

A HUMAN RESOURCES STUDY OF THE CONSTRUCTION INDUSTRY ON PRINCE EDWARD ISLAND

Emerging Trends

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Introduction

1.0 Introduction

The Prince Edward Island Construction Industry, not unlike most other sector of the broader economy, is facing on number of current and/or emerging trends and challenges that will impact on the labor market over the next decade. These trends are broad and overarching in scope for the most part, and will impact on all aspects of the industry, including the areas of standards and regulation, the actual building and production process, and the recruitment, training and retention of the workforce.

Identification of Key Trades

2.0 Identification of Key Trends

2.1 Regulatory Pressures

The National Building Code

PEI is one of the few remaining jurisdictions that has not formally adopted the National Building Code. A number of key informants see this as a critical step that the province must take to help ensure that the province's construction industry can continue to grow and expand within accepted Industry standards. A number of key informants (federal, provincial, and municipal planners/project managers), and some building contractors, believe that putting the National Code in place would allow all contractors to work within the "same playing field", and in addition, to ensure a level of standard and quality. They also believe that this could be one way to ensure that the industry is seen as a more attractive and satisfying career option for new entrants.

Occupational Health & Safety

Many key informants believe that occupational health and safety standards and requirements must be more vigorously promoted and enforced for both safety and liability/risk management reasons. The federal government has stringent occupational and health safety standards that are factored into tenders and monitored on a regular basis. In addition, the province has similar standards and regulations; however, the capacity to monitor the number of building sites across the province is limited.

Professionalism and Trades Certification

As the overall costs of building continue to increase, the customer/client and a whole host of other stakeholders (insurance companies, realtors, lawyers, mortgage/financing institutions) are going to become more interested in protecting their interests and investments in terms of quality (product) and professionalism (customer relations, business practices, etc). A number of key informants believe that the industry needs to move toward more professionalism and trades certification. This move is needed to improve the image of the construction industry and the quality of workmanship in the industry. These key informants indicated that professionalization and certification of trades would be increasingly important.



2.2 Production Processes

New Building Designs & Construction Processes

Advancements in building design and construction processes that have been introduced into the industry over the past decade or so have changed the nature and pace of construction. In addition, new knowledge and awareness of the health impacts of certain materials and/or conditions within physical environment have changed how buildings are designed and built. Things like new air quality regulations, emission control standards, and other environmental issues are now critical elements in the design process.

2.3 Technology

Information Technology & New “Green” Technology

Information processing and communications technology have made many advancements in recent years, and are now impacting on building design and construction. Many new buildings are being “wired for data”, thus requiring a whole new range of knowledge and skills to work with new codes, protocols and Information Technology requirements.

In addition, some larger projects such as the Atlantic IT Centre, and the new federal building have/will be integrating several new “green” technologies such as “green” roofing, the collection of rain water to provide for flushing of toilets, watering of plants and greenery, hydrogen fuel cells and sunlight collectors to retain heat.



2.4 Demographic

The Aging of the Workforce

The 2001 Census 40 percent of people in trades occupations in PEI were 45 years old or over. Many of these individuals will be retiring over the next several years. Some trades are already on the verge of crises; for example, 60 percent of plumbers were over 45 in 2001 and the average age of masonry tradesmen is reported to be 55. One union local (plumbing and heating) indicated that the average age of their approximately 100 members was 52. In both of these trades there appeared to be very few new entrants. In fact, the 2001 Census reported no plumbers under 25. This situation is placing a lot of pressure on an aging workforce to meet tight project deadlines and still do quality work.

Key informant interviews indicate that there is a whole cohort of business owners/employers that are about to move on, and the next generation is either not there or not ready to assume this role. The business experience and “savvy” is not there, and there is no succession planning taking place within the industry to address this emerging gap. As noted by one key informant interviewed for the study:

“There are no dollars in a contract for succession planning”.

There is a whole knowledge/skills transference issue that needs to be addressed. A process to allow the older experienced tradespeople to mentor a new generation of business owners would be one way to improve this situation. There is no industry wide human resource strategy to address this looming dilemma.



New Entrants

Quite apart from any future aggressive promotional/education programs to attract new entrants into the industry, there will be simply fewer of them to attract. On PEI, the largest growing population cohort over the next 10-15 years will be the 55 + group. The younger working age cohort (18-25) has been declining, and will continue to do so. An additional challenge is the level of expectations of the younger working population. It is evident that the younger generation favour professional, white-collar occupations and an increasing proportion are attending university to obtain the education required for these careers. They will not settle for consistently low paying jobs with few/no benefits, and unsatisfying and unchallenging work. The more ambitious and industrious young entrants to the trades are looking for stable employment, the opportunity to make an acceptable living, some level of medial/health and pension benefits, and work diversity and challenges. Young people have an increasing number of career options and the industry must adapt to meet the expectations of young people in order to attract them into the trades.

2.5 Education and Training

Perception/Status of Trades

Key informant interviews indicate that there is an overall lack of awareness and or promotion of the trades as being an attractive career path. The common perception and belief is that it's "a dirty, cold non-rewarding job" and, for many younger people, pursuing a career in Information Technology, Tourism, Hotel Accommodation, and/or Golf Management sound a lot more "jazzier" and rewarding.

Higher Entry Level Requirements

Trade schools and other post secondary programs have established higher entry standards for incoming students. Registration officials at Holland College indicate that they now require high school graduation as a minimum level of entry, and that candidates must have strong numeracy and literacy skills. High school graduates with general diplomas may find that they do not have strong enough literacy and math/science background to be accepted into most programs offered. Given the large number of young people who are now pursuing post secondary education at the College level, the competition for



available seats is high.

Holland College Business Direction

Since the early to mid 1990's Holland College has been vigorously pursuing a course consistent with the key economic development priorities of the province. The College has strategically targeted sectors such as Aerospace, Information Technology and Communications, Tourism and Hospitality, and Golf Management as areas of potential student interest and hence future enrollment capacity. While training for the various trades have continued to be part of the College's program inventory, it has not been a high growth in terms of new entrants and/or student demand.

2.6 Low Wage Structure – “The Race To The Bottom”

Low Wages

The PEI construction industry is highly competitive. Competitive pressures put downward pressure on wages. This situation acts as a “drag” on the long-term development and growth of the industry within the province. At a time when there has been a high level of construction activity (and it is anticipated to remain high for the next several years), contractors and employers are describing a situation where they are caught in a “race to the bottom”, rather than being in a situation where “a rising tide lifts all boats”.

In addition, the better/most skilled trades people the “follow the money”; trades people have always been mobile, and with PEI's wages being consistently lower than elsewhere, many of the more ambitious and skilled people move to work at higher paying jobs on major projects elsewhere.

Assessment of the Impact on the Labour Force

3.0 Assessment of the Impact on the Labour Force

3.1 Regulatory Pressures

Strengthening the regulatory environment by adopting the National Building Code, enhancing the Home Warranty Program and improving and enforcing Occupational Health and Safety protocols would increase the need for highly trained and qualified tradespeople. This would require more new entrants and/or the training of existing workers, and more training capacity (facilities, instructors, equipment, etc). A higher level of training would further lead to expectations of higher wages, benefits and long-term employment.

In addition, more regulatory codes and protocols would also mean more monitoring and enforcement of these standards. This would require more field inspectors to visit job sites across the Island to monitor and enforce standards, provide education and risk management advice.

3.2 Production Processes

Large firms from out-of-province tend to win the larger, more complex ICI construction projects. While they do use local labor and tradesmen when they are available, the benefits of these projects to the local industry and workforce is limited. Local production capacities are subsequently reduced over time, particularly in some of the more complex and specialized aspects of construction.

The road building and heavy industry sector increasingly requires more highly trained worker. Environmental management issues, emissions from engineering plants and new surveying technology and tools are driving the need for more knowledgeable and skilled tradespeople. In addition, this sector is beginning to specialize in areas such as golf course construction, natural gas pipeline work and sewer and water work.



3.3 Technology

Increasingly, both the design work, and the actual construction work in newer buildings are utilizing more advanced electronic, mechanical and IT communication systems, and environmental innovations and adaptations. Large institutional and commercial projects break down to 40% of costs toward base construction work (site preparation, cement work, steel, block and brickwork), and approx 60% of cost for work that is highly specialized work such as electrical, H-VAC, digital electronic systems and advanced environmental adaptations.

These developments will require that builders and trades people have the capacity and skill to compete for, and deliver on, more sophisticated building contracts. In the PEI context, many contractors have the capacity to do the basic construction work but are not able to compete for the more advanced technical contracts. Many trades have not advanced with the new technologies; this is one of the biggest weaknesses of the PEI Industry as it looks to the future.

3.4 Demographics

With an aging workforce, and a smaller cohort of younger workers entering the labor force, the labor pool on PEI has become “static”. Competition for labour in the future will be felt in all sectors. However, it will be especially felt in the construction/building and trades sector because of the perceived low status of the trades (low wages, few benefits, unstable employment, etc). Given that this sector does not yet have a long-term labour force development strategy, this situation will be particularly challenging over the next several years. As noted by one key informant:

“If labour is in short supply, and your sector is already low on the ladder, then you’re not likely going to have an easy time attracting new people”



3.5 Education and Training

Given the new developments in construction design and building technologies, the various trades training programs need to be brought up to date with regard to training curriculum, teaching/learning methodologies, and up-to-date materials and equipment. In short, a number of the programs may need to be “re-tooled” and resourced to meet the new demand of the industry.

More bridging and transition programming will need to be developed, at least in the short term, to assist young people who want to pursue a trades career, but lack the necessary prerequisites (literacy, numeracy skills and proficiency) to gain entrance to the training programs.

A huge training and development issue for the industry is to address the ongoing training needs of existing tradespeople who are working full time, and will never be in a position to leave their jobs for any extended period to get new training. A series of flexible training modules will need to be developed for this population of workers. Both training institutions and employers will need to adopt a collaborative approach to deliver the most suitable and flexible programs possible.

Mentors, both at the trades and project management levels, will be needed over the next decade to provide support and leadership to new entrants. The Provincial Apprenticeship Program offers an excellent basis to further develop the mentorship approach.