

# **Human Resource and Training Needs Assessment & Strategies**

**Residential Construction Sector Partnership**

July 20, 2000

Executive Summary

## EXECUTIVE SUMMARY

### 1.0 INTRODUCTION

The residential construction industry is very important in Saskatchewan, generating significant employment and investment opportunities. Cities are growing at the expense of rural communities, and this growth requires a highly qualified housing industry that is capable of meeting the stringent and ever-changing building code requirements for new residential buildings.

The fundamental challenge facing the residential construction industry in Saskatchewan is current and future capacity. The average age of the skilled worker is getting close to that of retirement, and the sector is not engaged in the active process of replacing these skilled workers with younger people. Secondly, the sector is experiencing a very high turnover of workers, primarily in jobs with lower skill requirements and in jobs that are mainly provided through piecework contracts.

The existing apprenticeship program and provincial training programs for construction trades and workers are very comprehensive, with significant portions devoted to commercial construction. Also, there are few if any programs available for specialty and general workers in the low-rise residential construction sector.

The Saskatchewan Home Builders' Association, in partnership with Saskatchewan Post-Secondary Education and Skills Training, Canadian Home Builders' Association, SIAST, New Home Warranty Program of Saskatchewan, Saskatchewan Apprenticeship and Trade Certification Commission, Federation of Saskatchewan Indian Nations, Dumont Technical Institute, and the Saskatchewan Labour Force Development Board, felt there was a need to assess and address labour force priorities, and at the same time explore and establish appropriate linkages to training using new or alternative training delivery methods.

In order to identify the human resource and training needs of the residential construction sector, and to develop strategies for human resource and training planning, the Residential Construction Sector Partnership undertook a survey of the industry. This report presents the results of this research.

### 2.0 METHODOLOGY

A literature review was completed in order to provide the Sector Partnership Steering Committee with the background information needed to establish the base for the human resource and training needs assessment study.

A database of education and training programs available for the Saskatchewan residential construction industry was developed. This database provides an overview of training programs including the type of course, location of training, and training provider.

Research was completed to develop a database of the residential construction industry in Saskatchewan, which provided the Steering Committee with an understanding of the complexity and size of the sector.

A survey was developed by the Sun Ridge Group, in consultation with the Sector Partnership Steering Committee. Respondents were selected from the Saskatoon and Regina Home Builders' Association directories, a list of builders from the New Home Warranty Program, the Saskatoon City Yellow Pages, and a search of the Saskatchewan yellow pages through mysask.com.

Telephone surveys were conducted between February 3 and February 28, 2000. If requested, the questionnaire was either mailed or faxed to respondents to complete and return, or to use as a guideline for the phone survey. The telephone interviews were conducted by three individuals; each had some knowledge and/or experience in the home building industry. A total of 91 companies participated: 52 builders and 39 trade companies.

Based on the results of the survey, a strategy addressing training and human resource issues was developed by a subcommittee of the Steering Committee. To assess the validity of the survey results, and to determine the viability of the strategy, discussions were held with the Saskatchewan Apprenticeship and Trade Certification Commission, and two focus groups.

The focus groups were conducted in Saskatoon and Regina. Private builder and trade companies, educational institutions, and industry-education organizations were asked to participate. In order to have a fresh perspective, builder and trade companies that did not answer the survey were asked to attend.

The focus groups were asked specific questions regarding, recruitment, retention and training issues. They were then asked to provide feedback on the strategies and recommendations.

The recommendations regarding training and human resource issues were developed by the Steering Committee and were further refined in consultation with industry at the discussion groups, and with the Commission.

### **3.0 HUMAN RESOURCE AND TRAINING NEEDS ASSESSMENT**

Ninety-one companies (52 builders and 39 trades) were surveyed. They were asked about current and future training needs, training recommendations, recruitment and retention, the residential construction workforce, and the main human resource issues in the industry.

## 4.0 KEY FINDINGS

### 4.1 Current Training Needs

- The majority of respondents provided in-house training for their employees.
- In-house training consisted primarily of job-related technical skills for production employees.
- Approximately one half of the respondents provided outside training for their employees.
- Outside training consisted primarily of product supplier courses directed at production occupations.
- Most of the respondents preferred in-house training for their employees, primarily because the available outside training was not applicable to their needs.
- Eighty five percent of respondents did not anticipate needing courses in cultural sensitivity or race relations. Most of the comments were “will hire anyone as long as they are qualified and willing to work”.
- One half of the respondents indicated that more training was needed for their employees, particularly technical training.
- One half of the respondents indicated that more training was needed for their subcontractors, particularly technical and safety training.

### 4.2 Future Training Needs

- Respondents indicated that changes in codes and standards, health and safety regulations, and new technology would affect their future training needs.

### 4.3 Training Recommendations

- One half of the respondents indicated that the current apprenticeship system was working; one third indicated it was not, and 18 percent didn't know. The main problems with the program were identified as being: classes are not updated, and not enough classes available. The main recommendations given were: provide more on-the-job training, and make classes more accessible in terms of location.
- Respondents indicated that the main reason why people are not taking training to work in residential construction is because they can get jobs without formal training. Suggestions to encourage individuals to take training included: provide accreditation for on-the-job training, pay higher wages, and provide pre-employment training.
- The preferred training methods indicated by respondents were job coaching/mentoring and a combination of classroom and workplace training.

### 4.4 Recruitment

- Recruiting skilled employees was more of a problem for trade companies than for builders. Trades had problems recruiting general labourers, cabinet installers, sheet

metal workers, and salespersons. Builders had problems recruiting carpenters, and general labourers. The main reason why they thought it might be difficult to recruit skilled employees was because of a lack of skilled people in the province.

- Most of the respondents did not have problems recruiting subcontractors. Of those that did, builders had problems recruiting carpenters and trades had problems recruiting flooring installers. The main difficulty encountered was a lack of skilled workers.
- Respondents recommended increasing awareness of jobs in the industry, and increasing wages to help improve recruitment.

#### **4.5 Retention**

- Most respondents did not have problems retaining skilled employees. Of those that did, builders had problems retaining carpenters, and trades had problems retaining general labourers. Low wages, and an aging workforce were cited as the main reasons why it might be difficult to retain skilled workers.
- The main strategy recommended to decrease employee turnover was to pay higher wages.
- One third of the respondents indicated that they expected one or two of their employees to be leaving in the next two to five years because of retirement.

#### **4.6 Sector Workforce**

- The majority of respondents believed there was currently a shortage of skilled workers in the residential construction industry, mainly in the carpentry trades.
- Over one half of the respondents foresaw a shortage of skilled workers because of growth in the next two to five years, mainly in the carpentry trades.
- Over one half of the respondents foresaw a shortage of skilled workers because of people leaving the industry in the next two to five years, mostly as a result of people retiring.

#### **4.7 Issues**

- Respondents identified the following issues that the residential construction industry needs to address: low wages, high taxes, young people not entering the trades, poor image of the industry, and the underground economy.

### **5.0 ISSUES AND STRATEGY**

#### **5.1 Issues**

Based on the results of the survey, the major issues identified in the residential construction industry were: shortage of skilled workers, low wages, young people not entering the trades, poor image of the industry, and the underground economy. In order to address these issues, a subcommittee of the Steering Committee developed a strategy to

encourage individuals to pursue a career in residential construction, by gaining skills and knowledge through training, and receiving recognition for that training.

## **5.2 Strategy**

The strategy is for industry, in partnership with members of the Steering Committee, to develop training specifically for the residential construction sector, which will lead to certification within the provincial apprenticeship system. The strategy is based on the premise that specific occupations within residential construction should be recognized, and that new entrants, as well as those already in the industry, should be able to take training leading to certification. In addition, there needs to be recognition for knowledge and skills previously acquired (Prior Learning Assessment and Recognition).

## **5.3 Rationale**

The residential construction industry has developed into highly specialized trade and supply sectors. The current construction occupational descriptions do not break down the residential components of each occupation. In addition, residential jobs have become very specialized, and job descriptions are often quite narrow.

Each job within residential construction requires specific technical and employability skills, which can be learned either on-the-job or through structured classes. However, there is currently no recognition for on-the-job training.

According to this strategy, each occupation within residential construction, and the components within each occupation, would be defined, i.e., specific technical and employability skills.

For example, in the carpentry trade, at least four occupations can be extracted: framer, finisher, former, and cabinet installer. In order to become certified, an individual would require three sets of skills:

1. Transferable Skills – basic skills, such as math, plan reading and safety, which are applicable to most occupations within residential construction.
2. Technical Skills – skills that are specific to an occupation.
3. Employability Skills – critical skills that are needed in the workplace including communication, problem solving, positive attitudes and behaviours, adaptability, working with others, and science technology and math skills.

These skills may be acquired in the classroom, on-the-job, through alternative training methods, and through practice and experience. New entrants would be evaluated through

the Prior Learning Assessment and Recognition (PLAR) process. This allows individuals to be recognized for the skills and knowledge they already have, whether from school, community work, on-the-job training, or other life experiences.

Recognition for workplace and technical training would be the responsibility of the Saskatchewan Apprenticeship and Trade Certification Commission. Once the training is completed, an individual is eligible to challenge a certification exam, which if passed would result in certification. For example, an individual could become certified as a “Residential Framer”.

An individual may choose to remain a “Residential Framer” and work for a framing company, or to enter other residential trade training programs. In this case, the skills and knowledge already obtained would be recognized, thus shortening the length of time to complete further training. Since all training is within the apprenticeship system, acquiring numerous residential certifications could eventually lead to a journeyperson designation.

An individual wishing to be self-employed will be able to complete general business training and become certified as a “Residential Framing Contractor”. There is a need for business and management training in the trade occupations, including finance, marketing, production, and human resources. Many individuals in the trades become self-employed, and do not have the skills to operate a successful business.

In order to support this strategy, builders would be encouraged or required to use only certified contractors. This could be achieved by establishing a “Licensed Builder”, which could only be attained by compliance with established criteria, such as providing a third party warranty and using only registered contractors.

In order to implement this strategy, there are several steps that must be completed (in no particular order):

- Identify all the activity-related occupations in the residential construction industry.
- Develop a market description of each of the occupations: income range (expectations), working conditions (indoor/outdoor, clean/dirty), work duration (seasonal, etc.).
- Develop an occupational analysis for each occupation.
- Develop a training outline for each occupation.
- Determine who can provide training and who can “sign off” or certify.
- Prepare a “training plan” for each occupation.
- Develop prior learning and assessment recognition.
- Prepare an individual training “tracker” for each employee/person.
- Identify support for providing training – employer, HBA, SIAST, Others
- Begin education of industry on the new process and get people/companies registered.

## **6.0 VALIDATION OF RESULTS AND THE STRATEGY**

In order to validate the results of the survey, and to determine the viability of implementing the strategy, two focus groups were conducted in the province, one in Saskatoon and one in Regina. In addition, the strategy was presented to the Saskatchewan Apprenticeship and Trade Certification Commission.

The focus groups addressed the issues of recruitment, retention and training. Discussions essentially confirmed the concerns expressed by the survey respondents. The groups also provided feedback on the strategy. All indications were that this would be a positive step for the industry.

Preliminary discussions were initiated with the Saskatchewan Apprenticeship and Trade Certification Commission on the possibility of implementing the strategy. A presentation was made to the Chair of the Commission and the Assistant Director of Apprenticeship. The response was very positive, indicating that the strategy is viable.

## **7.0 RECOMMENDATIONS**

The following recommendations are based on the results of the research, and discussions with industry and stakeholder representatives.

### **1. Begin education of industry on the strategy and get people/companies involved**

Once the strategy is approved and being implemented, it will be necessary to disseminate the information to the industry, get people involved, and begin the process of issuing certifications.

Distribution of the information can be done through mail-outs, and presentations at companies, conferences, associations, and other functions. A province-wide tour could be implemented.

### **2. Identify and develop a typical job description of each of the occupations**

An outline of each occupation in residential construction describing job opportunities, income range, working conditions, work duration, etc., needs to be developed. Once this has been done, promotional and career path materials can be assembled for use in promoting careers in the residential construction industry.

### **3. Increase awareness of the industry particularly in schools**

The educational system has to recognize that occupations within the residential construction industry can be an excellent career choice for many individuals. Career counsellors must be provided with information so they can guide students towards



residential trade occupations, not just university. The benefits and long term opportunities in trade occupations must be stressed to students. For example, the skills they acquire can lead them to profitable self-employment or good positions in larger companies.

#### **4. Develop a relationship between industry and schools (K-12)**

Industry and educational institutions need to work together to design, deliver, and certify training that meets employer's needs. For example, the Saskatoon & District Industry-Education Council (IEC) is an umbrella organization jointly operated by industry and education. The IEC encourages a partnership between industry and education in order to benefit these partners and the students of the Saskatoon district. It enables industry to keep students informed of career opportunities so that students can plan ahead, linking their studies with future job markets. The IEC supports job shadowing, student work experience, and internships/apprenticeship. In effect, the Council works with industry to help fill the gap between current educational programs and real-world training.

In 1999, the IEC hosted a series of meetings with various industrial sectors in the Saskatoon district to determine ways in which they might be of assistance to them. As a result, the Council has implemented several projects including:

- Student Career Portfolio
- Take Our Kids to Work
- Spotlight on Careers
- Digital Student Career Portfolio
- Career Expo (planned for January, 2001)
- Business Talks to Students and Student Tours to Business
- Business Talks to Counsellors and Teachers

The IEC participated in the Saskatoon focus group, and has expressed interest in supporting the initiatives of the Sector Partnership. In response to IEC requests, the SHBA needs to identify issues, make recommendations as to how the Council can promote the industry, and become involved in IEC projects. This strategy will be expanded to other areas of the province.

#### **5. Promote a professional image of the industry**

The image of the residential construction sector is not generally attractive, particularly to youth. It is often perceived as a job that provides temporary employment while pursuing another career. One of the major problems is that much of the work is seasonal, and workers are laid off for part of the year. Also, many aspects of residential construction are physically demanding and relatively risky in terms of safety. Many young people today are very technology-oriented and not as interested in physical work.

Technology is taking the physicality out of much of the on-site construction. For example, many of the components of homebuilding are now undertaken in manufacturing facilities, as opposed to at the construction site.

A marketing campaign to promote residential construction as a professional industry needs to be undertaken. The variety of occupations that are available in the sector needs to be promoted, including the less physically demanding jobs. Also, new technology in the industry needs to be highlighted in order to attract today's youth. For example, new construction materials and methods, energy efficiency, computerized plan design, paperless plans and other computer applications. The opportunities for self-employment and advancement need to be stressed – this is not a dead end occupation. Professionals in the industry need to take part in school presentations and student tours of businesses.

## **6. Promote careers in residential construction to women and Aboriginal people**

Construction Technology for Women (CTW), a project undertaken by Women in Trades and Technology (WITT) promotes construction technology as a viable career path for young women in Canada by providing high school courses and summer internships (participants are paid by their employers). Participants are young women 16 to 29 years, and include representation of Aboriginal women, racial minority women, and women with disabilities.

One of the problems with the initial program was finding internship positions with employers. This would be an excellent opportunity for the sector partnership to help employers deal with short term labour shortages by promoting CTW. There is also the potential that students will become interested in the industry as a career, thus increasing the pool of future employees.

In addition to SIAST and the universities, there are three post-secondary institutions in Saskatchewan that serve Aboriginal students: the Gabriel Dumont Institute of Native Studies and Applied Research, the Saskatchewan Indian Federated College, and the Saskatchewan Indian Community College (also known as the Saskatchewan Indian Institute of Technologies). The Gabriel Dumont Institute has a joint venture agreement with SIAST, which helps students and potential students of Aboriginal ancestry on all SIAST campuses to access education and training programs. SIAST has implemented an Education Equity Program to improve access to SIAST programs for all segments of the Saskatchewan population. This program makes SIAST education more accessible to qualified applicants who: are of Aboriginal ancestry, have a disability, are of a visible minority, and are women. A promotional program should be developed and presented to students and potential students in the Aboriginal training institutions.

The industry needs to develop and enhance a partnership with Aboriginal training institutions and organizations to promote training and career opportunities in order to work towards a representative workforce within the sector.

## **7. Provide information to companies about accredited training courses that are available**

Companies in the industry generally support on-going training of their employees, particularly in job-related technical skills; new tools, methods, materials, and techniques; and safety. Although in-house training was preferred, one of the reasons for this was that outside training was not available (or was not known to be available). Employers need to be made aware of training programs in the industry. Where training does not exist, industry and training institutions must work together to develop these programs.

It is critical that a database of available training programs is kept current and that the information is available to the industry through information packages, and on the Internet. The best way to accomplish this would be to have a central location to process and distribute the information.

Timing of training courses offered at training institutions was another factor in determining whether or not employers decided to send employees. Industry and training institutions must work together to ensure there are adequate training spaces, programs and courses. Alternate methods of training delivery should be explored.

Trends in the industry will influence the type of training needed by companies in the future. Respondents indicated that changes in codes and standards, safety, and new technology would be most likely to affect their future training needs. Trends in the industry need to be monitored by the Trade Advisory Boards (with SHBA and industry representation), and incorporated into training programs.

## **8. Establish a communication link between builders and trades**

There was a general concern expressed that there was a lack of communication between builders and trades. In fact, builders were unaware of many of the problems being experienced by the trades.

## **9. Ensure that the Trade Advisory Boards are aware of issues in the residential construction industry**

Residential construction is a large sector in Saskatchewan. According to Statistics Canada, from January 1956 to February 2000, residential construction represented 47% of the total value of construction in the province. During the same period, commercial construction represented 26%, government and institutional 19%, and industrial 8%.

Technological change is beginning to have an effect on the skills required of both workers and management in the sector. New materials and methods are being introduced, as are new methods of planning and organizing construction activities. As a result, the industry is faced with the challenge of continuously upgrading its skill levels.

It is crucial that the residential construction industry have a voice on the Trade Advisory Boards. The SHBA is the only organization currently representing the residential construction industry in the province, and must endeavor to ensure that Board members are aware of the issues in this sector.

## **8.0 NEXT STEPS**

In order to ensure that the work begun under the Sector Partnership initiative is continued, the committee has identified the following first steps:

1. Develop a communication strategy by circulating this document to key stakeholders, and educating industry about the new system.
2. Explore partnerships with organizations, such as Department of Post-Secondary Education and Skills Training, and Human Resources Development Canada, and request financial assistance to implement the proposed strategy and recommendations.
3. Ensure that representatives on the Trade Advisory Boards take into account the needs of the residential construction sector.
4. Work with the Saskatchewan Apprenticeship and Trade Certification Commission and the trade boards to establish new designations.
5. Develop and enhance a partnership with Aboriginal training institutions and organizations to promote training and career opportunities in order to work towards a representative workforce within the sector.