



Services to Support Tradeswomen: A BC Environmental Scan

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Executive Summary

The issues faced by women in trades (WIT) are well documented. Recent studies on women in trades in BC found four major barrier types to overcome if the industry is to achieve a measurable positive impact: Macro (Societal), involving changes to gender stereotypes that discourage women from a trades career; Organizational, to encourage employers to hire women and create a workplace culture that is inclusive of women; Interpersonal, whereby women both in trades and exploring a career in trades can connect with others for mentorship and support; and Individual, which equips women with the right skills – hard and soft – to find their place in a male-dominated industry.

Up until now there was no comprehensive look at what services are indeed available to women and employers in BC to overcome these barriers. This environmental scan is, therefore, the first catalogue of such information: resources currently available to support WIT; resources not specific to support WIT that could be expanded or adapted to include this group; and where the services are available around the province.

The main focus of this research project is on WIT *retention*, however, research participants insist that WIT *recruitment* efforts and shifting societal attitudes towards women entering the trades continue to play a critical role in any successful strategy. This environment scan therefore includes both recruitment and retention programs. An initial list of more than 100 organizations that might offer programs for WIT was distilled to a final list of 28 organizations that offer services to at least some WIT groups, or could expand their services to include WIT.

The good news is that, looked at collectively, these programs do indeed address all four barrier types and are available around the province. BC is equipped with a few multi-career stage (pre-apprenticeship, apprenticeship, journey) programs with services that address several barriers at once, and these programs are seen as the most effective. Further, many individuals and organizations participating in this research are keen to see women succeed in the trades and serve (or could serve) as industry champions that, through their ideas and independent actions, demonstrate that change is achievable. Many organizations would offer additional services with the right vision and coordination. Indeed, the act of undertaking this environmental scan has succeeded in piquing the interest of several organizations to adapt their services for WIT. For example, the Minerva Foundation has just launched a scholarship for a journeywoman to participate in its flagship program Women Leading the Way.

However, the programs for WIT are highly fractured, and therefore lack the ability to offer coordinated support throughout the different career stages. Most of the organizations offering services (or potentially offering services) to WIT operate independently of the others, and offer only a partial suite of services. This means that women must actively pursue program information and connect with available services based on their location, career stage and eligibility, and then find other programs when one of these circumstances changes.

Those organizations keen to do more to support WIT lack the awareness of who is doing what in this space, and therefore knowledge about what services would be most valuable to offer. As well, most organizations do not (but could, if viable over the longer term) tailor their services for the unique WIT experience.

Taken together, organizations and their programs accessible to women in trades look more like a *patchwork* than an integrated set of services.

Given the above, this environmental scan offers the following recommendations:

- Support students and K-12 schools with programs that reduce the social bias against women choosing careers in the trades;
- Implement social procurement practices that favour employers with progressive hiring and employment policies and workplaces that encourage retention;
- Support company owners and senior leadership with cultural change management to make their companies more women-friendly;
- Create a provincial-level plan between ITA and its funded regional programs for better coordinated WIT events, and to facilitate peer-to-peer mentorship that allow more women to connect with others throughout their careers;
- Gather better data on women in the trades, starting from interest in grade school through the journey and beyond, to better understand the triggers and motivations that cause women to enter or leave the trades;
- Facilitate a service for tradeswomen to seek information on their legal rights and protections, and to receive advice and support for unfriendly hiring practices, or bullying and harassment in the workplace;
- Create a central repository of WIT programs and services that allows organizations to create a common vision of WIT success, raises awareness among women of the available programs, and connects the organizations to ensure better coverage and fill service gaps;
- Expand eligibility for programs that offer services that push on multiple barriers so that more women have access, and partner with successful organizations that demonstrate that their programs lead to improved outcomes for women;
- Share WIT best practices with organizations that are addressing similar barriers for other underrepresented groups.

Introduction

Women in Trades (WIT) represent an average of 4.8% of the total trades workforce¹, and this number has not significantly increased over time despite a persistent trades labour shortfall, and heightened attention from government, training organizations, not-for-profit associations and some key employers.

The problems underneath the low numbers for attracting and retaining WIT are well-documented, and many organizations have ideas on what must change to boost the interest of women for the trades, and then support them (and their employers) as the women move through their career.

The BC government has a keen interest in boosting the success of WIT, because it is the right thing to do, and it is one strategy to counter a chronic and growing trades workforce shortage in the province. To that aim, the province has supported industry to embark on a five-phase initiative to thoroughly understand the breadth and depth of the issues with attracting and retaining women in the trades., and to implement and evaluate the strategies and tactics that materially increase the number of women in trades and make their experiences significantly more positive to create a “virtuous” and self-sustaining cycle.

Five Phases of the B.C. Sector Labour Market Partnership Program



¹ Source: 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).

This environmental scan, funded under the Sector LMP Program in concert with the Ministry of Advanced Education, Skills & Training, is part of Phase 3: Strategy Development, and has two primary objectives:

1. Catalogue the capacity and capabilities of existing resources available to women in the trades across BC;
2. Detail which organizations around the province are willing to adapt their programs to offer new or additional support to women in trades.

The output of the environmental scan – a detailed compilation of available organizations and programs – is unique, and for the first time allows interested parties to appreciate a collective view of what is available around the province, the types of programs offered, their target audience, and their delivery capacity. The compilation also informs go-forward strategies for expanding successful programs to serve more women, and filling the gaps where programs are significantly lacking or absent.

Although this report focuses on resources for women already working in the trades (i.e., retention and advancement), the report also includes recommendations for recruiting more women into the trades because research participants hold a very strong view that successfully *retaining* women depends on the success of *attracting* more into the trades. In other words, the success of Attraction, Recruitment, Retention and Advancement are integrated and symbiotic.

Setting the Context

This environmental scan adds to the existing body of research about women in trades in BC. In particular, three pieces of preceding research pointed to the need for this environmental scan:

1. *Enhancing the Retention and Advancement of Women in Trades in British Columbia: Final Report* (February 2017) from SkillPlan enriches the understanding of the barriers to women's participation in the trades in BC, as well as the types of supports and services that would enhance entry and retention rates. The report confirmed the following:
 - a. Trades remain a male-dominated industry, often with unwelcoming and non-inclusive environments, ingrained gender bias, and a lack of a critical mass of women;
 - b. Common and pervasive bullying and harassment throughout the women's career, and employers that are ill-equipped to address the issue;
 - c. Discriminatory recruitment, hiring, and advancement practices;
 - d. Lack of role models, mentors, and networks for WIT at all career stages.

- The report also created a Matrix of Barriers for WIT. The matrix discusses four primary barrier levels – Macro (Societal), Organizational, Interpersonal and Individual – that discourage women from entering into and staying with the trades as a career choice. Each of the barriers contains three strategies and their associated tactics to minimize barrier impacts, thus encouraging more women to join and to stay in the trades. All four barriers are considered significant, and must be minimized in unison. (See below for more details)
2. *A Women in Trades Program Matrix for British Columbia: Priorities and Implementation Options*, also from SkillPlan provides partial information on what programs and supports exist for WIT, and recommendations for potential pilot projects that would begin to change the dynamics that keep women from entering and advancing in the trades. This report highlights that the BC-based WIT resources investigated suffer from limited strategic and centralized guidance, scopes that are too narrow, and a lack of coordination and communication between them.
 3. *Retention and Advancement of Women in Trades: Draft Report (July 2017)* from Siena Consulting contains ideas to address two of the four barrier groups in the Barriers Matrix – Macro (societal) and Organizational barriers to WIT. The report also details an ambitious Vision Statement for women in the trades for the year 2045 where women are as present, accepted, well-integrated, and supported as they are in many other industries.

Lenses: Matrix of Barriers and Economic Regions

This environmental scan adds new, and detailed, information into the body of existing research on women in trades in BC. To link this report's findings to the three preceding reports above, the environmental scan data is filtered through two primary lenses: The Matrix of Barriers for WIT, and Economic Region.

Matrix of Barriers

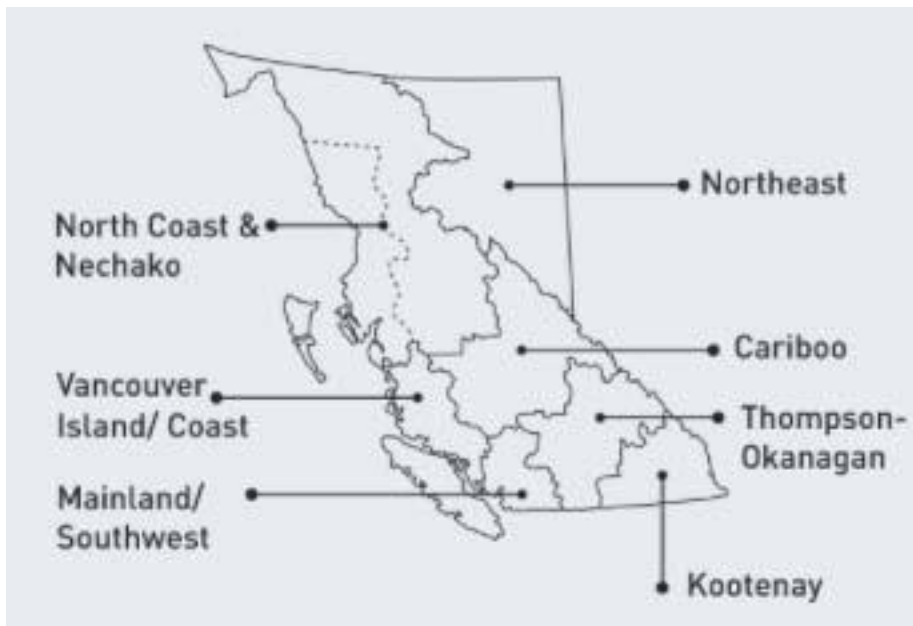
As discussed above, the Matrix of Barriers shows the four barrier types, plus strategies and tactics to minimize the barriers. All resources in this report are mapped to this matrix based on the targeted barrier and the services offered to minimize that barrier.

Barrier type	Strategies	Methods / Program components
<p>MACRO (SOCIETAL):</p> <p>Biased social attitudes and beliefs about gender roles and expectations related to the trades.</p>	<p>Outreach, Engagement, and Education</p>	<p>Broad outreach to build relationships, raise awareness, and shift attitudes; Targeted outreach to strengthen next generations of tradeswomen.</p>
	<p>Advocacy and Leadership Development</p>	<p>Financial advocacy: Hiring incentives such as wage subsidies, tax breaks, grants for gender-specific facilities for equipment; Regulatory advocacy: Top-down regulatory change, and policies and guidelines to support tradeswomen; Leadership development: Build industry and government champions and leaders to drive change.</p>
	<p>Strategic Engagement of Target Populations</p>	<p>Engagement, outreach, and support for targeted groups, such as Indigenous women, are culturally appropriate and aligned specifically to the unique needs of these communities.</p>
<p>ORGANIZATIONAL:</p> <p>Issue: Gender-biased organizational practices, policies, norms and standards – some of which are results of the macro-level barriers.</p>	<p>Organizational Analysis and Action Planning</p>	<p>Engage employers and other organizations, and demonstrate the business benefits of hiring women using local business case studies; Support and facilitate organizational analysis and action plan development.</p>
	<p>Supports to Build Organizational Capacity</p>	<p>Provide expertise and supports to build organizational capacity in the following:</p> <ul style="list-style-type: none"> 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; <p>Maintain close ongoing follow-up with employers, unions, and tradeswomen.</p>
	<p>Workplace Training Interventions to Support Organizational Practices</p>	<p>Change the mindset of people working directly with tradeswomen on a daily basis.</p>
<p>INTERPERSONAL:</p> <p>Issue:</p> <p>Discriminatory attitudes and detrimental behaviours of co-workers on job sites, including bullying and harassment.</p> <p>Negative influences and discouragement from immediate personal social circles (e.g., family, teachers, peers).</p>	<p>Facilitating events and building professional networks</p>	<p>Host smaller-scale events, large-scale conferences, and build and strengthen professional networks. </p>
	<p>Formal and Informal Mentorship</p>	<p>Develop more informal mentorship relationships among tradeswomen.</p>

Barrier type	Strategies	Methods / Program components
<p>INDIVIDUAL:</p> <p>Issue: An individual's knowledge, beliefs, self-perception and self-confidence – the negative effects of which may be exacerbated by interpersonal barriers.</p>	<p>Employment Services and Supports</p>	<p>Job search, job matching and job maintenance supports; Career counselling.</p>
	<p>Upskilling</p>	<p>Technical training, and soft skills development such as professional development, leadership, and small business skills and communications.</p>
	<p>Continual Wrap-around Supports</p>	<p>Flexible, individualized supports for things like childcare, work-related aids and provision of affordable housing.</p>

Economic Regions

This environmental scan categorizes the available programs across 7 economic regions, based on the widely used BC economic regional map:



Summary of Methodology, Processes and Activities

A **steering committee** comprising industry leaders, union and non-union employers and associations, and a representative female tradesperson drove the oversight of this project, and provided ongoing guidance and industry knowledge.

Steering Committee members:

Name	Position	Organization/Company
Clyde Scollan	President and CEO	Construction Labour Relations Association
Tom Sigurdson	Executive Director	BC Building Trades
Chris Atchison	President	BC Construction Association
Lindsay Langill	Vice President	Independent Contractors and Businesses Association of BC
Tara Fong	Manager	Industry Training Authority
Gary Herman	CEO	Industry Training Authority
Shelley Neil	Construction Manager	PCL Constructors West Coast Inc.
Rasna Nagra	Recruiter	Seaspan
Lisa Langevin	Assistant Business Manager	IBEW 213
Matthew Milovanovic		Ministry of Advanced Education, Skills and Training

The steering committee provided crucial input into a broad-reaching list of stakeholder groups and industry partners invited to participate in the research. The final list included over 100 organizations across the 7 economic regions that *may* have programs specific to WIT, from the following organization types:

- Employer
- Employment Services
- Labour Union
- Network
- Non-Government Agency / Not-For-Profit
- Post-Secondary Institution
- Private Institute
- Provincial Government (or Affiliated/Mandated organization)
- Secondary School Program
- Trade Organization

Over the summer of 2017 the project team connected with these organizations through focus groups, personal interviews by phone and face-to-face, email questionnaires, general web searches, documentation sourced from localized business organizations and service providers, and government-community consortiums.

The project team employed two interview guides to ensure that conversations yielded specific information on available (or extendible) resources for WIT. The guides were especially useful for discussions with industry partners (e.g., trade associations, unions) and post-secondary institutions, where many of the existing resources are found.

One challenge surrounding the research is the time frame. Conducting the research in the June to September period means that some participants were unable to join a focus group and participate in the collective dialogue around existing programs and the way forward. To achieve maximum participation and high data quality the project employed alternative data collection methods such as interviews, and website and documentation reviews².

Summary of Key Themes and Findings

Of the more than 100 identified organizations, 28 BC-based organizations meet the criteria of already offering services to at least some WIT groups, or could expand their services for WIT, as outlined in the following tables³.

² More information on the project methodology and details on the gathered data is available in the Appendices.

³ Detailed information on these organizations can be found in the accompanying Excel data file.

Table 1: Organizations in BC currently offering programs to women in trades

Organization	Region Served	Target Clients	Description of Services or Supports Offered by Barrier Level
ACCESS	Mainland/Southwest	Indigenous	<p>ACCESS Trades was established to increase training and apprenticeship opportunities in the urban Aboriginal community. Their services are specifically designed for men and women interested in entering into apprenticeship training and becoming certified in one of the trades.</p> <p>Interpersonal - Their staff provide a mentorship link back to the program participants on an ongoing basis. Prepares participants to have a successful workplace experience and maintain contact following employment to provide support where needed.</p> <p>Individual - ACCESS Trades is committed to providing apprentices with the resources and support necessary to successfully complete the full term of their apprenticeship. Goal is to help Indigenous men and women attain Red Seal or Provincial certification in a trade. Apprenticeship counsellors are experts in the area of apprenticeship and will help guide individuals in the right direction. Once a trade is chosen they will refer individuals to their ACCESS Employment Assistance Service. They will determine the individual's eligibility for the program and financial assistance. Training delivered in partnership with BCIT, VCC, Pacific Vocational Institute and other ITA approved providers. A two-week targeted, structured and supported program where learners gain job search skills that enables them to effectively tap into the workforce.</p>
BC Construction Association – STEP Program	All regions in BC	All men and women meeting eligibility requirements	<p>Non-Profit Association serving construction employers & eligible participants. BCCA delivers the Skilled Trades Employment Program (STEP), serving the province with local offices linked to their regional construction associations.</p> <p>Interpersonal - Their staff provides a mentorship link back to the program participants on an ongoing basis. Prepares them to have a successful workplace experience and maintains contact following employment to provide support where needed. Participates in trade fairs, conference and educational forums to increase awareness of their services and encourage more participation by women in trades.</p> <p>Individual - Provides full construction trades employment services and supports, including maintaining a pool of employers for job matching and mentorship interactions, needed skills training and funding for equipment or supplies.</p>
BC Institute of Technology	Mainland/Southwest	All Women	<p>Trades Discovery for Women programs are designed to allow participants extensive access to the available trades and technical training at BCIT campuses.</p> <p>Individual - Continuing education opportunities available through their part-time studies programs (business, leadership, project management etc.). The programs prepare participants to successfully enter and complete trades/technical training or seek apprenticeship. Includes two weeks of unpaid</p>

Organization	Region Served	Target Clients	Description of Services or Supports Offered by Barrier Level
			work experience, partnering education with industry and the community. Skills gained in HILTI Power Actuated Tools, Lift Truck Operator, WCB Occupational First Aid Level One, Workplace Hazardous Materials Information System (WHMIS), as well as exploring the trades in construction, mechanical, transportation and manufacturing.
BC Tradeswomen Society	All regions of BC	Women in All Non-Traditional Trades Occupations	<p>The main function of the Society is to increase recruitment of women in trades and to ensure that women who are recruited have the supports and resources they need to succeed. Their plan is to charge a nominal (\$5 per year) membership fee to women and to have corporate members who support the hiring and advancement of women in the trades.</p> <p>Interpersonal - Private Facebook page developed by the Society to connect apprentice and journey level tradeswomen with each other and available resources around the province. This is an informal mentorship support. This Facebook page has 530+ followers who were individually approved to participate in the group.</p>
Build Together – BC Building Trades	All regions in BC	All Women	<p>Build Together is a Canada wide organization; BC is the first to have provincial team.</p> <p>Macro - Their anti-bullying and harassment strategies are available in hard copy as well as online tools for use by individuals and employers. Videos and policy template have been created and made available on their website.</p> <p>Organizational - Many resources on their website, including manuals, videos for employees and employers and policy templates, relate to the hiring of women, creating an inviting environment for women.</p> <p>Interpersonal - Support, mentoring, networking, community involvement, learning and development. Local outreach done throughout community to highlight women in trades. Facilitated mostly by volunteers. Participates in conference, trade fairs, talking to Brownie and Girl Guide troops.</p>
Camosun College	Vancouver Island/Coast	Female Students who meet eligibility requirements	<p>Public, post-secondary, includes apprenticeship and pre-apprenticeship trades programs.</p> <p>Interpersonal – Created a Job Coach position to assists the women in their employment search, including connections with employers and online referrals to local professional networks specifically for women in trades.</p> <p>Individual - Women in Trades Training, Trades Exploration and Foundation technical training that includes funding to support, tuition, textbooks, tools and personal protective equipment (PPE). Also provide employment and job search supports and placement.</p>

Organization	Region Served	Target Clients	Description of Services or Supports Offered by Barrier Level
Canadian Construction Women	All regions in BC	All Women	<p>CCW is a not-for-profit organization established in 1981. CCW engages their members by hosting monthly tours, speakers, socials, and workshops as well as an online community.</p> <p>Interpersonal - Offers women in construction trades an opportunity to network and socialize through monthly events, workshops and site tours.</p>
IBEW	All regions in BC	All Women	<p>International Brotherhood of Electrical Workers (IBEW) represents electricians serving in construction, communications, municipal, manufacturing, utility, railroad, alarm, sound, publishing, service, food, education, entertainment and marine industries. The IBEW represents thousands of skilled journeypersons. They support the Canadian Red Seal Program and offer continual safety training and upgrading.</p> <p>Interpersonal - IBEW 213 provides informal mentorship and support for women in the union, providing them with opportunities to network and support one another. As an additional line of support each new woman entrant into the union is given a list of supportive individuals to connect with.</p> <p>Individual - Provides supports and upgrade skill training. Organizes and facilitates training courses related to leadership, harassment, bullying, conflict resolution.</p> <p>Has set a policy of 20% women apprentices or journey persons by 2020. 20 by 20. Setting targets and supports with hiring tradeswomen and supporting them through various internal programs, including mentorship and leadership training opportunities, creating internal policies to provide equitable and inviting working environments.</p>
Industry Training Authority (ITA)	All regions in BC	Men and Women	<p>ITA leads and coordinates British Columbia’s skilled trades system. It works with employers, employees, industry, labour, training providers and government to issue credentials, supports apprenticeships, fund programs, set program standards and increase opportunities in the trades. ITA funds programs for Women, Indigenous Peoples, Immigrants, Youth and other equity-seeking populations through the Canada BC Job Fund Programs. It supports equity-seeking population initiatives that include Women in Trades Training Canada-BC Job Fund supported programs at: Camosun College (Vancouver Island/Coast), Okanagan College and Thompson Rivers University (Thompson-Okanagan), and Open Door Group-Tradeworks (Mainland/Southwest).</p> <p>Interpersonal - Organizes and funds Women in Trades Training conferences around the province providing women an opportunity to network and share ideas and experiences. In addition they fund/sponsor conferences delivered by other organizations.</p> <p>Individual - All WITT funded programs included employment services, up-skilling and continual wrap around supports for all participants. All WITT program teams engage their community in the</p>

Organization	Region Served	Target Clients	Description of Services or Supports Offered by Barrier Level
			<p>programming (employers, stakeholders, K-12 schools). Work with employers and have developed a Best Practices Guide and Apprenticeship Advisors work to build awareness about WIT in their regions. Youth programs also engage young females in all 7 programs and in 2016 the Youth Day conference was themed to Women in Trades. The Indigenous Peoples in Trade Training (IPTT) programs are open to all genders, include cultural components to their training (e.g., working with elders, in community program delivery in cooperation with local Band governments and services) and have seen an increasing participation of Indigenous women in these programs. WITT and IPTT programs are focused to in demand trades in the province, but more specifically to the specific community or region the program is delivered.</p>
<p>Launch Community Development Foundation</p>	<p>Thompson-Okanagan</p>	<p>Men and Women</p>	<p>Launch Community Development Foundation (Launch Kelowna) helps people move forward in life by providing them with the financial knowledge, confidence and community support to take the next step towards greater independence and sustainable positive change.</p> <p>Individual - Launch Kelowna offers Money Management programs that empower people to be financially independent. Save money, start a business, embark on new education or increase your skill in a trade. Provides workshops for attendees to learn money management and are encouraged to save money throughout the duration of the 12-month course. Successful attendees receive matched funding for their savings; funding can be used to help pay for school, equipment for work, assist with starting a new business, etc.</p>
<p>Minerva Foundation</p>	<p>All regions in BC</p>	<p>All Women</p>	<p>The Minerva Foundation is a registered, non-profit charitable organization that supports women and girls throughout the province to gain the confidence and skills they need to reach their leadership potential.</p> <p>Interpersonal - The Women Leading the Way program provides participants with leadership skills and mentorship relationships.</p> <p>Individual - Women Leading The Way is an interactive, part-time training program for established and emerging leaders. Grounded in the principles of values-based leadership, has transformed the careers of hundreds of women with its unique approach. Two days per month for 6 months. Current focus around women in engineering and technology could be expanded in partnership to offer a program for trades women.</p>
<p>Nicola Valley Institute</p>	<p>Thompson-Okanagan</p>	<p>Indigenous</p>	<p>Post secondary program offered at the foundation training level available only to indigenous persons.</p> <p>Interpersonal - Outreach in the local school system has produced successful recruitment strategies for WIT in electrical, past years saw 25%-45% women. Participate regionally (Merritt) in networking and</p>

Organization	Region Served	Target Clients	Description of Services or Supports Offered by Barrier Level
			<p>trade fair events through local schools.</p> <p>Individual – Local suppliers support the costs to the students entering the ACE-IT program (textbooks, supplies etc.)</p>
Okanagan College	Thompson-Okanagan	Female Students who meet eligibility requirements	<p>Okanagan College is a public, post-secondary institution with over 120 certificates, diplomas, degrees and programs including apprenticeship and pre-apprenticeship trades programs. Its largest campus is located in Kelowna, British Columbia</p> <p>Interpersonal - Monthly events and contact through social media avenues. Women working in the trades continue to provide mentorship for current students - Women Giving Back.</p> <p>Individual - Offers women in trades training programs following Red Seal Certification. Gateway to Building Trades for Women and Women in Trades Foundation Program Sponsorship, that includes funding to support, tuition and textbooks. Includes tools and personal protective equipment (PPE). Track students past graduation for one year. Employment readiness skills and interpersonal skills throughout the program. Employment and job search supports also provided.</p>
Open Door Group - Tradeworks Women in Trades	Mainland/Southwest	All Women	<p>Tradeworks operates a social enterprise called Tradeworks Custom Products, whose mission is to employ residents living in Vancouver’s Downtown Eastside, while providing quality products.</p> <p>Interpersonal - Staff provides a mentorship link back to the program participants on an ongoing basis. Prepares them to have a successful workplace experience and maintains contact following employment to provide support where needed.</p> <p>Individual - Women in Trades Training (WITT) offers 12-week pre-apprenticeship program in construction woodworking, and includes life skills and job search training and financial supports. A trades training programs that run five days a week for 8 weeks in a fully equipped carpentry facility in Vancouver’s Downtown Eastside and concludes with a 3-4 week practicum. Includes job skills and soft skills training. Employment readiness workshops and employment supports.</p>
Prince George Nechako Aboriginal Employment and Training Association (PGNAETA)	Cariboo	Indigenous	<p>PGNAETA was formed in 1993 as a Non-Profit Society, mandated to serve the Aboriginal community in the field of Human Resource Development. Guided by Chiefs, Urban leaders, Employment practitioners and Aboriginal citizens, they work collaboratively to aid the Aboriginal workforce to participate in the shifting labour market in today’s economy.</p> <p>Interpersonal - Staff provides a mentorship link back to the program participants on an ongoing basis. Prepares them to have a successful workplace experience and maintains contact following employment to provide support where needed.</p>

Organization	Region Served	Target Clients	Description of Services or Supports Offered by Barrier Level
			<p>Individual - The Aboriginal Employment Gateway (AEG) team works with the client to determine the most appropriate intervention to assist them in meeting their goals. Following the assessment process, the client meets with the coordinator to determine a program intervention, or a succession of interventions that are plausible. Success measures, employer needs and workplace policy, personal commitment, required supports, financial planning and information on employment opportunities are all part of the discussion prior to approving an intervention. The Association has developed a Job Access Centre with computers for clients to use in seeking employment and researching opportunities. Provide full service employment services and supports, including mentorship. Construction 101 in partnership with Teamsters Union.</p>
Riverside College	Mainland/Southwest	Men and Women	<p>Riverside College has been creating graduates in the Mission community and the Fraser Valley for the past 15 years. It has established itself as one of the top post-secondary schools of choice for local high school graduates. Students in grade 12 can take advantage of dual credits and complete the first year of a college program while still getting credit towards their high school graduation.</p> <p>Interpersonal - Women in Trades Conference, February 16, 2017 (inaugural with ITA funding). Staff provides a mentorship link back to the program participants on an ongoing basis. Prepares students for successful workplace experiences and maintains contact following employment to provide support where needed.</p> <p>Individual - Main focus is grade 12 level, foundations program. Intake of some adults into program where space available. Also offer on-line training to anyone for business related courses (through Ed2Go). All secondary school aged students 100% funded through Ministry of Education, adult students potential for various funding opportunities (cost \$5400 per year).</p>
Selkirk College	Kootenay	Men and Women	<p>Selkirk College is a community college in Castlegar, BC. Founded in 1966, it was the first regional community college in British Columbia. The college offers over 60 programs.</p> <p>Individual - Offers Trades Discovery Program, covering Workplace Essential Skills, Employer Expectations, Workplace Culture, Shop Safety, tools operation, fall protection, confine space training, forklift operation, rigging and job shadowing.</p>
Single Parent Employment Initiative (Through WorkBC Centres)	All regions in BC	All men and women meeting eligibility requirements	<p>The Single Parent Employment Initiative is a program of the Province of BC.</p> <p>Individual - Up to 12 months of funded training or paid work experience; continued income or disability assistance while in training; child care costs covered during your training or work placement and for the first year of employment; transit costs to and from school; WorkBC Employment Services Centre supports, including workshops on resume writing, interview and work preparation; Health supplement</p>

Organization	Region Served	Target Clients	Description of Services or Supports Offered by Barrier Level
			coverage for a full year after you leave income assistance for employment. This includes dental, optical and premium-free Medical Services Plan and Pharmacare programs; exemptions for bursaries, grants and scholarships when you are in an approved training program.
Skills Canada BC - InSPIRE Program	All regions in BC	Men and Women	Interpersonal - The InSPIRE program is a unique in-school presentation that provides teachers and students from grades 6 – 12 with a new perspective on skilled trades and technology careers through engaging and thought-provoking activities. Presentations not only link classroom subjects and students' passions with skilled trade and technology careers, they also provide useful resources to help with further exploration of career options. During the presentations students participate in hands-on activities and watch and listen to apprentices, other students and/or industry professionals in a series of industry produced and 'inspiring' videos. In 2015/16 over 15,000 BC students participated in this highly informative program. Skills Canada BC also delivers a Trade & Technology Conference for Women in partnership with IBEW BC Provincial Council.
Small Business BC	All regions in BC	Men and Women	Small Business BC provides entrepreneurs with products and services that will assist their successful entry into small business ventures Individual - Offers services in business plan development, training courses for employees. Business education courses, professional expert advice. Also have Canada-BC Jobs Grant Advisors who can assist companies in reviewing their eligibility for employee training and assist with developing a training plan.
Thompson River University (TRU)	Thompson-Okanagan	Female Students who meet eligibility requirements	Thompson Rivers University is a public teaching and research university offering undergraduate and graduate degrees and vocational training. Interpersonal - Participates in outreach events in the region to shift attitudes towards trades training. Mind Over Metal, Girls do Mining, Women in Trades and Technology Mentorship programs all related to women in trades. RBC Funding directed specifically towards Women in Trades supports workshops, networking events, social media and full time administrator funded by this agreement. Individual - Women in Trades Training offers Women Exploring Trades program and Foundation Technical Training to eligible women that could include funding to support, tuition, textbooks, tools and personal protective equipment (PPE). Employment and job search supports. Funding agreement through RBC - provides bursaries up to \$3000 for current women in the trades programs. Continuing education opportunities available through their part-time studies programs (business, leadership, project management etc.).

Organization	Region Served	Target Clients	Description of Services or Supports Offered by Barrier Level
United Association Piping Industry College of BC (UAPICBC)	North Coast/Nechako	All men and women meeting eligibility requirements	<p>UAPICBC is a Trade School providing pre-apprenticeship, apprenticeship and certification training in the Piping Trades: Plumbing, Sprinkler-fitting, Steamfitting and Welding.</p> <p>Individual - Offers Introduction to Construction, and piping, sprinkler fitting, steam fitting and welding foundation, essential skills training, job search supports and Indigenous specific training. Eligible participants can receive tuition, tools, books, and other supports, including employment readiness and job search supports.</p>
	Mainland/Southwest		
	Northeast		
Vancouver Community College (VCC)	Mainland/Southwest	Men and Women	<p>Vancouver Community College is a public community college in Vancouver. Founded in 1965, it is the largest and oldest community college in British Columbia, with over 140 certificate and diploma programs.</p> <p>Individual - For those seeking continuing professional development post Red Seal they offer courses such as leadership and management skills, office administration and small business.</p>
Vancouver Island Construction Association	Vancouver Island/Coast	All Women	<p>The Vancouver Island Construction Association is a not-for-profit organization serving the construction community: the institutional, commercial, industrial, civil, and multi-residential construction sectors on Vancouver Island, the Gulf Islands, and other coastal areas of British Columbia.</p> <p>Interpersonal - VICA Women in Construction and U40 networking groups provide opportunities for mentorship and monthly events to engage tradeswomen in activities.</p> <p>Individual - VICA also provides Gold Seal Certification level courses related to Project Management, Estimators, Foreman, Superintendent training as well as an extensive list of on-line courses in areas of business and safety training.</p>
Vancouver Island University	Vancouver Island/Coast	Men and Women	<p>Vancouver Island University is a Canadian public university serving in Vancouver Island and coastal British Columbia.</p> <p>Individual - Offering 60 transfer credits for Red Seal Certified individuals to transfer to an undergraduate program. Also offering the Graduate Level Business Program to those with their Red Seal.</p>
Women Enterprise Centre	All regions in BC	All Women	<p>Women's Enterprise Centre was established in 1995 by Western Economic Diversification Canada to assist women in starting and growing businesses in BC.</p> <p>Interpersonal - Provides Networking Connections, Business Resource Library, Events and Workshops, One-to-One Mentoring Program, Financial Fitness Peer Mentoring Program.</p> <p>Individual - Business resource for BC women who own a business or are thinking of starting a business.</p>

Organization	Region Served	Target Clients	Description of Services or Supports Offered by Barrier Level
			Provide essential business services and resources, as well as referrals to many resources and other business service providers throughout the province. Free Business Advisory Services, Business Loans, Practical Business Skills Development.
WorkBC Centres	All regions in BC	Men and Women	<p>WorkBC is the provincial government's access point to the world of work in British Columbia. It was created with one key goal – to help all British Columbians to successfully navigate B.C.'s labour market.</p> <p>Interpersonal - WorkBC delivers the "Find Your Fit Tour" across BC, introducing grade 5-10 students to in-demand careers within BC through fun and interactive activities.</p> <p>Individual - WorkBC Centres offer case management, employment/job search supports and workshops for the general public and EI eligible citizens. Support Apprentices in technical training offers the Job Match Apprentice/Employer e-job board. Provide online resources for funding support, jobs in demand, accessing post-secondary/adult education programs.</p>
WorkSafeBC	All regions in BC	Men and Women	<p>WorkSafeBC is a provincial agency dedicated to promoting safe and healthy workplaces across B.C. They partner with workers and employers to save lives and prevent work-related injury, disease, and disability. Their services include education, prevention, compensation and support for injured workers, and no-fault insurance to protect employers and workers.</p> <p>Macro - WorkSafeBC has developed a series of videos regarding bullying and harassment that are available on their website.</p>

The engagement process of this research project has generated an overwhelming sense of energy and enthusiasm towards developing supports and partnering on future strategies. In addition to the organizations listed above, other organizations that do not currently have specific programs to increase recruitment and retention of women into their trades are eager to build them, including (but not limited to) the following:

National Floor Covering Association	Seaspan
BC Carpenters Union	Canfor
LNG Canada	Independent Contractors and Businesses Association (ICBA)
Iron Workers Union 97	BCIT
Christian Labour Association of Canada	

The following charts provide summary information on the organizations currently offering programs, including the target barriers, program locations and career stage. Note that some programs are offered across multiple regions, or offer programs for women in different career stages, so data in tables is not additive.

Table 2: Focus of programs available to women in trades and employers

The 28 organizations have programs that address one or more barrier types, using one or more strategies, as categorized below.

Barrier type	Number of organizations ⁴	Barrier reduction strategy	Number of organizations ⁵
MACRO (SOCIETAL)	2	Outreach, Engagement, and Education	2
		Advocacy and Leadership Development	0
		Strategic Engagement of Target Populations	0
ORGANIZATIONAL	1	Organizational Analysis and Action Planning	1
		Supports to Build Organizational Capacity	1
		Workplace Training Interventions to Support Organizational Practices	1
INTERPERSONAL	19	Events Management	12
		Professional Networks	8
		Formal and Informal Mentorship	15
INDIVIDUAL	23	Employment Services and Supports	13
		Upskilling	22
		Continual Wrap-around Supports	16

⁴ Organization programs can address multiple barriers with multiple strategies. As an example, 19 of the 28 organization programs focus on reducing Interpersonal level barriers. Of those 19, 12 programs address the barrier through events management; 8 offer professional networks; and 15 offer formal and informal mentorship opportunities.

Table 3: Geographic presence of organizations with programs available to women in trades

The 28 organizations offer their programs to different economic regions. This table shows the geographical reach of the available programs.

REGION⁵	Number of organizations
All regions in BC ⁶	13
Cariboo	1
Kootenay	1
Mainland – Southwest	6
North Coast & Nechako	1
Northeast	1
Thompson-Okanagan	4
Vancouver Island – Coast	3

Table 4: Target audiences for programs available to women in trades

This table shows the target audiences for the different programs. A single program may offer services for women in one or more career stages.

Career stage⁶	Number of organizations
Pre-apprentice	15
Apprentice	16
Journey	17

⁵ Totals in these tables are greater than 28 because organizations may offer programs in one or more economic regions (e.g., most post-secondary institutions), or to all regions of BC (e.g, WorkSafeBC), and serve people in one or more career stages.

⁶ Service delivery for organizations operating throughout the province may be more centralized (e.g., Small Business BC), or organizations may have local delivery offices in the individual economic regions (e.g., BCCA STEP program).

Detail of Key Themes and Findings

Analyzing the data on the organizations and programs offers insight into what is currently available around the province to address the different barriers. Beyond this quantitative information this environmental scan has yielded rich content from participants – insights, stories and recommendations on how the barriers to women in trades can be addressed. This section presents the combined quantitative and qualitative findings.

Findings specific to certain barrier types

Barrier type	Where WIT programs see success	Where current WIT programs can be more effective
<p>MACRO (SOCIETAL)</p> <p>2 organizations around the province</p>	<p>This study identified several passionate, committed champions – organizations and individuals – who are making a difference or desire to have a greater impact to solve the barriers for women in the trades. These champions use their positional authority and their formidable powers of persuasion to lobby for and to create sustainable change across organizations, trade types and individuals. Other champions likely exist, or can be built around the province using best practices.</p> <p>Indeed, a forthcoming pan-Canadian study commissioned by the federal government (written by Marcia Braundy) will also affirm that active, visible champions are critical to the long-term success of barrier reduction pilot projects.</p>	<p>Two organizations target the Macro barrier. This absence of supports can undermine programs targeting other barriers because all four barriers must be addressed in tandem for true change to take hold.</p> <p>Grade schools, as major influencers of society and societal norms, present a particular opportunity. The consensus among the environmental scan participants is that grade schools (K-12) can reduce biased attitudes and gender role stereotypes by actively presenting the trades as a natural fit for women, and ensuring that these discussions do not discourage young women from the trades. Further, discriminatory attitudes and behaviours entrenched at an early age (e.g., young men do not learn about trades alongside young women) are more difficult to change when these students become adults on a job site. This, in turn, erodes the ability to retain qualified women in the trades.</p> <p>Further, women in trades are not typically part of curriculum design, and women may not see themselves as full participants in their chosen trade during formative training years.</p>
<p>ORGANIZATIONAL</p> <p>1 organization around the province</p>	<p>Senior trade company owners and executives set the culture, the policies and the practices of an organization, and create a trickle-down effect throughout the company. Some owners and executives are committed to hiring and</p>	<p>Only a single organization targets the organizational barrier. Active interventions must be facilitated within organizations, and supports be readily available to prevent the dilution of programs targeting other barriers. All four</p>

Barrier type	Where WIT programs see success	Where current WIT programs can be more effective
	<p>providing supports for tradeswomen in their companies, and support sub-trades with equal opportunity hiring practices.</p> <p>Some organizations make credible business cases, showing positive dollar impacts, to hiring women. For instance, some employers see women as very desirable employees – more reliable, take better care of equipment, and greater attention to detail than men.</p> <p>Several research participants noted that once the first woman tradesperson is hired and is performing well and well-integrated, subsequent hiring of women becomes simpler.</p> <p>Some electrical companies have all female crews and forepersons, and use women in their retail (residential) business because customers ask for this.</p> <p>In the Northeast, where labour is so difficult to find, employers are more apt to enforce anti-bullying and harassment policies because they want women to stay on the job.</p> <p>STEP, a program offered by the BC Construction Association, encourages employers to hire women by offering to work closely with these companies to ensure that their labour needs are met.</p>	<p>barriers must be addressed in tandem for true change to take hold.</p> <p>Many employers are still reluctant to hire women based on legacy stereotypes: Women will “distract” the men or might injure themselves. Employers are often unaware of the strong business case to hiring women.</p> <p>Employers may be unwilling to change the culture of their workplace to accommodate women, in particular addressing poor behaviour in the workplace, even though this cultural change improves working conditions for everyone (women, Indigenous peoples, immigrants and men).</p> <p>The consensus from research participants is that men are hired more easily than women, even if women are better qualified.</p> <p>The first woman working for a company often is seen to represent “all women”, and any injury or misstep may taint future hiring of women.</p> <p>Companies may not include women in the writing of policies to ensure that they are indeed “women friendly”.</p> <p>Employers are not experimenting with alternative work arrangements, and early start times and lack of shift flexibility are difficult for women with child / daycare responsibilities.</p>
<p>INTERPERSONAL</p> <p>19 organizations around the province</p>	<p>Relatively large number of services exist to address this barrier, and most of the programs offer two or all three of the tactics: Events Management, Professional Networks and Mentorship.</p> <p>Formal mentorship, which often includes technical skills development, is part of the trades culture, and is therefore offered readily to tradeswomen.</p>	<p>A woman’s formal (technical) mentor may not always be the right person to serve as a peer mentor. For example, a peer mentor on site with the tradeswoman can be very effective to confront bad behaviour from a co-worker and openly show support for the woman. Technical mentors may not understand or want the peer mentor role.</p> <p>Participants believe that connecting young women to working tradeswomen is a very good way to generate interest in the trades (and organizations would do more</p>

Barrier type	Where WIT programs see success	Where current WIT programs can be more effective
	<p>Although less common than formal mentorship, research participants speak highly of programs that offer peer-to-peer connections for tradeswomen in different stages of their career. Useable knowledge about life on the job site is often shared, such as avoiding pitfalls at work, and companies that have good reputations for employing women.</p>	<p>of this if asked), and yet most schools do not actively seek these opportunities.</p>
<p>INDIVIDUAL</p> <p>23 organizations around the province</p>	<p>A relatively large number of services exist to address this barrier, and successful programs for women are open to expanding their services specifically for WIT.</p> <p>At least one organization in every economic region offers upskilling services.</p>	<p>More women could take advantage of the existing programs, whether they are specific to WIT or not. Several organizations have few WIT as clients, and WIT can be encouraged to embrace these opportunities like women in any other business sector.</p> <p>Although career progression and transition are seen as positive, women who move from the tools to other jobs like management, education, recruitment, etc. leave gaps on the job sites. Information is lacking to understand why women choose to take other positions – unfriendly work sites, enticing opportunities elsewhere, or something else – and whether additional services could be offered to encourage them to remain on site.</p>

Findings applicable to multiple barriers

Element	Where WIT programs see success	Where WIT programs can be more effective
<p>Program Availability and Effectiveness</p>	<p>The collection of currently available programs address <i>most</i> of barrier reduction strategies, with an emphasis on reducing Interpersonal and Individual barriers;</p> <p>Every region has at least one organization (local or province-wide) offering services to address the four barrier types.</p>	<p>The available supports are highly fractured due to specific eligibility conditions, geography, and stage of career.</p> <p>Strategies must work in tandem across all four barrier types for meaningful change. Few programs directly address macro and organizational barriers, which can undermine progress against all barriers.</p> <p>There is a significant lack of programs both specifically for women in trades and that support WIT throughout their career stages (pre-apprenticeship, apprenticeship and journey), and women must therefore look for different support organizations as they transition from one phase to another.</p> <p>All programs funded through federal and provincial funding agreements are subject to eligibility requirements, which could be changed upon renewal of funding agreements. Details on current eligibility requirements can be obtained through individual website links listed on page 37 of this report. These requirements limit the ability to serve more women in trades. With an expanded mandate and funding, several of these programs could expand their existing services to cover more WIT.</p> <p>Less populated regions rely on province-wide organizations, rather than on local organizations, to offer barrier reduction programs.</p> <p>Finally, data on women leaving the trades is poor, with only anecdotes about whether they left the trades due to the barriers, ineffectiveness of barrier reduction programs, or for some other reason.</p>

Element	Where WIT programs see success	Where WIT programs can be more effective
Expanding existing programs for WIT	<p>Several organizations, and post-secondary institutions in particular, are very open to expanding their existing offerings.</p> <p>Several best practices exist across the different programs that can be shared and implemented elsewhere.</p>	<p>Organizations do not know what services might be useful to add, and require guidance (and potentially funding) and to make expansion successful.</p> <p>For the most part, organizations do not track WIT as a distinct sub-group accessing services, nor do the organizations record the number of potential clients that might be served if the program were expanded. So while many organizations say that they would expand, no data is available to indicate total unmet demand.</p>
Desire of organizations to offer new or targeted WIT programs	<p>All organizations participating in this environmental scan expressed a willingness to offer or support development of programs for WIT, with specific guidance on objectives, audience, links with other organizations and target outcomes.</p> <p>For instance, Skillplan, a Burnaby-based organization offering workforce development programs, plans to launch a new WIT mentorship program in 2018.</p> <p>Also, the Women Building Futures program in Alberta offers WIT-specific services to address tactics across multiple barriers, and could expand services to women in BC (see Best Practices section for details)</p>	<p>Organizations interested in offering services are not connected to other providers, and therefore do not know which services would be the most valuable services to add in their regions.</p> <p>WIT-specific programs are few today, and services focused on WIT would require enough ongoing interest by women to make them viable over the longer term.</p>
Increasing awareness by WIT of existing organizations and programs		<p>Given the fractured nature of the services on offer, it is very difficult for women to readily understand what is available, connect with those resources, and see how the services connect to support their career stages.</p>
Coordination among the different organizations offering programs		<p>There is no overarching coordination among the different support organizations, so the existing services resemble a “patchwork”, rather than a concerted portfolio of services.</p>

Element	Where WIT programs see success	Where WIT programs can be more effective
Sharing strategies and approaches with other under-represented groups and programs for these groups		<p>Other groups suffer from similar barriers as women in trades, and there is little information available to confirm that organizations are connecting to share information and best practices. For instance, 2013 research results by the Applied Science Technologists and Technicians Association of BC (ASTTBC) demonstrates similar barriers and strategies for women in other male-dominated sectors.</p>

Recommendations – The Path Forward

This environmental scan shows that there are numerous organizations around the province making some level of difference for the women they support, and for the employers that hire them. It also highlights that the **existing services must target broader groups of women, must be better connected and coordinated, and be simpler to identify and access to materially impact the prevailing barriers that keep women in trades numbers low.**

Although the environmental scan data is focused on services to retain journeywomen, the participants in this exercise are adamant that **no amount of retention services to see women successfully finish their apprenticeship and have long Red Seal careers can succeed without the same level of success in attracting women to the trades and supporting them through their apprenticeship period.**

Based on the above, this report offers the following recommendations:

Barrier type	Recommendation
MACRO (SOCIETAL)	<ol style="list-style-type: none"> <li data-bbox="461 953 1401 1115">1. Acknowledge the link between interest and recruitment, and WIT retention and advancement, and the societal role grade schools play in shaping gender role stereotypes and beliefs. Because the attitudes and beliefs acquired during grade school carry forward into adult lives, the K-12 education system must evolve to present the building trades as normal place for both women and men to work. <li data-bbox="461 1136 1401 1224">2. Implement social procurement policies throughout the provincial government that ask prospective trade contractors to detail their policies and practices that support WIT, and award contracts to the best. <p data-bbox="509 1262 1401 1451">The provincial government has an opportunity to nudge employers to do much better. It is likely that social procurement policies would incentivize employers and their trade associations to create services, or request services from other organizations in response. In addition, there could be a potential to highlight organizations that are open to hiring women providing an incentive to other organizations to follow suit.</p>
ORGANIZATIONAL	<ol style="list-style-type: none"> <li data-bbox="461 1568 1365 1629">1. Offer programs to owners, senior leaders and companies that want to change their workplace culture. <p data-bbox="509 1650 1390 1808">Changing organizational or corporate culture is always difficult, and many leaders do not know how to effectively create change. Senior leaders need to see that programs and policies related to anti-bullying/harassment to create a respectful workplace, flexible shifts, etc. are good for everyone (including women) in the organization, and the industry.</p>

Barrier type	Recommendation
INTERPERSONAL	<p>1. Create a provincial plan between ITA and the regional programs it funds to host WIT events (e.g., awareness of the trades and available resources, conferences, education) that provide opportunities for women to connect and form peer mentor relationships. A coordinated plan can be more efficient and effective, with wider coverage across the province, than today’s model of individual event planning.</p> <p>To boost peer-to-peer connections, explore creating trade associations specific to women, or ways that existing trade associations can recruit more women and offer events to allow women to increase and deepen their connections to each other.</p> <p>To encourage a continuum of mentorship for WIT create a process that will support the transfer of skill sets for formal and interpersonal skill transfer, creating a best practice that employers can adopt and demonstrating the return on investment that mentoring will bring.</p>
INDIVIDUAL	<p>1. Collect better statistics on women in trades to know what services they access, and to follow their career progression to determine which combination of services are most impactful.</p> <p>Organizations normally only record gross numbers of clients who access their services, and do not typically break down these numbers by client type. It is therefore extremely difficult to know how many women access existing services (unless the service is specific to this group).</p> <p>As well, organizations do not typically record outcomes for program participants and can not, for example, say what occurred in the women’s lives that caused them to leave apprenticeships or trades jobs. It is often assumed that women leave the trades because of a bad event or situation, and therefore the supports “failed” to retain them. It may be that women accessed professional development, or training in another field and left for career advancement.</p> <p>2. Facilitate a service for tradeswomen to seek information on their legal rights and protections, and to receive advice and support for unfriendly hiring practices, or bullying and harassment in the workplace. Often women do not know who to contact to speak about their experiences and what recourse they may have to improve their situation.</p>
MULTIPLE	<p>1. Create a central repository of organizations, programs and services for WIT to reduce the current fragmentation. This repository could thrive inside of an existing organization that has both a provincial scope, and the information technology and human capacity to offer the following:</p> <ul style="list-style-type: none"> • Raise awareness and knowledge for women seeking services by publishing and maintaining the list of resources (e.g., social media strategy; online, interactive search tool); • Raise awareness among employers of available services and broadly communicate the business case for women employees to mitigate the existing (and future) labour shortage; • Raise awareness and knowledge among the organizations, helping them share best practices and identify service gaps that can be filled;

Barrier type	Recommendation
	<ul style="list-style-type: none"> • Map programs and services to the career lifecycle, and improve the women’s journey from one program to another; • Gather specific statistics on program usage by WIT, and outcomes. <p>2. Scale the efforts to expand recruitment and retention for WIT by connecting WIT organizations to organizations with the same goals for other under-represented groups (e.g., Organizations boosting success for Indigenous peoples and immigrants).</p> <p>Share the information gathered to reduce WIT barriers with government and other agencies to support efforts to reduce barriers for other under-represented groups by connecting organizations and programs.</p> <p>3. Reduce or remove the eligibility requirements on programs that offer cross-barrier services – OR – replicate the programs and offer to a broad base of women in trades.</p> <p>In particular, organizations such as PGNAETA, BCCA (via STEP) address multiple barriers in parallel, and their programs (or replicated programs) could have a broader impact if they were able to serve larger groups of women in the trades (See Best Practices section for more information).</p> <p>4. Partner with forward-thinking organizations to build new programs that address existing coverage or eligibility gaps.</p> <p>Existing multi-service programs for women are very receptive to expanding their offerings for women in trades in BC, and supplement other organizations’ programs (See Best Practices section for more information).</p>

Best Practices to Support Women in Trades in BC

The focus groups and interviews across the province reveal a number of passionate, committed champions – organizations and individuals – who are making a difference or truly desire to have a greater impact to solve the barriers for women in the trades. The following best practices highlight some of their successes, and while not an exhaustive list, demonstrate what is possible across All regions in BC if these best practices are widely shared, promoted and coordinated.

Barrier type	Best Practice
ORGANIZATIONAL	<p>Island Health, under the leadership of the Chief Project Officer (CPO), used two large infrastructure projects (North Island Hospitals located in Campbell River and Comox) to promote a broad attitude change about women and Indigenous peoples in the trades. The belief of the CPO is that these “legacy projects” do not just change infrastructure; they can change communities. The CPO created purposeful employment, contracting and work policies and practices that grew the numbers of women and Indigenous peoples on the work site. He also used consistent, ongoing argument and persuasion with multiple stakeholders to change opinions about who can succeed in the trades. His ongoing actions “nudged” multiple companies, associations and schools to encourage under-represented groups to explore a trades career and to grow and use their trades skills on the project. His belief is that these policies and practices can continue beyond this project. Over the course of three years the CPO successfully delivered the following:</p> <ul style="list-style-type: none"> • The project served as a training ground for over 360 apprentices, and more than 150 women working in different roles; • Leveraged the project to forge better relationships between the Island’s post-secondary institutions supporting trades, the ITA, trades instructors, both the provincial and municipal governments, Indigenous groups, and key individuals; • Gained access to local elementary schools to talk about the projects and life in the trades; • Invited high school students to the site to view the state-of-the-art technology, and hear from project architects and engineers; • Tapped into multiple groups to find qualified workers - Chambers of Commerce, STEP, Indigenous training groups, employment centres, school districts; • Connected with local Rotary Clubs, Lions Clubs, city councils, First Nations and other community groups to raise awareness about the project, and the need for local trades labour. <p>Large infrastructure projects, combined with the right champion, can be excellent vehicles to experiment with barrier reduction. They are by nature time-bound and can serve as a catalyst to mobilize many organizations to work together to make a positive impact for women on the worksite and their employers.</p> <p>According to the ITA Northeast Economic Region Apprentice Advisor, the severe labour shortage has helped to shift the culture in the region to be more accepting of women in the trades workforce. Indeed, the Northeast may be more reliant on</p>

Barrier type	Best Practice
	<p>women than other parts of the province, simply because labour is in such short supply. Employers therefore may have a strong business reason to keep as many good employees on the job as possible, and can make it clear to the male employees that unfilled jobs are bad for everyone.</p> <p>Certain client groups, including women homeowners who are generally present when tradespeople are working in their home, are specifically requesting female electricians. Mott Electric has therefore assembled teams of women electricians to perform residential work to meet this demand.</p> <p>Houle Electric also sees a business case to employing women electricians, and tracks hiring and career progression details about all employees such as gender, to track corporate performance toward a more diverse workforce.</p> <p>Several research participants were very vocal about the business case for hiring women, and share their opinions freely with employers and other influential people in the trades. In their experience, women are easier on equipment than men (lowering repair and replacement costs), higher attention to details (important in trades like Electrical and interior finishing), get things right the first time (lower re-work costs), and are more reliable than their male counterparts (less turnover).</p> <p>The above best practices show the potential for effective and strong messaging to employers about the business case for hiring women for trades positions, and how this can positively impact an employer’s top- and bottom-line.</p>
INTERPERSONAL	<p>Okanagan College offers mentorship for women through the program “Women Giving Back”. Tradeswomen and others working in construction meet monthly with students and build mentor-mentee relationships. Students who have a mentor during training can seek assistance from a trusted advisor prior to any job site situation, and builds women’s confidence in their ability to handle difficult situations. These women are also more likely to search out a mentor on site post Red Seal.</p> <p>The program also offers software and soft skills training, communication skills, teaches women how to give and receive feedback and how to reduce aggression in colleagues, and how to have positive working relationships with co-workers and authority figures.</p>
INDIVIDUAL	<p>The Minerva Foundation focuses on building leadership capabilities in women, and offers leadership programs, education awards to women facing barriers, and culturally-relevant programs in collaboration with Indigenous women. Minerva’s programs are not presently directed at tradeswomen, and the organization believes that such a program expansion may be worthwhile.</p> <p>One of Minerva’s flagship programs is Women Leading the Way, a six-month part-time leadership arranged around the participants’ work schedule and supported by their employers. This program focuses on those looking for growth opportunities, those wanting change, advancement, learning skills managing people, negotiating, etc. with a common thread of continuing investment in oneself.</p>

Barrier type	Best Practice
	<p>Following a discussion with the environmental scan project team, Minerva has launched a brand new scholarship for a woman in the trades for the upcoming cohort of Women Leading the Way program. This is an example of how organizations are willing to do more to support WIT, if they understand the needs, and how their services can help reduce barriers.</p> <p>Small Business BC offers a wide range of professional development courses – business, finance, marketing – for people that want to start a small business. Its library of 50 courses include general business, finance and marketing, teach skills such as business and financial planning, and are aimed at people who want to start their own companies and need to fill in knowledge gaps.</p> <p>Courses are open to all, and Small Business BC believes that its current courses, while not specifically for women in trades, are applicable to anyone who has an interest in starting a business. As such, Small Business BC makes its services accessible to the maximum number of people around the province via remote learning (via phone, webinar, video chat) as well as in person. It partners with local Chambers of Commerce and the provincial government to ensure accessibility around the province. Costs for the courses are well under \$100 each, and are delivered by industry professionals.</p>
MULTIPLE	<p>Programs from the BC Construction Association (Skilled Trades Employment Program (STEP)) and the Prince George Nechako Aboriginal Employment and Training Association (PGNAETA) offer services over the different career phases that address several barriers at once. Both organizations therefore have a unique perspective on the most effective combination of strategies and tactics that have the biggest impact on barrier reduction.</p> <p>STEP employees in many cases are tradesmen and women themselves with a deep understanding of the WIT experience (mentorship). STEP builds long-term relationships with employers, and can have candid conversations with employers about the business case to hiring women. Because of these employer relationships, STEP guides women on how to approach employers for jobs, and can steer women toward more progressive companies. Provides full construction trades employment services and supports, including maintaining a pool of employers for job matching and mentorship interactions, funding for upgraded skills requirements, safety tickets and work gear/equipment/tools or supplies. Funding support is also offered where needed.</p> <p>PGNAETA offers a broad range of ongoing services to support clients as they build their foundational skills, and obtain the Red Seal and even post-Red Seal certifications. Services include obtaining proper work gear, safety tickets, employment counselling, and advancement training. Funding support is also offered where needed.</p> <p>Offering a range of services over the different career phases builds long-term relationships between PGNAETA and its clients, creating a high level of trust between the program employees and the people served.</p> <p>Women seeking support from either organization must meet specific or stringent eligibility requirements, which ultimately limit the programs’ ability to have a</p>

Barrier type	Best Practice
	<p>broader impact on WIT. STEP clients are men and women who are ineligible for Employment Insurance, and PGNAETA works exclusively with Indigenous clients.</p> <p>Women Building Futures (WBF), located in Alberta and contemplating expansion into BC, offers training and ongoing support specifically for underemployed women looking for better careers in industries where women have historically been under-represented. Whereas some programs have specific eligibility requirements, WBF seeks to work with as many women as possible.</p> <p>Foundational education is geared toward boosting both women’s life management skills and their likelihood of success in the workplace, including courses on personal finance and being a successful employee. Partnership with employers is key to identifying the roles that the female student hold (e.g., working on a job site) to tailor the training.</p> <p>Women completing the WBF program have consistent employment rates of over 90%, and the organization works closely with employers to ensure that they are ready to successfully integrate women into their offices and job sites. LNG Canada is already talking to the organization about custom programming for women in the LNG industry in Kitimat.</p> <p>Build Together, Women of the Building Trades is a national coordinated program through Canada’s Building Trades Unions (CBTU) with provincial chapters, that promotes, supports and mentors women in the skilled construction trades through formal mentoring, networking, community involvement, and learning and development opportunities for women. The program’s website provides clear and compelling information on the myths and barriers for women in the trades, and promotes resources to improve the recruitment and retention of women. The resources target both women and their employers, and include manuals, videos, and policy templates.</p>

Conclusion

This environmental scan provides a comprehensive list of organizations that currently offer programs for women in trades. At first blush the list appears extensive, with programs available throughout the province and, as an ensemble, the services address to a certain extent all four of the barriers as well as the different stages of career.

The findings tell a more nuanced story, in part because not all strategies are covered by the existing services, and because there is a lack of coordination among the services. They resemble a *patchwork* more than an ensemble. The organizations and their programs also lack a unifying vision and the requisite coordination to ensure that the services offered have maximum impact. Such clear vision and coordination could enable the following, among other benefits:

- A centralized point to build broad awareness among women (both in the trades and contemplating a career in the trades) about the available services around the province;
- Knowledge among and between the different organizations and the programs they offer, which promote best practice sharing, and highlight service gaps to fill;
- Better and easier transition between the programs as women move through their career stages;
- A collective push by the organizations on all four barriers in parallel, which ultimately would lead to better outcomes.

This environmental scan provides another piece in this multi-staged research project that has now engaged, tradeswomen, employers, and organizations towards creating a series of strategies to increase the retention and advancement of women in trades. Together all of these projects and strategies will form the basis for developing a program that serves the province.

There are many people and organizations that want to see women in trades succeed, and thanks to them there are pockets of excellence around the province. BC can be proud of its existing services, and at the same time recognize that if we truly want to see more women in the trades, a new approach is required. This approach must include better coordination of existing services, guidance around impactful new services to offer, and the recognition that supporting women in trades involves not just building their own capacity and leadership; it also means building better employers, and ensuring that the next generation of women is encouraged to enter the trades and sees their trades career as viable and well-supported.

Resources

Organization	Website link for details
ACCESS	http://accesstrades.accessfutures.com/aboutus/
BC Construction Association (BCCA) - STEP Program	http://www.stepbc.ca
BC Institute of Technology	https://www.bcit.ca/study/programs/1190acert
BC Tradeswomen Society	https://www.facebook.com/bctradeswomensociety/
Build Together - BC Building Trades	http://buildtogether.ca/our-focus/women/
Camosun College	http://camosun.ca/learn/school/trades-technology/community-partnerships/women-in-trades.html
Canadian Construction Women	https://www.constructionwomen.org/Events
IBEW	https://www.ibew213.org/ibew-committees/ibew-womens-committee
Industry Training Authority	http://www.itabc.ca/ http://www.itabc.ca/apprentice-service/canada-bc-job-fund
Launch Community Development Foundation	https://launchkelowna.ca
Minerva Foundation	https://theminervafoundation.com/lead/leadership-development/women-leading-the-way/
Nicola Valley Institute	http://www.nvit.ca
Okanagan College	http://www.okanagan.bc.ca/Page19415.aspx
Open Door Group - Tradeworks Women in Trades	http://tradeworks.bc.ca/programs/
Prince George Nechako Aboriginal Employment and Training Association	http://pgnaeta.bc.ca
Riverside College	https://www.riversidecollege.ca
Selkirk College	http://selkirk.ca/program/trades-discovery-program
Single Parent Employment Initiative	http://www2.gov.bc.ca/gov/content/family-social-supports/income-assistance/on-assistance/employment-planning/spei
Skills Canada BC - InSPIRE Program	http://skillscanada.bc.ca/programs/inspire/
Small Business BC	http://smallbusinessbc.ca
Thompson River University (TRU)	http://www.tru.ca/trades/programs/women-in-trades.html
United Association Piping Industry College of BC	http://www.uapicbc.ca
Vancouver Community College (VCC)	http://www.vcc.ca
Vancouver Island Construction Association	https://www.vicabc.ca/about-us/women-in-construction--wic/
Vancouver Island University	https://tradesappliedtech.viu.ca
Women Enterprise Centre	http://www.womensenterprise.ca/content/womens-enterprise-centre-we-help-women-start-grow-their-business
WorkBC Centres	https://www.workbc.ca/Employment-Services/WorkBC-Centres.aspx
WorkSafeBC	https://www.worksafebc.com/en/resources/health-safety/videos/bullying-and-harassment-in-construction/not-part-of-the-job-scenario-1?lang=en