BEYOND CHICKEN LITTLE

UNDERSTANDING THE NEED FOR MEASURED REFORMS TO ALBERTA'S SYSTEM FOR SKILLS TRAINING











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EXECUTIVE SUMMARY

When thinking about Alberta's labour market recently, it's hard not to be reminded of the children's fable about Chicken Little. No matter who you talk to – employers, government, or the media – everybody seems to be saying the sky is falling.

In this paper we argue that while the current Alberta labour market is tight, there is no reason to over-react. The sky is not falling.

The truth is that there are some sectors that are experiencing problems – but it's not universal. Even in the most effected sectors like construction, the problems are likely to be temporary.

What's troubling to us is that some employers and employers groups are using the current concerns over the tight labour market to advance suggestions for reform that we think are not in the public interest – and which would not even be considered in normal economic times.

For example, some employers want to water down apprenticeship ratios (which we think would undermine training, safety and job quality). Some are also calling for dramatic increases in the use of temporary foreign workers and measures that would interfere with the internal operations of unions. The problem is that all of these have more to do with advancing the narrow agendas of non-union employers than actually addressing the skills needs of individual Albertans and Alberta employers.

This is all not to say that change is not needed. In fact, we would argue that reform to our system of skills training is long overdue. But rather than abandoning the ship, we need to fix the leaks.

That's why we're pleased that the government is under taking its current review and considering a ten-year framework for labour market development. We've never really had a seamless workforce development plan in Alberta, so developing one is a big step in the right direction.

But before we can discuss solutions, we need to be sure we have correctly identified the problems.

We believe that the government and most employers have misdiagnosed the problem – that the symptoms in many cases are being mistaken for the disease.

The common wisdom is that there's a shortage of skilled tradespeople because the trades have an "image problem"... that there is somehow a problem attracting young people into the trades. But, according to our research, the real problem is not getting young people into the trades so much as keeping them there.

What the evidence shows is that thousands of people are going into the trades – but less than 60% are completing their apprenticeships. Given the current high demand for skilled workers, we think this high 'dropout' rate is unacceptable and a clear indication that the system is failing both workers and the wider economy.

We are convinced that the current employer-driven approach to training creates underlying structural weakness in Alberta's apprenticeship program and other areas of occupational training.

In addition to our concerns about high 'non-completion' rates in the trades, we argue that employers in Alberta and the rest of the country are simply not meeting acceptable standards when it comes to spending on workplace training and skills upgrading. In this area, we currently rank last among developed nations.

Individual workers are too often left on their own to acquire the skills employers demand. The financial burden placed on individuals has created labour rigidities and skill supply problems.

The good news is that there are solutions to the underlying weaknesses of our labour force development system. Some are mechanisms that have been used in other jurisdictions and proven to work. Others are sound suggestions based upon a clear analysis of the problem.

These solutions focus on recognizing that we all — as a society — benefit from a better trained workforce. They focus on shifting the responsibility for training from employers and easing the burdens and barriers faced by individuals.

Our solutions also take advantage of the energy, interest and financial resources of the labour movement. Labour has a proven track record in training that must be integrated into any effective overarching labour force development system.

We firmly believe a cooperative approach that joins the interests and energies of government, labour, employers, educators and individual workers can eliminate future skills and labour force crises.

RECOMMENDATIONS

Recommendation Number One:

The Alberta government should develop and implement a long-term plan to manage the pace of development in the oil sands. Development permits should be spaced out to avoid placing unreasonable demands upon the construction workforce. This would also be a huge benefit to Fort McMurray and its citizens — who are suffering from an infrastructure deficit, a housing crisis and quality-of-life issues because of the unrestrained development of the oil sands.

Recommendation Number Two:

The government should dovetail its plans for infrastructure spending with overall labour force demand. Specifically, it should try to launch more public projects when the construction industry is not working at maximum capacity in the private sector. To accommodate this kind of "counter boom" spending, the government should establish a Heritage-style infrastructure fund which could fund much needed public infrastructure projects—with a focus on spending during periods of lower private sector construction activity.

Executive Summary 1

Recommendation Number Three:

The Alberta Government should focus its recruiting strategies on programs which would support and encourage current Canadian journeypersons in compulsory certification trades from other provinces to take their Red Seal certification. This could include brief refresher courses – organized by the Alberta government – to prepare workers for exams. The program could also offer transportation allowances to encourage migration to Alberta, and provide direct links between the newly certified workers and Alberta employers.

This would require the Alberta government to develop a core of technical educators who could be sent to other jurisdictions to prepare journeypersons for writing the appropriate Red Seal exams. Such courses would need to be skill specific and run in brief, small-group intensive sessions.

Recommendation Number Four:

The Alberta government should not endorse the use of temporary foreign workers, nor assist or encourage corporations in the use of temporary foreign workers unless those workers can be guaranteed access to all the rights and protections enjoyed by Canadian workers. Temporary foreign workers who are deemed necessary should be guaranteed full market wages and benefits, have landed immigrant rights, and should be required to pass appropriate Red Seal examinations.

Recommendation Number Five:

The AFL recommends that the Alberta government immediately permit all construction craft unions to establish Training Trust Funds (TTFs) entitled to indenture apprentices. The government should seriously consider creating a program to support and encourage the establishment of these TTFs.

Recommendation Number Six:

That the government create a standing industrial sector skills training committee to recruit and integrate the active involvement of the industrial employers and unions into an overarching skills training program in Alberta.

Recommendation Number Seven:

The Alberta government should make it a priority to work toward harmonization of provincial training programs, standards and trade definitions across Canada.

Recommendation Number Eight:

The AFL recommends that the Alberta government protect existing trades from division into smaller sub-trades. New skill or craft definitions should not be used to splinter or divide existing trades.

Recommendation Number Nine:

The AFL urges the government to make all trade certifications compulsory.

Recommendation Number Ten:

That Alberta focus its labour force development policy on improving access to and delivery of training and retraining to the existing under-utilized Canadian workforce rather than on promoting massive increases in immigration.

Recommendation Number Eleven:

The AFL recommends that the Alberta government pursue a policy of minimizing the cost of post-secondary education to students at all institutions. Further, the government should consider at least temporarily reducing tuition to zero in the case of specific occupations like nursing that are in extreme demand.

Recommendation Number Twelve:

The AFL recommends that Alberta institute a 1% payroll training tax to be paid into an Occupational Training and Retraining Fund in the province. This fund could be used to assist in the formation of Training Trust Funds, and to increase seats or capacity at post-secondary intuitions. It could be used to subsidize training and education fees to encourage workers to pursue needed occupational skills. It could finance workforce surveys to provide stakeholders with reliable forecasts of current and future skill needs in all economic sectors. It could be used to subsidize workplace skills upgrading and retraining initiatives.

Recommendation Number Thirteen:

That a Provincial Training Council be created to administer this fund. This Council should be made up of equal numbers of government representatives and leaders from employer and employee organizations from the various economic sectors. The objective of the council would be to ensure that Alberta's workers have the skills currently needed in the workplace, and to ensure that future skill needs are properly predicted and addressed in the present.

Recommendation Number Fourteen:

The AFL recommends that voluntary provincial sectorial training groups like the Canadian Steel Trade & Employment Congress (CSTEC) that bring together employers and labour be supported and encouraged.

Recommendation Number Fifteen:

That the government create a comprehensive retraining and economic benefit program for workers laid off due to plant closures and the decline of employment in sunset industries. Such a program should be funded through a Occupational Training and Retraining Fund (as proposed in Recommendation Number Twelve)

Recommendation Number Sixteen:

The AFL recommends that government develop a budgetary mechanism to immediately address shortfalls in training capacity for critical skill shortages. By providing timely financial support to post-secondary institutions, the government would encourage a more efficient and responsive labour force training system.

Recommendation Number Seventeen:

The government should do a thorough investigation of the working terms and conditions of occupations where skills shortages have been identified with a view to making regulatory changes that would create better work environments.

Recommendation Number Eighteen:

The AFL suggests that rather than training off the reserve, government and employers should consider bringing the pre-apprenticeship and initial apprenticeship training to aboriginal youth in their own communities. The courses and materials may also have to be reworked with the specific audience in mind. As well, a serious effort has to be made to eliminate racism from Alberta work sites.

Another way to incorporate Aboriginal youth into the workforce is to bring the work to them – in other words to begin a planned program of economic development on Alberta's reserves.

Recommendation Number Nineteen:

The AFL recommends that the Alberta government prepare a basic information package for employers to advise them on steps to take to retain their older workers — with particular attention paid to mechanisms like phased-in retirement, redesigned work, better pensions and access to training and upgrading.

2 EXECUTIVE SUMMARY

BEYOND CHICKEN LITTLE

The government of Alberta has recently made labour force development a priority. This is clearly the result of the booming energy sector and the consequent increased demand for labour.

This has happened in Alberta before. With any resourcedriven economy, there are inevitably boom-bust cycles. These are a direct consequence of a market driven economy that cycles between shortage and glut; overinvestment and underinvestment.

The government is trying to address Alberta's immediate and predicted labour supply problems by creating a labour force development policy which would provide a template for government programs and actions over the next ten years.

The Alberta Federation of Labour applauds the intent of this policy development initiative. Alberta badly needs a policy framework that will address all labour force problems. For example, the province needs to dispassionately evaluate all of its post-secondary education and training programs and policies. Government also needs to be prepared to act decisively on issues like aboriginal training and employment, the aging workforce, and the high demand for skilled construction and health care workers.

In order to create a workable and effective labour force development policy, it will be absolutely necessary for the government to listen seriously to all the stakeholders, not simply those whose opinions mesh with their own. Further, government must be prepared to reconsider many of its basic assumptions in the area of training and post-secondary education and labour force management. This cannot simply be a quick fix effort to address the current perceived skilled labour shortage – band-aid solutions will not do.

Interestingly, during the current high demand for constructions trades workers, the corporate sector has suddenly become advocates of intervention in the marketplace. When demand outstrips supply for any other product or service, the standard response is to let the market decide by pushing the price up. But when it is the price of labour for big energy and big construction firms, the rules change.

Some cynics might argue that helping employers keep wages down is one of the reasons government has taken an interest in developing a plan for labour force development. We sincerely hope that is not the case.

Regardless of the underlying causes of the government's new focus on labour force development policy, it is – from our perspective – a long-overdue development. For too long, labour force development has been a patchwork quilt of barely connecting provincial and federal programs and initiatives, of unworkable or dysfunctional laissez-faire training and education polices. It has also all too often been a story of outright disinterest and neglect.

The current policy consultation provides an unprecedented opportunity for the government and the various stakeholders in labour force development to draw up a policy that will address not only the immediate perceived skills shortage, but also the underlying weaknesses in the system. These weaknesses are always present – but become more apparent in times of economic stress.

This brief by the Alberta Federation of Labour will first examine the extent and causes of Alberta's labour force development problems, and then offer solutions to resolve both immediate and systemic problems.

PART ONE: THE THE CONSTRUCTION INDUSTRY

The general consensus from labour, employers and government is that the province is entering a period in which shortages in selected occupations are expected. The debate is about how serious the problem is, what has caused it, and what needs to be done about it.

There is no doubt, however, that the construction trades are at the center of the current storm of media coverage and that the construction labour force merits special attention in any labour force development policy.

SKILLS SHORTAGES IN THE CONSTRUCTION INDUSTRY

When it comes to Alberta's construction labour force, there are two related, but separate problems — one short-term and the other long-term. The first is a short-term skills shortage problem in certain areas. This problem is caused by the current energy boom that is overheating the Alberta economy. The second is a long-term skills supply problem. This longer term problem is partly the result of demographic changes in the Canadian population. But it is also structural because it is caused by inadequacies in our current system for training and employing skilled trade workers.

THE SHORT-TERM CONSTRUCTION CRISIS

The global appetite for oil is growing and seemingly inexhaustible. This appetite is driving oil prices up and triggering unprecedented investment in the Fort McMurray oil sands. The construction boom in Fort McMurray has also stimulated other economic growth in the province.

In most ways, the growth associated with Alberta's energy sector has been a boon for the province. But it has also created problems. The Alberta government has allowed essentially unrestrained development of oil sands properties. The lack

Table 1

INVENTORY OF MAJOR ALBERTA PROJECTS SUMMARY FEBRUARY 2006				
Sector	# Total Projects	Value of Projects (\$ millions)		
Agriculture & Related	23	538.5		
Chemicals & Petrochemicals	6	570.0		
Commercial/Retail	88	3,448.3		
Commercial/Retail & Residential	5	1,127.0		
Forestry & Related	6	920.0		
Infrastructure	272	12,084.8		
Institutional	199	9,769.4		
Manufacturing	3	59.0		
Mining	6	319.8		
Oil & Gas	18	4,983.3		
Oil Sands	46	72,959.0		
Other Industrial	23	509.7		
Pipelines	28	4,600.4		
Power	19	4,040.3		
Residential	78	1,636.9		
Tourism/Recreation	145	6,733.3		
Total	965	124,299.7		

of any government control over the pace of development has created a classic boom economy in the province.

The most current inventory of major projects in Alberta (see Table 1) lists 46 major oils sands projects with a projected value of \$73 billion. The inventory is produced by Alberta Economic Development, a department of the provincial government, to assist firms in identifying potential supply opportunities. It lists major projects in Alberta, valued at \$2 million or greater, that are either planned, under construction, or have recently been completed.

Although oil sands development constitutes less than 5% of the total number of all major construction projects it accounts for roughly 60% of the *total value* of all construction projects in the province.

In fact, it would be reasonable to say that without the oil sands projects, Alberta would not be facing a labour force 'crisis' at all. This is an important fact to note because the government could have simply regulated the development of the oils sands to schedule construction over a more reasonable time period – guaranteeing a longer-term and more stable demand for the various construction trades. This, in itself, could have helped resolve some of the longer term apprenticeship issues that will be dealt with later in this brief. And, it would certainly have alleviated the immediate labour force supply problems.

However, not only has the government neglected to put the brakes on our over-heated energy sector, they have actually intensified the problem with announcements of significant new capital spending projects. The March 22, 2006 budget earmarked \$13.3 billion for new roadway, bridge, hospital and other infrastructure construction over the next three years. As a result, the government will essentially be competing

with the private sector for people and resources. This can only exacerbate the skills shortage.

Although this new spending is badly needed as a consequence of government under-spending on infrastructure over the past decade, surely it could have been phased in or staggered to begin only after the completion of some of the current megaprojects in the oil sands. This would have the added advantage of providing some labour stability in the construction industry and would likely result in lower construction costs for the government (and better value for taxpayers).

Recommendation Number One:

The Alberta government should develop and implement a long-term plan to manage the pace of development in the oil sands. Development permits should be spaced out to avoid placing unreasonable demands upon the construction workforce. This would also be a huge benefit to Fort McMurray and its citizens – who are suffering from an infrastructure deficit, a housing crisis and quality-of-life issues because of the unrestrained development of the oil sands.

Table 2

Source: CWDFC

EMPLOYMENT REQUIREMENTS (000s) INDUSTRIAL PROJECTS VALUED \$50 MILLION AND OVER							
	2005	2006	2007	2008	2009	2005-2009	
Boilermakers	0.53	0.49	0.63	0.32	0.18	2.15	
Bricklayers	0.23	0.19	0.24	0.07	0.04	0.75	
Carpenters	1.18	1.25	1.41	2.00	0.62	6.47	
Electricians	1.60	2.03	2.33	2.57	1.07	9.61	
Insulators	0.94	1.05	1.44	1.15	0.58	5.16	
Ironworkers	1.40	1.77	1.78	1.76	0.62	7.33	
Labourers	1.60	1.62	1.95	2.65	0.64	8.46	
Millwrights	0.50	0.43	0.43	0.29	0.10	1.75	
Operating Engineers	1.45	1.61	1.94	2.09	0.78	7.86	
Plumbers/Pipefitters	2.70	3.46	3.82	3.95	1.78	15.70	
Sheet Metal Workers	0.99	1.12	1.38	1.54	0.42	5.44	
Welders	0.85	0.86	0.94	1.08	0.43	4.15	
Other Occupations	4.67	4.58	4.52	4.58	1.56	19.92	
Total	18.63	20.46	22.80	24.05	8.80	94.75	

The Construction Workforce Development Forecasting Committee also examines the predicted supply and demand within each of 15 different construction trades year by year from 2005 to 2009 for all construction within the province.

It is significant to note that even during the period of highest projected labour force demand (2005-07) the CWDFC only predicts actual shortages of skilled workers in four instances: boilermakers in 2005 and 2007; ironworkers in 2005 and crane operators in 2005. Note that three of these actual shortages are now in the past, leaving just a single predicted upcoming instance of skills shortage: boilermakers in the year 2007. And in this case there was a predicted shortage of one worker.

Recommendation Number Two:

The government should dovetail its plans for infrastructure spending with overall labour force demand. Specifically, it should try to launch more public projects when the construction industry is not working at maximum capacity in the private sector. To accommodate this kind of "counter boom" spending, the government should establish a Heritage-style infrastructure fund which could fund much needed public infrastructure projects—with a focus on spending during periods of lower private sector construction activity.

SKILLS SHORTAGE - A FLEETING PROBLEM

Although it is clear that the labour market in Alberta is tight, there are signs that the worst of the current skills shortages will have passed within a very few years.

At least, that is the likely end of our temporary critical construction skills supply problem according to the Alberta Construction Workforce Supply/Demand Forecast 2005-2009 May 2005 Summary Report.

The report is the work of the Alberta Construction Workforce Development Forecasting Committee; a construction employer-government partnership dedicated to providing reliable workforce demand projections to government and industry.

The Committee forecasts "...a sharp increase in the demand for trades over the next three years, followed by an easing in demand growth in 2006 and a decline in 2009. During the early part of the period, supply is not able to keep up with demand making it difficult to find workers in a number of trades. As supply catches up with demand this difficulty is alleviated in 2009."

Table 2, taken from the Forecast shows clearly that the overall demand for skilled construction workers in major projects (those over \$2 million in value) is expected to decline from a peak of 24,000 in 2008 to just 8,800 by 2009 – a decline in employment of over 15,000 workers in just one year.

In fact, the term skills shortage that is so commonly bandied about is misleading. According to Professor Sue Richardson from the Australian National Institute of Labour Studies, "The idea of a shortage seems straightforward: the supply of workers is not sufficient to meet the demand, at current rates of pay. But on closer inspection 'shortage' is a surprisingly slippery concept."

Both the U.S. Bureau of Labor Statistics and the Organization for Economic Development and Cooperation (OECD) conclude there is no universally applied definition of labour shortages. However, most Canadians would likely agree with the intuitive notion of a skills shortage – the situation where demand for a certain skill outstrips supply of that skill.

In other words, the current *extreme* construction "skills shortage" is in most cases not an actual shortage, but instead just a very tight labour market. And, even that tight labour market will likely be gone by 2009.

Table 3

	2005	2006	2007	2008	2009
Plumbers		•		·	•
Labour Force	5851	6320	6613	6769	6751
Employment Unemployment Rate (%)	5525 6.1	5980 5.4	6162 6.8	6170 8.8	6006 11.0
Steamfitters/Pipefitters	0.1	0.7		0.0	
Labour Force	3037	3557	3884	÷ 4088	4007
Employment	2923	3498	3655	3729	3462
Unemployment Rate (%)	3.8	1.7	5.9	8.8	13.6
Carpenters					
Labour Force	14,918	14,954	15,105	15,737	15,539
Employment Unemployment Rate (%)	13,432 10.0	13,598 9.1	13,853 8.3	14,831 7.0	13,851 10.9
onemployment hate (%)	10.0	9.1	0.3	7.0	10.9
Bricklayers					
Labour Force	1,033	1,000	1,023	927	937
Employment Unemployment Rate (%)	911 11.7	882 11.8	938 8.3	779 16.0	840 10.3
onemployment hate (%)	11.7	11.0	6.3	10.0	10.3
Insulators					
Labour Force	2,113	2,335	2,672	2,617	2,608
Employment Unemployment Rate (%)	1,901 10.0	2,106 9.8	2,469 7.6	2,164 17.3	2,167 16.9
		9.0	7.0	17.3	10.9
Electricians (Except Industrial & Po	wer System)				
Labour Force	8,839	9,249	9,506	9,714	9,579
Employment Unemployment Rate (%)	8,097 8.4	8,584 7.2	8,744 8.0	8,839 9.0	8,456 11.7
onemployment nate (%)	0.4	1.2	0.0	9.0	11.7
Industrial Electricians					
Labour Force	2,020	2,352	2,580	2,724	2,569
Employment Unemployment Rate (%)	1,901 5.9	2,283 2.9	2,415 6.4	2,467 9.4	2,145 16.5
onemployment nate (%)	5.8	۷.۶	0.4	5.4	10.5
Sheet Metal Workers					
Labour Force	2,177	2,356	2,600	2,825	2,617
Employment Unemployment Rate (%)	2,017 7.4	2,186 7.2	2,447 5.9	2,611 7.6	2,160 17.5
Onemployment Rate (%)	7.4	7.2	5.9	7.0	17.5
Boilermakers					
Labour Force	370	411	509	308	339
Employment Unemployment Rate (%)	389	382	509	190	309
Onemployment hate (%)	-5.3	7.0	-0.1	38.4	8.9
Ironworkers					
Labour Force	1,714	2,176	2,382	2,455	2,311
Employment Pate (%/)	1,720	2,165	2,152	2,117	1,863
Unemployment Rate (%)	-0.4	0.5	9.6	13.8	19.4
Welders					
Labour Force	2,862	3,089	3,171	3,269	3,109
Employment Rate (%)	2,599 9.2	2,877 6.9	2,865	2,941 10.0	2,633 15.3
Unemployment Rate (%)	9.2	0.9	9.6	10.0	15.3
Construction Millwrights					
Labour Force	684	726	730	629	597
Employment Pate (%/)	644 5.0	679	660 0.5	510	513
Unemployment Rate (%)	5.9	6.5	9.5	18.8	14.0
Heavy Equipment Operators	(Except Crane)				
Labour Force	6,552	6,668	6,729	6,764	6,508
Employment	5,751	6,189	6,251	6,235	5,795
Unemployment Rate (%)	12.2	7.2	7.1	7.8	10.9
Crane Operators					
Labour Force	1,278	1,486	1,757	1,946	1,793
Employment	1,292	1,445	1,731	1,821	1,474
Unemployment Rate (%)	-1.1	2.8	1.5	6.4	17.8
Construction Trades Helpers	& Labourers				
Labour Force	12,747	12,905	13,161	13,808	13,286
Employment	12,747	12,905	12,114	12,877	11,627
Unemployment Rate (%)	10.3	8.9	8.0	6.7	12.5

Construction Sector Council and CWSFC

However, even if the peak demand continues a bit longer, it is clear that this extreme demand is a temporary and exceptional. Given this, the kind of panicky "the sky is falling" reactions of some employers can best be described as overreaction.

From our perspective, some employers and employer associations have clearly been exaggerating the nature and extent of the crisis in order to advance other agendas (agendas which have little or nothing to do with labour shortages).

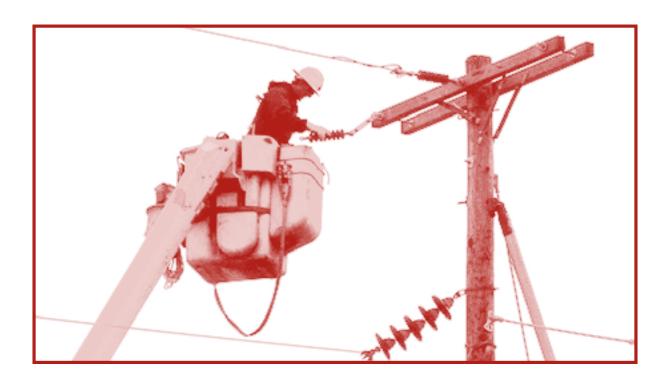
For instance, the Merit Contractors Association is trying to use the current supply/demand problem to propose self-serving changes to apprenticeship and immigration regulations that in normal times would never be seriously considered by most stakeholders in the construction sector. Under the guise of addressing short-term labour force shortages in certain specific trades, they propose curtailing worker access to EI, interfering in the internal processes of unions, reducing journeyperson to apprentice ratios on work sites, and to "fast track applications for temporary foreign workers where shortages in specific trade skills are widely recognized".

The problem is that the Merit Contractors are non-union employers. That means that their wage and benefit packages aren't generally quite as attractive as those provided by the unionized employers. So when their association is quoted in the media about shortages of skilled workers, the public and policy makers have to consider the source.

For instance, when the Merit Contractors Association claimed on March 21, 2006 that 72% of their members were unable to fill positions this winter compared to 66% during peak construction last June, did they mean there were simply no workers available? Isn't it more likely that there were simply no workers available at the wages, benefits and working conditions Merit contractors were willing to offer? A recent complaint by the Association that their members were being forced to raise wages substantially supports the latter explanation.

This is not to say that there is no problem. Clearly there is a very tight labour market. However, it is not so extreme as to warrant the widespread use of temporary foreign workers or justify the wholesale dismantling of regulations on required skills, apprenticeship and training.

For all of the ardent free-enterprise and free market proponents in business and government, the response ought to be straightforward. Let the market decide. If labour is in high demand, then the cost of labour (wages and benefits) should rise. Some projects will simply not be viable at higher labour costs and will have to be delayed until labour costs come down or until the projects can be refinanced to meet the new market conditions.



AN UNTAPPED POOL OF SKILLED CANADIAN WORKERS

Table 4

То	tal Labour Force	Red Seal Certified	Proportion of Red Sea
Sum Of Trades	1,153,370	184,700	16.0%
Cooks	185,470	9,588	5.2%
Hairstylists & Barbers	88,400	2,937	3.3%
Bakers	40,630	330	0.8%
Plumbers	36,300	15,871	43.7%
Steamfitters, Pipefitters & Sprinkler System Installers	20,120	6,116	30.4%
Gas Fitters	4,705	208	4.4%
Carpenters	125,440	23,926	19.1%
Cabinetmakers	21,895	201	0.9%
Bricklayers	16,065	2,896	18.0%
Concrete Finishers	9,460	60	0.6%
Tilesetters	6,060	0	0.0%
Plasterers, Drywall Installer and Finishers & Lathers	22,855	7	0.0%
Roofers & Shinglers	16,825	698	4.1%
Glaziers	7,795	512	6.6%
Insulators	7,570	114	1.5%
Painters & Decorators	41,620	2,377	5.7%
Floor Covering Installers	14,665	188	1.3%
Electricians (Except Industrial & Power System)	61,370	40,200	65.5%
Industrial Electricians	29,445	4,701	16.0%
Machinists and Machining & Tooling Inspectors	53,515	7,184	13.4%
Tool & Die Makers	17,910	83	0.5%
Sheet Metal Workers	19,410	8,649	44.6%
Boilermakers	4,035	1,599	39.6%
Structural Metal and Platework Fabricators & Fitters	10,635	6	0.1%
Ironworkers	9,985	92	0.9%
Welders and Related Machine Operators	101,535	14,804	14.6%
Construction Millwrights and Industrial Mechanics	66,960	14,001	20.9%
Heavy-Duty Equipment Mechanics	42,435	13,325	31.4%
Refrigeration & Air Conditioning Mechanics	14,535	4,837	33.3%
Motor Vehicle Body Repairers	33,635	8,218	24.4%
Oil & Solid Fuel Heating Mechanics	3,050	742	24.3%
Electric Appliance Servicers & Repairers	8,840	27	0.3%
Electrical Mechanics	6,720	32	0.5%
Motorcycle & Other Related Mechanics	3,480	171	4.9%

If government and employers are convinced that the tight labour market warrants bringing workers to Alberta from other jurisdictions, the truth is there is no need to look overseas for temporary foreign workers. That's because there is a large, currently untapped source of skilled workers right here in Canada.

Across the country today, there are literally thousands and thousands of skilled trades people – many of whom are either unemployed or under employed. But in order for these tradespeople to come to work in Alberta, they must either be certified here or pass a national certification exam administered under something called the Red Seal program.

The Red Seal Program was established to provide greater mobility across Canada for skilled workers. Through the program, apprentices who have completed their training and have been certified as journeypersons, are able to obtain a "Red Seal" endorsement on their Certificates of Qualification and Apprenticeship by successfully completing an Interprovincial Standards Examination.

The Red Seal program also encourages standardization of provincial and territorial apprenticeship training and certification programs. The 'Red Seal' allows qualified tradespeople to practice their trade in any province or territory in Canada where the trade is designated without having to write further examinations.

The problem is that among the tradespeople from other provinces who could potentially fill jobs here in Alberta only a small proportion have actually completed the necessary certification exams.

According to the Red Seal Secretariat, only 16% of skilled workers in other provinces have the Red Seal certification that would allow them to work in Alberta. Even in the high demand trades, the proportion of tradespeople from outside Alberta who have actually taken and passed Red Seal certification exams is very low. For example, only 43.7% of all plumbers in Canada currently have their Red Seal; 30.4% of pipefitters; 4.4% of gasfitters; 39.6% of boilermakers; 65.5% of electricians; and 14.6% of welders. Less than 1% of all ironworkers have their Red Seal!

These figures beg the question: why on earth are we spending time and money recruiting temporary workers in places like China and Venezuela when we could focus instead on certifying existing skilled workers in Canada so they could move freely across provincial boundaries?

Some might say that Canadian tradespeople from other provinces just don't want to come to Alberta. A number of non-union employers and employer groups, for example, have come up empty after running ads and holding job fairs in other parts of the country. But, to be blunt, we are skeptical of these efforts. Did the employers involved really make a sincere effort to contact tradespeople? Or were they just going through the motions in order to satisfy the requirements of the federal governments Foreign Temporary Worker Program (which stipulates that employers will only be granted permission to import temporary workers if they can demonstrate that there are no Canadian workers available to fill the jobs)?

Recent evidence would suggest that the latter is the case. In February this year, the northern Alberta local of the ironworkers union advertised across Canada for skilled workers willing to take jobs in Alberta. Within a week, the local received 700 replies which, in turn, led the union to identify about 500 individual Canadian ironworkers prepared to come to Alberta to work.

Leaving aside the obvious conclusion that skilled workers trust their union more than they do a non-union construction company; this huge response to the Ironworkers recruitment drive suggests that Alberta's skills shortage is not nearly as severe as it is being portrayed. There really is a pool of available skilled Canadian workers out there.

With that in mind – and following the example set by the Ironworkers – we believe the Alberta government could run a program designed to contact and encourage skilled workers in other provinces to take their Red Seal certification. Such a program would have the potential to create a significant pool of workers who could immediately fill positions in Alberta. This is especially true if the government were to offer to pay for the training upgrade.

The advantages of such a program to employers are obvious. Unlike temporary foreign workers, Canadian workers who have earned their Red Seal certification would not need painstaking checking of credentials. They would also not need language training, or expensive transportation. To top

things off, recruiting them would not require the participation and approval of the federal government.

Recommendation Number Three:

The Alberta Government should focus its recruiting strategies on programs which would support and encourage current Canadian journeypersons in compulsory certification trades from other provinces to take their Red Seal certification. This could include brief refresher courses – organized by the Alberta government – to prepare workers for exams. The program could also offer transportation allowances to encourage migration to Alberta, and provide direct links between the newly certified workers and Alberta employers.

This would require the Alberta government to develop a core of technical educators who could be sent to other jurisdictions to prepare journeypersons for writing the appropriate Red Seal exams. Such courses would need to be skill specific and run in brief, small-group intensive sessions.

OTHER CONCERNS ABOUT TEMPORARY FOREIGN WORKERS

Aside from the extra expense of transporting them to and from Canada, there are other problems associated with the use of temporary foreign workers.

First, there are the rights of the foreign workers themselves. The Alberta Federation of Labour has always been very clear about this. Temporary foreign workers must enjoy the same rights and privileges as Canadian workers. We cannot be in the business of bringing workers here to be exploited or treated as disposable commodities. Furthermore, we contend that all foreign workers should have the right to apply for citizenship or landed immigrant status. We shouldn't be in the business of renting workers, using them and discarding them.

We strongly support federal government regulations that specify that temporary foreign workers must be paid at the current market wage rate for their occupation. However, we have serious concerns about how these rules will be policed and enforced. Take, for example, the proposal from Canadian Natural Resources Limited (CNRL) to use foreign temporary workers to build a "tank farm" on its Horizon site near Fort McMurray. CNRL may indeed pay the going market rate for wages, but can they actually guarantee that the individual workers will actually get the wages coming to them?

Finally, foreign workers brought into Canada should face exactly the same tests as Canadian workers from other provinces face. That is, such workers should be required to pass the Red Seal exams. Any lesser test creates an unfair double standard for Canadian workers and potentially compromises worksite safety.

Recommendation Number Four:

The Alberta government should not endorse the use of temporary foreign workers, nor assist or encourage corporations in the use of temporary foreign workers unless those workers can be guaranteed access to all the rights and protections enjoyed by Canadian workers. Temporary foreign workers who are deemed necessary should be guaranteed full market wages and benefits, have landed immigrant rights, and should be required to pass appropriate Red Seal examinations.

THE LONG-TERM CONSTRUCTION SKILLS PROBLEM

Despite the fact that labour is adamantly opposed to the kind of crisis-driven quick fixes that some employers and employer associations are demanding, the fact remains that there are serious problems related to the long-term supply of skilled construction workers in Alberta. These are problems that need to be dealt with quickly and decisively. The good news is that there are solutions – solutions that will address the problem without sacrificing either the quality of training or the interests of individual workers.

THE FAILURE OF THE APPRENTICESHIP PROGRAM IN ALBERTA

In general, most observers would agree that Alberta has at least as good an apprenticeship system as any other province in the country. But being as good as everyone else is not the same as being the best you can be.

Much attention has been paid to the perceived failure of our apprenticeship system to attract people into careers in the trades. In fact, it can reasonably be argued that the Alberta government has put almost all of its eggs in the "public relations" basket – developing programs aimed at reducing the "stigma" attached to trades employment.

But we would argue that the main issue is not an "image problem" for careers in the trades. Instead, we believe that there is a fundamental flaw in the way skilled trades workers are trained that has actively discouraged young workers from both entering and successfully completing apprenticeships in the trades.

This is unfortunate, since virtually all stakeholders in the system agree that the apprenticeship model provides optimal training for skilled occupations. These programs, which normally run three to four years, divide the apprentice's learning experience between hands-on training on the worksite (80%) and classroom training (20%) normally at a technical institute or college.

A 2004 survey of employers by the Alberta Apprenticeship and Industry Training Board found that 96% of employers were satisfied with the skills of certified journeypersons; 87% were satisfied with apprenticeship technical training, and 96% were satisfied with the effectiveness of the–on-the-job training component.

Graduating apprentices were equally positive, with 96% indicating that, based on their experience with apprenticeship, they would still have chosen to apprentice.

Yet despite this apparent satisfaction from both employers and workers, the apprenticeship system has obviously not met the province's need for skilled workers. Since the entire purpose of the program is to ensure that a sufficient number of new skilled workers are available to replace retiring workers and to fill new positions arising from economic growth, this is a serious indictment

Superficially, the program seems to be working. The most recent annual report of the Alberta Apprenticeship and Industry Training Board (released November 15, 2005) indicates that there were 40,483 registered apprentices in Alberta as of December 31, 2004 – and that 23,746 new apprentices were registered in 2004. Alberta trains 20% of Canada's apprentices – far more than its share of the total workforce warrants.

These are impressive numbers. However, a deeper look at the system reveals some shocking inadequacies. First, according to the Board, only 75% of apprentices who successfully complete their first year of training will complete their apprenticeship within 2 years of their earliest possible completion date. That means that one in four fail to "graduate".

Alberta currently has the highest high school drop-out rate in Canada with one in four failing to graduate. This is considered a provincial scandal. Yet the same failure rate in the apprenticeship program is touted as indication of a well-run program.

But the problem is far worse than that. By sorting for only those apprentices who successfully complete their first year, the Board has obscured the fact that non-completion rates are actually much higher. The truth is that a scandalously huge number of apprentices never complete their first year!

The table on the next page (Table 5) was prepared from information available in the Apprenticeship Board's annual report. It simply compares the current (2004) journeyperson/occupational certificates issued in specific trades with the number of new apprentices registered in the appropriate intake year who all should, theoretically, be completing their apprenticeships in 2004. (Some apprenticeships take two years, although most are three or four year programs.)

Table 5

	Certificate Issued 2004	Intake Year	New Registers Intake Year	Completion Rate
Agricultural Equipment Technician	4	2000	34	11.8%
appliance Service Technician*	4	2001	29	13.8%
uto Body Technician*	64	2001	205	31.2%
automotive Service Technician	292	2000	614	47.6%
aker	26	2001	57	45.6%
Boilermaker*	26	2000	39	66.7%
Bricklayer	21	2001	41	51.2%
Cabinetmaker	42	2000	115	36.5%
Carpenter	243	2000	827	29.4%
Communication Technician	41	2000	167	24.6%
Concrete Finisher	7	2002	23	30.4%
Cook	149	2001	404	36.9%
Crane and Hoisting Equipment Operator*	232	2001	705	32.9%
Electrical Motor Systems Technician	4	2000	13	30.8%
Electrician*	766	2000	1560	49.1%
Electronic Technician*	2	2000	17	11.8%
Elevator Constructor*	19	2000	44	43.2%
loorcovering Installer	1	2002	16	6.3%
Gasfitter*	20	2001	58	34.5%
Blazier	16	2000	50	32.0%
lairstylist*	574	2002	847	67.8%
leavy Equipment Technician*	365	2000	703	51.9%
nstrument Technician	165	2000	396	41.7%
nsulator	52	2001	161	32.3%
ronworker*	81	2000	109	74.3%
ronworker - Metal Building Systems Erector*	14	2002	38	36.8%
andscape Gardener	23	2000	68	33.8%
ather - Interior Systems Mechanic	7	2001	60	11.7%
ocksmith	2	2000	14	14.3%
Machinist	101	2000	198	51.0%
/lillwright	169	2000	335	50.4%
Notorcycle Mechanic*	10	2000	48	20.8%
Painter and Decorator	17	2001	58	29.3%
Parts Technician	104	2001	229	45.4%
Plumber*	272	2000	584	46.6%
Power Lineman	38	2001	87	43.7%
Power System Electrician	8	2000	23	34.8%
Recreation Vehicle Service Technician*	17	2001	32	53.1%
Refrigeration/Air Conditioning Mechanic*	64	2000	109	58.7%
Roofer	14	2001	41	34.1%
Sawfiler	1	2000	11	9.1%
sheet Metal Worker*	90	2000	248	36.3%
teamfitter/Pipefitter*	222	2000	501	44.3%
Structural Steel & Plate Fitter	26	2001	69	37.7%
ïlesetter	9	2001	22	40.9%
ransport Refrigeration Technician	9	2001	18	50.0%
Vater Well Driller	6	2002	15	40.0%
Velder*	948	2001	2293	41.3%

BEYOND CHICKEN LITTLE

So, for example, carpentry is a four year apprenticeship. There were 827 new first year apprentices registered in carpentry in 2000 who could have earned their journeyperson certification in 2004. Yet, there were only 243 carpenters certified in that year. That means that 673 people who entered their first year of apprenticeship in carpentry in 2001 failed to complete within the soonest time possible. That is a 70.6 percent failure rate – not a 75 percent success rate.

This table gives a good indication of the magnitude of a problem that no one seems to be addressing. To put it in a nutshell – if there is a crisis, it is a crisis of non-completion. Thousands of young Albertans are starting apprenticeship programs every year – but an unacceptably high proportion of them are not completing their training. So the problem is not so much attracting people to the trades (as it has so often been characterized by employers and the government) – the real problem is retaining them.

Admittedly, there are some problems with comparing figures on apprenticeship intake with figures on completion. Some of the people certified in any given year will be from other intake years, and clearly there is no rule insisting upon completion within the shortest period. However, looking at the aggregate figures for trade enrollment and certification for the past six or seven years, the trends are clear and disturbing. There is simply no way of disguising the fact that less than half of new apprentices are completing their programs on time!

This conclusion is corroborated by a Statistics Canada Research Paper entitled Registered Apprentices: The Class of 1992, a Decade Later. In it, author Sandrine Prasil followed the new apprentices registered in Alberta and two other provinces in 1992 for a decade. Only 42.6% of new apprentices in Alberta were certified in the optimal program time. After 11 years, that figure slowly climbed to 58.8% completions, still leaving 41.2% of the class of '92 with no trade certification.

The study showed that 977 apprentices (over a third of all successful apprentices) from 1992 took 2 years or longer beyond the expected completion date to successfully finish. So not only was the absolute certification rate below 60%—many apprentices who did manage to graduate were taking twice as long to complete their certification as the program intended.

Just as significantly, of those apprentices who dropped out of the program (about 50% on average), between 76%

and 88% (depending upon jurisdiction) never returned to complete a trade.

The bottom line is that, while government and industry keep telling people that the problem is simply the "negative" public image of the trades, the real problem is keeping apprentices in their programs and enabling them to succeed in their chosen professions.

ADDRESSING THE UNDERLYING PROBLEMS IN THE APPRENTICESHIP PROGRAM

So, why are first year apprentices failing in such huge numbers? And, why are a quarter of those who successfully complete the first year not finishing their apprenticeships?

According to the study Registered Apprentices: The Class of 1992, a Decade Later, the most prevalent reasons for non-completion of apprenticeship training were related to a failure in employment.

41% of non-completers reported that they did not have enough jobs. 49% had been laid off or unemployed. This is straightforward. To apprentice, you must be employed and get in your hours at work under qualified supervision before you complete the classroom instruction. If you can't get work or get laid off, you cannot continue to apprentice.

The failure of employment and of employers is at the heart of the failure of the Alberta apprenticeship training system. Simply put, the system as it currently stands is employer driven. The rule is that only employers can indenture apprentices.

WHY EMPLOYERS ARE NOT SUITED TO DRIVE THE APPRENTICESHIP PROGRAM

From our perspective, there are two important structural flaws in this method of indenturing apprentices. First, employers see training as an expense. It costs them money to train an apprentice. In a market driven system like Alberta's, it is entirely reasonable for an employer to prefer to hire a journeyperson whom someone else has trained. After all, that means that you benefit from one of your competitors expenditures – and that's good business.

Consequently, many employers evade their responsibility to assist in the training of the skilled workforce they draw upon. In fact, a recently released joint study by the Canadian Apprenticeship Forum and Skills Canada found that only 18% of Canadian employers take on and train young apprentices—although 41% had the capacity to do so because

they already have qualified tradespeople on staff who could supervise the training.

This is what economists call the "free rider" problem. Most employers agree that it is desirable to train more apprentices. But too many of them don't want to bear the cost themselves – instead, they assume that "the other guy" will do it. Unfortunately, the "other guy" usually makes the same

Table 6

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YEAR	TOTAL COMPLETE CERTIFICATES	TOTAL NEW APPRENTICES	TOTAL APPRENTICES
1999	5577	9305	31,105
2000	4716	11,312	32,536
2001	4950	13,994	38,089
2002	5273	13,038	40,501
2003	5724	11,758	39,294
2004	5978	12,747	37,001

^{*}This figure includes individuals issued qualification certificates that did not go through the apprenticeship program as well as certified occupations in addition to the certified trades.

assumption and the number of apprenticeship positions available – even in Alberta's hot economy – fails to meet the demand

The second structural flaw arising from an employer-driven apprenticeship system is lack of continuity. When the economy grows – particularly with the boom conditions that are all but inseparable from resource based economies—employers suddenly need skilled workers.

However, the standard apprenticeship program lasts three or four years. It simply doesn't make sense for an employer who needs help now to embark on a three or four year training program. As a result, instead of training workers for the future, employers focus their energies and finances on recruiting workers who are already certified. This helps explain why so many employers in Alberta's current hot economy have focused on recruiting journeymen from elsewhere (including temporary workers from other countries) rather than training young Albertans for the jobs of tomorrow.

Just as seriously, before the economic upswing that triggers increased labour force demand, construction employers generally don't have the economic resources to engage in long-term training. And besides, during slow periods, they need fewer workers. As a result, the existing supply is usually more than enough to fill demand. Without demand, employer interest in increasing (or even maintaining) the pool of skilled workers wanes.

This is not to say that employers should not be entitled to indenture apprentices. It is clear, however, that if the only point of entry is through employers, the system will never operate efficiently.

TRAINING TRUST FUNDS

Another entry point to apprenticeship in many jurisdictions (other than Alberta) is found within the trade union movement. In other jurisdictions, trade unions have established Training Trust Funds (TTFs). TTFs are established to provide occupational training to union members. This training typically includes pre-employment training, pre-apprenticeship training, apprenticeship training, health and safety training and upgrade training. By providing another, alternate route to apprentice training, the TTFs could complement Alberta's existing system.

TTFs are typically incorporated entities with officers bound by fiduciary duties, and often construct or own their own training facilities.

Most TTFs are jointly managed by unions and employers and are funded through multi-employer collective agreements. Benchmark employer contributions are 1% of wages. Most existing TTFs are in the construction industry and are associated with craft unions.

Employer contributions to a TTF are a deductible business expense. The training benefits received by workers are not regarded by the Canada Revenue Agency as a 'taxable benefit'.

TTFS AND SMALL EMPLOYERS

Nearly 90% of construction companies in Canada employ fewer than 20 workers. Over 60% employ fewer than five workers [Stats Canada: Canadian Business Patterns, December 2002].

There is a very real difficulty for such small firms to either fully fund an apprentice or maintain the necessary continuity of employment for an apprentice. A TTF which has a multiemployer collective agreement with such small employers not only pools their training resources into a manageable and sustainable fund, it also enables apprentices to transfer employment from one employer to another as the work is available and without denying those apprentices access to all-important hours of workplace experience. In this way, TTFs resolve three of the most serious failings of the Alberta system — discontinuity of employment which results in apprenticeship drop-out, the reluctance of employers to train someone who may take work with another employer, and the inability of small firms to afford training.

The value and efficiency of Training Trust Funds can be judged by their performance. According to one study, TTFs in the Canadian construction industry trained 51,000 workers in 2001-2002. Overall, TTFs account for one-third of all upgrade and apprenticeship training in the construction industry. [Prism Economics and Analysis (2003) A survey of Union Training Centres.]

Unfortunately, here in Alberta, there are only two unions currently permitted to indenture apprentices: the Ironworkers and the Boilermakers. We think it is no coincidence that these are the same two trades that – at 66.7% and 74.3% – have the highest optimal apprentice completion rates in the construction trades in Alberta!

Another, little considered advantage of Training Trust Funds is the human element. As the indenturing body, the TTF maintains contact with and encourages the apprentice during periods of unemployment. This assistance may make all the difference between an apprentice who drops out and one who continues their training.

This is borne out in studies done on the effect of union membership on apprenticeship. Raykov and Livingstone found that there is "a 25% to 89% higher probability for unionized workers to enroll in apprenticeship training in Canada, as compared to their non-unionized equivalents." (Canadian Apprenticeship and Effect of Union Membership Status: Trend Analysis 1991-2002. Centre for Study of Education and Work. OISE/UT).

Equally telling is a 1999 Canadian study that found a 25% higher likelihood for completion of apprenticeship among unionized employees in the construction industry and a 65% higher likelihood for completion among all industries. (Union Membership and Apprenticeship Completion. R. Sweet & Z. Lin; Toronto; York University.)

To put it another way, union members in Canada are more likely to apprentice and more likely to successfully finish their apprenticeship than non-union workers! So, if the goal is to increase the pool of skilled workers in the province, union-busting initiatives like the ones being put forward by the Merit Contractors Association actually move us in the wrong direction. What would make more sense is to make unions full partners in the training process.

INDUSTRIAL UNION APPRENTICESHIP TRAINING

Another important way to increase apprenticeship completion rates is to make use of the ideal training conditions available in industrial plants.

Most industrial operations have a core of skilled workers that enable them to indenture apprentices in a multitude of skilled trades

These industrial operations have a marked advantage over the construction sector in that the operations run twentyfour hours a day seven days a week. Once an apprentice is indentured, there need not be any periods of unemployment typical of the construction sector during which the apprentice is neither learning at school nor learning on the job.

Typically, industrial unions like the United Steelworkers of America (USWA) and the Communications Energy and Paperworkers Union of Canada (CEP) and the United Food and Commercial Workers Union (UFCW) actively encourage apprenticeships by negotiating them into existing collective agreements.

With appropriate financial support, the industrial sector is well-placed to meet long-term skills training needs in Alberta.

An efficient provincial labour force development policy must take full advantage of the skills training potential inherent in the industrial sector by gaining the active involvement of both industrial employers and industrial unions.

Industrial unions have demonstrated their ability to train and retrain workers in the past – given appropriate resources and support.

Recommendation Number Five:

The AFL recommends that the Alberta government immediately permit all construction craft unions to establish Training Trust Funds (TTFs) entitled to indenture apprentices. The government should seriously consider creating a program to support and encourage the establishment of these TTFs.

Recommendation Number Six:

That the government create a standing industrial sector skills training committee to recruit and integrate the active involvement of the industrial employers and unions into an overarching skills training program in Alberta.

RATIONALIZING A CHAOTIC NATIONAL SYSTEM

In any given year, the number of apprentices who become certified in Canada is between 16,000 and 19,000. The number of enrolled apprentices is about ten times larger than that, ranging from 165,000 to 215,000.

However, each provincial jurisdiction makes its own decisions about training requirements, trade designations, and whether it will be compulsory or optional to be certified in any given trade.

There are currently 275 different trades recognized by provincial governments. Only 45 trades are part of the Red Seal program.

This chaotic diversity of trade definition, trade training and trade standards has created a rigid, inflexible labour market by preventing or discouraging the movement of skilled workers and apprentices between jurisdictions.

Ideally, each jurisdiction should harmonize its training programs, standards and trade definitions to facilitate as much

free movement of workers as possible. While recognizing that much has been accomplished in this area by the Canadian Council of Directors of Apprenticeship and the Canadian Apprenticeship Forum, much still remains to be done.

Recommendation Number Seven:

The Alberta government should make it a priority to work toward harmonization of provincial training programs, standards and trade definitions across Canada.

Another point to consider when looking at the apprenticeship program is to recognize that employers and employees can have diverging interests in the final outcome of training. Employees want their training to be as broad as possible to improve their portability in the job market. Employers, on the other hand, are biased toward more specific skill training that meets their precise needs. Such training, if taken in isolation, can reduce training time and expense.

In this case, however, the interests of employers as a class and society as a whole align with workers' interests. A highly skilled, mobile workforce is more efficient – and better for the economy – than a narrowly skilled immobile one.

Recommendation Number Eight:

The AFL recommends that the Alberta government protect existing trades from division into smaller sub-trades. New skill or craft definitions should not be used to splinter or divide existing trades.

Finally, the there needs to be a strong recognition by government of the important effect that compulsory certification has on workforce skills. If trade certification is compulsory, there is a certainty that the men and women doing the work have the requisite skills and education to do the job properly. In the construction industry, this has important ramifications not only for employers and clients (who want quality workmanship) but also for public safety as well as jobsite safety.

Currently there are far more trades in Alberta where certification is optional than where it is compulsory. Moreover, some of the designations make no sense at all. Carpenters, bricklayers and millwrights are optional certifications, despite the critical nature of the work they do on construction sites. Hairdressing, on the other hand, is a compulsory certification. This just doesn't make sense.

The Alberta government clearly recognizes the importance of trade certification and its value to employers and society at large. It's time the province carried that recognition to its logical conclusion. If a trade is important enough that it has a certification certificate, then that certificate should be mandatory.

Recommendation Number Nine:

The AFL urges the government to make all trade certifications compulsory.



PART TWO: OTHER SKILLS SHORTAGE ISSUES

Although the Alberta focus has been almost exclusively on predicted skill shortages within the construction industry, the skills shortage problem is actually national in scope and reaches far beyond the construction industry into the health care, education and manufacturing sectors.

In these sectors, a whole range of other labour force issues come to the fore. Notable among these are concerns over the demographic shift in the Canadian population related to the aging of the baby boomers; the cost of post-secondary education; evolving occupational skills; shifts in Canadian economic development and changing working conditions.

A comprehensive labour force development policy must not only address situations where there is a shortage of skilled labour, but also the mirror situation when there is a glut of skilled labour.

Employers demand immediate government action when there is a skills shortage – but are entirely satisfied with the converse. However, a glut of skilled labour in any occupation is a disaster for working people. It leads to unstable employment or unemployment and falling wages and benefits.

It is important that Alberta's labour force development policy focus on how to create the skills we need now and, as much as possible, how to create a training and education program that will meet the province's future needs. All this needs to be done while accommodating and seeking to minimize the peaks and troughs in employment.

Labour force development is about training and retraining and dealing with an ever-changing occupational landscape. Questions need to be answered about how much of the cost of training should be borne by individual workers, how much by the employers who benefit from that training and how much from government which benefits from the proper match between skills and economic need.

WHY A MASSIVE INCREASE IN IMMIGRATION IS NOT THE ANSWER

The labour movement has always been a staunch supporter of Canadian immigrants. Often, the first institution that reaches out a helping hand to new Canadians is the trade union movement. Labour has always fought for the rights of immigrant workers both on the jobsite and in the community. Further, the immigration of skilled workers has always been a benefit to Canada and the workforce.

Labour continues to support an enlightened immigration policy, particularly Canada's important role in providing a safe haven for refugees. However, dramatic increases in immigration will not resolve our labour force problems – which are a result of an ineffective training system nationally and provincially.

It has become fashionable to bring the demographic consequences of the aging of the baby boomer generation into discussion of labour force issues. Graphs and charts showing the aging of the workforce have been used to justify

demands for dramatic increases in immigration, and have instilled a sense of crisis into skills shortages debates.

There are two distinct arguments against this course of action. First, large scale labour migration doesn't work well and carries various negative social impacts. According to a research paper *Forecasting Labour and Skills Shortages*, prepared for the European Commission by the Hamburg Institute of International Economics, European experience with large-scale labour migration has not produced the results required. "The idea that labour migration can provide a flexible and interim solution to labour shortages has largely been discredited in many countries."

Secondly, there is a strong argument that large scale labour migration isn't demographically justified at this point in time. A major research report prepared by Canadian Policy Research Networks actually concluded that: "There is no evidence that Canada is facing a looming general shortage of skilled labour as a direct result of demographic aging" [Labour Force Aging and Skill Shortages in Canada and Ontario. Julie Ann McMullin and Martin Cooke. August 2004]

Prominent Canadian demographer David Foot, author of *Boom, Bust & Echo*, concurs. He says that the 'echo' generation, the children of the baby boomers, is now entering the job market and that to increase immigration levels any time within the next decade is unnecessary. "If you raise immigration levels now, you're asking the new immigrants to come in and compete with the children of the boomers. That's not fair to the new immigrants and it's not fair to the children of the boomers," he said. [Edmonton Journal, February 11, 2006].

The fact is that Canada currently has one of the most highly educated generations of young workers in the world, and one of the most well-educated workforces overall. Canadian high school students rank among the best in the world in the foundation skills of reading, mathematics and science.

There are currently nearly three million Canadians working part-time, according to Statistics Canada. Twenty-five per cent of those would rather work full-time – that makes roughly 750,000 part-time workers looking for full-time work. There were also 1,172,800 unemployed Canadians in 2005.

Yet despite the availability of hundreds of thousands of unemployed and underemployed workers – most of whom have a superb basic education – Alberta and the rest of Canada is clearly facing an extremely tight labour market in specific skill areas.

The skilled trades are only one facet of this labour shortage. There is currently a shortage of Registered Nurses in Alberta, across Canada and in fact, globally. Ominously, that shortage is soon to be much worse with the average age of RNs in Alberta now over 45. Other specific skills are in demand in health care, education and various industrial sectors.

What we have is a mismatch of the skills Canadian workers have and the skills needed in the workplace. There are more than enough workers available who have a strong educational foundation – they just don't have the exact skill sets employers need.

It is our provincial and national training and retraining systems that are at fault here – not the workforce.

Recommendation Number Ten:

That Alberta focus its labour force development policy on improving access to and delivery of training and retraining to the existing under-utilized Canadian workforce rather than on promoting massive increases in immigration.

DEALING WITH THE HIGH COST OF POST-SECONDARY EDUCATION

Alberta has one of the highest post-secondary tuition rates in Canada. Despite the surplus-driven tuition freezes at Alberta universities, colleges and technical schools over the past few years, the fact remains that our national and provincial policy on post-secondary training for the past three decades has been to download the cost of education onto the individual student. Tuition fees have more than doubled since 1990 at universities. In Alberta, college tuition has quadrupled since 1990.

As a consequence of that downloading, a disturbing trend has emerged: the lower a high school student's family income is, the less likely they are to progress to post-secondary education of any kind.

Working people now take an enormous risk when they commit themselves to acquiring a new occupational skill. There is a significant financial burden made up of the combination of the lack of earning power while studying and the very high costs of books and tuition and living expenses while learning.

At the end of the day, each student is gambling that the skills they acquire will be in demand when they graduate. Small wonder that workers are hesitant to commit to retraining during their working life. The entire burden is on the individual, none of it is on the employers and society who will benefit from the skills.

It's time the Alberta government changed its thinking about all post-secondary education. It is not an expense – it is an investment in the future. In Europe, post-secondary education is either free, or at worst, half the cost students pay in Alberta. In Ireland, in an effort to address the country's nursing shortage, the government has decided that nursing students will pay no tuition at all.

Recommendation Number Eleven:

The AFL recommends that the Alberta government pursue a policy of minimizing the cost of post-secondary education to students at all institutions. Further, the government should consider at least temporarily reducing tuition to zero in the case of specific occupations like nursing that are in extreme demand.

ADDRESSING THE LACK OF EMPLOYER COMMITMENT TO TRAINING/RETRAINING

It is not just in the skilled trades that employers avoid committing resources to their own future labour force needs. The same rationale that discourages construction employers from apprenticing workers also discourages employers from other sectors from committing adequate resources to training and retraining.

Simply put, it is against any employer's best interests to spend resources training someone who may leave to work for a competitor. It is more economically rational to either wait for workers to pay for their own training or to wait for a competitor to do the training and then simply poach the newly trained worker.

There is no simple way out of this dilemma in a market-driven occupational training system like ours. The inevitable conclusion is that no employer adequately supports training – and the financial burden of training falls on individual workers. This produces the dysfunctional situation we now have in Canada – over a million bright, willing workers with superior educational foundations who do not have the occupational skill set they need to succeed in the job market.

There are two ways to break the impasse between employers' need for occupational skills and employers' unwillingness to pay for occupational training. One is voluntary, the other is involuntary – but both involve employers sharing the costs of training equitably.

First there is the example of the Canadian steel industry. The Canadian Steel Trade & Employment Congress (CSTEC) is a joint venture between the United Steelworkers of America and Canada's steel producing companies. CSTEC commissioned a diagnosis of short and long-term human resources challenges facing the industry that it then used to develop a human resource strategy for the industry.

The final report and recommendations of the study were published in May, 2005. It calls for companies and unions to create a workforce development plan that contains recommendations for a nation-wide apprenticeship program, a PR campaign aimed at attracting youth to the industry, a focus on workplace knowledge transfer, and overall upgrading of training methods and courses within the industry.

CSTEC offers a good model for cooperative employer/ union initiatives within particular sectors to deal with training issues and needs. The vital role played by the union, the United Steelworkers of America, in the success of CSTEC cannot be overemphasized. It is the union that provides the common denominator that brings together all of the erstwhile competing employers. Furthermore, the USWA has made a priority of training within the workplace – going so far as to negotiate specific numbers of apprenticeships within the collective agreement in some cases.

However, this voluntary model doesn't work in many sectors that are either not unionized or lack the union density that exists within the steel industry. In such cases, a program of involuntary employer financial support for training should be instituted.

Since all employers stand to profit from training, it only stands to reason that all employers should support that training. The Quebec Workplace Training Fund, where a 1% payroll training tax is used to fund occupational training, provides a sound example. By assessing employers based upon payroll, the large employers who are likely to benefit the most from the program also pay the most. This is a far more workable and equitable way to fund training than the inefficient, under-funded approach taken in Alberta.

Recommendation Number Twelve:

The AFL recommends that Alberta institute a 1% payroll training tax to be paid into an Occupational Training and Retraining Fund in the province. This fund could be used to assist in the formation of Training Trust Funds, and to increase seats or capacity at post-secondary intuitions. It could be used to subsidize training and education fees to encourage workers to pursue needed occupational skills. It could finance workforce surveys to provide stakeholders with reliable forecasts of current and future skill needs in all economic sectors. It could be used to subsidize workplace skills upgrading and retraining initiatives.

Recommendation Number Thirteen:

That a Provincial Training Council be created to administer this fund. This Council should be made up of equal numbers of government representatives and leaders from employer and employee organizations from the various economic sectors. The objective of the council would be to ensure that Alberta's workers have the skills currently needed in the workplace, and to ensure that future skill needs are properly predicted and addressed in the present.

Recommendation Number Fourteen:

The AFL recommends that voluntary provincial sectorial training groups like the Canadian Steel Trade & Employment Congress (CSTEC) that bring together employers and labour be supported and encouraged.

Alternatively, the Alberta government could consider the proposition put forward by the Canadian Labour Congress (CLC) to resolve the problem at a national level. The CLC proposes that the national Employment Insurance (EI) plan, which all employers already pay into, be expanded to provide regular benefit coverage for workplace-based training. Basically this would mean workers would be paid from the fund while on educational leave, and their jobs would be protected under provincial or federal Employment Standards legislation.

The CLC further proposes that an EI premium reduction be put in place for employers who invest in training beyond a certain level.

ALBERTA'S SUNSET INDUSTRIES AND THE PROVINCIAL RETRAINING DEFICIT

Alberta has failed, in a glaring fashion, to establish any kind of consistent or effective program to deal with workers who lose their jobs because of plant closures.

When a plant closes or an industrial sector begins to shut down, hundreds of long-term workers can find their occupational skills redundant and suddenly and unexpectedly face economic hardship. Alberta has never developed a plan to retrain these workers into areas of skills shortages. Instead they leave the workers to fend for themselves.

In cases where the workers are lucky enough to have a union, unions like CEP and UFCW have managed to scare up enough resources from employers and government to provide for some rudimentary retraining for the displaced workers.

This is clearly a chaotic and indefensible way to deal with plant closures and large scale layoffs in industrial sectors. The waste of human potential is particularly egregious given the current labour market conditions.

Worse, Alberta is going to face more and more such closures and mass redundancies as various sunset industries like conventional oil and gas and the petrochemicals begin winding down in the future.

A priority of the Government's new labour force development strategy should include a standing contingency plan to equip laid-off workers from such industries with needed occupational skills in a systematic effective way. The program should protect workers from economic hardship during the skills transition period.

Recommendation Number Fifteen:

That the government create a comprehensive retraining and economic benefit program for workers laid off due to plant closures and the decline of employment in sunset industries. Such a program should be funded through a Occupational Training and Retraining Fund (as proposed in Recommendation Number Twelve)

OTHER CONTRIBUTORS TO SKILLS SHORTAGES

Although the high cost of training to the individual is the most serious barrier to Canadian workers attaining the occupational skills employers need, there are other problems that need to be addressed.

SHORTAGES WITHIN TRAINING PROGRAMS

There can be shortages of sufficient training placements in our technical schools and universities. Clearly this is something that can be addressed by infusing appropriate new funds into specific program areas within the post-secondary education system to meet identified needs. In most cases that should involve expansion of staffing (increased program budget) in various institutions – although it may also demand investment in new infrastructure (capital budget) as well.

Recommendation Number Sixteen:

The AFL recommends that government develop a budgetary mechanism to immediately address shortfalls in training capacity for critical skill shortages. By providing timely financial support to post-secondary institutions, the government would encourage a more efficient and responsive labour force training system.

OCCUPATION SPECIFIC WORKING CONDITIONS

There are occupations where existing working conditions can discourage new entrants into the field. The nursing profession is a good example of this circumstance. Onerous shift work and heavy workloads are the dominant impression of the nursing profession. When prospective nursing students add those impressions to the extremely difficult and expensive university studies required to earn a nursing degree, many may be convinced to seek other occupations.

There are many other occupations that discourage new entrants because of working conditions – which can include physical hardship, isolation, stress on family life, boredom, shift work and a gap between perceived benefits and perceived cost of training.

For example, the meat packing industry is infamous for its working conditions. The pace of work is extremely demanding. Plants are maintained at high humidity levels to prevent shrinkage – which means workers are in either very cold or very warm. The work is dangerous, messy and hard.

That is why, in order to attract a stable workforce, the meat packing plants used to pay top wages and benefits. Unfortunately, with the global competition in the meat packing industry, Canadian plants cannot afford to pay the wages they need to attract workers and at still remain competitive. At current wages, the turnover in Canadian workers at meat packing plants can exceed 90% each year.

Unless the government is prepared to let Alberta's meat packing industry disappear in the name of market efficiency, something must be done. To date, the answer has been the use of temporary foreign workers.

The United Food and Commercial; Workers Local 1118 represents workers in the Olymel plant in Red Deer. The union has a good working relationship with the company and, in fact, has supported the employer's efforts to secure foreign workers.

The union is integrally involved in the training of the new workers, teaching ESL and lifestyle courses and plant-specific language, WHMIS and an introduction to the community.

What the union objects to is the constant cycling of the temporary workers. The UFCW wants government to get rid of the 'temporary' workers designation. It believes that all of the work and time it takes to train workers in the industry and acclimatize them to the Canadian way of life is lost with the mandatory return of workers to their country of origin every 12 months. The union wants all imported workers to have the same status and rights and the opportunity to become citizens. [See Recommendation Number Four.]

Recommendation Number Seventeen:

The government should do a thorough investigation of the working terms and conditions of occupations where skills shortages have been identified with a view to making regulatory changes that would create better work environments.

WHY IS THERE NO EMERGENCY RESPONSE TO HEALTH CARE LABOUR SHORTAGES?

One of the unsettling aspects of the current focus on labour force development is the fixation on construction skills 'shortages' to the exclusion of other sectors. Yet there has been a deep and lasting shortage of professional and technical health care workers for a protracted period that simply has not received either the government or media attention it deserves.

The unemployment rate for professional occupations in Alberta's health sector was 0.5% in 2005. The rate for technical health occupations was 0.3%!

The provincial government has responded by increasing training spots available for these occupations. In the past four years, according to the government website at Health and Wellness (March 29, 2006), Alberta has added 2,100 additional post-secondary education seats in health occupations over the past four years.

Unfortunately, there is a disconnection between government as labour force educator and government as employer. Despite the need for more nurses, laboratory technologists, MRI technologists and a long list of other technical and professional workers, the government has not increased

health care funding so that the various regional health authorities can afford to hire the personnel they need.

If that doesn't happen, the increased training will simply be providing other jurisdictions with skilled health care workers—as Alberta graduates go elsewhere for employment in their high-demand occupations. Further, the continued workload pressures on current health care workers may well spur a wave of early retirements or people simply going elsewhere.

THE SPECIAL CASE OF ABORIGINAL WORKERS

The Aboriginal population is young and growing at twice the rate of the Canadian population. With Aboriginal unemployment typically running three times the rate of non-Aboriginal unemployment, it is easy to see why employers and governments have targeted young Aboriginal workers as a potential solution to the perceived skills shortage.

However, simply suggesting that there is a supply (a lot of unemployed Aboriginal youth) and a demand (a lot of potential jobs available) is not going to produce any inevitable market-driven results in this instance.

The cultural gap between life on the reserve and the demands of apprenticeship or other occupational training programs should not be underestimated. Nor should the alienating effect of moving from safe and familiar surroundings to foreign and sometimes hostile surroundings be ignored. Employers need to remember that Aboriginal youth do not have to participate in the workforce. As a result, positive recruitment, learning and workplace experiences are virtually mandatory.

Recommendation Number Eighteen:

The AFL suggests that rather than training off the reserve, government and employers should consider bringing the pre-apprenticeship and initial apprenticeship training to aboriginal youth in their own communities. The courses and materials may also have to be reworked with the specific audience in mind. As well, a serious effort has to be made to eliminate racism from Alberta work sites.

Another way to incorporate Aboriginal youth into the workforce is to bring the work to them – in other words to begin a planned program of economic development on Alberta's reserves.

RETENTION STRATEGIES FOR OLDER WORKERS

The draft government labour force strategy discuses ways of retaining older workers and convincing them to stay in the workforce longer. There are several obvious ways to encourage workers to stay longer. Employers can offer phased in retirements where older workers can reduce their work-time while drawing a partial pension. Workplaces can be ergonomically restructured to make it easier for older workers to cope.

Inducements that attract older workers like longer vacations and better ancillary health benefits (e.g.: prescription drug plans) can be offered. Improvements in pension plans are also an important tool in retention of older workers. So long as their pensions are actually getting better, workers will be willing to stay on the job longer. However, any attempt to reduce pension benefits would have the opposite effect – workers will retire immediately to preserve their pensions at the best level possible.

Finally, the overall employer attitude to older workers will have to change in order to encourage older workers to remain. Currently, employers tend to exclude older workers from training and retraining opportunities – effectively marginalizing them on the worksite.

Recommendation Number Nineteen:

The AFL recommends that the Alberta government prepare a basic information package for employers to advise them on steps to take to retain their older workers — with particular attention paid to mechanisms like phased-in retirement, redesigned work, better pensions and access to training and upgrading.

CONCLUSION

The labour force crisis created by the current economic boom in Alberta has provided the government and stakeholders with a good opportunity to completely re-examine and redesign our labour force development system.

We should not squander this chance to create a system that will more efficiently provide Alberta workers with the skill sets they need to meet the demands of our evolving labour market. We also need to seize this opportunity for reform so that we will never again be in a situation where employers are insisting upon world-wide searches for skilled workers while hundreds of thousands of willing Canadian workers are unemployed or underemployed.

The most important step toward a better system is to recognize the deep, irresolvable flaws in our current occupational training system. Canada's system for adult training is less developed than other OECD nations. According to the OECD, less than 30% of Canada's employed adult workforce receives employer-provided training. This is far less than European nations – and 10% less than the United States.

The simple fact is that our current system, based upon voluntary employer investment in training, isn't functioning. We are perennially short of skilled workers in the boom times because employers will not invest in training for "theoretical" labour force needs in the future.

Employers, as rational economic actors in a market economy, minimize expenditures on training – preferring instead to hire or poach already trained workers that some other employer has spent resources training.

Small employers have difficulty committing resources over the time required for successful training. During economic downturns, new workers-in-training are the first to be let go. Such interruptions result in massive failure rates in the apprenticeship system.

Other than in the apprenticeship trades where workers and employers share costs, the expense and risk of occupational training is normally borne by almost entirely individual workers. The high costs of post-secondary education discourage young workers from making expenditures on training or re-training. The whole system seems designed to ensure that we are constantly short of most skills.

The AFL strongly urges the government of Alberta to take two immediate steps: first, to levy a flat 1% payroll tax on Alberta employers to fund a Workplace Training Fund. Secondly, we urge the government to create a Provincial Training

Council made up of leaders from employers' organizations and labour from each economic sector to administer the fund and draft a new seamless occupational training program for the province.

It's time that employers in Alberta recognized their obligation to shoulder a much more significant portion of training costs. It is also time for government to ensure that employers fulfill that obligation and to recognize that employees and labour organizations must be equal partners in any properly functioning labour force development system.

Government, employers and labour have a chance now to rethink Alberta's workforce development policy and to create a program that will effectively and equitably serve the needs of employers and workers now and in the future.

There are solutions to Alberta's workforce development problems. Most involve putting considerably more resources into labour force development. Proper diagnostic and predictive tools need to be put in place so that we can get a handle on short, medium and long term skill requirements in every sector. Barriers to skill acquisition – not just for youth, but for the entire workforce – need to be identified and removed.

A properly funded and representative Provincial Training Council would be an important immediate step in this process.

BIBLIOGRAPHY

THE AGING WORKFORCE; Dan O'Hagan & Bert Pereboom; Communication Energy and Paperworkers Union; 2002

SOLVING BC'S LOOMING SKILLS SHORTAGE; British Columbia Federation of Labour; 2004

HUMAN RESOURCES STUDY OF THE BROADER CANADIAN STEEL INDUSTRY; Canadian Steel Trade & Employment Con-gress; Toronto; 2005

GOING STRONG: 2004-2005 ANNUAL REPORT;Alberta Apprenticeship and Industry Training Board;
Alberta Advanced Education; 2005

LABOUR FORCE AGEING AND SKILL SHORTAGES IN CANADA AND ONTARIO; Julie Ann McMullin & Martin Cooke; Canadian Policy research Networks Research Report w/24; London, Ont.; 2004

CLC STATEMENT ON SKILL SHORTAGES AND INTERNATIONAL TEMPORARY WORKERS;

Canadian Labour Congress; Ottawa; 2005

TRAINING TRUST FUNDS: A REVIEW OF THEIR HISTORY, LEGAL FOUNDATIONS, AND IMPLICATIONS FOR TRADE UNION TRAINING STRATEGY; John O'Grady; Canadian Labour Congress; Ottawa; 2005

EMERGING PATTERNS IN THE LABOUR MARKET: A REVERSAL FROM THE 1990s:

P Cross; Canadian Economic Observer; Statistics Canada; Ottawa; 2006

FEW EMPLOYERS TAKING ON APPRENTICES: NEW SURVEY; Virginia Galt; Globe & Mail article; Toronto; March 22, 2006

REGISTERED APPRENTICES: THE CLASS OF 1992, A DECADE LATER; Sandrine Prasil; Statistics Canada; Ottawa; 2005

WHAT IS A SKILL SHORTAGE; Professor Sue Richardson; National Institute of Labour Studies; Australia; 2005

ALBERTA CONSTRUCTION WORKFORCE SUPPLY DEMAND FORECAST 2005 – 2009 SUMMARY REPORT; Construction Workforce Development Forecasting Committee; Alberta; 2005

APPRENTICESHIP IN EUROPE: FADING OR FLOURISHING?; Hilary Stedman; Centre for Economic Performance; London, England; 2005

CANADIAN MEAT PLANT FOREIGN WORKERS PROGRAM EMPLOYEE HANDBOOK; Greg Badger; Chisholm International Food Merchants; undated

ILLUSTRATIVE PRACTICES: APPRENTICESHIP TRAINING IN CANADA; Canadian Apprenticeship Forum; 2005

CHANGING LABOUR MARKETS: KEY
CHALLENGES FACING CANADA; Ron Saunders
& Judith Maxwell; Canadian Policy Research
Networks; HRDC; Ottawa; 2003

LET'S GET TO WORK; Merit Contractors Association & The Progressive Contractors Association of Canada; undated

CANADIAN APPRENTICESHIP AND EFFECT OF UNION MEMBERSHIP STATUS: TREND ANALYSIS 1991 – 2002; Milosh Raykov & David W. Livingstone; Centre for the Study of Education and Work; OISE/UT/; Toronto; 2005

THE APPRENTICESHIP SYSTEM IN CANADA: TRENDS AND ISSUES; Andrew Sharpe & James Gibson; Centre for the Study of Living Standards; Ottawa; 2005

INCREASING IMMIGRATION A MISTAKE SAYS DEMOGRAPHER; Sarah O'Donnell; Edmonton Journal article; Feb. 11, 2006

WILLING AND ABLE: THE PROBLEM OF SKILLS SHORTAGES IN WESTERN CANADA; Todd Hirsch, Ben Brunnen & Kristina Molin; Canada West Foundation; 2004

NATURE AND CAUSES OF SKILL SHORTAGES; Department of Education, Science and Training; Government of Australia; 2002

WITHOUT A PADDLE: WHAT TO DO ABOUT CANADA'S YOUNG DROP-OUTS; Patrice de Broucker; Canadian Policy Research Networks; Ottawa; 2005

SEEKING: OPPORTUNITY, RESPECT AND GOOD PAY. SCHOOL-TO-APPRENTICESHIP PROGRAMS IN CANADA; Janis Stone; Canadian Labour Congress; Ottawa; 2005

FORECASTING LABOUR AND SKILLS
SHORTAGES: HOW CAN PROJECTIONS
BETTER INFORM LABOUR MIGRATION
POLICIES; Christina Boswell, Silvia Stiller & Thomas
Straubhaar; Hamburg Institute of International
Economics (HWWA); Germany; 2004

20 Bibliography

UNIONS CONSULTED

Amalgamated Transit UnionATU
Athabasca University Faculty Association AUFA
Bakery, Confectionery, Tobacco & Grain Miller Workers International UnionBCTGMW
Canadian Auto Workers Union
Communication, Energy & Paperworkers Union
Canadian Union of Office & Professional Employees
Canadian Union of Postal WorkersCUPW
Canadian Union of Public EmployeesCUPE
Grain Services UnionGSU
Health Sciences Association of Alberta HSAA
International Alliance of Theatrical Stage Employees & Moving Picture Machine OperatorsIATSE
International Association of FirefightersIAFF
International Association of Machinists & Aerospace Workers IAM
International Brotherhood of Boilermakers, Ironship Builders, Forgers & HelpersIBB

International Brotherhood	
of Electrical Workers	IBEW
International Brotherhood of Ironworkers	IBI
International Union of Painters & Allied Workers	IUPAT
Media & Communications Workers of Alberta	MCWA
Public Service Alliance of Canada	PSAC
Telecommunications Workers Union	TWU
Hotel Employees & Restaurant EmployeesUN	ITE-HERE
United Brotherhood of Carpenters & Joiners	UBCJA
United Food & Commercial Workers	UFCW
United Mineworkers of America	UMWA
United Nurses of Alberta	UNA
United Steelworkers	USW
United Transportation Union	UTU
Canadian Labour Congress	CLC



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