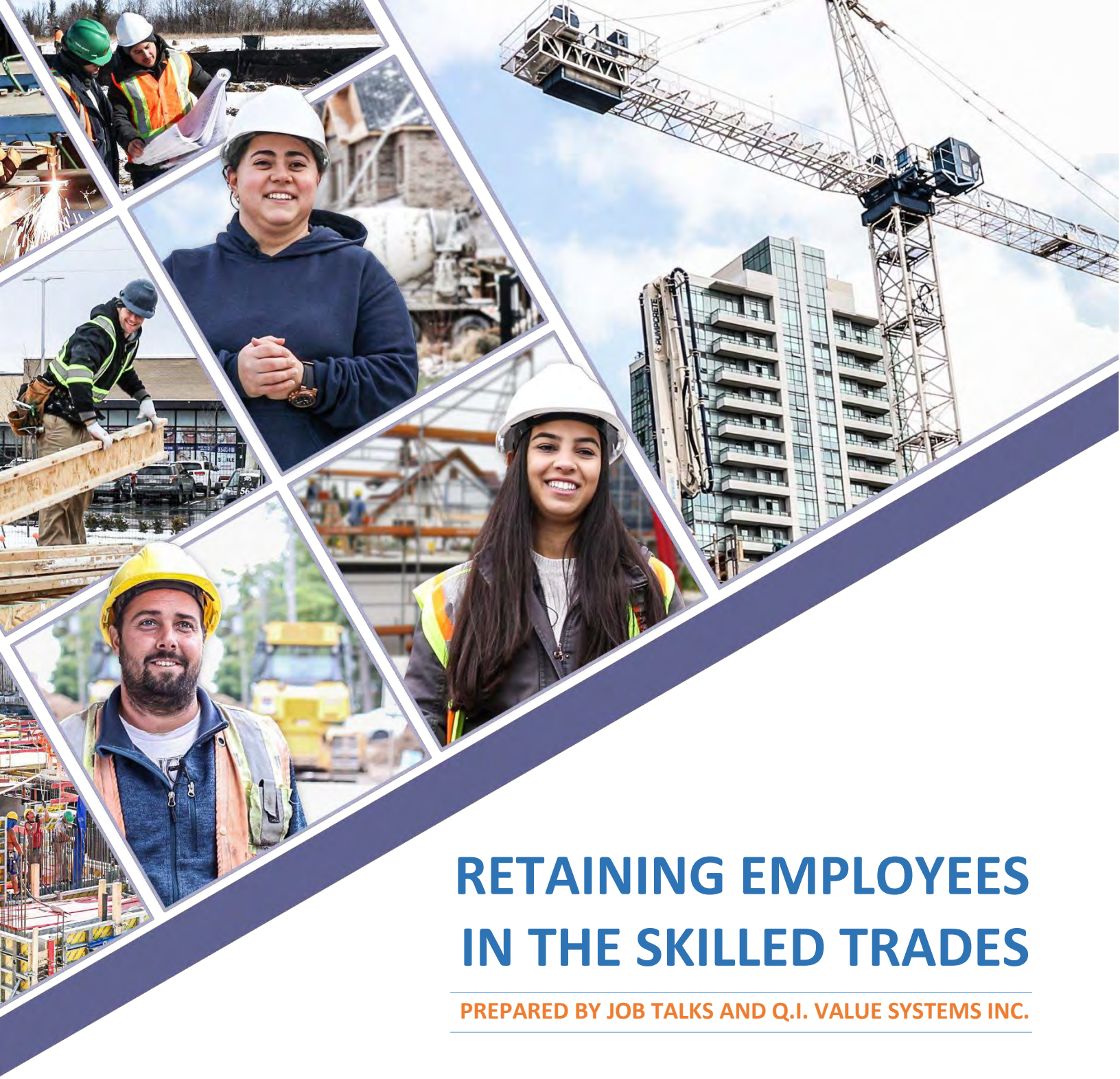

RETAINING EMPLOYEES IN THE SKILLED TRADES

PREPARED BY JOB TALKS AND Q.I. VALUE SYSTEMS INC.

MARCH 2019

FOREWORD

It is well known that the construction industry is facing labour supply issues and will continue to over the next decade. In its latest forecast, BuildForce is projecting that 91,100 skilled construction workers in Ontario are slated to retire within the next decade (more than 40,500 are coming from the Greater Toronto Area alone).

The Residential Construction Council of Ontario (RESCON)[1] realized that the residential sector will not be exempt from this demographic shift.

In the spring of 2018, RESCON applied and was successfully granted resources from the Ontario Labour Market Partnerships (OLMP) program, through the Ministry of Training, Colleges and Universities (MTCU)[2] to study retention in the skilled trades, focusing on the Greater Toronto Area (GTA).

RESCON's successful proposal addressed numerous OLMP goals related to the development and implementation of strategies to address and respond to local economic (employment) development and labour force adjustments.

Specifically, RESCON committed to:

1. Partner with the Ontario Residential Council of Construction Associations (ORCCA) to ensure representation across the residential and residential-related infrastructure sectors.
2. A series of three events designed to gain information, build industry buy-in and present the project's findings.
3. Release a final report focused on retention of skilled trade workers in the GTA.

In order to achieve our objectives, RESCON formed a governance committee which was fundamental in providing guidance on all aspects of the project, including but not limited to the survey, events, and the report. This included the collective decision by the governance committee and RESCON to contract Job Talks and Q.i. Value Systems Inc. to design and administer a survey which they used to deliver independent findings, recommendations and this report.

This report and related activities are the first step in addressing retention and turnover of skilled construction workers.

Our hope is that the findings in this report will:

- Inform those in the industry on what keeps skilled trades workers in their jobs for long periods of time.
- Identify reasons why skilled trade workers leave.
- Make recommendations to both expand successful retention practices and eliminate or reduce issues which result in or increase industry turnover.

We are proud to introduce this report and look forward to feedback from industry, government, key stakeholders, media, and the public.

Richard Lyall
President, RESCON

[1] RESCON members build world-class high-rise, mid-rise, and low-rise homes, including rental apartments, social housing, and family communities. RESCON's other activities in residential construction include: labour relations and collective bargaining; technical standards, including building science and the building code, and fostering innovation; health and safety.

[2] At the time of application and initial awarding of the grant, the Ministry of Training, Colleges and Universities was called the Ministry of Advanced Education and Skills Development.

ACKNOWLEDGEMENTS

I would like to acknowledge the efforts of the following groups and people. Without their tremendous efforts, this report would have not been possible:

1. The governance committee for showing leadership and providing crucial industry input to all aspects of this project. Members include representatives from the following associations.

    - Durham Residential Construction Labour Bureau
    - Greater Toronto Railing Association
    - Metropolitan Toronto Apartment Builders Association
    - Ontario Concrete and Drain Contractors Association
    - Ontario Formwork Association
    - Ontario Residential Council of Construction Associations
    - Ontario Sewer and Watermain Construction Association
    - Residential and Civil Construction Alliance of Ontario
    - Residential Tile Contractors Association
    - Toronto Residential Construction Labour Bureau
    - Trim Association of Ontario

2. Job Talks and Q.i. Value Systems Inc. for their dedicated professionalism, academic integrity, and hard work in creating the survey, compiling the findings, creating recommendations, and writing this report, in addition to presentations at events, and correspondence with the governance committee. Special thanks to:

    - Jon Callegher, Executive Director, Job Talks
    - Benjamin Millard, Research Manager, Job Talks
    - Ted Langschmidt, CEO, Q.i. Value Systems Inc.

3. Job Talks survey participants and those who promoted the survey to their workers

4. James (Jason) Stewart and Lindsay McCardle for their complementary research on recruitment from a behavioural economics perspective

5. RESCON Staff

    - Amina Dibe, the Project Lead and Policy and Programs Analyst
    - Andrew Pariser, Vice-President
    - Aonghus Kealy, Director of Communications
    - Cassandra Dobrzynski, Associate, Member and Corporate Services

In addition to the report and related survey, the REST project also encompassed three industry events with guests representing various construction industry organizations as well as various training and education stakeholders. These events occurred throughout the duration of this year-long project:

- May 10, 2018 – REST Kick-off Symposium
- November 28, 2018 – REST Mid-term Event
- March 19, 2019 – REST Final Event

I would also like to thank participants and attendees of all three events. Feedback, Q&As, and workshops from the first two events were integral to the survey's creation.

Collectively, RESCON would like to acknowledge the support of the Ontario government and the Ministry of Training, Colleges and Universities. It should also be noted that the views expressed in this report and other REST-related publications (oral, written, and visual) are the views of Job Talks and/or RESCON and do not necessarily reflect those of the Ontario Government or the Ministry of Training, Colleges, and Universities.

Richard Lyall
President, RESCON

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INTRODUCTION

INTRODUCTION

One of the greatest challenges young people face is identifying a way to make a rewarding living. Given the amount of effort that goes into finding any job to begin with, it is often more challenging to find work that aligns with our interests, personality, and skills, all while making a positive difference in the world.

There are aspects of all jobs that cannot be anticipated prior to experience, and there is no single resource of unbiased information and perspective to draw from. However, many people tend to choose jobs based on what the media and society tell them is a “good job,” rather than what is really the “right job” for them. It is no wonder so many Canadians are unhappy in their working lives.

Job Talks specializes in work-related research and media production, with a focus on better understanding and marketing the skilled trades. In collaboration with Q.i. Value Systems Inc. and its proprietary “deep dive” methodology, we investigated the emotions felt by construction industry workers in the Greater Toronto Area (GTA), how they perceive themselves as workers, what is keeping them in their jobs, and what might cause them to leave. The result is one of the most comprehensive studies of any group of workers in Ontario.

The generally negative perception of construction jobs among parents, the media, and many in the education system is a symptom of a widely-held belief that these jobs are mostly dirty, difficult, and dangerous. This report provides strong evidence of the reality: that jobs in the construction industry are, in fact, better than those in most other categories of work. Not only are its workers more satisfied at work, but the reasons for their satisfaction could be considered as aspirational for workers in other categories.

Yet, retention and recruitment remain as sizeable challenges in the construction industry across the GTA. There are numerous causes for these challenges, often related to perceptions within the industry itself. In this report, we begin to unpack what the fundamental issues are, where the misperceptions arise, what the potential repercussions are, and most importantly, how to retain and recruit good workers in the future.

RESEARCH OBJECTIVES

The primary objective of this study was to explore ideas for improving retention and recruitment of employees in the residential construction and related-infrastructure trades in the GTA. This involved a detailed investigation into:

- Influences on one’s decision to enter the construction industry.
- Thoughts and feelings about the residential and infrastructure-related construction industry and workers.
- Cognitive (rational), perceptual, and emotional associations regarding construction industry jobs.
- Workers’ perceptions of the ideal job.
- Proximity of workers’ own work to the ideal job.
- Job satisfaction.
- Likelihood of recommending one’s construction industry job to others.

- Work-related values of construction industry workers.
- Perceived shortages and turnover in the GTA construction industry.
- Proposed solutions and individual suggestions to address retention and recruitment issues.

METHODOLOGY

This report is based on the online survey responses of 412 construction industry employees in the GTA. The survey was hosted through Canadian Viewpoint Online Inc. and took between 25 and 30 minutes to complete, on average.

Respondents were recruited by means of referrals and invitations from the study's governance committee. Recruitment involved the sharing of a survey link via email and social media (Twitter, Facebook, LinkedIn), and by handing out cards containing the survey URL to workers at various job sites. Fieldwork took place between September 2018 and January 2019.

The following industry organizations also assisted in sharing the survey link after being approached by the governance committee.

- Ontario Construction Careers Alliance (OCCA)
- The Ontario Residential Council of Construction Associations (ORCCA)
- The Ontario Skilled Trades Alliance (OSTA)
- The Residential and Civil Construction Alliance of Ontario (RCCAO)
- The Residential Construction Council of Ontario (RESCON)
- Other trade-related organizations and unions across Ontario

Respondents were informed that the objective was to explore important work-related issues in the construction industry, and to propose solutions to challenges, such as retaining and attracting employees.

The survey questionnaire was designed by Q.i. Value Systems Inc. in consultation with Job Talks and the governance committee. The questionnaire design was "quali-quant." This means that it included open-ended "qualitative" questions that explored each respondent's personal opinions, perceptions, and ideas, as well as "quantitative" questions in which respondents chose their replies from structured lists.[3] The structured lists were derived from previous skilled trade surveys conducted by Q.i and Job Talks, as well as from a kick-off symposium with representatives of our participating construction industry organizations on May 10, 2018.

Given the wide array of jobs in the residential and related-infrastructure industries, this sample is not statistically representative of all construction workers in the GTA. Given that the primary objective of our study is not to provide regional statistics, but rather to explore solutions for retention and recruitment, the sample is judged to be broadly representative of these workers.

[3] In most structured lists, respondents were also given the option of providing additional answers in their own words.

EXECUTIVE SUMMARY

As the demand grows for skilled labour throughout the GTA, this report provides a better understanding of issues facing workers in the residential and infrastructure-related trades and recommends ways of retaining them.

More than 400 construction industry workers across 10 categories participated in this study by completing a 30-minute survey.

ABOUT CONSTRUCTION WORKERS

Compared to workers in most other sectors in Canada, construction workers are happier, more satisfied, and more fulfilled. Many regard their own occupations as practically ideal for them:

- The wages and benefits are excellent.
- It challenges their body and mind.
- They are always learning.
- They find their work stimulating.
- They do something good and useful on a daily basis.
- They enjoy the camaraderie of the workplace and job site.

The main reasons for dissatisfaction are:

- The work can be hard, particularly on the hands and back.
- It's not necessarily dirty, but it can be.
- The winter weather can make it very uncomfortable outdoors.
- The days can be long, especially for those with a long commute.

Construction workers are also aware of the stigma of working in their field. There is a misperception that construction workers lack intelligence, creativity, or problem-solving skills, and that they are disorganized and unreliable. Construction workers are frustrated by these misperceptions, viewing them as a major deterrent to others entering the industry.

KEY FINDINGS

- 73% of workers were influenced by family or friends to enter the construction industry.
- Only 8% of workers were positively influenced by a guidance counsellor.
- 80% of workers prepared for the job through the help of industry mentors.
- 65% of workers would strongly recommend their job to a young person.
- The most satisfied workers tend to be over age 36, are married, and are homeowners.
- Millennials (ages 25 to 35) are the least satisfied group and the most likely to leave the industry.
- Electricians feel less connected to others in the industry than all other categories.
- Designers and planners feel less accomplished in their work than all other categories.
- 69% of respondents believe that there is a shortage of workers in their field.
- 96% attribute shortages to stigma and negative parental influence.
- 88% believe that the trades are seen as too tough and hands-on for most people.
- 70% of workers believe that people lack knowledge about the trades.

CONSTRUCTION WORKERS HAVE BETTER JOBS THAN MOST CANADIANS

Previously, Job Talks partnered with Q.i. Value Systems Inc. to develop a new segmentation of Canadian workers based on their work-related values. It revealed a 5-stage gradient of attitudes toward one's work. The same segmentation was applied to GTA construction industry workers and revealed that they are far less likely to feel unhappy and much more likely to feel comfortable and fulfilled compared to the rest of Canada.

Work-Values Segment	**GTA Construction Industry workers (%)** *n=412*	**Total Working Population (%)** *n=996*
Miserable	3	11
Unhappy, but optimistic that things will improve	21	26
Reasonably happy and formed bonds with co-workers	8	15
Comfortable and satisfied	23	21
Fulfilled	45	27

REASONS FOR LEAVING

On average, construction industry workers believe that 37% of workers who start out in their field will eventually end up leaving. The definition of "leaving" is broad, however, and includes the movement away from the tools and into management or entrepreneurship within the industry. Therefore, workers may leave for a range of reasons, both "good" and avoidable.

Good Reasons for Leaving

- Better job opportunities.
- Advancement within their company.
- Starting their own businesses.

Avoidable Reasons for Leaving

- Sometimes the job is just not the right fit.
- Problems with employers.
- Stress on the body, including weather.
- Financial problems related to the seasonal nature of work.

RECOMMENDATIONS

Many construction workers and industry stakeholders are in agreement that the construction industry has a marketing problem. An important objective in addressing this involves getting industry alignment around messaging, retention, and recruitment strategies.

Leverage the Industry's Massive Network in Recruitment

The first step in retention is hiring the right workers. The construction industry's network is among the largest in the country and it is time to promote itself accordingly.

The best recruiters can be found within the industry itself. Building suppliers, owners, accountants, lawyers, architects, salespeople, contracts managers, engineers, and building officials all represent broader construction industry success stories. They must be called upon to communicate the industry's best kept secret—that the opportunities for a fulfilling career in construction are widespread and that job satisfaction levels are high.

Integrate Construction Early in the Education System

Exposure to construction careers must begin in elementary school to shape the perceptions of guidance counsellors, teachers, students, and parents. This includes weaving construction industry themes into the school curriculum, along with bringing back shop class with everyday applications.

It also means promoting construction jobs to all students, whether they are book-smart, hands-on, tech-savvy, or entrepreneurial. You don't have to just be good with a shovel to have a fulfilling and well-paid career in construction.

Invest in High Quality Media Production

Tackle the industry's marketing problem by creating high-quality video programming and websites for use in schools and training centres. Apply Behavioural Economics principles to minimize the number of steps between discovering a new construction career and getting started in the industry.

Mobilize Companies and Associations to Address Retention

Construction industry stakeholder groups must come together to address key issues and support creative solutions related to retaining good workers, including:

- Improving on-site conditions, especially in the winter.
- Formalizing and articulating career pathways.
- Investigating more opportunities for skills development, training, and upgrading.
- Centralizing industry resources and communication.
- Creating community in the voluntary trades.
- Helping workers plan for the reality of seasonal work.
- Improving communication and transparency around the scheduling of work.

CHAPTER 1
DETAILED SAMPLE DESCRIPTION

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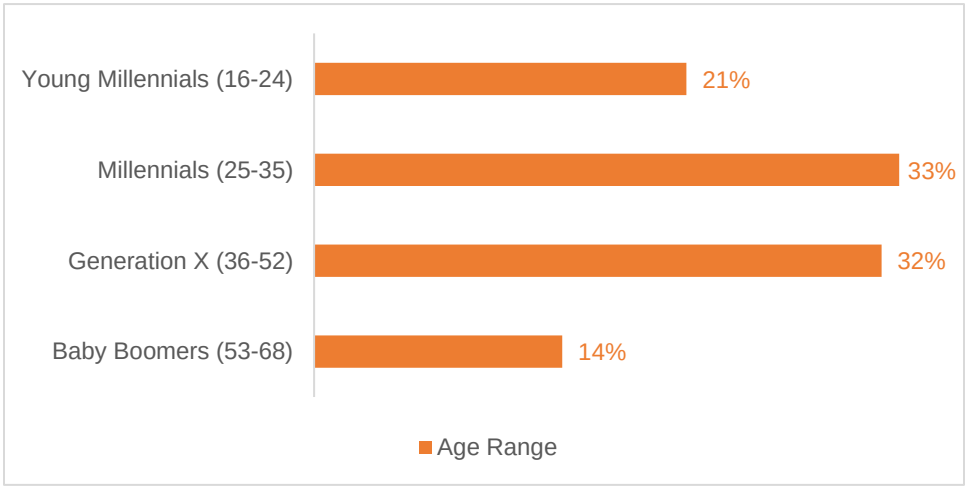
The first section of this chapter provides a detailed overview of the demographics of our sample of 412 construction industry workers, including breakdowns related to gender, age, language, financial status, relationship status, life stage, dwelling area, and dwelling type. The next section provides sample details related to job category, perceived skill level, employment status, company size, stake in company, as well as information related to compulsory and voluntary trades. The final section examines certification and oversight, specifically the differences between workers in compulsory and voluntary trades and between unionized and non-unionized workers.

GENDER

Females account for 12% of the sample in the study, corroborating the evidence that the vast majority of construction industry employees are male. Significant differences between males and females in the construction industry are explored later in this chapter.

AGE

The ages of our survey respondents are grouped into the following “generational” age brackets: Young Millennials (16-24)*, Millennials (25-35), Generation X (36-52), and Baby Boomers (53-68).

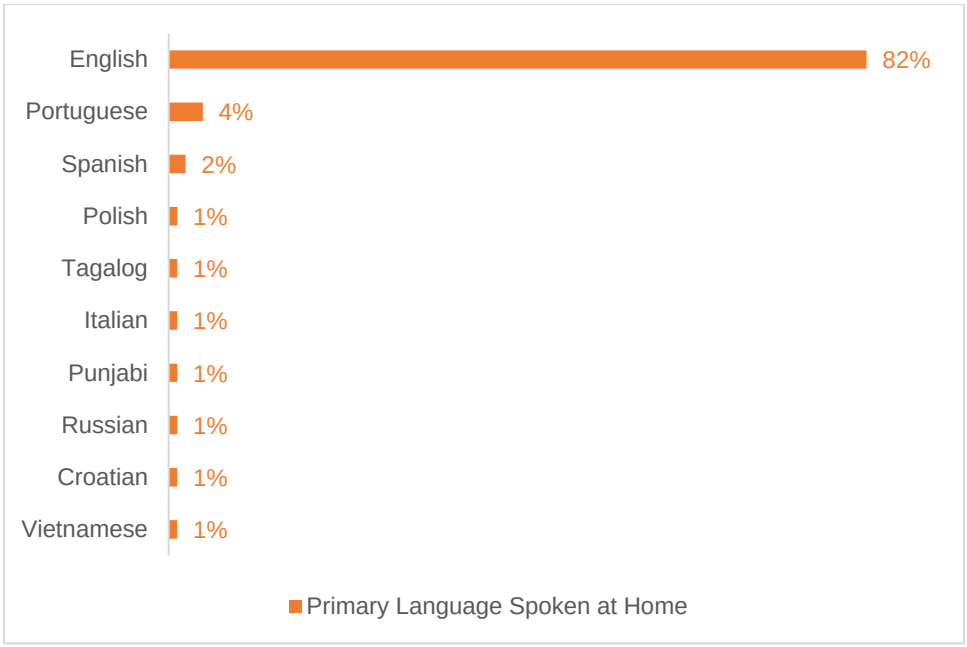


n=412

**Due to Ontario's applicable health and safety regulations, the number of 16 and 17 year old survey participants is limited to those who are enrolled in the OYAP or Step to Construction Program. Please note that all individuals in either program were provided with the following health and safety training and were limited to a job-shadowing capacity in which they worked towards earning a high-school credit. Training included WHMIS, awareness training, working at heights, and other mandatory site and sector specific training.*

LANGUAGE

Respondents were required to complete the survey in English. However, to ensure data quality, respondents were asked to indicate the language that they "usually speak at home." If English was not selected, respondents were advised of the language requirement. 82% of respondents chose English as their main language. The following table contains a list of all languages primarily spoken at home by 1% of respondents or more.



n=391

FINANCIAL STATUS

Q.i.'s financial status question is based on an individual's self-assessed perception of financial well-being rather than on their actual or stated income. Perceived financial well-being/affluence is affected by many factors, such as dependency ratios, household size, debt, health, financial responsibilities outside the nuclear family, disposable income, etc.

In our survey, respondents were shown seven statements of varying degrees of financial security and asked to select the one that best described their situation "compared with other people."

Over three-quarters (81%) of respondents selected one of the top three options on the scale, indicating a sense of financial security for the vast majority of workers in the construction industry:

Financial Status	%
Well off / Affluent	9
Fairly well off / Comfortable	36
Reasonably comfortable / coping, but can't really afford to be extravagant	36
Have to budget carefully to make ends meet	11
Have to budget VERY carefully to make ends meet	3
Just surviving from month to month - no extra income	4
Really struggling to survive / sometimes go hungry	1

n=412

Only 5% of the sample (20 respondents) selected the bottom two options for financial status: "Just surviving from month to month – no extra income" and "Really struggling to survive / sometimes go hungry."

RELATIONSHIP STATUS

Nearly three-quarters (71%) of respondents are in a committed relationship, comprising 47% who are married, 11% who are living with a partner, and 13% who are "dating someone seriously."

20% of respondents identify as single, while 5% are "dating someone casually." Just 3% of respondents are separated, 1% are divorced and <1% are widowed.

LIFE STAGE

In regard to life stage, 39% of respondents are part of a couple with children. Specifically, 21% are with "young children," 8% with teenagers, and 10% with "young adult" children.

As well, 14% are young couples with no children at present, 15% are living with their parent(s), and 11% are starting out on their own.

Life Stage	%
Single – living with parent(s)	15
Single – starting out on your own	11
Young couple – no children	14
Couple with only young children living with you	21
Couple where eldest child living with you is a teenager	8
Couple where eldest child living with you is a young adult	10
Single parent family	3
Mature single	5
Mature couple – never had children	3
Mature couple – empty nesters	3
Other	7

n=412

DWELLING AREA

Nearly three quarters (73%) of the workers in this study live in the GTA. Specifically, over a quarter (26%) inhabit the “downtown area … or surrounding neighbourhood,” while close to half (47%) live in the suburbs. Of those who live outside the GTA, 14% travel from a “small city or large town” to get to work while 6% make their way from a “small town or village.” 8% live in rural areas or “the country.”

Older workers are slightly more likely to live in smaller urban regions while younger workers tend to cluster near the city centre.

DWELLING TYPE

Over half (54%) of construction industry workers in the GTA live in detached homes and 18% live in semi-detached homes. Nearly a quarter (23%) of respondents live in an apartment or condo. Millennial workers are significantly more likely to live in an apartment or condo, while home ownership rates tend to increase with age.

CATEGORIES OF CONSTRUCTION JOBS

What are “construction industry workers”? What do they do? In consultation with industry stakeholders, a list of more than 40 construction industry jobs was developed for survey respondents to select from. An alternative “Other” field was also provided, allowing the respondent to type in their own answer.

After the data were collected, the job titles supplied by industry were classified into seven job categories. Furthermore, the analysis of the “Other” responses yielded an additional three categories, resulting in a total of 10 job categories in the construction industry. These categories will be referenced throughout the analysis and discussion in this report.

The first seven categories represent workers who are “on the tools,” performing the tasks necessary to complete a construction project. They do everything from building wood frames and pouring concrete to installing pipes, running wires, and applying finishing details like trim or a coat of paint.

The latter three categories typically support those on the tools. These workers ensure health and safety, arrange for the materials and labour needed on site, manage on-site activities, and develop business opportunities, among other support functions. Some Trades Support roles even work on the tools, especially in the case of Supervisors. However, the majority of support duties rely on non-trades-based skills, and these jobs are classified accordingly.

The following table provides a brief description of the work performed within each job category. It also shows the percentage of respondents in each category, their average age, and the percentage that belong to a union.

Construction Trade Categories	% of Total*	Avg. Age	% of Category in a Union
Carpentry-related Trades & Labourers			
The cornerstone of the construction labour force, these workers perform most of the tasks required to erect a structure – assembling wood, steel, and concrete according to the building plan. They also apply many of the finishing details on a project, such as hardwood floors, wood trim, and paint. Roles like framer, construction craft worker, and general labourer are construction generalists who may perform one or multiple tasks on site. Many occupations in this category do not require a Certificate of Qualification[4] to work.	38%	38	55%
Pipe & Vent Workers			
These workers are responsible for installing the water, air, and gas lines that run throughout a building. They connect a completed build to the central utilities that supply these lines. Most jobs in this category require a formal apprenticeship and Certificate of Qualification to work.	19%	36	65%
Electricians			
These highly specialized workers are responsible for the electrical components inside a building, from circuit design, to wiring, to installing switches. Given the unique nature of this work, there is only one occupation in this category (Electrician). Like Pipe & Vent Workers they must also be registered as a formal apprentice or hold a Certificate of Qualification to work.	11%	39	55%
Stone, Brick & Exterior Cladding Workers (Note small base size: 28 respondents)			
The work performed by this category can be some of the most visible to the public. In the most general terms, these workers are responsible for completing the outer appearance of a project. They also perform specialized functions that involve stone materials, including the work of Basement Formers (who are distinct from other Carpentry-related Trades & Labourers, who may also form concrete), and custom work done by masons.	7%	42	61%
Road & Bridge Workers (Note small base size: 22 respondents)			
Workers in this category are more likely to work on large-scale infrastructure projects. However, some skills are transferrable to and from the residential sector. These jobs draw varied skillsets from other categories and are grouped because of their work typically on infrastructure projects, like roads and bridges.	5%	41	45%
Equipment Operators (Note small base size: 19 respondents)			
These workers are trained to operate the specialty equipment used in residential and civil construction. This equipment can include: large components like a drill rig or tower crane; heavy equipment like a tunnel boring machine, excavator, or bulldozer; or small equipment, like a forklift or skid-steer.	5%	38	68%
Metal Workers & Welders (Note small base size: 13 respondents)			
Including Welders and Sheet Metal Workers, this category represents those who form and fuse metal materials together in a construction project. This group works closely with both the Carpentry-related Trades & Labourers and Pipe & Vent Workers categories.	3%	38	92%

*n=412 *The total percentage is over 100% because respondents were able to select more than one occupation to describe their work and could thus be placed in multiple job categories. In this study, 36 individuals were placed in more than one category. Table continues below.*

[4] In Ontario, a Certificate of Qualification is granted to apprentices who have completed the mandatory training hours and passed an exam of their trade knowledge and competency. Commonly known as a "C of Q," it is the primary mechanism for regulating the practice of compulsory trades.

Trades Support Categories	% of Total*	Avg. Age	% of Category in a Union
Supervisors			
The Supervisors category includes jobs like site supervisor, construction manager, co-ordinator, and site clerk. The roles require presence on a construction site and involve the oversight of tasks being performed. Supervisors direct the work while ensuring compliance with standards like building codes and health and safety. Some Supervisors may be directly involved in the work, performing tasks themselves.	10%	34	3%
Administrators (Note small base size: 29 respondents)			
Administrative workers tend to be off-site and provide many business support functions to a construction project. The job titles range from office clerk, to business manager, to sales representative, and even owner of a construction company.	7%	40	0%
Designers & Planners (Note small base size: 26 respondents)			
Designers & Planners conceive projects and work to ensure the necessary materials and labour are available to complete them. The jobs in this category include architects, draftsmen, engineers, and project managers. These workers typically perform most of their duties prior to the start of a project. Once projects are underway, Designers & Planners may provide support in a supervisory or administrative context.	6%	37	3%

*n=412 *The total percentage is over 100% because respondents were able to select more than one occupation to describe their work and could thus be placed in multiple job categories. In this study, 36 individuals were placed in more than one category. Table is continued from previous page.*

PERCEIVED SKILL LEVEL

On a scale from 1 to 10, where 1 means the worker is “at entry level, just starting out and still learning,” and 10 means they are “a total expert or master,” GTA construction industry workers give themselves an average skill level score of 7.1.

Apprentices typically understand their entry-level status and so were the most likely to select the lower-end of the scale. Over a third (34%) of respondents ages 24 and under selected a skill level of 1 to 3.

Perceived skill level increases with age, with an average of one skill point gained from one age cohort to the next (Young Millennials average 4.8 on skill, Millennials—6.9, Generation X—8.1, Boomers—8.9), with the most drastic increase (2.1 points) when going from Young Millennials to Millennials (i.e. approximately when workers turn 25).

Just 15% of construction industry workers perceived themselves as a “total expert.” Even among the Boomers, only 36% gave themselves a 10, while 55% selected 8 or 9.

EMPLOYMENT STATUS

Of the 412 respondents, 85% reported being employed full-time and 13% claimed part-time or seasonal employment. Only 2% of the sample is currently unemployed and/or looking for work.

While full-time employment is common in the construction industry at large, it is not spread evenly among different types of workers, particularly those in Construction Trades (82%) compared with Trades Support (92%). The seasonal or weather-dependent nature of the work is also a significant barrier to full-time employment.

Millennials (90%) and Generation Xers (89%) are the age groups experiencing the highest full-time employment, while Young Millennials report the highest part-time or seasonal employment at 24%.

In regard to claiming employment insurance (EI), nearly a quarter (24%) of all respondents reported doing so during “times when there is no work available.” Given that only 15% of respondents claimed to be unemployed, seasonal, or part-time, it may be that some self-described “full-time” employees have claimed some form of unemployment insurance in the recent past.

When it comes to claiming EI, 69% of workers who have done so are between 25 and 52 years of age. These are the Millennials & Generation Xers, who are arguably in their prime working years in terms of physical and mental acuity, and who make up most of the workforce.

COMPANY SIZE

Respondents were asked how many people currently work at their company "to the best of your knowledge." Nearly a third (30%) of respondents were unable to answer this question (i.e. selected "Don't know"). Among those who responded, the average company size was 125 employees.

Smaller companies (with between 11 and 25 employees) appear to have a more equal balance of young workers and more senior ones. On average, 19% are ages 16 to 24 and 13% are ages 53 to 68. The higher number of younger workers may be an indication of the apprenticeship system at play (young workers learning on-the-job from older, experienced workers).

The average company size among respondents in Trades Support roles is 203 employees, confirming that the dedicated specialities/functions of these workers are usually reserved for larger organizations. As well, respondents in the Designers & Planners[5] category, whose tasks are highly specialized, belonged to the largest companies, with an average size of 310 employees.

Among respondents in the Construction Trades, Equipment Operators,[6] who tend to work on larger, more expensive projects, report the largest average company size (162). Among the bulk of the construction labour force (Carpentry-related Trades & Labourers), the average company size is 90 employees, which is below that of total sample average (125).

OWNERSHIP/STAKE IN COMPANY

When it comes to having a stake in the company for which they work, 13% of respondents claimed to be owners, partners, or shareholders. This provides some evidence that construction is a promising industry for the entrepreneurial-minded.

Company owners and shareholders are more likely to be Generation Xers and Boomers. Workers in these age groups are more likely to be financially secure, having had time to earn "sweat equity" (exchanging working hours for a stake in the company) or enough money to buy in. Among those with ownership in their company, 71% are between the ages of 36 and 68.

MEN AND WOMEN IN THE CONSTRUCTION INDUSTRY

There are some obvious differences between men and women in the construction industry. First, it should be noted that 92% of female respondents are under the age of 52 and 57% female are under the age of 35.

Women have the highest representation in the construction industry in Trades Support roles (37% of females respondents work in these roles, compared with 21% of men). Women also tend to work at larger firms, which may have departments dedicated to Trades Support functions. Among female respondents, their average company size is 218 employees, compared with 113 employees among male respondents.

[5] Small base size for Designers & Planners: *n=26*
[6] Small base size for Equipment Operators: *n=19*

Among specific job categories, women are most visible in:

- Administrators[7] (31%)
- Designers & Planners[8] (23%)
- Road & Bridge Workers[9] (23%)
- Carpentry-related Trades & Labourers (15%).

On average, men consider themselves to be somewhat more skilled than women based on self-reported scores (7.2 for men vs. 6.3 for women). This may be tied to increasing numbers of young women entering the construction workforce and the tendency for younger workers to rate themselves as lower-skilled. Interestingly, the proportion of men and women viewing themselves as master tradespeople is about the same – 15% and 12% respectively gave themselves a score of 10. Additionally, men (13%) and women (12%) are just as likely to own shares in their company.

COMPULSORY & VOLUNTARY TRADES

A mechanism for certification and oversight of construction industry workers are the designations of compulsory and voluntary trades. The definitions of compulsory and voluntary trades are as follows:[10]

Compulsory Trade: A trade in which registration as an apprentice or Certificate of Qualification is required. There are currently 23 skilled trades that are designated as "compulsory."

Voluntary Trade: A trade in which a Certificate of Qualification is not legally required to practice the trade.

This study revealed some statistically significant differences and patterns among respondents who were categorized in compulsory trades (28%) vs. voluntary trades (52%), with the remaining in Trades Support roles.

First, close to two-thirds (64%) of those in compulsory trades are Millennials ages 16 to 35.[11] Women (14%) are less likely to work in compulsory trades than men (30%).

Second, workers who practice a voluntary trade are more likely to live in the city than those in compulsory trades.[12] This may be due to the fact that in urban areas trades jobs are currently viewed as a "fall back" option for work. Those who move to the cities and are unable to find work in their field of expertise could seek work with a low barrier to entry, like roles in hospitality or construction. Among Construction Trade jobs, the compulsory trades have a higher barrier to entry due to the Certificate of Qualification and other requirements that may dissuade those who are looking to quickly find a job in the city.

Third, compulsory trades are clustered in certain occupation categories. The Electrician category is entirely composed of the compulsory trade of electrician.

[7] Small base size for Administrators: *n=29*
[8] Small base size for Designers & Planners: *n=26*
[9] Small base size for Road & Bridge Workers: *n=22*
[10] "Trades in Ontario." Ontario College of Trades, 2019, www.collegeofTrades.ca/Trades-in-ontario
[11] As well, 58% of Trades Support roles are currently filled by Millennials ages 16-35.
[12] Workers in Trades Support roles are the least likely to live outside of the city or suburbs.

For Pipe & Vent Workers, 84% are compulsory trade practitioners, likely owing to the high numbers of Plumbers and Steamfitters surveyed. For Metal Workers & Welders,[13] 62% work in compulsory trades (sheet metal worker is a compulsory trade, while welder is not). Finally, 21% of Equipment Operators[14] report their jobs as compulsory trades, many of them heavy equipment or crane operators.

The categories of Carpentry-related Trades & Labourers, Stone, Brick, & Exterior Cladding Workers, and Road & Bridge Workers do contain trades that are considered compulsory, although compulsory status is reported as less than 15% for each category. For the principal labour pool of Carpentry-related Trades & Labourers, just 6% are compulsory trades.

Fourth, neither voluntary nor compulsory designations have notable effects on full-time employment status, with 85% of compulsory trade workers being full-time compared with 79% of voluntary trade workers.[15] Both compulsory trade workers (30%) and voluntary trade workers (27%) are more likely to claim EI than Trades Support roles, among which only 7% of workers report doing so.

Fifth, the average company size for workers in compulsory trades is 127 employees, compared with workers in voluntary trades, where the average company size is 86. On the other hand, more voluntary trade workers (18%) report owning a stake in their company than compulsory trade workers (8%).

Finally, workers in voluntary trades reported having higher skill levels than reported by workers in compulsory trades. That is, 61% of voluntary trade workers reported themselves as highly skilled (with an 8, 9, or 10 rating), compared with 53% of compulsory trade workers.[16] When controlling for just the top two scores (9 or 10 rating), voluntary trade workers edge further ahead, with 35% reporting this very high skill rating, compared with 24% of compulsory trade workers.

UNIONIZED & NON-UNIONIZED CONSTRUCTION WORKERS

Unions are organizations which represent the rights and voices of workers. Union representatives collectively bargain with a company's management or employer association to negotiate collective agreements, which govern the terms and conditions of employment, including compensation and working conditions. As such, union membership has several impacts on how construction industry workers view their jobs and behave.

Among the respondents in this study, nearly half (48%) are members of a union. Union membership is highest among workers ages 36 to 52 (Generation X) and lowest among those ages 16 to 24 (Young Millennials). All age categories are significantly more likely to claim union membership than Young Millennials. When it comes to gender, however, women (22%) are far less likely to claim union membership than men (52%).

[13] Small base size for Metal Workers & Welders: *n=13*
[14] Small base size for Equipment Operators: *n=19*
[15] Full-time employment in the construction industry is highest among roles considered to be Trades Support, at 95%.
[16] Among Trades Support workers, 45% reported a skill level between 8 and 10.

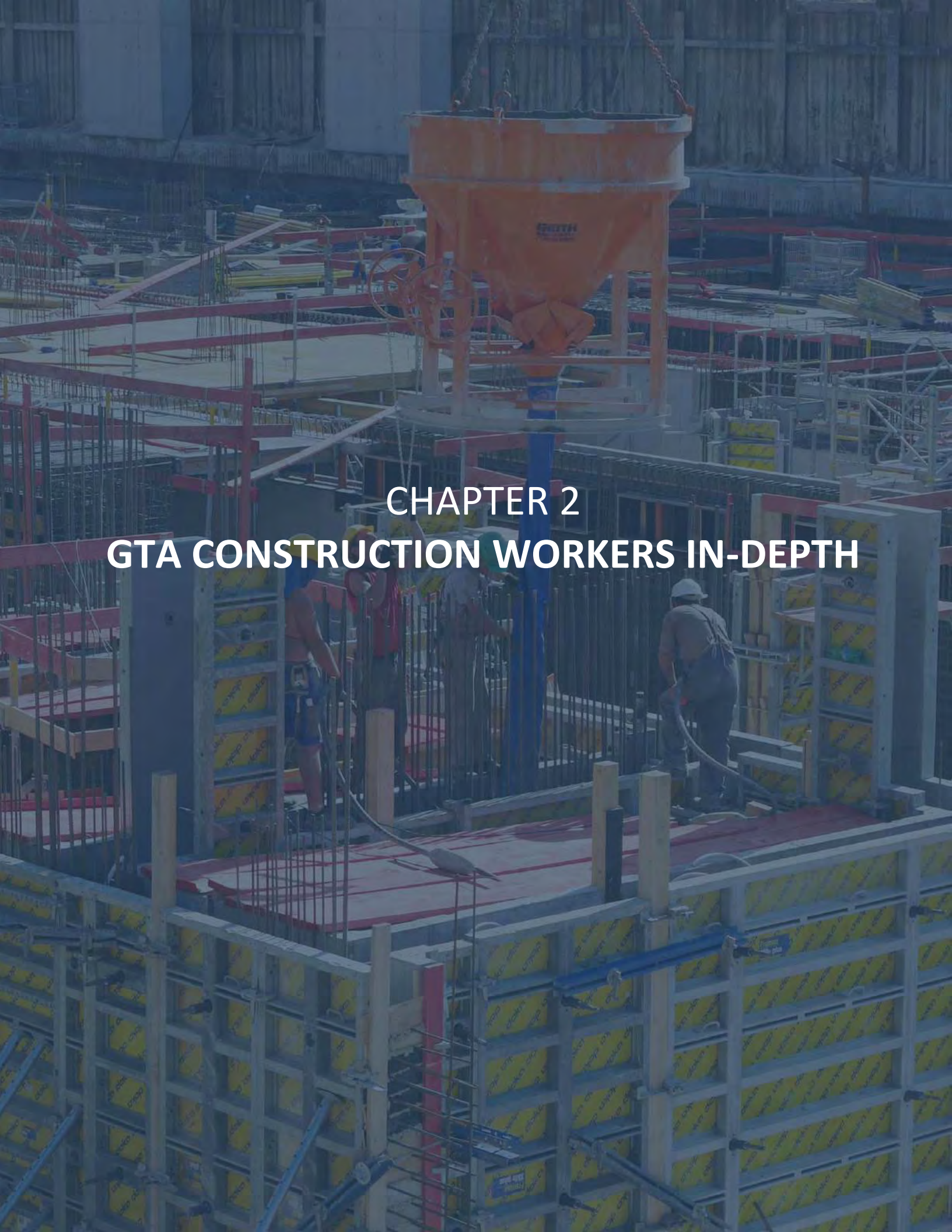
Unionized respondents are more likely than their non-union counterparts to be married (53% vs. 41%), and non-unionized respondents are more likely to report that they are living with their parents or "starting out" on their own (34% vs. 17%).

In this study, union membership is concentrated among workers who are in Construction Trades roles—on the tools. Union membership for those in Trades Support roles is merely 2%. All other job categories report union membership at more than 50%, except for Road & Bridge Workers[17] (45% are unionized). As well, among compulsory trade and voluntary trade workers, union membership among respondents is 64% and 59% respectively.

While 88% of unionized respondents are employed full-time, compared with 82% of non-union workers, union membership has a nominal effect on whether workers are employed full-time or part-time and/or seasonally. However, unionized respondents account for 76% of workers claiming unemployment benefits and are much more likely to claim EI than those who are not union members. That is, 38% of union members claim EI, compared with 11% of non-unionized workers. This may relate to the seasonal nature of some construction work and the role of unions in representing workers in Construction Trades rather than Trades Support roles. Those in Trades Support roles are the least likely to claim union membership, claim EI, and to experience seasonal employment. Therefore, higher EI claims among union members could relate to the fact that their work is generally more dependent on the weather.

Finally, union membership has a statistically significant correlation with perceived skill level. The average reported skill level of a unionized respondent is 7.4, while non-union respondents have an average rating on 6.8. As well, more unionized respondents perceive themselves to be highly skilled, with 61% rating themselves as 8, 9, or 10 on skill, compared with 49% of non-unionized respondents.

[17] Small base size for Road & Bridge Workers: *n=22*



CHAPTER 2
GTA CONSTRUCTION WORKERS IN-DEPTH

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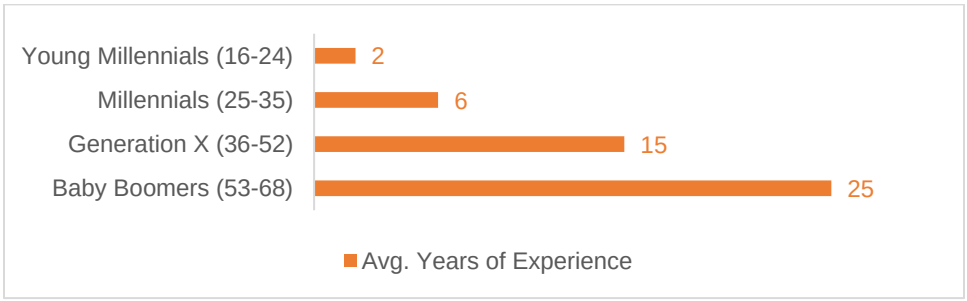
GTA CONSTRUCTION WORKERS IN-DEPTH

This chapter provides an in-depth profile of GTA construction industry workers by examining their reasons for entering the construction industry, their preparations for their job, and their thoughts and feelings about the work they do. It also looks at how they like to spend their free time.

YEARS OF EXPERIENCE

Respondents were asked to indicate the number of years that they have been working in their current job. While the number of years on the job increases with age, the average time spent in their current role is just under 11 years.

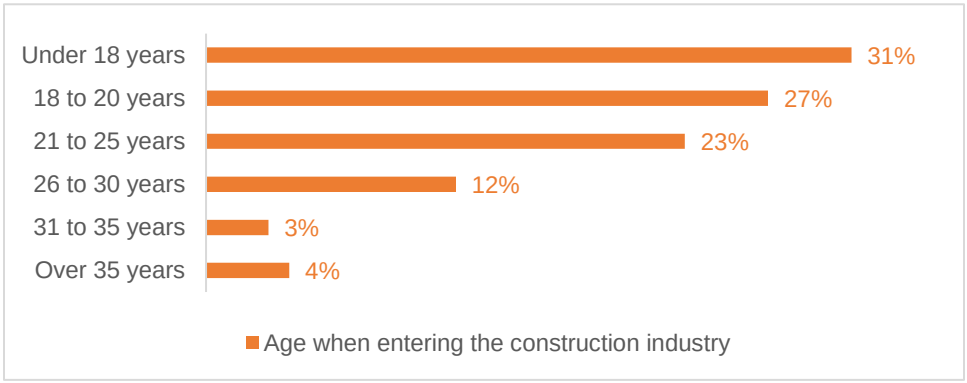


n=412

Men report having worked longer in the construction industry than women, averaging 11.2 years to 7.5 years respectively. This is further reflected in the higher number of men (15%) than women (6%) reporting more than 25 years of experience in construction. However, 20% of female respondents in this study have five to nine years of experience, compared with 18% of men, indicating that the number of women entering the construction industry is rising.

THE DECISION TO ENTER THE TRADES

While the average age at which the decision was made to enter the trades was just under 21, nearly a third of respondents claimed to have made the decision before their 18th birthday. Only 7% decided on a career in the trades after the age of 30.



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INFLUENCES ON ENTERING THE TRADES

When asked about all the influences on their decision to enter the trades, 42% of respondents claimed that they were influenced by a family member. Within this group, Millennials are twice as likely as Boomers to cite family members as an influence (22% vs. 11%). As well, 31% of all respondents were influenced by a friend to get into the trades and 8% were impacted by their experience with a summer job or work camp.

Only 8% of workers reported being influenced by a guidance counsellor to enter the trades. While this number is relatively small, the fact that it was cited by 9% of Millennials vs. a mere 2% of Boomers suggests that guidance counsellors have been promoting construction careers more in recent decades. As Jason Stewart and Lindsay McCardle (2019)[18] observed in their study, *A Behavioural Economics Approach to Recruitment in Skilled Construction Trades*, guidance counsellors (and teachers) have a decisive influence on young people's perceptions of careers and their career choices. While this is a step in the right direction, these influencers must continue to increase their efforts on educating young people about opportunities in the trades.

As well, nearly half of respondents (46%) mentioned that the circumstances around their decision to enter the trades were a little random or fortuitous:

- An opportunity came along and they took it (15%).
- They saw tradespeople working and were intrigued (13%).
- They heard that there were job openings in their trade (10%).
- Entry into their trade "happened by chance" (8%).

In addition, about 10% reported having been influenced by promotions, videos, job fairs, websites, or union activities.

TRAINING AND PREPARING FOR A CAREER IN THE TRADES

When asked about all the ways in which construction industry workers prepared for their eventual career, 80% of respondents were prepared by mentors in any of the following ways:

- "I learned on the job, from more experienced people" (37%).
- "I learned by watching others" (23%).
- "I went through an apprenticeship" (20%).

In addition, 41% mentioned that they had been "always interested in making things/ fixing things/building things since childhood." This natural ability may have been further developed by one's family members and friends, as recognized by 31% of respondents:

- "My dad or mom taught me some basic skills" (22%).
- "Another family member (e.g. uncle, aunt or grandparent), taught me some basic skills" (9%).

[18] James (Jason) Stewart and Lindsay McCardle, "A Behavioural Economics Approach to Recruitment in Skilled Construction Trades", (Vaughan, ON: Residential Construction Council of Ontario (RESCON), 2019).

Formal education played a role for 39% of respondents:

- “I studied at a college” (20%).
- “I studied at a university” (9%).
- “I studied at a union training centre” (7%).
- “I studied at a technical / polytechnic school” (3%).

Lastly, about a third of respondents included self-taught activities when preparing for their career:

- “I learned by doing it myself” (23%).
- “I learned from books” (10%).
- “I basically taught myself” (9%).
- “I learned from online videos” (8%).
- “I learned from TV shows” (3%).

HOW CONSTRUCTION WORKERS THINK AND FEEL ABOUT THEIR JOBS

COGNITIVE ASSOCIATIONS

In order to understand how construction industry workers think and feel about their jobs, it is necessary to explore the rational or ‘cognitive’ perceptions of, and associations with, the Construction Trades. A list of attributes was derived from preliminary research by Q.i. and Job Talks, as well as from the May 10, 2018 symposium with participating construction industry stakeholders. Respondents were able to select responses from the list of common rational/cognitive attributes of skilled trades jobs.

Positive Cognitive Associations

Respondents were asked to ‘click on’ the statements that they agreed with most strongly. The Top 10 cognitive associations with construction industry jobs were:

Rank	Positive Cognitive Associations with Construction Jobs	%
1	Good money.	54
2	You’re always learning and building new skills.	44
3	The job requires thinking skills, using your mind, brains, and intelligence.	43
4	It’s honest, real work.	41
5	Gives you a sense of fulfillment, satisfaction and accomplishment.	40
6	It’s hands-on – you’re actively working with your hands.	40
7	You become a skilled, respected professional.	39
8	You need physical and mental ability.	38
9	With your trade you can work anywhere in Canada.	38
10	Doing your job well is a great confidence booster.	37

n=412

Prior to viewing the cognitive/rational lists, respondents were asked to share their “opinions and feelings” about their jobs. These open-ended responses add further depth to the options selected from the list. The top positive theme, mentioned by 41% of respondents, related to income, pay and money. The second-most positive theme, at 19%, related to the sense of satisfaction and the rewarding feeling of fulfillment, accomplishment, and pride that one gets from seeing the results of a job well done. Also at 19% is that, in the construction industry, one is always learning.

The table on the following page contains a summary of the 29 themes that were coded as positive.

Rank	Theme	%	Rank	Theme	%
1	Great wages / Pay / Money / Make a good living	41	16	Freedom / You're in charge	5
2	Job Satisfaction / Feeling of fulfillment / Rewarding	19	17	Interesting work	4
3	Always Learning / Learn a lot / Training	19	18	Union / Support / Security	4
4	Variety of work / Locations / Projects / People	14	19	Proud / Well-respected	3
5	Good hours / Busy / Fast-paced / Year-round work	14	20	Creative / Artistic	3
6	Collaborating / Friendly colleagues / Work with good supportive people	12	21	Hire students / Easy entry / Education not needed	2
7	Great industry / Good jobs / Good company	12	22	Safety / Prevent injuries	2
8	Career opportunities for advancement within one trade / To try many trades	10	23	Easy	2
9	Challenging / Problem-solving	9	24	Happy customers / Work is appreciated	2
10	Trades always needed / In demand / Always work	9	25	Leadership / Management roles	1
11	Hands-on / Building / Useful / Practical / Use machines	9	26	Clean	1
12	Great pension / Benefits	8	27	Be positive / Keep it up /Stay Positive	1
13	Fun / Exciting / Enjoyable	8	28	Helping others	<1
14	Work environment / Outdoors	7	29	Communication / Communicate	<1
15	Active / Exercise / Strengthens body	6			

n=412

For construction industry workers, it is clear that not only is the money good, but also their work requires a balanced intelligence across body and mind, requiring both mental and physical acuity. These positive perceptions, associations, and feelings may help counteract some of the underlying negative perceptions and feelings related to the trades, as shown in the following sub-section.

Negative Cognitive Associations

Many of the top negative associations are related to the fact that working in the construction industry can be tough. It can at times be dirty and dangerous. It can be especially tough on the hands and body, particularly during the winter and during long days. Respondents also pointed to the stigma attached to the trades, and the seasonality of work.

Rank	Negative Cognitive Associations with Construction Jobs	%
1	It can be dirty work.	45
2	It's tough being out on a site in winter.	42
3	It's tough on the hands and body.	39
4	It can be dangerous.	32
5	Long hours / Long days.	32
6	It's heavy labour / Back-breaking work.	26
7	There's a stigma attached to the trades.	25
8	Too much travel / Long commuting hours to worksites.	21
9	Some people look down on you.	21
10	Unsteady work / Seasonal / Not year-long job security.	14

n=412

With respect to the respondents' open-ended responses, while the volume of comments was lower among negative themes than among positive themes, there was a greater variety of negative themes (38) than positive ones (29).

The table on the following page contains a summary of the 38 themes that were coded as negative. The top negative theme, mentioned by 17% of respondents, again related to "hard, physical work" and its potential for damage to the hands and body. The next-most negative theme related to the Canadian climate, and particularly to the bitterly cold winters (15%), followed by the long days/long hours (12%), which can be exacerbated by travel to work sites.

Negative-Coded Themes: Cognitive Associations with Construction Jobs					
Rank	**Theme**	**%**	**Rank**	**Theme**	**%**
1	Hard physical work / Hard on body / Injuries / Pain	17.0	20	Early work hours	1.6
2	Weather / Extreme heat or cold	15.0	21	Boring / Tedious	1.6
3	Long hours	12.0	22	Labour shortage	1.6
4	Seasonal / Not steady employment	6.0	23	Economy-based / Bottom-line based	1.3
5	Difficult people / Hard to work with or work for	6.0	24	Shift work / On call	1.3
6	Dangerous / Safety concerns / Unhealthy	5.0	25	Few or no benefits	1.0
7	Dirty	5.0	26	No opportunity to grow or advance	0.9
8	High stress / Mentally demanding	5.0	27	Job site bureaucracy	0.9
9	Away from home / Long commutes / Travel	4.0	28	Difficult customers / Public	0.7
10	Underpaid	3.5	29	Too much responsibility	0.7
11	Lack of respect / Not appreciated	3.4	30	Errors / Making mistakes	0.7
12	Lack of Job security / Lay-offs	2.5	31	Difficult work-life balance	0.5
13	Unqualified incompetent managers and owners	2.3	32	Frustrating	0.5
14	Lack of training	2.3	33	Inter-cultural issues	0.5
15	Too Busy / Too Fast-paced / Not enough time	2.1	34	Changing for the worse	0.5
16	Challenging / Difficult work	2.0	35	Hard to find good workers	0.5
17	Politics / Regulations / Taxes	2.0	36	Lack of quality workmanship	0.5
18	Male dominated / Prejudice against women	2.0	37	Noisy	0.5
19	Union issues	1.8	38	Alcohol and drug use	0.4

n=412

PERCEPTIONS OF CONSTRUCTION INDUSTRY WORKERS

Further illuminating how construction workers think and feel about their jobs are their perceptions of the type of people who work in the industry. Respondents were shown a list of 200 positive and negative perception/personality attributes and asked to select those that "may apply to YOU and also to people like you who work in your trade."

Participants were also asked directly about the emotions they often experience "in your working life." A list of over 100 positive and negative emotions was provided to help construction industry workers articulate how they truly feel about their work.

Positive Perceptions

When it comes to their perceptions of construction industry workers, the Top 10 positive terms chosen by respondents were: Hard working, Knowledgeable, Professional, Friendly, Intelligent, Respectable, Organized, Competent, Motivated and Reliable. It is clear that people in the construction industry have a very healthy and balanced image of their colleagues.

Q.i. has mapped the relationship between different image/personality traits. The analysis reveals eight distinct groupings of these traits. The table below summarizes how GTA construction workers perceive themselves and their colleagues in broad terms. For more details about each group, see Appendix A. Construction industry workers rate themselves the most highly on traits associated with Competence (a combined 20% average level of association), Practicality (19% average), and being Successful (18% average). Their self-perceptions range from 9% to 14% average association across the other 4 dimensions of personality/character.

Rank	Positive Perceptions of Construction Industry Workers	% Avg.
1	**Competent, Knowledgeable and Conscientious** Wants to feel informed and professional, and to understand, explain and predict. (But could come across as a bit critical, stubborn, or a 'know-it-all'.)	20
2	**Careful, Practical, Respectable and Reliable** Wants to feel safe, and be protected in their community. (But could come across as traditional, old fashioned or too conservative.)	19
3	**Successful, Ambitious and Influential** Wants to feel confident, and be inspiring and in control. (But could come across as a bit arrogant, selfish, impatient or pushy.)	18
4	**Normal, Decent and Down to Earth, with Family Values** Wants a quiet, peaceful and comfortable life. (But could come across as a bit ordinary, tired, or boring.)	14
5	**Passionate and Extraverted, who Loves Freedom and Change** Wants to feel alive and excited, and to be dynamic, creative and different. (But could come across as a bit crazy, or a show-off or an adrenaline-junkie.)	13
6	**Friendly, Sociable and Charming** Likes people, and feels as if their "soul" is related to all humanity and to nature itself. (But could come across as a bit disorganized or too idealistic or sentimental.)	13
7	**Open, Active and Accepting of Life Experiences, and of Other Cultures** Wants to have fun, and feel the pleasure and joy of life. (But could come across as a bit rebellious, impulsive, or too liberal.)	10
8	**Kind, Co-operative, Loving and Nurturing** Feels Compassion and Empathy, and wants to be a Good person. (But could come across as a bit weak or naïve, or a pushover.)	9

n=412

Negative Perceptions

The Top 10 negative traits chosen by respondents to describe construction industry workers were: Stressed (23%), Stubborn (17%), Bad tempered (14%), Moody (14%), Tired (14%), Aggressive (12%), Arrogant (12%), Controlling (12%), Difficult (11%), and Easily upset (10%). These traits are within a normal and healthy distribution. Being aware of ones limitations and having the capacity to behave negatively is a sign of good mental health.

The lowest negative associations (all below 4%) were with the following traits: Unimaginative, Bad, Detached, Narcissistic, Needy, Soft, a Pushover, Evil, Vulnerable, a Nobody, a Sinner.

This affirms that workers in the construction industry do not see themselves as neither weak (Soft, Needy, a Pushover, Vulnerable, a Nobody), nor bad (Evil, Narcissistic, a Sinner), nor as Unimaginative.

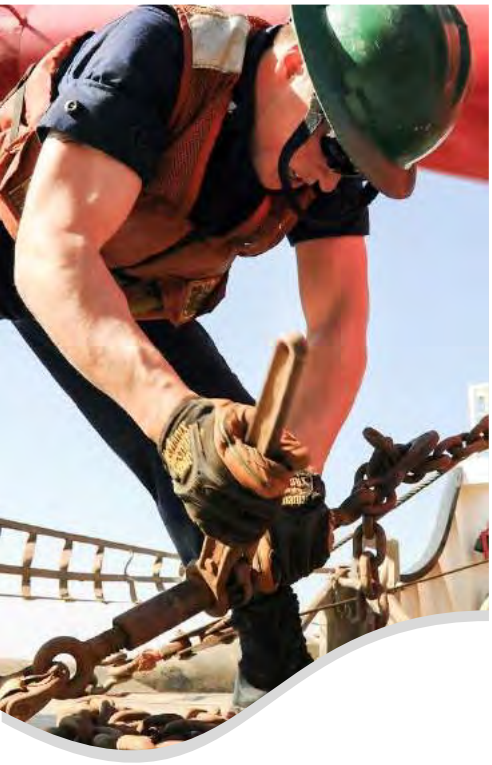
Positive Emotions

In research, when you ask people how they feel with an open-ended question, they typically only mention between 1 and 3 emotions. However, if you show people a list, you get a much better indication of how they really feel, and of their underlying feelings and emotions.

The Top 10 positive emotions that construction industry workers often feel are: Proud, Focused, Self-confident, Satisfied, Respectful, Friendly, Interested, Serious, Appreciated, and Safe.

Rank	Positive Emotions Felt	%	Rank	Positive Emotions Felt	%
1	Proud	39	12	In control	28
2	Focused	36	13	Loyal	25
3	Self-confident	34	14	Enthusiastic	24
4	Satisfied	31	15	Fulfilled	23
5	Respectful	31	16	Grateful	22
6	Friendly	31	17	Energized	22
7	Interested	31	18	Connected	21
8	Serious	30	19	Patient	21
9	Appreciated	29	20	Trusting	20
10	Safe	29	21	Calm	20
11	Happy	28	22	Informed	18

n=412



Negative Emotions

While about 21% of respondents reported feeling no negative feelings at all, 30% reported feeling Stressed, 24% felt Fatigued, 24% felt Frustrated, 19% felt Overwhelmed, 15% felt Anxious, 13% felt Worried, 12% felt Mixed feelings, 11% felt Irritated, and 11% felt Discouraged or Disappointed.

Although this might seem alarming, the levels of negative emotions among construction industry workers are considerably lower than those for the average Canadian worker, where 44% of Canadians report feeling Stressed, 51% feel Fatigued, 35% feel Frustrated, 42% feel Worried, 35% feel Mixed feelings, 34% feel Irritated, and 21% feel Disappointed.

While negative emotions like stress, fatigue, worry, and frustration are consistent in life, on the whole, construction industry workers have greater levels of emotional well-being.

FAVOURITE ACTIVITIES

Respondents were shown a list of over 80 common activities and asked to select the ones that they "really like or love doing." Through coding of their responses, five aspects of the "Good Life" for construction industry workers are revealed. The options selected by 30% or more of construction industry workers in the GTA reveal a lot about who these workers are and what they like to do most with their time.

The first aspect of the Good Life relates directly to work activities. The most popular activity of all was **"making money,"** selected by 42% of all respondents. As well, 31% of respondents enjoy "DIY, home improvement, fixing things" as another favourite activity. A related DIY activity is "Arts and crafts," which was indicated by 27% of women, compared with 6% of men.

The second aspect relates to **connecting with friends and loved ones**. Many of the top-selected activities have an element of socializing, especially if food is involved. Respondents really enjoy:

- "Spending time with friends" (37%).
- "Barbecuing" (36%).
- "Spending time with family, your kids" (32%).
- "Eating out, going to a restaurant" (31%).
- "Having friends over" (30%).
- "Making love" (30%).

All these activities involve in-person contact. Workers who displayed a preference for these kinds of social activities tended to feel more fulfilled in their jobs.

The third aspect of the Good Life for construction industry workers relates to **relaxing and resting**. These are low-energy activities that are done at home, where they are at their most comfortable. Respondents love:

- "Listening to music" (38%).
- "Relaxing, resting" (34%).
- "Watching TV" (33%).
- "Watching movies at home, e.g. DVD, Netflix, streaming" (33%).
- "Watching sports" (32%).
- "Staying home" (30%).

These activities may especially help balance out some of the physically demanding aspects of the work done by Construction Trade workers. It is also worth noting that most of their favourite "relaxing and resting" activities involve media typically associated with a television set/screen, as opposed to surfing the Internet.

The fourth aspect relates specifically to **travel**. A third of respondents reported that they really enjoy "travelling" (34%) and/or "going on short vacations, holidays, trips" (33%). These activities could offer balance by way of an escape or an element of unpredictability, given that the other top activities might keep respondents grounded at home.

The final aspect of the Good Life for construction industry workers relates to **feeling good generally**. That is, 36% of respondents love "having fun" and 35% love "laughing." These expressions of positive emotions are highly valued and are elicited though engagement in the above activities and others.

Some of the activities that construction industry workers are **least likely** to participate in include:

Introspection/Spirituality

- Daydreaming, fantasizing (9%).
- Going to Church, or Temple, or Mosque (7%).
- Meditating, praying (6%).

Online Technology

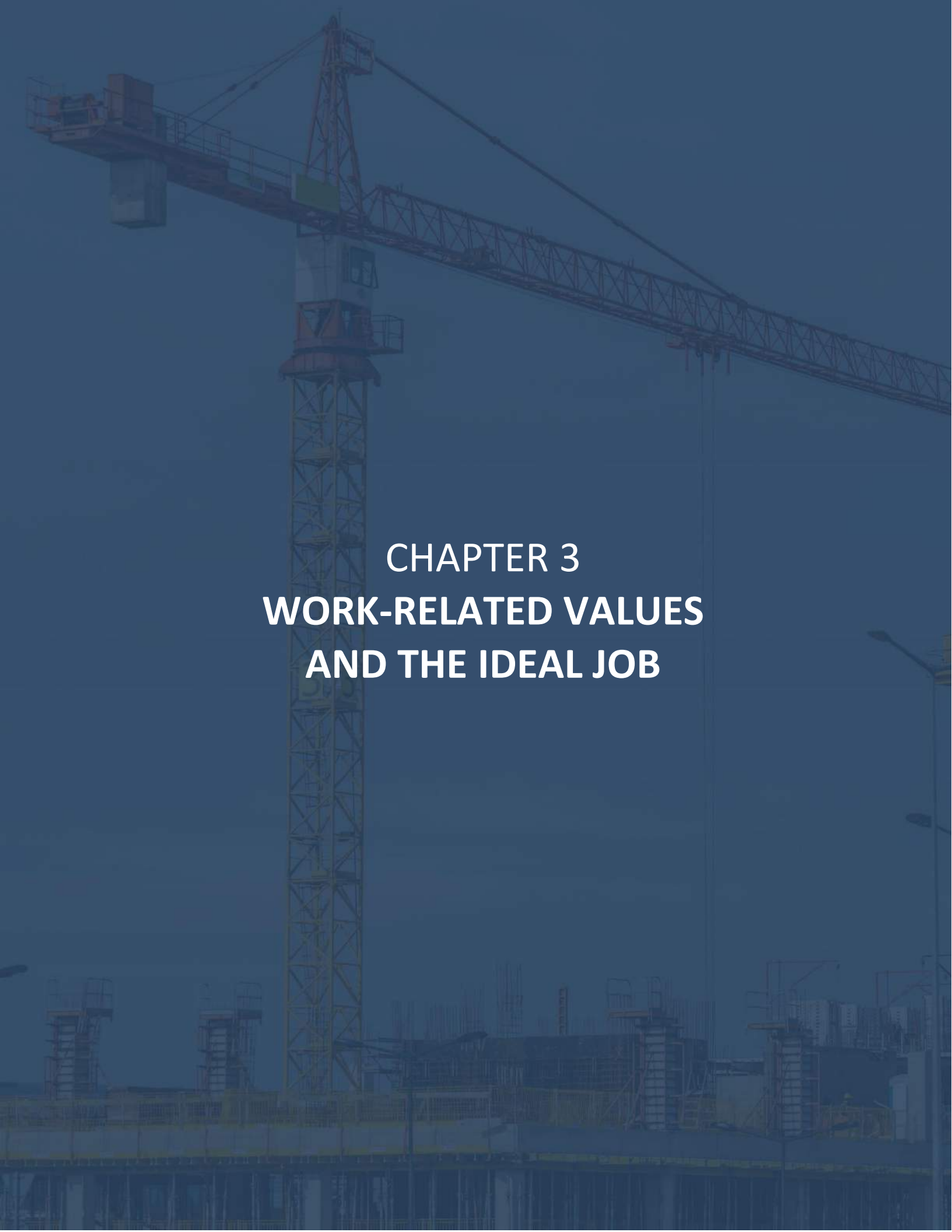
- Listening to podcasts / audio books (8%).
- Dating, online dating (4%).

"Social Justice"

- Giving to charity, charity work (7%).
- Fighting injustice, standing up for what's right (6%).
- Writing, tweeting, blogging (3%).

In summary, the Good Life for construction industry workers is expressed by:

- Enjoying work and making money.
- Connecting face-to-face with the people who are important to them.
- Unwinding with home entertainment.
- Getting out and exploring once in a while.
- Having fun, laughing, and smiling!



CHAPTER 3
WORK-RELATED VALUES AND THE IDEAL JOB

CHAPTER 3
WORK-RELATED VALUES AND THE IDEAL JOB

To understand Canadians' attitudes toward their jobs, Q.i., in partnership with Job Talks, developed a set of statements that explore attitudes and values regarding working life. The statements cover each of the dimensions or zones on Q.i.'s proprietary MindMap™ and form the basis of a segmentation of Canada's working population. These work-value statements were presented to construction workers.

The respondents in this study were asked to indicate whether each work-values statement was either "True for you," "Partly true for you," or "Not true for you at all."

Below are the statements that received a "True for you" response by 60% or more of the respondents:

Work-Values Statement	"True for you" (%)
"People trust me to deliver on what I promise at work."	78
"I like the fact that I'm not hurting or exploiting anyone through my work."	78
"I like the fact that I work in the real world with real people."	71
"I like that I can be myself at work."	70
"My work gives me a sense of success and achievement."	69
"Hard work pays off in my field."	69
"I like being able to teach people some of the things I do at work."	67
"I get a lot of satisfaction out of my work."	61
"I'm always on top of things when it comes to work."	60
"Time flies while I'm at work."	60

n=412

The top three selections indicate a desire for authenticity and a certain aversion to pretentiousness or "office politics." This raises a question for future investigation: did these workers choose a career in construction because of their values, or did a career in construction help these workers develop their values?

Values can be defined as the things that we believe are important in life, as well as the things that we think are unimportant. With this view, let's take a look at the highest associations with the statements that were regarded as "Not true for you at all" by respondents. Below is a list of statements that were disagreed with by 10% or more of survey respondents. By far, the greatest disagreement came with the statement, "If it wasn't for the money, I would quit my job tomorrow."

Work-Values Statement	"Not true for you at all" (%)
"If it wasn't for the money, I would quit my job tomorrow."	41
"I like that things at work can't run without me."	28
"One of the best things about my job is that I get to interact with clients - I like getting to know them personally."	20
"I feel like I am caring for others through my work."	15
"My work brings me peace of mind."	13
"For me, my clients are not just numbers, they're real people."	13
"In my line of work, we're concerned about people as well as profits."	13
"In my line of work, we help people and respond to their needs."	10
"I feel a special bond with other people in my field - it's as though we're part of a family."	10

n=412

Since many of the top "Not true for you" selections still received "True for you" responses from up to 50% of respondents, these statements may be considered the most divergent among construction industry workers. Many of the "Not true for you" selections show that construction industry workers find their work to be about more than just money, and that they rely on a teamwork mentality to complete tasks.

NOTABLE DIFFERENCES

An analysis of responses to the Work-Values statements revealed some significant differences among particular groups.

Millennials' View of their Work

Millennials tend to differ from their older cohorts in their level of agreement with certain statements that are associated with satisfaction and fulfillment.

Less than two-thirds (63%) of Millennials appreciate that their job allows them to "work in the real world with real people," compared with more than three quarters of Generation Xers (76%) and Boomers (78%). Millennials (72%) are also less concerned that their work doesn't involve "hurting or exploiting anyone" than do Generation Xers (85%) and Boomers (84%).

Millennials are also less likely to feel like they can truly be themselves at work, or that they "get a lot of satisfaction" from their work, or that "time flies" at work than their older counterparts.

Finally, over a quarter of Millennials (28%) reported that they would quit their jobs tomorrow "if it wasn't for the money," which is the highest proportion of any age group in this study.

Work-Values Statement	"True for you" (%)		
	Millennials (age 25 to 35) *n=136*	Generation Xers (age 36 to 52) *n=132*	Boomers (age 53 to 68) *n=58*
"I like the fact that I'm not hurting or exploiting anyone through my work."	72	85	84
"I like the fact that I work in the real world with real people."	63	76	78
"I like that I can be myself at work."	63	75	75
"I get a lot of satisfaction out of my work."	54	63	69
"Time flies while I'm at work."	53	66	60
"If it wasn't for the money, I would quit my job tomorrow."	28	18	15

Electricians Feel Less Connected to Others

For some of the most agreed-upon statements among GTA construction industry workers, Electricians report much less agreement than the sample averages. Less than two-thirds (64%) agree that "people trust me to deliver on what I promise at work" and that "I like the fact that I'm not hurting or exploiting anyone through my work," compared with over three-quarters (78%) of all respondents. Electricians are also less likely to say that they work "in the real world with real people" or outdoors.

Work-Values Statement	"True for you" (%)	
	Electricians *n=45*	All Respondents *n=412*
"People trust me to deliver on what I promise at work."	64	78
"I like the fact that I'm not hurting or exploiting anyone through my work."	64	78
"I like the fact that I work in the real world with real people."	55	71
"I like that my work involves getting outdoors."	43	60

Designers & Planners[19] Feel Less Accomplished

While the base size for Designers & Planners is small (26 respondents), the group differs greatly from all respondents in a few ways that may be worth further investigation.

As shown in the table on the next page, not only are Designers & Planners far less likely to agree that their work "gives them a sense of success and achievement" (54%) compared with all respondents (69%), they are also less likely to "get a lot of satisfaction" out of their work (42% vs. 61%).

Moreover, only 42% of Designers & Planners agree that "hard work pays off in my field," compared with 69% for all respondents. These lower scores may be related to the fact that only 54% of Designers & Planners agree that they can be themselves at work, compared with 70% of all respondents.

[19] Small base size for Designers & Planners: *n=26*

Work-Values Statement	"True for you" (%)	
	Designers & Planners *n=26*	All Respondents *n=412*
"I like that I can be myself at work."	54	70
"My work gives me a sense of success and achievement."	54	69
"I get a lot of satisfaction out of my work."	42	61
"Hard work pays off in my field."	42	69

COMPARING GTA CONSTRUCTION INDUSTRY WORKERS TO THE TOTAL CANADIAN WORKING POPULATION

The statements that were highlighted above are among those that were used to form the segmentation of the Canadian population based on work-related values.

The original baseline segmentation was derived from a survey across the total working population of Canada (conducted in 2017/18 by Q.i., in partnership with Job Talks). It revealed five coherent groups or segments of working people, with very different attitudes and values.

The five segments represented "a work-life gradient," ranging from workers who are:

1. Miserable, to
2. Unhappy, but optimistic that things will improve, to
3. Reasonably happy and formed bonds with co-workers, to
4. Comfortable and satisfied, to
5. Fulfilled.

The following table includes a label for each segment and shows the corresponding percentage of construction industry workers compared to workers in the general population. The paragraphs that follow contain brief profiles on each of the five segments, with additional commentary focused on construction industry workers.

Work-Values Segment	GTA Construction Industry Workers (%) *n=412*	Total Working Population (%) *n=996*
1. Square Pegs	3	11
2. Bottom Rungers	21	26
3. Musketeers	8	15
4. Comfortable	23	21
5. Fulfilled	45	27

n=412

1. SQUARE PEGS

3% of GTA Construction Industry Workers vs.
11% of Total Working Population

This segment represents workers who are unhappy and have a negative outlook on their future. When it comes to work, as the saying goes, they are "square pegs in a round hole" – they don't fit well into what they're doing. They are the most pessimistic of all segments and are in greatest need of intervention.

80% of those in this segment are willing to change jobs for a better opportunity. Further, half of Square Pegs would quit their jobs tomorrow "if it wasn't for the money." They derive very little satisfaction from their work and associate it with fatigue and stress.

The base of construction industry workers in this segment was too small (3%) for detailed statistical analysis.

2. BOTTOM RUNGERS

21% of GTA Construction Industry Workers vs.
26% of Total Working Population

This segment represents workers who are unhappy, but with a somewhat positive outlook. As implied by the name, these workers are on the "bottom rung" of the workplace "ladder," which provides two important pieces of context. First, these workers are at the bottom ("underneath" others), which gives them little control and decision-making ability, yet they also have heavy workloads. Second, they are indeed "on the ladder," meaning that they are "climbers"—looking to get ahead.

Bottom Rungers are not necessarily happy with their positions at work, but there is an assured sense that things will change. Some understand and appreciate that, by virtue of their age and inexperience, they will need to be patient since promotions are inevitably coming. Other Bottom Rungers are more aggressive in their outlook and seek workplace advantages that will help them get ahead faster.

Bottom Rungers in the construction industry are the most prone to unemployment or working part-time (22% of them do), especially when compared with the Comfortable segment profiled later on. This could indicate that one of the things that Bottom Rungers strive for at work is full-time hours. Not having this arrangement may contribute to their Bottom Runger mentality.

Possibly as a reflection of their increased likelihood to work part-time or seasonally, Bottom Rungers are the most likely to claim EI, especially when compared with the Comfortable and Fulfilled segments. Precarious employment in the construction industry seems to be a strong indicator of the Bottom Runger workplace attitude.

More Bottom Rungers are members of unions than are Musketeers or Comfortable workers. 57% of Bottom Rungers claim union membership, making it one of two segments (the other being Comfortable) where the majority are union members.

Bottom Rungers are least seen in Trades Support roles, with just 11% of segment members.

3. MUSKETEERS

8% of GTA Construction Industry Workers vs.
15% of Total Working Population

Musketeers are workers who are reasonably happy with their working arrangement or have at least made peace with their situation. Like the famous Three Musketeers, this segment views their work as a responsibility to their colleagues as well as to society at large – "All for one, one for all." There is usually a strong sense of solidarity among these types of workers. This could be because Musketeers are often employed in stressful occupations, primarily in the healthcare industry. They understand the importance of their work and take on a high degree of responsibility in performing their jobs.

Musketeers are more likely to be employed full-time than Square Pegs and Bottom Rungers.

Musketeers in the construction industry average the smallest firm size among all work-values segments with 72 employees, though this is not surprising given that this group's disposition ("others first, me second") may lead them to thrive among smaller teams.

Despite the solidarity that this segment appears to feel with other workers, in the construction industry Musketeers are the segment least likely to claim union membership. Just 24% indicated that they are members of a trade union.

4. COMFORTABLE

23% of GTA Construction Industry Workers vs.
21% of Total Working Population

The Comfortable segment is fairly self-explanatory in its label: these are workers who are satisfied in their workplace, confident in the scope of their responsibility, and assured in how they execute their work. They feel comfortable in the jobs they are doing. The Comfortable is not the truly ideal segment, though, because work is still viewed as a separate and distinct aspect of self, rather than an integrated part of one's life and lifestyle.

In the construction industry, the respondents in the Comfortable segment tend be older and are among the most financially-secure. For them, they may have struck their ideal balance between work and life.

Like Musketeers, the Comfortable in the construction industry are more likely than Square Pegs or Bottom Rungers to be employed full-time.

58% of the Comfortable claim union membership, making this the other segment (along with Bottom Rungers) where a majority are union members.

5. FULFILLED

45% of GTA Construction Industry Workers vs.
27% of Total Working Population

The final segment represents workers who are completely satisfied in their work and report a high degree of "fulfillment" through their jobs. Fulfillment can be viewed as the degree to which one feels their job is "what they are meant to do" in life. This sentiment is the result of aligning one's personal aptitudes and values with the requirements of a job.

Workers in the Fulfilled segment view their work and their colleagues as a part of who they are. That is, rather than as a balance between working and non-working life, the Fulfilled have integrated their work into their lifestyle.

In the construction industry, the Fulfilled are more likely to be employed full-time than Square Pegs or Bottom Rungers. However, the Fulfilled are also more likely to work part-time compared to the Comfortable, suggesting that flexibility of hours may be one of the keys to fulfillment.

In summary, the GTA construction industry workers who participated in this study[20] are concentrated heavily in the top end of our segmentation distribution. Over two-thirds (68%) are in the Comfortable or Fulfilled segments, compared with less than half (48%) of the total working population of Canadians. As well, just under half (45%) of these construction industry workers are in the "happiest" segment—Fulfilled—compared with just over a quarter (27%) of the total population.

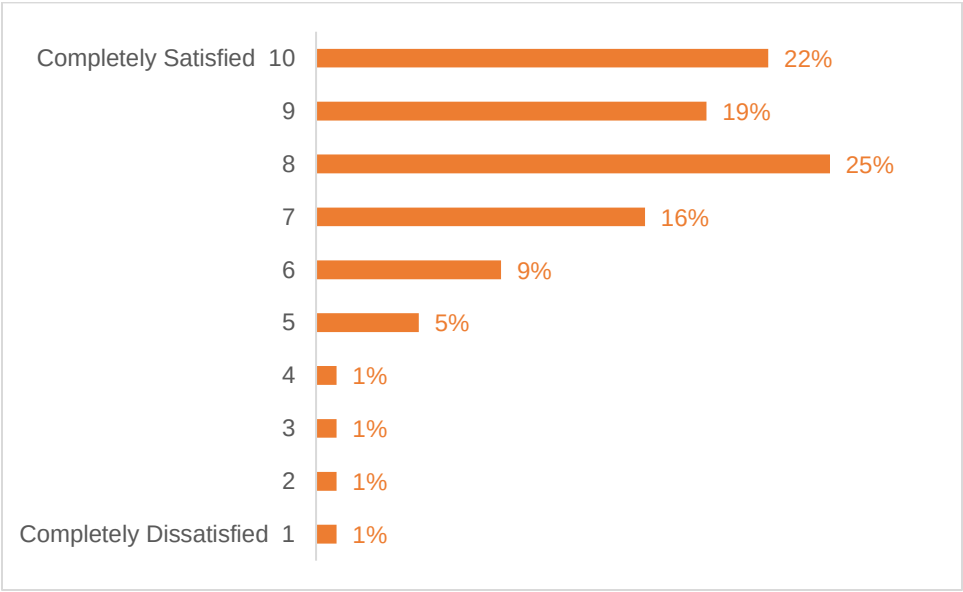
[20] The voluntary, or self-selected, nature of this survey means that the results cannot be regarded as entirely representative of the industry.

JOB SATISFACTION AND THE IDEAL JOB

Job satisfaction is affected by the workers' perception of what an ideal job is or should be, and how close they believe their own working arrangements are to ideal. To understand both issues in-depth, respondents were asked to provide satisfaction ratings based on their current job, as well as "free associations" (the first words or thoughts that come to mind) with their ideal job.

Job Satisfaction

Respondents were asked to indicate their satisfaction with their current job, using a scale from 1 to 10, where 1 means they are totally dissatisfied and 10 means they are completely satisfied. Two-thirds of respondents (65%) rated their satisfaction between 8 and 10. The average level of satisfaction was 7.9. Only 3% rated their job satisfaction between 1 and 3.



Level of Job Satisfaction	Response
Net: Top 2 Box (9 -10)	41%
Net: Top 3 Box (8 -10)	65%
Mean	7.9
Median	8

n=412

Satisfied workers (those with an 8, 9, or 10 satisfaction rating) average the longest time in their occupations (12.1 years), compared with those who feel neutral (7.9 years), making overall job satisfaction a contributing factor to retention. Workers who have passed the 10-year mark are more likely to report being satisfied.

While the characteristics of the most satisfied workers in the construction industry vary, they are more likely to:

- Be over 36 years old.
- Perceive themselves as financially "comfortable" (not necessarily affluent).
- Be married, with children living at home.
- Own a house.
- Feel skilled at what they do.
- Work full-time in a company of more than 100 employees.

This is not to say that these are the mandatory criteria for retention in construction. Rather, the characteristics of this profile should be used to help move all workers closer to being among the most satisfied. Additional research may be needed to deeply understand:

- What makes older workers more satisfied and how can their perspective can be brought to younger workers?
- How can the construction industry encourage younger workers who want to own homes and start families to do so earlier?
- How can milestones like marriage, children and home ownership be connected to a lifetime career in the construction industry?

At the other end of the spectrum, 4% of our sample had rated their level of job satisfaction between 1 and 4. These respondents were then asked to provide one word that describes the major cause of, or reason for, their dissatisfaction.

Below are the main reasons they gave for their dissatisfaction (most provided more than one word):

Reasons for Job Dissatisfaction (with selected quotes)		
Poor Remuneration "Underpaid." "Money, pay." "Not paid for amount of work and stresses."	**Negative Emotions** "Frustration." "Stress." "No loyalty." "No appreciation."	**Discrimination** "Discrimination against women." "Black women don't get much opportunities in the trades!"
Poor Security / Safety "Security." "Safety."	**Workplace issues** "Place sucks." "Poor team relationships."	**Poor Mentorship** "Electricians don't want to teach the apprentices how to do things.
Dirty "Dirty tradespeople."	**Unqualified workers** "Unqualified workers."	**Poor management** "Management."

n=16

Determining the Ideal Job

In the section below, we examine the "free association" comments that participants had in response to the following question:

When you think of your ideal job, what comes to mind? What words, thoughts, feelings, images etc. pop into your mind when you think of your IDEAL job?

Free associations with the ideal job provide an illustration of what construction industry workers would like their job, their workplace, and their employers to be.

The table below shows the Top 20 associations that workers in the construction industry have with the ideal job. This is followed by explanations and detailed responses for each theme.

Rank	Free Association Themes	%
1	Money, Good Pay, Benefits, Financial Security	37.8
2	Feeling Good / Feeling Positive Emotions	23.3
3	Job Satisfaction	12.5
4	Mention of Specific Occupations	12.2
5	The Rewarding Feeling of Fulfilment and Achievement	11.1
6	Work Relationships, Friendship, Teamwork, Collaboration	10.4
7	Good, Hard, Honest, Physical Outdoor Work	9.7
8	Be Your Own Boss, Business Owner, or Manager / Have Power	9.7
9	Freedom, Decision Making Freedom, Independence	9.7
10	Continuous Learning, Gaining Knowledge, Teaching, Mental Stimulation	7.9
11	Relaxed and Comfortable, Doesn't Feel Like Work, Pleasure, Not Hard	6.8
12	Good Work-Life Balance, Good Hours, Family Time, Time Off	6.6
13	Always Challenging, Always Changing, New Tasks	6.5
14	Creative / Being Creative / Creativity	6.3
15	Good Management, Leadership, Mentorship, Problem Solving, Trouble Shooter, Take Care of Team	5.9
16	Flexible Hours / Flexible Schedule	5.9
17	Clean-Environment, Cleaner Job, Environmental Responsibility	5.4
18	Mention of Positions Regarded as Ideal	5.4
19	Respect / Being Respected / Giving Respect	4.1
20	Stable, Steady, Stability	3.8

n=412

#1 – Money, Good Pay, Benefits, Financial Security (37.8%)

The top association with the ideal job related to income. A high/good income was mentioned by 13% of our sample. 11% simply referred to "Money!" About 7% mentioned benefits and 3% job security. Some associations with an ideal job related to generating wealth or profits (2%), and some related simply to earning a fair or decent wage (1.5%)

Related Associations	%
Good Pay / Well Paid / High Pay	13.0
Money	11.0
Benefits	7.0
Financial Security / Stability	3.0
Wealth / Profits	2.0
Fair Pay / Comfortable	1.5
Equal Pay / Equality	0.3

n=412

#2 – Feeling Good / Positive Emotions (23.3%)

At 23%, the second-largest group of associations with the ideal job included mentions of a wide range of positive emotions. The category included mention of feelings like fun, happiness, enjoyment, excitement, being inspired/motivated, loving your work, and pride. In general, individuals are not very good at describing their feelings, so it is unusual that positive emotions made up the second-most important category of associations with the ideal job.

Related Associations	%
Fun / Having Fun	5.0
Happiness / Feel Happy	4.5
Enjoy / Enjoyable	4.5
Exciting / Excitement / Excited	1.6
Inspired / Motivated	1.6
Love My Work	1.3
Self-Confident	1.0
Pride	1.0
Busy / Energized	1.0
Stimulating / Stimulation	0.5
Trust / Trusting	0.5
Responsible / Responsibility	0.4
Empathy / Understanding	0.4

n=412

#3 – Job Satisfaction (12.5%)

At around 13%, the third-largest category of associations related to job satisfaction and included mentions of satisfaction with one's own job or work (7%), belief that one's own job was ideal (3%), and the feeling that the ideal job was easy/pleasing to do.

Related Associations	%
Feel Satisfaction / Satisfying	7.0
My Own Job is Ideal	3.0
Job Seems Easy / A Pleasure	2.0
Great	0.5

n=412

#4 – Mention of General Occupations (12.2%)

The fourth category in the ranking of associations with the ideal job were mentions of occupations. Although a wide range of "ideal" jobs were mentioned, they were mostly in the field of the skilled trades. Top mentions included: engineers, electricians, people in more senior or supervisory positions (supervisors/ foremen and managers), as well as people who are highly skilled, certified, or self-employed.

#5 – The Rewarding Feeling of Fulfilment, and Achievement (11.1%)

The fifth category in the ranking of associations with the ideal job were powerfully rewarding feelings of fulfilment, achievement, recognition, passion, collaboration, and a sense of meaning that resulted from a good job well done.

#6 – Work Relationships, Friendship, Teamwork, Collaboration (10.4%)

Ranked sixth in terms of associations with the ideal job was a category that included friendship in the workplace, the importance of personal relationships, working with good people, teamwork, and a good atmosphere and work environment.

#7 – Good, Hard, Honest, Physical Outdoor Work (9.7%)

The next category included associations of their ideal job with being outdoors, or with good, hard, honest, physical work.

#8 – Be Your Own Boss, Business Owner or Manager, Have Power (9.7%)

Tied with #7, the next frequent association with the ideal job was being your own boss, becoming an entrepreneur and owning your own business, or becoming a manager in an existing business. The category included mentions of the power and importance of being in control.

#9 – Freedom, Decision-making Freedom, Independence (9.7%)

Tied with #7 and #8 was the notion of the ideal job involving 'decision-making freedom' and the ability to work independently. This concept is closely related to #8 above – 'being your own boss'. In fact, if these two categories were combined into one larger category of "Desire for Freedom, Independence, Autonomy, Being Your Own Boss," the new category would be in third place overall. For construction industry workers, **decision-making autonomy** is a key feature of their ideal job.

#10 – Continuous Learning, Gaining Knowledge, Teaching, Mental Stimulation (7.9%)

In 10th place, with associations around 8% was the belief that the ideal job involves continuous learning and mental stimulation, gaining and building knowledge, teaching and being mentored.

#11 – Relaxed and Comfortable, Doesn't Feel Like Work, Pleasure, Not Hard (6.8%)

In 11th place was a category of comments emphasizing how the ideal job didn't even feel like work. It is effortless, comfortable, relaxed, easy, and a pleasure. You feel like you were made for the job, you love your work, and never even watch the clock!

#12 – Good Work-life Balance, Good Hours, Family Time, Time Off (6.6%)

In 12th place was the notion that the ideal job offers reasonable work hours, enabling a good work-life balance with time for family.

#13 – Always Challenging, Always Changing, New Tasks (6.5%)

In 13th place was the association of the ideal job with an ever-changing and challenging work environment, one where the work is varied and tasks differ from day to day.

#14 – Creative / Being Creative / Creativity (6.3%)

In 14th place was the association of the ideal job with creativity and imagination. People in the construction trades are aware that their work is not widely regarded as creative. Many made a point of emphasizing the creative dimension of their work.

#15 – Good Management, Leadership, Mentorship, Problem Solving, Trouble-shooter, Take Care of Team (5.9%)

This category described the qualities of a good manager as being a good leader and problem solver as well as being supportive and a good listener. Having a good manager was clearly regarded as integral to the ideal job.

#16 – Flexible Hours / Flexible Schedule (5.9%)

In this category, the association of the ideal job is with flexibility, having flexible hours, and a work schedule that matched one's personal needs/life situation.

#17 – Clean Environment, Cleaner Job, Environmental Responsibility (5.4%)

This category of associations relates to a clean or cleaner job, and to a cleaner environment.

#18 – Mention of Specific Positions Regarded as Ideal (5.4%)

Tied with #17 is that over 5% of respondents mentioned positions they presumably regarded as ideal (possibly aspirational), such as a manager or a project manager.

#19 – Respect/Being Respected, Giving Respect (4.1%)

About 4% of respondents associate the ideal job with being treated with respect and having management who are respectful.

#20 – Stable, Steady, Stability (3.8%)

The final association in the top twenty, mentioned by almost 4% of our respondents related to job security and stability.

HOW CLOSE ARE CONSTRUCTION JOBS TO IDEAL?

Respondents were asked to rate how close they believed their current job was to their ideal job:

Overall, how close would you say your work as a/an _____ is to your ideal job on a scale from 1 to 10? Where 1 means it's not at all ideal (it's "just a job" to you) and 10 means it's your ideal job (it's exactly what you're meant to be doing).

The average proximity score was 7.5, while the median was 8. More than half (57%) of respondents gave a rating of 8 to 10, meaning that their current job was very close to their ideal job. As well, over a third (37%) of respondents selected either 9 or 10, and of this, 19% gave a score of 10. Only 5% of survey respondents gave ratings of 1 to 3.

It can be said that most workers in the construction industry are in the ideal job for them. This is especially the case for those ages 36 to 52 (Generation X), two-thirds (67%) of whom gave scores of 8 to 10, with an average score of 7.9.

The workers who believe their job is closest to ideal are those with 15 to 19 years of experience (72%). This group also tends to be the most satisfied (84% reported high satisfaction with their jobs).

In contrast, both groups of Millennials have the least idyllic view of their jobs with an average score of 7.3. Still, like other age cohorts, the majority of Millennial construction industry workers give a high score of 8-10.

Male construction industry workers are slightly more likely to view their jobs as close to ideal, with an average score of 7.6, compared with 7.1 for females. To that end, males are much more likely to view their job as a perfect fit, with 20% of men giving a score of 10, compared with 10% of women.

Compulsory trade workers are more likely to claim that their job is a perfect fit, with 27% of them giving a score of 10, compared with 17% of voluntary trade workers and 18% of Trades Support workers.

Among the job categories, there could be cause for concern given that Carpentry-related Trades & Labourers report lower ideal scores than the sample average (7.2 vs. 7.5). While more than half (53%) of Carpentry-related Trades & Labourers gave a score between 8 and 10, they still lag behind when compared with more specialized job categories like Pipe & Vent Workers (average score 7.9). This could indicate that specialization is an important factor in whether a job is perceived as ideal in the construction industry.

Among Trades Support roles, Designer & Planners[21] report their jobs as the least ideal (average score 7.0). This may be because they are furthest removed from the construction process/build itself, meaning they may not feel the reported sense of accomplishment among those who physically work to complete the project.

A worker's close proximity to the ideal job is strongly associated with being in the Comfortable and Fulfilled segments and most weakly associated with being a Square Peg.

Higher levels of job satisfaction are correlated with higher ideal job ratings. Jobs that are seen as ideal and generate feelings of satisfaction increase a worker's intention to recommend their jobs to young people.

[21] Small base size for Designers & Planners: *n=26*

RECOMMENDATION INTENT

Respondents were asked how likely they would be to recommend that young people enter their trade, where 1 meant they would definitely not recommend their trade and 10 meant they definitely would.

Nearly two-thirds (65%) of respondents rated their recommendation intent as 8, 9, or 10, with an average score of 7.8. These scores are consistent across most categories of construction industry workers who are satisfied and who view their job as close to ideal. As well, workers with 20 to 24 years of experience are most likely to recommend their job to young people (78%).

The main exception, however, is that a large gap was observed between workers in compulsory and voluntary trades. 70% of compulsory trade workers were likely to strongly recommend (8 to 10 score) their job to young people, compared with only 62% of voluntary trade workers.

Only 7% of respondents (29 people) rated their likelihood of recommending their trade at between 1 and 4. These respondents were asked a follow-up question:

Would you recommend to someone that they work in another trade instead or in another field of work altogether?

Of the 29 respondents, 15 indicated that they would recommend another field altogether and 11 had no opinion on the matter.

CHAPTER 4
SHORTAGES & SOLUTIONS

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SHORTAGES & SOLUTIONS

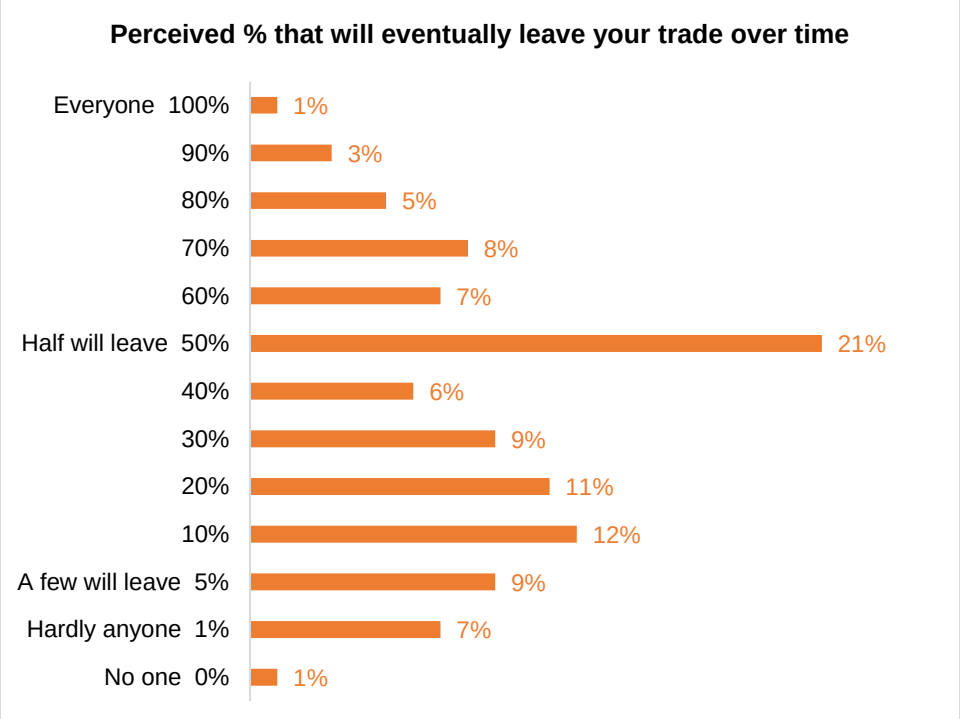
In this chapter, we discuss the retention and recruitment challenges as prioritized by construction industry workers, as well as proposed solutions.

RETENTION ISSUES

Respondents were asked to indicate, based on their experience, the percentage of people who start out in their job that will end up leaving.

While 17% of our respondents were optimistic that under 5% of people who started out in the field would ever leave, another 8% were pessimistic, believing that over 80% of people in their field would eventually leave for other opportunities.

On average, the expectation was that over a third (37%) of workers in one's field would eventually leave their job.



Perceived % that will eventually leave your trade over time	%
Net: Top 3 Box (80 to 100%)	9
Net: Bottom 3 Box (0 to 5%)	17
Mean	36.9

n=412

Millennials, Females, and Non-Union workers were slightly more pessimistic than other groups. Their average perception among these groups was that between 39% and 42% of workers would leave their job over time.

While such attrition estimates from workers confirm that retention is a concern, the reasons why workers may leave provide insight into the overall culture of the construction industry. That is, many believe that a worker "leaves" one's trade upon accepting a better offer elsewhere, being promoted to a management position, or becoming an entrepreneur. These are arguably "good" reasons for leaving as they relate to pursuing other opportunities, often within the construction industry.

Therefore, the top reasons for leaving could be divided into good reasons and avoidable reasons:

Good Reasons, Related to Opportunities

Reasons for Leaving*	%
People get better offers.	52
They have other opportunities.	51
They leave to start their own businesses.	35
People get offered promotions / become managers.	27
Poaching / they get taken by the competition.	14

*n=408 *Only those believing that more than 0% will leave were asked to provide an answer.*

Avoidable Reasons, Related to Difficulties with Work and Job Conditions

Reasons for Leaving*	%
The work is really tough.	32
It's unpleasant working in the cold.	27
It's dirty work.	26
The hours are long.	26
It is back-breaking work.	25
Poor on-site conditions.	13
Poor on-site facilities – bathrooms, locker rooms.	11

*n=408 *Only those believing that more than 0% will leave were asked to provide an answer.*

Two other categories related simply to the need for a change or a vision, and to problems associated with poor management:

Need for Change

Reasons for Leaving*	%
They get tired of it.	25
The grass looks greener on the other side.	26
They get bored with it.	14
Lack of a clear career path.	13

*n=408 *Only those believing that more than 0% will leave were asked to provide an answer.*

Poor Management

Reasons for Leaving*	%
Old style managers – yelling, bullying, playing favourites.	17
Poor managers / supervisors aren't good.	16
Lack of respect on job site.	16
Unrealistic expectations.	13

*n=408 *Only those believing that more than 0% will leave were asked to provide an answer.*

IMPROVING RETENTION

Respondents were asked to indicate what actions could or should be taken to retain good workers by selecting from a list of possible recommendations. This list was derived from our May 10, 2018 symposium with industry stakeholders.

The top recommendations included remuneration and training, as well as providing more opportunities and clearer steps to advancement. Respondents also recognized the importance of having better outdoor clothing in the winter.

The following table contains a ranked list of ideas of improving retention:

Rank	Recommendation	%
1	Increase rate of pay.	48
2	Give incentives for helping in training new people.	37
3	Provide more options for advancement/ more salary and promotion levels.	34
4	Offer opportunities to gain additional training.	28
5	Develop better on-the-job training plans and goals.	22
6	Provide better / high tech clothing for people working in winter conditions.	16
7	Greater transferability of skills in the trades.	15
8	Reduce workload.	15
9	Improve mobility between trades.	14
10	Develop the technology to work in winter so that the work isn't seasonal.	14
11	Promote and celebrate the voluntary trades.	13
12	Lobby the government to provide support for training for voluntary trades.	12

n=412

Respondents were also asked if they had additional suggestions of their own for retaining workers. 8% provided answers. Their ideas for retention centred on:

- Improving management practices, particularly regarding the need to treat workers with more respect.
- Promoting the image of the trades while confronting the realities and negative perceptions directly.
- Focusing on the basics, like financial incentives/commissions/write-offs, providing benefits, improving work conditions/reducing long working days/hours.
- Skills development/training/upgrade.
- Addressing discrimination, including prejudice against women in the workplace.
- Addressing safety concerns.
- Facing union concerns.

Appendix B provides supporting quotes for each of the above ideas for retention.

Finally, some respondents took the opportunity to point out that movement out of the trades is inevitable for certain workers:

- *"Not everyone likes it - there will always be movement between jobs."*
- *"Some people are just gonna use electrical as stepping stone and leave to go onto things like Hydro, Fire Alarm, PLC controls, etc., nothing you can do to stop them."*
- *"Some people leave because it's not for them."*
- *"Some people don't have what it takes to pass their trade license exam."*

INTER-JOB CATEGORY RETENTION

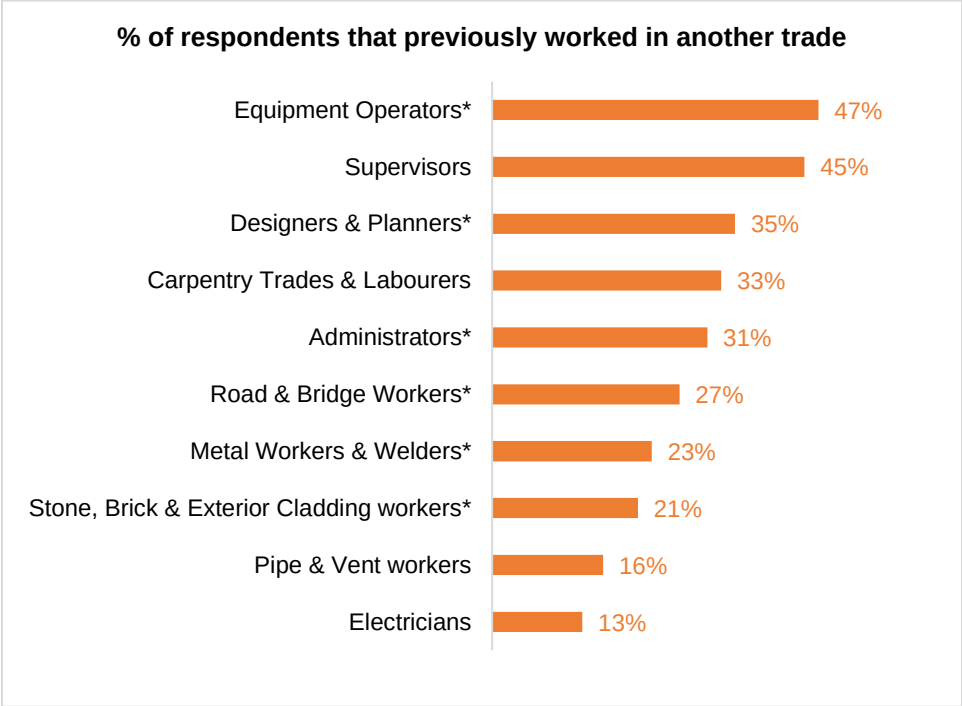
In total, nearly a third (30%) of respondents reported working in another job from our industry list prior to their current role.

Movement among construction trades jobs appears to affect all generational age groups, including Young Millennials. For this young cohort, switching may be a result of new curricula for training programs that cover a broader range of skills (e.g. labourers learn a little woodworking, a little plumbing, a little electrical, etc.). Alternatively, this group could be restless and are switching to find the ideal job fit.

Meanwhile, workers in compulsory trades are less likely to report working in another trade prior to their current one. Only 12% of compulsory trade workers report having experience in another trade, compared with 35% of voluntary trade workers and 38% of Trades Support workers. The compulsory trades and their accompanying certifications may be seen as aspects of job security, leading to higher retention rates.

The most common construction jobs that respondents report holding prior to their current one are general labourer (20% of all respondents with prior experience), general carpenter (20%), and construction craft worker (16%). While well-paid, these jobs might be considered as "entry-level" roles in residential construction, where workers gain experience before moving on to a specialized role.

Among the job categories, below are the figures on previous trades experience:



*n=123 *Small base size*

Additional analysis revealed that 60% of respondents in the Carpentry-related Trades & Labourers category have switched roles within the same category. These workers move between roles within the category at a rate that is almost triple that of those who bring their experience from a different category. Among current Carpentry-related Trades & Labourers:

- 19% have previously worked as Road & Bridge Workers
- 15% have previously worked as Stone, Brick & Exterior Cladding workers
- 13% have previously worked as Equipment Operators
- 12% have previously worked as Electricians

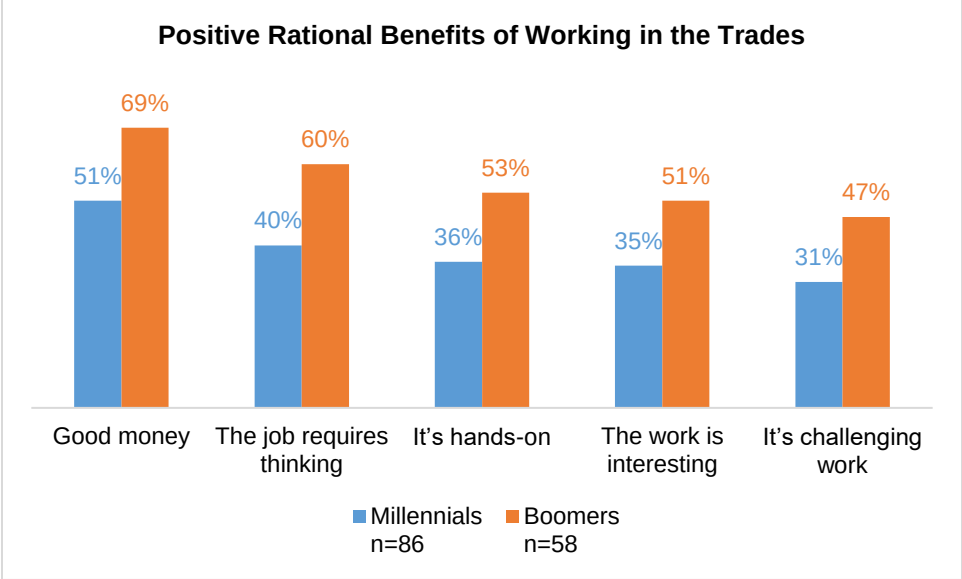
Most movement is within the Carpentry-related Trades & Labourers category, or from a Construction Trades role to a Trades Support role. In fact, 38% of respondents in Trades Support roles have previous experience in another trade.

Among those who remain on the tools (i.e. have not moved to a Trades Support role) and are not within Carpentry-related Trades & Labourers, most respondents have moved into the Pipe & Vent Workers category than any other (11% of these workers have done so), making it an important destination on the construction industry workers' career path.

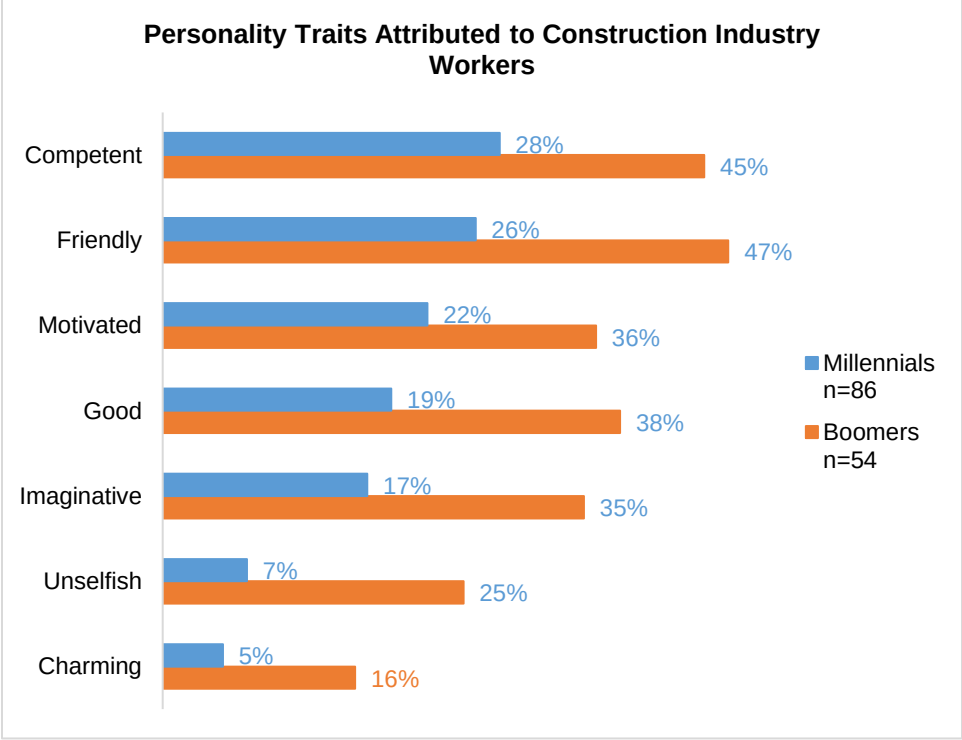
MENTORSHIP FOR MILLENNIALS

Finally, in looking at retention in the construction industry, it is worthwhile to consider some significant differences between its relatively newer workers (Millennials) and those who are nearing retirement (Boomers), along with the importance of mentor-mentee relationships in the construction industry.

To begin, as shown in the table below, Millennials are much less likely than Boomers to cite the positive rational benefits of working in the trades, such as high wages, using their minds and hands, perceiving their work as interesting or challenging.



In addition, Millennials are much less likely to describe construction industry workers as Friendly, Competent, Motivated, Good, Imaginative, Unselfish, or Charming.



When these two tables are taken together, it may be worthwhile to consider the impact of having Boomers as mentors to Millennial workers. As it stands, Millennials do not appear to hold their co-workers in high regard with respect to personal qualities like friendliness, motivation, imagination, and charm. Could this opinion be connected with Millennial's lesser appreciation for their work as hands-on, interesting, or challenging?

Millennials are more than twice as likely as Boomers to cite the "lack of a clear career path" (20% vs. 8%) as a reason that individuals leave the construction industry. Millennials are also twice as likely as Boomers to report feeling "fatigued / tired out" at work (32% vs. 16%). And finally, Millennials are twice as likely as Boomers to believe that reduced workloads would help retain workers (26% vs. 11%).

Conversely, Boomers are twice as likely as Millennials to report feeling "Loyal" at work (40% vs. 18%). This raises the questions: How important are Boomers in ensuring that Millennial workers develop a higher regard for their colleagues and a greater appreciation for using their minds and bodies at work? How can Boomers, who are nearing retirement, be incentivized to mentor the construction industry's newest workers?

RECRUITMENT ISSUES

When asked about labour shortages in the construction industry, there was a fairly wide range of perceptions. Close to half (44%) of respondents agreed that there are big or fairly big shortages, particularly in Civil Construction and among Road & Bridge Workers.[22] A quarter (25%) feel there that are some shortages, especially those who work in Stone, Brick & Exterior Cladding.[23] Another 14% did not really believe there were shortages (particularly among Electricians), with 9% believing there were exactly the right number of jobs and 5% believing there are in fact too many or way too many people wanting to enter their trade.

About 17% did not know or preferred not to answer the question.

Perception of Shortages	%
There is a big shortage of people needed in your trade.	27
There is a fairly big shortage of people needed in your trade.	17
There's some shortage of people to fill the needs of your trade.	25
There's exactly the right number of people for the number of jobs available.	9
There are too many people wanting to enter your trade.	4
There are way too many people wanting to enter your trade.	1
Don't know.	12
Prefer not to answer.	5

n=412

[22] Small base size for Road & Bridge Workers: *n=22*
[23] Small base size for Stone, Brick & Exterior Cladding Workers: *n=28*

The 69% of respondents who believe that there is a shortage were shown a list of potential reasons (derived from our May 10, 2018 symposium with stakeholders) and were asked to click on the reasons they believed or felt were true and relevant.

Almost half (46%) believed that a reason for the shortage was that "Young people are encouraged to go to university or college rather than consider the trades." As well, nearly a third (32%) believed that "Everybody wants to go work on computers these days."

When grouped together, there is commonality around other overarching reasons for the shortages in the construction industry. The largest grouping (96%) involves the stigma that is attached to the trades. These negative perceptions, as discussed by Stewart and McCardle (2019)[24] are an example of "mental models" in behavioural economics—or views of the world that are structured by one's community and experiences. While a young person's mental models can be changed, doing so requires time and consistency of messaging from influential people and groups.

Stigma Attached to the Trades (96%)

Reasons for Shortages	%
People look down on the trades.	35
Parents discourage children who might want to enter a trade.	32
People look down on those who work with their hands.	29

n=284

The Trades are Not for Everyone (91%)

Reasons for Shortages	%
The work is seen to be too hard / tough.	45
Some people aren't good with their hands - they're only 'computer smart'.	24
People don't like working outdoors.	22

n=284

Lack of Knowledge (70%)

Reasons for Shortages	%
People don't know enough about the trades.	41
Guidance counsellors and teachers don't promote the trades.	24

n=284

[24] James (Jason) Stewart and Lindsay McCardle, "A Behavioural Economics Approach to Recruitment in Skilled Construction Trades", (Vaughan, ON: Residential Construction Council of Ontario (RESCON), 2019).

Lack of Support from Government and Industry Stakeholders (54%)

Reasons for Shortages	%
Not enough support to get into the trades.	22
The right information is tough to find.	14
The government is not bringing in enough immigrants who are in the trades.	9
Employment pathways don't exist.	9

n=284

All respondents were asked what they personally thought could be done to help recruit people into the trades. First, they were shown a list of ideas, which emerged from our May 10, 2018 symposium with industry stakeholders. They were then asked to click on the recommendations that they supported.

Four of the top five selections involve having youth directly involved in construction work and projects. These suggestions are not for an academic overview in a classroom setting, but rather to get young people actually involved at a work site or in a shop class—with real tools.

Greater youth involvement in the trades was a major theme from the workshop and is reflected in the top selections. The need for improved promotion (i.e. marketing the jobs) underpins an overall outreach strategy. The crucial task in the minds of most workers, however, is to bring more young people on to the site and have them try out a few job roles. This gives young people a better appreciation of the physical and mental requirements of the job, while also showing them that they are capable of getting started in the field.

Recommendations for Recruitment	%	Recommendations for Recruitment	%
Co-op programs for students.	44	Provide promotional material for guidance counsellors and teachers.	22
Expose students to youth apprenticeship programs.	41	Focus on success stories from students.	22
Run school programs.	35	Create better online information and websites.	22
Increase the number of shop classes in high school.	33	Advertise to parents.	20
Advertise, promote, and showcase the trades better.	30	Focus on advice from mentors and teachers.	19
Field trips, site tours, pre-apprenticeship programs.	29	Online job sites, more online video material.	14
Job shadowing, job trials, holiday jobs.	29	Apply for grants to do research and develop strategy.	14
Guest speakers talking about the trades - including speakers from underrepresented groups.	26	Lobby government to recruit immigrants with trade skills.	12
Offer more certificate programs at colleges.	26	Create an organization or body with a website to represent the voluntary trades.	11
Start younger, target elementary schoolkids.	25	Run holiday skills camps.	9

n=412

Respondents were also asked whether they themselves had additional ideas on how to recruit people into the construction industry.

About 1 in 10 respondents suggested their own ideas. Some of the top suggestions related to improving pay, providing work year-round, investing in marketing, taking on stigma, addressing discrimination, and improving and incentivizing training:

- Improve earnings or non-monetary benefits (e.g. healthcare) for entry-level and low-seniority roles.
- Provide consistent work year-round, or spread earnings evenly throughout the year, and set realistic expectations around roles that are seasonal.
- Improve training by simplifying the apprenticeship process for journey-persons and connecting skills with broader education curricula.
- Invest in marketing the trades, particularly to the influencers of young people's post-secondary education and training decisions.
- Change perceptions of the trades/address misperceptions through media production and direct messaging to youth.
- Create incentives that help employers locate new, willing workers to hire and train, and make these incentives highly visible to companies in the construction industry.
- Address discrimination and bullying with more enforcement of existing codes of conduct, and the creation of incentives for under-represented groups to start in construction.
- Offer internships and summer camps as a method to integrate young people into the Construction Trades early in their work-life.

Appendix C provides supporting quotes for each of the above suggestions for improving recruitment.

CHAPTER 5
RECOMMENDATIONS

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RECOMMENDATIONS

Many construction workers and industry stakeholders are in agreement that the construction industry has a marketing problem. An important objective in addressing this involves getting industry alignment around messaging, retention, and recruitment strategies.

The following recommendations are intended to spark discussion about the willingness to implement creative retention and recruitment strategies. It is important that the knowledge gained from this study be made widely available to those engaged in the broader construction industry (e.g. employees, associations) and other stakeholders, and that a framework be developed for doing so.

1. LEVERAGE THE INDUSTRY'S MASSIVE NETWORK IN RECRUITMENT

The first step in retention is hiring the right workers. The construction industry's network is among the largest in the country and it is time to promote itself accordingly. The best recruiters can be found within the industry itself. Building suppliers, owners, accountants, lawyers, architects, salespeople, contracts managers, engineers, and building officials all represent construction industry success stories. They must be called upon to communicate the industry's best kept secret—that the opportunities for a fulfilling career in construction are widespread and that job satisfaction levels are high.

2. INTEGRATE CONSTRUCTION EARLY IN THE EDUCATION SYSTEM

Exposure to construction careers must begin in elementary school to shape the perceptions of guidance counsellors, teachers, student, and parents. This includes weaving construction industry themes into the school curriculum, along with bringing back shop class with everyday applications. It also means promoting Construction jobs to all students, whether they are book-smart, hands-on, tech-savvy, or entrepreneurial. You don't have to just be good with a shovel to have a fulfilling and well-paid career in construction.

Construction careers should also be introduced contextually in other subjects, such as math and logic word problems or essay assignments. The potential linking to early-childhood programming, such as "Bob the Builder" and Netflix's "Dinotrux," is also recommended to increase engagement.

The report also suggests many ways in which adolescents can be exposed to Construction careers, including:

- Practical shop classes at school.
- Job camps, job trials, job shadowing, and holiday jobs.
- Guest speakers from the industry.
- Pre-apprenticeship programs.

Introduce and Promote "Balanced Intelligence"

To successfully improve retention in the construction industry, there must be greater respect for its workers in society at large. A major approach to correcting the prejudice against Construction workers is to introduce and promote the concept of "balanced intelligence" – or practical, body-and-brain intelligence. This is in contrast to the prevailing ideal of "academic intelligence" and "book smarts," often to the point of impracticality in today's age. Construction is getting "smarter," becoming less about physicality (e.g. heavy lifting), thanks to technological advancements. If you want a tech job, if you want to put your body and brain to work, if you want to contribute to the wellbeing of society, get into construction.

Apply a Behavioural Economics Framework to Career Information

Today's young people need assistance in not only navigating the many disparate sources of career information, but also in taking the first steps to career education and training. We recommend that a Behavioural Economics (BE) framework be adopted by school boards across Ontario in the organization and presentation of information, and in the transition to construction industry jobs. As described in detail by Stewart and McCardle (2019),[25] BE recognizes that, when presented with new information, it is not only the visual presentation ("information architecture") that affects choice, but also the way in which such choices are presented ("choice architecture"). This extends beyond the screen or catalogue to the individual(s) who is communicating the information to young people ("messenger effects").

The authors also emphasize the critical importance of minimizing the number of steps between discovering a new construction career and getting started in the industry ("the last mile"), along with drastically improving the way in which post-secondary paths and subsequent career paths are tracked over the long term.

See Appendix E for an overview and summary of key findings from Stewart and McCardle's (2019) report on applying behavioural economics to recruitment in the skilled trades.

3. INVEST IN HIGH QUALITY MEDIA PRODUCTION

The construction industry needs to sell itself in order to attract people. To address the construction industry's marketing problem, we recommend creating high-quality video programming and websites for use in schools and training centres.

Other types of media production include:

- A YouTube series featuring interviews with young workers in the construction industry who are passionate about their jobs. The interviews should be of high production value and approximately 2 to 4 minutes in length. Each video should be accompanied by a "Get Started" link, which brings the viewer to an uncluttered sign-up page or to the appropriate email, phone, text, or social media contact.

[25] James (Jason) Stewart and Lindsay McCardle, "A Behavioural Economics Approach to Recruitment in Skilled Construction Trades", (Vaughan, ON: Residential Construction Council of Ontario (RESCON), 2019).

- Documentary material showing the importance of the nature of work performed by the trades to society at large, such as building and repairing, protecting and defending, cleaning and sanitizing, and making the wheels of industry turn.
- Documentary material that promotes the role of women in the trades and portrays the trades as a viable pathway to self-sufficiency for those in marginalized communities (e.g. low-economic, racialized, and indigenous groups).
- A “reality TV” program in which teams of construction industry workers compete against other types of workers on real-world challenges, such as getting across a river, building a shelter, or bringing water to a community.

4. MOBILIZE COMPANIES AND ASSOCIATIONS TO ADDRESS RETENTION

Provide Guidance on On-Site Conditions

Harsh weather continues to be viewed as an inevitable barrier to work. It is also believed that a main reason for leaving the construction trades is the poor weather and the resulting on-site conditions.

It is recommended that a committee be utilized to discuss means of improving on-site conditions. The committee could consider adopting a framework of building employee loyalty through the provision of adequate or comfortable facilities for men and women at the job site (e.g. washrooms vs. portable toilets).

Provide More Training Opportunities

Encourage residential construction and infrastructure companies and associations to provide more training opportunities that will build loyalty among workers. Investigate opportunities for skills development, training, upgrading, and their related incentives. This could be connected with the creation of a standardized promotion hierarchy.

Create a Centralized Resource “Hub” for Construction Workers

Construction workers learn from experience and through contact. Our aim should be to ensure that the right and best learning opportunities and educational material are made available, and that tradespeople know where to find them. We recommend the creation of a centralized online resource that hosts information on training within construction careers, opportunities for advancement, seamless communication mechanisms, carpool scheduling, and more.

Formalize and Articulate Career Opportunities

Provide career clarity so that workers know their advancement potential. Help construction industry workers build a career by articulating roles like crew lead, team lead, foreman, and site supervisor, along with clear requirements and timelines for advancement.

Launch a Guild for Workers in the Voluntary Trades

We recommend the creation of a centralized website for workers in the voluntary trades. This would be especially useful for younger workers who are seeking a sense of community and affiliation. The website would provide information on group benefits, financial training, lead generation, vehicle leasing, family and social events (networking), and more.

Provide Tools to Improve Communication and Transparency around Scheduling of Work

Provide easy-to-access business help for piece workers and small businesses. This may involve the creation of apps to assist with quoting work, scheduling, financial credits, tax write-offs, commissions, setting up email, and other supports that reduce uncertainty and stress while improving productivity by allowing workers to focus on their primary offering, their skills.

Provide Guidance for Seasonal Workers

It is recommended that a committee be utilized to discuss means of helping seasonal workers plan for the realities of seasonal work, including financial planning, education and training plans, managing family expectations, and keeping up morale.

CONCLUSION

On the whole, work-life for workers in the residential and related-infrastructure trades in the GTA has been found to be superior to that of those in many other industry sectors. They report high average scores for their skill levels and job satisfaction. They also indicate a desire to advocate for their trade and an overall positive attitude toward their work.

So, if construction industry jobs are so great, why would anybody want to leave?

Workers themselves report varied opinions regarding why some of their colleagues will "leave." This raises fundamental questions about how to define retention in the construction industry:

- What does it mean to "leave" the trade?
- If a worker takes on a new role within their company, do they "leave" construction?
- If a worker decides to start their own small business, do they "leave" the trades to become a business person?

In this way, some of the concerns about retention in the GTA construction industry are perceptual.

In fact, many workers admit that their colleagues have "left" for good reasons: a promotion, or a better opportunity, or to start a business. These decisions do not necessarily indicate that their colleagues are leaving the construction industry, nor do they confirm that those who actually leave have decided to stop working on the tools or with heavy equipment.

It may be that the industry itself is falling victim to the stigma around working in "trades" jobs. That is, the jobs that are so essential to performing building tasks on a project are seen as "lesser" work that nobody wants to do—even in the industry. These roles are portrayed as stepping stones, necessary evils, a time to "pay your dues" before you can transition into a more desirable role. Perhaps much of the anxiety around retention issues is arising from the perception that nobody wants to do this work.

While the top suggestion to improve retention is to pay more, the results show that this is just one foundational element of the retention puzzle. Good wages are needed to attract good workers, but what makes them stay is much closer tied to the intangible aspects of the job and the feelings it gives to the men and women doing the work: independence, creativity, self-reliance, and a sense of balanced intelligence.

Workers are seen to "leave" when they begin making money in a role that provides these intangible benefits in the way that society narrowly appreciates. One person may be a bricklayer and another a business owner who also lays bricks. They are fundamentally the same, but the business owner is presumed to be more independent, creative, self-reliant, and intelligent because he or she is out there "making it" alone.

Therefore, in order to have the greatest impact on retention, it must be effectively communicated to society that all construction industry workers are intelligent, creative, and self-reliant. This begins by rallying workers—whether they are on the tools or in the office—around a positive and consistent message about the construction industry. These jobs must be celebrated for the tangible and intangible benefits they bring to the young men and women who dismiss the stigma and enter the industry.

Improved retention can be achieved with strategic endeavours to address certain structural challenges, including helping manage the seasonal nature of the work through improved financial and training support, in addition to striving to mitigate the impact of weather.

A greater challenge, though, will be in overcoming the perceptual element of retention, in which the jobs themselves are seen as intrinsically "lesser" or undesirable by those inside and outside the industry. However, a shift in perception can be achieved by centralizing the messaging and resources within and around the construction industry. If done steadily, even if slowly, the benefits to individuals and society will be immense.

APPENDIX A

POSITIVE PERCEPTIONS OF CONSTRUCTION INDUSTRY WORKERS

Rank	Positive Perceptions of Construction Industry Workers	% Avg.
1	**Competent, Knowledgeable and Conscientious** Wants to feel informed and professional, and to understand, explain and predict. (But could come across as a bit critical, stubborn, or a 'know-it-all'.) 51% Hard-working, 38% Professional, 38% Knowledgeable, 32% Intelligent, 31% Competent, 31% Organized, 29% Disciplined, 20% Serious, 17% Wise, 16% Intellectual, 15% Perfectionistic,12% Inspiring, 11% Important, 9% Strict, 6% Fussy, 3% Geeky, 3% Discerning, 3% Deep.	20
2	**Careful, Practical, Respectable and Reliable** Wants to feel safe, and be protected in their community. (But could come across as a traditional, old fashioned or too conservative.) 33% Respectable, 32% Reliable, 28% Trustworthy, 26% Practical, 22% Mature, 21% Careful, 13% Traditional, 13% Old fashioned, 12% Authentic, 10% Neat, 9% Conservative, 5% Private.	19
3	**Successful, Ambitious and Influential** Wants to feel confident, and be inspiring and in control. (But could come across as a bit arrogant, selfish, impatient or pushy.) 31% Motivated, 29% Self-confident, 27% Independent, 27% Tough, 26% A leader, 25% Successful, 21% In good shape, 19% Ambitious, 16% Alert, 13% Health conscious, 12% Masculine, 12% Entrepreneurial, 11% Outspoken, 11% Intense, 9% Influential, 5% Remarkable, 5% Complex, 4% Sophisticated.	18
4	**Normal, Decent and Down to Earth, with Family Values** Wants a quiet, peaceful and comfortable life. (But could come across as a bit ordinary, tired, or boring.) 27% Down to earth, 26% Helpful, 23% Loyal, 19% Humble, 15% Calm, 11% Protective, 8% Uncomplicated, 8% Ordinary, 7% Quiet, 7% Contented, 5% Introverted.	14
5	**Passionate and Extraverted, who Loves Freedom and Change** Wants to feel alive and excitement, and to be dynamic, creative and different. (But could come across as a bit crazy, or a show-off or an adrenaline-junkie.) 25% Creative, 23% Energetic, 17% Interesting, 17% Imaginative, 16% Outdoorsy, 15% Passionate, 10% Sporty, 10% Different, 9% Exciting, 5% Extroverted, 4% At bit over the top, 4% A Rebel.	13

Rank	Positive Perceptions of Construction Industry Workers	% Avg.
6	**Friendly, Sociable and Charming** Likes people, and feels as if their “soul” is related to all humanity and to nature itself. (But could come across as a bit disorganized or too idealistic or sentimental.) 31% Friendly, 28% Easy going, 24% Likeable, 6% Wonderful, 6% Charming, 2% Mysterious, 2% Cute, 1% Romantic.	13
7	**Open, Active and Accepting of Life Experiences, and of Other Cultures** Wants to have fun, and feel the pleasure and joy of life. (But could come across as a bit rebellious, impulsive, or too liberal.) 26% Open minded, 20% Happy, 16% Fun, 14% Young at heart, 11% Witty, 11% Cool, 8% Goofy, 8% Free spirit, 5% Popular, 4% Liberal, 4% Attractive, 3% Fashionable, 2% Flirtatious, 1% Sexy.	10
8	**Kind, Co-operative, Loving and Nurturing** Feels Compassion and Empathy, and wants to be a Good person. (But could come across as a bit weak or naïve, or a pushover.) 22% Good, 20% Polite, 16% Tolerant, 16% Generous, 13% Caring, 11% Unselfish, 9% Empathetic, 7% Gentle, 5% Loving, 4% Spiritual, 4% A Bit Socially Inept, 4% Sentimental, 3% Nurturing, 2% Feminine, 2% A goody-goody.	9

APPENDIX B

IDEAS FROM RESPONDENTS FOR IMPROVING RETENTION

Improve Management Practices

- *"Penalties for bad managers and companies. Some people operate with impunity."*
- *"Need better management."*
- *I think when a person starts a new trade, they are there to learn. They shouldn't be taught by someone who isn't qualified to teach them."*

Treat People with Respect

- *"Treat people respectfully."*
- *"Treat them with respect as integral parts of society."*
- *"From what I've seen most people who leave the trade go because of how they are treated by coworkers."*

More Benefits

- *"Paid sick days."*
- *"Offer benefits."*
- *"Make provisions to retire at an earlier age."*

Be Realistic with Entry-Level Workers

- *"Realistic time lines for job completion with entry level workers."*
- *"Be realistic when educating youth about trades. Don't fool them into thinking everyone can do it."*

Flexible Hours

- *"Flexible hours."*
- *"Flexible time off."*
- *"Four day work-weeks, like four 9-10 hour days."*

Address Union-Related Issues

- *"Reduce the unions to protect workers."*
- *"Address union issues."*

Basic Skills Training/Fund Training

- *"Include a training initiative to include basic construction skills that ALL workers would benefit from, including hand tools, power tools, oxy-acetylene, etc."*
- *"Funds for companies to train."*
- *"On the job training with government supported programs."*

Address Safety Issues

- *"Increase workers responsibility for safety rather than put on Supervisors."*
- *"Provide competitive basic personal safety equipment."*

Treat Women Better

- *"Washrooms for women."*
- *"Incentives for women."*
- *"Punishment for men who mistreat women."*
- *"Stop treating women like shit."*

Allow Write-offs of Travel Expenses

- *"Lobby government to allow trades who travel to write off expenses."*
- *"Allow travel costs from province to province to be a tax write off."*

Additional Suggestions

- *"Commission for all work found."*
- *"Drug testing for workers."*
- *"Industry memberships."*
- *"Set contract lengths."*
- *"Provide opportunities to showcase work."*

APPENDIX C

IDEAS FROM RESPONDENTS FOR IMPROVING RECRUITMENT

Improve Earnings

- *"More money."*
- *"Decent benefits across the board."*

Provide Year-Round Work/Consistent Work

- *"Year round work."*
- *"Find a way to make pay more consistent."*
- *"Be truthful about seasonally unemployed tradesmen."*
- *"Change the way construction is managed. It's a high pressure industry in which people get laid off at a moment's notice."*

Improve Training

- *"Train in schools for jobs that really exist."*
- *"Support 'Not for profit' training institutions in order to give the best opportunities to those who are genuinely looking for a career."*
- *"Train immigrants."*
- *"Improve training ratios of apprentices to journeymen."*
- *"Make training more affordable."*

Invest in Marketing the Trades

- *"Create a television show that showcases the projects we build and offer links on how to join a trade."*
- *"Engage employers to promote the trades to students at schools."*
- *"Educate teachers and guidance councillors on importance of trades."*

Offer Internships and Summer Camps

- *"Internships."*
- *"Co-op programs."*
- *"Summer camps."*

Address Discrimination/bullying

- *"End discrimination."*
- *"Affirmative action to force hiring women."*
- *"Ongoing supervision around bullying / discrimination."*

Change Perceptions of the Trades/Address Misperceptions

- *"Get the young generation understand that swinging a hammer isn't degrading and pays well!"*
- *"Address negative perceptions that tradespeople are less intelligent or lack creativity or problem solving skills."*

Create Incentives for Employers to Hire/Train

- *"Create incentives for employers to hire and train young skill workers to enter a trade."*
- *"Make it worthwhile for employers to take on and train apprentices. Learning takes time and there are risks to having new and young people on job sites."*
- *"Employers need to know that all the Ministries acknowledge and value what they are doing in training apprentices."*

Additional Suggestions

- *"Make shop mandatory in school – just the basic stuff."*
- *"Adapt an apprentice model like Switzerland."*
- *"Focus more on adults, not just students."*
- *"Equally focus recruitment efforts on rural areas."*
- *"Make it easier to join a union."*
- *"Require mandatory certification to improve the employer pool for those entering the trades."*

APPENDIX D

Backgrounder: The Construction Industry, The Residential Sector, and Residential-Related Infrastructure Sectors

This backgrounder provides an overview of the construction industry, and more specifically the residential and residential-related[26] construction sectors. It is intended to highlight the importance of Ontario's construction industry and its key sectors and why residential construction and other construction sectors are recognized by government and industry stakeholders as unique.

Why focus on Residential and Residential-Related Infrastructure?

In order to build a new house, subdivision, or a condominium tower, a developer and/or builder must navigate something we refer to as the "approvals process". This process includes oversight from all three levels of government and about 45 regulatory bodies. The ability to deliver housing is dependent on the prior approval and construction of all required infrastructure including sewers, roads, transit, and utilities.

This interrelationship is the reason why we extended the survey to cover construction workers in the residential and residential-related infrastructure sectors.

The construction industry is a major economic driver, accounting for roughly 7% per cent of Canada's GDP. In Ontario, construction is comprised of seven distinct and separate sectors. These sectors are recognized by industry, government, and various pieces of legislation.

These sectors are:

1. Industrial, Commercial and Institutional (ICI)
2. Residential
3. Sewer and Watermain
4. Roads
5. Heavy Engineering
6. Pipeline
7. Electrical Power Systems

It is important to note that the construction industry, compared to other sectors, has higher rates of unionization, especially in the GTA. As a result, the evolution of construction in Ontario has been heavily impacted by unions, collective agreements, and labour relation activities in general. This has resulted in special legislation (under the Ontario Labour Relations Act) for the construction sector, but also for individual sub-sectors including both ICI and residential. For example, in each of these seven sectors, the issue of overtime has become increasingly specialized and unique. The stakeholders involved have acted differently for each sector and include: owners, builders, and developers; sub-trade primes and contractors; and workers (through labour unions). The way work is performed, buildings are built, or projects are constructed varies and is unique in each sector.

The result is that each sector has varying workforces, work rules, and work environments across Ontario. This does not mean that there are seven types of each skilled construction trade – rather that the environment in which a trade works is distinct and unique as each sector has specific actors and influencers.

Accordingly, in order to understand the construction industry and its sub-sectors, one must first understand Ontario's labour relations history and how each of the seven sub-sectors has evolved as there are numerous practical differences between the sectors.

Brief History of Residential Construction in the GTA

While it is important to note that residential construction existed and prospered before the 1960s, it can be argued that the current structure and organization of work, including labour supply, started in that decade. In the 1960s, new-build residential construction was divided into two distinct sectors: high-rise or apartment builders formed one main group, and low-rise or home builders formed the second. Also significant at that time, international building trade unions (Plumbers, Electricians, Carpenters, etc.) had made major inroads into the ICI sector and viewed the high-rise residential sector as a natural area for further expansion.

[26] Residential-Related: For the purposes of this report and the related survey, residential-related referred to workers who are employed outside of the residential sector, but whose work is required to prepare a residential site. Examples of workers included: 1. a road worker who builds the roads in the subdivision which are required before a house can be built. 2. A sewer or watermain worker who installs sewer and watermain lines to a high-rise or sub-division.

High-Rise Unionization

High-rise builders became aware of this desire to unionize by the building trades unions and were concerned about the future of their business for many reasons, including the potential impacts of jurisdictional disputes (JDs). JDs occur when competing unions jockey, grieve, or dispute which union has the right to perform work. JDs slow down the pace of construction and can lead to expensive grievance and arbitration awards.

In response to this, collective agreements were eventually created and administrated by the Metropolitan Toronto Apartment Builders Association (MTABA) and LiUNA! Local 183. These agreements enshrined the idea of composite crews, eliminating jurisdictional disputes and creating a workforce which was dominated by LiUNA.

Low-Rise Unionizations

Low-rise builders were unionized later than the high-rise builders but faced a similar situation in the 1970s. They followed a similar path as the high-rise builders, forming the Toronto Residential Construction Labour Bureau (TRCLB) and signing a similar collective agreement with LiUNA! Local 183.

Over time, the GTA residential construction sector has grown and unified. With the Ministry of Finance projecting that more than 115,000 people will come to the GTA every year to push the region's population to 9.7 million people by 2041, it's important that we keep the housing industry healthy for future residents. Builders have evolved: many can offer new-home buyers a choice of low-, mid-, and high-rise homes.

Legislatively, the sector benefited from unique legislation in the late 1990s and early 2000s which saw the creation and enshrinement of specific residential provisions in the Ontario Labour Relations Act, 1995.

Demographics and Immigration

The construction labour force is currently experiencing a huge demographic shift, with an increasingly aging workforce. Within the next decade, there will be 261,000 workers exiting the industry due to retirements in Canada, according to industry-led research group BuildForce Canada. In Ontario alone, 91,100 workers are expected to retire – around 20% of the current construction workforce. As the population continues to age, we must ensure that we are replacing the retiring workforce with new, young entrants.

Immigration is also an important aspect in the demographic shift. Historically, the construction industry has relied on skilled immigrants and temporary foreign workers to sustain its workforce, with mass immigration following the Second World War to the 1970s from Europe (Ireland, Italy, Portugal, etc.). Many of these immigrants worked in construction, contributing to city building in Canada's largest cities.

While immigration has helped as a traditional recruitment method – and recognizing that our aging workforce is on the verge of mass retirement – there is an urgent need to better understand and improve today's current recruitment methods of construction workers.

With Canada's population continuing to grow, construction workers are needed to build places for people to live and work. Construction workers are also needed to keep up with the pace of infrastructure investment.

APPENDIX E

A BEHAVIOURAL ECONOMICS APPROACH TO RECRUITMENT IN SKILLED CONSTRUCTION TRADES[i]

Overview and Key Findings

A BA in history and a minor in plumbing should not be seen as a joke. It should be a reality as it is in countries such as Germany or Switzerland....

CIBC World Markets' Deputy Chief Economist Benjamin Tal (2018)[ii]

Skilled trades can offer a promising and rewarding career path, yet many youth are either unaware or discouraged to think of skilled trades as a sustainable career path due to some widely held misconceptions.

CivicAction, *Now Hiring* (2018)[iii]

Collect data. Stories are powerful and memorable…. But an individual anecdote can only serve as an illustration. To really convince yourself, much less others, we need to change the way we do things: we need data, and lots of it.

Richard Thaler[iv], winner of 2017 (Nobel) Prize in Economic Sciences

By James (Jason) Stewart and Lindsay McCardle

March 2019

There are crucial challenges in recruiting young people to skilled construction trades and related jobs. Many of these occupations are facing existing and projected increasing shortages of new entrants. The amount of these shortages will vary among the seven sectors comprising the construction industry[v] depending on the health of the economy, demographic shifts including immigration, and government policy. Yet the inadequate supply of new entrants to skilled construction work is a structural trend that is projected to continue well into the next decade.[vi]

Skilled trades and other labour shortages in Ontario's construction industry are in part a function of the amount and pace of retirements in this sector.[vii] However, they also result from too few young people entering these skilled jobs,[viii] despite compensation that ranges from above average to very attractive,[ix] and high satisfaction in these occupations.[x]

Why Behavioural Economics (BE) Offers a Valuable Framework and Insights for Recruitment

The BE Report, A Behavioural Economics Approach to Recruitment in Skilled Construction Trades, contends that behavioural causes are a major contributor to the gap between the demand for skilled construction labour and its supply. A **BE** approach can improve the understanding of many of these recruitment challenges, and help reinforce opportunities to attract new entrants to skilled construction work.

BE recognizes that there are systematic influences upon our thought processes, choices, and actions. These begin with the reality that we cannot process all the information we receive nor assess all the choices offered to us. Our decisions and actions are subject to our cognitive biases and barriers. Emotional, motivational, and social factors including time dimensions and mental models are also crucial influences. Accordingly, a BE framework helps explain why noticing, understanding, and effectively acting upon career choices is very difficult for young people. It is also useful in examining behavioural factors that impact the entities and people that influence young people's attention, interpretation, and actions.

BE and Some Key Concepts in Brief

BE brings insights from psychology and other behavioural sciences into an economic framework.[xi] Its foundations begin with behavioural science, which is the study of human decision-making and actions. BE intersects with multiple disciplines such as psychology, neuroscience, decision science, anthropology, and others.[xii]

BE's widespread application in recruitment and retention merits highlighting. Technology firms, banks, sports teams, and a number of colleges, universities and governments use BE extensively in their hiring and personnel management. For recruitment in skilled construction work, using BE offers significant advantages. A BE approach recognizes that young people's career choices are subject to numerous internal factors such as inadequate expertise, significant uncertainty, and their emotions and motivations. External influences are also important such as their parents, peers, social norms, and the timing of when they need to make decisions.

The full *BE Report* extensively explores BE's concepts and insights applicable to recruitment.[xiii] Seven are highlighted in this *BE Report Overview and Key Findings*. They are integral to its analysis and main recommendations, with **mental models** one of its key BE foundations. Mental models are the concepts, identities, narratives, and views drawn from our communities and experiences about how the world is structured and how it operates.[xiv]

Moving from its foundations to applying BE's insights starts with recognizing and focusing upon the **last mile** which refers to the touchpoints that organizations have with individuals in their delivery of services.[xv] **Information architecture** is important because the way that information is displayed can influence the way people process it, especially given how online formats have significant impacts on our cognition and focus.[xvi] **Choice architecture** is also crucial. It refers to the design of different ways to present choices to people, and the substantial effects that presentation can have on our decisions and actions.[xvii]

Nudging changes choice architecture by altering the way that choices are presented to promote a beneficial outcome or better decision-making without forbidding any options or significantly altering the incentives.[xviii] **Messenger effects** refer to the strong influence of who communicates information to people.[xix] The right messenger(s) can be very effective nudges to our attention, interpretation, and actions. **Boosts** aim to instill a new competence or knowledge, or foster existing skills and understanding. When we are at risk of making poor and/or uninformed choices, boosts offer a way to enhance our decision-making expertise.[xx]

BE Report Overview, Parameters, and Structure

Using a BE lens, the *BE Report* examines a range of issues hindering the recruitment of young people. It explores ways to increase the attraction of careers in all sectors of the construction industry, especially in the residential sector. It provides a preliminary BE framework and behavioural insights to understand young people's career decision journey. The Report examines important external influences upon young people's career perceptions and choices such as family, peers, educators, employers, labour unions, non-profit associations, and governments (collectively, "Influencers").

The *BE Report's* focus is on the supply side (new entrants) of the skilled construction trades and related work, not the demand side (training placements and jobs). It assesses recruitment in skilled construction work, but not retention. While our BE framework, insights, and recommendations are in depth and broad ranging, the report is neither all encompassing nor exhaustive at this stage. It also does not examine the broader labour market implications of the macro-economic cycle nor does it look at the effects of structural employment trends and technology developments on recruitment in construction.

As noted above, the *BE Report's* structure includes a literature review that looks at how cognitive barriers as well as emotional, motivational, and social factors shape what we pay **attention** to, how we **interpret** information, and how we **act** upon choices (see figure below). From this general BE foundation and platform, the *BE Report* explores young people's career decision journey and their skilled trades options. It considers specific BE applications to improve students and educators' attention to, understanding of, and potential actions for career options in skilled construction work. These include using BE-informed[xxi] approaches and tactics, and the need to implement BE testing.

UNDERSTANDING OUR BEHAVIOUR: ATTENTION, INTERPRETATION AND ACTION

The *BE Report* concludes with four main recommendations, plus proposals for future BE research:

- ✓ Use BE to help improve the mental models of young people, parents, and educators;
- ✓ Assess and enhance Influencers' nudges and boosts for young people;
- ✓ Embrace BE testing to improve these tactics' results and costs; and
- ✓ Collect, analyse and sustain longitudinal metrics to enhance recruitment.

MAIN RECOMMENDATIONS

1. Improve Mental Models about Skilled Construction Work in all Phases of School

- **Young people need earlier and more sustained exposure to skilled construction work as a viable and equal option with college and university.** Mental models help shape our perceptions and thinking, and significantly impact our choices and actions. Given the importance of mental models, it is essential that the benefits and opportunities in skilled trades and related occupations across all construction sectors become a foundation of career guidance throughout every phase of education. Skilled construction work specifically and skilled trades in general need to be well described and depicted such that young people are aware of and understand the full range of potential pathways. Skilled trades need to be shown as being as attractive, as feasible, and as worthwhile as academic paths in university and college. They need to be viewed and offered as viable and desirable first choices for many young people, not merely a fallback option nor one to choose after college and/or university do not pan out.

- **Young people need earlier and more extensive in-person interactions with the skilled trades, especially in construction.** Whether in primary school or in Grades 7-12, students and educators need more interactions with construction work and tradespeople. The quality and quantity of these interactions matter. Essential touchpoints for employers, labour unions, and non-profit associations include more in-depth presentations and much more extensive offerings of effective career events and activities in schools, at training centres, and at worksites. The method of providing this information is crucial, and needs to include effective audio-visuals.

  Recommended tactical Initiatives to address these needs begin with **increasing the focus upon and interaction with primary schools when students' initial ideas about work are being formed**.

  Outreach to primary schools by employers, labour unions, and non-profit associations should be a priority for career events in classes and in school-wide activities in primary schools.

- **Major Influencers need to build upon and improve most of their online approaches.** Although there are some good onscreen examples of selected Influencers, most educational, employer, labour union, and non-profit association websites need to be improved. Their websites need to be made easier to find and use on all major types of digital devices, and become more attractive, social, and timely. Influencers' online approaches need to become more salient and tangible, use better messengers, and offer clear calls to action.

- **There is a fundamental need to improve all elements of career guidance frameworks and career options models in high school.** More frequent in-class and school-wide presentations about skilled construction work could benefit both educators and students in Career Studies courses and beyond. These activities should include more field trips to training centres and worksites. Improved online resources and audio-visual examples[xxii] to change perceptions of skilled construction trades as well as significantly increase the quantity of interactions in classrooms on a school-wide basis are essential.

  It is also critical to increase engagement with parents to challenge misperceptions about the nature, opportunities, and pay in skilled construction work. More school-wide events and field trips with parents are vital to understand the full range of career pathways. These activities need to highlight the different sectors of construction, their compensation and satisfaction benefits. They also need to convey the education and training involved in skilled construction work, including the increasing importance of mathematics and communications skills.

- **There are clear opportunities to enhance the outreach to young people during and after high school**. Although there is a range of government and other Influencer activities already in place, significantly more can be done.

  It is also critical to address the opportunity to attract young people in precarious employment or in the NEET situation (not employed, in education or in training). Our recommendations include offering increased opportunities for training centre and worksite visits, and better online resources. More work-integrated programs during and after high school, and more high school to college programs offer additional BE benefits.

2. Achieve Much Greater Collaboration among Influencers to Increase Nudges and Boosts

- **There is major scope for Influencers to coordinate and/or jointly increase their effectiveness in the primary and middle grades, high school, and post-secondary years.** There are multiple models with successful tactics for young people in providing career information and interacting with the world of work. They demonstrate how effective collaboration can be achieved among educators and industry and include:

  - ✓ The Halton Industry Education Council (HIEC) Career Centre model whose impacts strongly suggest that students in Grades 7-8 are ready for greater exposure to career information, and much more interaction with the world of work;
  - ✓ Building Opportunities for Life Today (BOLT) for under-resourced youth with its BE-relevant success in reaching disadvantaged youth, placing them in construction jobs, and providing crucial social supports;
  - ✓ The Specialized Trades Exploration Program (STEP) to Construction model with its implicit BE strengths in nudging and in boosting students' awareness, understanding, and marketability in construction trades; and
  - ✓ The leading-edge best practices of George Brown College's programs in construction management and other skilled construction programs in connecting employers and industry with students and faculty.

These entities and the four other organizations we focus upon – LiUNA! Local 183 training centres, Ontario Construction Careers Alliance (OCCA), the Ontario Youth Apprenticeship Program (OYAP), and Humber College construction programs – implicitly use the EAST framework[xxiii] in key activities to increase the awareness and understanding of young people about skilled construction work. They make it:

- ✓ **Easier** to find information and to engage with the world of construction work by reducing the hassle costs to attend events in person, to read in print, and to use online;
- ✓ More **attractive** with their interactive presentations, training centre, and/or worksite visits;
- ✓ More **social** by engaging with the whole class or on school-wide basis; and
- ✓ **Timely** by ensuring in-depth information and interaction opportunities are available during Career Studies in Grade 10, and with career events and activities in Grades 11-12.

- **In many cases, our recommended nudges and boosts do not need new money; instead, a better allocation of existing funds and greater commitment to co-operation across all types of Influencers is recommended.** Although it is beyond the scope of the Report to have recommendations specific to individual entities, there are strategic and tactical issues such as how can the models of the HIEC Career Centre, BOLT, and STEP to Construction be scaled up and/or expanded elsewhere in the GTA? What are the lessons from George Brown College's programs in construction for other colleges? What other best practices can be adopted from LiUNA! Local 183, OCCA, OYAP, and Humber College? What are the potential opportunities for increased future collaboration with Skills Ontario given its programs focused on the skilled trades[xxiv] and with CivicAction given its activities focused on disadvantaged youth[xxv]?

  A host of BE-informed initiatives are also recommended for guidance counsellors. They start with much more information about and presentations regarding construction work during their professional development days. Applying BE

effectively would also include building skilled construction work databases that are easier and faster to use, creating better online linkages to audio-visuals such as *Job Talks* videos,[xxvi] and providing ongoing web-based courses to boost guidance counsellor knowledge of the skilled construction trades, related occupations, and different sectors within construction.

- **Improving the linkages, depth, and breadth of Influencers' online approaches is overdue and vital.** Despite notable examples of good online approaches of some employers, labour unions, and non-profit entities, too often these Influencers' onscreen resources are siloed and uncoordinated. The absence of a single online source with an easy to use, clear, and comprehensive overview of skilled construction work is striking. At least as important, too few of these websites offer linkages or references to other websites to fill in gaps in their information.

  At a minimum, a series of crucial nudges onscreen need to be undertaken. They include the need to improve the visual appeal of many websites as well as adopting chunking, simplicity, and tangibility in their approaches. It also involves making more websites mobile friendly to attract young people on the devices that they use most. This would reduce the hassle costs in finding out about skilled construction work and using social media more effectively.

3. Commit to BE Testing of initiatives, and adjust programs and tactics to reflect its results

BE testing is critical. Successful collaboration initiatives need to be quantified on an absolute basis to better assess their stand-alone merits and costs. Governments, educators, and industry also require a better understanding of the relative merits of specific information, formats, methods of delivery, and visuals versus other tactics and options.

As an initial step, we would recommend looking at particular aspects of several successful Influencers' programs, and running a trial experiment of their impacts. Specifically, this BE testing would measure what students attending these specific events / undertaking these activities (i) describe as the effects of the information, speakers, visuals and other aspects (self-reported results) of these activities; and (ii) recall and use of these materials (actual impacts). Implementing BE-testing on an ongoing basis of key existing tactics and of potential new initiatives will generate usable evidence and much greater understanding of:

- ✓ Which programs are most effective for students, parents, and/or educators?
- ✓ What aspects of these programs are most effective?
- ✓ What are the best practices for adoption/scaling across school boards and regions?
- ✓ What elements require further adaptation and refinement? And
- ✓ How can this information better inform school curriculums and be more effectively shared with students, parents, and educators?

4. Better Longitudinal Metrics of Young People's Paths after high school are crucial

The longstanding[xxvii] and surprising gap in the collection and use of data regarding young people's career paths is a major problem. It is crucial to address this lack of data and other empirical tracking of the (i) initial post-secondary paths for students, and (ii) subsequent career paths of young people.

Better and sustained data collection, curation, and analysis of career decisions will provide vital metrics to assess changes in the behaviour of young people making actual career choices (initial and ongoing). While BE testing is essential to help measure interim impacts (i.e., changes in knowledge and perceptions of skilled construction trades), our goals are also to find what is effective in helping young people find work that aligns with their goals, interests, and needs.

Some efforts at measurement of young people's career choices are underway. However, to date, these are neither systemic nor sustained. Better career path metrics are long overdue. Without these data, Ontario does not have an evidence-based approach to career guidance, nor any means to measure its effectiveness. Our recommendation of collecting, curating, monitoring, and analysing career path metrics is also consistent with other leading recent reports that call for much better collection of data by government and educational entities.[xxviii]

Using BE in Recruitment offers Broader Economic and Social Gains

Addressing the barriers to recruitment through BE offers major benefits beyond the residential construction industry and the rest of the construction sector. There are substantial and much broader economic, fiscal, and Using BE insights effectively in recruitment will help young women, Indigenous peoples, and those less fortunate economically by offering them more paths to higher-earning, higher-satisfaction jobs.

Improved recruitment to skilled construction work through BE will also lessen the costly economic inefficiencies of the current system. There are too many young people who automatically pursue a university degree – irrespective of the subjects studied and any training received – thinking it will lead directly to well-paying and satisfying jobs and careers. A substantial number of these young adults find themselves belatedly choosing apprenticeships, other training paths in the skilled trades, or college with potentially large student debt from their university years and with a major delay in earnings. In other cases, a significant number of young workers lack credentials for better-paying and more satisfying work. Too often, they have only precarious employment options that they neither want nor enjoy but must take to have a paid position. Skilled construction work needs to be a viable career option for these and other young people.

Next Steps: Future BE Research Recommendations

There are significant opportunities and merits in additional BE research starting with the **supply side of recruitment**. There are major benefits to developing this *BE Report*'s preliminary BE framework and core recommendations into a full BE framework, and undertaking in-depth testing of recruitment's supply side. This should include BE testing of selected nudges and boosts, other initiatives, and Influencer tactics.

There are also numerous advantages to using a BE approach and applying its insights to the **demand side of recruitment**. This should include in-depth BE analysis of the (i) information communicated in person and online; and (ii) hiring approaches of employers, labour unions, and non-profit associations.

There are also robust merits and major opportunities in creating a BE framework and applying its insights to **retention**. Using BE findings and insights to build upon the very useful survey of GTA and Ontario construction workers[xxix] could enable additional understanding of fundamental questions such as what are the key BE factors supporting and inhibiting retention? How can BE insights be used to foster the former and reduce the latter? And what BE factors are reducing retention by encouraging skilled labour flows to other construction sectors and to non-construction sectors?

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[i] This BE Report is part of an independent study commissioned by the Residential Construction Council of Ontario (RESCON), and the Ontario Residential Council of Construction Associations (ORCCA). This study arose from a related Ministry of Training, Colleges and Universities (MTCU) grant-funded report focusing on retention of construction tradesworkers.

[ii] B. Tal, "Why a BA in history and a minor in plumbing should not be seen as a joke", *The Globe and Mail*, October 27, 2018

[iii] CivicAction, *Now Hiring: The Skills Companies Want that Young Canadians Need*, p. 19. https://www.civicaction.ca/wpcontent/uploads/2018/12/SkillsConnect_NowHiring_Dec_2018_DIGITAL.pdf

[iv] R. Thaler, **Misbehaving: The Making of Behavioral Economics**, (New York: W.W. Norton, 2015), p. 355.

[v] See the definition and listing of the seven sectors of the construction industry set out in Ontario's statute 95|01, section 126 (1). https://www.ontario.ca/laws/statute/95l01

[vi] BuildForce Canada, "Construction and Maintenance Looking Forward", Ontario: 2019-2028 Highlights, pp. 1-2. https://www.constructionforecasts.ca/sites/forecast/files/highlights/2019/2019_ON_Constr_Maint_Looking_Forward.pdf

[vii] *Ibid.*

[viii] Through 2018, skilled trades are viewed as the hardest positions to fill in North America, according to the surveys of the ManpowerGroup. This is the 11th year running that these occupations have had this assessment. (Cited in https://www.jobtalks.org/report, p. 6; and CivicAction, *Now Hiring: The Skills Companies Want that Young Canadians Need*, p. 18. https://www.civicaction.ca/wp-content/uploads/2018/12/SkillsConnect_NowHiring_Dec_2018_DIGITAL.pdf. 18. While technical aptitude is cited as the leading reason for this challenge, it is clear that "not enough people are signing up to be adequately trained for work in the Trades." Cited in JobTalks, *Trading Up,* p. 6.

[ix] See the annual salary ranges for 45 different construction trades from starting levels to the much higher levels attainable after years of experience in the presentations of the Ontario Construction Careers Alliance (OCCA) to young people. See also the salary ranges available on each career profile on OCCA's website, www.constructu.ca

[x] Tradespeople report feeling 2.5 times more positive emotions than the rest of working Canadians, and self-report over 3.5 times as many positive personality traits than negative ones. Workers in the Skilled Trades also have very positive attitudes toward work and a strong desire to advocate for their own trade. See JobTalks, *Trading Up,* p. 18.

[xi] S. Hunt & D. Kelly, "Behavioural economics and financial market regulation: practical policy, rigorous methods", *Agenda*, Oxera July 2015, p. 1.

[xii] P. Lunn, "Regulatory Policy and Behavioural Economics" (Paris: OECD Publishing, 2014), p. 19.

[xiii] J. Stewart and L. McCardle, A Behavioural Economics Approach to Recruitment in the Skilled Construction Trades (Vaughan, ON: Residential Construction Council of Ontario, 2019)
[xiv] World Bank, *Mind, Society and Behaviour*, 2015 World Development Report, pp. 11, 62-63.
[xv] D. Soman, **The Last Mile: Creating Social and Economic Value from Behavioural Insights** (Toronto: University of Toronto Press, 2015), pp. 7-22.
[xvi] S. Benartzi with J. Lehrer, **The Smarter Screen: Ways to Influence and Improve Online Behavior** (New York: Penguin Random House, 2015), p. 195.
[xvii] R. Thaler & C. Sunstein, **Nudge: Improving Decisions about Health, Wealth and Happiness** (updated ed., New York: Penguin Group, 2009), pp. 3-13.
[xviii] *Ibid*, p. 6.
[xix] D. Halpern, **Inside the Nudge Unit: How Small Changes can make a big difference** (London: WH Allen, 2016), p. 50.
[xx] R. Hertwig, "When to Consider Boosting: some rules for policy-makers", *Behavioural Public Policy* (2017), 1: 2, p. 143.
[xxi] J. S. Lourenco *et al*., *Behavioural Insights Applied to Policy: European Report 2016*, (Brussels: European Commission Joint Research Centre, 2016), p. 15.
[xxii] See M. Bowman, "Video Marketing: The Future of Content Marketing", February 3rd, 2017, https://www.forbes.com/sites/forbesagencycouncil/2017/02/03/video-marketing-the-future-of-content-marketing/#53d7fcba6b53; and T.J. McCue, "Video Marketing in 2018 Continues to Explode as Way to Reach Customers", June 22nd, 2018, https://www.forbes.com/sites/tjmccue/2018/06/22/video-marketing-2018-trends-continues-to-explode-as-the-way-to-reach-customers/#41794974598d
[xxiii] Halpern, **Inside the Nudge Unit,** pp. 60-61, 149.
[xxiv] See http://www.skillsontario.com/programs
[xxv] See for example https://leadership.civicaction.ca/youthconnect/
[xxvi] See https://www.youtube.com/channel/UCsIWDqEMDKOYm4BO30Edq6g
[xxvii] In the late 1990s and early 2000s, Statistics Canada and its partners were reportedly moving to undertake a variety of important longitudinal surveys, including youth in transition from school to work. Unfortunately, several factors combined to stop this critical data collection and other important survey initiatives. See Wayne Smith, "We deserve to know ourselves better", *The Globe and Mail*, January 28 2019, p. A13.
[xxviii] Institute for Competitiveness & Prosperity*, Teaching for Tomorrow: Building the necessary skills today*, Working Paper 33 (Toronto: Institute for Competitiveness and Prosperity, September 2018), p. 41.
[xxix] Job Talks and Q.i. Value Systems Inc, "Report on Retaining Employees in the Skilled Trades", (Vaughan, ON: Residential Construction Council of Ontario (RESCON), 2019)