to address individual needs, including tools, training and resources are fundamental, as they form the kinds of wrap-around supports tradeswomen often find necessary to help them remain and advance in the trades.

Similar to the barriers, these enabling factors are interrelated and trickle down the levels of the framework. Because of their interconnectedness, experts and stakeholders we consulted often advocated for *system-wide* changes to effectively level the playing field for tradeswomen.

At the **pre-apprenticeship** stage, interviewees identified the importance of promotional and advertising campaigns to help shift societal attitudes around gender roles and expectations; combat the negative perceptions of the trades; and communicate accurately the benefits but also the realities of working in the trades. Other important support factors at this stage include tools and resources that help tradeswomen become both well-informed and well-prepared before they enter an apprenticeship. Examples of such resources included exploration training programs with practical, hands-on components.

Employment services and job counselling were the most frequently identified supports required during **apprenticeship**. According to our participants, the most effective programs not only helped them secure long-term employment but also served as a channel to give them access to guidance and resources when problem arise. Another theme in apprenticeship related to equitable recruitment and better job matching practices, including through more personalized approaches. Finally, women consistently identified safe, supportive, and inclusive environments as an important factor, emphasizing the importance of building and maintaining organizational capacity to support diversity in the workplace. Employers echoed this theme and identified the need for more tools, resources, and other employer-directed services to assist them in recruiting and supporting tradeswomen in their organizations.

Journeyed tradeswomen often talked about the crucial role that organizational infrastructure can play, as workplace policies and practices are the main drivers that shape an inclusive and positive workplace culture. Exemplary employers also highlighted the importance of maintaining standards of excellence, codes of ethics, and consistent safety practices to support their female workforce. At this stage, flexible workplace practices to help women balance work-life responsibilities also emerged as important enabling factors, contributing to helping women build *long-term* careers in the trades.

Scope and structure of a Women in Trades program in BC

We are recommending a program model with four fundamental service delivery domains, corresponding to strategies to address macro, organizational, interpersonal, and individual barriers.

Our results suggest that strong partnerships with multiple stakeholders are key to effectively target *macro-level barriers*. It is important not only to engage with current and future generations of tradeswomen, but also to foster collaboration and develop leadership among policymakers, industry stakeholders, and other trades service providers. Our recommended program components in this domain fall into two major categories. First, *outreach, engagement, and education* campaigns are needed to build and maintain relationships with wide-ranging communities, raise awareness, contribute to shifts in attitudes, and strengthen the next generation of tradeswomen in BC. Secondly, *advocacy*, including financial and regulatory advocacy, *and leadership* development, is an important area to help build government and industry champions, and facilitate system-wide changes. Third, *strategic engagement of target populations*, such as Aboriginal women is needed in alignment with the unique needs of target groups.

To effectively respond to *organizational barriers*, the WIT program components need to fulfill the following key roles. First, *support organizational analysis and action planning,* including to demonstrate the business case for hiring tradeswomen. Second, *offer expertise and supports to assist organizations in building capacity* to implement equitable recruitment, training and advancement practices; enhance organizational policies and practices to address bullying and harassment; strengthen health and safety programs and policies; and develop flexible workplace policies and practices. Finally, *provide services and assistance to implement workplace training*

interventions to build respectful workplaces and help create supportive peer networks in the workplace.

The recommended program components to address *interpersonal level barriers* include activities designed to *build and strengthen professional networks, provide events management,* and *enhance formal and informal mentorship* opportunities for tradeswomen. This could be accomplished through a series of activities including networking events and professional conferences – at the provincial, regional, and local levels – in order to build a system through which tradeswomen can connect with one another, access professional development opportunities, and to mitigate feelings of isolation.

Supports for women working in the trades cannot follow a one-size-fits-all approach. An individual's circumstances, interests, strengths and weaknesses play important roles in determining their success in the trades. Therefore, to address *barriers on an individual level*, it is essential that women be provided with: *employment services and supports*, including job search, job matching, job maintenance, and career counselling; *upskill to provide technical and soft-skill training*, including professional development, leadership, and small business skills; and *continual, individualized, wrap-around supports*, including needs-based aids, as women progress through their careers.

The success of such a comprehensive program depends on the active engagement, collaboration and partnership of multiple levels of stakeholders in the industry. Therefore, *a strong and broad staffing structure* is critical to make sure that adequate human resources are dedicated to all program domains.

At the management level, it is recommended that a senior-level *Executive Director* leads the partnership development efforts. The Executive Director should not only be knowledgeable about the trades, but should also have the skills and knowledge to navigate the system to build and maintain partnerships with government, industry, service providers, and other stakeholders. The daily operation of the program is best managed by *Operational Leaders* who have established their credibility in the field through their professional success as tradeswomen.

It is important to align the *service delivery staffing structure* with program objectives, organizing strong teams of delivery staff dedicated to key functional areas of the overall program. To make the operationalization of the program more feasible and practical, we also provide recommendations regarding office locations and regional staffing structures based on unique BC context.

We suggest a *governance structure* that includes diverse representation of stakeholders from government, industry, unions, and other major partners. The key here is to bring on board those who are most likely to be in a position to support change – and to actively engage and drive change – in a positive direction consistent with short and long-term objectives. *Rotating term positions* for governing committee membership should be considered in order to allow for proper flexibility in committee composition, aligning the needs of the program and its evolving progress, or lack thereof, with particular objectives based on changing sectors' priorities.

It is critical for ongoing program monitoring and strategic planning to have a robust informational system. We recommend the development and integration of a participant database with a full

management information system (MIS) and data collection strategy, guided by an evaluation framework. This system should track participant information and, more importantly, implementation indicators of all program activities, which can be linked to a series of intermediate and longer-term outcomes for tradeswomen and employers. We provide a preliminary yet rich framework for these indicators including:

- **Implementation indicators** to monitor the development and roll-out of information resources, promotional campaigns, conferences, workshops, counselling, training, advisory services, and other practices and activities designed to address each of the four levels of barriers identified in this report (i.e. macro-level, organizational, interpersonal, and individual).

- **Intermediate outcomes** to evaluate the short-term results for participants targeted by these activities – including women at various stages of a pathway to the trades and with employers implementing supportive policies and practices – but also industry and union representatives, policymakers, and other stakeholders. Intermediate outcomes may include awareness, satisfaction levels with services received, and shifts in attitudes, as well as the development of strategies and action plans at the organizational level and gains in skills, self-efficacy, trust, and availability of networks at the individual level.

- **Longer-term outcomes** to evaluate whether intermediate outcomes are associated with sustained gains in indicators of employment and job quality among tradeswomen, as well as positive business outcomes for employers.

This will serve dual objectives of supporting ongoing strategic planning for the WIT program as well as planning for its sustainability by collecting data that can help demonstrate its effectiveness to industry stakeholders and potential funders.

References

Abu-Laban, Y. (Ed.). (2008). *Gendering the nation-state: Canadian and comparative perspectives* (pp. 1-18). Vancouver: UBC Press.

Acker, J. (2006). *Inequality regimes gender, class, and race in organizations.* Gender & society, 20(4), 441-464.

Braundy, M. (Ed). (1989). *Surviving and Thriving – Women in Trades and Technology and Employment Equity.* Winlaw, B.C.: Kootenay WITT Kootenay Women in Trades and Technology.

Brydon, R., & Dachis, B. (2013). *Access Denied: The Effect of Apprenticeship Restrictions in Skilled Trades.* CD Howe Institute Commentary, 380.

Bubel, A., Kain, J., & Kerr, K. (2009). *Women Building Futures: Journeywoman Start Program: Social Return on Investment Analysis.* Available at http://www.womenbuildingfutures.com/Portals/49/pdf/reports/Final%20WBF%20SROI%20Report.pdf

BuildForce (2016). *Construction and Maintenance Looking Forward: Construction trades outlook for major projects in Canada's territories.* Ottawa, ON: BuildForce Canada.

Charmaz, K. (2000). Grounded Theory: Objectivist and Constructivist Methods. In Norman K. Denzin & Yvonna S. Lincoln (Eds.), *Handbook of Qualitative Research,* 2nd edition (pp. 509-535). Thousand Oaks, Ca: Sage.

Clark, D., Martell, A., Wentzell, W., and Wheaton, M. (2009). On The Level: Women Working in Trades and Technology. Halifax, Nova Scotia: Hypathia. Available at: http://womenunlimitedns.ca/images/uploads/OnTheLevel.pdf

Cleghorn, C. (2010). Yukon Women in Trades and Technology: Evaluation Report. Whitehorse, Yukon: Advanced Education, Department of Education, Yukon Government. Available at: http://www.education.gov.yk.ca/pdf/YWITTProgram_Evaluation2010.pdf

Construction Sector Council (2010). *The State of Women in Construction in Canada.* Ottawa, ON: Construction Sector Council.

Government of Yukon (2010). *Yukon Women in Trades and Technology Evaluation Report.* Prepared for: Advanced Education, Department of Education, Yukon Government.

Griffin, M. & Braid, K. (2000). Training and Equity Initiatives on the British Columbia Vancouver Island Highway Project: A Model for Large-Scale Construction Projects. Labor Studies Journal, 25(3), 70-103.

Heinrichs, B. (2015). *Canada's Broken Compulsory Trades System.* Frontier Centre for Public Policy.

Johnson, B. (1997). Examining the validity structure of qualitative research. *Education, 118*(3), 282-292.

Kelly, M., Wilkinson, L., Pisciotta, M., & Williams, L. S. (2015, June). *When Working Hard Is Not
Enough for Female and Racial/Ethnic Minority Apprentices in the Highway Trades.* In Sociological
Forum (Vol. 30, No. 2, pp. 415-438).

Lincoln, Y.; & Guba, E. (1985). *Naturalistic Inquiry.* Newbury Park, CA: Sage Publications.

Maxwell, J.A. (1996) *Qualitative Research Design: An Interactive Approach.* Thousand Oaks, CA: Sage
Publishing.

Mayer, H. and Braid, K. (2007). *A Winning Ticket: Women in Trades in British Columbia and Yukon.*
Vancouver, BC: Simon Fraser University.

Mueller, R., & Laporte, C. (2011). *The Completion Behaviour of Registered Apprentices: Who
Continues, Who Quits, and Who Completes Programs?* (No. 2011333e). Statistics Canada, Analytical
Studies Branch.

Patton, M. Q. (2005). *Qualitative research.* John Wiley & Sons, Ltd.

Statistics Canada. Table 282-0141 - Labour force survey estimates (LFS), by National Occupational
Classification (NOC) and sex, unadjusted for seasonality, monthly (persons unless otherwise noted).

Statistics Canada - 2011 *National Household Survey.* Catalogue Number 99-012-X2011033.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for
developing grounded theory,* 2nd Edition. Thousand Oaks, CA: Sage.

Vojakovic, D. (2008). *Women in Trades: Discussion Paper.* Vancouver, BC: Industry Training
Authority.

Appendix A: Sample Comparisons

Table A.1 compares the distribution of occupations of women who took part in the research (survey or focus group) with the most recent provincial data we could obtain – i.e. the 2011 National Household Survey. Recruitment for the focus groups and the survey was conducted in parallel, in order to provide tradeswomen with options to engage with the project. Though efforts were made to reach as broad a sample as possible, getting an entirely representative sample was not the primary goal in either case.

Nonetheless, the research samples generally provide a fairly good representation of all the occupations of interest, with the exception of women in the masonry and plastering trades, relatively few of whom were recruited (none at all for the survey sample). Other construction trades, which is the most common of the occupations provincially (representing almost 30 percent of tradeswomen province-wide), is somewhat underrepresented in both the survey (10 percent) and the focus groups (6 percent). The second most common occupation, electrical trades and electrical power line and telecommunications, is somewhat overrepresented, making up 42 percent of the survey sample and 25 percent of the focus group sample, compared to 20 percent provincially.

In addition, tradeswomen not targeted by the recruitment strategy (listed as "Other trades") made up about 7 to 8 percent of both survey and focus group samples.

Table A.1   Distribution of women working in the trades, by occupation

	Provincial distribution (2011) (women only)	Survey	Focus group
Machining, metal forming, shaping and erecting trades	9.6	8.7	19.5
Electrical trades and electrical power line and telecommunications workers	20.0	41.8	25.3
Plumbers, pipefitters and gas fitters	5.0	12.6	8.0
Carpenters and cabinetmakers	17.0	10.7	13.8
Masonry and plastering trades	9.0	0.0	3.4
Other construction trades	29.5	9.7	5.7
Machinery and transportation equipment mechanics (except motor vehicle)	8.1	6.8	9.2
Crane operators, drillers and blasters	1.8	1.0	8.0
Other trades		7.8	6.9
Don't know/Declined		1.0	
Total	**100.0**	**100.0**	**100.0**

Sources: Provincial distribution is calculated based on data from Statistics Canada - 2011 National Household Survey. Catalogue Number 99-012-X2011033. Survey and focus group distributions are from SRDC survey and focus group tracking tools.

Table A.2 shows the regional distributions of tradeswomen in both our research samples – survey and focus group. Because neither the Labour Force Survey nor the National Household Survey has publicly available data that disaggregate regional distribution of tradespersons by sex, our population reference group is made up of both men and women in recruitment target occupations in each of the regions. Thus, the comparisons presented below are apt as long as regional distributions do not vary significantly by sex.

The highest proportion of tradeswomen in both research samples work in the Lower Mainland. However, the proportion of those in the Lower Mainland in both the survey and focus group samples is relatively low compared to the provincial distribution of almost 60 percent (though again, that number reflects both men and women). The survey also tends to under-represent the Interior (11 percent of the sample, compared to 17 percent provincially) and over represent Vancouver Island (30 percent of the sample, compared to 16 percent provincially). Focus groups, on the other hand, tend to over-represent the North (21 percent of the sample, compared to 9 percent provincially) and the Interior (24 percent of the sample, compared to 17 percent provincially).

Table A.2   Regional distributions of those working in trades occupations targeted by the recruitment strategy

	Provincial distribution (2015) (men and women)	Survey	Focus group
Lower Mainland	**58.4**	**44.7**	**36.8**
Vancouver Island/Coast	**15.9**	**30.1**	**18.4**
Interior	**16.7**	**10.7**	**24.1**
Thompson-Okanagan	12.3	7.8	
Kootenay	4.4	2.9	
North	**9.0**	**13.6**	**20.7**
Northeast	2.5	1.9	
North Coast and Nechako	2.4	5.8	
Cariboo	4.1	5.8	
Don't know/Declined		**1.0**	
Total	**100.0**	**100.0**	**100.0**

Sources: Provincial distribution is calculated based on data from Statistics Canada. Table 282-0157 - Labour force survey estimates (LFS), employment by economic region based on 2011 Census boundaries and National Occupational Classification (NOC), annual (persons). Survey and focus group distributions are from SRDC survey and focus group tracking tools.

Notes: The calculations of provincial distribution include both men and women working in occupations corresponding to NOC 72 and NOC 73. The definition of the four regions (Lower Mainland, Vancouver Island/Coast, Interior, and North) aligns with region categorization used in British Columbia 2025 Labour Market Outlook published by WorkBC.

Finally, Table A.3 shows that the unionization rates of both survey and focus group samples are close to 70 percent. We could not find publically available data to compare our sample rates with unionization rates within the targeted occupations at the provincial level. However, several key informants in our depth interviews report average unionization rates between 70 to 75 percent.

Table A.3   Distribution of women working in the trades, by union status

	Provincial distribution	Survey	Focus group
Union	Not available	68.0	69.6
Non-union	Not available	31.1	26.1
Don't know/Declined		1.0	4.3
Total		**100.0**	**100.0**

Appendix B: Subgroup Analysis

Subgroup Variations by Union Status

Barriers and Challenges

Sixty-eight percent of our respondents came from unionized work environments. Overall, these women were better off than their non-union counterparts when it comes to pay equity. About one in two women working in non-unionized environments reported the challenge of receiving lower pay than their male colleagues, whereas only one in eight of those in union cited such gender-based pay inequity as a significant challenge to their career. However, women in unionized workplaces were more likely report significant challenges related to limited organizational capacity to address discrimination and harassment, as well as incidence of gender bias and bullying in the workplace. The details of these union vs. non-union differences are discussed next.

As illustrated in Figure B.1, relatively high proportions of survey respondents reported that a lack of role models, networks and mentors represented significant challenges in their work, with no clear differences between those in unionized and non-unionized job sites.

Figure B.1   Lack of role models, networks and mentors
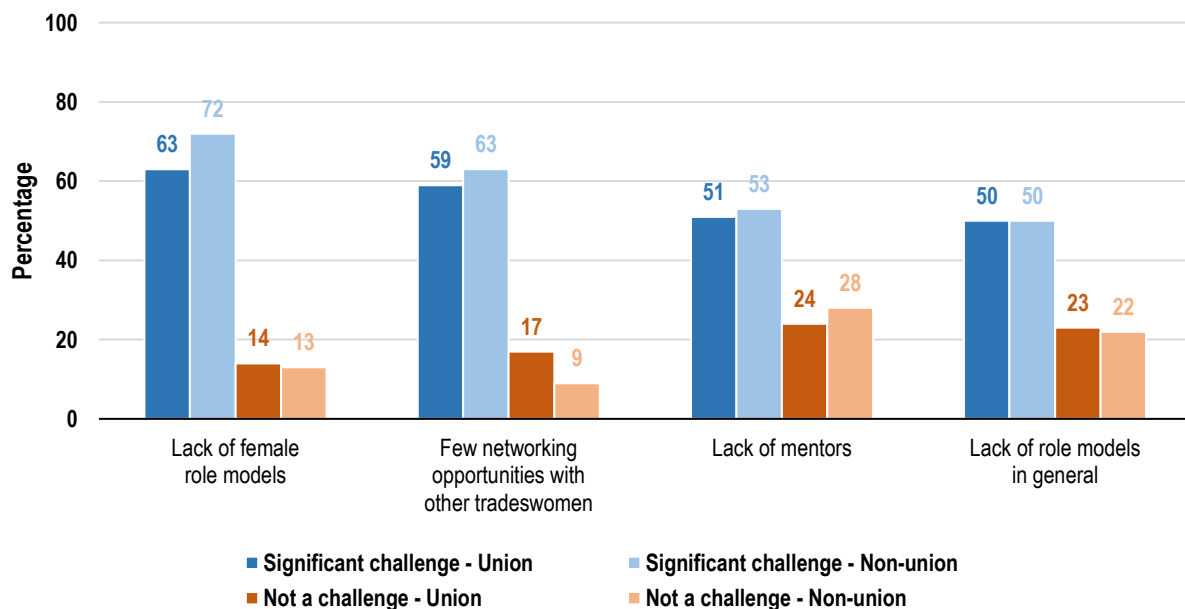
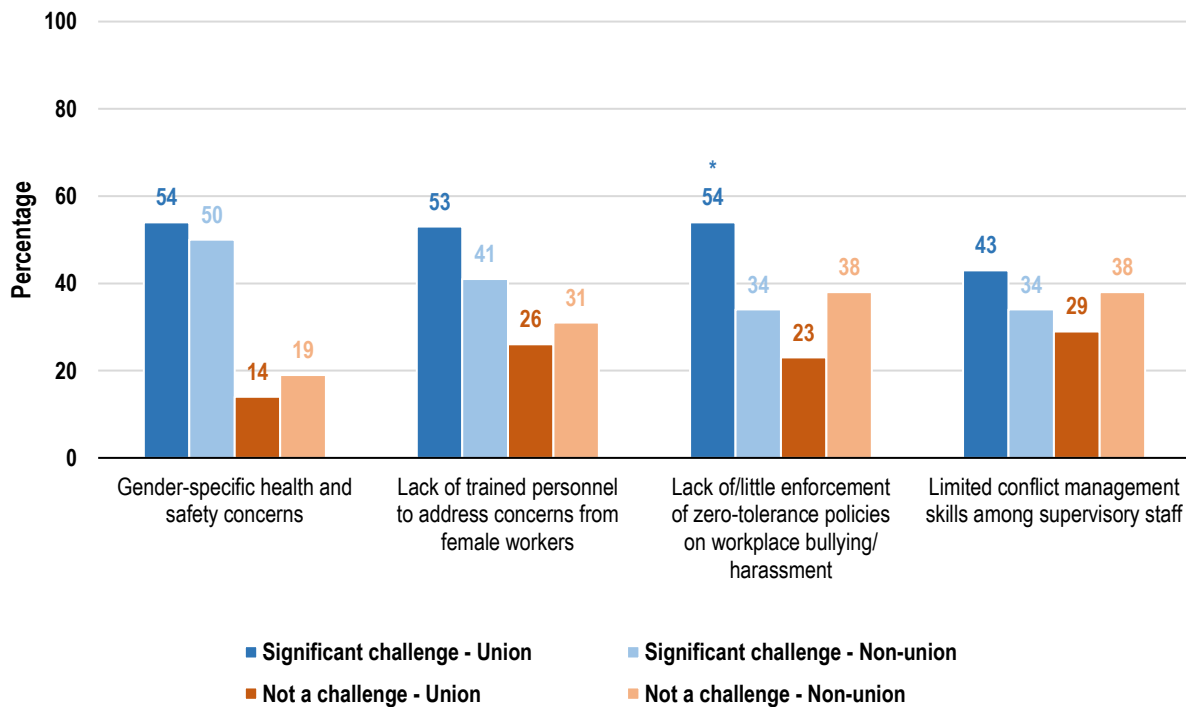**Note**: Statistically significant differences between those in union and those not in union are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

Figure B.2, on the other hand, shows interesting differences in terms of challenges perceived as a result of discriminatory recruitment, hiring, and advancement practices. Unsurprisingly, women in

union were much less likely to report challenges as a result of pay equity issues, with only 13 percent citing lower pay than male coworkers as a significant challenge, compared to 47 percent of those in other trades. However, unionized respondents were more likely to report challenges associated with lack of enforcement of workplace policies promoting diversity, as well as less exposure to on-the-job training – though the differences failed to attain statistical significance as a result of the small sample size.

Figure B.2   Discriminatory recruitment, hiring, and advancement practices
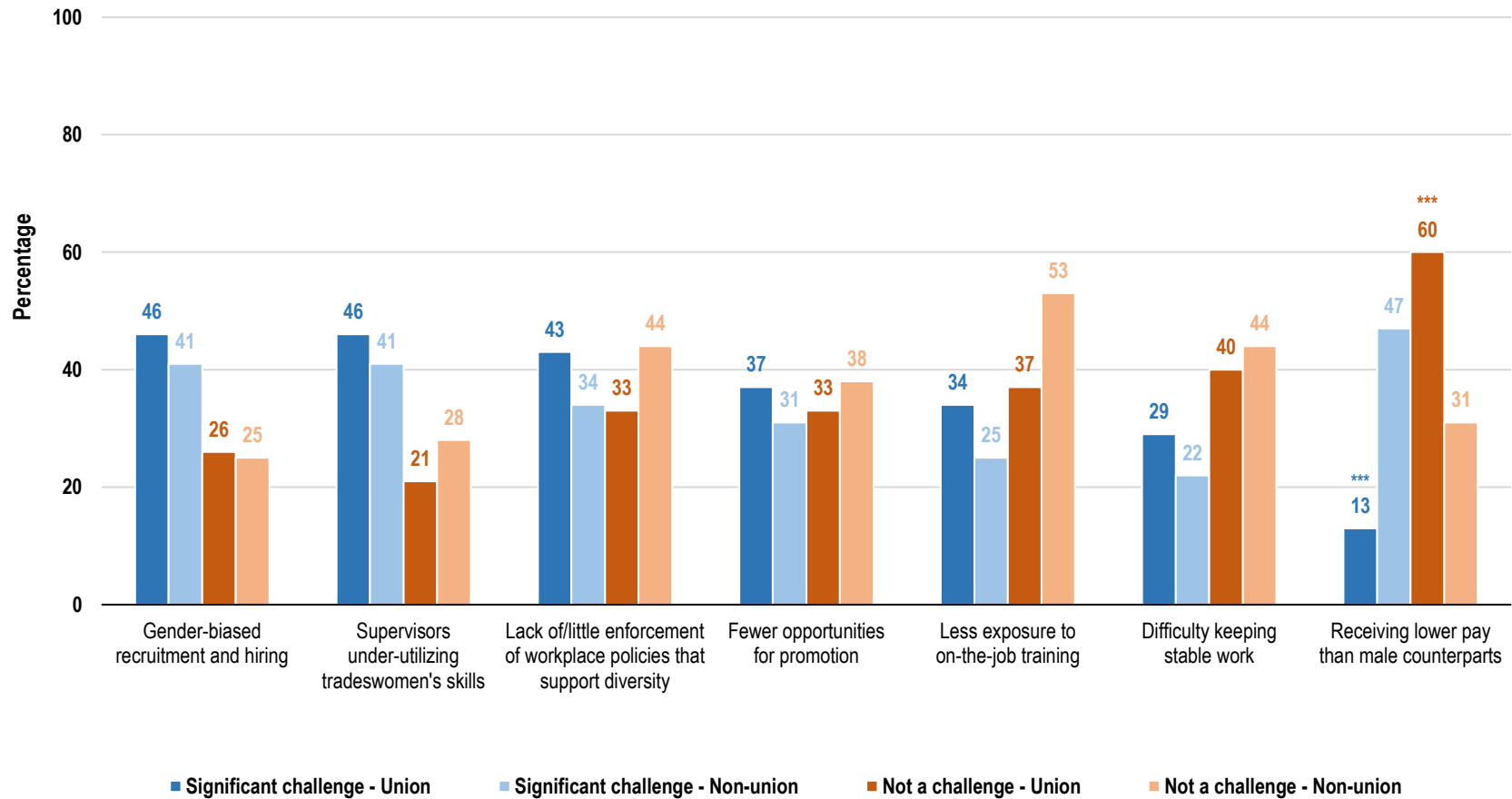
■ Significant challenge - Union   ■ Significant challenge - Non-union   ■ Not a challenge - Union   ■ Not a challenge - Non-union
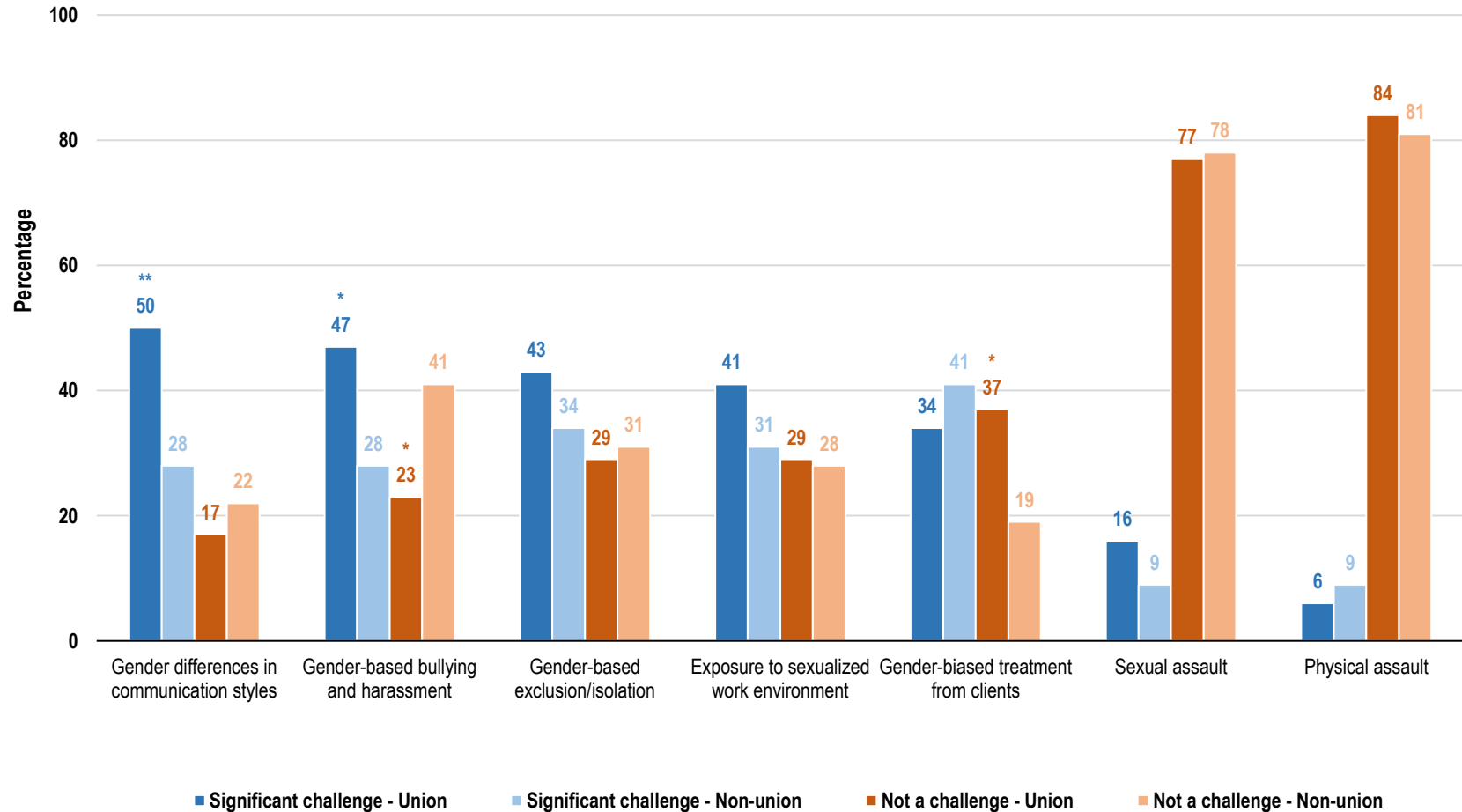
Note: Statistically significant differences between those in union and those not in union are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

As illustrated in Figures B.3 and B.4, women in unions were also more likely to report higher rates of challenge arising from lack of organizational capacity to deal with discrimination and harassment, as well as higher rates of interpersonal bullying and harassment.

For example, Figure B.3 shows that 54 percent of those in union cited lack of enforcement of zero-tolerance policies on workplace bullying and harassment as a significant challenge, compared to only 34 percent of their non-union counterparts. A similar trend was also observed in two other indicators of organizational capacity – lack of trained personnel to address concerns from female workers, and limited conflict management skills among supervisors – though in neither case was the difference statistically significant.

Figure B.3   Limited organizational capacity to address discrimination, harassment, and health and safety

Note: Statistically significant differences between those in union and those not in union are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

In terms of difficulties at the interpersonal level, half of those in union indicated that gender differences in communication styles were significantly challenging, while only about a quarter of those not in union cited this barrier as a significant challenge (see Figure 4). As well, 47 percent of those in union found gender-based bullying and harassment as a significant challenge, with only 23 percent saying it was not a challenge. By comparison, 28 percent of those in non-unionized work environment cited bullying and harassment as a significant challenge, with 41 percent reporting that it was not a challenge.

Two other indicators of interpersonal challenge – namely gender-based bullying and harassment and gender-based exclusion – revealed similar trends (i.e. greater proportions of women in union reporting challenges), though in each case the small sample size prevented the observed differences from attaining statistical significance. Interestingly, tradeswomen in unionized workplaces were significantly less likely to find gender-biased treatment from clients to be a challenge than those in non-unionized environments.

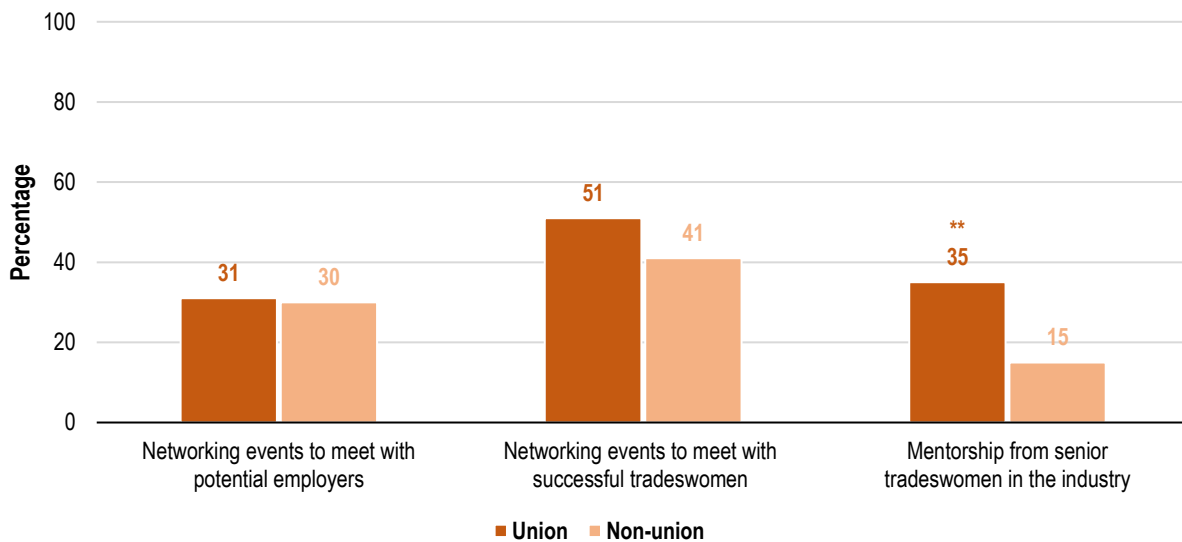**Figure B.4   Gender bias, bullying, and harassment in the workplace**

Note: Statistically significant differences between those in union and those not in union are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

Funding provided through the Canada-British Columbia
Labour Market Development Agreement.

Finally, as illustrated in Figure B.5, there is no clear difference between those in unionized and non-unionized job sites when it comes to challenges related to inflexible workplace practices.

Figure B.5   Inflexible workplace practices
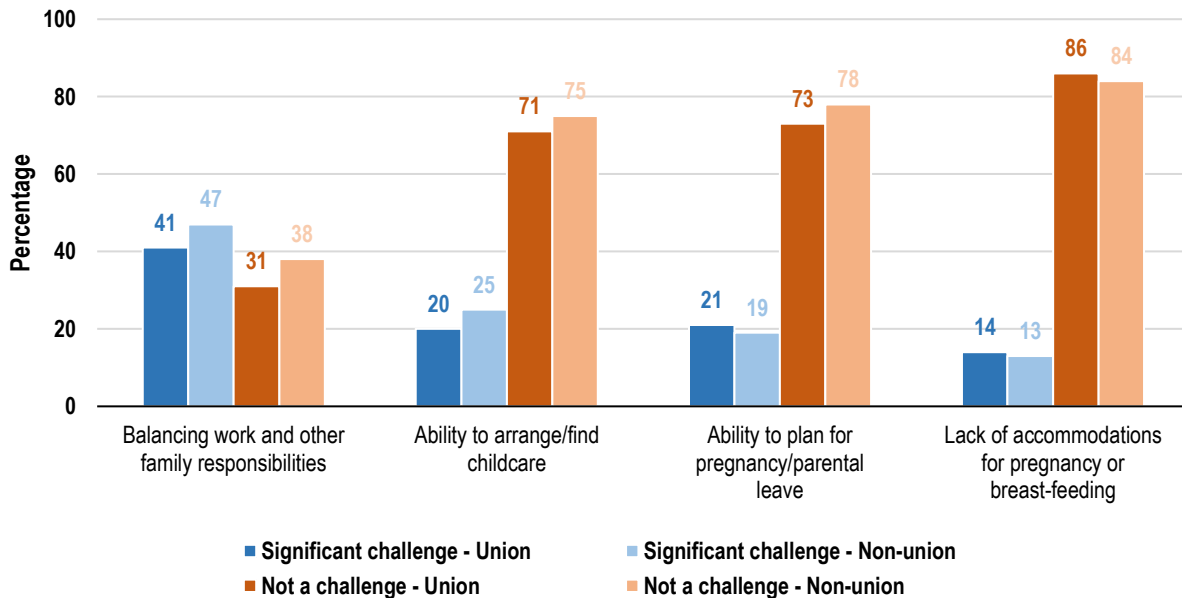
Note: Statistically significant differences between those in union and those not in union are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

Availability of supports and services

The general trend that emerged from these results is that availability of supports and services was much more likely to be reported by women in unionized environments than their non-unionized counterparts, with one key exception. To be more specific, unionized tradeswomen are more likely to report the availability of 1) networking and mentorship supports, 2) services and supports to promote diversity and equality, as well as 3) wraparound supports. However, what seem to be lacking for them, relative to their non-union counterparts, are supports related to fit assessment and employment readiness. These findings, along with subgroup differences in terms of challenges and barriers, give important implications for our analysis. We will elaborate on these implications after presenting the details of these results.

As illustrated in Figure B.6, networking opportunities and mentorships tend to be more readily available to tradeswomen in unions than to those not in a union. Thirty-five percent of unionized tradeswomen reported the availability of mentorship from senior tradeswomen in the industry, while only 15 percent of non-unionized tradeswomen reported the availability of such opportunities.
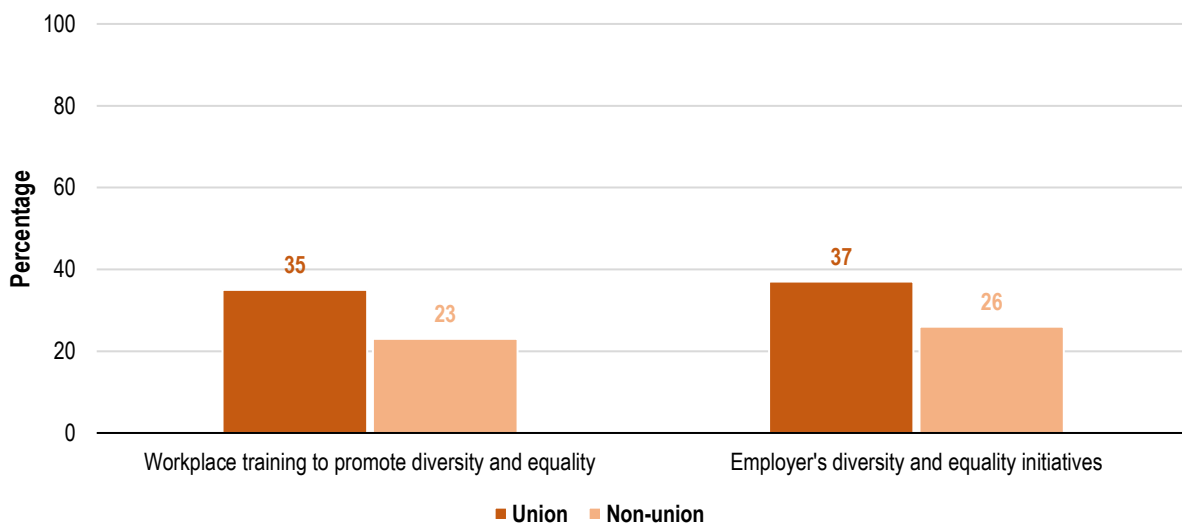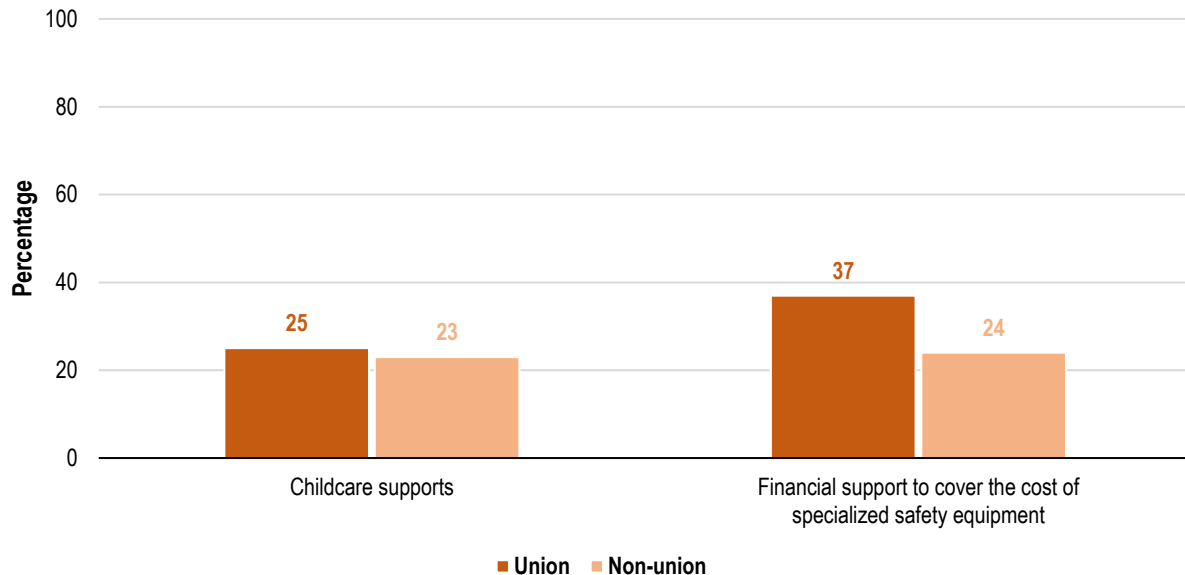
Figure B.6   Services and supports to facilitate networking and mentorship

Note: Statistically significant differences between those in union and those not in union are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

In terms of services and supports to facilitate diversity and equality, similar trends were observed, although these differences were not statistically significant. As illustrated in Figure B.7, those in unions were more likely to report the availability of workplace training to promote diversity and equality, as well as employer's diversity and equality initiatives.

Figure B.7   Services and supports to facilitate diversity and equality

Note: Statistically significant differences between those in union and those not in union are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

Finally, as illustrated in Figure B.8, those in unions were more likely to have financial support to cover the cost of specialized safety equipment available to them, although this was also not a statistically significant trend.
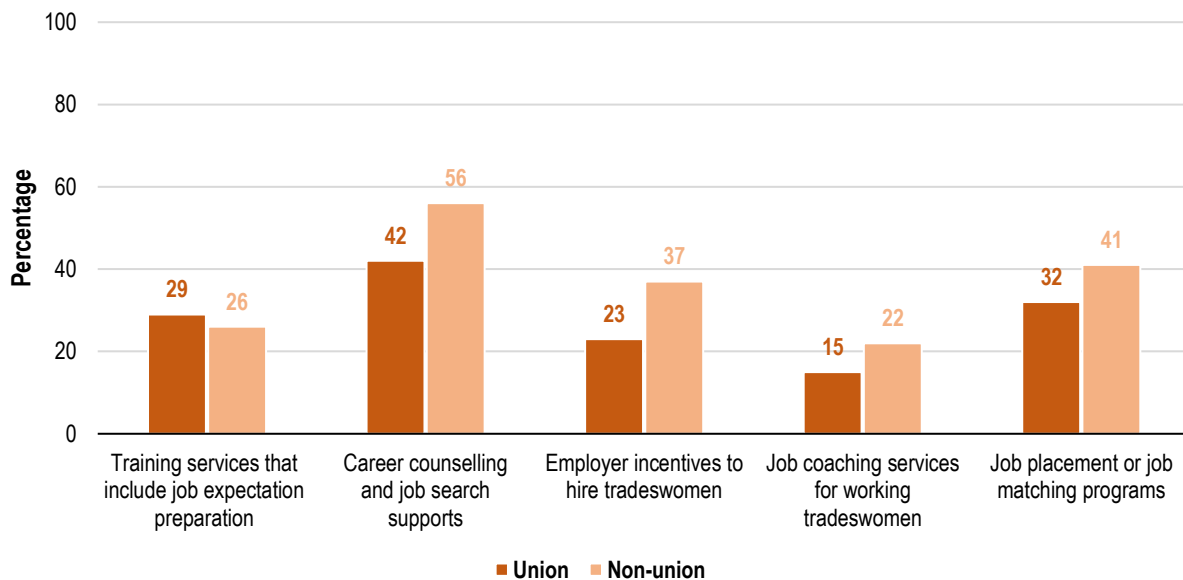
Figure B.8   Wraparound supports

Note: Statistically significant differences between those in union and those not in union are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

Figure B.9 shows a completely reversed tendency compared to what we have observed so far: women working in unionized environments were less likely to report the availability of services and supports to facilitate job fit and readiness compared to their non-union counterparts. Particularly, unionized tradeswomen were less likely to report having career counselling and job search supports, job coaching services, as well as job placement or job-matching programs. Unionized respondents were also less likely to report the availability of employer incentives to hire tradeswomen, compared the non-unionized tradeswomen. It is important to note however that these trends were not statistically significant.

Figure B.9   Services and supports to facilitate job fit and readiness

Note: Statistically significant differences between those in union and those not in union are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

Implications

Results from the survey indicate that substantial progress has been made in unionized work environments to narrow the gender pay gap. The fact that a significantly higher proportion of women in unionized job sites reported having opportunities to receive mentorship from senior tradeswomen is also an encouraging sign, indicating that efforts are being driven by unions to strengthen the professional networks of women working in the trades. Furthermore, there is evidence to believe that unionized workplaces are leading changes to improve the work experience of minority groups, including women, by providing training and initiatives to promote diversity and equality in the workplace.

Nevertheless, tradeswomen in unionized environments tend to be more significantly challenged by barriers related to 1) limited organizational capacity and 2) gender bias, bullying, and harassment in the workplace. These survey findings are in line with what we heard in focus groups and depth interviews with women who left the trades. These trends could be a result of the poor employment fit that unionized tradeswomen are more likely to experience than non-unionized ones. To reiterate, our qualitative data suggest that those in unionized job sites frequently found it frustrating to go through the dispatching process that unions use to match tradeswomen to employers, citing a lack of personal approach. The process means that, on the one hand, gender bias at the recruitment stage is less profound for those in unions than those not in a union, as employers do not know the gender of the unionized applicants. However, those who have gone through the process often felt that they were not placed on job sites that fit well with their personal circumstances and backgrounds. This evidence is corroborated by our survey finding that, compared to non-unionized tradeswomen, those in unions were less likely to have services around

job fit assessment and employment readiness available to them. The lack of fit could contribute to women's feeling of isolation and exclusion in the workplace, as they often found themselves navigating the challenges with little to no supports from peers.

More importantly, even when policies and supports are in place for minority groups in unionized job sites, many women may be reluctant to use these services to the best of their interest. Particularly, multiple respondents in our focus groups indicated that while they were aware of union supports, they often wanted to save "*the one time [they] go to the union [with a grievance] for the really big instance.*" Daily incidences of bias, bullying, and harassment can therefore add up to become a significant challenge.

It is important to note that there could be a certain level of self-selection bias in our results. Non-unionized tradeswomen, when faced with similar barriers and challenges, may find it less costly to switch to another employer, as they do not have to consider the trade-offs related to giving up certain privileges associated with having a union job. Therefore, it is possible that tradeswomen not in a union tend to remain in job sites that are generally more inclusive and supportive. In this case, our survey data would not be able to capture the experience of women in non-unionized job sites on the other extreme, and thus may over-represent the positive experience of this subgroup relative to those in unionized work environments.

Subgroup Variations by Trades

Besides subgroup differences along the line of union affiliation, we also look at whether the rate of challenges or availability of services varies by trade. The largest subgroup of surveyed tradeswoman, comprising 42 percent of our sample, were in electrical trades or electrical power line and telecommunications trades. No other trade made up more than 13 percent of the sample, so the subgroup comparisons below focus on potential differences between those in electrical trades and those in all other trades combined.

Challenges

As illustrated in Figure B.10, relatively high proportions of survey respondents reported that a lack of role models, networks and mentors represented significant challenges in their work, with no clear differences between those in electrical trades compared to those in other trades.

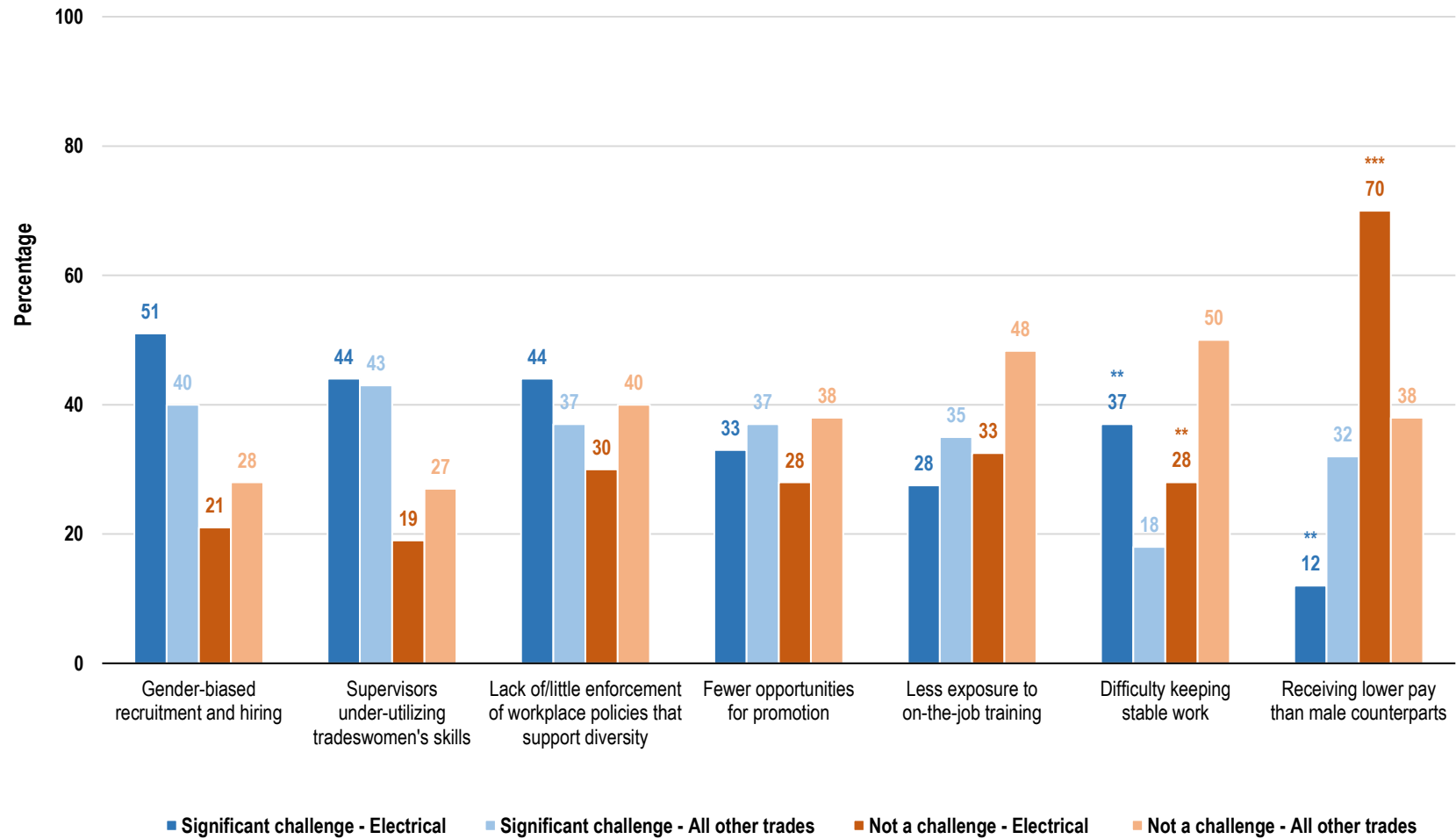**Figure B.10   Lack of role models, networks and mentors**
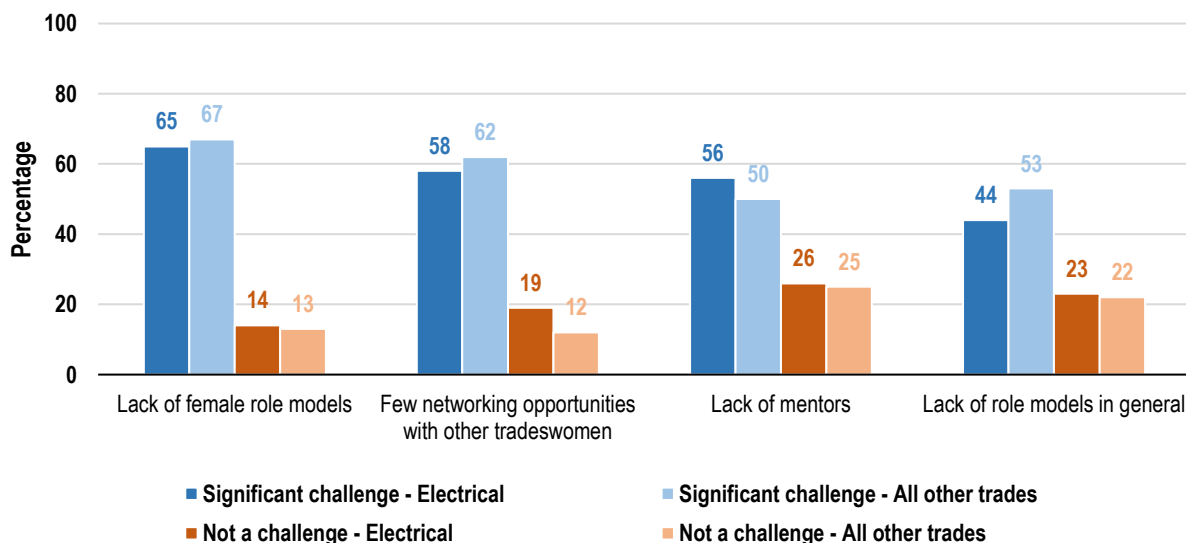
Note: Statistically significant differences between those in electrical trades and those other trades are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

Figure B.11, on the other hand, shows that there were some significant differences between those in electrical trades and those in other trades in terms of challenges perceived as a result of discriminatory recruitment, hiring, and advancement practices. Women in electrical trades were much less likely to report challenges as a result of pay equity issues, with only 12 percent citing lower pay than male coworkers as a significant challenge, compared to 32 percent of those in other trades. Higher rates of pay equity may be linked to the very high rates of unionization (>88 percent) reported by women in electrical trades.

Pay equity notwithstanding, respondents in electrical trades were more likely to report challenges associated with employment stability, with 37 percent citing difficulty in keeping stable work,

compared to only 18 percent of those in other trades. Other areas in which higher proportions of women in electrical trades reported challenges include gender-biased recruitment and hiring, and lack of enforcement of workplace policies promoting diversity – though the differences between those in electrical trades and those in other trades failed to attain statistical significance as a result of the small sample size.

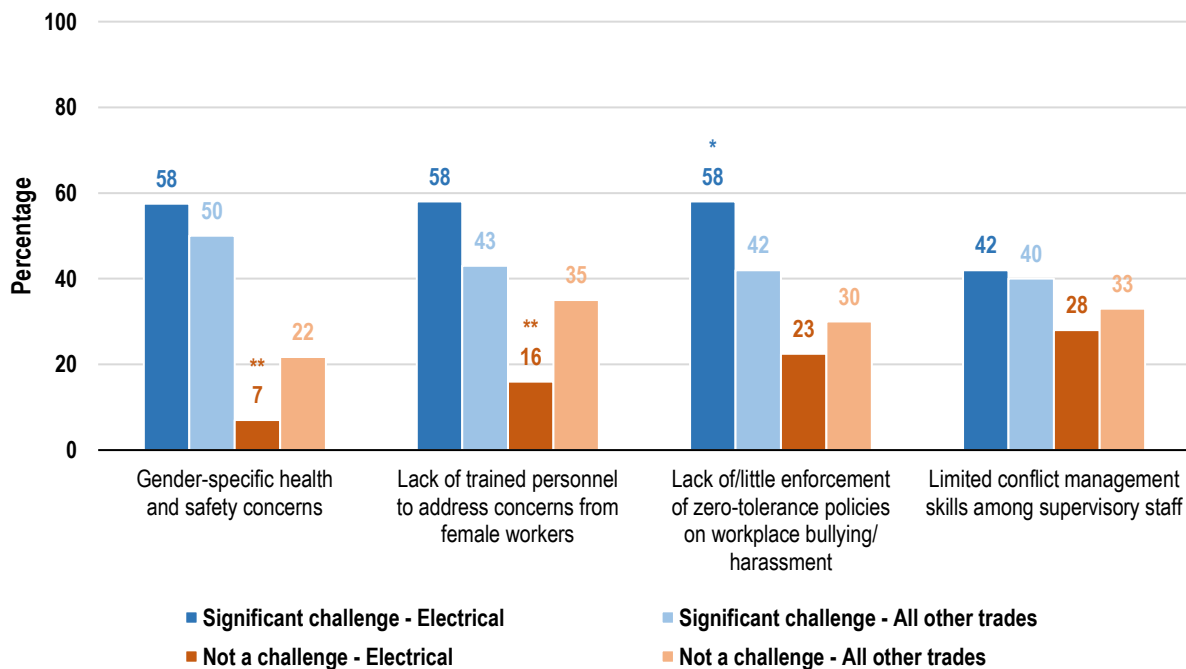**Figure B.11 Discriminatory recruitment, hiring, and advancement practices**

Note: Statistically significant differences between those in electrical trades and those other trades are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

As illustrated in Figures B.12 and B.13, women in electrical trades were also more likely than those in other trades to report higher rates of challenge arising from lack of organizational capacity to deal with discrimination and harassment, as well as higher rates of interpersonal bullying and harassment.

For example, Figure B.12 shows that 58 percent of those in electrical trades cited lack of personnel to address concerns from female workers as a significant challenge, with only 16 percent saying it was not a challenge. By comparison, 43 percent of those in other trades cited this issue as a significant challenge, with 35 percent reporting that it was no challenge.

Similarly, 58 percent of women in electrical trades reported lack or little enforcement of zero-tolerance policies on workplace bullying and harassment as a significant challenge, compared to only 42 percent of women in other trades. A similar trend (i.e. those in electrical trades more likely to report challenges than their counterparts in other trades) was also observed in other indicators of organizational capacity – namely, gender specific health and safety concerns.

Figure B.12   Limited organizational capacity to address discrimination, harassment, and health and safety

Note: Statistically significant differences between those in electrical trades and those other trades are indicated as follows; *** $P < 0.01$; ** $P < 0.05$; * $P < 0.10$

Figure B.13 Gender bias, bullying, and harassment in the workplace
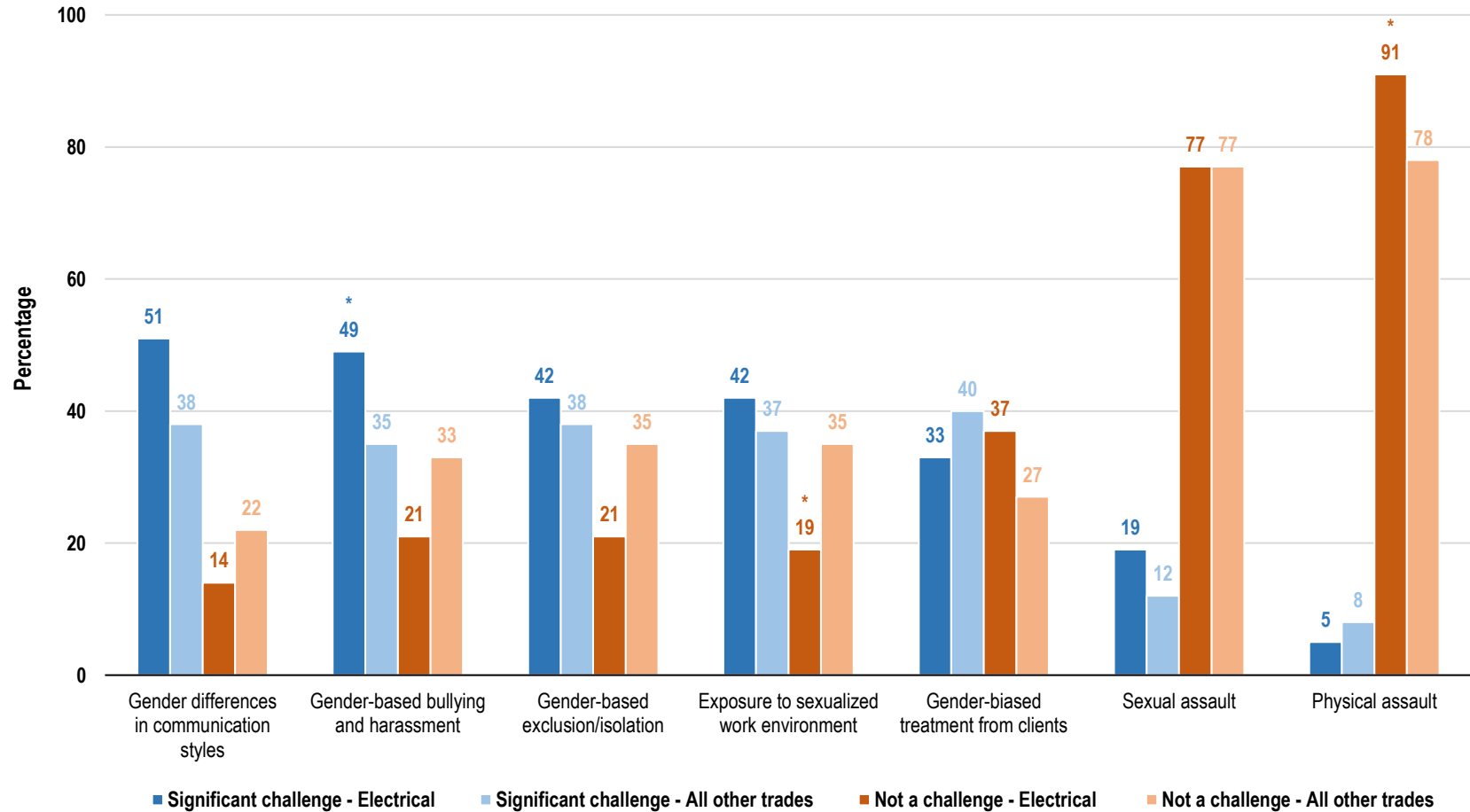
Note: Statistically significant differences between those in electrical trades and those other trades are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

As illustrated in Figure B.13, 49 percent of those in electrical trades cited gender-based bullying and harassment as a significant challenge, with only 21 percent saying it was not a challenge. By comparison, 35 percent of those in other trades cited bullying and harassment as a significant challenge, with 33 percent reporting that it was no challenge.

Similarly, 42 percent of those in electrical trades said exposure to a sexualized work environment was a significant challenge, with only 19 percent saying it was not a challenge. By comparison, while 37 percent of those in other trades reported significant challenges as a result of a sexualized work environment, an almost equal proportion (35 percent) reported no challenge.

Two other indicators of interpersonal challenge – namely gender differences in communication style and gender-based exclusion – revealed similar trends (i.e. greater proportions of women in electrical trades reporting challenges compared to those in other trades), though in each case the small sample size prevented the observed differences from attaining statistical significance.

Finally, as illustrated in Figure B.14, women in electrical trades were more likely than their counterparts in other trades to report challenges in balancing work with other family responsibilities, with 51 percent reporting significant challenges and only 23 percent reporting no challenges in this area – in contrast, women in other trades were more likely (42 percent) to report no challenges in maintaining work-life balance than to report significant challenges (37 percent) in this area.

Figure B.14   Inflexible workplace practices
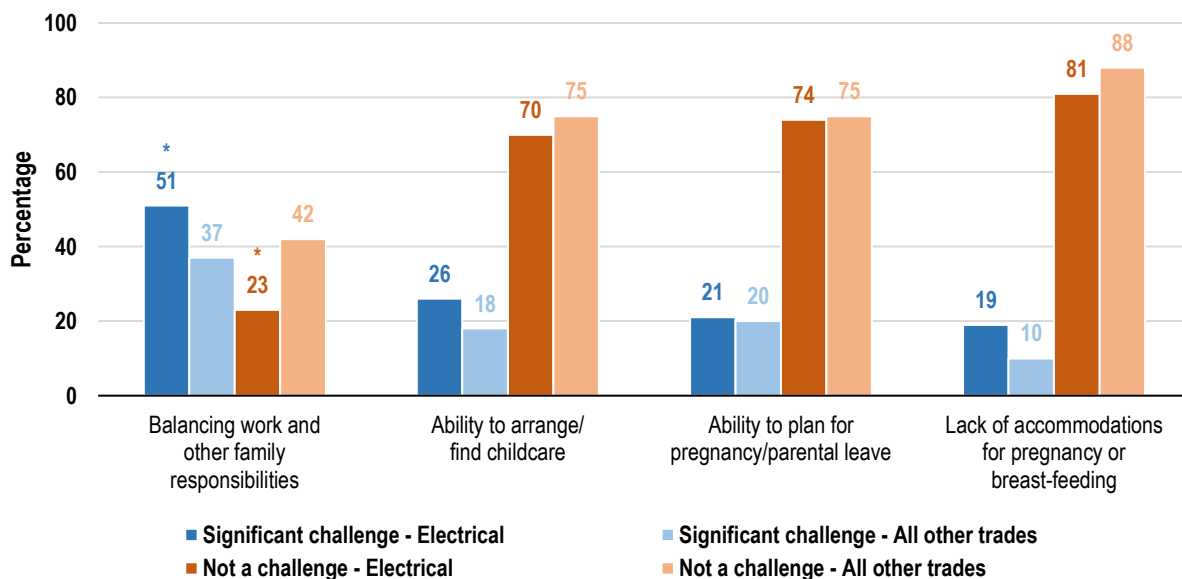
Note: Statistically significant differences between those in electrical trades and those other trades are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

Availability of supports and services

As illustrated in Figure B.15, availability of networking opportunities and mentorships were much more likely to be reported by women in electrical trades than by their counterparts in other trades. For example, 65 percent of those in electrical trades said that networking events to meet with successful tradeswomen were available to them, compared to only 36 percent of those in other trades.

Similarly, over 40 percent of women in electrical trades reported the availability of events to meet potential employers and mentorships from senior tradeswomen, compared with 25 percent or less of women in other trades.

Nonetheless, the relatively high proportion of women in electrical trades reporting a lack of role models, mentors, and professional networks suggests that available services in these areas may not be functioning as well as they could.

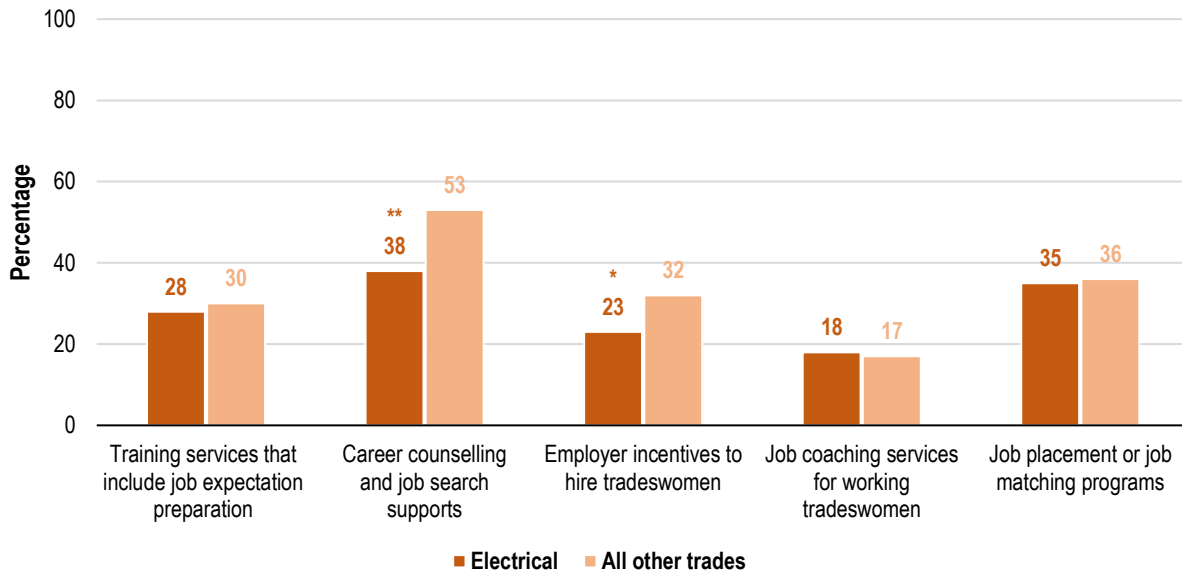**Figure B.15   Services and supports to facilitate networking and mentorship**
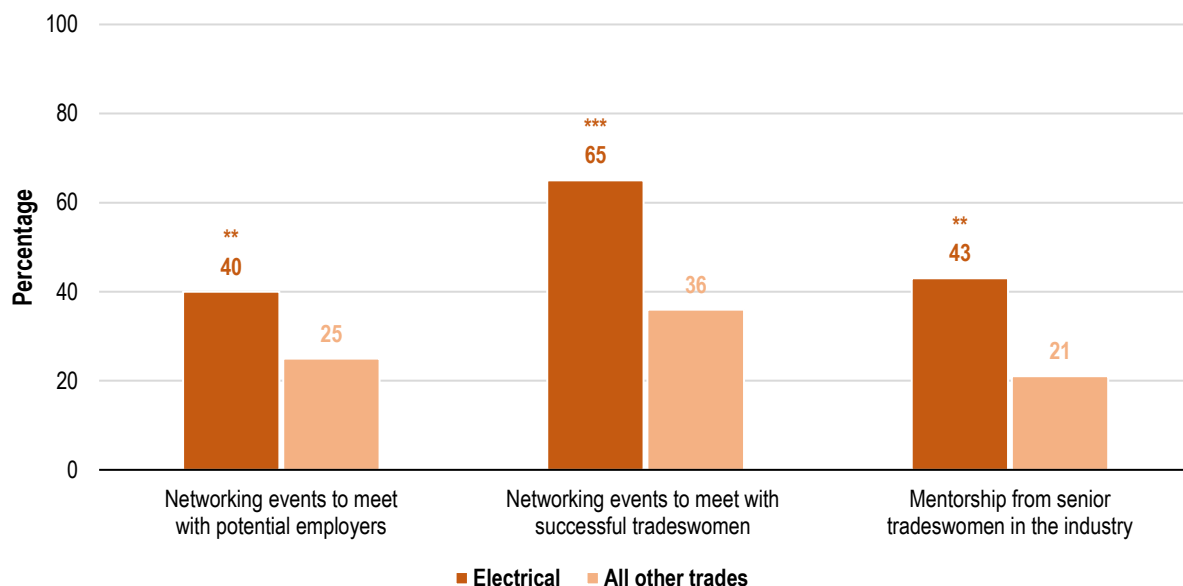
Note: Statistically significant differences between those in electrical trades and those other trades are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10

There are few differences between women in electrical trades and those in other trades with regard to availability of other kinds of supports and services – where differences do exist, they tend to favour those in other trades.

For example, only 23 percent of women in electrical trades – compared to 32 percent of women in other trades – reported the availability of employer incentives to hire tradeswomen (Figure B.16). Similarly, 38 percent of electricians reported the availability of career counselling and job search supports, compared to 53 percent of their counterparts in other trades.
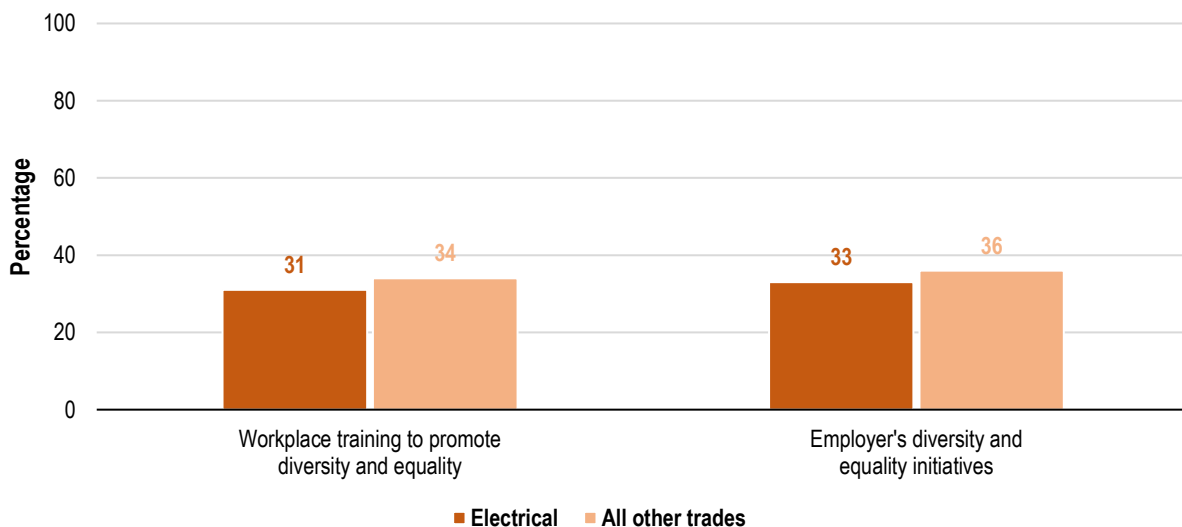
Figure B.16   Services and supports to facilitate job fit and readiness

Note: Statistically significant differences between those in electrical trades and those other trades are indicated as follows; *** P < 0.01;
** P < 0.05; * P < 0.10

As illustrated in Figure B.17, roughly one-third of women in electrical trades, as well as those in other trades, reported the availability of training and employer initiatives to promote diversity and equality.

Figure B.17   Services and supports to facilitate diversity and equality

Note: Statistically significant differences between those in electrical trades and those other trades are indicated as follows; *** P < 0.01;
** P < 0.05; * P < 0.10

Finally, as illustrated in Figure B.18, a significantly smaller proportion of women in electrical trades (27 percent) reported the availability of financial support to cover the costs of safety equipment, compared to those in other trades (38 percent).
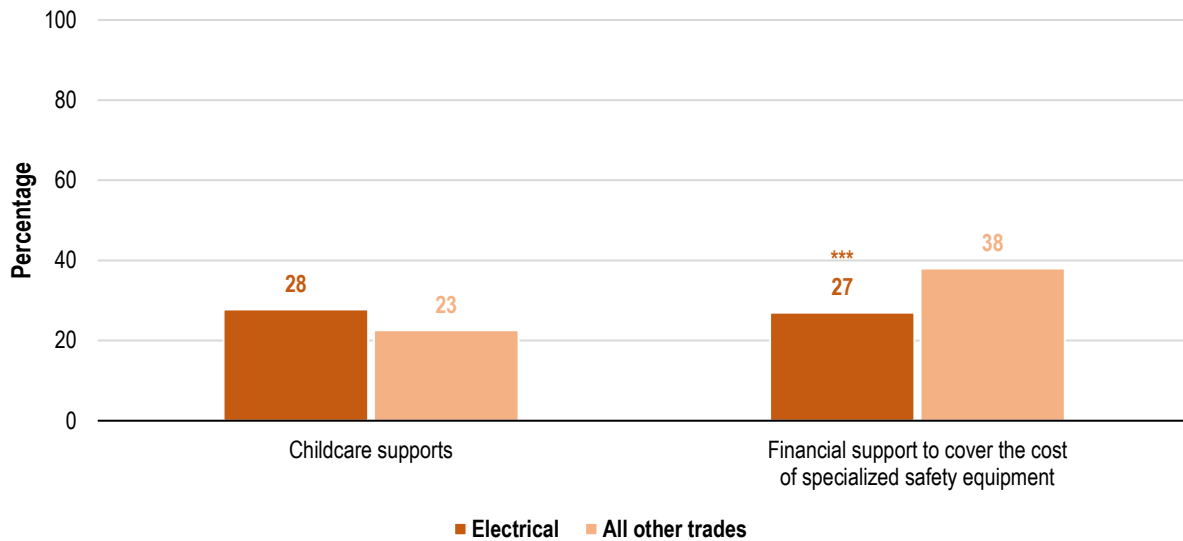
Figure B.18   Wraparound supports

Note: Statistically significant differences between those in electrical trades and those other trades are indicated as follows; *** P < 0.01; ** P < 0.05; * P < 0.10.

Appendix C: Background on WIT Programs

Additional background information on the following programs considered as part of the review are provided in this appendix including a brief description of its background, their scope of services and whether any formal or informal evaluation has been conducted:

- Build Together
- Office to Advance Women Apprentices (OAWA)
- ITA's Women in Trades Training (WITT)
- SK Polytechnic's Women in Trades and Technology (WITT)
- Oregon Tradeswomen Inc. (OTI)
- Women Building Futures (WBF)
- Women in Skilled Trades and Information Technology (WIST/IT)
- Women Unlimited
- Women in Resource Development Corporation (WRDC)
- Trade HERizons from Women's Network PEI
- Chicago Women in Trades
- Apprenticeship and Non-traditional Employment for Women (ANEW)
- Non-traditional Employment for Women (NEW)
- Policy Group on Tradeswomen's Issues (PGTI)
- Sisters in the Building Trades
- Minnesota Women in Trades
- Missouri Women in Trades

Build Together

Brief description

- Organization: Build Together is a national program that promotes, supports and mentors women in the skilled construction trades. As a national initiative of the Canadian Building Trades Union, the Build Together program has tailored strategies to actively recruit and retain women to the industry.
- Programs:
  - Current programs/activities:
    - Network-building and outreach:
      - Created online platforms where tradeswomen and industry network and support the cause
      - Raised awareness by presenting at events such as trade shows, career fairs, school presentations; maintaining a media presence
      - Given back to the community: donations and volunteerism.
    - Mentorship: Mentored women who expressed interest in the trades (seems to be on an informal basis for now)
  - Future programs/services:
    - Network-building and outreach:
      - Build partnerships and create a sponsor recognition program of like-minded organizations
      - Support and assist in the creation and operations of provincial Build Together programs through the CBTU's provincial councils. Existing provincial chapters:
        - British Columbia and Yukon Territory
        - Alberta
    - Mentorship:
      - Launch a *structured* mentorship program specifically geared towards retention of women in the industry

Scope of Service:

- Outreach – Exposing Women to the Trades: Women get less exposure because they have historically been steered away from the trades. The Build Together program operates a *classroom speaking program* to connect students with strong female role models that are active in the industry.
- Mentorship – Mentoring Women in the Trades: developing a *structured mentorship program* specifically geared towards the retention of women in the trades
- Respectful workplaces – Making space for Women in the Trades: Women face a number of unique challenges in the trades from washroom facilities to inadequately fitting safety gear. Something as normal as pregnancy can leave employers and co-workers uncertain about how to support a woman in the trades. Build Together is working with industry to give a voice to women's issues on the tools and identify ways to create workplace cultures that are inclusive of women.
- Advocacy – Challenging policy makers and industry: Government, training institutions, labour and employers all have a role to play in supporting women in the trades. Build Together is working to identify the barriers for women in construction as well as the conditions for success and replicate them across Canada.

Evaluation/Discussion on implementation: none found

Office to Advance Women Apprentices (OAWA)

Brief description

- Organization: The Office to Advance Women Apprentices (OAWA), funded by the provincial government of Newfoundland & Labrador, was created in 2009 with a mandate of increasing employment opportunities for females in the skilled trades. OAWA works with female apprentices once they complete their in school training to assist them in finding employment opportunities with the ultimate goal of achieving journeyperson status.
- Programs:
  - **A registry database:**
    - *Of female tradespersons*: information on their trade, level of apprenticeship, employment status, and resumes. This database is continually updated as more women enter the trades, serving as an internal resource that can facilitate other activities of the organization such as job matching.
    - In the process of creating an *employer database*: employers can provide business name and contact information to be assisted with finding qualified apprentices.
  - **A Wage Subsidy Program** to assist employers with the cost associated with hiring apprentices
  - **Mentorship programs:**
    - The Journeyperson Mentoring Program, funded by the Provincial Government of NL, will support employers in hiring *journeypersons to mentor apprentices* by offsetting the salary of Journeyperson Mentors. Open to employers interested in hiring an apprentices from under-represented groups, including not only women but also Aboriginal persons or persons with disabilities.
    - Mentoring Program for Women in Trades: fairly new program – both formal/long-term and informal/short-term mentorships. Current tradeswomen volunteer to act as mentors:
      - To secondary school students through Women in Trades Day
      - One-on-one mentoring with women interested in a career in the trades
  - **Diversity Scholarships** offered in partnership with LHEA/RDTC (Note: not sure if this scholarship is still available – the Diversity link on the website is no longer active)
  - **Conferences:** details are available up to 2014 only
    - Skilled Trades Conference for Women & Youth: with interactive demonstrations during the Construction Fair
  - **Programs and services for employers:**
    - Organizational training: customized to meet employer needs in order to transition and adapt to a change in the composition of a workplace
    - Advisory services: provide support in developing and implementing women's employment and diversity plans, as well as strategically communicating diversity-related initiatives

Scope of Service

- OAWA works with female apprentices *once they complete their in-school training* to assist them in finding employment opportunities, with the ultimate goal of achieving journeyperson status.

- OAWA has established partnerships with employers, unions, government and training institutions to accomplish these goals.

Similarities/differences with Build Together:

- Similarities:
  - Program/Service components: registry database, mentorship, networking events (conferences)
  - Program goals: retain female skilled workers in the industries, help advance their careers, promote diversity in the workplace
- Differences:
  - Target population: more geared toward those who are already interested in trades, not so much a venue to raise interests of those who are undecided – although such career counseling services are embedded in outreach activities targeted to middle school students
  - Registry database is designed to support other employment services such as job matching instead of as a statistical resource for reporting purposes
  - More services offered to employers

Evaluation

- Cited as a success story in a CAF's 2016 report: "In Newfoundland and Labrador, the Office to Advance Women Apprentices works with female apprentices to assist in finding employment opportunities (…) So far, 586 opportunities for women have been secured."
- Informal mention of program outcomes: Interview with Karen Walsh – OAWA Exec Director (2009):
  "Walsh feels the initiatives are achieving results. Her office has a database of over 600 women apprentices, and has directly assisted over 200 women in getting jobs.
  'Once we get a job for a woman, we don't say thank you and move on, but we monitor that relationship. We have constant emails and phone calls with the employers; we put on our hard hats and go into the fields; we interview them both to make sure they're happy with each other, to make sure the apprentice is being treated fairly on the job. And the response back is that it's working.'
  One tradeswoman commented on the work of OAWA: 'It should be in every province…They've done an amazing job of listening to the women on the ground.'"

Discussion on implementation

- Same interview: Walsh believes the tripartite nature of the partnership has proven fundamental to its success: "Government, industry, and unions have to be equal partners for this to take off. You can put on as many women's courses as you like, but unless you have the major players all participating it's not going to work."

ITA's Women in Trades Training (WITT)

Brief description

- Organization: The Women in Trades Training (WITT) initiative is part of ITA's long-term strategy to match the skills of women apprentices with the needs of British Columbia's labour market. Funded through the Canada-British Columbia Labour Market Agreement
- Programs: currently works with seven different partner organizations to provide training or introductory training programs:
  - Gateway to the Building Trades for Women with Okanagan College (Vernon, Kelowna and Penticton)
    - 12-week exploratory program for those who are unsure of which skilled trade is right for them.
    - Include classroom learning (safety and best practices for the shop and job site) + hands-on projects.
    - Cover: carpentry, joinery, plumbing, collision, electrical, automotive, sheet metal, RV tech, and welding
  - Women Exploring Trades-Essential Skills program with Vancouver Island University (Vancouver Island University, Powell River campus)
    - 12-week program
    - Participants will get exposure to the trades offered in Powell River, Essential Skills for the Trades, and Employability Skills training. There are financial supports such as transportation and child care, if required.
  - Piping Opportunities for Women with UA Piping Industry College (Delta, Kitimat and Fort St. John)
    - Training with financial supports, may include: free tuition, childcare subsidies, provision of safety equipment
    - Available training options:
      - Exploratory: 6-week course developed for those with minimal or no experience within the piping trades, giving them an overview of the trades + exposures to female mentors working in the trades. Participants who successfully complete will be able to move forward into Piping Foundation or Welding.
      - Piping Foundations: 18-week level one common-core technical training, blended with essential skills training for plumbing, sprinklerfitting and steamfitting.
  - STEP Skilled Trades Employment program with the BC Construction Association (province-wide)
    - Open to both men and women
    - Job-matching: find motivated, trained, and ready-to-work candidates for construction employers with jobs to fill
  - Women in Trades Exploration program with Camosun College (Victoria)
    - 2 programs: Exploratory + Trades Foundation skill training programs
  - Women Exploring Trades program with Thompson Rivers University's School of Trades & Technology (Kamloops)
    - This program allows women to rotate through six different Red-Seal trade areas over the duration of the program

- In each of these areas, the candidates are taught *essential skills* along with related safe work practices while participating in practical and theoretical labs.
- Women's Workshop with Tradeworks Training Society (Lower Mainland)
  - 12-week pre-apprentice trades training program
  - Women enrolled in this program will receive hands-on instructions on how to use the latest hand tools, power tools and other equipment used in today's construction and woodworking industry.
  - Also include life skills training: on how to *write a resume* specifically for the trades, interview preparation workshops, and how to make good decisions to help shape long-term career goals.

Scope of service

- Recruitment and matching: recruit eligible participants and match them with partnered service providers
- Financial supports are available: tuition support, funding for childcare and transportation costs, work gear, tools and equipment
- Target:
  - Unemployed individuals who are determined to be non-EI clients; and
  - Employed individuals who are low skilled, i.e., who do not have a high school diploma or a recognized certification, or who have low levels of literacy and essential skills.

Similarities/differences with Build Together:

- Differences:
  - Goals: more focused on the training component
  - More limited target population
  - Do not directly provide the training and/or mentoring services: services provided by partners instead

Evaluation and/or implementation report:

[Empowering Growth in BC: 2012/2013 Canada-British Columbia Labour Market Agreement Industry Training Authority Success Report](#)

- In total, more than 2,000 women have benefited from the initiative since it was first introduced in 2008/9.
- Key program components driving success:
  - Financial support
  - Essential skills training
  - Foundation training and pre-apprenticeship exposure to the trades
  - On-the-job training and mentorship
  - Connection with women who work in the trades as certified tradespeople

SK Polytechnic's Women in Trades and Technology (WITT)

Brief description

- Organization: Sask Polytech Women in Trades & Technology provides career exploration opportunities for women in predominately male trades and technology fields.

- Programs:
  - Mentorship: As a female student or apprentice in these Sask Polytech programs, you can access support and mentorship through your education and after graduation. We can connect you with experienced trades and technology professionals to support your educational and career journey.
  - Outreach
    - GETT Camps (Grades 6, 7 and 8): Girls Exploring Trades and Technology (GETT) camps introduce girls in grades 7 and 8 to a variety of possible career futures while attending an enjoyable week-long day camp.
    - WIT Exploratory Course - Women in Trades (Adults): Both Saskatchewan Polytechnic in Saskatoon and Saskatchewan Polytechnic in Regina offer this hands-on course to introduce women to a variety of basic *trade* skills.
    - WiTech Exploratory Course - Women in Technology (Adult): Saskatchewan Polytechnic offers this hands-on course to introduce women to a variety of basic *technology* skills.
    - SKILLS WORK! A Conference for Young Women (Grades 9 to 12): The conference is an exciting event that helps grade 9 to 12 girls from around Saskatchewan investigate careers in skilled trades. It is held annually in conjunction with the Skills Canada Saskatchewan competition, which is an event that highlights skilled trades through a series of competitions for secondary and post-secondary competitors.

Scope of service

- Focus on both trades and technology
- Mentoring programs to supplement existing skills training programs at the school
- Outreach programs

Similarities/Differences with Build Together

- More limited in scope: mentorship and outreach only, without components such as: career counselling, job matching, etc.
- Includes careers in technology
- Not directly engaging employers (other than through the school's career counselling services)

Evaluation/Implementation: none found

Oregon Tradeswomen Inc. (OTI)

Brief description

- Organization: Oregon Tradeswomen, Inc., (OTI) is dedicated to promoting success for women in the trades through education, leadership and mentorship. Established in 1989 as a small support group and reorganized as a non-profit organization in 1999, OTI was founded on the principles that women deserve and can attain economic self-sufficiency through pursuing careers in the building, mechanical, electrical, and utility trades while helping and encouraging the trades industry build up a diverse workforce. Today the organization is comprised of nearly 400 members, three programs, an annual trades career fair for women and girls, and the support of trades industry employers.
- Programs:
  - **Annual Women in Trades Career Fair** (May 14, 2016)
    - It is the focal point of OTI's adult and youth programs, combining the best practices of all of OTI's programs, including: mentoring by tradespeople role models, career information and support strategies, and hands-on workshops and demonstrations.
    - Hands-on workshops led by successful tradeswomen are one of the most effective ways for young women to learn about non-traditional careers. In a workshop setting, role models can confront students' stereotypes about what girls (and women) can do. Students' expectations of what kind of career field they might enjoy or succeed in are also challenged by participating in these highly interactive, fun, and informative hands-on workshops.
  - **Building Girls:** encourages secondary students to explore careers in trades. The program is temporarily paused to re-examine strategic programming decisions and pursue sustainable funding.
  - **Pathway to Success**: offers the *Trades and Apprenticeship Career Class (TACC)*; a 7-week, pre-apprenticeship training class that helps women prepare for a high skill, high wage career in construction. The class is offered at no charge to participants.
  - **Tradeswomen Organized for Outreach, Leadership and Support (T.O.O.L.S.):**
    - Advocacy initiatives: promotes fair and equitable hiring practices, ensuring a healthy and positive workplace environment for tradeswomen.
    - Tradeswomen Leadership Institute: facilitates the leadership development, advocacy skills, and unity among all women (union, open shop, self-employed and otherwise) working in the building, construction, mechanical and utility trades. The 2016 Institute was cancelled to re-evaluate the leadership development component of the program – it will be back in 2017.
    - Other leadership training: a summer school program designed for labor union members and members of organizations working to promote a strong organized labor and worker justice movement.

Scope of service

- Recruit, train, place and retain women in the electrical, mechanical, highway and utility trades
- Encourage middle and high school aged girls to learn about trades careers options through hands-on activities
- Address broader issues of economic opportunity, access to apprenticeship training and workforce development.

Similarities/differences with Build Together:

- Similarities:
  - Categorization of targeted populations: students in secondary schools, those interested in skilled trades, those still looking for a job, those starting their career in skilled trades, leaders in the field
  - Program components: training, networking, mentorship, ongoing supports, creating and promoting respectful workplaces
  - Goals: recruit, train, place and retain women in skilled trades
  - Focus: focus of supports is on the current and prospective employees; the organization plays more of a liaison role with the employers
- Differences:
  - No mention of registry database – but may have internal membership directory or something similar
  - Pre-apprenticeship training is structured in a more formal way – rather than as an introduction to the industry or a demo to gauge interests
  - No mention of supports/follow-up review regarding those who exit the industry or quit the training
  - Gender role: not only raise awareness among the male-dominated employers, but also bring them into the network as mentors → give them a more active role (e.g., Dads and Daughters workshop – special workshop of the 2016 Career Fair: designed to make men from the trades feel welcome at the Women in Trades Career Fair, and to foster and celebrate their role as a mentor to their daughters).
  - Starting to provide specific supports for *minority* women in the trades (e.g., women of color)

Evaluation and/or implementation reports:

Review of 2015 Career Fair: attendance statistics and comments from participants

Additional information on the programs:

Pathway to Success program: participants can

- Learn basic trades math and measurement
- Receive an introduction to green building
- Explore topics such as job site safety and construction culture
- Learn to use hand and power tools
- Gain 30 hours of hands-on experience working alongside skilled female instructors on real job sites
- Go on field trips to apprenticeship training centers and active construction sites
- Improve physical fitness with strength training taught by a certified fitness trainer
- Upon graduation, OTI career counselors assist TACC graduates with their job search and application to apprenticeship training programs. OTI career counselors also provide individualized employment counseling throughout the entire course of the graduate's trades career.

Tradeswomen Organized for Outreach, Leadership and Support (T.O.O.L.S.)

- Respectful Workplaces: A new pilot program will seek to improve apprenticeship retention rates among women and people of color in the highway construction trades.

153

- Community Benefits Agreement: OTI pushed for inclusion of journey level tradeswomen in contract language
- National Taskforce on Tradeswomen Issues: OTI serves on the Steering Committee for the National Taskforce on Tradeswomen Issues (TWTF, helping to provide staffing for leadership committees, input on national policy work, and assistance in planning the annual Women Build Nations conference.

Annual Women in Trades Career Fair:

- The largest non-traditional career fair of its kind, OIT has been held annually since 1993 as an industry sponsored and volunteer powered event, offering dozens of hands-on activities designed to introduce women and girls to the possibility of a future career in the trades.
- Highlight of this year: Dads and Daughters: Targeted to parents/guardians and the young women in their lives, the goal of Dads & Daughters is to engage current trades workers in encouraging their daughters' exploration of living-wage careers in the high-paying building, construction, mechanical, utility and highway trades through hands-on trades-related activities. A dad's support and encouragement is vital for young women considering a career field that is non-traditional. A dad can help young women work through their self-doubts, learn important skills, counteract social stereotypes of the kind of work women perform, and help them make important connections in the world of trades work.

Women Building Futures (WBF)

Brief description

- Organization: Established in 1998, Women Building Futures is a leader in trades *training* for women, with extensive experience *recruiting* women into the construction, mining and oil and gas industries
- Programs/Services:
  - Training programs to students
    - Pre-apprenticeship programs:
    - Driver/Operator training programs:
    - Others: Math Boot Camp, workshops such as Best Practices for Building a Career in Construction, one-on-one supports on how to apply to the program
  - Awards and financial supports to students
  - Services for employers
    - Develop customized training programs
    - Provide recruitment, assessment and job matching services
    - Support applications for the Canada Alberta Jobs Grant.

Scope of service

- Workforce Attraction: positioning construction as a first-choice career option for women; and positioning women as a viable source of quality skilled workers for Alberta's construction sector
- Assessment and Essential Skills Training; helping women make an informed career decision about a career in trades and address gaps in essential skills
- Workforce Training: preparing women for success through skills training, safety certification, Workplace Culture Awareness©, fitness and academic upgrading
- Workforce Coaching: coaching is available to all WBF students and alumni to support training retention and long term employment success
- Job Retention: job search and retention support is available to all WBF students and alumni to assist with securing and retaining apprenticeships and employment.

Similarities/Differences with Build Together

- Similarities:
  - Program components: training and recruitment/job placement, career counseling for those unsure of a career in trades
- Differences:
  - Engagement with employers: employers receive supports/services, and/or can act as sponsors for: housing to students, training facility, etc.
  - Outreach efforts: done by making a presence in the news, not through conferences/events
  - No mentorship

Evaluation/Implementation:

Evaluation of a specific program: [Women Building Futures – Journeywomen Start Program: Social Return on Investment Analysis](#)

Women in Skilled Trades and Information Technology (WIST/IT)

Brief description

- <u>Organization:</u> The Women in Skilled Trades and Information Technology (WIST/IT) program, funded by the Ontario Women's Directorate, offers an opportunity for low-income women who are unemployed or under-employed to gain in-class and on-the-job training to prepare them for employment in trades and IT occupations. The Skilled Trades stream provides *pre-apprenticeship training* geared towards increasing the number of women in skilled trades. Following graduation, women are qualified to enter a variety of high-demand skilled trades jobs and apprenticeships.
- <u>Programs/Services:</u> The WIST/IT program is delivered through funding to training delivery agencies in communities where skill shortages have been identified or are projected by local employers and labour market information.
    - The Centre for Skills Development and Training - Enhanced General Carpentry
    - Community MicroSkills Development Centre - Horticulture Technician
    - Collège Boreal - Industrial Millwright/Machining
    - Conestoga College - Enhanced General Carpentry
    - La Cité collégiale - Residential Renovation
    - Sault College - Heavy Equipment Operator
    - Women's Enterprise Skills Training of Windsor, Inc. - Mechanical Millwright
    - YWCA Toronto - Residential Air Conditioning Systems Mechanic & Gas Technician

Scope of service

- Funding to training delivery agencies
- Cover both trades and technology careers – within the trade stream: focus on pre-apprenticeship training only

Similarities/Differences with Build Together

- Similarities:
    - Goals: training
- Differences:
    - Provide funding to other service providers only
    - More limited in scope: pre-apprenticeship training only

Evaluation/Implementation: none found.

Women Unlimited

Brief description

- Organization: The Women Unlimited Association is a not-for-profit women's organization in Nova Scotia that promotes the full participation of women in trades and technology. We work with industry, governments, educational institutions and the community to address the systemic barriers that limit the participation of diverse women in these fields.
- Programs/Services:
  - Recruit: Engage Diverse Women
    - Comprehensive assessment and compatibility process
    - For diverse, unemployed and underemployed women
    - Programs located in Halifax, Dartmouth, Bridgewater and Sydney
  - Explore: Career Exploration Program
    - Free, 14-week program
    - Hands-on experiences in trades and technology programs at the NSCC
    - Safety certificates, essential skills in math, portfolios, personal development
    - Labour market information, site visits, employer/apprenticeship engagement
    - Career exploration and decision-making strategies
  - Train: Support During Trades and Technology Programs
    - Partnership with the Nova Scotia Community College
    - Support with application and financing processes
    - Support during trades and technology training programs
    - Networking with women training and working in trades and technology
    - Mentoring Network
  - Work: Support to Transition into Employment
    - Links to local employers for work experiences
    - Transitional support to employment and/or apprenticeship
    - Job retention support
  - Change: Build Welcoming and Respectful Workplaces
    - Partnerships with employers, unions and industry associations
    - Build workplace strategies to recruit and retain women
    - Promote respectful workplaces for diverse women

Scope of service

- The Women Unlimited model is holistic and offers a continuum of services and supports. Women who participate in Women Unlimited are supported along a pathway: from recruitment, to career exploration, through pre-apprenticeship training, to employment and once employed, through apprenticeship and employment retention in these fields

Similarities/Differences with Build Together

- Similarities:
  - Goals and scope
- Differences:
  - Target population: slightly more limited – only for those not in school or other training programs

Evaluation/Implementation: A Degree in Possibility: more an informal story of how their service delivery model was built and implemented.

Women in Resource Development Corporation (WRDC)

Brief description

- Organization: WRDC is a provincial non-profit organization committed to increasing women's participation in trades and technology. With private and public funding, WRDC offers a variety of programs and services to address challenges surrounding the attraction, recruitment, retention, and advancement of women in these sectors.
- Programs/Services:
    - Orientation to Trades and Technologies (OTT): program components: academic; essential work skills; personal and professional development; hands-on skills development; exploration on the natural resource sector, labour market research and job shadowing
    - Employment Assistance Services (EAS): offer career development, career planning, job search strategies for unemployed women interested in the natural resource sector
    - Community Development: community outreach and career counseling services for unemployed women
    - Industry Outreach: WRDC works closely with operators, contractors, and other employers to review and assess their organization's diversity policies and practices, and provide individualized recommendations and customized tools and supports to enhance their efforts.
    - Mentors Network
    - Other outreach activities through their Educational Resource Centre:
        - o Techsploration Newfoundland & Labrdor - is a program designed to provide young women with opportunities to explore trades, technical and technology-related occupations. It also helps them understand the significance of high school math and science to their future careers.
        - o GUSTO! (Girls Understanding Skilled Trades Opportunities): is a free workshop for high school girls across Newfoundland and Labrador who are interested in gaining hands-on experience in the carpentry and electrical trades
        - o TOTT (Techsploration: Orientation to Trades and Technology) is a 13-week program developed by WRDC to give women ages 17-22 practical experience of natural resource-based industries.

Scope of service

- Provide increased access to training for women,
- Educate the general public, and
- Support the development of policies that promote the involvement of women in the natural resource and trades/technical industries.

Similarities/Differences with Build Together

- Similarities:
    - Goals and program components
- Differences:
    - More emphasis on policy advocacy and community outreach works
    - In terms of training, slightly more emphasis on the "soft-skills" training – through career counseling services

- Offers supports to other organizations advancing women's interests in the trades

Evaluation/Implementation: none found

Trade HERizons from Women's Network PEI

Brief description

- Organization: Women's Network PEI (WNPEI) is a not-for-profit organization based in the province of Prince Edward Island, Canada that works to strengthen and support community efforts to improve the status of women in the society. Trade HERizons is one of their projects designed specifically to increase the number of women in non-traditional trades and technology occupations on PEI. It supports unemployed and underemployed women to explore, prepare for, obtain and maintain employment in the trades and industrial technology fields. Additionally, WNPEI works with employers to create a culture of diversity in the workplace, which supports women's full participation in non-traditional workplaces.
- Programs/Services:
  - Trade HERizons: free, 12-week career exploration and college prep program

Scope of service

- Provide services and programs in a lot of areas (health, parenting, etc.), one of the programs focuses on women in trades and technology
- Career exploration course

Similarities/Differences with Build Together

- Differences:
  - More limited in scope – only offers exploratory training

Evaluation/Implementation: none found, but they did a needs assessment to prepare for the scaling up of Trade HERizon: Building a Community Response to Employment and Gender Gaps in Trades and Technology on PEI: A Needs Assessment

Chicago Women in Trades

Brief description

- Organization: Founded by tradeswomen in 1981, Chicago Women in Trades (CWIT) works for women's economic equity by increasing participation in well-paid, skilled jobs traditionally held by men and by eliminating barriers that prohibit women from entering and succeeding in these fields.
- Programs/Services:
    • Technical Opportunities Program: a pre-apprenticeship program preparing women to compete for and succeed in construction apprenticeship programs and other related nontraditional occupations.
    • Women in Welding Program: CWIT is partnering with the Jane Addams Resource Corporation to provide women with welding instruction, primarily geared toward preparing them for entry level manufacturing jobs.
    • Policy: developing and promoting policies and practices that support women's careers.
    • Midwest Regional Technical Assistance Center: under this initiative, CWIT is providing training, technical assistance, and resource materials to registered apprenticeship, pre-apprenticeship, and other training and workforce development providers to build the capacity of these organizations to prepare, train and retain women in construction careers.
    • Conferences and events for both tradeswomen and employers: Women Build Nation Conference; Recruiting and Retaining Women in the Trades: An Institute for Practitioners and Employers; etc.

Scope of service

- Provide support, advocacy, and education to tradeswomen;
- Work to increase training for women and girls to enter nontraditional jobs;
- Provide assistance to employers, unions, and other service providers;
- Document workforce trends; and
- Advocate for policies and practices that support women's access to and retention in skilled training and jobs.

Similarities/Differences with Build Together

- Similarities:
    • Goals and program components
- Differences:
    • Less focused on career exploration – although they post self-assessed career exploration questionnaires online
    • No programs/activities for secondary school students
    • Provide training and supports to other organizations
    • Has a job posting section on the website: post trades jobs to the public

Evaluation/Implementation:

- A case study of the Implementation Analysis of High Growth Job Training Initiative Programs (2008)

Apprenticeship and Non-traditional Employment for Women (ANEW)

Brief description

- Organization: Founded in 1980, ANEW is among the oldest pre-apprenticeship programs serving women, providing preparatory training and services to help them gain, retain, and advance in employment in non-traditional industries.
- Programs/Services:
  - Pre-apprenticeship Trades Rotation Training Program: free, 12 week, for careers in construction trades and manufacturing.
  - Apprenticeship Opportunities Project: Open to both men and women, help those who are unemployed or under-employed get livable wage jobs or apprenticeships: via career counseling, job placement, etc.
  - ANEW Alumni Association: through mentorship, social interaction, learning and volunteer opportunities, the alumni association connects alumni to current pre-apprentices and recent apprentices, helping them enter a construction apprenticeship.
  - Sustainable Building Science Technology: As part of a three-year grant, ANEW is recruiting women to enroll in South Seattle College, Bachelor of Applied Science: Sustainable Building Science Technology Program.
  - Basic Food Employment and Training: A partnership between ANEW and the Department of Social and Health Services, BFET offers educational and workforce training to those receiving Basic Food Assistance.

Scope of service

- Training, career counseling
- Partnering with other organizations to help women on social assistance achieve self-sufficiency
- Partnering with post-secondary institution to help women advance their education in technology

Similarities/Differences with Build Together

- Similarities:
  - Goals and some program components: training, career counseling
- Differences:
  - Has a specific program for disadvantaged women
  - Broader scope: not only helping women advance their career in skilled trades, but also their interests in higher education in subjects related to trades/technology
  - Partners with other training organizations
  - Fewer interactions with employers

Evaluation/Implementation: none found

Non-traditional Employment for Women (NEW)

Brief description

- Organization: Founded in 1978, NEW is a sector-based workforce development program that prepares, trains, and places women in careers in the skilled construction, utility, and maintenance trades, helping women achieve economic independence and a secure future.
- Programs/Services: Blue Collar Prep: industry overview, job readiness (including sexual harassment/discrimination prevention skills), interview skills, trades math, hands-on practices, health and safety training
    - NEW at Night: for women working during the day – same pre-apprenticeship components as Blue Collar Prep
    - (In 2010 – may have been discontinued) NEW Signature Project Programs: job placement program designed to increase the utilization of tradeswomen on existing NYC construction projects.
    - NEW Construction Internship Program: Short-term job placement for recent NEW graduates

Scope of service

- NEW programs include a mix of hands-on shop skills, classroom instruction, physical fitness assessment, job development and placement services, and social service referrals

Similarities/Differences with Build Together

- Similarities:
    - Program components: training, job placement
    - Goals
- Differences:
    - Not much outreach
    - Pre-apprenticeship training only, no trade training
    - No mentorship

Evaluation/Implementation: none found, but acted as a key stakeholder in the study Expanding Opportunity for Middle Class Jobs in New York City: Minority Youth Employment in the Building and Construction Trades

Policy Group on Tradeswomen's Issues (PGTI)

Brief description

- Organization: PGTI, a regional collaboration of construction industry stakeholders, including tradeswomen, building trades unions, contractors, government representatives, community organizations and researchers, has met bi-monthly since 2008 to work on the persistent policy failure to open up good jobs in the construction trades to women.
- Programs/Services: More of an advocacy group
    - Recruitment and retention: provides information on the organizations, government policies, and research data that support, guide, and inform successful recruitment and retention efforts – best practices – links to other websites and research reports
    - Compliance and enforcement: provides construction workforce compliance data, project labour and community benefits agreements (e.g., on gender pay gap, workforce diversity)

Scope of service

- Provide research and guidelines for those interested in advancing women's career in construction
- Organize forums for employers to share best practices

Similarities/Differences with Build Together

- Differences:
    - Work more with the demand side of the labour market
    - No training, mentorship
    - Advocacy is a major part of their work

Evaluation/Implementation: none found.

Sisters in the Building Trades

Brief description

- Organization: Sisters in the Building Trades is a not-for-profit organization aiming to expand a network of active women that will affirm building trades sisters as a positive and growing part of the construction workforce. The goal is to increase the number of trades women through cooperative recruitment efforts and mentoring support for enhanced retention.
- Programs/Services:
  - Mentor network
  - Disaster training

Scope of service

- Networking and mentorship: Hold regular networking meetings, match mentors to new trades women; offer mentor training
- Outreach: increase public awareness of construction careers, provide speakers to career fairs and other outreach opportunities;
- Recruitment: support recruiting efforts of apprenticeship programs;
- Enter into partnership with disadvantaged women to provide encouragement and hope

Similarities/Differences with Build Together

- Differences:
  - Focus more on the mentorship and networking aspect
  - Offer co-ed mentor training
  - Offer disaster training/emergency response training
  - Partner with other Women in Skilled Trades organizations (called Sisters Alliance – not sure how active this partnership is – some of the organizations listed are no longer in operation)
  - No formal trade training

Evaluation/Implementation: none found.

Minnesota Women in Trades

Brief description

- Organization: Minnesota Women in Trades is a network of tradeswomen working on improving conditions by promoting best practices, changing policies to support equal wage, equal hours, equal annual income, and equal pensions for tradeswomen. The organization also provides a 24/7 help line to support tradeswomen with crisis issues.
- Programs/Services:
  - Support network: with networking and other social events, informal mentoring

Scope of service

- Networking
- Support network
- Outreach: increase public awareness by advertising other programs and services for tradeswomen

Similarities/Differences with Build Together

- Differences:
  - Focus more on the mentorship and networking aspect
  - No formal trade training
  - Tailor supports to those already in the trades

Evaluation/Implementation: none found.

Missouri Women in Trades

Brief description

- Organization: MOWIT is dedicated to expanding opportunities for women to enter and succeed in apprenticeship and careers in the construction and building trades of the greater St. Louis area. MOWIT works with employers, unions, educational organizations, and other entities and allies to increase women's equal employment opportunity and equitable working conditions. MOWIT is committed to building a diverse workforce, strong labor movement, safe and healthy worksites, and women's empowerment and economic security.
- Programs/Services:
  - Support Group: refer women to an independent support group, open to any tradeswoman
  - Recruitment: participate in local Career Fair Days, Ranken's Summer Academy for Middle School Girls, and ongoing referral of new members to local apprenticeships.
  - Outreach: work with local and regional Girl Scouts to provide badge workshops; help host Women In Construction Week activities at local high schools; participate and recruit at events like: Saint Louis Lady Arm Wrestlers, Arch Rival Roller Girls, LGTB Community events.
  - Retention – Connecting tradeswomen to jobs: partner with employers as well as other groups such as YWCA to connect tradeswomen to jobs in the region; provide supports to non-tradeswomen by referring them to local hiring halls/career services.

Scope of service

- Networking
- Support network
- Outreach
- Job placement

Similarities/Differences with Build Together

- Similarities
  - Program components: networking, job placement, outreach – including activities for secondary school students
- Differences:
  - No training offered, no formal mentorship
  - Closer monitoring of the labour market, via Job News
  - Act more as a local support service for tradeswomen in the area – may use other resources (e.g., training programs, conferences) from other organizations (e.g., send members to Women Build Nation Conference organized by Chicago Women in Trades)

Evaluation/Implementation: none found.