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RESEARCH REPORT

CASE STUDY ON THE CARMA
CENTRE FOR EXCELLENCE IN
HOME BUILDING & LAND
DEVELOPMENT



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CASE STUDY
On
The Carma Centre For Excellence
In Home Building & Land Development

Canada Mortgage and Housing Corporation



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Al Morrison	President, Morrison Homes

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John Drake	Senior Partner, Glenwood Homes Inc.
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EXECUTIVE SUMMARY

The Case Study on the Carma Centre For Excellence In Home Building and Land Development (Carma Centre) was initiated by the Canada Mortgage and Housing Corporation (CMHC), as a review of the objectives and outcomes of an innovative approach being taken towards solving a growing labour shortage in residential housing. This case study provides an in-depth review of the Carma Centre, their training and awareness initiatives, and their involvement in the Career Pathways in Professional Home Building. CMHC is interested in examining the Carma Centre's potential, as a particular applied approach, and as a model that could be replicated in other locations across Canada.

Goals of the Carma Centre

The Carma Centre's goal is to promote specialized training and define the basic opportunities and occupations in the residential construction and land development industry. The vision of the Carma Centre is to *"be the acknowledged Centre for learning and training for the residential construction and land development industry by developing the knowledge and skills base for people and organizations to meet the changing technology, systems and management requirements of the marketplace"*.

The case study, conducted between November 2003 and February 2004, involved interviews with individuals and with organizations directly or indirectly associated with the Carma Centre.

The Carma Centre pursues local partnership-based initiatives with industry, educational institutions, government, and residential construction organizations. The Carma Centre was initiated to respond to the following industry needs:

- The lack of investment in training for the new workforce and the existing workforce,
- The requirement for additional workplace training opportunities, and
- The need to create awareness and to promote the occupations within the residential construction industry.

The Carma Centre's initiatives are funded through industry support and various government and organizational grants. Through this funding, the Carma Centre has conducted labour market research, developed marketing materials, facilitated industry-training initiatives, and staffed the Centre.

Strategies and Initiatives

The Carma Centre's strategies include:

- Curriculum updates,
- Program development,
- Skill development,
- Labour market issue awareness,
- Promotion of the industry,
- Skills Passport development,
- Encouraging a worker-friendly industry, and

- Enhancing the skills of existing workers

The Carma Centre's initiatives include:

- Updating the PHBIA Professional Site Manager program
 - The development of marketing and communication tools
 - Youth awareness initiatives
 - Labour market research
 - Identifying other sources of supply and facilitating training programs
 - An Occupational Description and Skills Profile Project, and the development of a residential construction certification process
 - Lobbying the Alberta Apprenticeship and Industry Training Board
 - Developing Skills Passports for each of the occupations within the residential construction industry.
 - Establishing Career Ladders, which will be used as a template to highlight careers within the industry, and to facilitate development of sustainable industry-training systems
 - Creating a Home Builders' Summer Mentorship Program in conjunction with the Calgary Board of Education
 - Implementing a Career Pathways program in Professional Home Building in partnership with the Calgary Board of Education.

Potential Impact

External environmental factors potentially impacting the success of the Carma Centre initiatives, include:

- Competition from other industries,
- Political issues,
- Short-term relief in labour force pressures,
- The Alberta Apprenticeship and Industry Training Board's willingness to improve the training and certification process.

The findings indicate that replication of the Carma Centre should pursue a pro-active, industry-driven, long-range and broad approach. The human resources strategy should explore alternatives for resolution of industry's issues and the barriers to implementation of that strategy. A national or provincial initiative would have advantages over a local or community driven approach.

INTRODUCTION

This case study on the Carma Centre for Excellence in Home Building and Land Development (Carma Centre) was initiated by the Canada Mortgage and Housing Corporation (CMHC). The objective is to highlight the Carma Centre's development, their training and awareness initiatives, and their involvement in the Calgary Board of Education's Career Pathways program. The CMHC is also interested in the Carma Centre's new approach to certification of trades and to professional development within the housing industry. As the Carma Centre uses an industry-driven partnership approach to address skills and labour shortages in Calgary's residential construction industry, this case study is of value to policy makers interested in developing a similar partnership approach.

CMHC has been involved in supporting a broader initiative in conjunction with the Canadian Home Builders Association (CHBA) and Human Resources Development Canada (HRDC) to identify a strategy for addressing national trade shortages. On a national level, the importance of studying an organization such as the Carma Centre includes:

- *Housing Affordability.* The skilled worker shortage in the home building trades is resulting in building delays and is adding to the cost of new homes.ⁱⁱ
- *Housing Quality:* Quality standards are a key issue affecting the residential construction industry across Canadaⁱⁱⁱ. The lack of industry accreditation will continue to decrease the quality of home building.
- *National Labour Shortages:* Statistics Canada reports only 12% of Canadians age 25 or older (2.4 million) are qualified in a trade^{iv}. A 2002 Conference Board of Canada report notes that by the year 2020 Canada could be facing a shortfall of one million skilled workers^v. Of concern is 2001 Statistics Canada data, which reports that 250,000 Canadians had registered for the Apprenticeship program, but only 18,260 (less than 10%) completed the program^{vi}.

Study Scope

The scope of this case study is the analysis of the Calgary-based Carma Centre. The case study approach has included a literature review, in-depth interviews with individuals directly and indirectly connected with the Carma Centre, on-site interviews with various building trades and suppliers, and focus groups with school and career counselors. The time frame during which the information was gathered was from November 2003 to February 2004 (this included a temporary hold on the study from December to early January). Although numerous milestones had been achieved by the time this case study began, many are still underway and could not be reported on in full during this phase of the study.

CMHC notes that the value of the Carma Centre concept is the fact that education and networking are key components. CMHC is aware that the Carma Centre is still in development stages and will be evolving over time. As the Carma Centre is still developing, the extent to which the CMHC would advocate the approach is limited to the Carma Centre producing demonstrable outcomes.

PART I – WHY THE CARMA CENTRE EVOLVED

1.0 WHY THE CARMA CENTRE EVOLVED

This section outlines the Carma Centre's importance, evolution, governing structure and organizational aims.

1.1 Background on Human Resources Issues in Residential Construction

The Canadian Home Builders' Association's report 'A Proposed Work Plan and Budget for a Human Resource Development Initiative' for the New Home Building and Residential Renovation Industry" has identified that human resource challenges within the skilled trades as a number one issue across the country. Reasons for these labour shortages include:

- An aging work force^{vii}
- Negative images of the industry resulting in attracting fewer new entrants
- A Lack of labour supply through immigration
- Insufficient funding for vocational training^{viii}
- A restrictive Apprenticeship system that is not truly relevant to residential construction^{ix}

Challenges

Challenges in Calgary's residential construction industry which led to the formation of the Carma Centre include:

- *High Industry Demand.* Calgary's home building industry is estimated at \$3 billion dollars annually, and employs approximately 35,000 people. Population growth is particularly strong in Calgary, and accounts for approximately 60% of the homes being built in the province. The Calgary home building industry experienced its fourth best year on record in 2003. Under such brisk economic conditions, the industry is under pressure to build homes quicker and to use whatever resources are available.
- *Industry structure does not facilitate training and development.* Currently only 11% of residential construction tradesmen are Journeymen or Apprentices. Since 1995, the number of Albertans completing Apprenticeships has declined by 16%.^x The structure of the Alberta homebuilders is one that employs minimal staff and involves completing projects primarily with small trade-contracting companies. As a consequence, homebuilders have no direct interest in developing tradesmen, as they are not employees. The small trade-contracting companies, operate on tight margins, and find it difficult to sponsor Apprentices.
- *Difficulties Managing Supply and Limited Succession Planning.* The skill level of the trades is expected to decline as the older trades workers retire. Industry's human resource solution in the past has been to hire from competitors by offering higher wages. Although this approach worked during the 1980's and early 1990's, the aging of the workforce has increasingly become the predominate issue.
- *Competition from other provinces and other industries* Although the number of housing starts in Calgary is anticipated to be lower next year, the inter-migration of trades people is expected to decrease. At the same time the number of commercial construction permits is anticipated to increase significantly.

- *A significant part of the Apprenticeship program may not be relevant to residential construction.* Many of the contracting trade companies are not Journeymen-led as this is not a mandatory requirement in Alberta. Consequences to this have been:
 1. Differences in on-the-job training processes and an inability to transfer skills from one employer to another,
 2. Some trade companies cannot indenture Apprentices because they are not led by qualified, Journeymen, and
 3. Some trade companies do not see the value of indenturing Apprentices because Journeyman status is not a condition of employment industry-wide.

- *The Alberta new home building industry is currently experiencing transition and a need for structural changes.* Modern building supplies and systems involve more sophisticated construction, thus requiring additional completion time, more manpower, additional industry training, and changes to techniques to respond to structural issues. A lack of industry organization has made it difficult to promote the development and retention of workers, and the skilled labour shortage has resulted in a plethora of issues including:
 1. Increased costs in insurance premiums
 2. Increased costs due to having to do the same work twice
 3. Increased costs because of delays
 4. Safety issues due to unskilled labour.

- *Difficulty attracting young people.* Currently, the average age of an apprentice is 27 years.
^{xi} Factors contributing to the industry's difficulties in attracting young people include:
 1. *Competition for workers from other industries.* Occupations within other industries are often more enticing. In addition, the commercial construction sub-sector is able to offer better working conditions and higher wages.
 2. *Students lack career awareness.* Most high school students lack clear career goals, or career awareness, and thus have difficulty seeking information regarding a specific sector or occupation.
 3. *A lack of respect for the trades.* Unlike the United Kingdom and other European countries, which encourage a culture of respect for the trades, the Canadian perception is different. In Calgary, this perception originates from the parents and teachers. In focus group discussions, parents, teachers and guidance counselors readily admitted encouraging youth to pursue University, rather than choosing a trade.
 4. *The residential construction industry has been their own worst enemy.* Site conditions, the physically demanding nature of the work, and the cyclical nature of the industry has discouraged entry into the industry. The industry has admitted that over the past fifteen or twenty years they have not done a good job of creating a safe environment, nor of promoting careers in the industry.
 5. *Industry Training has not been coordinated.* Although a number of different industry training projects have been developed in the past, a perception is that all partners in business, education and government have defined and addressed the problem differently rather than cooperating.

1.2 History and Evolution of the Carma Centre

Pre-Carma Centre Events

In 1996, two years prior to the formation of the Carma Centre, a partnership between the Alberta New Home Warranty Program (ANHWP), the Calgary Region Home Builders Association (CRHBA) and the Southern Alberta Institute of Technology (SAIT) was initiated to pilot test an Alberta-based training project. The intent was to expedite the entry of skilled framers into the residential construction industry by providing a fast-tracked entry-level knowledge of the required tools, materials, language, and safety practices.

This training program was only moderately successful due to the limited number of participants who pursued ongoing careers in the industry and industry employers who felt the eight-week course only provided minimal skill knowledge. Although the program organizers were aware of the shortcomings of the training program, industry need for workers was still substantial. This awareness along with discussions regarding implementing additional programs in concrete forming occurred just prior to the evolution of the Carma Centre for Excellence.

The Carma Centre Evolution

In 1998, the Carma Centre evolved from a concept put forth by Carma Developers. Carma Developers, (principally a developer but also one of the top builders in Calgary), was concerned about the 'health' of the residential housing industry and wanted to be involved in a solution. They pledged the initial up-front funding of \$200,000 (\$100,000 immediately and \$20,000 annually for the next five years).

The initial founders of the Carma Centre for Excellence were Carma Developers, the Alberta New Home Warranty Program, Calgary Region Home Builders Association and SAIT. The Carma Centre was registered as a separate not-for-profit organization on April 1, 2000 along with the following value statements.

Vision

"Be the acknowledged Centre for learning and training for the residential construction and land development industry by developing the knowledge and skills base for people and organizations to meet the changing technology, systems and management requirements of the marketplace"

Mission Statement

"Utilizing the full resources of the residential construction industry and existing educational institutions, identify and facilitate the development and delivery of the current and future education and training requirements of the residential construction and land development industry to promote continuing skill development creating rewarding career paths for individuals and excellence in the product for the home buyer"

Purpose

"To provide leadership in focusing curriculum and training efforts of industry and educators, to promote the career path/ladder in the industry to individuals who are current and potential employees of the industry and to promote the concept of continuous learning within the industry".

When it came to choosing a name for the organization, the founding directors decided, "to give recognition to Carma Developers because they provided the initial funding". However, the

organization has always remained open to a future name change to one that is more easily recognized by people outside the industry.

In their strategic business plan, it was determined that the Carma Centre would not become educators or course developers, but rather serve as industry champions and organizers.

It was realized in the very early stages that the Carma Centre's goals could not be accomplished solely with volunteers. In 2000, the Carma Centre hired an Executive Director with a strong background in education to bring an educational perspective to the organization and to facilitate partnerships with the schools. Another staff member was hired in 2003, to assist the Executive Director in executing the Carma Centre's strategy and (as part of the marketing strategy) to network with industry. In early 2004, a further employee was added on a part-time basis to assist with the validation of the skills competencies/profile initiative.

1.3 Objectives and Business Activities

The Carma Centre's initial purpose and specific objectives included:

Curriculum Updates and Program Development

- Develop a process to keep industry current with technological changes.
- Develop new programs and update existing programs to enhance the career aspirations of workers.
- Facilitate a process for educational institutions to cooperate and to implement more consistent training methodologies.
- Lead and facilitate the organization, coordination and focus of all assets and resources related to skills development for residential construction.

Skill Development and Enhancement

- Improve the quality of education and learning standards in order to increase the qualifications of new entrants and current workers by encouraging and supporting the development of specialized training.
- Develop a mechanism for pro-actively encouraging career laddering and career growth.
- Create a template for pre-employment programs and professional development training.
- Address the consequences of skill gaps and the potential impact on the quality of home construction.
- Devise a long-term approach for resolving skilled labour shortages that encourages existing workers to upgrade through the certification programs.
- Facilitate an industry understanding of the need to expect the major trades and suppliers to be certified or journeymen-led.

Labour Market Issue Awareness

- Identify market needs.
- Create awareness of the issue of future manpower shortages.
- Provide a common forum for industry leaders to discuss the key causes of the labour shortage and solutions for attracting young people to the industry.
- Gather labour market information to keep industry informed of trends and new sources of labour.

Promotion of the Industry

- Raise the awareness of the residential construction industry.
- Define and make visible career opportunities within the residential construction industry.
- Raise the awareness of *all* career opportunities within the industry (trade occupations and other categories such as sales, administration and marketing).
- Ensure industry is fairly represented in the schools and in the general workplace, and has a voice in relation to other industries that are competing for the same workers.
- Put forth specific campaigns to encourage young people to pick the industry as a career of choice.
- Develop a mechanism to draw on industry participants, and to pursue marketing initiatives that promote the residential construction and land development industries.
- Promote the residential housing industry through the high schools.

Encourage a Worker-Friendly Industry

- Encourage stakeholders to hire and train individuals who are motivated to remain in the industry.
- Implement a worker-friendly environment, which includes fair reimbursement.

Business Development Activities

Some key business development activities of the Carma Centre during its formative years included:

- *Identifying existing community training initiatives.* The Carma Centre researched all of the current resources and training initiatives to avoid duplication and to establish partnerships.
- *Conducting industry needs assessment to identify critical shortages.* By canvassing and interviewing industry stakeholders, the Carma Centre identified the most in-demand skills and the required number of people per occupation to sustain the industry.
- *Obtaining Five-year pledges from industry.* Fund-raising efforts were conducted through a telephone and mail-out campaign to obtain five-year pledges from industry.

In the initial stages, the Professional Home Builders Institute of Alberta was contracted to supply administrative services, coordinate marketing, and conduct program research, development and delivery, and SAIT was contracted to provide program research, development and delivery.

1.4 Governing Structure: Carma Centre for Excellence Board, Executive Director, Committees, Staff and Members

Recruiting volunteers to serve as directors and committee members has involved personal contact by influential industry leaders and a minimum one-year (but preferably five-year) commitment. Committees are created on an 'as needed' basis. There are committees that are "*held in advance*" and not currently active. The Board holds annual planning sessions to set future objectives. A key future objective of the Centre is to develop a strategic marketing campaign.

All industry supporters of the Carma Centre Board have a long history of volunteerism in the home building and land development industry or in their respective specialties. They are well-respected executives among their peers and/or have held high positions in industry-related

associations. Non-industry directors represent key stakeholder groups interested in supporting the efforts of the Carma Centre.

The volunteer board includes:

Founding Board Members

- Carma Developers (Alan Norris, Chair of the Carma Centre and current CEO of Carma Developers; Brian Hodgson, retired Executive Vice-President and COO of Carma Developers)
- Alberta New Home Warranty Program (Dennis Little)
- Calgary Region Home Builders Association (Donna Moore)

Builders

- Homes by Avi (Avi Amir)
- Cedarglen Homes (Bruce Hall)

Government Representatives

- CMHC (Elizabeth Huculak)
- Alberta Human Resources and Employment (Laird Anderson)

Trade Contract Suppliers

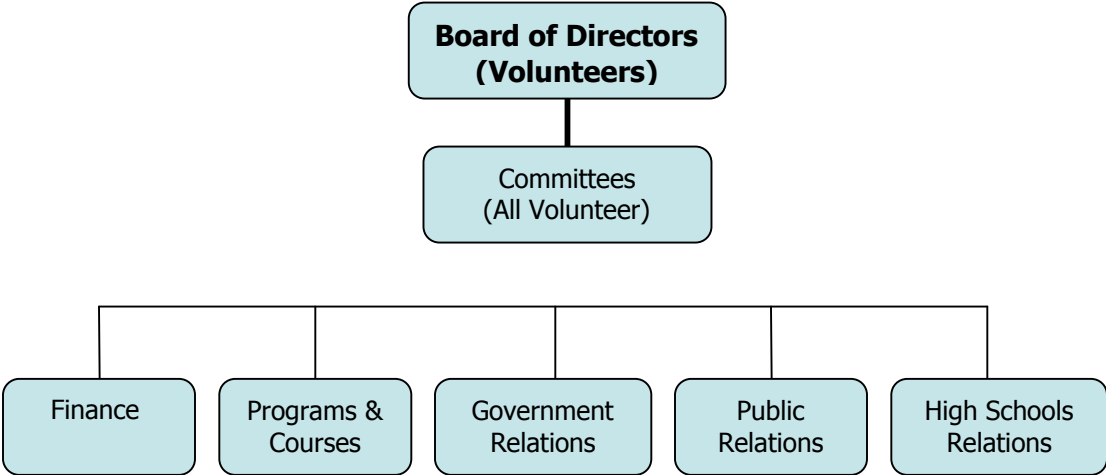
- Omega 2000 (Dell Lloyd)

Educational Institutions

- Southern Alberta Institute of Technology (Larry Rosia, Dean of Construction)
- The Calgary Board of Education (Derald Fretts)

<u>Carma Centre’s Committees and Directors</u>	
Finance:	For fundraising
Government Relations	To explore government funding opportunities and maintain a high profile with public officials
High School Relations	To promote career awareness through home building projects, summer mentorship, career fairs, and to respond to individual requests for information or presentations.
Programs	To work with PHBIA and SAIT to produce industry-required courses
Publicity	To create greater awareness within and without the industry for recruitment, continuing education, skills training and upgrading
Marketing	To develop a strategic marketing campaign, to connect with the high schools and the High School sub-committee, and to focus promoting the career pathways model. (Future)
Directors-at-Large	To provide special support and advice

Organization Chart (as of March 30, 2000)



PART II – INDUSTRY SUPPORT AND PARTNERSHIPS

2.0 INDUSTRY SUPPORT AND PARTNERSHIPS

This section describes the Carma Centre’s membership structure and its partners.

2.1 Membership (Industry Supporters)

A. Builders and Developers

Currently, the Carma Centre members account for only 15% of the Calgary Region Home Builders Association membership. The Carma Centre has buy-in from developers, most of the large builders, but still requires commitment from the small builders.

Members who did commit pledged a financial contribution based on their size and financial capability for a 5-year period. Membership has five (5) financial options:

- Platinum \$10,000
- Gold \$5,000
- Silver \$2,000
- Bronze \$500 to \$1000
- Non-metal \$100 to \$500

While each option receives different recognition for their contribution, a metal supporter receives recognition through advertising on the Carma Centre website and on trade booth handouts.

Concern over the shortage of skilled labour in the industry is promoted as the main reason for becoming a member. Financial support is a requirement of membership, but being a volunteer is not mandatory. However, the major supporters are also involved in the Carma Centre as volunteers in some way such as:

- Being an active board member,
- Working on a committee,
- Volunteering within the Carma Centre community and high school based programs,
- Sponsoring a student through the mentorship program. (This sponsorship could include paying wages to the students to work for a sub-contractor).

In addition to being involved with the Carma Centre, some members conduct their own private programs. This could include having their own training centres, or having partnerships with high schools and/or junior high schools.

B. Trade Contractors

A broad-based and targeted campaign to encourage trade contractors to become members has been discussed but not yet implemented. Currently, member representation by the trades is limited to one or two select trades.

Limited to one or two select trades. Buy-in from trade contractors is a key component for the success of the Centre. The Carma Centre has been spreading the word to trade contracting companies about their initiatives through the builders who contract their services. Trade contractors who had previous connections with members of the board, or who were known to have an interest in training and career development, are the most likely to become involved. Trade contractors have been aggressively contacted for input into validation of the Skills Passport project.

C. Challenges in Attracting Members

The Carma Centre recognized very early that having a strong voice and respected leadership is vital to obtaining industry support. This was key in influencing their decision to develop a volunteer base of homebuilders who are respected leaders in the industry. For specific tasks (such as curriculum review), they approached these same leaders for their input and to provide some of their highly experienced employees to complete these tasks.

It was noted during this review, that although the staff at the member companies are aware of their company's individual programs (such as the partnerships with schools), or have personally been involved in the company's initiatives, the builders have not created a strong internal awareness of the Carma Centre. Raising awareness of the Carma Centre among their staff may be a future challenge for the member builders.

2.2 Non-Members

Some non-members do provide volunteer support, assist with high school trade fairs and career fairs, become guest presenters at high schools, attend focus groups, and employ students through the Summer Mentorship program. In fact, the majority of employers that participated in the Summer Mentorship program are non-members. The Carma Centre encourages this type of support from non-members as a further opportunity to promote the Centre's mission, to expand its membership and to encourage more industry involvement. Non-members provided a number of reasons for not being a member:

- *A Lack of Information and awareness of long-term objectives* Information on the Centre's mandate and on the different levels of membership has not been fully reviewed. As a result, some builders and trade contractors lack an awareness and understanding of the Carma Centre's goals. Board members note that because of the innovative nature of this initiative, it is difficult to communicate the long-term goals and anticipated benefits. To encourage more trades involvement, non-members suggested creating marketing and promotional materials, which outline the mission, the goals, and the importance of the Centre. They also indicated that conducting diligent follow-up to recruitment efforts, and having a clear statement of a need for financial support would also have been beneficial.
- *Concern with the Name:* The name "Carma Centre for Excellence" is perceived as an initiative that primarily benefits and creates recognition of one developer (Carma Developers). A name change for some companies would have a positive impact on their decision to become a member.
- *No direct benefit to individual companies* The Carma Centre initiative is perceived as a general approach which may benefit competing industries as much as the residential

housing industry. For the expected dollar investment of membership, some builders and trade companies prefer to conduct their own initiatives, which will have specific payback benefits to their own company. Some builders have expanded to have their own plumbing and framing divisions to their companies in which they hire and train workers in-house or pay for outside training. Other non-members employ work placement students or use employee-referral incentives to attract workers.

- *A lack of awareness of impending labour market issues.* Some non-member builders have a short-term view of the workforce, which does not include concerns beyond five years. Other non-members do not believe the labour shortage problem is significant or are having a big enough challenge in dealing with today's issues that they have been unable to consider succession plan issues.
- *Limited results to report.* Although the Carma Centre has significantly increased awareness of the labour force issues, outside of the residential construction industry, the builders, and trades suppliers have not seen any significant benefits to this point in terms of:
 - More students becoming interested in the trades,
 - A change of attitude among students and parents, or
 - A dramatic increase in the number of new people at the worksites.

2.3 Partnerships

The Carma Centre has developed a partnership with the following organizations:

- The Calgary Region Home Builders Association (CRHBA)
- The Professional Home Builders Institute of Alberta (PHBIA)
- The Alberta New Home Warranty Program (ANHWP)
- Southern Alberta Institute of Technology (SAIT)
- Calgary Board of Education (CBE)

A brief description of these specific partnerships and their relationship to the Carma Centre follows.

A. Calgary Region Home Builders Association

The membership with the Calgary Region Home Builders Association (CRHBA) includes approximately 550 industry companies including builders, developers, renovators, suppliers, trade contractors (primarily the larger ones), manufacturers, and other companies indirectly involved in residential home building (such as industry professional service companies). Approximately 85% of CRHBA's current membership is trade-contracting companies. CRHBA serves members operating businesses in the geographical area from Carstairs to the North, Banff to the West, Strathmore to the East, and Fort McLeod to the South.

CRHBA's mandate includes dealing with the industry's issues and providing information on industry events and trends. CRHBA is one of Canada's most results-driven chapters and has the second largest membership in Canada. Being relevant to the market and having significant member-volunteer participation has been the basis for the CRHBA's success which has been beneficial to their partnership with the Carma Centre.

Although the CRHBA supports education and training, this is not currently a part of their mandate. The CRHBA believes that role is better performed by the PHBIA and the Carma Centre. The relationship between CRHBA and the Carma Centre is described as an alliance to which the CRHBA contributes a number of benefits:

- Information Facilitator and Conduit The CRHBA promotes the Carma Centre through its mailings, newsletters and Board meetings.
- Link to the Builder Members The CRHBA hosts annual industry conferences at which they promote the Carma Centre and its mandate.
- Funding Support The CRHBA provides funding on a limited basis to the Carma Centre.
- Provincial Association Link The CRHBA works with the Alberta Home Builders' Association (AHBA) to raise awareness of the Carma Centre across the province.
- Board and Committee Involvement The entire Carma Centre board, and the committee members, (with the exception of the government and educational liaisons), are CRHBA members.
- Public Relations The CRHBA continuously promotes public aware of the labour force shortage issues and how the Carma Centre is addressing the issues.

The CRHBA anticipates they will continue to support the Carma Centre through the Association mandate. Although, the two organizations may become more closely related as the issues around labour shortages become more significant, and the CRHBA may link the Carma Centre to their overall educational programs through PHBIA, the Carma Centre is expected to remain a separate entity.

Other industry initiatives, in which the CRHBA is involved, and which may help to strengthen the Carma Centre initiatives include:

- The CRHBA has a strong and successful partnership with SAIT. Through this they initiated a design competition within the high schools in conjunction with SAIT.
- Some of the CRHBA members have significant participation in the Apprenticeship program, or are involved at the Junior High and High School level.

B. Alberta New Home Warranty Program

The Alberta New Home Warranty Program (ANHWP) is a not-for profit organization, with a mission to provide investment protection for new homebuyers in Alberta; to provide quality services to its builder members; and, to promote the aims of the Alberta Home Builders' industry. Its' primary stakeholders are the builder members who pay a fee based on the purchase price of each home.

The ANHWP does not see any overlapping endeavours between themselves and the Carma Centre. The Carma Centre's role in this partnership is to facilitate the training of new recruits and to re-educate the existing workforce. The Carma Centre is seen as a benefit to the ANHWP members, because it is a pro-active initiative aimed at improving the skills of the trades, the quality of new home construction and to provide builders with additional resources to avoid potential problems with homeowners.

The ANHWP has provided the Carma Centre with a limited amount of funding, but their core added value to the relationship is “*intellectual capital*”. The Alberta New Home Warranty Program anticipates continuing to support the Carma Centre through a facilitating role.

C. Professional Home Builders Institute (PHBIA)

The Professional Home Builders Institute of Alberta (PHBIA) is a not-for-profit training centre, which has obtained status as an educational forum by the Government of Alberta. ANHWP, which is the parent company, provides financing for PHBIA’s educational programs.

Professionals already working in the industry are the most likely participants in the PHBIA’s programs, although there are some applicants who are interested in getting into the industry. PHBIA has a high enrollment of individuals from small and large sized companies, as these builders believe that training is essential to remaining competitive. PHBIA’s programs which offer management training and education with respect to residential housing and technical issues, are offered alternatively in Calgary and Edmonton. The number of employees that can take time off to attend classes is a deterrent to enrollment. To address these challenges, PHBIA offers on-site courses for some of the larger builders.

PHBIA’s curriculum and academic standards are industry-driven and developed or revised by industry specialists, other post-secondary educational institutions, or the various municipal Planning and Building Departments. These courses are now also approved by the Carma Centre, which is becoming recognized by the home building industry as the standard for industry training and education.

The previous Executive Director of PHBIA held a seat on the Board of Directors for the Carma Centre and served as the Chair of the Programs and Courses Committee. Currently, the relationship between the two organizations is limited to monthly or bi-monthly communication, and providing funding on a per student basis for some of the courses. PHBIA and the Carma Centre have not had any challenges in their relationship and both organizations anticipate continuing to operate separately.

D. Southern Alberta Institute of Technology (SAIT)

Southern Alberta Institute of Technology (SAIT) has a business mandate of working with industry to serve the community’s training needs. SAIT’s expertise is in delivering curriculum and providing customized training. They provide “relevant hands-on, individual skills training to their students, and keep them equipped to be successful in the changing world of work” ; the Carma Centre is premised on that same principle.

In consultation with the CRHBA, ANHWP and PHBIA, SAIT has developed and delivered courses specific to residential construction industry. The role of industry Associations in this partnership has included problem identification and facilitation; while SAIT’s role has been skills identification, curriculum development, program marketing and course delivery.

Since the beginning of the Carma Centre, SAIT has been involved as one of the three founding partners. From SAIT’s perspective, the Carma Centre is a means to help industry obtain the training it requires for a skilled workforce. The partnership with SAIT was formed to provide a channel for all of the training that would be required to deliver excellence and competencies in

the home building industry. SAIT's vision for the Carma Centre goes beyond the classroom to the creation of a virtual centre that could be a magnet for attracting new entrants industry.

SAIT's role in the partnership with the Carma Centre includes:

- To develop and deliver a curriculum based on standards established by the Carma Centre.
- To attract new entrants and to facilitate their entry into the industry.
- To assist with the Skills Passport product, this is currently in development stage.

Other initiatives being conducted by SAIT that will impact the Carma Centre's activities include:

- SAIT offers pre-employment and pre-Apprenticeship training programs, which provides high school students the opportunity to achieve some initial training required for entry into a trade. SAIT works with the students through the transition from school to a work placement. The introductory carpentry class has made field trips to job-sites; this is a program that the builders support and encourage. Some builders will set aside a home for the introductory carpenter class to frame.
- In cooperation with other technical institutions in Alberta, SAIT has developed individual learning modules (ILMs) as basic teaching units for all of the trades. These modules have been validated relative to the Apprenticeship course outline, are subject to peer review and are annually updated. Some of the modules for carpenter, electrician and plumber occupations are ready to deliver, while others are not. These modules are sold at nominal cost (from about \$2 to \$6 per module). This training technique, which provides more flexibility in delivering courses, was developed for the Apprenticeship programs, but also appears to be applicable to non-apprentice occupations.
- SAIT has experience in a number of Prior Learning and Recognition (PLAR) initiatives that are similar to the Carma Centre skills passport initiative.
- SAIT has developed custom programs as requested by home-building companies who are using training programs as a means for attracting new workers specifically for their company.

Challenges

Challenges with the partnership between the Carma Centre and SAIT include:

Challenge 1: SAIT notes they are experiencing difficulty in meeting all of the Carma Centre requirements and that delays being experienced on their part are due to insufficient funding. To enable the Carma Centre initiatives to move forward, SAIT believes that funding for the program will have to come from all constituents: the learners, the industry, the education institution as well as from other external funding.

Challenge 2: Key people at SAIT would like to continue to deliver traditional training, which does not include granting credits earned through the high school curriculum.

Challenge 3: While the key strength of the SAIT/Carma Centre partnership is the sharing of common goals and vision, some differences in views remain unresolved, particularly with

respect to the Career Pathways initiative. SAIT believes the following steps are required prior to proceeding with some of the training initiatives:

1. Conduct an industry needs analysis.
2. Clearly define the competencies to be taught for each residential construction occupation.
3. Explore similar initiatives in other provinces, and share experiences.

E. Calgary Board of Education

The Calgary Board of Education (CBE) is Canada's second largest public school system. The CBE consists of five administrative units. From Kindergarten to Grade 12, each area has approximately 25-30 schools, and is organized to respect existing "feeder school" organizations and ward boundaries. The Calgary Board of Education (CBE) envisions these units cooperating and collaborating to plan articulation activities, orientation activities, partnership initiatives, and to allocate discretionary resources towards the partnership with the Carma Centre.

Prior to the Carma Centre, some builders had already established partnerships or initiatives with individual schools. In addition, while still being supportive of the Carma Centre, other builders have since arranged their own school partnerships. However, none of these individual initiatives have interfered in the progress of the Carma Centre mandate. The schools have benefited from the partnerships through profit sharing from the sale of the homes that are being built through these partnerships. The Carma Centre has taken the partnerships concept that these individual builders have with the school, and expanded it into an industry-wide effort.

Recognition by the CBE of the potential opportunities of entering into a partnership with the Carma Centre has been a key strength and a catalyst for moving ahead with their joint initiatives. The relationship includes the Carma Centre providing the CBE with a template of the industry so the schools can organize their courses to be relevant to the residential construction industry. The most extensive initiative with a partner will be the Career Pathways relationship, (discussed in detail in subsequent sections of this report).¹

¹ Additional information about the Calgary Board of Education and the Career Pathways can be found on their website (<http://www.cbe.ab.ca/sitedirec/>)

PART III – FINANCIAL SUPPORTERS

3.0 Financial Supporters

This section describes the financial commitment from industry to the Carma Centre, and their relationship with government and not-for-profit organizations that provided partial financial assistance to the Carma Centre initiatives is also discussed.

3.1 Industry Funding

The Carma Centre Board, realizing the need for sustainable funding, established a Finance Committee. This Committee was successful in obtaining a commitment of three-quarters of a million dollars over a five-year period (or \$150,000 annually).

Industry fundraising was conducted via direct contact with key industry players. This request was complemented by hosting industry dinners, trade breakfasts, and boardroom meetings, which promoted the importance of the Centre and provided updates on the various initiatives.

The Finance Committee was conscious that homebuilders and developers already contribute to a wide variety of industry associations, foundations, and other charitable causes. As such, the request for support included details on the initiatives, the benefits for being a contributor, and a promise to keep the members informed.

Part of the contributions from industry were allocated to the salaries for the Executive Director and the support staff at the Carma Centre, as well as for office space, acquired in 2003.

3.2 Government and Foundation Funding

The Carma Centre has received grant funding from CMHC, and project-specific funding from Human Resources Development Canada, Alberta Human Resources and Employment and the Alberta Real Estate Foundation.

A. The Alberta Real Estate Foundation

The Alberta Real Estate Foundation funds industry initiatives to advance the real estate industry, including projects that improve the industry from a consumer perspective and from the broker-agent perspective. The Foundation provides project support, such as assistance in clarifying purpose, commissioning projects, and contracting evaluations and research.

Alberta Real Estate Foundation provided two 'one-time funding' grants (\$45,000 combined) to the Carma Centre to conduct labour market studies on Calgary's residential construction industry. The process for granting funding to the Carma Centre was evaluated on the basis of the funding criteria, but did not require project development or a matching investment. A final report was the only request made as the project carried limited risk and follow-up.

The Carma Centre plans to submit a subsequent request to the Foundation. Although the Alberta Real Estate Foundation does not envision a future relationship with the Carma Centre at this point, they are not adverse to considering another proposal should it meet their specific requirements. One of the barriers to another proposal may be the inter-relationship between the new and resale home industry, which in Calgary is noticeably adversarial at times.

B. Canada Mortgage and Housing Corporation (CMHC)

Canada Mortgage and Housing Corporation (CMHC) is a crown corporation of the Government of Canada, with a mission to promote housing quality, affordability and choice for Canadians. Through its Research and Information Transfer activities, CMHC provides reliable and objective housing information. This is done through directed and responsive research programs, and the provision of housing surveys, data and extensive analysis and forecasting of economic, housing and mortgage market trends and conditions.

The CMHC conceptually supports the Carma Centre initiative. This relationship with the Carma Centre has involved facilitating and providing support as needed for the Centre's organizational development, including:

- CMHC Calgary provided temporary office space to facilitate the Summer Mentorship Program.
- CMHC provided funding support for some of the research initiatives and for the curriculum development, currently underway.

C. Alberta Human Resources and Employment

Alberta Human Resources and Employment (AHR&E) is a provincial agency that has provided funding assistance to the Carma Centre. This relationship includes representation on the Carma Centre Board to act as a vital link to the provincial government and to create awareness of any upcoming funding initiatives that could benefit the Carma Centre. From a government perspective, AHR&E's involvement has been positive, as it demonstrates a willingness of AHR&E to partner, it keeps the government informed of the progress of the Carma Centre, and helps the department remain current on labour market trends in the residential construction industry.

In the Skills Investment Division of AHR&E, their core priorities are addressing skill shortages in the province and increasing employment participation in under-represented groups. A new array of programs includes:

- 1) Career Information (providing information on labour market trends)
- 2) Work Foundations, (upgrading)
- 3) Training for Work (employment training programs) and
- 4) Workplace Partnerships (industry partnerships).

AHR&E's core priorities that directly affect the residential construction industry include:

- *Offering Career Information* To increase the career information that reaches the public, to help people make career decisions, and to train unemployed people.
- *Fair and safe workplaces* To ensure labour standards are met in accordance with workplace health and safety and employment standards. As AHR&E is also responsible for Workplace Health and Safety, the Carma Centre initiative is of even more interest to this department.

The Carma Centre received their funding under the Labour Market Partnership Program, which aims to address the Human Resource industry requirements and the Labour Force Adjustment Issues based on the following criteria:

- Must fit within the mandate of a government department. AHR&E funded the Carma Centre's website and related marketing materials because it made career information on the residential construction industry available to all Albertans. The relevance of the Carma Centre's mandate to AHR&E includes:
 - Promoting careers within the industry.
 - Illustrating the career paths that can be achieved within the industry.
 - Tailoring education to fit the needs of industry.
 - Encouraging a safe work environment.
- Project-specific funding. AHR&E will fund specific projects, or 'one-off' initiatives depending on the circumstances. Funding requests must be realistic, be within the budget considerations of the Department, and have definable outcomes.
- Pay on Deliverables or Milestones. As AHR&E requires accountability and deliverables, as funding is not paid up-front, but is based on outcomes.
- Projects that include partnerships. AHR&E prefers projects that involve a cost sharing of "roughly fifty-fifty", and includes one or two partners in addition to their Department. The Carma Centre was considered to be an excellent example of the partnership approach because competing building companies were focusing on an issue and working jointly to improve the image of the industry.

The Carma Centre's current projects, which focus on education at the high school level, does not fall within AHR&E's mandate, but under the mandate of Alberta Learning. In the past, AHR&E has worked with schools to implement career information into the schools, and to review their current approach to career information. They also partnered with the Calgary Educational Partnership Foundation to facilitate a needs assessment for the school districts, and have provided some funding support for the Career Pathways project.

AHR&E has supported a number of entry-level skill-training programs in conjunction with SAIT and other organizations. Their partnership with SAIT involves working on youth transition issues. The aim of these community-based projects is to encourage unemployed individuals to obtain a Journeyman status rather than '*just working in the industry*'. The goal is to include encourage industry and the unemployed to connect as a consequence of the entry-level training. The next step is that industry is expected to assume responsibility for "*grooming the employee*" via the Apprenticeship program, and in formally training that person for a career in the industry. In general, approximately 75 to 80 percent of the pre-employment program participants obtain employment leading to training in the construction industry.

Currently, the Carma Centre is negotiating with Alberta Human Resources and Employment to obtain a \$100,000 grant to develop marketing posters brochures and other materials for upcoming certification and training programs.

D. Human Resources Development Canada

Human Resources Development Canada provided a Youth Internship Program grant to facilitate an employment program in conjunction with Bow Valley College. This program provided youth who were experiencing a variety of challenges and barriers to employment with an opportunity to work in the residential construction industry.

The proposal to conduct this program was considered a strong bid, because of the combination of Bow Valley and the Carma Centre—as a trainer and industry organization. The Youth Internship Program provided a very strong catalysis for helping people and employers, because of the Carma Centre’s ability to involve influential industry leaders. One of the project’s unique features was that the Carma Centre provided industry experts to speak with the students. In total, nine industry stakeholders were actively involved in the project.

The Carma Centre and Bow Valley College found it difficult to implement a program under the HRDC government funding, because the parameters were not conducive to finding and training the type of worker required in residential construction. As a criteria of the labour market agreement between the federal and provincial governments, the provinces are required to be responsible for all training initiatives. Because of this, Bow Valley College and the Carma Centre were not allowed to refer to the project in the ‘training’ context, nor to include training as part of their work-placement program. In order to include basic safety training, it was necessary to refer to the safety-training component as ‘orientation’.

As the program model is very flexible, Bow Valley College and the Carma Centre anticipate it can be used for pre-employment training for Immigrants, Aboriginals and unemployed Canadians. It is speculated that if funding was available, the program could be a strong force that would help people gain employment and help companies find the people they need. HRDC has indicated that the likelihood of the Carma Centre obtaining funding would improve if the Carma Centre’s initiatives were national rather than local.

Part IV –TARGET MARKET AND OTHER SOURCES OF SUPPLY

4.0 Target Market & Other Sources of Supply

This section highlights the various demographic components of the Calgary labour market on the supply/worker side. Comment includes the extent to which the Carma Centre has considered non-traditional labour sources. Where appropriate, information about the challenges that have been experienced by the Carma Centre in attracting or retaining specific groups of workers is outlined.

4.1 Overview of the Carma Centre's Target Market

The target market of the Carma Centre primarily includes high school students, but they also have a plan for focusing on influencers such as the teachers and parents. The Centre's ability to focus on students as a major target market, (rather than a broad promotion campaign aimed at multiple groups), is considered to be a strength.

A specific plan to identify the needs of the target group has not yet been developed outside of the mentorship program. However, the number of students participating in that program has increased substantially from the first year.

4.2 Overview of Other Sources of Labour Supply

Taking steps to involve special interest groups is only in early exploratory stages. Groups that have been explored by the Carma Centre as potential sources of labour supply include:

- Women
- Out-of- school and disadvantaged youth
- Aboriginals

Other potential sources of supply that the Carma Centre have not yet explored or discussed to a great extent include:

- Immigrants
- Unemployed and underemployed populations
- Disabled individuals

So far, the Carma Centre initiatives have not specifically included people from the correctional system. This is due to noticeable objection from the Board members that the Carma Centre should not become involved in the rehabilitation process.

4.3 Women as a Labour Source

While statistics indicate that women are becoming more attracted to pursuing careers in construction, the actual presence of female workers in on-site trades in Calgary is not prevalent. As reported in the Globe & Mail, an increasing number of women are getting into the trades in Alberta, although women still represent only 3% of the Apprentices in carpentry and only 2.8% of Apprentices in the construction trades. As well, "the number of women who completed their training fell by 4% between 2000 and 2001"¹.

Although industry has not discouraged the Carma Centre from initiating additional programs specific to recruiting women into the industry, the right opportunity to develop an appropriate training program has not yet occurred. The Carma Centre, to some degree, has developed an initial approach for attracting women through the YWCA's *Building Trades* program. *Building Trades* is a 21-week entry-training program for women focused on plumbing, carpentry, or electrical training, which provides theory and hands-on training, work experience, and an introduction to the industry.^{xii}

Challenges

The main challenge for the YWCA's trades training programs is that the client base predominantly is women with dependent families. This demographic is difficult to integrate into the residential construction industry, as currently there are no support systems such as daycare. Another challenge for hiring women in residential construction is transportation to and from work, as new home construction developments are generally inaccessible by public transportation. Although the Carma Centre could help facilitate job placement of women in the industry, one of their primary roles is not job placement.

4.4 Out of School and Barrired Youth

A. Youth Employment Centre

The Carma Centre is supportive of the services offered through the City of Calgary's Youth Employment Centre (YEC), primarily because of their strong candidate screening process. The Carma Centre has made an effort to place as many youth candidates referred by the YEC, as possible. They have also expended resources toward coaching the YEC to encourage their clients to apply directly to the job sites. This has resulted in a decrease in the number of inquiries on how their clients can obtain employment. The Carma Centre has been quite successful in attracting younger males in their early 20's from the YEC who are either dissatisfied with their current career, or have not yet made a career choice.

B. Bow Valley College

In the spring of 2002, the Carma Centre, in partnership with Bow Valley College, implemented an HRDC-funded pilot project that focused on participation of barrired youth in the trades. Participants in this program include Aboriginals, individuals on probation, ex-offenders and homeless people. Bow Valley College delivered the program and the Carma Centre facilitated the employer hosts.

Program Successes

Benefits of the project with Bow Valley College have been identified as follows:

- The strong coordination with stakeholders (that is, the individual builders and the Carma Centre) facilitated efficient resolution of students' issues.
- The decision by the Carma Centre to partner with both SAIT and Bow Valley College was strategically astute.
- The program spanned all trades and provided inexperienced workers, with an interest in construction, an opportunity to complete a work experience placement.
- The Carma Centre's human resources development strategy is not only about front-line occupations but also identifies ways to support entrepreneurship, supervision, and

management opportunities within the industry. This makes the Carma Centre mandate very relevant to Bow Valley College, and programs have been customized to fit the needs of the Carma Centre members.

- The business relationship between Bow Valley College and the Carma Centre evolved once they started doing projects together and has expanded to include providing references and support for each other, or advocating on the same issues.

In addition to curriculum development and program delivery, Bow Valley College has assisted the Carma Centre with government relations, human resources consulting (such as new training ideas, and new tests for identifying worker skills), access to non-traditional workers (such as Immigrants and Aboriginals), and customization of the modules and work-placement intervention programs.

- By implementing the program, the Carma Centre has been able to provide up-to-date labour market information to both the government and post-secondary institutions.
- The Bow Valley College and Carma Centre linkage has provided unemployed youth a “straight pipeline into the industry” and was able to supply unskilled workers with the needed skills.
- The Test Of Workplace Essential Skills, developed by Bow Valley College, is used for assessing these participants’ skills, and is considered to be a valuable and informative tool.

Program Challenges and Lessons Learned

- Substantial time is needed for the screening process, the orientation, and the work experience.
- Transportation to the worksites was more of a problem for the participants than anticipated. As many participants did not have vehicles, getting to work in the new communities when public transit is generally non-existent was problematic.
- The work environment in residential housing presented a challenge for the ex-offender participants, as they were unprepared for working independently. Prior to beginning such a program, these individuals require training that addresses basic employability and social skills, and more time to adapt to workplace expectations.
- Future training tools and equipment allotment need to be more trade specific. A shortage of equipment in some categories meant that graduates had limited hands-on exposure to some basic industry tools.
- Future programs should include support evaluations, and more follow-up until program graduates have entered Apprenticeship training.

While a joint program with Bow Valley College and HRDC is anticipated in the future, these insights will need to be considered prior to proceeding.

4.5 Aboriginals

While Aboriginal youth participation in the trades and in the Apprenticeship program is higher than the national average, Aboriginals are primarily employed as labourers. Introducing a program to develop skilled Aboriginal workers into managers could benefit the industry. The Carma Centre is aware that strategies, or models, for Aboriginal groups need to be culture-specific, and have been reviewing ways to implement such a program.

Calgary is included in the Treaty 7 area, which is a jurisdiction that includes only five out of the forty-seven First Nations bands in Alberta. Relative to the entire Aboriginal population, the population base of Aboriginal and Metis in Southern Alberta is small. However, the Aboriginal communities, and the reserves in Southern Alberta, are large in terms of population and land base. The population's proximity to major urban centres has increased their access to educational facilities and has led to less economic dependence on the Alberta government. As a result, the government's primary funding focus has been on bands in Northern Alberta, rather than those residing in Southern Alberta. In Lethbridge and Calgary, the government works with the Metis and the First Nations groups as well as Treaty organizations by offering services through the Canada-Alberta Employment Centres and specific programming options for Aboriginal people for assessing skills development and training.

In-depth interviews were conducted with bodies representing Aboriginal interests on national, provincial and local levels. The following provides an overview of some of these organizations.

A. National Aboriginal Human Resource Development Council of Canada

Currently, the Carma Centre has not had any involvement or experience with the National Aboriginal Human Resource Development Council of Canada that works with about 400 Aboriginal Human Resource Development agreement holders to provide support, communication and knowledge transfer.

Projects relevant to the residential construction industry that the National Aboriginal Human Resource Development Council of Canada has facilitated include:

- The Alberta Aboriginal Apprenticeship project. This project, initiated in 2001, is a province-wide initiative with a goal of registering a minimum of 180 Aboriginal apprentices by 2006^{xiii}. One of the measures of success will include the number of Aboriginal people who enroll in this program and reach Journeyman status. To date, the program has resulted in approximately 70 Aboriginal people entering the trades. The Alberta Aboriginal Apprenticeship program works closely with Apprenticeship and Industry Training to identify industry needs in targeted areas of Alberta that could employ Aboriginals. They also assist Aboriginal people obtain funding required for skills acquisition. Currently they have offices in Edmonton, Fort McMurray and High Level and plan to open an office in Calgary in conjunction with the Aboriginal Apprenticeship training program in Lethbridge and Treaty Seven Tribal Council.
- Think Trades, a component of the Alberta Aboriginal Apprenticeship Project (AAAP), has created videos and a website to encourage career awareness and to promote the trades to

Aboriginal youth.² The Aboriginal Apprenticeship program is promoted through the service provider organizations that visit schools and trade show events.

It is anticipated that once the Southern Alberta offices of the Alberta Aboriginal Apprenticeship Project are operational, an alignment with the Carma Centre is a possibility that could be of value in determining industry needs in comparison to Aboriginal skills. Organizations similar to the Carma Centre would be of value in Edmonton and in Fort McMurray to identify industry demands, which particular trades areas to focus on, and where training dollars should be targeted.

B. Aboriginal Affairs and Northern Development

The Aboriginal Affairs and Northern Development Ministry is not directly involved in training but works closely with provincial ministries such as Alberta Learning and AHR&E and federal departments. The Aboriginal Policy Initiative is an Alberta government initiative, which serves as an interface between the Aboriginal population in Alberta and the government ministries. Their role is to design, develop and deliver programs for Alberta's First Nations population via cross-Ministry initiatives. They also interact with industry stakeholders and not-for-profit organizations providing services to Aboriginal people.

The Department notes that the Alberta government is significantly more advanced in program evaluation and in producing positive outcomes than the Federally funded training programs. This statement is based on existing employment data showing that First Nations people (under federal jurisdiction) have higher unemployment rates compared to the Metis population (under provincial jurisdiction).

The Alberta Aboriginal Affairs and Northern Development Department is aware of the Carma Centre's initiatives, but notes that the Carma Centre is only in its introductory stages and has had limited contact with the Aboriginal population. The Department, however, is willing to interact with the Carma Centre once the Carma Centre is ready to explore other sources of supply.

C. Treaty 7 Tribal Council

Aboriginal Futures Career and Training Centre, is a partnership between the Treaty Seven Tribal Council and the Metis Association. Under the ARDA agreement, Treaty Seven Tribal Council created an urban Aboriginal training program. Clients of the Aboriginal Futures Career and Training Centre include Aboriginal Calgarians ages 16 to 65, as well as in-migrants who utilize the job search services or take courses in topics such as Microsoft Office or job search skills.

Aboriginal Futures Career and Training Centre, as a partner of Treaty Seven Tribal Council, provide the intakes and assessments and refer Aboriginal people to Treaty Seven Tribal Council to link them with training funding. Treaty Seven Tribal Council sponsors Aboriginal individuals to pursue training at Bow Valley College and at Mount Royal College as well as for enrollment in other trades programs offered in Calgary.

The Carma Centre has presented its' goals and objectives to the Aboriginal Futures Career and Training Centre but at this point no plans are being made to implement an initiative. This Aboriginal group perceives that the Carma Centre aims to establish a two-step process:

² www.thinktrades.com

1. Provide training to the point to which the new entrant could produce quality work without supervision, and
2. Assist with the transition in developing entrepreneurs who work on “piece work” projects.

D. Aboriginal Programs Reviewed by the Carma Centre

The Carma Centre is studying Aboriginal training initiatives to determine if linkages can be made or if the various procedures can be replicated.

Some Alberta government-funded Aboriginal initiatives for encouraging the trades include:

- **Women Building Futures.** This is an Edmonton based organization³, funded primarily through AHR&E, which provides pre-trades training. Their client groups have consisted of between 60% to 70% Aboriginal women and the program has produced excellent results.
- **Aboriginal Training to Employment Program.** This program receives significant funding through AHR&E Skills Development initiative. The program aims to provide skills training for Aboriginal people (specifically First Nations people).
- **An Aboriginal Pre-trades program.** This program is conducted at SAIT and Bow Valley College in conjunction with the Metis Nation Association of Alberta and Treaty Seven Tribal Council.

E. Challenges

- The Executive Director for the Carma Centre has lengthy experience working with Aboriginals and plans to include them as a potential labour source. Part of that plan involves conducting outreach exploration in order to work with the Treaty Seven Tribal Council and the Siksika Nation in the Calgary area.

Initial discussions indicate that the Aboriginal community does not consider a partnership with the Carma Centre a priority as other issues such as a physical need for housing on the reserve and general workplace training are currently more pressing. As well, there are an insufficient number of homes currently being built on reserves to create enough employment to warrant introducing training programs and most reserve Aboriginals prefer to be trained to work on the reserve.

- SAIT and Bow Valley College both offer Aboriginal Carpentry programs in Calgary. SAIT is currently offering a Carpentry program at the Siksika Nation reserve. SAIT has asked the Carma Centre to consider conducting job placement for their Aboriginal students. This process is not underway as the Carma Centre is not geared to be a job placement agency.
- The training needs of the Aboriginal students are greater than the training dollars available. A number of key informants in this study note that encouraging Aboriginal employment within the industry “*will be difficult*”, as past experiences have been problematic. Industry’s perception is that for the program to be successful, careful screening and pre-training is required. The cultural differences, values and perceptions regarding societal expectations of the First Nations people coming from remote reserve areas do not match the goals of similar organizations in an urban setting. Aboriginal students appear to lack understanding of expectations regarding education, employment, work ethic, and family life.

³ www.womenbuildingfutures.com

F. Future Plans for Working with Aboriginals

To reach the Aboriginal population, the Carma Centre is currently exploring a program, which could be integrated into the Career Pathways model. Specifically, the Carma Centre, Bow Valley College and HRDC are in the proposal stage of developing a five-year Exterior Systems Technicians training program for Aboriginal people. The Carma Centre is planning to replicate the success of the Sikh Community in lower Mainland, British Columbia in organizing communities of workers and creating a roofing industry that dominates that region. It is believed the program could mirror the Sikh model, and as a group, Aboriginal workers could become expert Exterior Systems Technicians and leaders in that sub-section of the industry.

G. Reasons to Pursue a Partnership with the Aboriginal Community

Key informants acknowledge that the Aboriginal population represents a critical future source of supply to the residential construction industry. Some of the key reasons to explore the Aboriginal workforce as a source of supply include:

- The large population base. Of Alberta's three million population, the Aboriginal population accounts for approximately 7% of the work-force age group. As well, Alberta's Aboriginal working-age population (ages 15 to 60) is growing four times faster than any other segment of Alberta's population.
- The Aboriginal Population is strategically located. Of the approximately 200,000 Aboriginal people between the ages of 15 to 60 years of age living in Alberta, 60% live within urban centres. Edmonton and Calgary are the two largest Aboriginal urban communities; both with populations that continue to grow.
- Aboriginal social issues are currently key Alberta issues. Aboriginal issues have been a major consideration for the Alberta government for the past three years. In 2003, 80% of government business plans had Aboriginal specific strategies, targets, goals or programs. The delivery of programs and services for First Nations people has shifted from being a federal government responsibility to that of a joint effort between the province and the First Nations groups⁴.

Alberta Human Resources and Employment has dedicated significant funding towards Aboriginal training. First Nations organizations in Southern Alberta have ready access to funding for specific employment training requirements, or for industry partnerships. The government of Alberta is supportive of private initiatives such as the Carma Centre becoming involved, and is open to whatever support is required to proceed in developing a partnership.

- Aboriginals Urbanization Issues. Aboriginals moving from the reserves to the city often have a mindset and a work ethic that stems from their previous community. Similar to Immigrants they require coaching, direction, and specific learning opportunities and full transition programs may be required to assist them in blending into the urban environment. The Carma Centre is being encouraged to work with training providers and consider introducing a post-work placement coaching component into their programs. At this point, the Carma Centre does not have the manpower to pursue the required level of focus for implementing such a

⁴ Alberta Government's 2001 to 2004 Business plan: <http://www.alberta-canada.com/aed/pds/econ.pdf>

program. The Carma Centre believes this type of initiative belongs under the educational system rather than under their existing mandate.

4.6 Unemployed and Underemployed Individuals

Currently, the delivery divisions of Alberta Human Resources and Employment (AHR&E) only have a cursory awareness of the Carma Centre. In the past, the Carma Centre has conducted labour market information presentations to the various AHR&E delivery divisions and has placed posters in the Calgary Labour Market Information Centre. The intention was to raise public awareness of the website and the career opportunities in residential construction. Key informants for AHR&E indicate that the Carma Centre has not fully 'tapped into' the potential of AHR&E as a key access point to the unemployed and underemployed population.

The Career and Employment Service Centres and Income Support Offices of AHR&E's delivery division are prepared to offer support if the Carma Centre is interested in expanding their promotion and awareness campaign to the general population.

A. Challenges of working with unemployed and underemployed groups

Challenges for working with the general population would be dependent on the specific characteristics of the client group, the motivation of the client group and the degree of skills training required. These factors would need to be carefully considered if the Carma Centre was involved in developing training programs for this client group. Some challenges of working with the clients of the Income Support Offices of AHR&E include:

- Unrecognized credentials from another country
- A lack of skills required in residential construction
- Childcare issues
- Employment barriers (such as health issues, a criminal background, alcohol or drug problems, attendance issues, or other personal issues)
- Affordable housing
- Education (the average for this group is less than high school)
- Transportation issues to access areas without transit

Recommendations put forward by the AHR&E for transition-training initiatives include:

- Assist with the transition of obtaining the skills sets related to the construction industry.
- Explore how current high school based programs and activities could be modified for the adult population.
- Identify specific characteristics of this population to attract them to training, and to target appropriate training to their interests and skill development needs.
- Identify labour market skill gaps and how to fill those gaps with appropriately trained individuals.
- Determine how to make occupations within the residential construction industry evolve into stable employment over the 12-month cycle.

Key informants with AHR&E report that public perception is that residential construction is seasonal and is not categorized as a stable 12-month career. This perception is a barrier to entry and retention. As well, if employment in residential construction is seasonal it conflicts with the

goals of the Income Support Offices, which is to encourage their clients to pursue non-seasonal employment.

4.7 Immigrants

Calgary's significant pool of unemployed Immigrants may be a viable source for the residential construction industry. The Carma Centre, however, feels they need to first determine the skill shortages in the residential construction industry are a supply issue or an attraction issue.

A. Steps Taken

The Carma Centre has extensively explored Immigration and in-migration as potential sources of labour. Key informants for the Carma Centre feel that a solid Canadian Immigration Policy may encourage growth in the housing and renovation labour supply.

Similar to the Greater Toronto Home Builders Association which has developed a program in conjunction with Citizenship and Immigration Canada and a web-based recruitment company, the CRHBA and the Carma Centre, has explored recruiting Immigrants experienced in residential construction.

A Citizen and Immigration Canada program entitled "Alberta Provincial Nominee Program" that included 200 nominations for accelerated immigration processing, was willing to offer Calgary residential construction companies the opportunity to import immigrants to ease the labour market strain. After reviewing the conditions of that program, the Carma Centre and CRHBA felt the program offered little benefit to the industry^{xiv}. While this program works well for high value-added employees in other industries, it is not as effective for the residential construction industry for the following reasons:

- Significant costs are incurred in traveling overseas to interview and qualify prospective workers, who may or may not qualify for entry.
- The challenges of demonstrating industry need to Citizenship and Immigration Canada is formidable. The high number of unemployed workers who state construction as their last employment on the Census is problematic. Regardless that the workers do not intend to return to the industry, cannot return, or are not re-hirable, they are recorded as unemployed construction workers. This leads Citizenship and Immigration Canada to the conclusion that residential construction is not properly utilizing existing resources in Canada, and will not consider the industry in the program.
- Hiring newly landed Immigrants has a number of challenges as their previous training is not always relevant to Canadian standards. Even if the concepts and tools are similar, extensive bridging is required. The main barriers include language and an understanding of safety requirements.

4.8 Disabled Individuals

The Carma Centre has not included working with the physically or mentally handicapped in their program and is unlikely to do so in the future. Disabled individuals are the responsibility of Assured Income for the Severely Handicapped (AISH) a division of AHR&E, and are considered to

be unemployable for medical reasons. It would be a difficult challenge for the Carma Centre to pursue any initiatives with this group, as only 2% of AISH clients are able to work or participate in training, even on a part-time basis.

PART V—STRATEGIES

5.0 Strategies

This section outlines the Carma Centre's marketing strategies which have been implemented to support their initiatives and to promote the residential construction industry. The Carma Centre's conceptual beliefs are discussed and serve as background information for understanding the development of their products.

5.1 Overview

The Carma Centre has evolved into a multi-faceted organization in order to respond to the growing needs of industry. It seeks to address key factors affecting the labour supply to the Calgary residential construction industry including:

- The industry's cyclical nature (via the Skills Passport),
- Demographic issues (via initiatives for women, Aboriginals and the disabled),
- Training and education issues (via certification),
- The societal and educational bias towards the trades (via Career Pathways), and
- The competition from other sectors for the labour supply (via Career ladders).

A. Milestones Achieved

The first milestone for the Carma Centre was getting their name "*in front of the industry and the community*". This initiative has been successful as the Carma Centre is visible with most of the agencies.

Future milestones that the Carma Centre is striving to achieve include:

- *Identification of specific careers within the industry, and making the information available to young people entering the workforce and those working in other careers.* This will include descriptive information about:
 - The building industry
 - The career process
 - The inter-relationship between industry occupations and roles
 - Advancement, and
 - The required entry skills.
- *Identification and understanding of industry needs.* The Carma Centre intends to continue to gather industry interest and provide input into training development that meets the needs of the workers, the employers, and the industry. They believe the key to making advancement will be ongoing collaborative input from trade contractors. Support from builders, trade companies, and construction managers, through the expansion of industry "buy-in" and participation is also essential.

B. Challenges to Achieving Milestone

Challenges to accomplishing these milestones include:

- *Volunteer Board.* Members of the Volunteer Board have their own work responsibilities, and while dedicated to the Carma Centre's mission, cannot be held accountable if they are unable to complete a task as a member of the working board.
- *A Mix of Short and Long Terms Goals.* While attempting to address the longer-term goals of the Career Pathways initiative and the Skills Passports, the Carma Centre also aims to show demonstrable results via short-term initiatives. The value of these initiatives can only be demonstrated to the members if they see an increase in the number of new industry entrants.
- *The Slower Pace of Governments and Institutions.* A significant challenge for the Carma Centre has been working at a pace that keeps their members motivated and supportive, while considering the human resource and funding allocation issues of the CBE and SAIT. Timing challenges for making progress with the CBE and SAIT partnership has resulted in significant deadlines being missed.

5.2 Updating the Professional Home Builders Institute of Alberta (PHBIA) Professional Site Manager Program

The first initiative completed by the Carma Centre was to spend approximately \$60,000 updating the Professional Home Builders Institute of Alberta (PHBIA) Professional Site Manager Program. These curriculum updates were completed over a two-year period in collaboration with SAIT, and provided a royalty of \$50 per registrant to the Carma Centre. The tactical plan was to engage SAIT and PHBIA in researching, producing, and delivering courses that set industry standards for skills and knowledge. The intended result was for members of the residential construction industry to give preference to hiring graduates from courses recognized by the Carma Centre. The residual income from the PHBIA courses has been used to promote the industry through building partnerships between the schools and the builders.

5.3 Youth Awareness Initiatives

Another accomplishment for the Carma Centre has been their relationship with youth and the interest by youth in participation in the mentorship program.

The Carma Centre's awareness initiatives have coincided with those of Merit Contractors Association, and the Alberta Construction Association. While the Apprenticeship program has been strongly promoted to youth in Alberta, research conducted by the Carma Centre indicates that this promotion has not been as successful for residential construction as it has for commercial construction. From this finding, the Carma Centre has identified an additional need to promote 'Career Laddering'. By combining this with a focus on the ageing workforce and worker replacement needs, the Carma Centre is demonstrating to youth that entry-level and potential career advancement opportunities do exist. The Calgary Construction Association is watching this initiative with great interest, and is hopeful that the Carma Centre can get this point across, when others have been unsuccessful.

The Carma Centre is also promoting entry into residential construction for occupations such as administration and sales and management. The focus on these occupations, in addition to the trades, is a marketing tactic and a means for preparing for anticipated shortages in those occupations.

5.4 Website

The Carma Centre website has been operational since 2002. The intended purposes included:

- An on-line job board for industry members,
- A means to record the number and types of inquiries received via the website,
- A point of access for parents, students, teachers and the public,
- A means to encourage awareness of the future in the building industry, to promote residential construction careers, and to highlight the income potential.

When the website was first launched, a public promotion campaign was implemented, which resulted in a dramatic increase in website activity. Since that first promotion, however, activity has decreased, and industry has not actively used the website for job posting purposes, as the Carma Centre originally hoped.

A. Website Features

- Board members view the website as a key point of entry, and would like to see the objectives for working with industry included.
- Currently, the website does not include the Carma Centre's mandate, vision statement, or purpose. This organizational information is important to visitors unfamiliar with the background and purpose of the Carma Centre.
- Some Carma Centre board members note that because of the website's incomplete information, the Carma Centre is perceived as not doing a good job of interfacing with the general public.
- The Carma Centre is aware that the website requires revision and plans to update it once the Skills Passports are developed and ready to be included on the website. For the Carma Centre's website to be successful, it is clear it needs to become a common place for industry to go to for industry information, for job applicants, job opportunities, and other purposes.

5.5 Trade Booth, Brochures and Posters

A. Trade Booth

An early stage initiative was the development of a portable trade booth for promotional use at school career days and job fairs. This booth has been used frequently and has generated some genuine interest and awareness. The Carma Centre has been active at Trade and Career Fairs at schools and other public events such as the Calgary Herald's Recruitment Fair. These events have resulted in hundreds of job applications being received, and thousands of visitors to the website immediately following the events.

The trade booths have been criticized as a marketing strategy with limited impact. Even though the trade booth's 'hands-on' attractions have been popular, a concern is that the Carma Centre is directly competing with similar representation from other industries. A proposed alternative would be to request an exclusive career day exposition. The Marketing Committee, however, is

concerned that the schools would lack the time to organize it, or that it would be a waste of volunteer time due to insufficient student interest in exploring only one industry at a time.

B. Brochures and Posters

A poster and handout brochures were designed as the main marketing tool to coincide with attending Trade and Career Fairs. The poster has been supplied to schools, has been posted in member offices to showcase their membership in the Carma Centre, and widely distributed to the public.

C. Future Plans

There is discussion that the Carma Centre should consider promoting the industry via job and education fairs at the Junior High School level, rather than at the High School level. It is felt this is the best way to encourage, in order to encourage earlier parent involvement, and to demonstrate the value of a career in residential construction trades to youth at an earlier age.

Future plans also include expanding participation in career days to include all of the schools. However, it has been noted that the Carma Centre may be forced to decrease the number of trade shows attended in the near future, because of limited staff and the need to focus on the Career Pathways initiative.

5.6 Publicity

The Carma Centre has received strong publicity and media coverage because of its uniqueness, and because it is the most organized and progressive initiative of its kind in the local marketplace. The Career Pathways initiative has been reported on the "A" Channel (TV) station, and writers with the Calgary Herald have contributed to creating awareness with frequent articles appearing in various sections of the newspaper.

A. Challenges

The Carma Centre currently does not have a public relations strategy to promote the Centre through builder or trade contractor's staff meetings. Until more milestones are reached, the Carma Centre has no immediate plans to conduct broadcast advertising or to develop a wide spreading marketing campaign. Outside informants note that a broader advertising campaign outside of the schools would be valuable in changing public perception.

B. Future Marketing and Communication Plans

Future marketing initiatives that are anticipated, once the Career Laddering project and the Skills Passport product are implemented include:

- 1) The distribution of information packages to career counselors, and employment and social agencies. The focus of this information will be to demonstrate the Skills Passport tool and to encourage service providers to contact the Carma Centre for regular updates.
- 2) Three "eye catching" posters, demonstrating Career Laddering and its relationship to the various residential construction occupations, will be designed and distributed to schools, employment counselors, and the Carma Centre's current employment contacts.
- 3) A brochure, aimed at the Carma Centre's employment contacts, will be designed for every occupation and will describe the basic functions, entry-level skills requirements,

training, advancement opportunities, and the availability of additional information. These brochures will reference the Carma Centre's website, and will serve as a simple and explicit self-assessment tool intended to create employment interest, to demonstrate the paths for entry, and to highlight the advancement opportunities.

- 4) Trade booths adaptations and website changes will be implemented to market the career/skills passports to the public, students and parents.

5.7 CD, DVD, and Industry Presentations

A CD and DVD were developed to raise awareness of the Carma Centre and the residential construction industry. The initial purpose of the DVD was to create an interactive trade booth to permit visitors to view the tasks of the various trade occupations and to illustrate the entire home building process. Industry use includes training new office staff on the building process. Schools use it as a resource for researching career options. While schools have requested additional copies, no process is in place for tracking the use of these tools.

Other promotional activities include a PowerPoint presentation, developed by the CRHBA, to assist in raising awareness of the Carma Centre and to facilitate the implementation of a Framer Technician program.

5.8 Research

The AHBA and the CRHBA note that the research conducted by the Carma Centre has been the strongest benefit to the industry. The Carma Centre's research has identified two key factors to be considered when attempting to attract and retain youth :

- 1) Renewed respect for the trades is possible by offering certification for the various occupations. Research on youth has shown that certification carries a highly prized value, as a feeling of doing something worthwhile and as a "new form of job security".
- 2) The marketing of the residential construction industry will require youth to clearly see industry's willingness to invest in training, regardless that the youth may not choose residential construction as a lifetime career.

The Carma Centre has contributed a significant amount of their own resources into their research projects. The funding provided by the Alberta Real Estate Foundation and Alberta Human Resources and Employment facilitated the implementation of the projects. The research conducted by the Carma Centre is summarized in chronological fashion, on the pages that follow.

A Employment trends in Residential Construction in Calgary & Area

Date	November 2000
Funder:	Alberta Real Estate Foundation
Grant Amount:	\$20,000

Project Overview

- A three-part study conducted with respect to the objectives and goals of the Carma Centre.
 - 1) Review of statistical data and existing literature with respect to industry trends to support projections regarding the future labour force.

- 2) Focus groups with industry representatives and with students.
- 3) One-on-one on-site interviews with 200 field workers representing 25 diverse trades.

Key Findings

- Residential construction is particularly sensitive to shifting economic trends. In the near future, significant shortages of skilled and trained workers in Alberta will occur.
- For the residential construction industry, forecasting actual hiring needs can be difficult.
- The most pressing labour force concerns are the aging of the workforce and the potential for a shortage of skilled trades people.
- Industry recognizes the need to market careers in construction to students at the high school level.
- Certification of residential construction trades is recognized as an important and valuable goal.
- High school students tend to overlook construction as a viable career, and a challenge will be to attract students who would normally pursue a post-secondary education with other industries in mind.
- Focus groups with builders, and owner/managers from a variety of trades and suppliers examined current and future employment trends, the shortfalls in available workers and in required skills, viewpoints on future labour force challenges and possible solutions.
- Focus groups with Junior and High School students investigated awareness and knowledge level of residential housing as a career option, the types of resources used for career information, their career expectations, and factors influencing their decisions.
- One-on-one interviews with trades investigated attitudes towards their occupation, the key challenges and barriers they face for obtaining training and progressing within their trade, their motivations for staying in that trade and their viewpoints and projections for the future.
- Calgary's dependency on inter-provincial migration, the lack of awareness of youth and the lack of respect within the industry were major challenges affecting the recruitment and development of a skilled workforce.
- The lack of a comprehensive system of industry-based training contributes to the lack of skill development. The industry has become highly specialized while current education systems remain highly "generalized". Resistance factors to on the job training limit development of "high" skilled workers.
- Key areas of focus for the Carma Centre, as revealed by the study, include:
 - 1) Career Awareness.
 - 2) Workforce Maintenance and Development.
 - 3) Mentorship Philosophy.
 - 4) School Partnerships.
 - 5) Work Experience.
 - 6) Career Ladders.
 - 7) Training Partnerships.
 - 8) Better Data.

Recommendations included increasing awareness in the schools among students and teachers, marketing endeavours, and ways of presenting residential construction as a career that deserves respect and opportunity. The study created a framework for the terms of reference for future study on how to create respect in trade occupations.^{xv5}

⁵ The complete report is available at http://www.carmacentre.com/html/Industry_News/Industry_News.html#

B. Industry Study for the Development of the Marketing Collateral Material

Date: 2002
Funder: Alberta Human Resources and Employment
Grant Amount: \$20,000

Project Overview

- This was a survey of job descriptions in the industry, which involved interviewed at least one person of each of the 39 different trades^{xvi}.

Key Findings

- The survey results formed the basis for developing the Carma Centre's marketing collateral material. The brochures, posters and DVD have been used to promote the industry to high schools and the general public. The CD has been used to promote the Carma Centre and its initiatives to the industry.

C. Market Research for Career Pathways in Professional Homebuilding Project

Date: 2003
Funder: Alberta Real Estate Foundation
Grant Amount: \$25,500

Project Overview

Spring 2003 A series of focus groups were conducted in the spring of 2003 with teachers and career counselors to obtain their feedback and buy-in to the Career Pathways program.

Summer 2003 Two university students were employed to conduct a summer long qualitative study of face-to-face interviews regarding all of the trade and office occupations in the residential housing industry; this resulted in interviews with 377 office workers and 249 on-site surveys with various tradesmen.

Fall 2003 Focus groups were conducted with parents to obtain their opinions and perceptions regarding the trades as a career choice for their children, and with students to determine their perceptions about making that choice.

Key Industry Findings

- The findings from this research provided the data to begin defining Career Ladders. As a result, some 61 potential ladders have been identified.
- The main goal was to determine relevant demographics of the workers, training history, future training plans, the best way to deliver training to the varying occupations, and the career path possibilities. The ultimate goal of the research is to assist employers to meet their current and future human resource needs, to increase the quality of work, to enhance training and education, and to gain insight into the career path development within all of the industry occupations.

D. Occupational Description and Skill Profile Project

Date:	2004
Funder:	CMHC
Funding Amount:	\$75,000

Project Overview

The Carma Centre is developing a standard skill sets for the industry.

Key Industry Findings

The material developed will form the basis for the Skills Passports and will be a new tool for counselors to advise young people on the occupations within the industry, and for institutions to use as a guide for tailoring training curriculum to industry's needs.

5.9 Marketing/Communication

Developing a strong industry communication strategy is one of the goals for the Carma Centre for 2004. Currently, they maintain contact with their members through annual general meetings, ongoing telephone contact, and at update meetings. Initially, an update article was included in the monthly CRHBA newsletter. As the Centre will be shifting strategy and goals over the next couple of years, they want to feel comfortable that what they communicate to the membership. The Carma Centre Board is hopeful that if non-member companies hear regular progress reports they will be encouraged to become members.

A. Successes

- The interest and willingness of industry, schools, and post-secondary institutions to partner on raising awareness and interest in the trades.
- The recent educational shifts occurring with Career Pathways and Alberta Learning's high school graduation criteria.
- The industry and government's joint concern about the future workforce, and the willingness of both to provide funding.

B. Opportunities

The marketing efforts of the Carma Centre have been criticized for not being followed up with "substance", as the Carma Centre has not encouraged industry to make changes, and has not yet started the Career Pathways initiative. The Carma Centre is having difficulty breaking through the 'marketing clutter' of awareness initiatives being conducted by other industries, but are aware that their ongoing challenge will be "*to stand out from the clutter*" if they are to attract interest to the industry.

Areas in which the Carma Centre could make improvements on their communications and marketing strategy include:

- They lack a singular focus and have difficulty meeting milestones
- They have yet to develop a strong positioning strategy to demonstrate competitively how the career options available in residential construction compare to other industries.
- There is a need for further awareness and respect for the trades among the general public, workers in other industries, students, and key influencers such as parents.

- They need to continue to develop long-term and on-going strategies, which ensure appropriate linkages are maintained among government, institutions and industry.

5.10 Other Strategies

The Carma Centre has been executing strategies for mitigating labour shortages in the short term, and implementing more long-term solutions to the industry's structural problems. Key concerns include:

- A requirement for more flexibility in Apprenticeship Programs (certification, modular training components).
- Mitigation of the poor links between labour market needs and the education system.

Although the Carma Centre has changed its approach from time to time, the original objectives have remained the same. The Carma Centre has expanded its mandate and its board membership has also expanded to include a wider cross-section of members. According to the board members, the last strategic planning session in 2003 was the most productive. During this session they developed goals for the next three to five year, and detailed strategic initiatives for the following year. Part of this plan includes renewal of the five-year pledges from industry, which expire in 2004.

PART VI - CERTIFICATION

6.0 Certification

The Carma Centre's certification initiative represents the key strategy for responding to industry's need for training specific to home building. This section will discuss the challenges experienced, general perspectives on benefits and disadvantages of certification, and the progress that has been made to the time of this review.

6.1 Certification

The Carma Centre believes that certification will respond to industry needs for the future training and will remedy some of difficulties for attracting trades to the industry. The Occupational Descriptions and Career Profiling project, which is later referred to as the Skills Passport, is the first step required for moving forward with certification.

Steps Taken to Date Towards Certification

As a start, the Carma Centre has set out the curriculum for a 'Residential Cribber', using the cribber components from SAIT's Carpenter Apprenticeship Program. Approximately 90% of the course material required for the residential construction training is already in the approved curriculum, with some requirements necessary for re-packaging. The Carma Centre is hopeful that SAIT will endorse the course to allow cribbers to become certified, and that it can be applied to the Inter-provincial Standards (Red Seal) Program. The Carma Centre is of the opinion that a correspondence-based course for certification of cribbers might be the most workable, as the industry is more than willing to mentor employees even if arranging time off for training is difficult.

The Carma Centre's plan for addressing a less than favourable perception of the industry is a combination of raising awareness of the career laddering possibilities, and developing the accreditation process.

6.2 Challenges to Moving Towards Certification

The perspective of the partners, member builders and trade contractors on certification include:

- Certification may be valuable in the future, but under current labour shortage conditions putting hiring restrictions based on training and qualifications will not work.
- A 'made-in-Alberta certification' process might mean that workers from other provinces would not be able to work in the Alberta market because they do not hold that certification. A more realistic alternative to certification may be for employers to look for people with a trades background from high school, coupled with basic skills or experience.
- Although SAIT is working with the Carma Centre, they appear to be resistant to re-designing their course materials because of the associated expense. They are also reluctant to offer shorter programs even if they have the potential to deliver these programs to a larger audience. According to an industry informant, who has experience working with the National Education and Training Advisory Committee (NETAC), this opinion and resistance to change by educational institutions is a typical challenge across Canada.

- If the Carma Centre is able to make progress with certification in 2004 and can gain consensus from SAIT, it is anticipated that the Carma Centre will be able to rally sufficient interest among students to fill the classes.

If the initiative is adopted by industry, certification will also help to fill more seats in the Apprenticeship programs. In addition, by the end of 2005, at least three of the larger builders in the city have indicated they will be asking for certification of all of their trades. These builders believe in the program and plan to market their homes on the basis of building the best quality homes with the best trained and qualified trades.

- SAIT has indicated they will only endorse any course development if it is recognized and supported by industry. The larger cribbing companies are skeptical that smaller cribbing companies will certify their workers, as smaller cribbing companies would rather replace trained workers with less expensive un-certified employees.
- Key informants agree that when more builders adopt and support the 'certification only' concept for hiring trade contractors, wages in residential housing will become equal to similar positions in commercial construction. It is also perceived that once the larger builders support certification, the trades will be able to afford to buy-in.
- Some of the trades companies are concerned that if industry does not implement these changes, that government may become involved by creating stricter rules and regulations in the future. The Carma Centre's position is that by industry taking the initiative to implement a certification program, they can maintain control of industry's concerns without governmental involvement.

6.3 Reasons for Supporting Certification

Issues that demonstrate an industry need for certification include:

- **High dropout rates from the Apprenticeship program.** Less than 2% of the current workforce is certified, and only approximately 12% of all cribbers in Calgary hold a Journeyman status. The proposed certification process would allow accreditation to be given at frequent intervals throughout the training, provide recognition of achievement to date, and facilitate meaningful employment throughout the process to assist workers to pay for that training.
- **Training programs at technical schools are outdated.** It is important that industry become more involved in updating curriculum to communicate industry needs and to ensure that the programs are kept current.
- **Apprenticeship programs are unaffordable for many people working in residential construction.** While an Apprenticeship program works well for the commercial sector, it does not work well for residential construction. Because much of the work in residential construction is done on a piecework basis at lower margins than commercial construction, most residential construction workers cannot 'afford to be off work' for the classroom time required for the Apprenticeship programs.
- **Cribbers and framers are the two trades with the greatest labour shortage, and framing and cribbing are the only building components of a house that carry a**

five-year warranty. While framing and cribbing are two key structural components of a home, no specific Apprenticeship program for these trades exist. The implications of a five-year warranty suggest that more training and skills should be expected for these trades.

- **Residential construction is becoming increasingly more specialized.** The sub-trades within the residential construction industry are becoming more specialized and do not require all of the skills taught under one Apprenticed program.
- **Builders have not required trade certification to this point, which has resulted in a decline in the number of available Journeymen.** In the last three years, approximately 30 new cribbing companies have set up business in Calgary. These companies are often led by unqualified people without Journeyman status, and are hired by smaller builders because there are no regulations requiring certification. As one trade contractor notes “*Alberta New Home Warranty doesn’t ask for it, CMHC doesn’t ask for it when the mortgage comes up, and the City Inspectors don’t require it, so why would you become certified*”

6.4 Reasons to Oppose Certification

Trade companies opposed to a certification program offered the following reasons:

- **The training developed by the CRHBA and SAIT is insufficient.** Trade contractors note that a four or six week training program does not create a significantly qualified trades person. They believe that the individual trade contractors’ Associations, such as the Alberta Wall and Ceiling Bureau, should create their own training programs.
- **A tangible benefit for training must be realized by the tradesperson.** As an industry, carpet companies would gladly pay higher rates to certified workers, but are concerned that builders would not pay the extra rates to cover the associated increases in costs.
- **The Carma Centre currently does not focus on niche trades.** One flooring company noted that certification would not be likely in their field as vinyl-flooring installation is not a popular trade and therefore is unlikely to be included in any program. As a result, the company plans to continue to train their own workers.

6.5 Status of Certification

Internally, the Carma Centre board does not have a complete understanding of how certification will be implemented. The Carma Centre is currently discussing how the following issues will be resolved:

- **Promoting certification, as a way to re-train the current work force will require a “grandfather provision” for experienced workers.** A possible means of facilitating this provision includes a short course and passing a challenge exam, or obtaining acknowledgement of quality of work by a registered Journeyman. The vision of the Carma Centre is that certification will validate the years of experience of people within the industry.
- **Encouraging industry to recognize certification will require industry to self-regulate.** Although the industry is currently involved in promoting certification, they would not be required to recognize it. If certification programs and the Skills Passports are not supported and utilized by industry they will carry no value and will soon fail. For certification

to be fully supported by industry, the Carma Centre will have to demonstrate that accreditation ultimately will lower builder costs through a reduction in warranty claims and customer complaints.

- **Maintaining certification will require a mechanism for implementing the process, and for upgrading skills.** Specific details on how certification can be applied to the Apprenticeship program require discussion and resolution. SAIT has the ability to complete the certification process but would have to gain approval from Alberta Learning for certification to become a transferable Alberta Learning Certificate.
- **If the industry accredits itself, it is uncertain which organization will fulfill this role.** Although ANHWP could become involved in the licensing role, it is not within their current mandate, nor is it mandatory for all Alberta builders to belong to ANHWP.

6.6 Lobbying the Alberta Apprenticeship and Industry Training Board

Negotiations with the Alberta Apprenticeship and Industry Training Board are currently in infancy stages as they only began near the end of 2003. By reviewing the industry's training issues and beginning dialogue with the Apprenticeship Board, the Carma Centre is clearer on how the industry should approach certification.

Although the Alberta Apprenticeship and Industry Training board appears to agree with the concept of certification that has been presented, they are not prepared to finance it, nor to take it on as part of their mandate. They have suggested that the Carma Centre should prototype the certification idea, and simply present the concept to them for approval. The Alberta Apprenticeship and Industry Training Board has admitted that by working through them developing a prototype is often a seven to eight year process and could cost several millions of dollars.

Recent changes in the Apprenticeship Board's membership may have led to a "change of attitude", which would benefit the Carma Centre's goal of industry certification. During these discussions, the Carma Centre designated how the Apprenticeship courses need to be broken out to enable industry to choose modules most applicable to residential construction. The Apprenticeship Board acknowledged that the courses are available and it is now a question of who should accredit the course, as both believe the other should do it.

Factors Related to Lobbying the Apprenticeship Board

Specific comments about the Carma Centre's efforts to lobby the Apprenticeship board include:

- The Carma Centre has not been lobbying the Industry Advisory Network of the Alberta Apprenticeship and Industry Training Board long enough to change their mind.
- The commercial sector dominates the Industry Advisory Committee. The residential construction industry only has one representative on this Advisory Committee and has been criticized for taking too low a profile.

Although the Alberta Home Builders' Association currently does not have representation on the Apprenticeship Board, they are working towards holding a seat in the future. In their view, obtaining representation on the Apprenticeship Board will be key to gaining change.

- Apprenticeship training is a vital component of Alberta Learning and it is important to work within their guidelines. The Carma Centre is cognizant that they need to build stronger relations with the Apprenticeship Board and involve them in the certification process.

Objections to Certification

The objections of the Alberta Apprenticeship and Industry Training Board to the Carma Centre's concept of certification include:

- The Alberta Apprenticeship and Industry Training Board do not want the credibility of the Journeyman's ticket to become diluted.
- The Alberta Apprenticeship and Industry Training Board have been very successful, and trains 20 percent of Canada's apprentices. The Alberta Apprenticeship and Industry Training Board Program's point-of-pride is the transferability of the Red Seal designation across Canada and internationally. They believe these international standards make it difficult for a Calgary-based change-initiative to be successful.

6.7 Individual Initiatives being done by Industry

A few of the trade contracting companies have established their own initiatives to address labour market shortages. Some of these initiatives include

- Prior to the Carma Centre's inception, a stairs company began encouraging young people to pursue Apprenticeship training through the RAP program offered through the public school system. This particular company has received honorable mention as an employer that promotes the Apprenticeship program. Employees are reimbursed for tuition fees as an incentive for entering an Apprenticeship program. The company executives feel that if more employers paid the tuition fees, more workers would go through the Apprenticeship program.
- A woodworking company has set up shop at SAIT to teach design and building of circular staircases and spindles. This training program concentrates on creating personal goals and "brand-loyalty" among employees. The company hires through employment programs, rehabilitation centres, and shelter groups. They have won awards for their training efforts, and have not experienced any difficulty with the Apprenticeship Board in regards to establishing their own courses.
- A flooring company pays a higher rate as an incentive to sub-contractors who are willing to hire an Apprentice or an apprentice helper. The higher is to offset the time involved in mentoring the new Apprentice.
- A residential roofing company has a plan to employ more hourly-paid residential roofers and fewer piecework contractors. They are of the opinion that an hourly-paid crew can service clients better and note that a large number of homebuilders are asking for hourly crews. This firm is promoting the Apprenticeship Program on the basis that the company will pay the tuition fee and offers a \$500 bonus to anyone entering the Program.

Commentary

- Most of the trade contractors note that they have experienced few problems attracting workers, and have been able to recruit employees and/or sub-contractors through increased

newspaper advertising and word-of-mouth sources. A number of the local cribbers do not believe there is a skills shortage as most are able to maintain a core group of employees. They are unwilling to believe that the future will be any different.

- A roofing company notes that they do not have a labour shortage because they primarily do renovation work and are able to pay higher rates. However, within the roofing industry, retention is generally a concern as pay rates for roofers in residential construction are low. These companies indicate they retain workers by using a variety of approaches such as on-the-job training or hiring sub-contractors instead of employees. Only half of the trade companies interviewed encourage their employees to go through an Apprenticeship program.

6.8 Perceived Benefits of Certification

According to the trade contractors, the possible benefits of a certification program include:

- **Certification would standardize the level of experience.** Trade companies would be less likely to hire people who misrepresent themselves as being trained or lack a career commitment. Trade companies note that the value of certification will depend on whether work experience is a requirement.
- **Existing trades people will gain respect for the industry, and the profile of the industry for new entrants will be raised.** Some sub-trade contracting companies note that their professions are not referred to as a professional trade. A specific module dedicated to these occupations would help give them that status.
- **A modular program would be easier for the employee to pursue.** If it is possible to complete modules under the Carma Centre program and still end up with an overall Carpentry ticket, no negative effects will result, as Apprenticeship training is also broken down into modules. If the modules were formalized and could either apply to specific residential sub-trades, or to applications in commercial construction then the student could go through the modules gradually.
- **A modular program would be more focused and specific to residential construction.** A carpet layer contractor noted that carpet laying and linoleum are both part of the Floor Covering Apprenticeship program. However, not all of the Apprenticeship program is applicable, as it covers commercial flooring as well as residential floor coverage. Another example is certification for the sheet metal industry, as the duration of the current Apprenticeship program is considered too lengthy and too general in scope. A narrower focus, specifically on residential sheet metal, could reduce the training from 10 weeks to 5 weeks. Shorter courses would be more palatable and attractive to people wanting to become involved in either industry.
- **Apprenticeship training is financially unviable, with no incentives to workers to enroll.** The Apprenticeship program for carpet laying is “*dying a slow death*”, according to industry informants. Carpet layers are currently not required to become Journeymen to own their own business, but the industry is hopeful that it will eventually become a requirement if manufacturers deny warranty on the product for uncertified installers.

- ***Smaller modules will be more affordable and allow for a more flexible study schedule.*** The Apprenticeship program currently is unaffordable for workers already in the trade. As attending evening classes can be difficult as workers are often too tired, offering weekend training sessions twice a month through smaller modules would be more acceptable. Currently, there are no grants or Employment Insurance benefits available to offset the cost or loss in wages during training as these workers are primarily sub-contractors and self-employed.

PART VII – PRODUCTS AND PROJECTS (UNDERWAY)

7.0 Products and Projects (Underway)

This section describes the Carma Centre's current Occupational Descriptions and Skills Profile Project (Skills Passport and Career Ladders), and the Summer Mentorship program. The challenges associated with the CBE-Carma Centre partnership on this initiative are also discussed.

The reader will note that the Skills Passport and Career Ladder concepts in this study are interconnected. This is intentional as the Carma Centre has developed them simultaneously because one is dependent on the other.

Definitions

Career Ladders: Career Ladders provide a visual journey through the construction career options and reflects how one career path leads to another within the industry, including how to obtain relevant training and education. The process for developing the Career Ladders includes working with trades to define job functions and skill development necessary to take an individual from pre-employment to a skilled craftsperson. Career ladders are not to be confused with a training program or training model, but rather are a system for organizing and delivering career education on a lifelong basis.

Skills Passport: A Skills Passport is a physical document that records an individuals' mastery of the skills and competencies required for a particular occupation. The document will integrate formal and informal training obtained through work experience. In practice, it is an expansion of the Apprenticeship blue book. The foundation for the Skills Passport is the identification and validation of the required skills and competencies to perform each occupation in residential construction.

7.1 Career Ladders

In the past several years, the Carma Centre has worked to identify any project that might encourage new entrants on a short-term basis, but is now almost entirely focusing on a long-term strategy. A short-term focus would only become part of their mandate again if an opportunity arose to work with a specific group.

As part of the long-term strategy, the Carma Centre is attempting to change parents' and teachers' perceptions of the industry. They plan to do this by documenting the occupational profiles, holding informational sessions or conversation groups, and developing handout material. The Carma Centre anticipates that the Career Ladders initiative will be of value to government bodies and to the educational system, which are currently working with out-dated visual models of the residential construction industry.

While developing the Career Ladders was an original goal of the Carma Centre, the ultimate goal of the five-year commitment of the members is to develop a sustainable system of maintaining a skilled workforce. Once the Skills Profiles concept is developed into a new career awareness and

sustainable training system, a renewal of the five-year membership pledges will be necessary to facilitate implementation.

A. Development of the Career Ladders

The next landmark for the Carma Centre is to identify all of the careers in the industry and to distribute that information to high school students and people in other careers. The process for developing the Career Ladders concept will be conducted in stages.

Stage I: The Carma Centre has identified 15 sub-trades which they will focus on as their initial thrust. The three mandatory trades—plumbing, heating and electrical will be excluded from this initiative as they are covered under the Apprenticeship Program.

The Career Ladders initiative has been the entire focus of the Executive Director of the Carma Centre during 2003, and will continue to be until the fall of 2004. One outcome will be a comprehensive four-page document that will be used to market the Career Ladders, to describe the different industry careers, and to outline how the career-laddering concept works. This includes outlining the career advancement process, identifying the necessary education & training, and the required occupational attributes.

Stage II: The Career Ladder will be used as the guideline for developing a workable curriculum, which will include the necessary courses for progressing up the ladder.

Stage III: The final stages of the Career Ladder initiative will be a focus on developing an implementation plan.

7.2 Skills Passport

A. Background

The Skills Passport is a concept that was replicated by SAIT from New Flyer Industries, a major bus manufacturing company in Winnipeg. With financial support from the Federal and Provincial governments, New Flyer Industries repositioned their workforce into new occupations when the company went through a large downsizing. This involved identifying all of the occupational skills that individual employees had acquired in their positions and evaluating their competencies based on these required job skills.

This model uses a combination of prior learning and existing skills to position people into an occupation for which they may be partially skilled. Based on the passport evaluation, re-training focuses on the skill gaps identified during the evaluation rather than "starting from ground zero".

While the Passport developed for individual occupations at New Flyer Industries was only a single page, the Skills Passport completed by the Carma Centre will be more extensive. This initiative is a workable model that could easily be adapted to other industries. As this initiative was currently underway at the time of this Case Study outcomes will have to be reported at a later date.

B. Development of the Skills Passport

One of the key objectives of the Carma Centre is to complete these Passports for each of the residential construction occupations. This will result in a career-planning tool, which outlines the entire competencies for each occupation and the specific skill requirements. This Passport will

help workers evaluate their own transferable skills and to identify the career direction they should pursue. The template that the Carma Centre is using is a blend of resources from the Apprenticeship Board, from Alberta Learning and the National Occupation Codes.

C . Next Stages

In the spring of 2005, the Carma Centre plans to pilot test the Skills Passport with industry. The proposed process will begin by industry adoption of the tool, followed by the school system adopting the passports as another reference tool for students. The Carma Centre believes that industry should be responsible for ensuring that the adoption of the Passport concept is accepted. From a marketing standpoint, it is anticipated that builders who do so will be able to use it as a marketing tool. The message to their customers will be that they only use skilled workers to construct their homes. It is expected that increased consumer confidence in these builders will send a powerful message to other builders. The vision of the Carma Centre is that the Skills Passports will benefit the entire industry not just the members of the Carma Centre.

To be truly effective, the next step would be to develop a database to utilize on-line self-assessments tools and to identify the occupation(s) which best match that person's skills. Currently, the on-line self-assessment component is only in concept stage and it is estimated that such a tool would take from three to five years to implement at a significant cost.

D, The Connection between the Skills Passport and Career Pathways

Utilizing the Skills Passports as a base, the CBE will have a forum to promote career opportunities within the residential construction industry and to display that relationship to the Career Pathway concept.

The Carma Centre believes the Skills Passports will help students with career planning, will assist teachers to assess and tailor their curriculum and programs, and will help them determine how these courses fit within opportunities available in the industry. A web-based self-assessment tool would allow students to independently complete an assessment and to match formal skills they acquired in class to those required by industry.

E. Articulation

The Carma Centre intends to use the validated skills sets and occupational profiles to link the CBE curriculum with SAIT courses. Once these modules are integrated into SAIT programs, articulation agreements will be negotiated and approval can be obtained from SAIT's Board of Governors. It is estimated that approval could take approximately two years, and would require the Carma Centre to demonstrate that high school courses are being taught at a level that is acceptable to SAIT. Articulation would give students advanced placement into SAIT programs after graduation.

7.3 Summer Mentorship Program

A. Background

The CBE implemented an internship program approximately nine years ago. From this program, they realized there was an opportunity for students to extend learning into the summer months. The first Summer Internship Program offered by the CBE involved 35 student placements in manufacturing, the home building industry, information technology, and auto services. This program has since expanded to include nearly 1400 student placements in a variety of industries.

Recognizing this as an opportunity to introduce high school students to the residential construction industry, the Home Builders Summer Mentorship Program was formally implemented in 2000. Currently, mentorship placements are conducted in cooperation with the schools, but are not considered to be part of the Career Pathways program. Students can work in residential construction for six to eight weeks during the summer, and the builder can choose students to mentor in a variety of occupations. The schools have hired Work-Experience Teachers through the Career Pathways program to supervise the students, with a ratio for supervision of one teacher for every 20 or 25 students.

The Carma Centre plans to coordinate mentorship placements year-round, and to increase the number of work experience placements to 500 annually. The benefits of the program include:

- An increase in the number of students who graduate from high school
- An opportunity to provide greater awareness of workplace expectations, and
- An improvement in the ability of youth to make career decisions.

The Carma Centre views the Summer Mentorship Program as a way to provide work experience opportunities for students interested in the industry, and to offer a broader introduction into the industry. Student interest is not always from a construction standpoint; a growing number are interested in working in marketing, sales, accounting and other parts of the business.

B. Successes of the Mentorship Program

Interviews with teachers, counsellors and students provided positive feedback on the mentorship program.

Students

- They received good support and guidance from the sub-contractor employers.
- They liked the idea of “earning while they learn”; that they were acquiring work skills, and in some cases that they were earning high school credits.

Teachers and Counsellors

- The students were willing to work, and employers were impressed and willing to take students into the program at any time.
- The teachers liked the idea that the builders found placements for the students. From the schools’ point of view, this is a valuable aspect to the partnership.
- Employers voiced frustrations directly to the work placement teachers rather than to the students, which was appreciated. This prevented jobsite issues from occurring and kept the students interested in improving, rather than being fearful of reprisals at work.
- Students understood “some grunt work” was required, and recognized that being willing to participate could potentially lead to other opportunities.
- The mentorship program provided students with hands-on experience and a good idea of the requirements to work in residential construction.
- In some schools, students were able to use the mentorship program to gain apprenticeship hours, earn money and to gain high school credits.
- The program provided a broad spectrum of opportunities for the students. Trades placements included landscaping, bricklaying, carpentry, and cabinet making. As well, industry office and sales placements were available to students.

- The schools perceived the Carma Centre as being dedicated to building a relationship with the schools and in providing opportunities for the students.

C. Weaknesses of the Mentorship Program

The Schools and the CBE also noted weaknesses with the Summer Mentorship Program:

- Student Safety Concerns While students are trained at school in shop safety, teachers still expect the Mentorship Program to offer additional safety training to meet safety requirements at the job site. Schools feel it is too great a burden to expect them to conduct safety training during the month of June because of exams, and that such training should be facilitated by industry.
- Limits to the Number of Work Placements The CBE Administration is responsible for coordinating student placements, however, some of the individual schools would prefer to take this over, as they often have more students than the program will accept. Existing policies place a limit on the number of students who can participate, and often these limits are not communicated to the schools in advance. In the past this has resulted in the over-recruitment of students, and disappointment.
- Students are not always placed in their Trade of Choice The schools are not informed in advance as to the nature of the placements. Some students with specific career goals ended up not having the opportunity to work in their preferred occupation.
- Difficulties in Scheduling Work Placements There is a lack of agreement between Career Practitioners and Construction teachers as to which group should be the key contact between the schools and the Carma Centre. Currently, the Carma Centre's contact is the Construction Teachers. However, the Career Practitioners note they are a more direct and consistent resource to students who seek career information and advice on summer jobs.
- Student Transportation Issues Most new home sub-divisions are inaccessible by public transit, and many students do not have a driver's license, or access to a vehicle for a full workday. This limits the number of students who are able to participate in summer work placements. While some employers will arrange to pick students up from LRT stations or other locations and transport them to job sites, transportation issues remain a program challenge that requires resolution.
- Difficulties Matching Work Skills to the Placement. Finding a good match between the student and the employer is a challenge and a key factor for a successful mentorship. The work placement teachers note it is important to identify students who have an aptitude for the trades, and to encourage them to continue the program into the second and third year of high school. This can only be successfully done if they are matched to the right trade initially.
- Industry expectations are unrealistically high Teachers feel it is important for employers to understand that the student is not a replacement for a fully experienced worker, and that they will not be as skilled or productive as an existing workers.
- Insufficient Time for Pre-Program Planning As schools operate on a different schedule than business, they require considerable lead time to schedule the Summer Mentorship Program and to respond to changes. From the schools' perspective, planning meetings should begin as early as September to review the previous summer outcomes, and to initiate changes required for the upcoming year. To be truly effective, they require several planning meetings as early as January and February to finalize plans, including the number and type of upcoming placement opportunities. Typically, this planning had not occurred until May or June, which is too late as many students have already found summer positions, sign-up

becomes rushed, and there is insufficient time to have the necessary forms completed, or to prepare students for a placement.

- Student Supervision Concerns As some students require more assistance than others, teachers feel that the number of students per supervisor needs to be revisited if the required site visits are to be accommodated.
- Lack of Program Outcome Tracking A tracking system to follow the number of students who complete the mentorship program and the number who continue in the industry has not yet been established. Teachers feel such a system needs to be implemented to track students from one year to the next, and to ensure they receive an appropriate placement to utilize specific skills. They feel success stories would be valuable for showcasing the industry to prospective students, for keeping schools involved, and for demonstrating to parents that the initiative is working.

D. Strengths and Weaknesses of the Program as Identified by The Carma Centre members and Trades

Strengths

For the most part, the builders and trade contractors consider the mentorship program to be a positive experience. Home Builders have promoted the program by putting brochures in work related packages that regularly go to the trade contractors. Trade companies believe that the program provides students with an excellent opportunity to experience and learn about the trades, as some students who have participated in Summer Mentorship Programs have later become employees. This is an indication to the trades that the program has achieved one step towards raising awareness of the trades as a viable career option.

Weaknesses

In the opinion of the Carma Centre and industry informants, the Program carries the following weaknesses:

- Builders and trade contractors consider training students to be time consuming. Regardless of the perceived long-term benefits of the Program, staff who already work extra hours to meet deadlines, feel it is unrealistic to expect them to supervise students. On the other side, some students were not willing, or able, to meet the physical demands of the job. In addition some trade contractors feel that some students are too young to be in the program.
- Post-implementation follow-up after the first year is insufficient. The first year of the program was followed by a wrap-up dinner with the parents and students to honour students who had completed the program. Because of logistics, this part of the Summer Mentorship Program has been dropped, which appears to have resulted in less interest being shown on the part of both the parent and the student. With nothing to replace it, this is a lost opportunity to communicate with a group of key influencers.
- The Summer Mentorship Program is misunderstood by parents, teachers and youth
The Carma Centre mentorship program has been criticized as being operated like a “pre-occupational tour over the summer months”, rather than focusing on the students with the skills or interest to pursue the trades as a career. As well, some parents have interfered with some of the placements, by raising concerns on safety and the physical nature of the jobs. It is felt this is a direct result of poor communication to parents of the purpose of the program.

Clearly, some students perceive the Program as merely a way to gain 'a paying summer job', which is frustrating for the trade contractors devoting time and resources to the Program. The Carma Centre is addressing this challenge by encouraging teachers to refer only those students who are actually interested in the construction trades. It was reported that although the Summer Mentorship Program was initially a positive experience, successful results have not been achieved as too few participating students have indicated a future interest in the industry.

- *The Summer Mentorship Program is not properly promoted in the schools* From the perspective of the Carma Centre, with the exception of a few Construction teachers who are supportive and promote the Summer Mentorship Program, the schools do not make a strong effort to promote students to participate in the Summer Mentorship Program offered by the residential construction industry. They believe that the Summer Mentorship Program is being promoted or misunderstood at the school level as a summer job. In turn, students are opting for the 'coolest place to work', which may be at an amusement park, rather than in residential construction. Currently, participation in the Home Builders' Summer Mentorship Program is optional for schools.

Chronology of Events Surrounding the Summer Mentorship Program

1997	Beginning of the Calgary housing construction 'boom'
1998	Carma Developers' 40 th Anniversary. A donation of \$100,000 given by the Carma Developers for the formation of the Carma Centre. The Professional Home Builders Institute of Alberta Site Manager Program was updated during a two-year time frame and at a cost of \$60,000.
1999/2000	A Finance Committee is established and \$750,000 dollars is raised from industry
April 1, 2000	The Carma Centre For Excellence is registered as a not-for-profit organization
Summer 2000	Summer Mentorship Pilot implemented in conjunction with several builders. A total of 20 students were placed in the industry.
October 2000	Full-time Executive Director was hired
Winter of 2000	Partnerships with schools established
Winter 2000	A major research study was done to look at the industry and to gather attitudes
Summer 2001	1 st summer mentorship work placement. A total of 50 students enrolled in the program, of which 42 completed the full requirements of the program. The average student worked over 240 hours following enrollment in a construction safety-training module. Post evaluations by employers, students, and parents were extremely positive.
Summer 2002	2 nd summer mentorship work placements
Summer 2003	3 rd summer mentorship work placements
Fall 2003	More research is done with parents, teachers and guidance counselors
November 2003	The Carma Centre began validating Occupation Descriptions required for the 45 occupations in the residential construction industry and developing Skills Profiles for each occupation.
Early 2004	Plans are underway for the 2004 Home Builders Mentorship Program, which will be in its 5 th year. The Program begins its migration from career awareness to career exploration.

Part VIII— CAREER PATHWAYS

8.0 Career Pathways

This section provides an overview of the CBE's Career Pathways Program and the motivation for initiating the Program. Details on the Carma Centre's Career Pathway in Professional Home Building and the challenges that were encountered during the planning stages are also included. This section also outlines some of the lessons learnt and a suggested direction for developing a similar business-education partnership.

8.1 Overview

The intent of the Career Pathways Program is to allow students who have clear career goals to begin working on those goals while still in high school, and to either achieve advanced placement at a post-secondary institution, or to develop the competencies necessary for success in their chosen field. Students without clear career goals have the opportunity to change course at any time and explore different options. Career Pathways involves providing career-focused, hands-on, competency-based opportunities, including work experience, mentorship, internship, and summer programs. There are currently ten (10) Career Pathway opportunities offered by the CBE, one of which is Building Construction Technology (Professional Home Building).

Pathways are partnerships, which involve building "shared-destiny-relationships" in which all of the partners have the same goal, are involved in relationship building, and are working towards community sustainability through a trained and skilled workforce.

The pathway program for Professional Home Building and Logistics, are considered to be the most advanced programs in the Calgary school system, because of their sophisticated marketing materials. This includes electronic access to student-friendly occupational profiles. The CBE sees the partnership with the Carma Centre as a means of heightening the profile of the residential construction industry.

8.2 Motivation for Initiating Career Pathways

The involvement of the Carma Centre with the Career Pathways Program is concurrent with a fundamental paradigm shift in education. The paradigm suggests that the responsibilities of schools have expanded from teaching basic literacy and preparing students for post-secondary education to a third responsibility of preparing students for the world of work.

A. The Background of the Career Pathways in Calgary Schools

Career Pathways is a concept that was adapted from other jurisdictions and customized by the CBE to fit the local situation. Alberta Learning which was motivated to increase their focus on school-to-work models, supported the interest of the CBE in developing the Program. The decision to introduce Career Pathways was a result of a number of influences:

- *Student difficulty in making Career Choices.* Students who drop out of school generally do not believe they have the ability to pursue university education. This has resulted in long-term difficulties in making a career decision.
- *An Increased Societal interest in life-long learning, and school-to-work models.* Society has moved towards a philosophy of life-long learning, and validating learning that occurs outside

of the classroom has become an important component. This further support the concept of introducing a Career Pathways Program.

- *A high percentage of high school students are not pursuing post-secondary programs.* Statistics Canada data reports that of the 70% of students who complete high school, only 20% actually go on to complete post-secondary education. As a result, the current system places focus on that 20%. Parents and teachers who support the Career Pathways concept are aware of the importance of assisting students to explore the required skill sets, aptitudes, and values that employers find important. They also encourage including employability skills as a component in high school curriculum.
- *A high percentage of post-secondary students drop out of programs.* Post-secondary institutions have no screening tools other than academic performance when it comes to students entering specific fields. Concern over the notable dropout rate in the first year of post-secondary education raises questions about how many students were in the right program.
- *The Evolution of the Alberta School-to-Work model.* Career Pathways evolved from the various 'Tech Prep models' that are available in the Province. The CBE conducted a study in 1982 and produced a report on integrating vocational training into the school system. However, this notion was not adopted at the time, as industry was not yet interested or motivated in becoming involved in education. The school system is now pilot-testing School-to-Work programs.
- *A Proactive Approach.* The Chief Superintendent at CBE identified a need to link the CBE more closely with the Calgary and area economy to respond to labour force requirements for the future. Career Pathways appeared to be the logical tool, as it allows schools to become more involved with industry, to mitigate the missing link between the labour market and the education system, and to provide a more intentional way for students to consider future career opportunities.

8.3 Other Career Pathways Models Studied

The CBE established their current vision for a Career Pathways within the school system by reviewing several Pathway Models and by adopting and combining their most successful components.

Some of the models reviewed included:

- The for-profit Magnet Schools in Portland, Oregon. This model facilitates student placements, including hiring teachers to conduct supervision and tracking the success of the programs.
- The Washington-Vancouver model permits students to advance into the post-secondary programs either at full or partial placement. Success of the program is based on students' anecdotes and on post-completion information (such as how many students went to University or choose a specific career direction).
- The Tech Prep program established in 1998, by the Red Deer Public School Board System.
- Various Ontario models such as: the Hamilton-Wentworth Business Education Council and the Niagara Business Education Council.

High school Principals with the CBE were invited to participate in research missions, to attend presentations, and to participate in evaluation of each of the mentioned models. There was some criticism that the presentations only discussed successes and did not highlight any challenges or failures so a full assessment could be done. When adapting the American models to the vision of the CBE, key factors taken into consideration included:

- Many American schools are privately funded and therefore able to build multi-million dollar facilities to accommodate a Pathways Program. There is uncertainty if a publicly funded school systems such as in Calgary are financially able to support implementation.
- Most of the American models had 'elitist schools' and 'have-not schools' involved in their Programs because of significant differences in funding. The mandate for the CBE is that all of the schools should have the option to benefit from a wide variety of Pathway options, and not compete with each other. The pathway structure chosen by the CBE permits every high school to offer pathways based on the strengths of their teachers, existing programs, and the schools' ability to also continue to offer a comprehensive high school education.

8.4 Implementation

In order for the CBE to determine which schools should adopt a particular pathway they were required to go through a proposal process. This involved presenting a proposal for evaluation, with appointed directors and superintendents making the final decision.

Proposals are evaluated on:

- 1) The current student population
- 2) The value of the proposed pathway(s) to the school
- 3) The value of the pathway to the student population
- 4) Existing and future partnerships, and
- 5) Proposed accountability and measurement practices

Each of the five geographical areas in Calgary, which has three or four high schools per district, will offer all of the 10 pathways, but it is uncertain how the CBE will determine which pathways and the number of pathways that a particular school in each area will offer. A deciding factor will not only be the programs already being offered at individual schools, and how a particular pathway will enhance these programs. At this point, it is uncertain if school boundary relaxation will allow students to base their decision on a school because of the programs being offered.

School informants urge Carma Centre not to expect immediate results from the Career Pathways Program. However, they are encouraged by the current support from industry, and they feel once the community can be sold on the idea that there are career opportunities in residential construction benefits to the schools will follow.

The CBE believes that changing societal perception of the trades must be part of the program. They see this as a long-term process particularly among the influencer groups such as parents. The current attitude is that although they are aware that the industry offers lucrative careers, they do not want their own children to pursue trade occupations.

8.5 Key Factors for Introducing Career Pathways

Key influencing factors for introducing a Career Pathways model include:

- **Support for Curriculum Development.** Current curriculum requires revision and adapting so that all the examples used are related to the Pathway. Such a process will require teachers to be seconded to the project along with other support systems during the development process. Teachers' perceptions, language, and activities need to be reflective of the Pathways being taught. Changing how information is delivered, such as packaging some of the curriculum to accommodate students on work placements, is also required.
- **Buy-in at the school level.** While achieving complete buy-in is expected to take time, it is considered beneficial that buy-in hasn't been mandated and that staff are allowed to 'come on-board' as they develop an understanding of the Pathways program. There will be a need for advertising the Career Pathways model within the business community if schools are going to be able to develop the necessary partnerships. There is a need to educate teachers about career education in the broader sense to ensure that Career Pathways is not perceived as job training. This will require strategic planning by the school, as well as resource planning and a designated staff to take leadership of the process.
- **Gradual Implementation.** Career Pathways is seen as a revolution in secondary education for which the planning process is the most important step. Alberta Learning has developed an entire curriculum of on-line learning materials to make this an established and successful process. One of the high schools in the Program is currently exploring ways to support Career Pathways by designing employability booklets and supplementing math and language arts courses to make the subjects a more meaningful learning experience. They are also developing methods for integrating Career Pathways into their academic subjects. A group of teachers have been organized to spend time at businesses in different industries to observe how they operate. This has been beneficial in helping teachers visualize the connection between school and work. Development of the Career Pathways has been set as a goal by some schools to be accomplished over the next three to five years, and have already begun introducing the concept to parents.
- **Staff Development and Teacher Involvement.** Teachers delivering academic subjects require as much preliminary information about Career Pathways as the Construction Technology Studies (CTS) teachers, as it will encompass the entire school program. While school principals can present the process to teachers, there is no guarantee they will actually implement it in their classrooms. From Alberta Learning's perspective, until implementation occurs they will be unable to identify the areas that require improvement.
- **Direct School Board Involvement.** It is important that the schools can rely on strong support from their School Board. To its credit, this has occurred at the CBE:
 - The CBE's Chief Superintendent was involved in writing the Professional Homebuilders Pathways' outline with the Carma Centre.
 - The CBE Pathways team has assisted schools in obtaining resources, offered professional development to the teachers, and helped the schools connect with the Carma Centre.

A. Progress to Date

Four high schools have been involved with the program from the beginning. The intent is that these four schools (Henry Wise Wood High School, South Calgary High School; Lord Beaverbrook High School and Dr E. P. Scarlett) will begin to offer the Career Pathways Program in Professional Home Building in the fall of 2004. The remainder of the schools will be given the opportunity to put forward proposals to participate.

Implementation of the Career Pathways is expected to be easier for some schools than others, depending on their current structure. Schools that have an existing school-to-work structure, Centres of Excellence, or Academies have had the most success in planning for Career Pathways. Schools already involved in partnerships with local builders are also more easily able to adopt the Program.

Of the ten schools reviewed, most are aware that the Career Pathways will be adopted by the CBE, but have not yet started to plan for their own implementation. Concerns of the schools include:

- Regardless that the Calgary Board of Education has been discussing Career Pathways for four or five years, the schools have received limited information on the program. In 2003 they focused on evaluating the changes such a Program will make in their school, however, they only received information in February 2004 about how the proposal process will be evaluated. The implementation process requires further definition for them to be able to proceed.
- The schools may need to make changes to the school day of 9:00 AM to 3:00 PM, or to the timetable to accommodate a Program. Changes may also have to be made to the length of the school year.

8.6 Causes for Delays in Implementing the Home Builders Pathway

- *The Calgary Board of Education and SAIT's allocation of resources did not match the resources invested by the Carma Centre invested.* Although the Carma Centre has had strong industry support and volunteers available for the past two years, the CBE was not ready to proceed with Career Pathways' implementation. Although the CBE is the second largest secondary school board in Canada it does not have staff who are dedicated to implementing changes such as those necessary to implement a program such as the Career Pathways Model. The initiative would be more advanced if the CBE and SAIT had personnel they could specifically dedicate to the project.
- *The CBE and SAIT disagreed on objectives and how to use resources for advancing the initiative* Although the CBE and SAIT appear to have similar perspectives on a number of issues related to the Pathways Model, they are both subject to their own bureaucratic slowdowns. Governance issues have resulted in the need to meet with higher levels in both organizations to ensure that there is a solid commitment to advancing the Career Pathways Model.
- *The CBE did not have a solid communication strategy for advancing the concept with their principals and teachers.* Although the CBE promotes Career Pathways, they have provided limited support to the schools for implementation. Some schools missed out on the formal presentation on Career Pathways. It was left up to each principal to "spread the word" among the teachers and to initiate implementation.

Discussions between the schools and the Carma Centre have confirmed that teachers, parents, principals, and CBE administration often carry a different viewpoint of what is involved in initiating a Career Pathways Program. The Chief Superintendent at the CBE is currently re-packaging the message to the schools.

- *The current focus of most High School education is academics* The CBE's gradual approach for changing the focus of the school system from academics to a more practical career and business orientation, has been frustrating for the Carma Centre.
- *The Scope of the Home Builders Career Pathways is considered too broad.* The Carma Centre initially began this project with the intention of recruiting all of the high schools to participate. However, due to a lack of awareness and understanding of the Career Pathways Program, they are now focusing on 8 to 10 key schools. It is recognized that although it would be ideal to involve all of Calgary's high schools, it is not realistic at this time, and any attempt to pursue it would only slow the process further. The plan is to proceed with the supportive schools, and hope to recruit other schools as measures of success can be demonstrated.
- *The CBE and the Carma Centre have been in disagreement on the contents of the Home Builders Pathway.* A number of the schools are still focused on offering courses such as Finishing Carpentry and Cabinet Making in the traditional sense, and place little emphasis on the Framing and Cribbing trades. Changing this mindset is one the Carma Centres' greatest challenges.
- *Unresolved logistical concerns by the schools has hindered implementation of the Pathways Program.* Introducing a Career Pathways Program was initially considered when schools first adopted the Registered Apprenticeship Program (RAP). The benefits of the RAP program included placing student focus on achieving the hours they need to count towards their Apprenticeship certification while still in high school. This provided the CBE with a vision for expanding the concept to include other sectors. Like this time, logistical concerns also stalled the progress of the RAP program. Similarly, when it comes to Career Pathways and the residential construction industry, schools have expressed concerns regarding transportation issues (such as busing students between schools), school boundaries, and the effect on students and teachers' daily activities and program outcomes.
- *Details on Alberta Learning's overall plan for Career Pathways and graduation requirements.* Alberta Learning is in the process of discussing what students will be required to do outside of the classroom and how that will change how credits are awarded. A recent change in the Alberta Learning portfolio includes recognition of two new credentials on student's transcripts, and they are currently reviewing the possibility of adding work experience as part of the graduation criteria.⁶

Alberta Learning is currently discussing the government's role in launching the Career Pathways program. At this point, they do not have any formal policies or procedures for the level of support they will offer the schools, and do not anticipate any legislative changes in

⁶ Additional information about the Central Alberta Tech Prep credential is available on:

<http://www.techprep.ab.ca>

Additional information about the Green Certificate Credential is available on

http://www.learning.gov.ab.ca/k_12/curriculum/bySubject/green/green_pofs.pdf

this regard. Alberta Learning's intent is to provide a framework to allow Career Pathways to evolve according to the structure established by the CBE. At this point, they also do not know how Career Pathways will affect funding to the schools.

8.7 Anticipated Implementation Challenges for Schools Involved in the Career Pathways Program

The schools anticipate the following challenges when implementing the Professional Home Builders Pathway:

- *Some Pathways are too narrowly based or unappealing to the schools and the students.*
 - The Professional Home Builders Pathway is at a disadvantage, as the schools do not see it as far-reaching as other industries such as oil and gas.
 - A perspective to overcome is that the Professional Home Builders Pathway is merely a way for the large contractors to gain and maintain a cheap labour force.
 - Some of the schools prefer to focus on more traditional construction technology programs, and feel they lack adequate space to take on the Professional Home Builders Pathway.
 - Teachers and students require a clear understanding of the focus of the Professional Home Builders Pathway.
 - Students taking the carpentry courses need to be made aware that they have acquired entry-level skills, which are transferable to other residential construction occupations. Schools with existing partnerships with builders have already made changes to how they are delivering construction technology.
- *Duty of Care Issues.* As with the Mentorship Program Safety on the job site is a strong concern as teachers are ultimately responsible for their students while they are in class. For the Professional Home Builders Pathway to be successful, schools will require assurance that students will only work with safety-oriented companies.
- *Industry cycles may affect the success of some Pathways.* Some schools have expressed apprehension of another slow down in the construction industry. They are concerned that students could enroll in the Professional Home Builders Pathway to end up without a future. To plan for the long-term, they believe industry should consider offering courses on occupations outside the trades, (such as estimating, and land development), and subsidize training during slower times to retain the interest of workers for peak periods.
- *A lack of financial resources for equipment upgrades.* Much of the shop equipment at is outdated or require repair. Some schools anticipate that their ability to offer any programs will depend on the extent to which industry provides them with financial support.

8.8 SAIT's Partnership with the Schools and Involvement in the Career Pathways Program

A. Benefits of SAIT's Involvement

SAIT has also explored independent partnerships with the schools. The ideal partnership with SAIT is one in which students are enrolled in some SAIT's courses while they are still in high school. These courses would be taught at SAIT, which would give students exposure to the various programs available following high school.

Key informants at CBE see a variety of benefits to SAIT being involved with the school in the Career Pathways Program including:

- SAIT has a history of working with the residential housing industry and the schools.
- SAIT provides customized training and have self-paced learning modules.

B. Challenges of SAIT's Involvement

Challenges with respect to SAIT being involved includes:

- *SAIT's entrance requirements are inflexible.* Three of Calgary's Integrated Occupational Program (IOP) high schools offer a preparatory course specifically to enable their students to enter into the trades programs. The course is considered an entrance-challenge exam as students in the IOP programs lack the high school math required for admission to SAIT's trade program. These schools have attempted to come to some resolution with SAIT on how to bridge some of the IOP programs with SAIT's programs; to this point SAIT has not been willing to explore the possibility. As a result, a high number of students who are unable to achieve academic standards are 'shut out' of the trades programs.
- *Advanced Credits at SAIT is a complicated and labour intensive process.* In order to offer advanced credits for a program, a post-secondary institution must complete an evaluation process for each class in the program. Alberta Learning notes that SAIT's ability to offer advanced credit will be potentially challenging because of the labour intensive process currently in place. They also noted that formal provincial recognition for post-secondary articulation from the Alberta Council on Admissions and Transfer would make a big difference in terms of SAIT's ability to grant advanced credit, and to fast-forward the process.
- *Advanced Credits will potentially impact SAIT's funding.* Secondary schools receive provincial government funding based on the number of students who successfully pass courses. SAIT receives similar provincial government funding and the implementation of an advanced credit program would impact their funding. To this point, Alberta Learning has been unwilling to change the funding structure to facilitate the CBE and SAIT sharing the benefits of advanced credit enhancements. Industry feels that if an agreement is reached, the introduction of the advanced credit program would in-the-end benefit SAIT as it has the potential to increase enrollment.

8.9 The Professional Home Builders Pathway

In 2002, the Carma Centre began working with the two local school boards (public and Catholic) to develop the Career Pathway model for residential construction. The intent of the model is to provide a "seamless" transition from high school to employment/industry training by allowing students to earn transferable high school course credits to link to SAIT's apprenticeship training. This approach is expected to increase the number of students entering construction trades directly from high school. While plans have proceeded with the CBE, the Calgary Catholic School District has put their involvement on hold.

The business plan for the Professional Home Builders Pathway was approved in July 2003. The intent of the program is:

- To provide career information related to residential construction industry to youth,

- To illustrate the relevance of education to those careers through the Summer Mentorship Program,
- To assist students in making the transition from high school to employment/industry training,
- To assist parents, guidance counselors, and teachers to guide the student through the career development process, and

Unlike typical Career Pathway Programs, the Carma Centre's Career Pathways were not conceived by the school system. It started as a collection of discussions among key members of the residential construction industry who agreed to work cooperatively to address the human resource challenges.

As part of Career Pathways, the Carma Centre has discussed developing mandatory safety courses for high school students so that new entrants would start with a common background in basic construction technologies and work-site safety. This safety course would also apply to training programs developed for workers in the administrative side of the industry.

8.10 Future Milestones

- The next critical milestone for the Carma Centre is to launch the Career Pathway in Professional Home Building Program in co-operation with the schools. At the time of this report, the Carma Centre and SAIT were in the initial stages of building the Career Pathways Program. Next a curriculum that will fill these gaps will be developed to make a smooth transition into SAIT's Apprenticeship and Technology Programs. A key initial focus for the Professional Home Builders Pathway will be to encourage high school students to consider a career in residential construction.

Chronology of building a Partnership with the Calgary Board of Education	
2002	Carma Centre begins working with two schools and the CBE
2003	A business plan for the Professional Home Builders Pathway is approved, with the expectation of having an annual budget of \$500,000.
2004	Carma Centre works on occupational descriptions and skills profiles (Skills Passport project).
Winter 2005	The Professional Home Builders Pathway is scheduled to be offered in select CBE High Schools

Next Steps

The initiation of the Professional Home Builders Pathway will be a key milestone for the Carma Centre. While the initiative needs 'fine-tuning' before moving into the final stages of planning, the immediate 'Next Steps' for the Professional Home Builders Pathway include:

1. Reviewing the curriculum at the high school level including how students will receive accreditation.
2. Organizing events such as job fairs and industry tours to involve teachers outside of the classroom.
3. Developing a public relations program for teachers, guidance counselors and parents.
4. Encouraging open discussion of all of the options available to students.

5. Exploring the availability of financial support from the provincial and federal government for education programs and scholarships.
6. Ensuring more accessible and affordable entrance criteria to SAIT and other colleges.
7. Quantifying the percentage of graduates who currently pursue residential construction as a career choice, compared to the number or percentage of high school graduates required to enter the trades to maintain a viable workforce.
8. Encouraging the school system and SAIT to facilitate the involvement of their career counselors and instructors in the program.

8.11 Guidelines for Business-Education Partnerships

Key elements of a partnership with the local school board and involvement in a Career Pathways program include:

- Ensure Health and Safety standards are met. In order to ensure that proper standards are put into place at the beginning, establishing a relationship with Workplace Health and Safety, such as sitting on an Advisory Committee.
- Increase the marketing of the Career Pathways Program. A strong marketing campaign for the Professional Home Builders Career Pathway is critical to overcoming public perception of the industry and of trade occupations. The success of such a campaign will have a direct effect on the ability of the industry to attract youth.
- Build a Strong Communication Plan. A strong communication plan is necessary to ensure that all partners are on track, that the project is moving at a satisfactory pace and that individual needs are met. School informants recommend that any industry contemplating a Pathways Program should ensure that communications between the School Boards and the schools are clear and well documented. A key role of the School Board and the schools include obtaining teacher buy-in and that they bring students into the program. Prior to initiating a program, evaluation measurements need to be established to measure outcomes and a plan for communicating those outcomes.
- Begin with a small number of students and fewer schools. It is believed that greater efficiencies will be realized if the Career Pathways begins with a smaller number of select students, and that one school should be used as a pilot test. Once the pilot test is developed and successfully tested for a couple of years, then expansion of the concept into more schools with a larger base of students can be considered.
- Ensure there is clarity about the Career Pathways process. Schools note that if Career Pathways is about change and developing relevant curriculum, students must also have a clear understanding of the industry being promoted. As well, the partners should jointly address perception and bias by communicating in a more positive 'hands-on' approach to supporters.
- Conduct Process Research. Interested industries should conduct site visits to schools that have successfully implemented a Career Pathways Program to obtain a good understanding of the implementation process.
- Ensure that Industry/Education Partnerships evolve and are mutually beneficial. When developing industry partnerships for a Career Pathways Program, it is important to realize that while the basic framework may have been developed, relationships are not static. There will always be a need to make changes and modifications, to respond to membership changes, to explore improvements, and to adapt to changes in techniques and philosophy.
- Explore alternatives to encourage partnerships. When implementing a Career Pathways Model, it was recommended that alternative models with a successful history should be used.

A model that high schools have successfully used is a Music Program model, where clinicians come to the schools to work with music students. Using a similar model would see trades people coming into the schools as clinicians to instruct and assist teachers and students to learn about residential construction. While there would be issues to be resolved on how trades people would be paid, solutions through industry partnership funding could be the source.

- Industry should have direct and frequent contact with the students. School informants recommend that students must have access to industry as a resource to answer direct questions during a class year. Industry representatives are considering a 'hot line' as part of the process. Videos, a dynamic speaker with industry experience and presentations made to entire classes or to smaller groups of students, would also be beneficial. The success of this technique has been noticed by the in-person recruitment process the Carma Centre has successfully used for the Summer Mentorship Program. Overall, the Carma Centre has expressed a willingness to be supportive and to work with the schools by responding quickly to requests. The schools recommend increased involvement by the Carma Centre, or any other jurisdiction considering such a program, to demonstrate a concrete link between industry and the students.
- Performance Measurements Should be Established Identify ways of quantifying how many new entrants the program has achieved compared to industry's needs, and establish time frames for achieving specific numbers.

**PART IX – FACTORS THAT COULD AFFECT THE DIRECTION OF
THE CARMA CENTRE**

9.0 Factors that Could Affect the Direction of the Carma Centre

This section highlights some of the environmental factors, which may impact the current and future direction of the Carma Centre.

9.1 Influencing Factors that Directly Affect the Progress of the Carma Centre's Initiatives

External factors, which have already, or potentially could impact the success of the Carma Centre initiatives, include:

- *Competition from other industries.* Competition from other provinces and other industries will affect the Carma Centre's ability to respond to their human resource needs, as numerous other industries are also facing labour shortage issues. In an attempt to address the situation, HRDC has joined with distinct industries to establish Sector Councils to focus on labour force reviews, to fund labour market initiatives for attracting workers to individual industries, and to promote employment within the sector.
- *Other Political Issues and Short-term Relief to Labour Market Pressures.* Changes in provincial or federal policies have the potential to challenge the Carma Centre's ability to secure financial grants for continuation of their initiative. To a degree, the labour market issues for residential construction in Calgary have been less of a concern over the past year even though the economy is still very strong. A sustained softening in the market would decrease the urgency of the Carma Centre's initiatives, as the immediate problem of shortages would temporarily go away. However, the underlying issues would continue, as long-term improvements to the education system and a plan for succession in the industry are required.
- *The willingness and flexibility of the Alberta Apprenticeship Board and Industry Training to endorse Certification.* For the Carma Centre initiatives to be successful, more flexibility is required in the Apprenticeship system to facilitate certification. Just prior to the end of 2003, the Apprenticeship Board agreed to address the issue of certification. For instance, they gave the go-ahead to the Carma Centre to work with SAIT to identify training modules, which apply to 'Cribber' certification. The details of how this will be dealt with have yet to be finalized.

9.2 Future Roles

The success of the Carma Centre's initiatives is dependent on their ability to demonstrate tangible benefits to their supporters prior to the renewal of five (5) pledges in September 2004.

- The Carma Centre is unlikely to assume responsibility for resolving the labour market issues for all of Alberta, or Canada. Key informants from the Carma Centre Board indicated that if another organization could effectively demonstrate their ability to present the residential construction industry as a viable career option, and are able to address the skill issues, they would be willing to become part of that organization or permit that organization to become part of the Carma Centre. Members of the Board believe that industry and government support should be more centralized, and that training and education should be facilitated by organizations working in a co-operative and organized manner.

- An organization such as the Carma Centre is a great catalyst for creating change, but in order for that change to be sustainable the roles of the organization must be absorbed within the marketplace and assumed by an existing industry organization. If the Carma Centre does not maintain its existence, one of the Home Builder Associations, such as the CRHBA, the ANHWP, or the AHBA, would take over their mandate. It is not clear at this time which organization that would be.
 - The CRHBA (which is also heavily dependent on volunteers) would experience the same frustrations.
 - The AHBA is not considered a suitable successor, because they are a province-wide organization dealing with multiple issues and have fewer financial and human resources than the CRHBA.
 - The ANHWP would be the most obvious choice to assume the role of the Carma Centre, however, a barrier is that its focus is not industry wide.
 - SAIT may be looking very carefully at the Carma Centre initiatives, and at potential opportunities for expansion of SAIT's role into job placement or facilitation. Although the Carma Centre's roles are not currently part of SAIT's mandate and vision, it may be an appropriate future route, as they currently provide learning opportunities to facilitate an ongoing and adequate workforce for allowing industry to become more self-sufficient.

A. Key Factors to achieve Competitive Advantage

Key factors that have been identified for the Carma Centre to achieve a competitive advantage include:

- Sustainable and sufficient funding—particularly seed money to create some of the required structure and to ensure that the right curriculum is in place.
- Definition of the Professional Home Builders Pathway curriculum and sufficient funding for the development of that curriculum.
- Strong financial and volunteer support from industry, including willingness to provide work practicum sites and learning opportunities.
- A bridge between secondary and post-secondary institutions. The Carma Centre should continue to work with the post-secondary and high school systems to bridge the transition gap from high school into post-secondary education and life-long learning.
- Appropriate performance measurement tools to demonstrate outcomes of the initiative.
- Assurance that courses being offered in the industry are current and responsive to industry needs and are modified to address the market's performance standards. The Carma Centre's success will be dependent upon its ability to define quality standards, and to communicate how to develop high quality employees aligned with those standards. When establishing quality standards using a long-term approach, it is likely that new construction processes will evolve and result in efficiencies through new technologies or tools. Human resource shortages such as those being experienced have usually been brought about by technological advances and tend to redirect labour supply shortages.

9.3 Other Potential Influences

A. Calgary Construction Association

Although, currently the Calgary Construction Association (CCA) has no direct involvement with the Carma Centre, the CCA takes an active role in education and has made a significant investment in their efforts to attract youth into the construction industry.

The CCA feels there is a place for everyone within the commercial and industrial construction industry including disabled individuals, Aboriginals, and women. In regards to encouraging women's involvement, the CCA is more advanced than the residential construction industry, as they offer scholarships to women, have elected the first female National Chairman in 2003, and have hosted an industry breakfast themed "Women in Construction". As well, the CCA's Youth Employment program has a much broader reach than the Carma Centre initiatives. The CCA strongly encourages co-operation between the two bodies on the basis that a unified promotion campaign would be a more effective strategy that would benefit both industries.

B. The Alberta Home Builders' Association

Outside of the Calgary Region, the local Associations are interpreting the Carma Centre as a Calgary initiative and have very little knowledge of its goals and mission. Although the AHBA is not currently an official Board member of the Carma Centre, they have been invited to the Board meetings. To this point, AHBA has had limited involvement with the Carma Centre and only work on the periphery with respect to different issues.

From AHBA's perspective, the Carma Centre should have begun as a provincially based project. The crossover for the AHBA and the Carma Centre has been with respect to education levels required for a skilled industry, which AHBA considers to be a provincial issue, rather than a local issue. While an approach was made to the Carma Centre a number of years ago to make this a joint effort, the founders of the Carma Centre believed it would be more efficient to perfect the model locally and then consider expanding it across the province.

In the past, AHBA has partnered in other initiatives with similar goals such as, 'Women in Trades' facilitated by the Edmonton Home Builders' Association. This was an initiative for establishing a Canadian skills training competition focused on marketing careers in the trades to women. The AHBA is also involved in a large promotional initiative called 'Trade Up'. This initiative, in conjunction with over sixty other sponsoring organizations and companies, including government, the private sector and unions, is a marketing initiative that promote careers in the construction trades and Apprenticeship programs to young Albertans.

Part X –SUMMARY AND RECOMMENDATIONS

10.0 Summary and Recommendations

10.1 Summary of Strengths, Challenges and Solutions

A. Partnerships

- The Carma Centre is an unique labour market initiative because of their partnerships with educational organizations and government.
- It is industry initiated and has been funded by influential employers who 'buy-into' the concept and participate in the Carma Centre's initiatives.
- The industry has shown leadership in recognizing the employment and skills issues in the local home building industry. Day-to-day competitors have "banded together" to resolve short and long-term human resources concerns in a practical and industry-relevant manner.
- The Carma Centre's strategic alliances have focused on building partnerships with post-secondary and secondary institutions to deliver training, rather than becoming a competitor of these institutions.
- The Carma Centre quickly established a network of stakeholders who produce and deliver tailored courses for the industry.
- A key strength of the Carma Centre is that they have recognition from the builders and the developers who financially support them.

B. Organizational Structure and Evolution

In the development of a similar organization, the Carma Centre notes they would do the following things differently:

- They would have a clearer business plan in place initially that addressed long-term goals, identified a series of strategic initiatives to achieve these goals, and established performance measurements and outcomes. A comprehensive marketing plan would have been the first initiative to be developed and evaluated.
- The Carma Centre notes that having scheduled Board Meetings with attendance commitments from board members is vital in order to resolve issues quickly. Increased representation on the board of influential industry leaders would "make things happen" and demand accountability.
- Board members unanimously noted that operating primarily as a volunteer organization has made it very difficult to accomplish objectives quickly despite its ability to maintain reasonable costs. A larger, diverse staff would facilitate the awareness initiative and would accelerate industry buy-in. Suggested positions include:
 - *Education Specialist:* A specialist to focus on school board endeavors, to facilitate the meetings attended by the school board, the high schools and SAIT, and to serve as a link between education and the industry.
 - *Government Relations Specialist:* A specialist to oversee the political aspects related to the Apprenticeship Board and government funding. The lack of an effective government relation's strategy has slowed the Carma Centre's process in this respect. There is a need to become more effective at "high level lobbying" and in understanding the differences between federal and provincial contracts. Additionally, a government-relations specialist could meet with industry associations, and with Ministers at both levels of government to lobby for sustained funding arrangements more suitable to the Carma Centre model.
 - *Marketing Specialist:* A sales and marketing specialist to coordinate career fairs and trade shows and to develop the appropriate marketing material.

- *Researcher:* A researcher to keep up-to-date with industry changes.
- *Office Assistant:* An assistant to manage day-to-day activities such as taking minutes at meetings and sending out board meeting agendas.

C. Strategies

In the development of their strategies, the Carma Centre notes that the following could have been done differently:

- Less emphasis would be placed on obtaining government funding for small projects (i.e. those perceived of as placement-related functions) and more concentration placed on key issues such as workforce development, promoting the industry and enhancing public perceptions of the industry with their target group and their influencers.
- Utilizing additional communication channels beyond the CRHA and PHBIA newsletters would have broadened the reach of the Carma Centre as many of the small trade contracting companies are not members of either organization.
- Because the Carma Centre has not communicated directly with many trade contracting companies (they have communicated mainly via the builders), the Carma Centre's impact may not have been as profound as initially envisioned.
- As a local organization, the Carma Centre has limited access to federal or provincial funding, and limited ability to influence standards relevant to fundamental policy issues. Working with the Canadian Home Builders Association to try to change the Immigration laws in order to attract people from other countries for trade occupations may be of value.
- Being more open to cooperating with commercial organizations and other industries would expand the Carma Centre's contacts and would allow more input into policies.
- Engage industry early in the process with a clear-cut plan for fundraising, the benefits of participating, and for keeping the members informed.
- Put the plan in simple and easy to follow steps so it can be easily presented and understood by industry.

D. Target Market

Possible opportunities for the Carma Centre include:

- Exploring opportunities to expand the target market to include the general population, Aboriginals, Immigrants and people who have been in the corrections system or who have barriers to employment.
- Functioning in an information brokerage capacity to share information about the industry's future human resource requirements.
- Focusing on changing societal perceptions and reposition the belief that the skills shortages are an industry issue only.

10.2 Summary of Milestones Accomplished to Date

A. Industry Needs Identification and Promotion

- Identified a need to respond to the industry's skills shortages and training needs.
- Obtained industry commitment for a pledge of _ million dollars over a five-year period.
 - Established a volunteer board with representation from industry, industry associations, government, and educational institutions.
 - Leveraged the partnership's capabilities by identifying each partner's key strengths and working together for mutual benefit.
 - Conducted a needs assessment to identify the most critical and immediate industry needs.

- Researched existing community training initiatives to avoid duplication and to identify potential partnerships.
- Raised industry and community awareness of the Carma Centre and the importance of the initiative.
- Provided a common forum for industry leaders to discuss a solution to the residential construction industry's future labour market challenges.
- Received publicity in local newspapers, and on Calgary-based television channel.
- Updated the Professional Home Builders Institute of Alberta (PHBIA) Site Manager Program.
- Hired an Executive Director and support staff to bring focus and direction to the initiative.
- Provided industry updates to the members through the CRHBA's annual general meetings and newsletters, and through regular contact with industry members.
- Received an Honorable Mention in the *Process and Management Category* of the *CMHC's Housing Awards Program 2000 — Tomorrow's Housing Today: Meeting the Housing Challenges of the New Millennium Award Program*.
- Initiated dialogue and negotiations with Alberta Apprenticeship and Industry Training Board in regard to certification.
- Conducted labour market studies on the residential construction industry, and identified the key challenges of establishing respect in the trades.
- Promoted the residential construction sector to attract suitable employees.

B. Occupational Descriptions and Skills Profile Project

- Conducted "Career Ladders" research by interviewing industry workers within the trades, office and management occupations.
- Developed job function definitions and assessments for office and management level jobs and forty residential construction trades.
- Obtained the commitment of SAIT to begin the development of the Skills Passports as a tool for industry skill advancement.
- Began the process of validating essential skills required for one hundred occupations in the residential construction industry. The validation process will be a key component of the Professional Home Builders Career Pathway.
- Obtained the commitment and assistance of trade contractors to identify the key quality standards and skills specific to the residential construction trades.

C. Involvement And Participation Of Youth

- Obtained the support and involvement of builders and trade contractors for providing work placement sites for the Summer Mentorship Program.
- Became known, by the Youth Employment Centre as the "one-stop shop" for employment opportunities in the residential construction industry.
- Obtained approval for the Professional Home Builders Pathway business plan which involved a tri-party partnership with SAIT, the Calgary Board of Education and the Carma Centre.
- Completed market research for the Career Pathways in Professional Homebuilding Project, which was partially funded by a grant from the Alberta Real Estate Foundation.
- Formed an Education Committee which includes representation from industry, CBE principals, and SAIT.
- Facilitated three summers of positive work experience opportunities for a total of 282 students through the Summer Mentorship Program.

- Obtained grant funding from AHR&E to develop a website, trade fair booth, multimedia information tools, and marketing products.
- Developed a CD and a DVD entitled "*Building New Homes for Calgarians*" to raise awareness of the Carma Centre and the home building industry.
- Raised awareness of careers within the residential construction industry by presenting to high school students and the general public at over thirty career and employment fairs.
- Worked in partnership with the CBE and SAIT on the Career Pathways in Professional Home Building Project to improve school curriculum and youth career opportunities in the industry.
- Formalized the existing builder-CBE high school partnerships and expanded the concept to be industry-wide.

D. Involvement And Participation Of Other Sources of Labour Supply

- Encouraged and supported education and training providers to meet the skills needs of the residential construction sector.
- Gathered labour market information for the industry regarding labour market trends.
- Identified potential sources of labour and explored appropriate government funding for establishing a training or employment initiative.
- Met with representatives from the Aboriginal community to discuss partnership opportunities.
- Provided placement assistance to the YWCA's Building Trades program for Women.
- Initiated a Human Resources Development Canada Youth Internship Program (YIP) employment program in conjunction with Bow Valley College to provide employment opportunities for youth ages 15 to 30 with barriers to employment.

10.3 Summary of Milestones To be Accomplished

A. Industry Needs Identification and Promotion

- Renewal of the five-year industry pledges will be required in September 2004.
- As the industry is constantly changing and evolving, the Carma Centre plans to remain current of industry issues and to regularly review and update curriculum.
- Ongoing discussion with the Alberta Apprenticeship and Industry Training Board will be required to advance the industry certification initiative. This process is currently in an infancy stage.

B. Occupational Descriptions And Skills Profile Project

- The Carma Centre plans to identify the existing skills obtained through the Apprenticeship program and use these skills profiles as a basis for the CBE's Construction Technology modules that link to SAIT's courses.
- The cribbing course is anticipated to be endorsed by SAIT.
- The implementation of the Skills Passport within the industry and the school system is anticipated by the spring of 2005.

C. Involvement And Participation Of Youth

- The Summer Mentorship Program will continue to be offered. The Carma Centre has set a goal of 500 students in the program
- All CBE high schools are preparing to utilize the Career Pathways concept and four CBE high schools will begin implementing Career Pathways programs in the fall of 2004. The Professional Home Builders Career Pathway will be pilot tested.

D. Involvement And Participation Of Other Sources Of Labour Supply

- The Carma Centre has an ongoing objective of encouraging stakeholders to hire and train individuals who are motivated to be in the industry.
- The Carma Centre will initiate training programs in consideration of industry's needs and as government funding is available.

10.4 Recommendations for Replication

Recommendation #1: Ensure sufficient pre-implementation planning

Establish a Network of Resources.

- An understanding of the existing national, provincial and community resources is essential to avoid duplication, to develop an inventory of best practices, and to encourage resource sharing.
- The inventory of community assets should be exhaustive and include institutional, government, not-for-profit, and industry initiatives, which focus on the common purpose of developing a human resource strategy for the residential construction industry. This should include identifying what each of the industry associations is doing locally and provincially. An information strategy should then be coordinated and include identification of key concerns, the direction for each initiative, and a clear plan for raising awareness.

Establish Strong and Open Communication Guidelines to Encourage Buy-in from the right partners.

- Communication with partners and key stakeholders should facilitate a clear understanding of the purposes and objectives of the project in order to encourage buy-in and engage them in the project.
- Mutual understanding of all partners and stakeholders' capabilities and expectations should facilitate open communication, avoid duplication of efforts, and encourage long-term commitment.

Establish a Clear Understanding of the Partners' Roles and a Consensus of Project Goals including Stakeholders' Needs and Timelines.

- Project goals and timelines, which are realistic, clearly stated, measurable, and relevant to the stakeholders and partners will create a consensus to drive the project forward. Partnerships will always be a challenge because of the different priorities and mandates within the organizations.

Ensure awareness that developing curriculum is a multi-million dollar task and the industry requires support to achieve the curriculum changes.

- Funding should come from a combination of industry and government including some initial government seed money to begin the initiative and then the development of a means for sustainable funding. This could involve looking at other models, which have successfully developed sustainability.
- Once the courses have been implemented a mechanism to update the contents should be developed.

Explore options for initial seed money and sustainable funding.

- Seed money is a key component for replicating an initiative such as the Carma Centre.
- Explore ways to convince government to funnel training money through organizations such as the Carma Centre to work on sustained initiatives along with training partners, rather on a program-by-program basis.

Develop a Customized Model.

- An initiative like the Carma Centre requires flexibility to address the unique concerns of the jurisdiction. The Carma Centre could be used as a template and the structure customized to fit the uniqueness of the area.

Recommendation #2: Ensure a pro-active, industry-driven, long-range and broad human resource strategy that explores alternatives for resolution of issues.

Long-Term Planning Approach

- Issues regarding labour shortages and home construction quality standards are anticipated to worsen. The industry has typically been criticized as being reactive and short-term thinkers. To be successful, an initiative such as the Carma Centre requires a long-term and systematic plan, a good volunteer base of people, and appropriate linkages which are to be maintained despite fluctuations in the economy. Valuable components of the Carma Centre approach include their awareness campaign and the Career Pathways initiative, which focus on the industry's long-term health.

Broad Approach

- The Carma Centre approach of being community specific in this initial stage is advantageous, because community based organizations are nimble and more effective. However, recommendations from the respondents have included broadening the Carma Centre concept beyond the Calgary labour market.
- Labour shortages are a problem provincially and nationally. Workers are mobile and will go where the market is good and where the work is available. An initiative such as the Carma Centre by limiting itself to a local focus, is not accounting for or planning for the cyclical nature of the industry.
- A provincially based organization would have more direct relevance to the mandate of the provincial Home Builders Association, which provides activities on a provincial level such as industry networking events and conferences and government lobbying on technical issues.
- An initiative such as the Carma Centre would have "more strength and influence", if they represented residential construction in Canada because they would have an increased ability to affect policy as well as more human and financial resources. A stronger influence to affect policies such as policies to change in-migration patterns (to encourage workers to relocate to the areas where they are needed) would be advantageous.
- However, it should be noted that education and training are a provincial issue making it difficult to control nationally. The Canadian Home Builders' Association also focuses on education, however, they struggle because they are focusing on a provincial issue and facilitating industry communication on a national level is difficult.

Explore Alternatives

An organization similar to the Carma Centre should develop solutions to industry issues and resolution to external factors, which may affect their initiatives, including:

- The practice of trade contractors utilizing sub-contractors in lieu of employees should be explored. A consequence has been that workers interested in pursuing Journeyman Certification are not eligible for Employment Insurance benefits while in training, making it unaffordable to pursue.
- Barriers such as transportation and childcare issues that hinder the success of specific programs or initiatives should be resolved.
- Changing society's perception of trades people and establishing "good press" in order to improve the industry's profile involves marketing the entrepreneurial opportunities and earning potential of these occupations, but may also include reviewing employment practices in order to improve retention.
- Because youth are a huge demographic in Canada, helping them to decide their careers and dealing with labour shortages should be considered a societal effort as well as an industry effort. In the past, society has not paid enough attention to youth who are not university bound and who are struggling with career indecision.

10.5 Challenges of Replication

In replicating the Carma Centre, additional research should focus on the following:

Establishing a connection with the education systems

- Slightly different approaches to developing school-business partnerships may be required because the education systems are unique across Canada and because apprenticeship standards vary by province.
- Reputable and well-established post-secondary educational institutes currently offering trades training and willing to partner may not exist in other parts of Canada.

The industry's concerns

- Other areas of the country have a large, fragmented industry and encouraging an industry-wide approach will be a challenge. The ability to replicate the concept at the local level initially will be a key success factor.

Leadership

- Identifying the leaders and key industry players will be a critical step in moving the Carma Centre approach to another location.

Getting industry to buy-in

- The business people really have to see the need for it—which means that they really have to see the problem that they are trying to solve. The same buy-in may not be obtainable in all of the different regions of the country.

APPENDIX OF ACRONYMS

AAAP	Alberta Aboriginal Apprenticeship Project
AHBA	Alberta Home Builders' Association
AHR&E	Alberta Human Resources and Employment
AISH	Assured Income for the Severely Handicapped
ANHWP	Alberta New Home Warranty Program
CBE	Calgary Board of Education
CCA	Calgary Construction Association
CHBA	Canadian Home Builders Association
CHBA BC	Canadian Home Builders' Association – British Columbia
CMHC	Canada Mortgage and Housing Corporation
CRHBA	Calgary Region Home Builders Association
CTS	Career and Technology Studies
HRDC	Human Resources Development Canada
ILMs	Individual Learning Modules
IOP	Integrated Occupational Program
NETAC	National Education and Training Advisory Committee
PHBIA	Professional Home Builders Institute of Alberta
PLAR	Prior Learning and Recognition
RAP	Registered Apprenticeship Program
RFP	Request For Proposal
SAIT	Southern Alberta Institute of Technology
YEC	City of Calgary Youth Employment Centre
YIP	Youth Internship Program

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L'étude de cas consacrée au *Carma Centre For Excellence in Building and Land Development* (Carma Centre) a été lancée par la Société canadienne d'hypothèques et de logement (SCHL) dans le cadre de la revue des objectifs et des résultats d'une démarche innovatrice visant à combler la pénurie de main-d'œuvre qui sévit de plus en plus au sein du secteur de l'habitation. Elle revoit en profondeur le Carma Centre, ses initiatives en matière de formation et de sensibilisation, de même que sa participation au programme Career Pathways in Professional Home Building. La SCHL est intéressée à examiner le potentiel du Carma Centre à titre de modèle aisément reproductible ailleurs au Canada.

But du Carma Centre

Le but du Carma Centre consiste à favoriser la formation spécialisée et à définir les possibilités et les emplois de base dans le domaine de la construction résidentielle et de l'aménagement de terrains. La vision du Carma Centre s'exprime comme suit : *être le centre reconnu en matière d'apprentissage et de formation pour l'industrie de la construction résidentielle et de l'aménagement de terrains en perfectionnant la base de connaissances et de compétences des gens et des organismes en vue de répondre aux besoins changeants de la technologie, des systèmes et de la gestion au sein du marché.*

L'étude de cas, menée entre novembre 2003 et février 2004, englobait des entretiens avec des individus et des organismes associés directement ou indirectement au Carma Centre.

Le Carma Centre vise à réaliser des initiatives fondées sur la notion de partenariat avec l'industrie, les établissements d'enseignement, le gouvernement et les organismes de construction résidentielle. Le Carma Centre a été créé pour répondre aux besoins suivants de l'industrie :

- combler le manque d'investissement dans la formation de la main-d'œuvre, qu'elle soit nouvelle ou déjà en place;
- créer d'autres possibilités de formation en milieu de travail;
- faire connaître et favoriser les emplois au sein de l'industrie de la construction résidentielle.

Les initiatives du Carma Centre bénéficient du soutien de l'industrie et des subventions des différents gouvernements et organismes. Grâce à ce financement, le Carma Centre a mené des études de marché consacrées à la main-d'œuvre, élaboré du matériel de marketing, favorisé des initiatives de formation au sein de l'industrie en plus de s'occuper de la dotation en personnel du Centre.

Stratégies et initiatives

Les stratégies du Carma Centre portent sur :

- la mise à jour de programmes de formation;
- l'élaboration de programmes;
- le développement de compétences;
- la sensibilisation aux enjeux du marché de la main-d'œuvre;

- la promotion de l'industrie;
- la création d'un passeport-compétences;
- l'encouragement d'une industrie conviviale pour les travailleurs;
- l'accroissement des compétences des travailleurs en place.

Les initiatives du Carma Centre portent sur :

- la mise à jour du programme Professional Site Manager du PHBIA;
 - la création d'outils de marketing et de communications;
 - des initiatives de sensibilisation auprès des jeunes;
 - des études de marché consacrées à la main-d'oeuvre;
 - la caractérisation d'autres sources d'offre et la facilitation de programmes de formation;
- un projet de description des emplois et de profil des compétences ainsi que la création d'un processus de certification dans le domaine de la construction résidentielle;
- le lobbying auprès de l'Alberta Apprenticeship and Industry Training Board;
- la création de passeports-compétences pour chacun des emplois au sein de l'industrie de la construction résidentielle.
- l'établissement d'échelles de carrière, qui serviront de gabarit pour mettre en évidence les carrières au sein de l'industrie et favoriser l'élaboration de modes de formation durables;
- la création d'un programme estival d'encadrement des constructeurs d'habitations de concert avec le conseil scolaire de Calgary;
- l'instauration du programme Career Pathways in Professional Home Building en partenariat avec le conseil scolaire de Calgary.

Incidence possible

Voici les facteurs externes risquant d'influer sur la réussite des initiatives du Carma Centre :

- la concurrence de la part des autres industries;
- les questions de lignes de conduite;
- l'allègement à court terme des pressions concernant la main-d'oeuvre;
- la volonté de l'Alberta Apprenticeship and Industry Training Board d'améliorer le processus de formation et de certification.

Les résultats indiquent que la reproduction du Carma Centre devra poursuivre une vaste démarche dynamique, motivée par l'industrie. La stratégie en matière de ressources humaines devra sonder les options de règlement des enjeux de l'industrie et les obstacles à la mise en place de cette stratégie. Une initiative d'envergure nationale ou provinciale comporterait des avantages comparativement à une démarche locale ou d'initiative communautaire.



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