

Proceedings: Atlantic Construction Industry Symposium
November, 2003

Atlantic Construction Symposium

“Atlantic Provinces Working Together to Build Our Future”

Final Report

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Delta Hotel, Moncton, NB

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Introduction

A number of workforce issues emerged in recent years that pointed to the need for planning and partnerships between industry, training institutions, and government to ensure that the Atlantic region has the skilled workforce it needs for economic and social prosperity. The construction industry has been a leader in identifying issues that point to current and impending skill shortages and the associated impact on the economy. The Construction Associations of Atlantic Canada, the Council of Atlantic Premiers (CAP), Atlantic region provincial governments and the Atlantic Provinces Community College Consortium (APCCC) formed a partnership to identify, discuss, and propose solutions to these issues in the construction industry.

The Construction Associations of Atlantic Canada noted the importance of understanding the impact of large projects on the regional workforce; Atlantic training institutions are looking for ways to accurately predict the skill needs of the construction industry to ensure that supply meets demand; government is working to establish policies to address the development and maintenance of a skilled workforce. Public sector policy makers, training institutions, and industry leaders identified the need for an Atlantic forum to address shared human resource issues in the construction industry.

The first-ever Atlantic Construction Symposium was held on November 6 and 7, 2003, at the Delta Beauséjour Hotel in Moncton, NB. It was a collaborative initiative between the Labour Market Information Task Force, a sub-committee of the Atlantic Provinces Community College Consortium, and the Labour Market Information and Skills Work Group, a working group under the Council of Atlantic Premiers. The theme of the Symposium was "Atlantic Provinces Working Together to Build Our Future."

The APCCC Labour Market Information Task Force was tasked with focusing on a college-relevant occupational sector to attempt to balance the demands of the labour market from an Atlantic regional perspective with the supply through training programs so that Atlantic community colleges would be able to make better decisions around the development and delivery of community college programs. As a result of concerns that the construction labour pool is aging and mobile in nature, and identified skill shortages throughout the Atlantic region in construction trades, the Labour Market Information Task Force was directed to focus on the construction industry.

The CAP LMI and Skills Work Group had been approached by the Atlantic Construction Consortium to collect and analyze supply and demand data on a regional basis and thus, ensure Atlantic training facilities are producing graduates in sufficient numbers to avoid shortages. These two groups, working together on construction labour market information sharing, proved a natural fit, and so the Atlantic Construction Symposium was the result of their collaborative efforts. By pooling resources and bringing the expertise together in one place, participants were able to share, inform, brainstorm, learn, and educate for the mutual benefit of all participants.

Process

To provide focus before and during the Symposium, the Steering Committee acquired the facilitation services of Kathleen Howard and Associates, a creative consulting firm with over fifteen years experience in organizational coaching, transformation, and change. They worked collaboratively with the Steering Committee before the Symposium to help articulate a clear purpose and provided facilitation during the Symposium to move activities forward in a meaningful and productive way. Prior to the Symposium, members of the Steering Committee identified potential participants from each Atlantic Province representing the construction industry, related agencies and organizations, government, and community colleges, and issued invitations.

Three main themes were identified and background discussion papers (see Appendix A) were developed around those themes:

1. Learning and Training
2. Recruitment and Retention
3. Forecasting and Planning

Participants were asked to review the papers on each of the three themes prior to the event. At the Symposium, participants were challenged to consider the identified Issues, Opportunities, Questions, and Challenges for each theme. They were invited to add to those lists, based on their own experiences in the industry. This generated additional items for consideration for each theme. The full list is included as Appendix B. Participants were also asked to review the list of Innovations/ Best Practices, and to add to those. The amended list is attached as Appendix C.

A voting process was used to identify the twelve priority items under each of the three themes that participants felt warranted further consideration at the symposium. Under each theme, each of the twelve priority items receiving the highest number of votes was assigned to a separate table group for consideration. The twelve table groups were asked to identify three actions that might be undertaken related to their assigned priority item and to speculate as to how this action might benefit from regional collaboration. The results of these discussions are attached as Appendix D.

The twelve Table Groups were invited to present the one action under each of these priority items that they felt would most benefit from Atlantic regional cooperation. As each was presented, all participants were asked to indicate their immediate reactions to the proposed action by a show of red, green, or yellow cards, where a Green Card represented full support, a Yellow Card – support with caution, and a Red Card – cannot support.

The results of that exercise are presented below, under the three themes of the symposium:

1. Forecasting and Planning;
2. Learning and Training;
3. Recruitment and Retention.

Forecasting and Planning – Priorities and Top Actions

Green Card = full support
Yellow Card = support with caution
Red Card = cannot support

Priorities/Assigned Table #	Top Action	Green	Yellow	Red
1. Need for regional forecasting model; regional promotion, Statistics Canada (44) ¹	Four provinces approaching Statistics Canada collectively with one voice	35	29	1
2. Consistency of standardized compulsory certification (35)	Atlantic Apprenticeship Council in consultation with Council of Atlantic Premiers coordinate study to look into equalizing compulsory trades across the four provinces	38	27	0
3. Labour forecasting information available to schools; top students needed for construction industry (35)	Marketing and promote Atlantic-wide to improve attitudes toward Trades careers	51	14	0
4. Further invest in apprenticeship (23)	Job matching system for Atlantic region database (key that organizations take ownership of supplying their own data, e.g., homebuilders)	16	44	2

¹ This number indicates the number of votes received from the plenary, indicating this item as a priority.

Forecasting and Planning (cont'd)

Priorities/Assigned Table #	Top Action	Green	Yellow	Red
5. Key players need to be talking to each other; closer relationship with industry to develop a model when data from government and industry differs; major project players need to engage in joint planning (40)	Have a group that takes ownership of all the Atlantic information together and manage it (roll data forward)	44	21	0
6. How to encourage public school system to prepare students for skilled trades opportunities (31)	Provide good labour market information to schools, parents, students, and peers (public and private)	30	35	0
7. Promote trades as viable career choices (39)	Share fact-based research to build messages to youth, parents, and guidance counsellors	62	3	0
8. Compulsory certification of trades (31)	To increase the number of compulsory certified trades	44	17	2
9. Demand side: make sure owners and purchasers of construction services are consulting; access to reliable information so labour force can make informed decisions; improve quantity and quality of information on supply side; need reliable forecasts from employers (22)	Create a process/structure resulting in better coordinated Atlantic Labour Market analysis – and identify an organization to “drive the bus”	47	18	0

Forecasting and Planning (cont'd)

Priorities/Assigned Table #	Top Action	Green	Yellow	Red
10. Assess changing skill requirements and the need for upgrading the employed labour force; ensure local skilled trades persons have up-to-date knowledge and skills needed to meet constantly changing industry requirements (30)	Create a model to ensure collaboration between trainers/ schools and manufacturers/ employers	31	29	0
11. Ensure that policy makers and educators/ trainers have the necessary information from project developers to make policy and programming decisions (24)	File schedule of manpower requirements with development permit application	13	43	12
12. Improve working conditions and wages in the industry to retain skilled young people (16)	Get good supply and demand data to youth; right mix of skills at right time	39	21	1

Learning and Training – Priorities and Top Actions

Priorities/Assigned Table #	Top Action	Green	Yellow	Red
1. Contextualize the skills – connection between work and learning basic skills, including communication; provide essential basic skills, e.g., communication and math (18)	Industry needs to be involved in curriculum development at junior high and high school level	34	21	0
2. Offer training to those already employed who need to upgrade their skills; training for employed workers (41)	Develop a regional approach/ model to workplace education and essential skills delivery	57	5	0
3. Are kids getting the right information that they need about high school courses to make informed decisions about careers in construction? (37)	Ensure entrance requirements do not eliminate potential students Design of web sites to attract students Provide an orientation package at the start of high school	52	10	0
4. High school credits for on-the-job-training (31)	Establish an Atlantic regional PLAR process	61	1	0
5. Find the balance between the length of time required for qualification and current business needs (18)	Develop mechanism whereby industry participates in curriculum development to keep it current	37	22	2

Learning and Training (cont'd)

Priorities/Assigned Table #	Top Action	Green	Yellow	Red
6. A region-wide planning model to meet current demand and to address predicted skill shortages (25)	Develop a region-wide planning model – includes demand and supply model, gap model, provincial breakdown, e.g., PRAC model	37	21	0
7. The four-year apprenticeship model makes it difficult for colleges to react quickly to the changing needs of labour markets (24)	We need to build a regional lobbying force to make HRDC change policies on training funding – making it available to employed persons	30	29	1
8. The construction trades image among youth, counsellors, parents, and the need to better market the skilled trades as viable career options (32)	Re-instate some form of trades-related programs back into the public school system	57	5	0
9. Flexible delivery system for curriculum (on-line, face-to-face, correspondence, etc.); partner with industry for flexible delivery options (not just block, etc.) (40)	Pilot project (demonstrating flexibility): to have an institution have a video-conferencing/ on-line program as an alternative to in-class learning	12	33	0
10. Compulsory certification. Don't have three different employees at related tasks for \$8/hour each; have 1 employee at increased rate (at \$20/hr) to do all tasks (19)	Value of compulsory certification should be marketed to consumers	42	20	0

Learning and Training (cont'd)

Priorities/Assigned Table #	Top Action	Green	Yellow	Red
11. One college /school exclusively designated to construction trades (centre of excellence): economies of scale/centres of excellence – eliminate unnecessary duplication (16)	Virtual and physical campus (dorms and cafeteria), board of directors, certified trades people, and industry owners	9	45	3
12. Promote life-long learning – gold seal, blue seal, red seal; ongoing career development – multiple or changing tickets – are there barriers? (20)	Undertake research to develop a model for this priority (multiple roles) including develop delivery and funding models for post-journey/ training person and the existing workforce – consider models	28	30	0

Recruitment and Retention – Priorities and Top Actions

Priorities/Assigned Table #	Top Action	Green	Yellow	Red
1. Management skills and knowledge to implement effective HR strategies for recruitment, retention, and succession planning (18)	Develop a plan to develop an Atlantic Canada HR training program for small construction business; self-audit tool to audit their HR plans	40	12	0
2. Making the Construction Industry attractive to potential employees by making youth and other potential new entrants aware of the opportunities available to them (21)	Develop an Atlantic construction marketing / awareness campaign strategy to change attitudes – one website	45	7	0
3. There are shortages in many construction trades especially in rural areas. Better communication between employers, colleges, and government is required before a crisis occurs. (15)	Develop an Atlantic Canada website where trades people can go and identify their skills and certification and search the database	25	30	1
4. Improve jobsite mentoring through all levels of training, apprenticeship, journeyperson, and supervision management (36)	Requirement in all Requests For Proposals (RFPs) from the public sector that there would have to be a training and mentoring component to allow Journeypersons to have time in their work plans to mentor apprentices	12	39	1
5. Is there a shortage? Is there not a shortage? How do we verify this? (35)	Have a better forecasting model to avoid the “hit and miss approach”; includes supply and demand and gap analysis	32	19	-

Recruitment and Retention (cont'd)

Priorities/Assigned Table #	Top Action	Green	Yellow	Red
6. Promote trades as “stepping stone” on path to Lifelong Learning (31)	Get better industry involvement in creating awareness of career paths in construction trades, i.e., success stories and provide this information to the schools	57	-	-
7. Youth apprenticeship in high schools (36)	Do this on an Atlantic basis. What do we mean? What are the policies and procedures? Get buy-in from industry; industry should develop this in partnership with schools	39	16	1
8. How do small/ medium employers handle HR issues? Pool of HR experts courses; develop HR capabilities of employers in the industry, including recruitment, retention, and succession planning; provide tools to help employers develop planning strategies; educate employers on need for HR planning (20)	Promotion of the goal of gold and blue seal – include an aspect of HR training	38	17	-
9. Increase awareness of the building and construction trades as attractive career options for youth, parents, teachers, and counsellors; overcome the current belief that university rather than community college is the natural path after high school; how to change the mindset of youth, parents, teachers, and counsellors? (39)	Expand on the Trades Awareness program being done in NB – do this on a regional basis so students become more aware of trades and help them make decisions whether to go on to trades in the future	46	8	-

Recruitment and Retention (cont'd)

Priorities/Assigned Table #	Top Action	Green	Yellow	Red
10. Where there is no work locally, facilitate mobility to where jobs are (15)	Access funding for travel to and from work; talk to federal level for income tax relief, e.g., interest free loans; Atlantic region could cooperate on this initiative	26	22	-
11. Develop an incentive system to encourage employers with specific/ specialist skills to take on additional apprentices (20)	Partnership to develop financial incentives and involve industry, union suppliers, etc.	42	11	-
12. Is the current apprenticeship model working "best" for recruitment and retention? (enforcement) (22)	Some form of joint monitoring committee made up of management and union; registrations would be attached to the monitoring committee – explore this mechanism further	25	30	1

Table Views: What Has Happened Here?

Table 2

- Compulsory certification is an issue that needs much consideration and discussion
- Skills shortages? Remains an issue/ question
- A lot of good things are happening
- Many different sectors to the construction industry
- Construction no longer only seasonal
- What is missed? A lot of people in industry not accessing training. How do we/ are we connecting with these people?

Table 4

- No one has indicated or proved overall skills shortages
- Lots of learning
- Achieving diversity difficult with current role models
- Synergy
- Need more employer participation
- Need to share information among four provinces (all players)
- This format is good for consensus building
- No easy answers – complexity

Table 6

- Share information and educate ourselves about trade issues
- Develop expectations
- Good networking

Table 8

- Sharing (ideas, best practices, what is going on in other provinces)
- Where there is a will, there is a way
- Recognition of the need for such a forum
- Contacts
- Synergy
- Consensus (some)
- Partnerships
- Alliances
- Hope
- Model for other sectors (tourism, manufacturing, fisheries, health, etc.)
- Not all answers (Need to pursue this)
- We need to focus - a few initiatives, a few success stories

Table 10

- Commonality of issues is not restricted to one province
- Diverse/ good range of discussion (participants)
- Very positive recommendations
- Nice piano bar next door
- Nice start but we aren't finished

- Maybe should have been more contractors

Table 12

- We've discussed the issues
- We collaborated on the issues
- Provided some solutions
- Don't know where we're going from here

Steering Committee's View: Where to From Here?

- Report of proceedings (not decisions) and possibilities
- Distribute to all participants
- Solicit feedback
 - Validate
 - Concerns, issues, gaps
- Report... goes to CAP, APCCC

Should there be an on-going mechanism to keep this dialogue and potential collaboration going?

Table Views: Where to From Here?

Table 1

- Need a multi-representative group to push forward common themes/ ideas (e.g., supply side, labour study, training plan, marketing)
- Keep the communication flowing back to the group (participants of this symposium)

Table 3

- Forge an Atlantic committee that includes industry/college and government representatives
- Develop priorities
- Develop an action plan to implement priorities

Table 5

- Prioritized items need to be more than "wish list"
- Needs significant discussion of items before action plan developed

Table 7

- Move to action; start with all greens
- Identify what you can do now and do it

Table 9

- Develop an advisory group to move agreed upon recommendations forward

Table 11

- CAP and APCCC (Steering Committee) – review outcomes and develop an action plan on items that were identified most popular (limited number – most green votes)

Appendix A: Background Theme Papers for Discussion

Forecasting/ Planning Background Paper – CONSTRUCTION SYMPOSIUM

Lead Province - Nova Scotia

November 2003

1. Background

Human resource issues are one of the key challenges facing the construction industry across Atlantic Canada. To respond effectively to a changing and uncertain economic environment, adapt to new technologies, and accommodate the skill requirements of major projects, every effort needs to be made to ensure that industry has access to a skilled and adaptable labour force.

To respond to this challenge, stakeholders (industry, labour, governments, educators/trainers) need reliable information about trends in the industry including information about skills of the existing workforce, barriers and incentives that determine mobility patterns, age distribution of workers and their retirement rates, and regional and sub-provincial patterns of supply and demand. A good grasp of probable future trends in employment levels, based on projections of economic conditions and including a meaningful assessment of the impacts of anticipated major projects, is equally important.

This information provides a foundation for effective planning and coordination of learning/training initiatives to support the needs of industry in terms of essential skills training, pre-employment programming, apprenticeship training, and upgrading.

2. Issues/ Opportunities

- The construction industry needs access to an adequate supply of trained workers with an appropriate mix of skills.
- Labour supply requirements of major projects need to be met.
- The construction labour force must be responsive to changing demand conditions in local labour markets across the region and facilitate mobility.
- The Atlantic region must respond to the challenge of an aging labour force

3. Activities/ Innovation/ Best Practices

- NS established the Construction Trades Skill Development Initiative (CTSDI) comprised of industry associations, building trades, sector councils (residential and non-residential), training providers and federal and provincial governments to address issues in the construction industry.
- The Atlantic Home Building and Renovation Sector Council (AHB&RSC) and the NS Construction Human Resource Sector Council, Non-Residential have prepared studies that profile their respective sectors. The AHB&RSC is engaged in a pilot study of shortages and surpluses of plumbers and framers in Nova Scotia.
- With funding from HRDC, the Atlantic Provinces Economic Council (APEC) has completed a skills survey of selected oil and gas industry trades in NS.
- NS has established a Tripartite Sector Council Memorandum of Understanding between the Association of Industry Sector Councils, the Province of NS, and HRDC with a variety of activities.
- NBCC, the Department of Training and Employment Development (TED), and industry completed a Construction Trades Study of 19 occupations (January 2002) to determine the

supply of and demand for skilled workers; as a result, NBCC developed a provincial training schedule and re-introduced pre-employment training programs in carpentry, electrical, and plumbing.

- The NF Petroleum Industry Human Resource Committee (PIHRC) completed several reports related to demand, supply, educational capabilities, training requirements, and skills gaps for the exploration and production components of the oil industry. The PIHRC is currently addressing the report recommendations with the various stakeholders.
- The NF electrical construction industry in cooperation with federal and provincial government agencies completed a report identifying human resource and training issues and concerns facing the electrical industry and developed an action plan to address the report recommendations.
- The Newfoundland and Labrador Home Builder's Association is finalizing a study regarding human resource and training issues facing NF's residential construction industry.
- The NF Labour Market Development Committee enlisted key labour market stakeholders in a process of discussion, issues identification, and consensus building around possible strategies and actions to address solutions to labour market development concerns.
- PEI undertook a construction sector study that will be completed this fall.
- PEI has developed a community based training model designed to address the needs of seasonally employed workers experiencing literacy, numeracy, and essential skills challenges.
- PEI has initiated a trades training strategy for the coming decade led by Holland College, partnering with labour, unions, industry, government, and institutional representation.
- Holland College conducts an annual, formal review of enrolment targets for each program, taking into account regional and national HRDC labour market forecasts.
- The Construction Associations of Atlantic Canada have proposed a project to develop demand scenarios for industrial construction employment using available forecasting models, and an analysis of existing and anticipated capacities of the industrial construction workforce.

4. Questions / Challenges

How will we:

- Develop tools, information resources and methodologies to identify trends in supply and demand for skilled trades;
- Develop effective working relationships with project developers to ensure that policy makers and educators/trainers have the necessary information to make policy/programming decisions;
- Develop effective procedures for assessing human resource requirements of projects;
- Address the distinctive needs of the residential and non-residential (institutional, commercial and industrial) construction sectors;
- Assess changing skill requirements and identify the need for upgrading of the employed labour force;
- Ensure that labour market participants have access to reliable information so that they can make informed decisions;
- Develop effective planning structures and processes to support programming decisions in education and training institutions;
- Ensure that local skilled tradespersons have up-to-date knowledge and skills needed to meet constantly changing industry requirements;
- Meet labour market needs while large industrial projects are on-going at the same time;

- Address problems with counsellors and parents who do not perceive skills training as a first career choice. In addition, we need to focus on these two groups, as well as young people, to educate them about the benefits of skills training;
- Develop promotional materials for the high school system to understand and promote careers in skilled trades;
- Improve working conditions and wages in the industry to retain skilled young people;
- Improve mobility in Atlantic Canada.

Learning/ Training Background Paper - CONSTRUCTION SYMPOSIUM

Lead Province - New Brunswick

November 2003

1. Background

It is difficult for Atlantic community colleges and private occupational trainers to match the supply of workers to the demand for workers in the Construction Industry without creating an oversupply, and to predict the impact of large projects in the region on training. There are issues relating to residential vs. non-residential skills, mobility, professionalism and certification, the underground economy, and innovation and technological change resulting in changing job requirements and skill shortages and a need for continuous upgrading. These issues make it necessary for post-secondary training institutions to work closely with the Construction Sector in order to ensure that industry requirements for trained labour are met in a relevant and timely manner.

2. Issues/ Opportunities

- A region-wide planning model is needed to better address labour market needs and predicted skill shortages for this fast-paced, constantly changing industry. It is difficult to provide numbers relating to the current demand for workers as well as to predict future needs.
- Mobility is an issue: what happens when major projects end? Or begin?
- The rural nature of the Atlantic region has an impact: considering migration trends, how will rural construction trade workers be replaced?
- The apprenticeship model may need to be adjusted. There are problems with retention, duration, basic skills, etc. The length of time it takes to train an individual to become a tradesperson, i.e., four years, is an issue that makes it difficult for colleges to react quickly to the changing needs of the labour market.
- There is a need to improve the image of construction trades among young people, guidance counsellors, parents, etc. and better market the skilled trades as viable career options.
- The construction industry is particularly vulnerable to the underground economy, making it a challenge to acquire accurate labour market information on supply and keep it up-to-date.

3. Activities/ Innovation/ Best Practices

- NBCC has signed a Memorandum of Understanding with the Construction Association of NB and the NB Building Trades Council to cooperate on planning and delivery of training.
- NS has developed a two-year model for pre-employment trades and technology training in response to requests from industry for more in-depth pre-employment training.
- NSCC has a partnership with Dexter Construction to deliver a two-year co-operative education program called Heavy Equipment Professional.
- NSCC is developing new programs directed to the emerging offshore energy market.
- NSCC is delivering a new Pipe Trades program incorporating elements of Plumbing, Steamfitting/Pipefitting, and Gas Installation and Service into one two-year program.
- NSCC has implemented portfolio education so that each graduate from NSCC will have completed a portfolio prior to graduation.
- NS has an apprenticeship construction trades partnership and an essential skills project with the Apprenticeship Branch of the Department of Education; as well, they hold a carpentry career fair and have signed an MOU with the carpentry sector council.
- The NF Department of Youth Services and Post-secondary (YSPE) has received federal funding under the Labour Market Development Agreement to provide skills training to prospective apprentices in trade occupations and to upgrade journeymen with the latest technological skills required by industry.
- Holland College, with the support of local business and the Western PEI Education/Service Task Force, introduced the West Prince Carpentry and Career Enhancement program to meet a critical shortage of trained carpenters.
- Holland College has designed an Employability Skills program to prepare labor market entrants and existing workers to meet the challenges of life and work; it is available in electronic format (WebCT) and is designed to allow flexibility in delivery.
- Holland College has introduced the Bluefield Model where high school students work in one of four areas - including Trades and Technology - over a whole semester.

4. Question/ Challenges

How will community colleges and learning institutions and agencies:

- Provide essential or basic skills: many students do not have the basic communication and math skills required to successfully complete their pre-employment and apprenticeship training?
- Address issues of Prior Learning Assessment and Recognition (PLAR) in construction trades programs?
- Offer training to those already employed who need to upgrade their skills? How do colleges become flexible and accessible enough to meet the needs of employers and workers?
- Meet the ongoing challenges of attrition and retention?
- Deliver programs that meet rural, provincial, and regional needs?
- Address the seasonal nature of the industry?

- Ensure a mix of pre-employment programming that is responsive to the needs of the labour market and provides students with a solid grounding in the skills and technologies that are in use in the industry?
- Work with industry to help them develop their human resource management skills, particularly smaller employers?
- Attract more clients to construction trades programs?
- Meet the need for increased training in soft skills, problem solving, critical thinking, etc., and a higher level of technical competency without increasing the length of programs?
- Adjust the current apprenticeship model to address current and future skill shortages in the construction trades?

Recruitment/ Retention Background Paper – CONSTRUCTION SYMPOSIUM

Lead Province - Newfoundland

November 2003

1. Background

In a situation of tight labour markets where some skills are in short supply, effective recruitment and retention strategies are essential if employers are to maintain their labour forces and compete effectively for the available labour supply. Firms need to offer attractive wage and benefits packages and provide employees with challenging and interesting work, opportunities for advancement, and a positive work environment.

Firms lacking such strategies may experience considerable difficulties in attracting new employees with required skills and maintaining their existing work force. They may incorrectly perceive the situation to be one of an overall market shortage.

From an industry-wide perspective, efforts to enhance the image of the industry and make potential employees more aware of opportunities for employment and the benefits of working in the industry can help to attract new entrants and increase the overall supply of labour to the industry.

2. Issues/Opportunities

- Employers in the construction industry need the management skills and knowledge to implement effective human resource management strategies in relation to recruitment, retention, and succession planning.
- Employers and educators must ensure that the construction industry is attractive to potential employees and that youth and other potential new entrants are aware of the opportunities available to them in the construction trades. Marketing and promotion of skilled trades as a first choice career option is required to increase enrolment in community colleges.
- The out-migration of skilled workers in the Atlantic Provinces is on the rise due to a lack of employment opportunities and competitive wages.

- The population decline has an impact on training institutions trying to recruit more students for skilled trade programs.
- The aging workforce will create a gap in industry that could result in loss of a skilled workforce and a reduction of economic activities.
- There are predicted shortages in manufacturing, plant maintenance, transportation, and other sectors that are competing for the same type of skilled workers as the construction industry.
- There are shortages in many construction trades, especially in rural areas. Better communication among employers, colleges, and government is needed before a crisis occurs.

3. Activities/Innovation/Best Practices

- The NF Department of Youth Services and Post-secondary Education (YSPE) is currently implementing a Youth Apprenticeship program to assist unemployed youth to gain meaningful entry level employment experience and gradually make their career decisions in trades or other related occupations. YSPE is also implementing an Apprenticeship Industry Linkage project to increase the number of employers from across the province hiring apprentices from the various industrial trades training programs and provide them with needed work experience to meet the requirements towards journeyperson certification.
- YSPE is finalizing a study to survey the active and inactive apprentices in order to determine the various reasons why apprentices are not completing their programs. A goal will be to increase the completion rate of apprentices and provide more qualified journeypersons to meet the anticipated skill shortages in various trade areas.
- In NB, a course "Construction Career Awareness Program" (CCAP) has been developed and delivered in high schools in Saint John and Fredericton, through a collaborative effort of industry, TED, and the Department of Education.
- The NB Department of Education, TED, NBCC, and industry have developed and implemented 'Explore My Future' career awareness expositions focusing on trades and technology in various locations throughout NB, directed at high school students and held at high schools and onsite at NBCC campuses.
- In NS, a College Prep Program has been put in place throughout NSCC through various MOU's with regional school boards for articulation with NSCC, providing opportunities for high school students to take community college courses.
- In PEI, a Social Marketing Campaign involving nine trades has been launched. It is aimed at high school students, parents, teachers, and guidance counsellors and promotes careers in the trades, using a variety of media: television, radio, print, web site, 1-800 number, and presentations at all high schools, using recent grads from apprenticeship programs as guest speakers.

4. Questions/Challenges

How will we:

- Develop human resource management capabilities of employers in the industry, including recruitment and retention strategies and effective succession planning?

- Ensure that the building and construction trades are attractive career options for youth and their parents, teachers, and guidance counsellors; how can we increase awareness of trades and technology programs available at community colleges?
 - Overcome the current cultural belief that high school students have to attend university rather than community college after completing their secondary studies?
 - Facilitate the increased participation of groups that are under-represented in the construction industry and construction trades training (such as women, persons with disabilities, African-Canadians, Aboriginal Persons, immigrants, etc.)?
 - Help first and second year apprentices obtain appropriate work experience in order to continue with advanced level apprenticeship training?
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Appendix B: Additions to the Original Discussion Papers

Forecasting and Planning

Issues and Opportunities

Votes	Issue or Opportunity	Assigned to Table #
-	1. Access to an adequate supply of trained workers with an appropriate mix of skills.	
	2. Meeting labour supply requirements of major projects.	
19	3. Mobility and response to changing demand conditions in local labour markets across the region. How do we keep our labour supply here? Mobility inter-provincial/provincial, regional/national	
5	4. An Aging labour force	
40	5. Closer relationship with Industry to develop a model; often data from government and industry differs. Key players need to be talking to each other. Major project players need to engage in joint planning. Regionally register and track trades-people – where are they now?	
23	6. Further investment in Apprenticeship	4
15	7. Fair wage schedule	
12	8. Length of time it takes for apprentices to get certified	
1	9. Ability to get all aspects of training required – availability	
13	10. Access to qualified workers by employers - difference between union vs. non-union sector	
35	11. Labour forecasting information needs to be made available to schools. Top students needed for construction industry	3
35	12. Consistency of standardized <u>compulsory</u> certification from one province to another	2

Votes	Issue or Opportunity	Assigned to Table #
1	13. Differences between large commercial and small residential/ commercial – also geographical differences Separate forecasts – residential/non-residential	
44	14. Need for regional forecasting model Atlantic region should be promoting itself Statistics Canada Atlantic Region Model to keep data current for stakeholders – HR Analysis	1

Forecasting and Planning

Questions and Challenges

How will we:

Votes	Issue or Opportunity	Assigned to Table #
3	1. Identify trends in supply and demand for skilled trades	
24	2. Ensure that policy makers and educators/trainers have the necessary information from project developers to make policy/programming decisions	11
-	3. Develop effective procedures for assessing human resource requirements of projects	
9	4. Address the distinctive needs of the residential and non- residential construction sectors	
30	5. Assess changing skill requirements and the need for upgrading the employed labour force Ensure local skilled trades persons have up-to-date knowledge and skills needed to meet constantly changing industry requirements	10

Votes	Issue or Opportunity	Assigned to Table #
22	6. Access to reliable information so labour force can make informed decisions Demand side – make sure owners and purchasers are consulting – purchasers of construction services Need reliable forecasting from employers Improve quantity and quality of information on supply side	9
7	7. Develop effective planning structures and processes to support programming decisions in education and training institutions	
-	8. Meet labour market needs along with on-going large industrial projects on-going	
16	9. Improve working conditions and wages in the industry to retain skilled young people	12
1	10. Improve labour force mobility in Atlantic Canada	
6	11. Are the certification models the right models? Are they working?	
1	12. How do we ensure 'buy-in' from all necessary parties	
6	13. How do you achieve an Atlantic view/approach?	
4	14. Construction workforce forecast committee (Alberta model)	
31	15. Compulsory certification of trades	8
-	16. Dealing with peaks and rolls and demand	
39	17. Promote trades as a viable career choice	7
-	18. Employers must identify <u>specific</u> needs	
3	19. Evaluation of future technology	
35	20. Inform counselors, parents and youth who do not perceive skills training as a first career choice How to encourage public school system to prepare students for skilled trade opportunities?	6
1	21. How do we integrate entrepreneurship/self-employment?	
-	22. How do we capture the impacts of change (technology/business)?	
-	23. Scope of industry is broad. How do we ensure collection of information is reliable and inclusive: broad concept of industry – fabrication, pre-manufactured	
3	24. Skills for existing workforce	
3	25. Time frame for large projects (ICI) – heavy industrial	
1	26. Short-term vs. long-term skill requirements	

Learning and Training

Issues and Opportunities

Votes	Issue or Opportunity	Assigned to Table #
25	1. A region-wide planning model to meet current demand AND to address predicted skill shortages.	6
3	2. Mobility - what happens when major projects end? Or begin?	
1	3. Considering migration trends, how will rural construction trade workers be replaced?	
24	4. The four-year apprenticeship model makes it difficult for colleges to react quickly to the changing needs of the labour market.	7
32	5. The construction trades image among youth, counsellors, parents, and the need to better market the skilled trades as viable career options.	8
4	6. Vulnerability to the underground economy, and difficulty of acquiring accurate labour supply information.	
5	7. Focus on National curriculum to facilitate mobility of apprentices	
40	8. Flexible delivery system for curriculum (on-line, face-face, correspondence, etc.) Partner with industry for flexible delivery options (not just block, etc.)	9
3	9. Obtaining/retaining quality faculty in comparison to industry - \$\$	
1	10. Co-operative approach to training	
2	11. Program to provide 'realistic' information to guidance counselors and teachers	
19	12. <u>Compulsory certification</u> - don't have three different employees at related task for \$8.00, have 1 employee at increased rate to do all tasks	10
13	13. Stripping/de-skilling/fragmentation of trades (decreased wages/limits hours	
16	14. Economies of scale, centres of excellence eliminate unnecessary duplication. One college/school exclusively designated to construction trades (centre of excellence)	11
20	15. Promote lifelong learning, gold seal, blue seal, red seal & master On-going career development (no longer one career) – multiple or changing tickets? Are there barriers?	12
3	16. Inter-generational knowledge transfer/succession planning	

Votes	Issue or Opportunity	Assigned to Table #
	17. Covering the scope and time to cover of the trade, specialization	
2	18. Competency-based training (proficiency) vs. time Soft skills vs. technical skills	
3	20. Post-journey training – add-ons, upgrading. Who pays? Does journey person want it? Is it necessary? Who certifies in the post-training?	
2	21. Barriers – personal issues, young families, need for income; location of training for rural areas/residents Cost of training – economic benefit to person at the end of the day	
3	22. Tax – 1% of payroll for training. Contribution by apprentice	

Learning and Training

Questions and Challenges

How will education and training institutions:

Votes	Issue or Opportunity	Assigned to Table #
18	1. Provide essential or basic skills - communication and math Contextualize the skills – connection between work and learning. Basic skills including communication	1
10	2. Address issues of Prior Learning Assessment and Recognition (PLAR) 3. Encourage fuller integration of apprentice/journey person credentials by granting consistent credits for specific certificates and degrees thereby encouraging life-long learning	
41	4. Offer training to those already employed who need to upgrade their skills. Training for employed workers	2
1	5. Meet the ongoing challenges of attrition and retention	
1	6. Deliver programs that meet rural, provincial, and regional needs	
4	7. Address the seasonal nature of the industry	
0	8. Ensure a mix of pre-employment programming that is responsive to the needs of the labour market	
11	9. Work with industry to help them develop their HR skills, particularly smaller employers The role/responsibility of employers/unions in the training question	

Votes	Issue or Opportunity	Assigned to Table #
2	10. Attract more clients to construction trades programs	
10	11. Increase training in soft skills, problem solving, critical thinking, etc., and a higher level of technical competency without increasing the length of programs	
9	12. Adjust the current apprenticeship model to address current and future skill shortages	
5	13. Upgrading of instructors to be current in the technology	
4	14. Training of under-represented groups	
2	15. Lack of flexibility in existing training models	
37	16. Are kids getting the right information they need about high school courses to make informed decisions about careers in construction?	3
5	17. How do community colleges set more meaningful and relevant admission requirements and better selection criteria	
5	18. Provide supervisory management/skills	
3	19. The issue of indentureship in relation to training, 3-way agreement/responsibility	
6	20. The cost to community colleges to provide infrastructure (equipment/materials) for trades training	
31	21. High school credits for on-the-job training	4
18	22. Find the balance between the length of time required for qualification and current business needs	5

Recruitment and Retention

Issues and Opportunities

Votes	Issues and Opportunities	Assigned to Table #
18	1. Management skills and knowledge to implement effective HR strategies for recruitment, retention, and succession planning.	1
21	2. Making the construction industry attractive to potential employees by making youth and other potential new entrants aware of the opportunities available to them.	2
-	3. The out-migration of skilled workers in the Atlantic Provinces is on the rise due to a lack of employment opportunities and competitive wages.	
-	4. The population decline's negative impact on training institutions' efforts to recruit more students for skilled trade programs.	
-	5. The aging workforce that could result in loss of a skilled workforce and a reduction in economic activities.	
2	6. Predicted labour shortages in other sectors that are competing for the same type of skilled workers as the construction industry.	
15	7. Shortages in many construction trades, especially in rural areas. Better communication among employers, colleges, and government is needed before a crisis occurs.	3
2	8. Perceived shortage of skilled workers is not reflective of the ICI sector. Future studies should reflect this.	
4	9. Develop mobility agreements for apprentices across Canada	
36	10. Improve job site mentoring through all levels of training apprenticeship – journey – supervision/management	4
3	11. More information from construction owners about new products and technologies so training can be adjusted prior to need arising	
1	12. Global competition as communicated to political leaders is a myth in construction, i.e. amount of rework on site is high and impacts productivity numbers	
35	13. Is there a shortage? Is there not a shortage? How do we verify this?	5
3	14. Availability of pre-employment training at colleges (more Atlantic regional response)	
5	15. Government support to deal with liability for career/co-op days students	
-	16. Create opportunities for successful/accomplished trades workers to "tell their stories" to youth	
31	17. Promote trades as "stepping stone" on path to lifelong learning	6
4	18. Promote entrepreneur opportunities for youth	

Votes	Issues and Opportunities	Assigned to Table #
36	19. Youth apprenticeship in high schools	7

Recruitment and Retention

Questions and Challenges

How will we:

Votes	Questions/Challenges	Assigned to Table #
20	1. Develop HR capabilities of employers in the industry, including recruitment, retention, and succession planning How do small/medium employers handle HR issues? (pool of HR experts courses) Provide tools to help employers develop planning strategies Educate employers on need for HR planning	8
39	2. Increase awareness of the building and construction trades as attractive career options for youth, parents, teachers, and counsellors 3. Overcome the current belief that university rather than community college is the natural path after high school. How to change the mindset of youth, parents, teachers and counsellors	9
10	4. Increase participation of under-represented groups in construction industry and trades training (women, persons with disabilities, African-Canadians, Aboriginal Persons, immigrants, etc.)	
9	5. Help first- and second-year apprentices obtain appropriate work experience Funding mechanism to help employers hire first and second year apprentices (3:1 IP)	
2	6. Finding right "fit" between trade skill and other company requirements – attitude, project management and other 'soft' skills	
5	7. More local benefits for Atlantic Canada resources	
15	8. Where no work locally – facilitate mobility to where jobs are	10
12	9. Industry needs to be more involved in career counseling (e.g. exposure to new tools, processes and technologies)	
9	10. Awareness of career paths in the construction industry	
1	11. Present excellence as challenge and avenue to permanent/ maximum employment at competitive wage (living wage)	
20	12. Develop incentive system to encourage employers with specific/specialist skills to take on additional apprentices	11
22	13. Is the correct apprentice model working 'best' for recruitment and retention? (Enforcement)	12

Appendix C: Innovations / Best Practices

Forecasting and Planning

Innovations/Best Practices

- NS established the Construction Trades Skill Development Initiative (CTSDI) comprised of industry associations, building trades, sector councils (residential and non-residential), training providers and federal and provincial governments to address issues in the construction industry.
- The Atlantic Home Building and Renovation Sector Council (AHB&RSC) and the NS Construction Human Resource Sector Council, Non-Residential have prepared studies that profile their respective sectors. The AHB&RSC are engaged in a pilot study of shortages and surpluses of plumbers and framers in Nova Scotia.
- With funding from HRDC, the Atlantic Provinces Economic Council (APEC) has completed a skills survey of selected oil and gas industry trades in NS.
- NS has established a Tripartite Sector Council Memorandum of Understanding between the Association of Industry Sector Councils, the Province of NS, and HRDC with a variety of activities.
- NBCC, the Department of Training and Employment Development (TED), and industry completed a Construction Trades Study of 19 occupations (January 2002) to determine the supply of and demand for skilled workers; as a result, NBCC developed a provincial training schedule and re-introduced pre-employment training programs in carpentry, electrical, and plumbing.
- The NF Petroleum Industry Human Resource Committee (PIHRC) completed several reports related to demand, supply, educational capabilities, training requirements, and skills gaps for the exploration and production components of the oil industry. The PIHRC is currently addressing the report recommendations with the various stakeholders.
- The NF electrical construction industry in cooperation with federal and provincial government agencies completed a report identifying human resource and training issues and concerns facing the electrical industry and developed an action plan to address the report recommendations.
- The Newfoundland and Labrador Home Builder's Association is finalizing a study regarding human resource and training issues facing NF's residential construction industry.
- The NF Labour Market Development Committee enlisted key labour market stakeholders in a process of discussion, issues identification, and consensus building around possible strategies and actions to address solutions to labour market development concerns.
- PEI undertook a construction sector study that will be completed this fall.
- PEI has developed a community-based training model designed to address the needs of seasonally employed workers experiencing literacy, numeracy, and essential skills challenges.
- PEI has initiated a trades training strategy for the coming decade led by Holland College, partnering with labour, unions, industry, government, and institutional representation.
- Holland College conducts an annual, formal review of enrolment targets for each program, taking into account regional and national HRDC labour market forecasts.

- The Construction Associations of Atlantic Canada have proposed a project to develop demand scenarios for industrial construction employment using available forecasting models, and an analysis of existing and anticipated capacities of the industrial construction workforce.
- MOU between NSCC and AISC (Association of Industry Sector Councils) (Mary Kenny)
- Marketing the youth to attract them to the industry
- Diversity outreach program for high school students. Orientation to an industrial environment. Tap into under-utilized talent pool.
- Post-journey training
- Co-op program for high school students CCAP
- MOU with industry that provide industry with input into training (NB)
- Collection of accurate information to determine capacity and training needs
- The NBCSA in partnership with NBCC is now having trades coming out of school with an industry accepted OHS
- Continue provincial work but co-ordinate on the Atlantic level
- AECC – Atlantic Excellence in Construction Consortium

Learning and Training

Innovations/Best Practices

- NBCC has signed a Memorandum of Understanding with the Construction Association of NB and the NB Building Trades Council to co-operate on planning and delivery of training.
- NS has developed a two-year model for pre-employment trades and technology training in response to requests from industry for more in-depth pre-employment training.
- NSCC has a partnership with Dexter Construction to deliver a two-year co-operative education program called Heavy Equipment Professional.
- NSCC is developing new programs directed to the emerging offshore energy market.
- NSCC is delivering a new Pipe Trades program incorporating elements of Plumbing, Steamfitting/Pipefitting, and Gas Installation and Service into one two-year program.
- NSCC has implemented portfolio education so that each graduate from NSCC will have completed a portfolio prior to graduation.
- NS has an apprenticeship construction trades partnership and an essential skills project with the Apprenticeship Branch of the Department of Education; as well, they hold a carpentry career fair and have signed an MOU with the carpentry sector council.
- The NF Department of Youth Services and Post-secondary (YSPE) has received federal funding under the Labour Market Development Agreement to provide skills training to prospective apprentices in trade occupations and to upgrade journeypersons with the latest technological skills required by industry.
- Holland College, with the support of local business and the Western PEI Education/Service Task Force, introduced the West Prince Carpentry and Career Enhancement program to meet a critical shortage of trained carpenters.

- Holland College has designed an Employability Skills program to prepare labor market entrants and existing workers to meet the challenges of life and work; it is available in electronic format (WebCT) and is designed to allow flexibility in delivery.
- Holland College has introduced the “Bluefield” Model where high school students work in one of four areas – including Trades and Technology – over a whole semester.
- MOU between NSCC and Association of industry sector councils
- Bursaries from major companies for individuals interested in construction trades (NF)
- Mentoring? Training journey person to be mentors (NF)
- Promotion to industry to use apprentices and just not hire journey-person (NF)
- Inform/train employers to the new reality (technology, globalization, competition, markets) (NF)
- MOU between province of Nova Scotia and the Association of Industry Sector Councils
- Competency-based assessment framework for residential construction trades
- Construction industry nominates labour and management rep’s to trade training schools
- Accessibility to training program
- Provide apprenticeship trade programs through private training institutions and local union training centres, in cooperation with the provincial government (such as is happening in Newfoundland and Labrador)
- Offer training (i.e. skills enhancement) during industry down times
- Supplement funding for post-journey training through EI funds for training time, travel and/or child care
- Automotive trade – many options (front end), finish with a discipline (State of Maine)
- Atlantic Building Supply dealer – dedicated room for training
- Employer takes people off the street, trains them in the traditional apprenticeship way
- Trades training in high schools allowing credit to the trades
- Individualized learning – student easily enters and easily exits. Flexibility
- TOWES – essential skills training
- Carpenter’s Math book – extensive use
- Real life projects as part of the learning experience (NF)

Recruitment and Retention

Innovations/Best Practices

- The NF Department of Youth Services and Post-secondary Education (YSPE) is currently implementing a Youth Apprenticeship program to assist unemployed youth to gain meaningful entry level employment experience and gradually make their career decisions in trades or other related occupations. YSPE is also implementing an Apprenticeship Industry Linkage project to increase the number of employers from across the province hiring apprentices from the various industrial trades training programs and provide them with needed work experience to meet the requirements towards journey person certification.

- YSPE is finalizing a study to survey the active and inactive apprentices in order to determine the various reasons why apprentices are not completing their programs. A goal will be to increase the completion rate of apprentices and provide more qualified journeypersons to meet the anticipated skill shortages in various trade areas.
- In NB, a course “Construction Career Awareness Program” (CCAP) has been developed and delivered in high schools in Saint John and Fredericton, through a collaborative effort of industry, TED, and the Department of Education.
- The NB Department of Education, TED, NBCC, and industry have developed and implemented 'Explore My Future' career awareness expositions focusing on trades and technology in various locations throughout NB, directed at high school students and held at high schools and onsite at NBCC campuses.
- In NS, a College Prep Program has been put in place throughout NSCC through various MOU's with regional school boards for articulation with NSCC, providing opportunities for high school students to take community college courses.
- In PEI, a Social Marketing Campaign involving nine trades has been launched. It is aimed at high school students, parents, teachers, and guidance counselors and promotes careers in the trades, using a variety of media: television, radio, print, web site, 1-800 number, and presentations at all high schools, using recent grads from apprenticeship programs as guest speakers.
- Skills Canada – key partner
- Talking trades with children in junior high and elementary schools
- “Apprenticeship news” (Nova Scotia region)
- Skills registry e.g. IT Sector Council NS, individuals register and employers shop for skills
- Pilot – pre-employment program – sample all trades – women. Carpenters Training School, Saint John, NB
- National inventory – registration of journeys every three years – link to post-journey upgrading
- Holland College “Bluefield” Model – see learning and training papers
- NSCC “Techsploration” – Grade 9 girls explore trades
- Memorial High School – NS (Composite school)
- Marketing trades – branding – video – print, Ontario License Plate Video
- Trades people (experienced) in the classrooms
- Community-based career counseling, HS career changers
- Training by association for members, i.e. supervisor and management training; training for new construction workers (entry-level) (i.e. scaffold, blueprint reading, etc.)
- PAB – PEI – Youth Apprentice Bursary program
- Apprenticeship databases cleaned up to ensure current and active
- Opportunity to experience ‘hands on’, mechano sets for all kids
- Mentorship training for journey persons/owners (CARS mentor/Co-AD)
- NSCC – Dexter – NS Tuition reimbursement (oil heat association)
- Apprentice search.com concept
- Best practices from other industries for international recruitment (NS)
- Industry scholarships (NS)
- One year program over three years. J - M essential skills and training, A – D on the job training and work. Community-based tech training (PEI)
- Gold Seal

- Sector Council MOU between Federal government and provincial government and industry association (NS)
- Dexter Institute – guarantee jobs, student loan rebate (open shop) (NS)
- Apprenticeship training tuition rebate by industry association (Merit NB, NS, AB)
- Include trades in the school curriculum. The early years (grades 6 – 9). Need to include parents.
- A certification scheme should be developed to include recruitment and retention i.e. Blue seal (Alberta), Gold seal (contractors)
- CAF (Canadian Apprenticeship Forum) trying to change the image of the trades (and Skills Canada). National campaign \$20 million program

Appendix D: Priority Actions and Benefits to Collaboration

Theme: Forecasting and Planning

Table #1

Priority: Need for regional forecasting model; regional promotion. (44)

Actions/Initiatives	Benefits to Collaborate
<p>Supply:</p> <ol style="list-style-type: none"> 1. Do a comprehensive study of the LM in the construction industry (similar to one presently being done in health sector) <p>Demand:</p> <ol style="list-style-type: none"> 2. Identify a way to keep track of demand <p>Statistics Canada:</p> <ol style="list-style-type: none"> 3. Need relevant regional information 	<ul style="list-style-type: none"> ♦ More accurate information! Identify lead licenses ♦ 4 (provincial) voices become 1

Table #2

Priority: Consistency of standardized compulsory certification. (35)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Research – pros and cons 2. Have Atlantic Apprenticeship Council co-ordinate study to equalize CL across the four provinces 3. Future applications addressed at the regional level 	<ul style="list-style-type: none"> • Enhanced mobility • Wages – improved • Consistency • Final product will be better quality

Table #3

Priority: Labour forecasting info available to schools; top students needed for construction industry. (35)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Marketing directly to kids (change attitudes) 2. Lifestyle and opportunities 3. Training/information to school personnel, teachers/counselors 	<ul style="list-style-type: none"> • Promoting on billboards, radio, TV, right in schools, trades people participate • Attracting best students

Table #4

Priority: Further invest in apprenticeships. (23)

Actions/Initiatives	Benefits to Collaborate
1. Job matching for Atlantic region (database), organizations responsible to collect data	
2. Collaboration on a regular basis to share information/data among stakeholders (quarterly, annual, etc.)	<ul style="list-style-type: none"> • Collaboration between construction associations and APCCC (Atlantic Community Colleges and private trainers)
3. Tax incentives/travel card system to support mobility for employer/employee	<ul style="list-style-type: none"> • Encourage more participation from employers/employees

Table #5

Priority: Key players need to be talking to each other; closer relations with industry to develop a model; often data from government and industry differs; major project players need to engage in joint planning. (40)

Actions/Initiatives	Benefits to Collaborate
1. More opportunities to come together on a regional basis (bring information together)	<ul style="list-style-type: none"> • Efficiency (standardization of information)
2. A group would need to take ownership of the information and manage it	<ul style="list-style-type: none"> • Provide accurate information
3. Find a vehicle to deliver the information on regular, consistent basis	<ul style="list-style-type: none"> • Eliminate duplication of effort

Table #6

Priority: How to encourage public school system to prepare students for skilled trades opportunities. (31)

Actions/Initiatives	Benefits to Collaborate
1. Provide good labour market information to schools, parents, students and peers (public and private)	<ul style="list-style-type: none"> • Consistency • Synergy
2. Determine perception barriers and how to overcome them	<ul style="list-style-type: none"> • Efficiency (not reinventing wheel)
3. Market trades career to the public – schools	<ul style="list-style-type: none"> • Cost savings

Table #7

Priority: Promote trades as viable career choice. (39)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Share fact-based research to build messages to youth, parents, guidance counselors 2. Planning – activity to build youth entry into sector, measure progress 3. Succession planning – commitment to youth to track certification to meet known needs 4 – 8 years 	<ul style="list-style-type: none"> • Efficiency of numbers • Cohesive messaging • Sustain current training, policy and industry capacity (skilled) • Evening out fluctuations, province to province • Reduces lag time between need and availability of skills

Table #8

Priority: Compulsory certification of trades. (31)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Common Atlantic recognition of compulsory trades 2. Increase number of compulsory trades 3. Better tracking of compulsory trades to gauge supply and demand 	<ul style="list-style-type: none"> • Mobility of workers • More accurate stats of worker availability • Higher status = easier recruitment

Table #9

Priority: Demand side: make sure owners and purchasers of construction services are consulting; access to reliable information so labour force can make informed decisions; improve quantity and quality of info on supply side; need reliable forecasts from employers. (22)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Identify people who have access to reliable information – bring together 2. Create process/structure that results in a coordinated Atlantic Labour Market analysis 3. Designate organization to accept accountability to lead this process (CAP) 	<ul style="list-style-type: none"> • Includes appropriate personnel with more accurate information • Outcome driven

Table #10

Priority: Assess changing skill requirements and the need for upgrading the employed labour force; ensure local skilled trades persons have up-to-date knowledge and skills needed to meet constantly changing industry requirements. (30)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Create a model to ensure collaboration between trainers/manufacturers 2. Monetary support for employers to obtain training 3. Stronger relations with national sector councils 	<ul style="list-style-type: none"> • Local labour up to date on skills and technology • Certification becomes more valued • Stronger voice to influence funding and change

Table #11

Priority: Ensure that policy makers and educators/trainers have the necessary info from project developers to make policy, programming decisions. (24)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. File with building permit request a schedule of manpower requirements 2. Database to track (accessible to all players) 	<ul style="list-style-type: none"> • Allows suppliers to project manufactured product needs • Allow decision/policy-makers to do more accurate forecasting

Table #12

Priority: Improve working conditions and wages in the industry to retain skilled young people. (16)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Good supply/demand data (skills/labour enhancement) 2. Train for long-term, not by project 3. Increase awareness of real opportunities 	<ul style="list-style-type: none"> • Right mix • Right numbers • Right skills/training • Right timing • Informs training and career development

Theme: Learning and Training

Table #1

Priority: Contextualize the skills – connection between work and learning basic skills including communication; provide essential basic skills e.g. communication and math. (18)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Industry needs to be involved in curriculum development at the junior high/high school level 2. All students at the junior/senior high school levels need to be introduced to the basic trades/life skills 3. Expose teachers (JH/SH/CC) to the world of worksites 	<ul style="list-style-type: none"> • Build on the existing K-12 Atlantic co-operation in curriculum development

Table #2

Priority: Offer training to those already employed who need to upgrade their skills; training for employed workers. (41)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Regional assessment tool to determine skills needs 2. Workplace education and essential skills model (certifications) 3. Develop creative funding partnerships 	<ul style="list-style-type: none"> • Economies of scale • Enhance productivity and competitiveness • Provides structure and consistency and clarity

Table # 3

Priority: Are kids getting the right information that they need about high school courses to make informed decisions about careers in construction? (37)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Access websites that are suited to high school and provide information on entrance requirements 2. Ensure entrance requirements do not eliminate potential students e.g. can physics be taught at CC? 3. Provide orientation package at start of high school (suited to parents and students) 	<ul style="list-style-type: none"> • Student friendly, lots of information, easy to communicate • Increase pool • Eliminate courses not required (by student)

Table #4

Priority: High school credits for on-the-job-training. (31)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Identify existing programs in four provinces e.g. YAP, Co-Op, ASAP for high school credits for on-the-job training 2. Establish an Atlantic regional PLAR process 	<ul style="list-style-type: none"> • Consistent regional policy re: recognition of credits

Table #5

Priority: Find the balance between the length of time required for qualification and current business needs. (18)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Ensure (develop a mechanism) industry participates in curriculum development on a regular basis 2. Comprehensive review of the requirements for practical experience in trades on a trade-by-trade basis 	<ul style="list-style-type: none"> • Program that provides/meets current requirements of industry

Table #6

Priority: A region-wide planning model to meet current demand and to address predicted skill shortages. (25)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Agree with Atlantic Planning model – which includes the full: <ul style="list-style-type: none"> • Demand – project scenarios HML, occupation demand • Supply – APP records, certification records, grad stats, current enrollment, employment status, and national picture • Provincial breakdown of stats • GAP analysis 	<p>Ex. Petroleum Research Atlantic Canada (PRAC)</p>

Table #7

Priority: The four-year apprenticeship model makes it difficult for colleges to react quickly to the changing needs of the labour markets. (24)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Build regional lobbying, force to make HRDC change funding for all training 	<ul style="list-style-type: none"> • Stronger voice with HRDC • Higher skills in region in less time

<p>automatic – not linked to EI</p> <ol style="list-style-type: none"> 2. More options – flexible for learning delivery 3. Remove barriers to achievement of number of (7200) hours e.g. overtime counts 4. Recognize existing skills (PLAR) – (linked) – competency based 	<ul style="list-style-type: none"> • Better meet employer needs • Synchronize in-school training with work experience • Improved commitment and image with public – smoother transitions between jobs
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Table #8

Priority: The construction trades image among youth, counselors, parents and the need to better market the skilled trades as viable career options. (32)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Increase (build on) the Trades Awareness Days in High schools 2. Develop an interactive CD-ROM to promote trades 3. Learn by doing, reinstate some form of trades-related (industrial arts) program into schools 4. Develop a resource list of industry speakers for schools 	<ul style="list-style-type: none"> • Economies of scale, i.e. cost savings • Consistent message

Table #9

Priority: Flexible delivery system for curriculum (on-line, face-to-face, correspondence etc.); partner with industry for flexible delivery options (not just block, etc.) (40)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Institution would be identified to deliver a pilot project for 1 trade using on-line video-conferencing delivery (or electronic delivery) 2. On-line library resource for instructors/ apprentices – shared curriculum 3. Integration of industry-specific training into regular apprenticeship programs 	<ul style="list-style-type: none"> • cost effective • regional coverage • access wider ranger of training • export potential • increased accessibility for the apprenticeship • creates professional development opportunities for faculty • more relevant training

Table #10

Priority: Compulsory certification. Don't have three different employees at related tasks for \$8/hour each; have 1 employee at increased rate (at \$20/hr) to do all tasks. (19)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Market value of certification to the consumer 2. Compulsory certification should exist where safety, environmental issues/standards and consumer protection is required 3. This should be marketed to the consumer 	<ul style="list-style-type: none"> • Aware of environmental standards and their own security • Consumer protection

Table #11

Priority: One college /school exclusively designated to construction trades (centre of excellence): economies of scale/centres of excellence – eliminate unnecessary duplication. (16)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Virtual and physical campus 2. Campus Board of Directors should be certified tradespersons 3. Industry owners 	<ul style="list-style-type: none"> • Mixed dorms with café serving ...

Table #12

Priority: Promote life-long learning – gold seal, blue seal, red seal; ongoing career development – multiple or changing tickets? Are there barriers? (20)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Undertake research to develop a model for this priority (multiple roles) including: <ul style="list-style-type: none"> • Develop delivery and funding models for post-journeyman/ training person and take the existing workforce • Consider competency-based models 	<ul style="list-style-type: none"> • See Newfoundland model • Quebec training fund

Theme: Recruitment and Retention

Table #1

Priority: Management skills and knowledge to implement effective HR strategies for recruitment, retention and succession planning. (18)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Atlantic HR Training Plan at low cost – develop and implement self-audit tool, certificate after completion 2. Pooling of resources (i.e. hiring consultant everyone can access) 	<ul style="list-style-type: none"> • Continuity • Credibility • Cost effective due to shared costs • Employer of choice (maybe)

Table #2

Priority: Making the Construction Industry attractive to potential employees by making youth and other potential new entrants aware of the opportunities available to them. (21)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Promote partnerships with Skills Canada initiatives in the 4 Atlantic Provinces 2. Atlantic Construction marketing/ awareness campaign strategy. Goal – change attitudes Look at: one website, one newsletter 	<ul style="list-style-type: none"> • Economies of scale • Four heads better than one – better products • Consistent approach and message • “One Stop Shopping”

Table #3

Priority: There are shortages in many construction trades especially in rural areas. Better communication between employers, colleges and government is required before a crisis occurs. (15)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Develop an Atlantic website – individuals can go on-line and register. Employers can access this for search of workers in a particular area 2. Hold regular/periodic symposiums with stakeholders to develop proactive approaches to potential/evident skills shortages (need employers involvement) 	<ul style="list-style-type: none"> • Communication • Avoid duplication efficiency • Mobility (support/encourages/informs)

Table #4

Priority: Improve jobsite mentoring through all levels of training, apprenticeship, journey person, and supervision management. (36)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Volunteer list of industry members to mentor. General contractors and construction associations must commit and lead 2. Defined part of journey person's job/workload is mentoring opportunities. Adjust compensation to include mentoring 3. All large projects should build-in a 'training/mentoring' component in designing/delivering projects 	<ul style="list-style-type: none"> • Apprentices will learn skills they need • Critical mass, small provinces get together • Better articulate what "apprenticeship really is" • Include in RFP's from all sectors

Table #5

Priority: Is there a shortage? Is there not a shortage? How do we verify this? (35)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Shortage of warm bodies or skills? – probably latter 2. Better demand and supply information, no consensus on latter, better forecasting model 3. ESPI using as much collaboration as possible 	<ul style="list-style-type: none"> • To avoid current hit and miss

Table #6

Priority: Promote trades as "stepping stone" on path to Life Long Learning. (31)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Better industry involvement in creating awareness of career paths in construction trades 2. Show links between training and higher wages/employment in the trades 3. Develop model to identify career opportunities beyond current IP certification 	<ul style="list-style-type: none"> • More people in the trades • More informed career choices • Professionalize the occupations within the sector

Table #7

Priority: Youth apprenticeship in high schools. (36)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Atlantic Canada Def. 2. Policies and procedures 3. Apprenticeship credit and HS credit 	<ul style="list-style-type: none"> • Transferable, win, win, win • Easier to market and fund • Career exploration

Table #8

Priority: How do small / medium employers handle HR issues? Pool of HR experts' courses. Develop HR capabilities of employers in the industry, including recruitment, retention and succession planning. Provide tools to help employers develop planning strategies. Educate employers on need for HR planning. (20)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Institute to offer special HR programs throughout Atlantic provinces 2. CCA – Gold Seal program include HR Training 3. Promotion of Gold and Blue Seal 	<ul style="list-style-type: none"> • Qualified HR function • Exp./education certificate • Highly qualified supervisors, estimators, project managers • Mobility of resources • Standards

Table #9

Priority: Increase awareness of the building and construction trades as attractive career options for youth, parents, teachers and counselors. Overcome the current belief that university rather than community college is the natural path after high school. How to change the mindset of youth, parents, teachers and counselors? (39)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Expand on CCAP in NB to apply the program regionally and involve more construction trades in program 	<ul style="list-style-type: none"> • Allows more high school students to be aware of the trade opportunities, with in-house training and work site exposure

Table #10

Priority: Where no work locally, facilitate mobility to where jobs are. (15)

Actions/Initiatives	Benefits to Collaborate
<ol style="list-style-type: none"> 1. Access funding to travel to work location – support structure 2. Income tax relief for travel support 3. Better information on work availability in rural communities 	<ul style="list-style-type: none"> • Where shortages occur, workers would access employment in rural, or other communities (eliminate shortages) • Workers would be more receptive to travel if relief/incentives were available

Table #11

**Priority: Develop incentive system to encourage employers with specific/
 specialist skills to take on additional apprentices. (20)**

Actions/Initiatives	Benefits to Collaborate
1. Partnership approach to develop financial incentives for employers: partners, industry, supplier, government, unions 2. Tax incentives	

Table #12

Priority: Is the current apprenticeship model working “Best” for recruitment and retention? (enforcement) (22)

Actions/Initiatives	Benefits to Collaborate
1. Apprentices register with a joint monitoring committee made up of management and unions/open shop 2. Compulsory certification could provide a mechanism for both recruitment and retention 3. Sell advantages of compulsory certification to employees	<ul style="list-style-type: none"> • This should improve retention • Helps place apprentices in jobs • Increase recruitment and retention

Appendix E: Day One Feedback

- Concerned that residential/renovation viewpoints from owners, workers and apprentices may not receive the proper attention
- Industry – who or what is meant by this word. Owner, supervisor, PR man, Pain for Rep... who? (to be reviewed by planning committee)
- What concerns me is that we must narrow each of these suggestions and establish who is going to carry message to workers and employers. Off the point... preparing people. The issue is in the forecasting.
- While I see value and exchanges necessary with the activities of the day, I felt it was a little too restrictive in terms of opinions and concerns from the individual experiences in and for the system. Perhaps a table rotation would have helped. Don't know where this is going. Not enough time, difficult to debrief
- Compulsory certification – although agree on overall notion of certification – concern where this information is going – need more discussion on such important issues. What are we going to do with these recommendations without more discussion? We already have process to look at this.

Appendix F: Steering Committee

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Appendix G: Participants

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