

New Brunswick Forest Industry Training
and Human Resources Development

Challenges, gaps and solutions

*A proposal for a collaborative partnership
to increase the competitiveness of the
New Brunswick forest industry*



New Brunswick
Forest Products
Association

Association des produits
forestiers du
Nouveau-Brunswick

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Executive Summary

The purpose of this project was to assess the present training and human resource development needs of the New Brunswick forest industry in order to:

- *Identify gaps*
- *Recommend new initiatives and programming that will make training more accessible, practical and affordable*
- *Recommend initiatives that will alleviate the looming workforce shortage*
- *Identify partnership opportunities*

The forest industry is going through difficult economic times. A fast changing business environment and a looming workforce shortage are creating many challenges for forest companies to remain competitive on the global market.

The province of New Brunswick has a solid and credible educational system and governmental programs. However, the labour force picture and the business of forestry have significantly changed over the past few years and today's labour force must adapt quickly to new technologies and be able to work with a higher productivity output if the New Brunswick forest industry wants to remain competitive. Productivity is at the heart of competitiveness, it's the key to profitability, growth and even survival and a sustained productivity growth is only possible with highly motivated and skilled people.

The survey result indicates that 60% of respondents are not satisfied with the present training system. Reasons for dissatisfaction include the lack of available funding for training, difficulty accessing training programs and the lack of follow-up by trainers to verify correct implementation of taught techniques. The survey also revealed less than 30% of respondents have a training plan for the next two to five years, even though almost 80 % are expecting human resources shortages in that same time frame.

Although important governmental programs exist to help unemployed people develop skills and find work, most respondents indicated that initiatives encouraging companies to invest training money in employees in order to upgrade skills and to increase productivity and efficiency would be very positive.

Certain gaps in training have been identified that would help the efficiency of forest operations. These include forest trucker training courses and business training for forest contractors. These courses would help increase efficiency of forest operations and increase the financial health of contractors.

The utilization of best practices for adult training would greatly benefit individual companies and the forest industry as a whole. To do this, industry leaders must develop a training culture within the industry and individual companies and focus efforts on training that gets results. Other elements of these best practices should include exportable training programs in modular form, hands on training and the integration of coaching and performance management in all training programs.

Attracting and retaining highly motivated and skilled people is becoming more and more of a concern with industry leaders. Increasing skill requirements and misperceptions of the forest industry are creating added hurdles to the already looming workforce shortage.

The right infrastructure is critical for efficient training and increasing the competency levels of the workforce. In order to meet present and future needs of the industry, the workforce and the training institutions, infrastructure investment should be done in such a way to increase contact among students, institutions and industry. The goal would be to create a climate where students, could experience industry culture first hand and to create a two way information sharing between industry and educational institutions.

As the government of New Brunswick is looking for new solutions and ideas to improve the educational system, create more job opportunity and to develop the full economic potential of the province, and as the forest industry is looking to become more competitive, efficient and wants to continue to increase its workforce competency level, there is presently an opportunity for a collaborative effort to meet these goals.

To help attain these goals, the report recommends 5 courses of action. If implemented these solutions should help industry increase productivity, become more competitive create job opportunities, further increase the competency level of the forest industry workforce and increase collaboration between stakeholders.

The 5 courses of actions are:

- 1st - Introduce initiatives that increases productivity of the forest industry*
- 2nd- Adopt strategies to increase access to and quality of training programs*
- 3rd - Implement initiatives to alleviate the looming workforce shortage*
- 4th - Promote the forest industry to create a positive image*
- 5th - Encourage appropriate infrastructure investments*

There is presently a unique opportunity to revolutionize the training system in the province and positively affect the forest industry and other business sectors. People are the single most important resource of all industry sectors. Increasing the investment in training opportunities for the people of New Brunswick will not only increase the competency level of the workforce, but also the productivity, efficiency, and competitiveness of the industry as a whole.

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1. Introduction

The business environment of the forest industry is forever changing, and at no other time in history has the pace of change been so great. New technologies, regulation changes, new competitors, and increasing environmental and product standards are just a few of the factors putting more pressure on New Brunswick's forest companies to become more productive, efficient, and innovative. Add to this a looming shortage of qualified workers and you quickly realize that New Brunswick's forest industry faces many challenges in the present and near future if it wants to remain competitive on the global market.

Although challenges are great and relentless, there is no better time to put building blocks in place to achieve excellence. The single most important factor in achieving excellence in the business environment is people. In today's environment, a well trained, skilled, and educated workforce capable of adaptability is necessary for staying competitive, growing business and attracting new investment. Productivity is at the heart of competitiveness, it's the key to profitability, growth and even survival (1). This will be the focus of the present report.

There is an opportunity and a need to organize training programs and human resource development strategies to ensure that the forest industry workforce keeps increasing its competency level and continues to be more qualified, productive, and efficient. The purpose of this evaluation is to:

- *Identify gaps*
- *Recommend new initiatives and programming that will make training more accessible, practical and affordable*
- *Recommend initiatives that will alleviate the looming workforce shortage*
- *Identify partnership opportunities*

This report provides basic findings, indicates limitations to the present training system, and offers recommendations for the development of a training strategy that will help the New Brunswick forest industry continue to increase the competency level of its workforce and fundamentally increase the efficiency of the industry.

"The goal here is not to just survive; it's to become the best in the world."

Mark Arsenault, President and CEO, New Brunswick Forest Products Association

(1)John S. McCallum. Advocating Productivity. Ivey Business Journal. Improving the Practice of Management. January/February 2000.

2. Background

2.1 Importance of Forestry to New Brunswick

When people think about the forest industry, very few realize the sheer magnitude of importance this industry has on everyday life for New Brunswickers. The forest industry is important for people from all walks of life - from job creation to the use of everyday products like paper, furniture, and building materials.

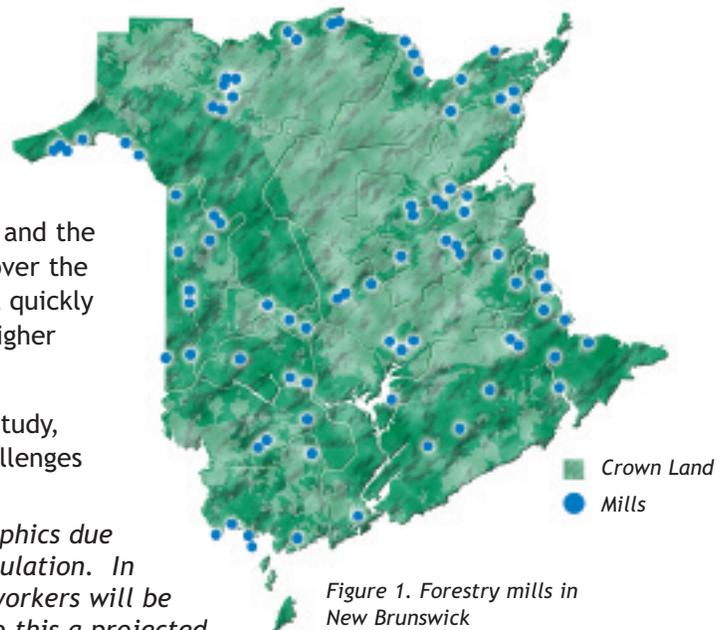
In fact, the New Brunswick forest industry creates over 14, 000 direct jobs, 9, 400 indirect jobs, and represents \$1.1 billion in wages and salaries every year (2). Over 50 communities depend directly or indirectly on activities from the forest industry for social and economic growth (Figure 1). If the forest industry wants to remain the staple of the New Brunswick economy and continue to compete on the global market, fundamental changes must occur in order to maintain, develop and expand an increasingly competent and productive workforce.

2.2 The Labour Force Challenge

Historically, the New Brunswick forest industry has been able to satisfy its labour force needs. However, the labour force picture and the business of forestry have significantly changed over the last few years. Today's labour force must adapt quickly to new technologies and be able to work with higher productivity and efficiency constraints.

An Atlantic Provinces Economic Council (APEC) study, conducted in 2005, clearly indicates several challenges with labour force issues (3):

- *The first one on the list is dwindling demographics due to a slow population growth and an aging population. In fact, the study indicates that almost 45% of workers will be between the age of 45 and 64 by 2011. Add to this a projected decrease of 23,000 young people entering the New Brunswick workforce between the year 2001 and 2021 which will result in an increased competition to recruit new workers.*
- *The rural exodus towards urban areas is a serious challenge as the forest industry heavily relies on a rural workforce. It is predicted that the rural parts of the province will continue to experience declines in both population growth and labour workforce.*



(2)http://www.nbforestry.com/frstry_nmbrs.htm

(3)Atlantic Provinces Economic Council. *New Brunswick Forest Industry Labour Force Profile*. May 2005.

- *The forest industry relies heavily on an increasingly skilled labour force. In today's information age, a highly educated and well trained labour force is a prerequisite for high productivity, efficiency and flexibility. This implies that educational attainment is increasing for both entry level jobs and skills upgrading. This creates a challenge to meet changing needs as 29% of the forest industry labour force is without a high school diploma and only 45% have some post-secondary education - well below the average level of all other industries. There is an exception in the pulp and paper labour force which is above the national average for all industries.*
- *There will be a significant loss of experienced workers and knowledge as the large group of baby boomers move towards retirement.*
- *The recent migration trend of young skilled workers towards Western Canada poses additional challenges for New Brunswick.*

"It all comes down to opportunity. Where people believe there will be opportunity in the future, they will likely stay for the future."

Dave Plante, Canadian Manufacturers and Exporters – Telegraph Journal, August 30th 2006

2.3 The Image Factor

Presently, rapid changes in demographics and technology for the business sector have made recruiting a critical element in attracting and retaining the qualified workers that are necessary to secure a knowledgeable and competent workforce (4). Unfortunately, the image of the forest industry has had a negative impact on the success of recruiting qualified workers.

During the last few years, the forest industry has been experiencing one of its worst economic periods, which continues to persist. This has generated negative press, thus creating a less than favorable image of the industry. There are many misconceptions about forestry, the most common ones are the following (5):

- *Forestry related job prospects are poor*
- *Forestry is only about logging*
- *Forestry is "low tech"*
- *The brightest students do not take forestry*
- *All forestry jobs are rural jobs*
- *Forestry is a sunset industry*
- *The forest industry is a poor environmental performer*

These factors likely discourage young people from considering the forest sector for career opportunities.

(4)*The Forestry Chronicle - January/February 2006, vol. 82-1. pages 57-69.*

(5)*Advisory Board Sub-Committee. UNB Faculty of Forestry and Environmental Management. Where are tomorrow's Professional Foresters? April 2006.*

One clear symptom of the lack of interest in the forest industry is the declining enrollment numbers at university level forestry programs across Canada. As shown in Figure 2, enrollment numbers in university level forestry programs have declined steadily since 1998. Low recruitment numbers can have a significant impact on forestry faculties in terms of having to reduce staffing and research funds. Eventually, this not only affects the ability of the industry to improve and innovate in the future, but reduces the future availability of professional foresters.



Figure 2. Enrollment numbers in university forestry programs across Canada(6)

The image problem will not only decrease the number of available forestry professionals, but can also have an impact on the decision making of trades people and other professionals when it comes to choosing a company or sector to work for. With the present and projected lack of skilled workers in all sectors, many groups will be aggressively recruiting in order to attract young talented people to their sector. By continuously working on its image and by developing innovative ways to inform its target audience, the forest industry will increase the likelihood of recruiting bright young workers to its workforce.

2.4 Post Secondary Education and Training Institutions

Educational services in New Brunswick are provided by a mixture of public and private learning institutions. A total of four universities with seven campuses, one French and one English Community College with 11 campuses, and over 80 private learning institutions deliver a variety of training programs. Of these, approximately 30 institutions offer programs that are of interest to the forest industry.

(6)Association of University Forestry Schools of Canada 2006

The existing education infrastructure is very good as it provides a variety of training opportunities within the province. Nevertheless, changes in the work force picture forces an investigation into finding innovative ways to deliver programs and create communication and partnership strategies between industry and institutions. This could improve the overall outcome of training and help remain more current as the need of industry evolves on a continuing basis. Following is a more detailed description of institutions that have the biggest impact on the forest industry.

2.4.1 The New Brunswick Community College and le Collège Communautaire du Nouveau-Brunswick

The New Brunswick Community College (NBCC) and le Collège Communautaire du Nouveau-Brunswick (CCNB) are key to the continuing health of the forest industry of New Brunswick. Annually, both colleges graduate, on average, 2,500 students (7) in 237 full-time programs. The NBCC has campuses operating in Fredericton, Miramichi, Moncton, Saint John, St. Andrews, and Woodstock, whereas the CCNB has campuses in Bathurst, Campbellton, Dieppe, the Acadian Peninsula, and Edmundston.

Another important service offered by both the NBCC and CCNB is corporate training. This service enables employers to work with a campus to customize training in order to meet specific needs. Training is offered in seven sectors. Critical sectors for the forest industry are business, forestry, information technology, trades and technology. The forestry corporate training program, offered in Miramichi seems to be well developed and diversified in the type of training offered.

2.4.2 Maritime College of Forest Technology and le Collège de technologie forestière des Maritimes

Most forest technicians working in the province of New Brunswick have been educated at the Maritime College of Forest technology (MCFT) in Fredericton or le Collège de technologie forestière des Maritimes (CTFM) in Bathurst. Contrary to most forestry programs in North America, the MCFT does not have an enrollment issue and even has a waiting list. The MCFT also has a Continuing Education Department which offers over fifty short courses each year to assist forestry and forest products professionals gain new knowledge and skills. Courses generally are two days to one week in length and are taught by experts from around the globe.

2.4.3 Universities

Four universities provide educational services to the province and offer a large variety of programs leading to Bachelor, Masters and Ph. D. degrees. Two of these, University of New Brunswick and “l’Université de Moncton” offer undergraduate and graduate forestry programs.

These two universities also offer a variety of continuing education, professional development and customized training programs enabling industry to take advantage of different training opportunities.

(7)Gouvernement du Nouveau-Brunswick. Les défis à relever en termes de formation et d'éducation pour atteindre les objectifs du Plan de prospérité du Nouveau-Brunswick de 2003 à 2011. Mai 2003.

2.4.4 New Brunswick Forest Industries Safety Association

The New Brunswick Forest Industries Safety Association (NBFISA) was incorporated in June 1963; however, was inactive for over 20 years. In 2005, NBFISA was reinstated to provide safety training to mills operating in New Brunswick. The association's function is designed to help improve workplace safety, increase the regional competitiveness of forestry companies, and enhance the mobility of forest workers. Indirectly, these benefits will help improve the well being and profitability of the provincial economy.

2.4.5 Private Training Institutions

In addition to these training and educational institutions, a large variety of private training institutions operate in the province of New Brunswick. These schools offer training on business management, computer science, trades, and a number of forestry related programs. Appendix 1 lists the recognized training and educational institutions that could be of interest to the forest industry.

2.5 Funding for Training

Presently in the province of New Brunswick, the Department of Post-Secondary Education and Labour offers a variety of important and necessary programs to help the unemployed secure work. These programs are available to all industries in the province. Generally, they offer financial incentives for employers to increase their employee base. Although these programs provide essential services to the public, they rarely promote business development and investment. The programs of interest to employers of the forest industry include the following:

- *Workforce expansion*
- *Employment services*
- *Self-help employment services*
- *Training and skills development*

2.5.1 Workforce Expansion

The workforce expansion program gives short-term help to employers for paying the salary of an additional employee. This program can be useful for a seasonal industry that needs extra workers every year for a certain number of weeks. The purpose of this program is to utilize temporary wage reimbursements to help an employer establish permanent employment, or an annually recurring seasonal job. The job created can not be piecework based, thus it is not practical for most forest or silviculture operations. The approval of the program must be done prior to the start of the job. Reimbursement rates are based on the type of employment created and the employed individual. There are two employment type categories: permanent employment or annual employment creation. Employee categories include: general, underprivileged, or recent post secondary graduates.

2.5.2 Employment Services

The employment services program gives support and funding to facilitate human resource management and labour market adjustments that are in the public interest. This program enables the hiring of a program consultant that will help organize an adjustment committee consisting of employer and employee representatives in order to address human resource issues. To be eligible, this program must involve a partnership and have a specific project outcome. Examples of issues that can be addressed include the following: threat of jobs being lost, industry downsizing or growth, impact of new technology and lack of human resource management skills.

2.5.3 Self-help Employment Services

The self-help employment service program is not a training program in itself, but can assist employers in connecting with individuals who are looking for work. For instance, employers can post job opportunities on the Job Bank web site: jobbank.gc.ca or a provincial web site NBJobs.ca.

2.5.4 Training and Skills Development

Training and skills development is a program enabling potential employees to gain experience and education by receiving counseling, direction toward a specific career path, and financial assistance to acquire the training and education needed. The program helps cover costs like tuition and training fees. As with other programs, certain conditions apply.

2.6. Federal Help for Training

There are also federal programs to aid with training.

2.6.1 Youth Employment Strategy

One category of programs focuses on creating employment and improving skills for youth. The Youth Employment Strategy helps young Canadians between the ages of 15 and 30 obtain career information, develop skills, find work, and stay employed. This strategy offers a variety of initiatives under three programs. They are:

- *Skills Link Program helps young, underprivileged people such as high school drop outs, youth in rural areas, or recent immigrants*
- *Summer Work Experience Program is a placement program that helps secondary and post-secondary students find work*
- *Career Focus is a program that helps post-secondary graduates develop skills and establish careers in their field*

2.6.2 Business Development

The federal government also provides aid for business development. The Atlantic Canada Opportunities Agency (ACOA) has a business development program that offers access to capital in the form of interest-free, unsecured, repayable loans. Only small and medium sized companies are eligible for these loans and generally a primary based industry such as a softwood or hardwood sawmill is not eligible. Companies investing in value added products are more likely to be considered. Activities that are eligible include business studies, capital investment, marketing, and training in lean manufacturing. Proposed projects should provide economic benefits to an area or a community and demonstrate that there is a need for financial assistance. Up to 75% of costs for training can be financed. Training costs includes the following: the development of a training plan, the hiring of training expertise to implement the plan, and other activities such as: materials, seminar fees, and employee wages during the time off the job training is received.

3. Methodology

The purpose of this study was to collect and analyze enough data to help identify the gaps and needs for training and human resource development within the New Brunswick forest industry. In addition, recommendations on possible solutions to improve training opportunities and efficiency for the forest industry were to be presented. Three methods were utilized to collect data:

- *A Survey sent to 50 member companies of the New Brunswick Forest Products Association (NBFPA): The objective of this survey was to obtain the following information:*
 - *Region of operation*
 - *Gender differences*
 - *Categories of employees*
 - *Amount of training*
 - *Type of training offered*
 - *Preferred length and time of training program*
 - *Organizations utilized to meet training needs*
 - *Perceived effects of training on business operations*
 - *Important criteria when choosing a training program*
 - *Deterrents to training*
 - *Human resource succession plan*
 - *The likelihood of change in their business environment*
- *Consultation with 35 stakeholders, including company members of the NBFPA, government officials, and educational institutions: The objective of the consultation was to obtain the following information:*
 - *Training gaps*
 - *Satisfaction of present programs*
 - *Possible partnership opportunities*
 - *Where funding should be directed*
- *A search of reports and documents on workforce issues, training, and training programs for New Brunswick and Canada. The purpose of this research was to gain knowledge on the workforce of New Brunswick and specifically the forest industry workforce.*

4. Results, Findings and Perceptions

4.1. Survey Results

Of the 50 surveys sent to NBFPA members, 21 (42%) were completed and returned.

Figure 3 indicates companies surveyed were distributed across the province with a larger proportion of those in the northwestern part of the province.

Most companies were involved in more than one specific sector and covered all major forest industry activities in the province (Figure 4).

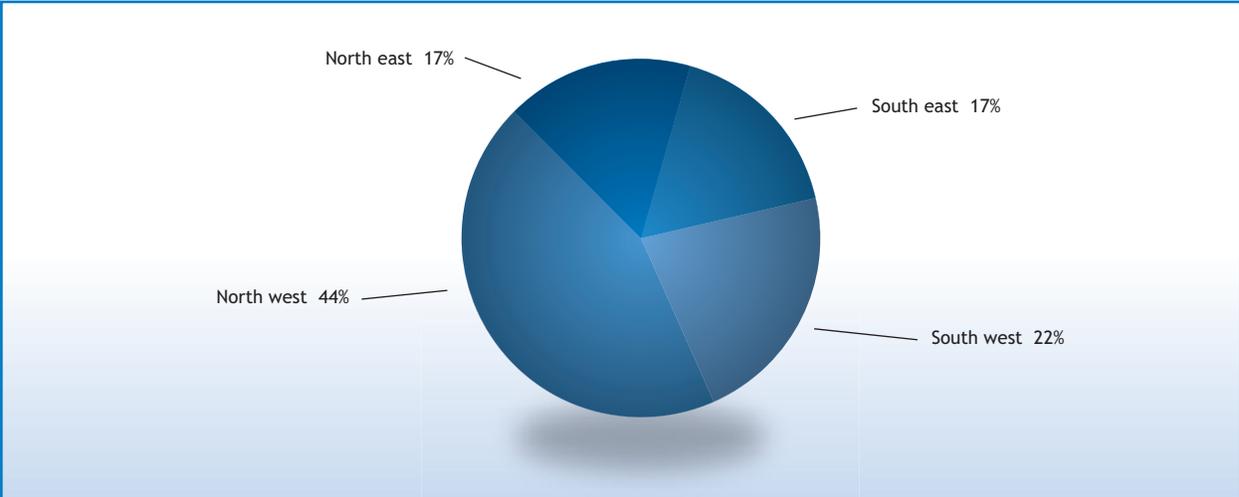


Figure 3. Region of operation of surveyed companies

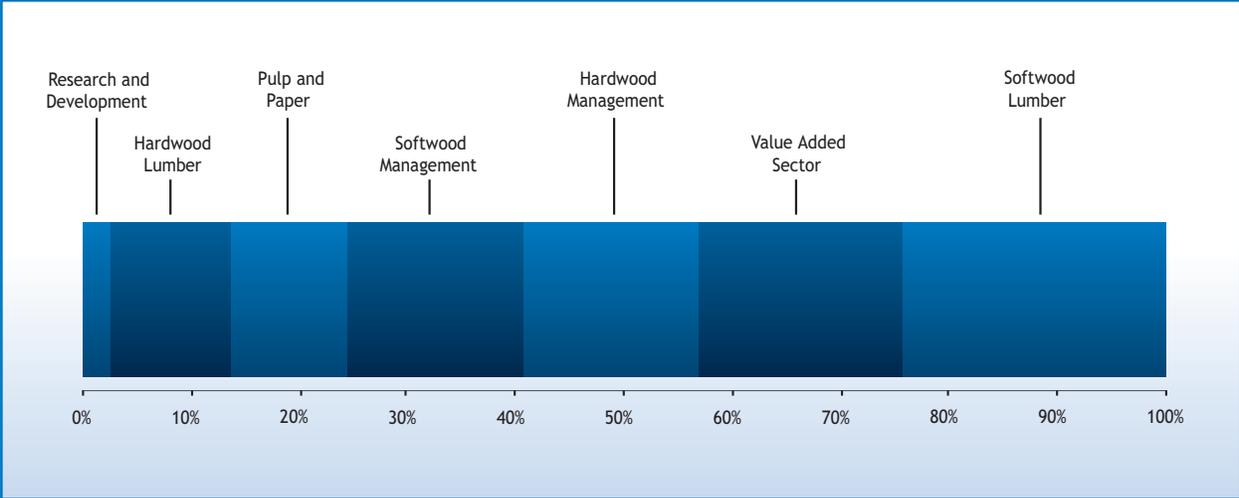


Figure 4. Forestry sector of surveyed forest companies

The sample of companies surveyed employed more than 6000 workers in the forest industry. Of those, approximately 14% of the workers were female and the remaining 86% were male (Figure 5).

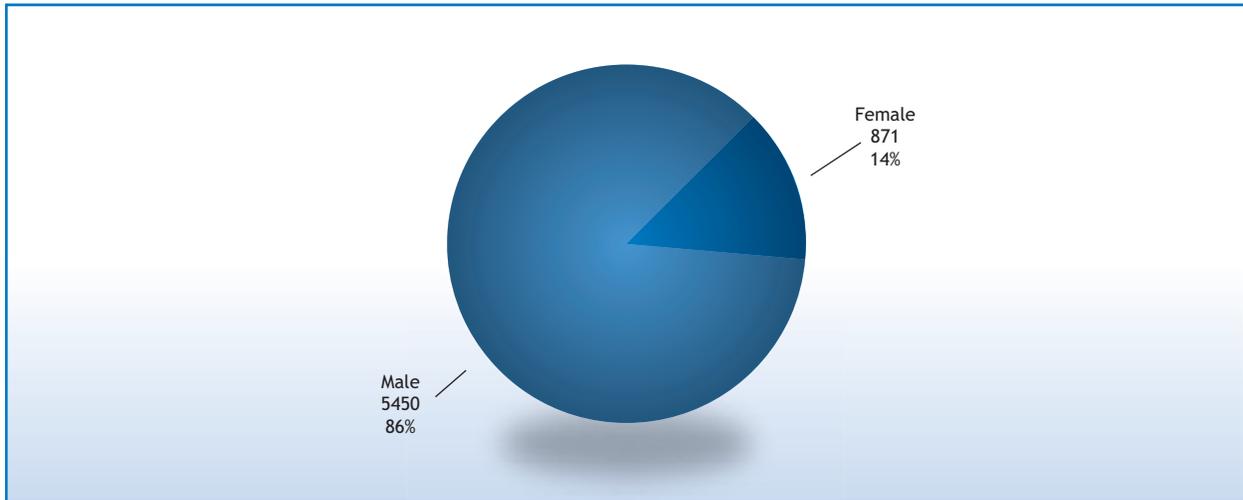


Figure 5. Male versus female employees

Figure 6 indicates that more than two thirds of the employees represented labour workers and only two percent of the employees were apprentices.

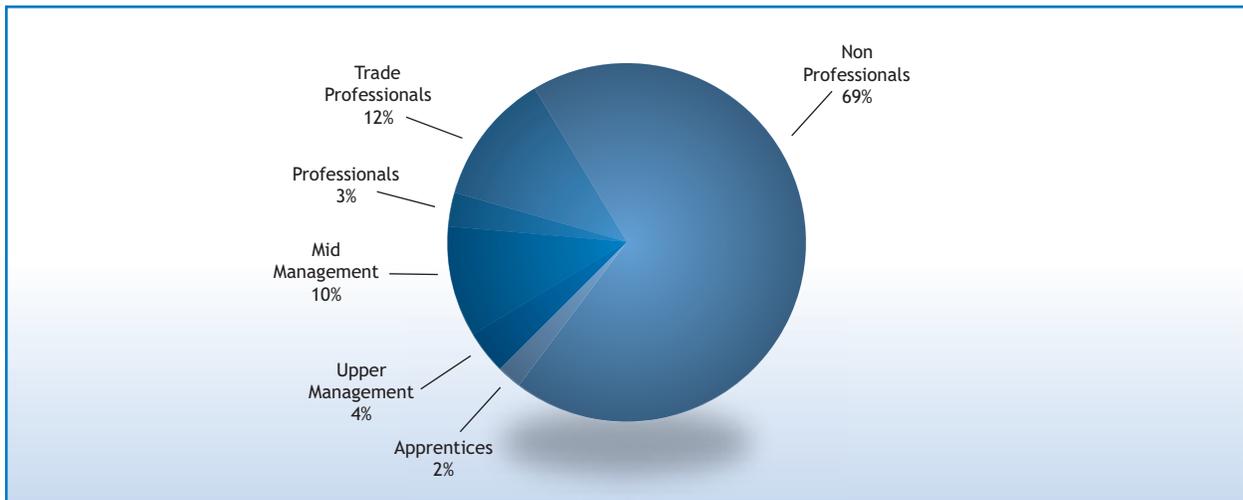


Figure 6. Employee Categories

More than half of the companies have maintained training levels in the past five years. Almost one quarter of the companies have either decreased training or have not offered training to their employees in the past five years. The remaining 24% have increased training (Figure 7).

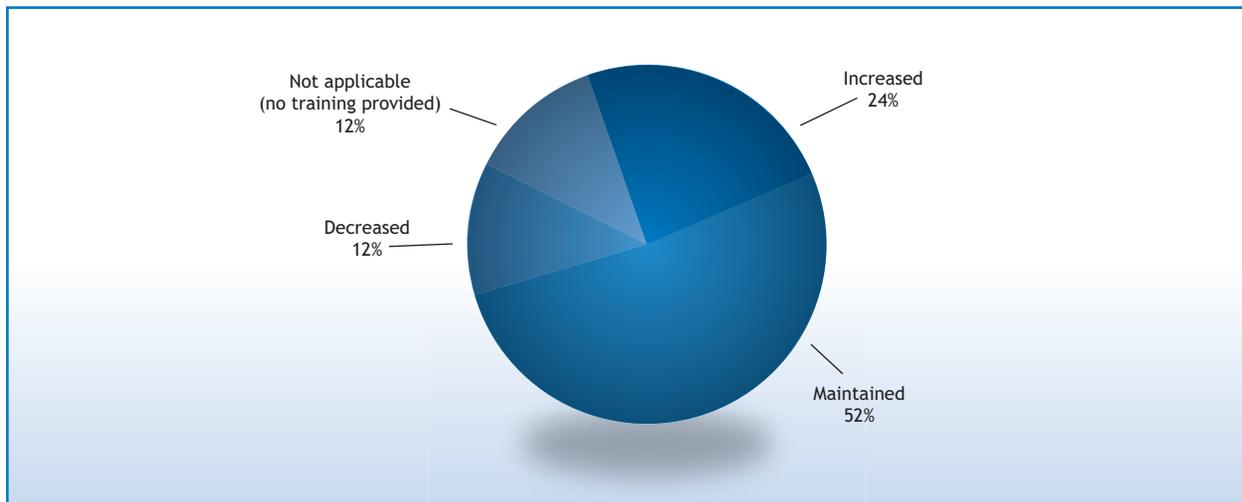


Figure 7. Amount of training provided in the past 5 years

Reasons given for decreased training included the following:

- A decrease in the number of employees
- A lack of funding for training

Reasons motivating companies to increase training included the following:

- Mandatory certification to International Standards Organization (ISO) and the Sustainable Forestry Initiative (SFI)
- Improve workers compensation rate
- Modernization of mill operations
- Remain current with technological changes

The following graph (Figure 8) shows there is more opportunity to access a larger variety of training programs for middle management, trade professionals and professional personnel than for upper management, non-professionals, and apprentices.

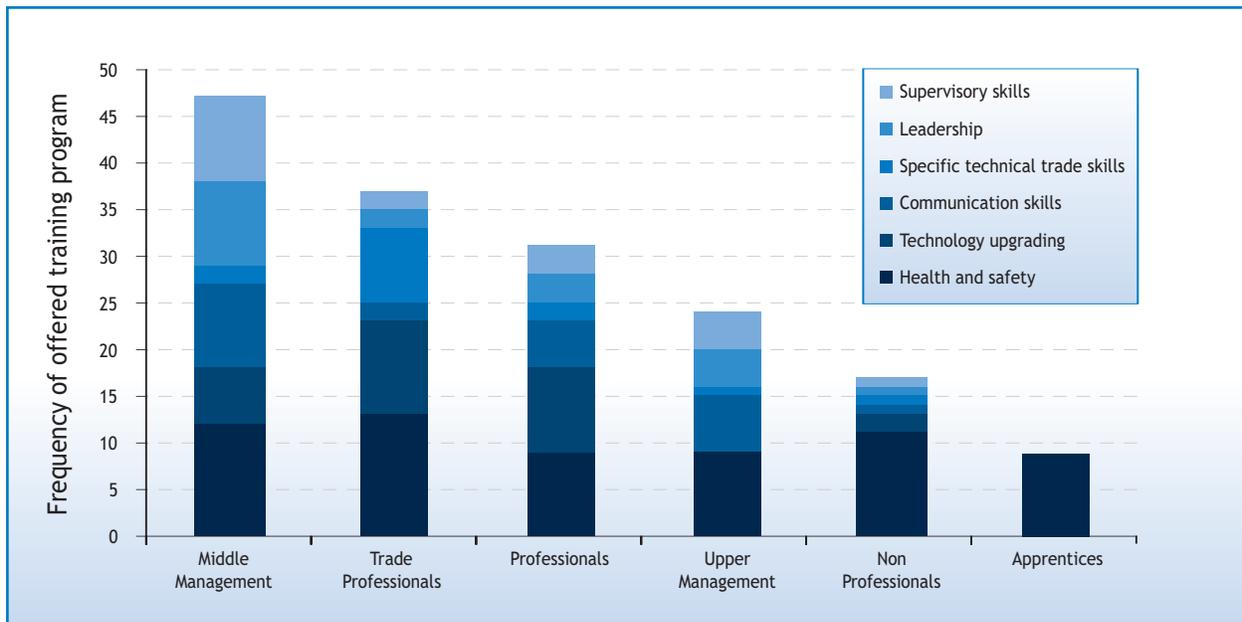


Figure 8. Types of training programs offered to different employee categories

The majority of companies prefer on-site training for apprentices, non professionals, and trade professionals. Over 50% of companies prefer on-site training for professionals and middle management, and less than 50% of companies prefer on-site training for upper management (Figure 9).

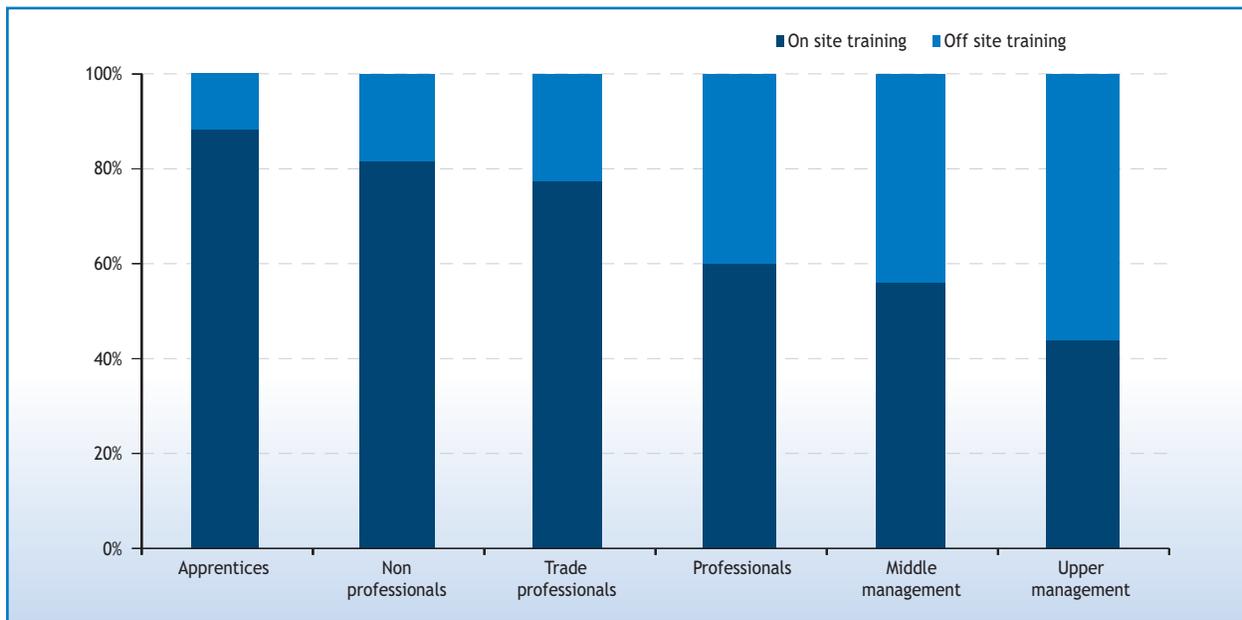


Figure 9. Preference of on-site versus off-site training for different categories of employees

Over 60% of companies prefer training programs that would be no more than two days in length. Approximately one quarter of companies stated it would depend on the training needs (Figure 10).

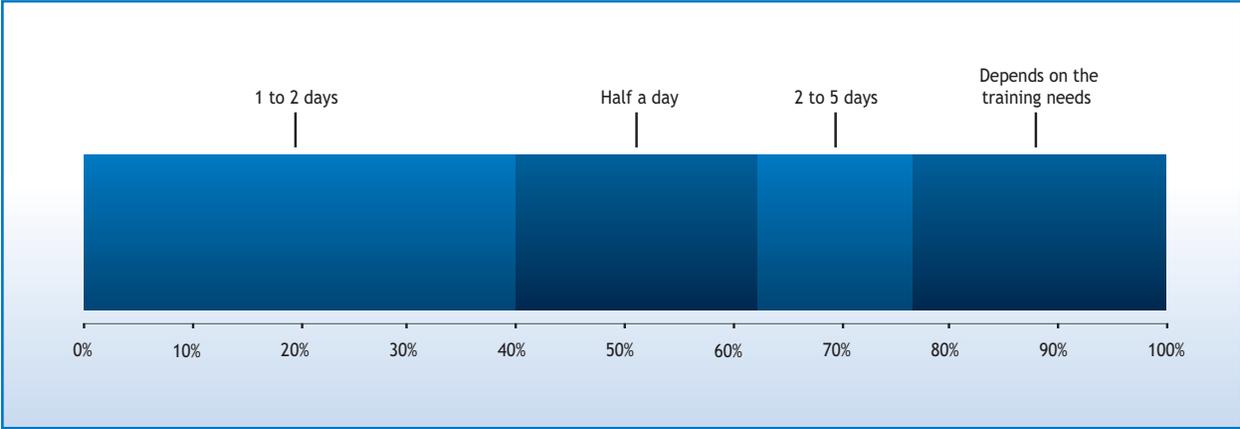


Figure 10. Preferred number of training days for a program

The majority of companies prefer to train their employees during work days (Figure 11).

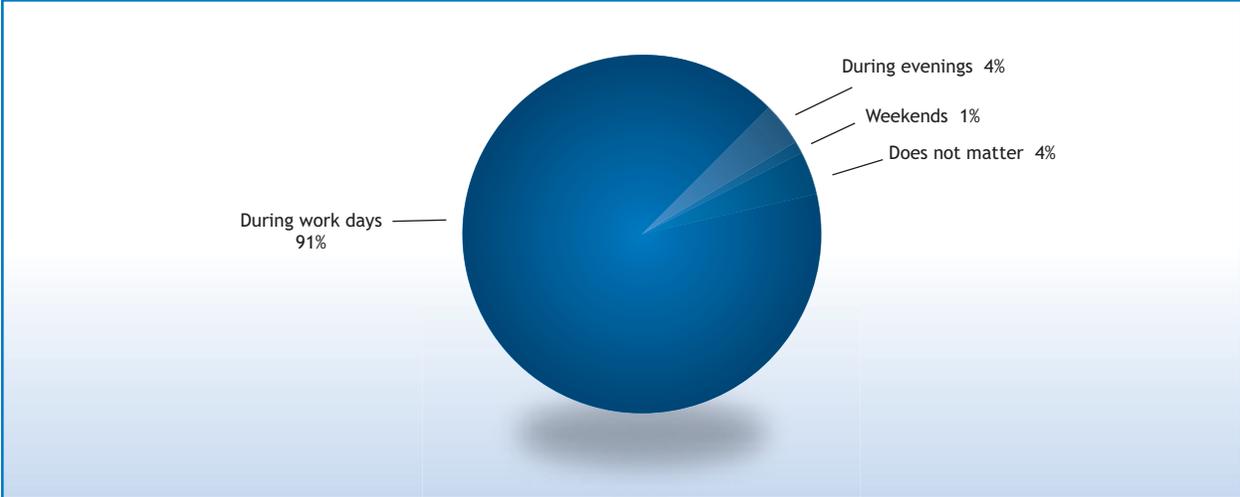


Figure 11. Training day preference

Figure 12 indicates that almost all companies utilize their own staff to train other employees. Close to 80% utilize private training consultants for their training needs.

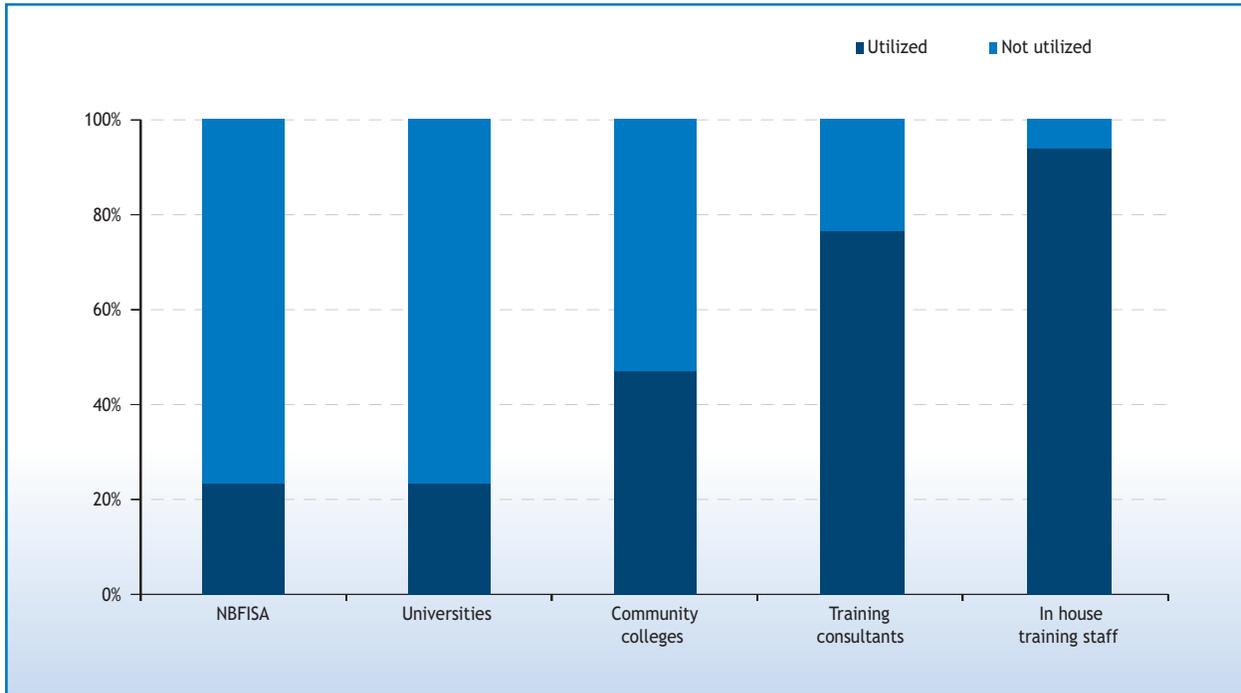


Figure 12. Organizations used to provide training

Sixty percent of respondents said they were not satisfied with the training available in the province of New Brunswick (Figure 13).

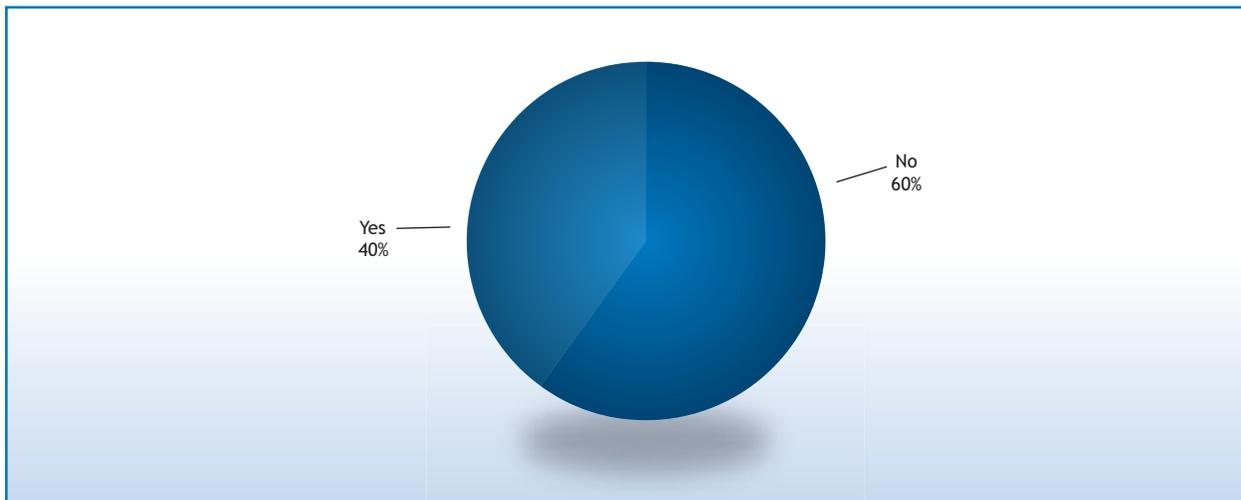


Figure 13. Satisfaction with available training in New Brunswick

The reasons for not being satisfied with the training available in the province include the following:

- *Training providers must be close to workforce; however, this is not often the case. Travel & lodging expenses add significant costs to training if either the trainers or students have to travel long distances*
- *No funding available to develop and improve the skills, knowledge and capabilities of forest contractors and their employees. Crown land Licensees and Sub-licensees cannot absorb the cost to train these people*
- *Most government programs are only for unemployed people*
- *The training offered needs to be better aligned with future workforce needs, not just the gaps today*
- *Provincial technical skills training providers typically do not provide for a follow-up at the worksite after the training has been completed to verify that the new skills are applied correctly*

The majority of companies agree that province wide training standards are important (Figure 14).

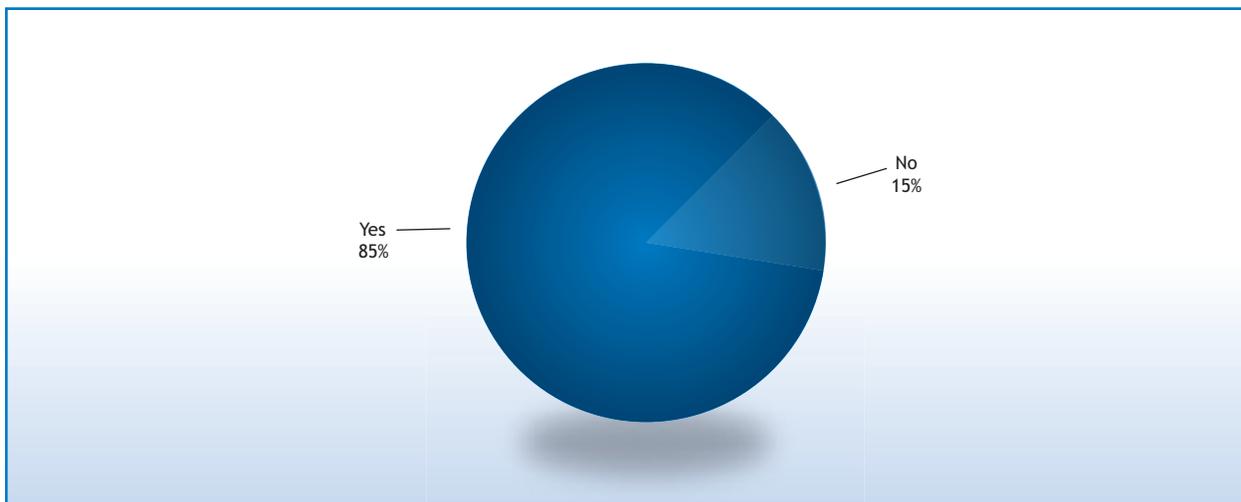


Figure 14. Province wide training standards are important

The respondents were asked to list the type of training that requires standardization. The answers included the following:

- *Woodlands standardization training would improve the ease of labour movement from one employer to another - specifically with respect to the SFI training criteria*
- *Health and safety regulations*
- *Safety training for woods workers*
- *Skills training for cutters, cable skidder operators, truck drivers, heavy equipment operators, mechanics, and welders*
- *All forest operations*
- *Labour laws*
- *Basic safety training for manufacturing*
- *Mill and forest safety,*
- *First aid*

The overwhelmingly majority of companies consider training to have a positive effect on business operations (Figure 15).

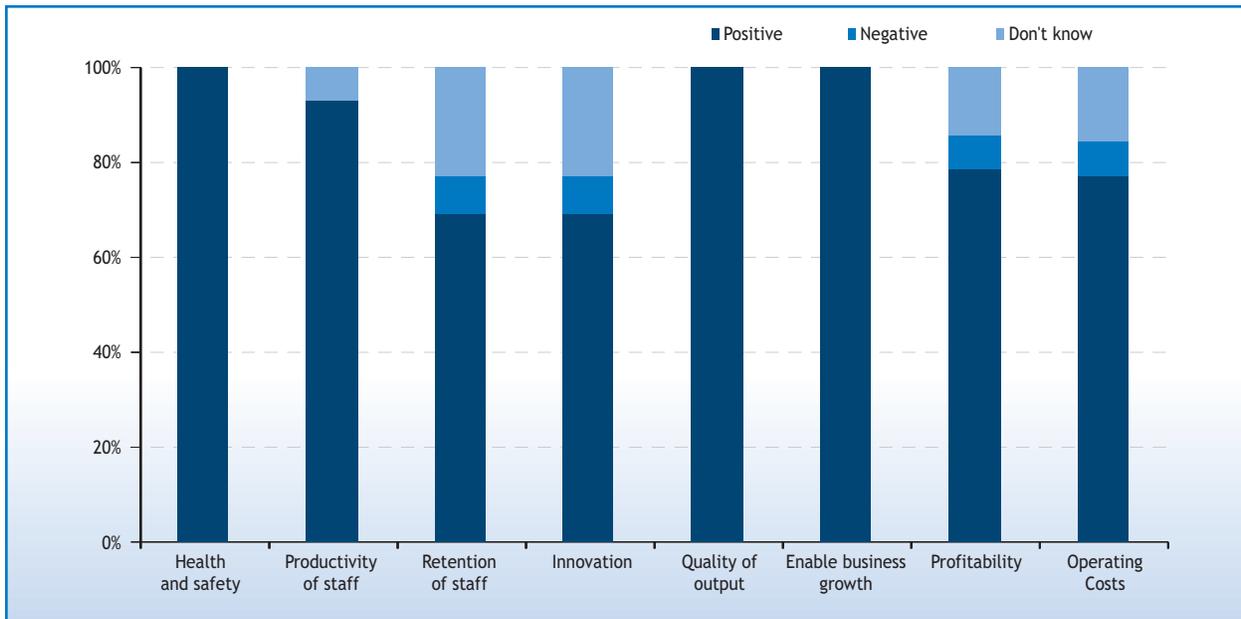


Figure 15. Effects of training on business operations

The following figure (Figure 16) represents the importance of certain factors when considering whether or not to offer training to employees. All of the factors have some importance to most companies, but cost of program, skill shortages, availability of suitable courses, financial aid for training, and availability of suitable candidates are the most important. Although not measured, program quality as a factor was mentioned by companies.

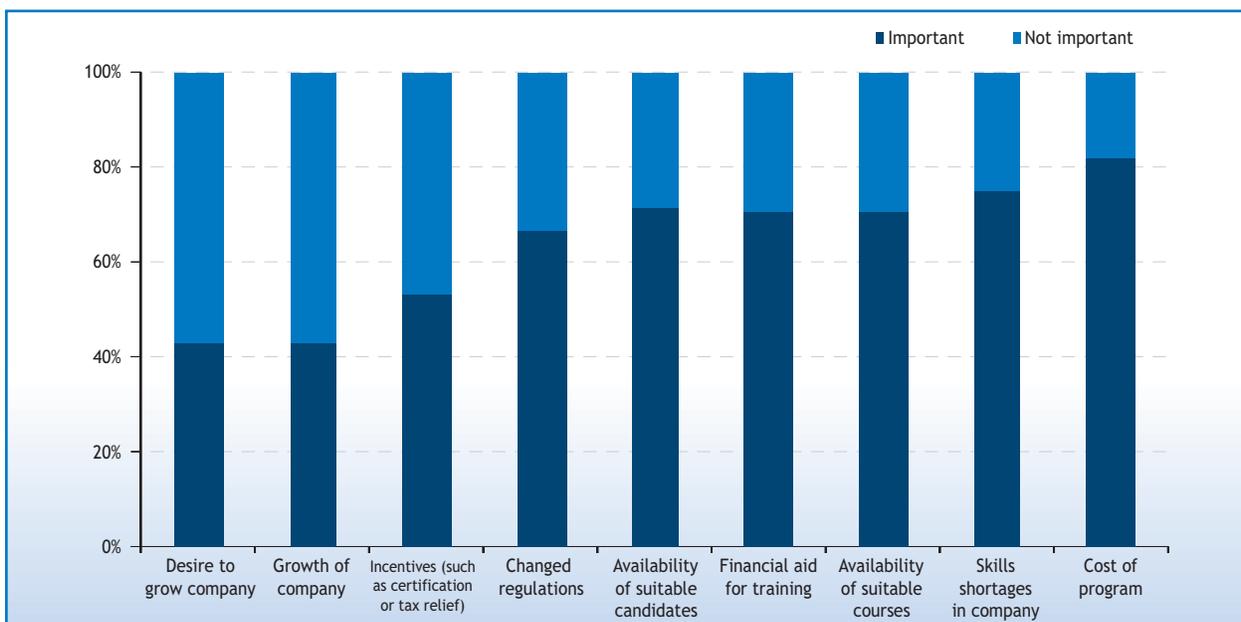


Figure 16. Factors affecting decisions to offer training or not

Almost 90% of companies were deterred from offering training when programs were too costly. Approximately 70% of companies felt that the red tape involved with organizing training and the lack of financial support from outside sources were additional deterrents to training (Figure 17).

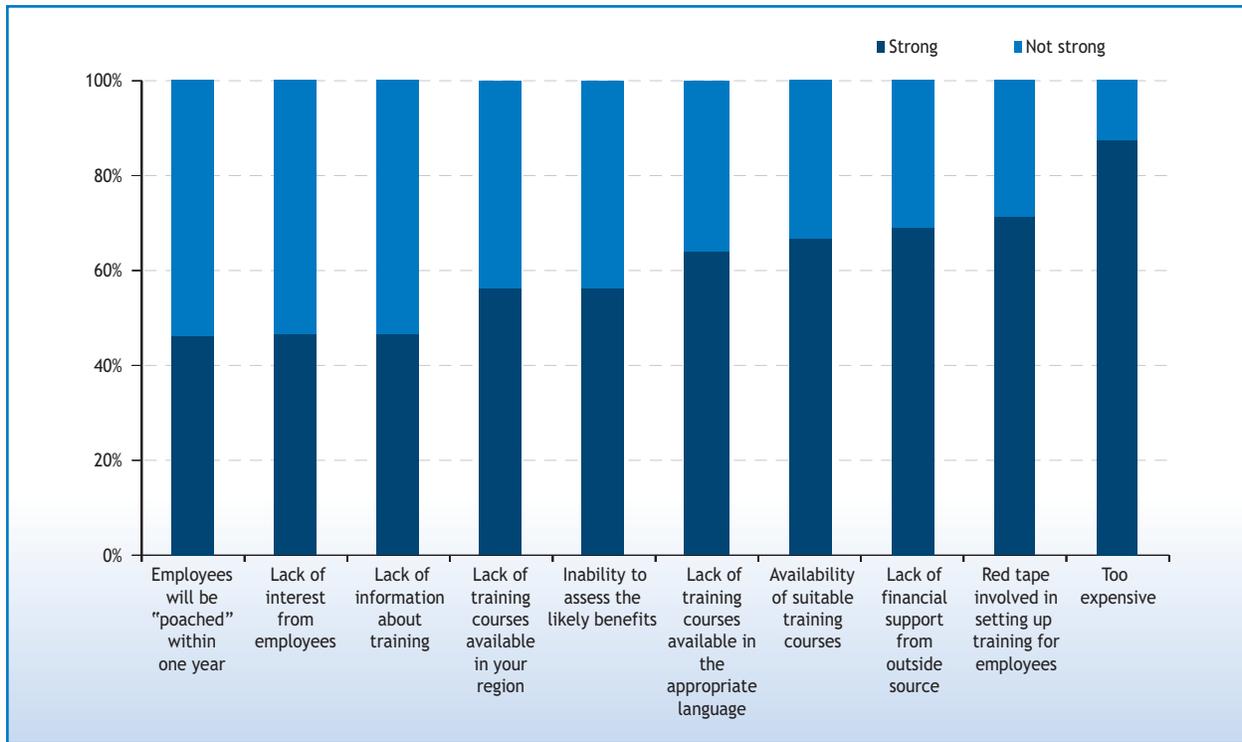


Figure 17. Deterrents to training

Slightly more than 50% of companies have conducted a long-term training needs assessment for the next one to two years. When looking at a two to five year outlook, fewer than 30% of companies have conducted such a study, and approximately 5% for a five to ten year horizon (Figure 18).

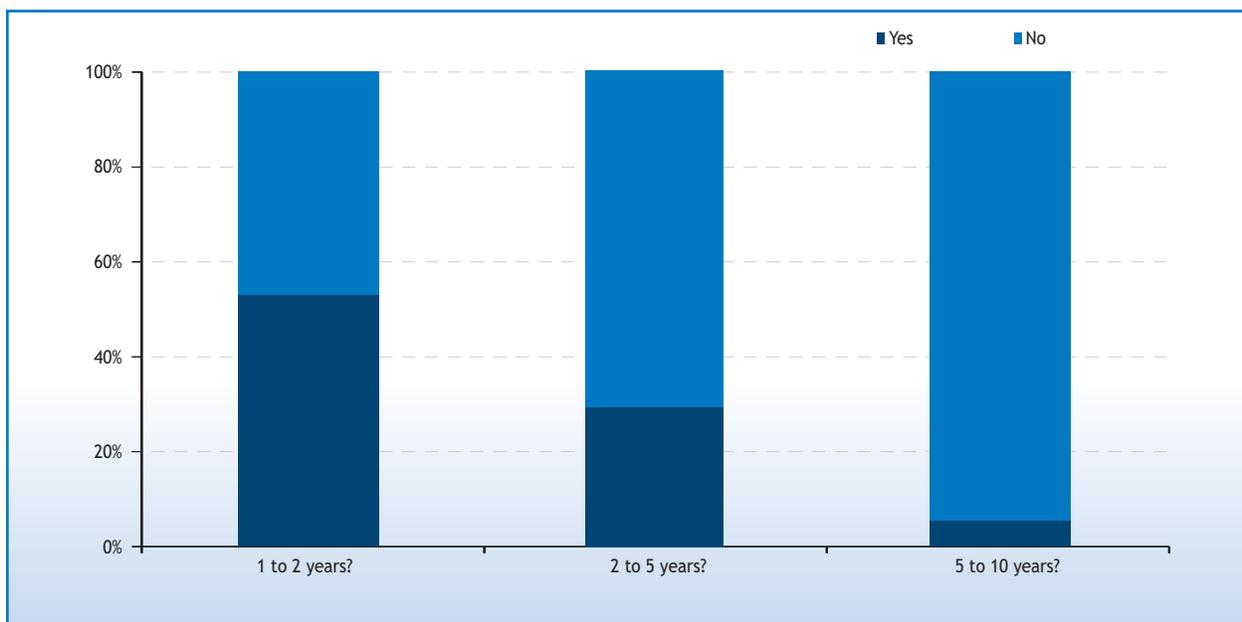


Figure 18. Companies with a training plan

Figure 19 shows that almost 80% of companies are predicting a lack of human resources in the next two to five years. Approximately half of the companies are predicting changing the products they produce.

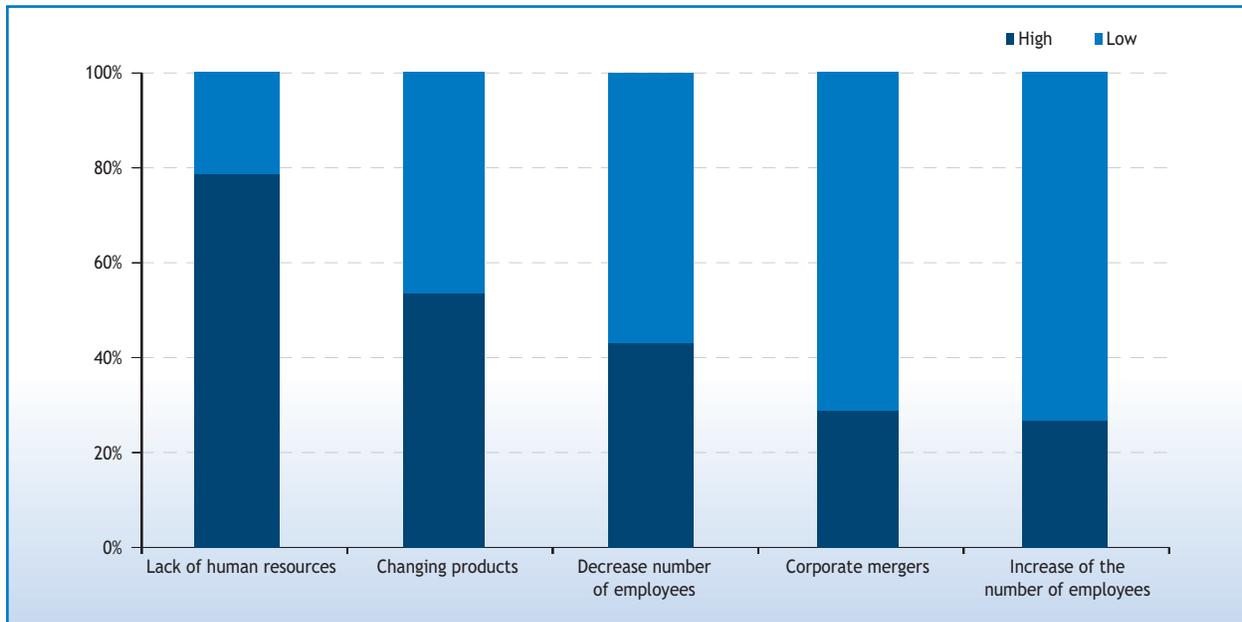


Figure 19. Likelihood of changes in the next 5 years

4.2. Interview Results

Interviews were conducted to receive information on training gaps, personal perspectives on the current situation, partnership opportunities, and investment priorities.

4.2.1 Forest Industry Perspectives

Several key issues have been identified within the present training system utilized by industry (Figure 20). These issues can be grouped into six categories:

- *Funding opportunities*
- *Training programs*
- *Program delivery and quality*
- *Workforce recruitment efforts*
- *Training coordination*
- *Infrastructure*

“Skilled people are the key to the ongoing competitiveness of New Brunswick's forest products sector. Productivity improvement, adapting new technology and ongoing innovation all depend on our most vital resource - our people.”

Bob Pinette, J.D. Irving

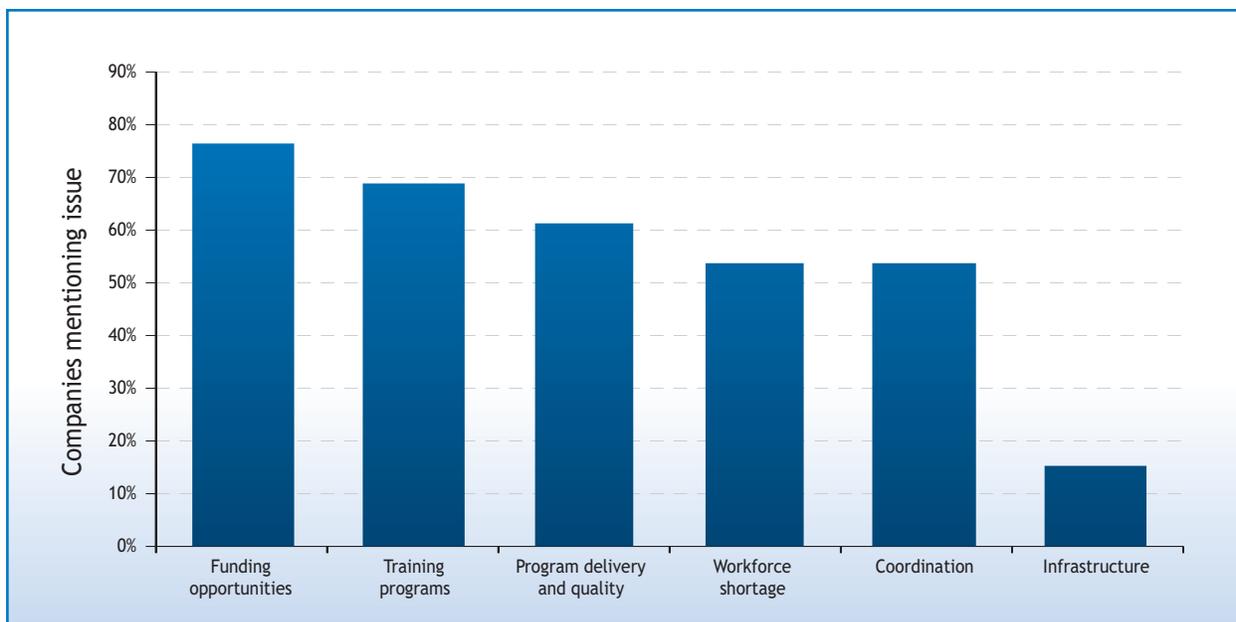


Figure 20. Key issues identified within the New Brunswick training system

4.2.1.1 Funding Opportunities

Although several important and necessary funding programs exist for training within the province, they do not always satisfy the needs of forest companies.

- *The majority of interviewed companies expressed frustration with the lack of programs that would enable industry to invest training money in employees. They would like to see less rigid programs that encourage investment in training while increasing competency levels of highly valued employees.*
- *There is a provincial program for apprenticeships which requires the participation of three partners: the apprentice, the employer, and government. Although this program encourages employers to hire apprentices, there are no financial incentives to do so and most companies feel they can't incur the extra cost.*
- *Many companies feel industry could use direct assistance in developing training programs, and bringing highly skilled instructors to the province to help produce world class workers.*

"Oftentimes programs aimed at businesses are inflexible and force businesses to adapt their strategies and plans in order to fit program criteria, not always in the best interest of the business."

Anne Hébert, Conseil Économique du Nouveau-Brunswick

"To get the biggest bang for your buck, you have to identify talent in your people and invest in those talents".

Ray Leblanc, Acadian Timber

- Many companies expressed the need for help in developing a human resource training plan for the company.
- Many companies expressed the desire to invest in productivity consultants but cannot due to the lack of available funds.
- Many training programs like SFI and ISO are mandatory and do help the province to better compete on the global market. However, these programs are very costly and reduce the ability of companies to invest in other business related activities.

4.2.1.2 Training Programs

Many training programs are not easily accessible. This means the programs, and /or the trainers either exist outside the province, are rare, or expensive. These courses need to be either developed or made more accessible. Following is a list of such programs mentioned by interviewed companies:

- *Front end loader training*
- *Quality control training*
- *Programmable logistic controller training*
- *Filer training*
- *Saw maintenance training*
- *Productivity and efficiency training such as Kaizan, Six Sigma and Lean Manufacturing Systems: These programs could be implemented to help improve the total business process and achieve financial savings. Having easy access to such programs and integrating these systems in the province will be necessary if forest companies want to remain competitive.*
- *The Mechanized Forest Operations (MFO) program is a very important program for forest companies. Most believe it should be expanded, but is presently inaccessible because of the high cost for the program. In the spring of 2006, it was offered at a special price of \$2,600. Very few companies showed interest in the program at this price due to the economic climate of the last few months. In fact, many companies were temporarily shut down or working at reduced shifts at one time or another during 2006. Industry believes this program should be continued in the years to come. It will become increasingly important to replace many Mechanized Forest Operators who have moved west.*

There also seems to be gaps in the current trucker training programs offered in the province. Most companies feel that the current truck and transport training businesses do not fully meet the specific need and requirements of the forest sector. Specifically, two areas of training seem to be lacking.

- *Off-road defensive driver training: Truckers that work for the forest industry are typically trained by generic truck driver courses. These courses qualify drivers to operate on paved surfaces like highways and city streets; however, they do not address the serious safety and environmental concerns of driving and operating on woods roads.*
- *Forestry truck and self loader trailer training: There also have been requests for specific training for forestry truck and self loader trailer operators. The loading and unloading of forest products is not a skill covered by current generic trucker training and the tie-down of forest products does not seem to be an element of training for highway transport drivers.*

“We need a province-wide trucker training program specific to forest operations. Basic highway trucker training is not enough. There are a lot of choices for truckers on specific equipment and factors that affect efficiency. They must better understand the type of equipment they are operating and how their driving habits affect safety and environmental issues.”

Drew English, Weyerhaeuser

Other training programs mentioned by companies are the following:

- *Business training for contractors: Most forest operations today are conducted by private contractors. They have the responsibility of providing fiber to mills and therefore are essential to the competitiveness and survival of the New Brunswick forest industry. Most contractors have little or no business training. This issue should be addressed because it is in the best interest of the industry that the contractor sector remains healthy.*
- *Safety training standardization for forest operations: Several problems are identified with safety training for forest operations. These include: inconsistent training, repetitive or ineffective training, lack of application of the information, and a high number of accidents relating to lack of effective training and inconsistent implementation of safe practices.*

4.2.1.3 Program Delivery and Quality

In addition to the absence or challenges of accessing specific programs, issues on program delivery and quality have been raised.

- *Location and length of certain programs: Most companies have raised the issue that there is simply no time, money, or enough staff to send essential employees away to get training on a specific subject or technology. Short, on-site, or local training, in modular form addressing specific skills is preferred.*
- *Techniques used to train employees: Trainers must use the best known techniques for adult learning that engage students and involve hands-on training.*
- *Keeping training programs current with industry needs: Most companies feel they do not receive the most current training available and need to look outside the province to fulfill its needs.*
- *Lack of follow up by instructors: Training is geared to change behavior, increase efficiency and improve the bottom line of individual companies, but without sufficient follow up, most employees return to the same patterns. To protect the initial investment in training, there needs to be a follow up coaching system implemented throughout the province. Coaching is a confidential, highly personalized, fixed on results learning process that enables employees to develop their talent and increase efficiency. Very few training programs or companies utilize coaches to increase the potential of its employees. Nevertheless, coaching seems to be highly valued with those that utilize it.*

“We have a need to access short, local training programs answering specific needs. We do not have the time, staff or money to send personnel away for training.”

Brent Wilkins, M.L. Wilkins & Son

“Coaches are essential for a follow up on training, we must get the best there is. Needs are individual and are measured against best practices like a playbook. Even Tiger Woods has a coach and is video taped.”

Dave Maxwell, J.D. Irving, Limited

4.2.1.4 Work Force Shortage and Recruitment Effort

Not surprisingly, work force shortage issues have been mentioned on many occasions as being a major challenge in the present and near future. Experts are in agreement that we are moving toward an employees' market and moving away from an employers' market. There will be fierce competition to attract employees.

- *Typically all trades will be hit with a shortage, but those most mentioned were the following:*
 - o *Industrial mechanics*
 - o *Pipe-fitters*
 - o *Industrial technicians and electricians*
 - o *Truck drivers*
 - o *Heavy equipment operator*
 - o *Loggers*
 - o *Chemical technologists*
 - o *Thinning saw operators*
- *The rural nature of the industry is another challenge. Forest industry companies generally rely on a rural workforce; however, studies show that young, potential workers are moving towards urban areas.*
- *Trades are not currently valued in the education system: An urgent need to bring back trades education in the schools has been expressed by forestry companies. Students who wish to choose trades as a career should be encouraged and valued.*
- *Many companies feel the forest worker occupation should be better promoted and valued. This would increase interest in such a career and help in finding qualified workers.*
- *Image problem with the forest industry: A clear symptom of this is the ever decreasing enrollment numbers in most forestry schools - leading to decrease in the number of foresters, forest technicians, trades people, and other professionals entering the in the forest industry system.*
- *As the survey indicated, most companies do not have a succession plan to prepare for the large number of retirees coming in the next 5 to 10 years (Figure 18). This will create challenges as workers retire. There is a particular problem in the pulp and paper industry as the average age is higher, and training is particularly complex, long, and expensive.*

"Given our location (Juniper), recruiting and retaining employees with the necessary skills/qualifications is certainly a major challenge. I wonder what, if anything, government can do to assist in ensuring we can develop and retain a top notch work force".

Don Corey, Fraser Papers

"If government wants to raise the level of education of its young people, it must ensure that they receive a high school diploma. By bringing back an industrial academic program, fewer students will leave high schools and a higher percentage of them will complete their high school diploma. This will increase the number of people ready for the work force."

Line C. Simon, Groupe Savoie

“The government and industry as a whole must do a better job in promoting the forest worker occupation. It must be seen as a career where they can progress. They must be able to see that they can grow within the career. We are not going to attract and retain good people unless we recognize and value the profession.”

Drew English, Weyerhaeuser

4.2.1.5 Coordination

Training in the forestry sector is very individualized and mostly done on an as needed basis which creates inefficiencies. Companies have indicated several issues with this situation.

- *The red tape associated with finding and organizing training sessions for employees: Several steps are necessary in order to get training done: namely, identifying gaps, pinpointing programs, developing content, pinpointing who and when, minimizing costs, choosing the language, getting notices out, delivering the course, getting an assessment of the course and verifying if the material taught is applied correctly. Unless the company has sufficient staff, or the luxury of having personnel to take on this task, it becomes very taxing and often training is simply brushed aside.*
- *Lack of a central database: Information and help is very scattered and it is not always easy for companies to find and determine which person(s) to contact.*
- *On a number of occasions interviewed companies have indicated they would like to improve communication and collaboration with training institutions. An open and continuous dialogue between the two parties would be seen as an advantage from the industry standpoint.*

“Generally individual company operations in NB don't have the scale or resources to coordinate comprehensive training for forest workers and truckers. The training is really fragmented and haphazard. There needs to be a provincial effort with a central tracking system for training.”

Drew English, Weyerhaeuser

“We would like to be able to contact only one person, one contact, one stop shopping. We don't know who to call, where to call or for what program. And we usually have to call a number of people before having our questions answered. Information is not always easy to access. We need coordination to help with training.”

Sam Porter, Fraser Papers

4.2.1.6 Infrastructure

The right infrastructure is critical for efficient training and increasing competency levels of the workforce. It is very important to ensure intelligent investment in infrastructure.

- *In order to meet current and future needs of the industry and workforce, infrastructure investment should be directed in such a way as to increase contact among students, institutions, and industry.*
- *Many students completing a program do not always have the opportunity to experience, first-hand, the industry climate and culture during their studies which is an important part of the learning process.*

4.2.2 Training Institutions

Meetings were also conducted with training and educational institutions throughout the province. Specifically, there were meetings with the UNB Faculty of Forestry, the Faculté de foresterie de l'Université de Moncton, the Maritime College of Forest Technology and also with officials from the New Brunswick Community College and le Collège communautaire du Nouveau-Brunswick.

- *Both universities are very concerned with the low enrollment numbers in forestry science and forestry engineering programs. They have also expressed the willingness and urgency for a collaborative effort combining government, industry, forestry associations, and universities to create a marketing strategy in an effort to increase interest in forestry.*
- *Both English and French community colleges are presently looking at their operations and trying to find ways to increase efficiency and better meet the needs of industry. All parties interviewed have expressed an interest for increased collaboration with industry and would like its input for creating an efficient working relationship. There are also important business opportunities to take advantage of by creating a multitude of short modules meeting specific needs.*
- *Training institutions seem to have difficulty in maintaining certain expensive pieces of equipment as well as keeping them current due to the ever changing pace of technology and the high costs.*

“It will be very interesting to see what infrastructure is being contemplated and, as with any public investment, it must be ensured we get value for money. If investments are going to add more seats to the schools, we would see that as a positive, but we want to ensure that the additions are being made in the right programs.”

Dave Plant, Canadian Manufacturers and Exporters – Telegraph Journal, August 30th 2006

4.2.3 Aboriginal Training

There is presently an Aboriginal Skills and Employment Partnership (ASEP) in New Brunswick. ASEP is an not-for-profit Aboriginal company whose mandate is to foster, develop, support, train, employ, and champion New Brunswick's Aboriginal Peoples inclusion within the forestry sector.

As an opportunity-driven program, ASEP operates on a collaborative partnership basis. Partners include the private sector, Aboriginal groups, educational institutions, and the provincial government. Other key partners include sector councils, labour, and other federal departments and agencies.

The training-to-employment plan is expected to provide for continuous skills development and the potential for advancement within the project. Over time, ASEP should help large employers meet labour and skills shortages by tapping into the potential of the Aboriginal workforce.

5. Key Observations

This project helped identify important factors and elements that affect training and human resource development in the forest industry of New Brunswick. The following are key observations that should be highlighted:

- *Sixty percent of respondents said they were not satisfied with the training available in New Brunswick.*
- *Slightly more than half of the respondents have a training plan for the next two years, less than 30% for two to five years, and about 5% for five to ten years.*
- *According to the interviewed companies, funding programs for training are too restrictive and does not promote business development.*
- *Most companies expressed a desire in receiving help to develop a human resource training plan and to invest in productivity consultants.*
- *The three main deterrents to training are: high costs, the red tape involved with training, and the lack of financial support.*
- *Most companies (over 60%) would like to see short training modules (two days or less) to meet specific needs.*
- *Almost 80% of companies forecast a lack of human resource in the next five years. It is anticipated that industrial mechanics, industrial electricians and pipe fitters will be in the shortest supply.*
- *All issues for training fell under the following six categories: funding, training programs, program delivery and quality, work force recruitment, coordination, and infrastructure.*
- *In general, a sufficient follow-up process after employees have received training does not exist.*
- *Red tape involved with training and the lack of a central database seem to create hurdles for companies that wish to invest in training.*
- *An increased dialogue among industry, government and training institutions could help improve the training system in the province.*
- *Institutions have indicated some challenges associated with keeping equipment and training current due to the pace of change and high cost.*

6. Action Plan Proposal

The following presents the main study findings and possible solutions to address the current situation. A summary of the proposed solutions with priorities is found in Appendix 2.

6.1. Main Findings

6.1.1 Government programs

Although very important government programs exist to help unemployed persons develop skills and find work, the study reveals that programs that provide funding for training does not necessarily make for better business and does not fulfill the needs of the forest industry. Initiatives encouraging companies to invest training money in employees in order to upgrade skills and to increase productivity and efficiency would be very positive.

6.1.2 Training Programs

Specific gaps have been identified between industry needs and the training programs being offered in the provincial system. Most urgently, the following gaps need to be rectified:

- *Off-road defensive driver training*
- *Forestry truck and self loader trailer*
- *Business training for contractors*
- *Safety training standardization for forest operations*

The availability of these programs could improve the state of the industry.

6.1.3 Program Delivery and Quality

Quality training and delivery is the essence of a high quality workforce. It is extremely important that best practices be utilized. Training programs should be cutting edge and delivery mechanisms should be adapted to the target audience.

The main issues with regard to program delivery and quality are the following:

- *Location and length of specific programs*
- *Techniques used to train employees*
- *Keeping training current*
- *Lack of follow-up*

6.1.4 Workforce Shortage and Recruitment Effort

A good proportion of the workforce is moving towards retirement and young people are either moving to Western Canada or towards urban areas, making it increasingly difficult for the forest industry to attract young workers. The forest industry must position itself to attract the best candidates possible to ensure a competent workforce for the future. This is important as entry level competency skills are increasing.

6.1.5 The Image Factor

The image of the forest industry has, and will continue, to have a direct impact on recruitment efforts. Misperceptions on environmental performance, technology, job opportunities, and the future of the industry are creating big challenges in recruiting bright, young talent. There is an urgency to attract and keep the brightest and best employees. Forest management is a complex, scientific subject that requires a diverse skill set. Forests are the province's greatest and most complex resource, and the lack of interest in the forest industry is creating challenges for recruitment and seriously putting forestry academic institutions in jeopardy.

6.1.6 Training Coordination

The current findings of this report indicate that training is very individualized and provided on an as-needed basis. This creates inefficiencies, such as increased red tape, scattered information, and missed opportunities for collaboration among government, training institutions, and the industry. A permanent liaison would be very beneficial in creating an information source for all parties involved. There is also a need for a province-wide, regional, and company specific coordination for training.

6.1.7 Infrastructure

Although, traditional school settings are very important, training institutions have indicated a number of challenges associated with keeping equipment and training current due to the pace of change and high capital cost. Industry leaders and institutions have also indicated that increased contact among students, institutions, and industry would be beneficial.

6.2 Courses of Action

1st - Introduce initiatives that increases productivity of the forest industry

2nd - Adopt strategies to increase access to and quality of training programs

3rd - Implement initiatives to alleviate the looming workforce shortage

4th - Promote the forest industry to create a positive image

5th - Encourage appropriate infrastructure investments

1st - Introduce initiatives that increases productivity of the forest industry

When businesses invest in training, the goal should be to upgrade skills, improve productivity and increase efficiency in order to improve the bottom line. With this in mind, proposed solutions include the following:

I. New Governmental Training Programs

Create new provincial governmental programs for companies wishing to invest in training of its employees to attain specific upgrading skills, increased productivity, and increased efficiency. These programs should integrate sufficient flexibility in the guidelines to access the funding. This will encourage companies to invest in programs that make its business more efficient.

II. Tax Breaks for Training

People and companies respond to incentives. Tax incentives for training would encourage individual companies to increase investment in training.

2nd - Adopt strategies to increase access to and quality of training programs

I. Implement best practices for training

Program delivery and quality is critical. It is recommended that best practices for training be developed and implemented. These best practices should include:

- *Programming in modular form exportable to different sites*
- *Hands on training*
- *Training trainers*
- *Integrate coaching and performance management in training programs*

II. New training programs

There is a need for creation of new training programs. Specifically:

- *Off-road defensive driving*
- *Forestry truck and self loader trailer*
- *Forest contractor business development training*

III. Forest Safety Standardization

It is recommended that the New Brunswick forest industry adopt a forest safety standard training program for forest operations. This will save lives, lower workers compensation premium and reduce costs in the long run. It will also increase contractor mobility, enable the industry to set up a provincial tracking system, and create the building blocks to increase value of the forest worker. NBFISA could be the central body that manages and coordinates training and the tracking system.

IV. Reduced Cost of the Mechanized Forest Operations Program

The high cost of the MFO program is a deterrent to this important training. It is recommended that this program be at the same price as other training programs. This will increase access and, in turn, the number of qualified mechanized forest operators.

V. Creation of a Training Advisory Council

It is recommended that a training advisory council be created. This committee would be represented by industry members, training institutions, and government - meeting a minimum of once a year, but preferably twice a year. This committee would advise training institutions on the needs of industry and could also develop strategies to improve training.

3rd - Implement initiatives to alleviate the looming workforce shortage

I. Increased Skill Requirements for Forest Workers

Increased skill requirements to work in forests can be seen as an advantage or a challenge. The challenging part of the equation is that this will require more training. But, the advantages far outweigh the challenges. By increasing the skill requirements, more value will be given to the forest worker. Furthermore, productivity, efficiency, and lifestyle should improve. This could increase interest in such a career. It is therefore recommended that the forest industry increase minimal competency levels for entry of the forest worker profession.

II. Incentives for Apprenticeships

Very few companies hire apprentices (or co-op students). Most companies agree that such programs are valuable but the financial burden is too great. Good apprenticeship programs have several advantages such as knowledge transfer, ensuring a continuing and competent work force and, most of all, increasing the likelihood of keeping young people within the New Brunswick workforce. It is therefore recommended that government create financial incentives for companies who participate in apprenticeships and co-op programs.

III. Help with Human Resource Planning

Many companies do not have a succession plan to replace the retiring workforce. It is recommended that a strategy be developed to help companies hire professional consultants to create such a plan.

IV. Industrial Academic Program in High Schools

With a shortage of trade professionals looming, it is suggested that government bring back the industrial academic program to all high schools of the province. This should increase the likelihood of students being exposed to the trades sector and increase the value of the sector.

V. Increase Female Recruitment

A large portion of the potential workforce is female, but the forest industry has not sufficiently tapped into this resource. It is suggested that industry implement a marketing strategy that targets females to increase to the likelihood of women entering into the industry.

4th - Promote the forest industry to create a positive image

I. Undertake activities and initiatives to educate the public, especially students, on the forest industry.

It is recommended that different initiatives be undertaken to educate students, teachers and parents on forest and the forest industry. This would create an opportunity for varying forestry stakeholders to come together and collaborate on creating a comprehensive plan. The following initiatives are to be considered:

- *Intensive promotional campaign,*
- *Increase forestry curriculum in schools,*
- *Continue to support and encourage extracurricular forestry related activities, such as Envirothon, Teachers Tours and the Woodlinks program.*

5th - Encourage appropriate infrastructure investments

I. Industrial Training Centers

It is recommended that infrastructure investment be directed at establishing training centers on key industrial sites such as pulp and paper mills, or modern sawmills. This will provide many advantages:

- *Relevant training*
- *Better familiarization and integration to the industrial sector*
- *Facilitate hands-on and practical training*
- *Training will remain current*
- *Increase likelihood of retaining students as employees*
- *Decrease investment of training schools on equipment*
- *Continuous information sharing*

7. Conclusion

The New Brunswick forest industry's business environment is going through difficult economic times. Globalization and increasing environmental and product standards are putting more pressure on individual companies to increase productivity and efficiency. Furthermore, a looming workforce shortage due to attrition, dwindling demographics, and a lack of interest in the forest sector by young people will make it difficult to attract and retain qualified and talented people as many sectors will be competing for a smaller labour force.

The province of New Brunswick is served by a mixture of public and private institutions. This existing educational infrastructure is very good as a variety of training opportunities are present in the province. Nevertheless, changes in the workforce, as well as industry, have mandated the need for an investigation to find new ways to create easier access to training, new training programs, and new delivery mechanisms all while increasing communications and partnerships between Industry, government and educational institutions.

The new global economy has put the forest industry in a position where it has to be very innovative in finding ways to increase productivity and efficiency of its overall operations in order to reduce costs and increase profit margins. Not doing so will put the industry in jeopardy. The convergence of knowledge and technology has allowed other countries to become part of the global supply chain and consumers have many options when they consider investing their money.

Being uncompetitive would not only shut down individual companies but also affect many communities and families as the forest industry is the economic engine for many rural communities and the province as a whole. As globalization occurs, New Brunswick needs to position itself by investing in its people to create world class businesses and leaders within the province. This will increase productivity and encourage innovation and investment in New Brunswick, in turn creating better opportunities for families and people of the province.

There are a lot of great things about forestry in New Brunswick. The province not only boasts one of the most progressive forest management systems in the world, but it has world class forestry faculties and schools which should help industry remain competitive and current. The forest industry has the willingness, people and educational institutions to become the best in the world. To help attain that goal, this report recommends an action plan with 5 courses of action.

There is a unique opportunity for collaboration by stakeholders to revolutionize the training system in this province and to positively affect the forest industry and other sectors. People are the single most important resource of all industry sectors. Increasing training opportunities for the people of New Brunswick will not only further increase the competency level of the workforce, but should also increase productivity, efficiency, and overall competitiveness of the industry.

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Appendix 1

Important Training and educational institutions for the forest industry situated in New Brunswick

Academy of Learning - Saint John [NACC]
245 Union Street
Saint John NB E2L 1B2 Canada

Atlantic Baptist University
P.O. Box 6004
Moncton NB E1C 9L7 Canada

Atlantic Business College [NACC]
1115 Regent Street
Fredericton NB E3B 3Z2 Canada

Atlantic Business College [NACC]
100 Cameron Street
Moncton NB E1C 5Y6 Canada

Atlantic Transport Training Academy Ltd.
60 George Street
Apohaqui NB E5P 3N7 Canada

BayTech Institute of Trades and Technology Corp.
245 English Drive
Moncton NB E1E 3Y8 Canada

Bourque Industrial Contract Manufacturing
Division
50 Industrial Drive
Saint John NB E2R 1A4 Canada

CAD/CAM Systems Ltd.
77 Westmorland St., Suite 110
Fredericton NB E3B 6Z3 Canada

Carpenters Training Centre of NB Inc.
P.O. Box 2181
Saint John NB E2L 3V1 Canada

Centre d'Apprentissage Professionnel en
Technologie
264, rue Notre Dame
Kedgwick NB E8B 1H9
CompuCollege in NB [NACC]
850 Prospect Street
Fredericton NB E3B 9M5 Canada

Computer Training Institute, The
120 MacDonald Street
Saint John NB E2J 1M5 Canada

Dynamic Quality Control Services Ltd.
45 A Bridge Street
Sackville NB E4L 3N8 Canada

Elite Driver Training Services Ltd.
245, Route 555
Bedell NB E7M 4M7 Canada

ESRI CANADA
Fredericton Office
Suite 104
231 Regent Street
Fredericton, NB E3B 4Y2
Four Best Management inc.
924, chemin 2e Sault
St-Joseph-de-Madawaska NB E7B 2L4 Canada

G.W. Driver Training
720 Coverdale Road
Riverview NB E1B 3L8 Canada

Gallop Associates
131 Kee Road
Keswick Ridge NB E6L 1V3 Canada

Horizon College/Academy of Learning
P.O. Box 1225 Stn A
334 Queen St., 1st Floor
Fredericton NB E3B 5C8 Canada

Labourers' Training Institute of New Brunswick Inc.
21 Gravenstein Street
New Maryland NB E3C 1B7 Canada

Institut de Formation en Santé et Sécurité au
Travail
C.P. 152
50, rue Dubé
Edmundston NB E3V 3K8 Canada

International Union of Painters and Allied Trades
Locals 1151 & 1936
1216 Sand Cove Road, Unit 23
Saint John NB E2M 5V8 Canada

Canadian Red Cross Society, The (Atlantic Zone)
318 Maple Street
Fredericton NB E3A 3R4 Canada

Lansbridge University
415 King Street, 2nd Floor
Fredericton NB E3B 1E5 Canada

New Brunswick Safety Council Inc.
440 Wilsey Road, Suite 204
Fredericton NB E3B 7G5 Canada

Local 2166 IBEW Training Institute Inc.
681 Union Street
Fredericton NB E3A 3N8 Canada

Maritime College of Forest Technology
1350 Regent Street
Fredericton NB E3C 2G6 Canada

Miramichi Career College Inc.
290 Dalton Street
P.O. Box 142
Miramichi NB E1N 3A5 Canada

Mount Allison University [AUCC]
Sackville NB, E4L 1E4 Canada

New Brunswick Community College [ACCC]
6 Arran Street
Campellton NB E3N 1K4 Canada

New Brunswick Forest Industries Safety
Association
PO Box 621
Miramichi, NB E1V 3T7
Northumberland Driving Institute Inc.
11387 Highway 11
Miramichi NB E1N 5G2 Canada

Operating Engineers Training Institute of New
Brunswick Inc.
P.O. Box 955
(341 King William Road)
Saint John NB E2L 4E3 Canada

Oulton College [NACC]
55 Lutz Street
Moncton NB E1C 0L2 Canada

Ready Arc Welding (2000)
600 Grandview Avenue
Saint John NB E2J 4M9 Canada

St. John Ambulance (New Brunswick Council) Inc.
[NACC]
P.O. Box 3599, Station B
(200 Miles Street)
Fredericton NB E3A 5J8 Canada

UA/MCA Joint Apprenticeship & Training
Committee of NB Inc.
P.O. Box 498
Miramichi NB E1V 3M6 Canada

Union of New Brunswick Indians Training Institute
(UNBI)
370 Wilsey Road
Fredericton NB E3B 6E9 Canada

Université de Moncton [AUCC][CLC]
165, avenue Massey
Moncton NB E1A 3E9 Canada

University of New Brunswick [AUCC][CVU][CLC]
P.O. Box 4400
Fredericton NB E3B 5A3 Canada

Versatile Training Solutions
P.O. Box 4591
Sussex NB E4E 5L8 Canada

Appendix 2

Summary of Recommendations and Priority Table

Course of action	Recommendation	Priority
Introduce initiatives that increases productivity of the forest industry	<p>New government programs for training</p> <p>It is recommended that there be creation of new programs for specific upgrading skills, increased productivity and efficiency. These programs should encourage companies to seek out and increase access to productivity consultant professionals</p>	High
Introduce initiatives that increases productivity of the forest industry	<p>Tax breaks for training</p> <p>Provide tax incentives or breaks for companies that invest in training.</p>	High
Adopt strategies to increase access to and quality of training programs	<p>Implement best practices for training</p> <p>Program delivery and quality is critical. It is recommended that best practices for training be developed and implemented. These best practices should include:</p> <ul style="list-style-type: none"> • <i>Programming in modular form exportable to different sites</i> • <i>Hands on training</i> • <i>Training trainers</i> • <i>Integrate coaching and performance management in training programs</i> 	High
Adopt strategies to increase access to and quality of training programs	<p>New training programs</p> <p>There is a need for creation of new training programs. Specifically:</p> <ul style="list-style-type: none"> • <i>Off-road defensive driving</i> • <i>Forestry truck and self loader trailer</i> • <i>Forest contractor business development training</i> 	Normal
Adopt strategies to increase access to and quality of training programs	<p>Forest safety standardization</p> <p>It is recommended that the New Brunswick forest industry adopt a forest safety standard training program for forest operations with a central body that would manage and coordinate training and a tracking system</p>	Normal

Course of action	Recommendation	Priority
Adopt strategies to increase access to and quality of training programs	Reduced cost of Mechanized Forest Operations program It is recommended that the MFO program be kept at the reduced cost of \$2600 in order to improve access, and in turn, the number of qualified trained operators.	Normal
Adopt strategies to increase access to and quality of training programs	Creation of a training advisory council It is recommended that a training advisory council be created This council should be represented by industry members, training institutions, and government.	Normal
Implement initiatives to alleviate the looming workforce shortage	Increased skill requirements for forest workers It is recommended that the forest industry increase minimal competency levels for entry of the forest worker.	High
Implement initiatives to alleviate the looming workforce shortage	Incentives for apprenticeships It is recommended that government create financial incentives for companies that participate in apprenticeships and co-op programs.	Normal
Implement initiatives to alleviate the looming workforce shortage	Help with human resource planning It is recommended that government put forward a plan with available funding to help companies hire professional consultants to create human resource succession plan.	Normal
Implement initiatives to alleviate the looming workforce shortage	Industrial academic program in high schools It is suggested that government bring back the industrial academic program in all high schools of the province.	Normal
Implement initiatives to alleviate the looming workforce shortage	Increase female recruitment It is suggested that industry implement a marketing strategy that targets females to increase the likelihood of women entering the forest industry.	Normal

Course of action	Recommendation	Priority
Promote the forest industry to create a positive image	<p>Undertake activities and initiatives to educate the public, especially students, on the forest industry.</p> <p>It is recommended that different initiatives be undertaken to educate students, teachers and parents on forest and the forest industry. The following initiatives are to be considered:</p> <ul style="list-style-type: none"> • <i>Intensive promotional campaign</i> • <i>Increase forestry curriculum in schools</i> • <i>Continue to support and encourage extracurricular forestry related activities, such as Envirothon, Teachers Tours and the Woodlinks program</i> 	High
Encourage appropriate infrastructure investments	<p>Creation of training centers within industry</p> <p>It is recommended that infrastructure investment be directed at the creation of training centers on key industrial sites such as pulp and paper mills, or modern sawmills.</p>	Normal