



EXECUTIVE SUMMARY

With a view towards the future and our ongoing competitiveness, in 2018 the Association of Consulting Engineering Companies of New Brunswick (ACEC-NB) created a diversity and inclusion committee. This group, with representation from several member firms, decided to tackle gender diversity and inclusion as its first priority.

Research was conducted over the course of 2019 and this report contains the insights gained from that process. We probed on what types of benefits are most meaningful to women in consulting engineering, drivers of career satisfaction, perception of career advancement opportunities, and work culture.

In addition, we have created a series of recommendations to support our member firms, which can be found on pages 23 – 26. Recommendations fall into the following themes:

- Tips to Create Diversity & Inclusion Strategies
- Tackling Flexibility, which surfaced as a top desired benefit and key driver of satisfaction
- Create transparent career tracks for recruitment, retention and advancement opportunities
- Developing onboarding strategies after parental leave
- Specific steps ACEC-NB will implement over the coming year to support member firms and their employees

For consulting engineering to thrive, we must all possess a foundational understanding of the issues facing our workforce and our economy. We hope that this research offers greater insight as to the opportunities that exist for our member organizations to create workplaces that support diversity and inclusion, and where women can pursue meaningful careers and advance into leadership in greater numbers.

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THANK YOU TO OUR SPONSORS













Agence de promotion économique du Canada atlantique

We thank our generous sponsors for their support and for making this research possible.

We would also like to thank our volunteer committee for supporting this effort with their time and expertise.

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The Association of Consulting Engineering Companies-New Brunswick (ACEC-NB) is a not-for-profit organization representing the New Brunswick consulting engineering industry.

ACEC-NB represents the commercial interests of businesses that provide professional engineering services, to both the public and the private sector. Members are involved in the planning, designing and implementing of all types of engineering projects, and provide independent advice and expertise in a wide range of engineering-related fields.

For more information about ACEC, please visit https://www.acec-nb.ca/

PURPOSE

New Brunswick is facing major labour shortages over the coming decade, with 120,000 employees* forecasted to leave the workforce. Compounding this issue is a changing economy that requires more technically skilled workers than ever before.

With the vast majority of retirements still to come, New Brunswick employers need to act now to adjust recruitment and retention strategies to be more inclusive and tap into a labour pool that is growing and highly educated – women.

120,000

EMPLOYEES

FORCASTED TO LEAVE

THE WORKPLACE

While women make up more than half the nation's population, they are still largely under-represented in the field of engineering. The number of women enrolled in post-secondary engineering programs has steadily grown over recent decades, as has the number of women in the engineering profession overall. However, despite these gains, men still significantly outnumber women, retention of women continues to be a significant challenge, and trends are consistent if not more concerning in the field of consulting engineering.

Engineers play a vital role in an economy's ability to prosper. They impact everything from physical infrastructure, to the knowledge economy and innovation, to our productivity. For New Brunswick to become more sustainable and for our profession to thrive, we must embrace this challenge of diversity head on.

OUR FOCUS

In 2018, ACEC-NB established a diversity and inclusion committee with the goal of:

- Supporting Engineers Canada on the 30 by 30 Initiative to increase the representation of women within the engineering field to 30% by 2030 – currently, New Brunswick is at approximately 15%, at the time of publication
- · Understanding specific issues facing women in consulting engineering through research
- Creating new learning opportunities for men and women to understand common challenges and best practices
- · Creating association events to foster better networking, mentorship, and awareness

30 by 30 Initiative INCREASE WOMEN IN ENGINEERING TO 30% BY 2030

RESEARCH ON RETENTION OF WOMEN IN ENGINEERING CONSULTING

Despite gains in attracting women to engineering, as well as improvements in enrollment and graduation rates, some women do not pursue licensure or leave the profession after obtaining their professional designation. We must understand why.

Engineers Canada has shared that while there is a lack of Canadian research on the reasons for this, many US-based studies have provided valuable insights, including the 2011 study, *Stemming the Tide: Why women leave engineering*. Among its key findings, *Stemming the Tide* found that:

- More than two-thirds of the women who left engineering ended up working in another field, and half of those rose to
 executive positions only five years after leaving engineering.
- Nearly half of women left engineering due to working conditions, such as too much travel, a lack of advancement, or low salary.
- 30% left engineering due to the organizational culture.
- 25% left engineering because they wanted more time with their family.

UNDERSTANDING RETENTION OF WOMEN IN THE NEW BRUNSWICK ENGINEERING CONSULTING PROFESSIONOver the course of 2019 we conducted research to better understand retention of female engineers in consulting specifically. The time is now:

- Member organizations in New Brunswick are at risk of losing significant investment if trends continue, and if highly skilled female employees choose to leave the profession
- There is a strong business case for offering clients a diverse project team with individuals who challenge 'group think' and bring different lived experiences and perspectives, and who can relate to an increasingly more gender-diverse client base
- · Consulting engineering is at a clear disadvantage if women cannot be retained in the profession

Our research was geared towards understanding specific career experiences and preferences that impact long-term retention of women in the profession.

^{*} https://www2.gnb.ca/content/gnb/en/corporate/promo/priorities/private_sector.html

AT A GLANCE

SURVEY

32
QUESTIONS

6 CATEGORIES 57
RESPONSES

93%
COMPLETION RATE

22
AVERAGE MINUTES SPENT

May & June

FOCUS GROUPS

FOCUS GROUPS

GROUPS:
SAINT JOHN & FREDERICTON

5 QUESTIONS

16
PARTICIPANTS

2.5
HOURS EACH

September 2019

PHONE INTERVIEWS
WITH WOMEN WHO LEFT
CONSULTING FOR
GOVERNMENT & ACADEMIA

30 MINUTES EACH

Various TOPICS

METHODOLOGY

RESEARCH REVIEW

While there is a general lack of research in Canada on retention of women in engineering, groups have emerged with new insights in recent years. In particular, ACEC-Manitoba conducted a study in 2015 about perceptions of workplace experiences in consulting engineering. Our committee reviewed this survey methodology and applied lessons learned in the construction of our research process. A key difference is that we decided to survey only women to target specific gender differences and insights.

DETERMINING AVAILABLE POPULATION

At the outset of this process, it was evident that we did not have reliable data on how many women work in consulting engineering in New Brunswick in a technical role. We therefore invested the first part of the year in outreach activities to ACEC member firms in New Brunswick to understand how many women they employ in technical roles, and how big our survey population could potentially be. We received varying responses to these outreach activities and successfully created a target audience list of 65 women for this survey. This group included women in a variety of engineering and geotechnical roles, including engineers and geoscientists in training. The completion rate was 93% which is very strong. Since those surveyed represent a sample of the target population, the results are directional and offer a view into the true characteristics of this population.

SURVEY

During the months of May and June 2019, we surveyed women in consulting engineering in New Brunswick through an online survey tool. The survey was constructed with 32 questions, mainly multiple choice with comment boxes, and it explored six categories:

- 1. Experience & your career
- 2. Benefits
- 3. Career satisfaction
- 4. Work culture
- 5. Women in engineering
- 6. Demographics

We kept the survey open longer than originally anticipated to encourage high participation rates and confidence in our findings. A survey of this nature is new for the association and the profession, and it therefore required the committee to create awareness about this new initiative. Reminder email invitations were sent, and a gift card incentive was offered for completion. The completion rate was 93%, with a confidence level of 95% and margin of error of 7%.

93%
COMPLETION RATE

32
QUESTIONS

6 CATEGORIES

FOCUS GROUPS

Two focus groups were conducted to augment the survey findings and to add more qualitative insights to the process. Focus group participants were selected from those women who had completed the survey, and were conducted in the cities of Fredericton and Saint John during the month of September, 2019. Five main themes were explored:

- **1.** General experiences in the field of consulting engineering as a woman in the profession, consider what is going well and what could be improved
- 2. Benefits what do you value and what would drive greater retention levels among women in the field
- **3.** Career advancement formal and informal opportunities for mentorship, professional development and training, and recognition and visibility at work
- **4.** Work culture social events, networking and business development, management support, and the nature of the hours, travel and pay
- 5. Engagement levels what would make you more engaged and loyal to your company and the profession

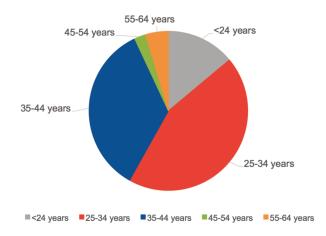
PHONE INTERVIEWS

While the survey and focus groups focused on women currently working in the consuting engineering profession in New Brunswick, we completed phone interviews with women who have exited the profession of consulting entirely. This was done to understand if there were any issues or challenges that impacted their decision making which had not surfaced in the survey process and focus group discussions.

PARTICIPANT DEMOGRAPHICS AND COMMITMENT TO THE PROFESSION

AGE & YEARS OF EXPERIENCE

Respondents represented a broad range of ages and experiences in the profession. 8 out of 10 respondents were between the ages of 25 and 44, while 58% of respondents were Millennials (less than 24-34 years) – younger women whose preferences we must seek to understand better to ensure a continued pipeline and retention for consulting engineering in New Brunswick.



Importantly, 58% were career starters with just 7 years or less of experience in the profession.

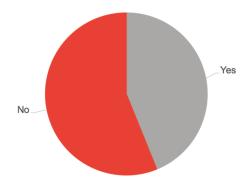
Designation by years of experience

	EIT/GIT	P. Eng/P. Geo	Total
0-3 years	80.0%	3.6%	30.2%
4-7 years	20.0%	32.1%	27.9%
8-14 years	0.0%	25.0%	16.3%
15-24 years	0.0%	32.1%	20.9%
25 years or more	0.0%	7.1%	4.7%
	100.0%	100.0%	100.0%

CHILDREN & MATERNITY LEAVE

One third of respondents had dependent children at home. While there is a trend in North America of Millennials delaying major decisions like marriage and children, this percentage could be a reflection of the younger ages of the survey participants overall, or it could signal that women are either putting off having children in favour of their career in consulting engineering, or choosing to leave the profession when they do. By way of general comparison, 2011 Census data indicates 52% of the population has dependent children.





Over 40% of respondents indicated they took a leave from the profession and returned. In most instances, that leave was for maternity, while others took the leave to take care of other family members or to pursue other professional interests.

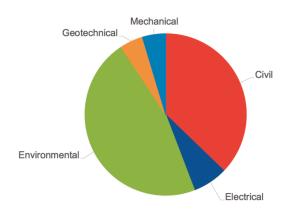


FIELDS OF INTEREST FOR WOMEN

The vast majority of respondents were in the fields of environmental and civil engineering, pointing to a continued lack of representation among women in the fields of electrical, mechanical and geotechnical. It is unclear whether certain fields are more attractive than others for women in consulting engineering.

When asked if they intend to stay in the profession, the vast majority of respondents indicated they were committed to staying in the profession. Just 7% of P.Eng., or 4 respondents, indicated they planned to leave the profession in the coming years. Of these 7%, timing was unknown, signaling that while they had made up their mind, they were not fully sure of the next step.

While 93% retention is a positive sign among those working in consulting engineering today, 80% of EIT / GIT respondents don't yet consider engineering a core part of their identity, meaning they are potentially at risk of leaving in the coming years.



93% RETENTION, BUT... 80%
DON'T CONSIDER
ENGINEERING CORE
TO THEIR IDENTITY

MALE-DOMINATED WORKPLACES

When gathering the baseline data to understand how many women work in consulting engineering in New Brunswick, it was clear that the experience for most New Brunswick female engineers and geoscientists is one that is very heavily male dominated, and where their needs are not well understood.

It was determined that of all of the women working in the field (whether in a professional technical role or not), they are outnumbered 4:1.

Just 35% of companies surveyed say they track statistics, whereas the majority of consulting engineering firms do not track labour statistics in their firm. Of those who do track statistics, 41% track the reasons for leaving the company, just 17% track the number of women promoted, and none track the number of women interviewed as part of the hiring process.

4:1
WOMEN WORKING
IN THE FIELD
ARE OUTNUMBERED
BY MEN

KEY TAKEAWAYS

- 58% of respondents were career starters with just 7 years or less of experience in the profession
- A third of respondents have dependent children at home
- At 93%, retention appears strong, yet 80% of EIT/GIT respondents indicated engineering is not yet a core part of their identity
- Women in the field are outnumbered 4:1 whether working in a technical role or not
- Just 35% of companies surveyed say they track statistics. The type of tracking varies with 41% indicating they track the reasons for leaving the company, just 17% track the number of women promoted, and none track the number of women interviewed as part of the hiring process.



Flexibility in the workplace is essential to family survival for two working parent families. We need to have the flexibility to attend school functions, look after sick children, attend sporting events, and maintain the household.



FLEXIBILITY THE MOST MEANINGFUL BENEFIT – WITHIN THE SECURITY OF A PERMANENT POSITION

Participants were asked what kind of benefits they value most, and overwhelmingly throughout the survey findings, focus groups, and phone interviews, participants confirmed what research has indicated for years on women in the workplace – flexibility is the most desired benefit by far. In the online survey, flexibility was rated as more meaningful than child care and general leave of absence opportunities, yet within the security of a permanent position – despite the rise of the gig economy amongst next-generation workers.

Percent of respondents indicating benefits are 'very meaningful'			
Permanent positions	84%		
Flexible work options	79%		
·	(jumps to 93% for women who have taken maternity leave)		
Flexible personal days	74%		
Access to professional development	61%		
Length of vacation	58%		
Child care	49%		
	(jumps to 73% for women who have taken maternity leave		
Paid overtime or in lieu	47%		

Flexibility ranks even higher for those women who have taken maternity leave, with 93% rating flexible work options as 'very meaningful'. Those same respondents rate child care support a full 24 points ahead of those women who had not taken maternity leave.

BENEFITS WOMEN HESITATE TO USE

Participants were asked if they hesitated to use any of their benefits, and if so, which ones. At 37%, over a third of respondents indicated they hesitate to use some of their benefits. That climbs to 40% for more established women with P.Eng. / P. Geo.

40%
P.ENG / P. GEO SAY THEY
HESITATE TO USE BENEFITS

While they don't often hesitate to use flex time if it's given to them, 26% hesitate to use sick time. The top two reasons cited for not using benefits are 'perception I'm not at work' at over 80%, and 'negative impact on advancement' at just over 60%.



In my experience the following are strongly frowned upon behind closed doors – sick time use, short-term disability (these cost the company) and unpaid leaves (affect the groups ability to perform the work).





We are measured to a very high level a scrutiny on utilization/chargeable hours. Sick time is not neutral, but rather is considered unchargeable time and counts against utilization.



EXTRA BENEFITS THAT WOULD BE VERY MEANINGFUL

This research study asked women to indicate which benefits they currently don't have, but if they did would be very meaningful. A number of options surfaced in the online study such as top-up maternity benefits, child care services nearby or financial support towards child care, and the value of mentorship.

Mentorship was a strong theme that surfaced in all aspects of the study including the online survey, focus groups and phone interviews. In the qualitative segments of the research, women spoke at length about the absence of career advancement opportunities geared towards women ranging from lack of role models, to the absence of formal mentorship programs to support women advancing, to the need for more visibility and recognition.

THE QUESTION OF PAY FOR CAREER STARTERS

While pay does not rate as highly as flexibility, the ability to make ends meet surfaced amongst younger women in the focus groups, as well as throughout the survey. 100% of online EIT/GIT respondents indicated paid overtime or in lieu was 'very meaningful' or 'meaningful' vs just 79% of more established women.

The focus groups offered an opportunity to probe further on the topic of pay. When questioned, younger women indicated they are either working a second job, or are thinking of getting a second job because their base pay does not allow them to handle the high levels of student debt or consider buying a home and putting down roots, let alone start a family and add the extra costs of child care to their already mounting financial pressures.

When asked about work culture and the prevalent expectation of working unpaid overtime, over half of respondents of all ages felt it was unreasonable. This may not be a gender issue, but is compounded by child care and family responsibilities. 37% 'strongly disagree' that unpaid overtime is a reasonable expectation, however, it ranked last in every single age group in terms of what would make participants leave their company. So, while respondents may not like it, they won't likely leave over it. However, employers should be aware of the extent to which it is a dissatisfier, and to which it is likely to impact overall engagement, loyalty and output levels.

In 2019 ACEC-NB conducted a survey of salary and benefits of 21 firms, with 13 or 62% participating. The number of employees reported on in 2019 was 651, up from 636 in 2016. Fig. 50 from that report shows median salaries by years of experience and gender and Fig. 38 includes classification. The starting salary captured in this chart is approximately \$15,000 higher than salaries shared in focus groups for career starters. Providing transparency around such reports, to employees across the industry, offers workers greater insight to comparable data and the possibilities for growth over time.

Fig 38. Median salaries by classifications and gender vs median years of experience

		Median salary	Years o	Years of experience	
	Male	Female	Male	Female	
Engineer	\$75,175	\$63,341	11	8.5	
Technician	\$58,099	\$52,000	15	10	
Administrative staff	\$60,002	\$47,025	26	16.5	
Other	\$73,500	\$62,000	16	9	

Fig 50. Median salaries for engineers by gender and years of experience

	Male	Female
0 – 1	\$50,933	\$51,252
1.1 – 5	\$56,000	\$57,500
5.1 – 10	\$68,864	\$68,000
10.1 – 15	\$79,000	\$82,309
15.1 – 20	\$84,500	\$77,917
20.1 – 25	\$93,569	\$100,500
25+	\$105,675	\$107,058

KEY TAKEAWAYS

- Flexibility is very meaningful ahead of child care and leave of absence....yet within the security of permanent positions (despite the move to a gig economy)
- Over a third hesitate to use benefits almost 40% for P.Eng/P.Geo
 - Unpaid leave and sick time tend to be those where people hesitate. Less so on flexible work hours, telecommuting, short-term disability and vacation (although 10% 'often hesitate')
- Benefits women value that they don't have include top-up maternity, child-care services/ support and more mentorship
- Pay is a driver amongst younger women and career starters, and will impact retention as they strive to juggle high student debt loads during their child-bearing years
- Over half of respondents indicate working unpaid overtime is unreasonable

CAREER SATISFACTION



Access to professional development or mentorship – there have been years (multiple) where I didn't have a single dedicated conversation with my manager about my career path or performance.

The assumption is that if we are busy, then things are going well.



KEY DRIVERS OF CAREER SATISFACTION VARIES BY AGE

- · 100% of established professionals said recognition was important, 75% of those said it was 'very important'
- 100% of EIT/GIT said training & professional development was important, 80% of those said it was 'very important'

In matters of importance to career satisfaction, recognition rises to the top for those more established in their career. 75% of P.Eng and P.Geo respondents indicated recognition is 'very important'. The top issue for EIT/GIT was training and development opportunities with 80% of this group indicating it was the most important driver.

Support to handle multiple life situations is also very important at 70%. This could be for different reasons among the sampled population, perhaps mental health prevalence among younger generations, and child care for older.

Career satisfaction drivers – 'very important'	
Support to manage multiple life situations	70%
Recognition	67%
	(jumps to 75% for P.Eng/P.Geo)
Formal mentorship	63%
Training & professional development	61%
	(jumps to 80% for EIT/GIT)
Challenging development opportunities	54%
Clear pathway to advancement	40%



Dedicated time to talk about career expectations, performance, mentorship and trajectory is very important to me and show's my manager's dedication to my success. This is amplified by the fact that informal work functions are often the place where these conversations happen and mentorship relationships are founded. Women can often be left out of the activities and are at a clear disadvantage.



REASONS TO LEAVE

Participants were asked what reasons might influence their decision to leave an employer or the engineering consulting profession. Quality of management comes out on top. Interesting to note, when broken out by age (under 34) results show a tie between *quality of management* and *limited or unclear advancement opportunities*.

Given, 58% of survey participants were career starters with just 7 years or less of experience in the profession, there is urgency to offer clear paths to advancement and to ensure career starters can see a future for themselves in the profession.

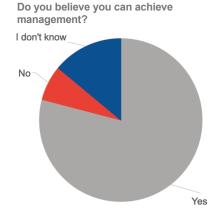
What would influence you leaving? (ranked)

- 1 Quality of management
- 2 Salary level
- 3 Lack of flexible work options
- 4 Limited or unclear advancement opportunities
- 5 Pressure to achieve a performance metric such as charge-ability
- Unpaid overtime

FOCUS GROUPS & PHONE INTERVIEWS OFFER GREATER INSIGHT INTO PERCEPTIONS OF UNCLEAR ADVANCEMENT OPPORTUNITIES

Given that younger survey respondents indicated that limited or unclear advancement opportunities is a key driver of retention, we explored the topic further in the focus groups. Five themes emerged:

- 1. Maternal bias & penalty the perception is strong that the engineering consulting profession would benefit from a strategy to support expectant and new mothers. The pace of the profession, heavy travel required of many career starters, seasonal intensity, and 'always on' pressure makes it nearly impossible for women to feel like they can start a family while also advancing in their careers. Furthermore, many focus group participants expressed that when they took leave, they did not regain their status as a high performer upon their return and that opportunities were not afforded to them because assumptions were made about which projects they could take on. This maternal bias, which is a form of unconscious bias, continues for women as their children grow, with leaders continuing to making assumptions about their capacity to work, put in hours, and move into leadership. It is further compounded by social events that are geared towards men in both type, and also time of day.
- 2. Share ownership seems elusive focus group participants indicated that a strong message is sent early on in their career that ownership is achievable, yet most were unclear about the path to ownership and many expressed a need for basic financial literacy for their own financial wellness and planning. They also expressed a strong desire to learn about the financial wellness of their company, to better understand criteria for share ownership, and to understand requirements to be considered for succession planning. Despite this, a full 79% of survey respondents indicated that they believed they could achieve management or executive roes within their organization.
- 3. Lack of role models female role models surfaced repeatedly as a critical component of career advancement for women. Focus group participants would like to see a greater emphasis on promoting women who can mentor younger female career starters and share insights as to how they navigated their careers and juggled family duties.



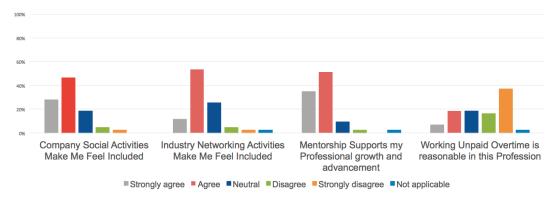
- **4. Lack of recognition** visibility and recognition for efforts was seen as key to helping increase one's chances of career advancement. In this survey we explored ways employers can support greater visibility for women and these are detailed on page 18.
- **5.** Pay disparity focus group participants indicated a general lack of transparency on pay and that there needs to be a better understanding of the point at which the disparity happens for women in their career, and when they begin to lose ground on pay when compared with male peers.

KEY TAKEAWAYS

- In matters of importance to career satisfaction, recognition rises to the top for those more established in their career
- Training and development opportunities are the clear priority for EIT/GIT
- Support to handle multiple life situations is also very high and important, especially among EIT/GIT, but also for P.Eng/P. Geo at almost 70%. This could be for different reasons, perhaps mental health prevalence among younger generations, and child care for older.
- Quality of Management is the key influence on 'reason to leave' but when examined by age, it ties with 'Limited or unclear advancement opportunities'

WORK CULTURE

On the topic of work culture, the online survey questioned participants about the degree to which they feel included in company social activities and industry networking activities. It also probed on access to mentorship opportunities that support their professional development, and the influence of unpaid overtime in the profession.



SENTIMENTS OF INCLUSION VARIES BY YEARS OF EXPERIENCE AND TYPE

- Company activities 74% of women surveyed indicated that they 'agree' or 'strongly agree' that company social activities make them feel included. However, when examined by age, those who have been in the profession longer are half as likely to indicate 'strongly agree'. Furthermore, 25% of established career professionals rate social activities as 'neutral' when assessed for inclusion, compared with just 7% for younger respondents. These results would seem to indicate that those who have been in the profession longer feel less included, and certainly are less favourable about the extent to which company social activities offer women inclusion.
- Industry activities survey respondents were not as favourable about inclusion in industry events when compared with company events. Those who answered 'strongly agree' when asked if industry networking activities made them feel included dropped by half with EIT/GIT, and by two thirds among more seasoned professionals. The extent to which women are out-numbered in the profession is no doubt magnified at industry events, more so than in company activities with close colleagues. This point was further explored in focus groups and phone interviews. Participants indicated three key issues:
 - Events are focused around activities that men typically enjoy and/or excel at
 - They do not prioritize children and often interfere with the time of day when women are juggling after school care evening lunch prep and bedtime
 - Because of these two issues, women self-select out which puts them at a greater disadvantage when it comes to cultivating business and industry relationships

Company	social	activities	make	me	feel	included
Collipally	Joulai	MOUVILLOS	IIIunc	1110		IIIOIUUCU

	EIT/GIT	P. Eng/P. Geo	Total
Strongly agree	40.0%	21.4%	27.9%
Agree	46.7%	46.4%	46.5%
Neutral	6.7%	25.0%	18.6%
Disagree	6.7%	3.6%	4.7%
Strongly disagree	0.0%	3.6%	2.3%
	100.0%	100.0%	100.0%

Industry networking activities make me feel included

	EIT/GIT	P. Eng/P. Geo	Total
Strongly agree	20.0%	7.1%	11.6%
Agree	46.7%	57.1%	53.5%
Neutral	33.3%	21.4%	25.6%
Disagree	0.0%	7.1%	4.7%
Strongly disagree	0.0%	3.6%	2.3%
Not applicable	0.0%	3.6%	2.3%
	100.0%	100.0%	100.0%



I have noticed that the male employees get the "let me take you under my wing" mentorship. They are more often sent to networking events early on in their careers (within 5 years). I started getting asked after 11 years. There is a difference.



MENTORSHIP VIEWED POSITIVELY WHEN IT HAPPENS

Mentorship is a key influencer to a positive work culture for women, with 86% of respondents agreeing or strongly agreeing that it supports their professional growth and advancement. Among EIT/GIT it's as high as 93%. However, as was indicated earlier in this report, the lack of opportunities for advancement is the number one dissatisfier among this group, meaning that employers need to have clear strategies to engage younger talent and bring clarity around opportunities to develop and advance professionally.

93%
MENTORSHIP SUPPORTS
PROFESSIONAL GROWTH
& ADVANCEMENT

UNPAID OT CULTURE

When asked if working unpaid overtime is reasonable in the profession of consulting engineering, just 7% of respondents strongly agreed, and just 19% agreed. Over half feel it is unreasonable, and 40% of early career starters 'strongly disagreed', and 36% of more established workers 'Strongly disagreed'. Focus group participants indicated that if the starting base pay was higher, and there was greater transparency around advancement opportunities, this may be less of an issue.

KEY TAKEAWAYS

While EIT/GIT say they 'strongly agree' that social activities and networking events make them feel included, P.Eng/P.Geo are not as favourable, yet still 'agree' in the majority of cases. This could signal that more seasoned women have experience with not being included, or have valuable insights about the ways they could better be made to feel included.

Over half feel working unpaid overtime is unreasonable (disagree and strongly disagree). This may not be a gender issue, but could be compounded by child care and family responsibilities. 37% 'strongly disagree' that unpaid overtime is a reasonable expectation, however, it ranked last in every single age group in terms of what would make them leave. So, while respondents may not like it, they won't likely leave over it.

35% of respondents 'strongly agree' that mentorship supports their growth. When combined with 'agree' that number jumps to 86%.

WOMEN IN ENGINEERING



The female role models I have impact my growth more than anyone else. I often receive positive feedback and credit for the work I do, which keeps me motivated to deliver.



IS GENDER AN ISSUE?

When asked if gender has had an impact on their career – either positively or negatively – most respondents indicated a neutral response – gender neither positively, nor negatively impacted their career. However, more than a third indicated it had negatively impacted their career, and when examined by years of experience, 43% of more seasoned professionals indicated a negative impact. Survey comments, focus groups, and phone interviews all shed light on this topic.

How has gender affected you?

	EIT/GIT	P. Eng/P. Geo	Total
Negatively	26.7%	42.9%	37.2%
Neutral – neither positively or negatively	66.7%	46.4%	53.5%
Positively	6.7%	7.1%	7.0%
Very positively	0.0%	3.6%	2.3%
	100.0%	100.0%	100.0%

While participants recognize progress has been made, they still point to systemic barriers that keep them advancing such as maternal bias, social activities where they don't feel fully included or that take placing during hours when they are juggling domestic duties, lack of mentorship and female role models, or being the only woman in management for too long.



I feel like my company does a lot for women, however there are also times that we are not included... networking events sometimes feels like the boys club if I go, or we just don't get invited.





Relatively recently, a female was announced in the "c-suite". I was elated. Having women in leadership positions, especially senior leadership, is so very important. It demonstrates that my company recognizes the importance of diversity and gives me hope that organizational culture will evolve to be less gendered.



ROLE MODELS EXISTS – JUST NOT ALWAYS WITHIN REACH

Almost 80% of respondents indicate there are women in leadership positions at their organization, however they were not always in their specific geography or in regular contact with the survey respondents. Respondents provided many comments about the importance of seeing women in leadership positions.



I briefly had a formal mentoring relationship with a woman in a leadership role (she has since left the company). During that time I was able to discuss strategies to advocate for myself and advance my career. As a direct result I received a promotion and 10% merit based raise that year.





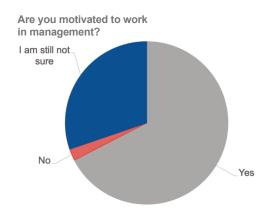
There are a few women in leadership positions, and there are lots over the years that have left as well. These women are not directly in contact with myself, or in my geographic area, therefore I also feel like there are limited (to no) women leaders within my reach.



MOTIVATED TO WORK IN MANAGEMENT

When asked if they are motivated to work in management or executive roles within their organization, 67% of survey respondents said yes, and it was consistent among EIT/GIT and P.Eng/P.Geo. No early career starters indicated no, and just 4% of more established professionals said no. However, over 30% said 'I am still not sure', pointing to a potential for great opportunity or for substantial loss of talent. Employers will need to cultivate this talent by demonstrating clearer paths to advancement and investing in mentorship to prepare women for succession and the management ranks.

Of those who indicated they were motivated, a full 79% believed they could achieve it, reflecting a confidence in themselves, their company or a combination of both.





It would give peace of mind that women are leaders.

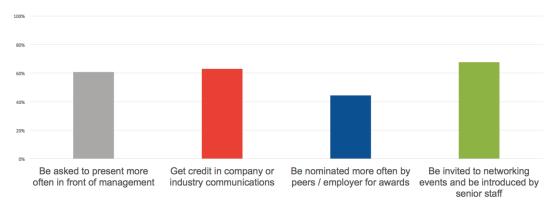
In our organization it is very rare that high-level leaders are female.

Female leaders are often given support roles. That's not right.



VISIBILITY

67% of women surveyed indicated they would like more visibility at work, and that jumps to 93% when we examine just EIT/GIT respondents. Respondents selected ways employees could gain greater visibility for their work:



How do you think employees in your organization could gain greater visibility for their work?

Be invited to networking events and be introduced by senior staff	39
Get credit in company or industry communications	36
Be asked to present more often in front of management	31
Be nominated more often by peers / employer for awards	25

KEY TAKEAWAYS

- Most women indicate that gender has had no noticeable impact on their career. However, a third have said it's had a negative impact.
- Almost 80% of respondents indicate there are women in leadership positions at their organization, and the comments support the importance of having female role models in leadership and as mentors.
- Respondents are clearly motivated to work in management and most believe they can achieve it.
- 93% of EIT/GIT want more visibility at work.

RECOMMENDATIONS & CONCLUSION

There are a number of ways that employers and the industry association can support greater diversity and retention in the field of engineering consulting.

DIVERSITY AND INCLUSION STRATEGIES

Employers should develop strategies to proactively generate greater awareness of the need for diversity and inclusion in their company and the broader field of engineering. Any of the below initiatives can be offered as part of a multi-year strategy to improve the focus on gender equality and diversity overall.

Education

- Declare that your organization supports Engineers Canada's 30 by 30 initiative. Educate employees about this initiative
 through company meetings and publications, which will send a clear signal that the organization is progressive and
 supportive of women engineers
- Provide unconscious bias training for employees
- · Create a lunch and learn series to discuss diversity in all of its forms and ways the organization can support better inclusion

Audit the hiring process

Review the hiring process, including job description language and the interview process for hidden biases. Report findings to employees and create company conversations about ways to improve. Consider establishing policies that ensure gender diverse candidate slates as well as gender diverse hiring panels.

Create inclusive social activities

Adjust social activities to be gender neutral, such as breakfast events all can attend vs after-hours events, incorporate a charity or community-focused teambuilding instead of sporting focused activities. Be deliberate with invitations and inclusive of all.

Create visibility for role models

Celebrate role models by profiling women who have advanced, and by profiling He for She advocates in your organization and the reason they are championing diversity.

Support women through mentorship

Create a mentorship strategy to support women moving into management; include tips for leaders on how they can mentor as well as ways they can create greater visibility for their female employees. Consider offering training to managers on how to more effectively mentor and create advancement opportunities for their teams.

Track metrics

Track metrics to gain greater insight about women in the workforce and to illuminate areas of opportunity. Metrics should include women applicants, interviews, and promotions.

FLEXIBILITY

Flexibility is the top desired benefit among women who participated in this research. Broader research across North America indicates that flexibility is also the number one desired benefit among Millennials. Benefits of offering greater flexibility include:

- · Increased ability to attract, retain and motivate high-performing and experienced employees
- · Reduced absenteeism
- · Mental health support by helping employees manage their responsibilities outside of work
- · Increased job satisfaction, creativity and output

Employers can explore a variety of approaches to formalize flexible work arrangements, as promoted by the Canadian Centre for Occupational Health and Safety: https://www.ccohs.ca/oshanswers/psychosocial/flexible.html:

Flex time

Flex time is an arrangement where employees work a full day but they can vary their working hours. These arrangements are usually established with specific guidelines so that a "core" working day exists. Flex time is usually arranged in advance with the employee and employer or supervisor and a set range of start and finish times are established. The total hours of work are not usually affected by this arrangement.

For example, the employee may choose to start between 7:30 and 9:30 AM, and finish between 3:30 and 5:30 PM. This arrangement establishes that core hours are between 9:30 AM and 3:30 PM when all employees will be at work. Lunch periods are usually mandatory and for a set length (30 to 90 minutes). Employees should maintain their start/finish times so that a routine is established and co-workers can become accustomed to each others' schedules.

Reduced hours / part-time

Employees may choose to work fewer than the standard 37.5 or 40 hour work week. These arrangements may be on a temporary or permanent basis depending on individual circumstances. It may also be considered in some cases for employees with health problems or disabilities. Work hours may be negotiated, or they may be chosen to coincide with peak workload hours depending on the type of business. However, employee benefits and qualification for government programs (such as employment insurance or pension plans) may be affected, and should be examined thoroughly before commencing.

Compressed work week

Compressed work week occurs when an employee works for longer periods of time per day or shift in exchange for a day off. Employees may start earlier or finish later that the normal work day. Compressed work weeks are often initiated by the employee, but sometimes the employer may initiate the option to improve operational efficiency, to maximize production (reduced daily start up costs) or to establish longer business hours which can enhance customer service.

Common arrangements for a 40 hours work week are working 10 hours per day, 4 days a week; working an extra hour a day with 1 day off every 2 weeks; or working an extra half hour a day and having one day every 3 or 4 weeks off.

Telework / telecommuting

Telework or telecommuting occurs when people do at least some of their regular work from home instead of going into the office. Details such as hours of work, and how communications between the teleworker, co-workers and clients need to be clearly outlined. Leveraging technology can offer tremendous productivity benefits for companies with offices spread across many geographies, remote management arrangements, and employees on project sites.

Banking of hours/ annualized hours

This arrangement allows employees to choose, within negotiated boundaries, their days and hours of work to the maximum for a set period of time. This period of time may be weekly, monthly or yearly. Such arrangements are often a combination of flex time and compressed work week and can help reduce the amount of overtime hours required. These arrangements may be suited to fields where there is variation in demands such as peak hours or seasonal peaks.

TRANSPARENT CAREER TRACKS

Research indicates that female career starters will leave an organization if there are limited or unclear paths to advancement. Employers should create transparency around career paths and how individuals progress through the ranks. This can be done a number of ways:

Prioritize career discussions – employers can host lunch and learns around the ways to grow with their organization. Established leaders can share insights to their own career paths, and younger employees can be offered the opportunity to ask questions. Often, these open environments serve as positive team building moments and have the added benefit of creating visibility to younger talent in the organization, while affirming for them that they are valued by leadership.

Training opportunities – ensure employees have a training plan that identifies the types of experiences and projects they need to advance with the organization. While online courses are available and should be leveraged, hands-on mentorship, job shadowing, and early exposure to c-suite conversations motivate younger employees more and show them potential future opportunities.

Celebrating female role models and prioritizing networking – younger women need to see and hear from women in leadership positions. Organizations should create communication moments to profile women already in leadership. They can share their stories through internal newsletters, invite them to be profiled as part of a career day, to sit on a panel about leadership, or to just share their lessons learned through an open online chat for all employees. Companies can also consider establishing a diversity resource group that prioritizes women in leadership and is given a budget to create programming and events that respond to the specific needs of this demographic.

PARENTAL ONBOARDING STRATEGY

Given the significance of parenting duties, and the maternal bias that is sensed by women in the profession, companies should create specific parental onboarding strategies for individuals who are re-integrating into the workforce after a leave. Research shows that if an individual has a negative experience re-integrating to the workforce, their productivity and contribution will suffer and the likelihood they will resign increases. This results in a significant loss of investment for employers.

Policies – if your policy needs updating to include paternity leave language, in addition to maternity leave language, do so. Studies show that when men are fully supported to participate in raising their children and sharing domestic duties, women are better supported.

Check your assumptions – research shows that many women who were considered high potential lose that status because managers make the assumption they won't want special projects or that they are no longer interested in the leadership track. Managers should create an open dialogue to ensure they are not short-changing returning parents of important career decisions.

Create a transition timeline – a lot can change while an individual is away from work. It is likely by the time they re-enter the workplace, colleagues have changed, leaders have changed, and new systems and technologies have been implemented. Managers should proactively create a transition timeline to help integrate an employee back into the organization. The timeline will start by an orientation to the things that have changed, and an introduction to any new people (including external industry networks) and major company developments. If training is required, it should be scheduled. The transition plan should also take into consideration if the individual wants a quick transition, or one that is more phased-in with flexible work arrangements.

Child care costs – employers can differentiate themselves and boost retention and engagement levels by supporting greater child care benefits for parents. Consider offering a child-care subsidy for the first few years while parents are re-integrating and re-establishing their past levels of performance.

INDUSTRY ASSOCIATION

ACEC-NB can play a critical role in supporting member organizations to advance gender equality and retain a strong pipeline of women in the profession. Over the course of the next two years, we will strengthen our offerings to target the specific areas of need that surfaced in this research.

Best practice sharing – we will strengthen our available resources to offer member companies best practices and research on the topics of gender equality, and diversity and inclusion overall.

Visibility – starting in 2020 we will actively embrace a strategy to profile more women in the profession through our publications and at our events. This will include developing an awards strategy to nominate more New Brunswick women engineers to nationally recognized competitions.

Seal of diversity & inclusion – over the course of 2020 we will create a list of best practices, and for those members organizations that meet them, we will issue a form of 'Diversity & Inclusion' recognition that companies can use for reputational profile and to promote their efforts. We believe this will differentiate those organizations who prioritize gender diversity and further support them in hiring and retaining women in the profession. In addition, it will signal to clients that member organizations are committed to creating modern workplaces that embrace diversity and inclusion.

Financial wellness support – for all young career starters in the profession, we will offer financial wellness education. ACEC-NB will partner with established financial services organizations to offer financial literacy training to assist organizations with creating better financial awareness and security for their career starters.

CONCLUSION

For consulting engineering to thrive, we must all possess a foundational understanding of the issues facing our workforce and our economy. We hope that this research offers greater insight as to the opportunities that exist for our member organizations to create workplaces that support diversity and inclusion, and where women can pursue meaningful careers and advance into leadership in greater numbers.