



HELP WANTED

The world of infrastructure needs skilled workers. Finding them could be a bigger challenge than you think.

By John G. Smith

Look no further than the *Halifax Herald's* job listings for proof that Canada is facing a shortage of skilled workers. While employment opportunities are found in every sector of the business world, one of the ads is even trumpeting "opportunities in Alberta," complete with the requisite exclamation points and capital letters.

It's one thing to look for employees in your own backyard. It's something else entirely when you need to search across provincial borders.

At just more than six per cent, the national unemployment rate is as low as it has been in three decades. And although that's good news for Canada's workers, it's presenting the business community with a fundamental challenge. In 2003, 48.7 per cent of Canadian Federation

of Independent Business (CFIB) members reported that their most significant issue was a shortage of "qualified" labour.

While the construction industry is employing more people than ever—related jobs have been rising steadily since 1995, hitting a record high of 952,800 in 2004—remaining shortages are forcing contractors to delay project delivery schedules or scale back bidding activities, Statistics Canada reports.

Indeed, the demand for skilled workers is seen in every corner of the construction industry, agrees Paul Douglas, president and Chief Operating Officer, Canadian Buildings, for PCL Constructors Inc. And some regions are being hit harder than others. Alberta's thriving oil patch, for example, is creating shortages in other areas by attracting tradespeople such as welders

and pipefitters who have been performing other work, he says. "We can't train [workers] and find them quick enough."

It's a concern being voiced in a number of other sectors as well. Employers in Canada's environment sector businesses reported 11,800 job vacancies in 2003, up from 4,200 in 1999. "Companies are having difficulty reaching their whole economic potential due to a lack of people with the appropriate skills and knowledge," says Grant Trump, president and CEO of ECO (Environmental Careers Organization) Canada. And he expects the demand to increase, with a \$3.9 billion federal program designed to remediate contaminated sites, creating 20,000 new jobs in the process.

An aging work force is expected to compound the problems.

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— Paul Douglas, PCL Constructors Inc.

them are having a hard time meeting the qualifications,” says Bill Humber of Seneca College’s Centre for the Built Environment.

To make matters worse, Canada’s future workers show little interest in following these career paths in the first place.

A visit to any high school classroom will show tepid interest in “blue collar” work, a recent Canadian Apprenticeship Forum study has shown. A mere 32 per cent of teenagers between 13 and 17 are even considering jobs in trades.

Could it be that teenagers are actually listening to their parents and teachers? Sixty-nine per cent of parents who have children between the ages of 13 and 24 say they would recommend such careers, but only 28 per cent have talked to their own children about the opportunities.

The message seems clear: “A skilled trade is a fine idea ... but not for my kid.”

“Everybody seems to be encouraging their kids to go do something other than working as a tradesman,” admits PCL’s Douglas, and he suggests the message is even coming from parents who work in a trade.

High schools, meanwhile, seem to be doing little to reverse the trend. Despite selected programs to encourage students who are interested in acquiring trades, 72 per cent of Canada’s students say that their guidance counsellors have never discussed such a career path.

Perhaps that shouldn’t be too surprising. “A lot of them have never had any [trade-related] work experience,” says Ken Ellis of Seneca College’s Centre for Precision Skills Training. The path to a teaching position can often be traced from high school, to university, to teacher’s college, and back to high school, without ever touching a “real world” environment. And many school boards have scrapped expensive woodworking and metalworking programs as a quick way to trim costs.

He suggests technical programs should be mandatory for Grade 9 and 10 students—just like English and mathematics. His early exposure to a shop class showed him that he liked working with his hands and the problem-solving challenges that are associated with a trade. He wonders how students will learn about the option without that exposure. “Did you enjoy golf before you played

it, or after you played it?” he asks. “You can only sell what you know.”

The responsibility for promoting blue-collar careers seems to have fallen squarely in the hands of industry and government. The federal government has invested \$12 million in its “Skilled Trades: A Career You Can Build On” campaign, scheduled to continue until December 2006. Individual trade associations, meanwhile, continue their own efforts to promote jobs in their respective industries. The Construction Sector Council’s new web site, www.careersinconstruction.ca, has even been designed to educate everyone from children to school board members, offering information about income potential and prospects in trades of all sorts.

Yet while pushes to promote trade-related careers have long focused on the money that they offer, it may be time for a new strategy, suggests Humber. “We’re always saying the plumber owns the best house on the street. That’s a compelling argument, but people also want a certain amount of heroic quality to their work.”

Heroic welders?

“I guess my point is that individuals are seldom given the respect they deserve ... the role is absolutely central,” he says. They may not be pulling victims from burning buildings, but it’s possible to promote the role of tradespeople in the context of larger issues, such as the need for sustainable development. “The technician, technologist, tradesperson is the lifecycle guarantor of our built environment.

“I don’t hear it said we have a shortage of architects, engineers and urban planners,” Humber adds. “When they look at the glamour or excitement of an environmental field or something in sustainable development, they look at it from the perspective of that first-tier profession.”

There’s no question that Canada’s pool of future workers is questioning whether such pride exists. The Canadian Apprenticeship Forum study found that a mere 41 per cent of youth say that tradespeople are respected in society; only 45 per cent would consider themselves proud to work in a skilled trade.

Those hiring water and wastewater employ-

According to the Conference Board of Canada, 48 per cent of the work force will be between 45 and 64 by 2015, and more than 62,000 construction workers will retire in the next decade.

The American Water Works Association reports that retirements are actually outpacing new hires who are interested in water and wastewater work. And this is occurring at a time when Ontario wants the stewards of its drinking water to demonstrate additional skills. Deaths linked to E. coli contamination in Walkerton, and the tainted water that forced the recent evacuation of the Kashechewan Reserve, are very much at the top of mind.

“Part of the challenge they face is that the province’s requirements, post-Walkerton, are far more stringent on water and waste practitioners. Many of the people already working for



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ees for Ontario’s Peel Region suggest they may have found a solution by actually increasing the demands placed on new employees. Recruits are expected to pass three exams in a predetermined period of time, and must be trained in a wider array of tasks than ever.

The additional training helps promote the idea that a career path exists, adds Ric Robertshaw, director of operations and maintenance. And there’s an added benefit. Well-rounded employees will be in a position to perform a variety of tasks, unlike their predecessors, who may have worked their entire careers in a single job.

“They know more in the first year than an operator out 10 to 20 years,” he says. “You need an operator who is flexible. You’re less vulnerable in running the business.”

While such employees are eligible for higher salaries, increasing payroll costs, the region will be better protected from future shortages,

Robertshaw says. “I’ve got to look at the bigger issue. I want the best people to run this organization.”

Cheerleading aside, businesses might need to take a closer look at “non-traditional” sources of workers if they plan to address shortages of the future.

Despite posters and ad campaigns that suggest otherwise, for example, men continue to dominate in most trades.

Jennifer Rose, who oversees training for Peel Region’s water program, admits there are still barriers. “If I was thrown out with them, I don’t know how they’d treat me,” she says, referring to acceptance by long-standing employees. “The younger ones grew up in a different generation. They’ve seen mothers, sisters, girlfriends and wives go into different jobs... it’s difficult to change a culture, but it’s not impossible.”

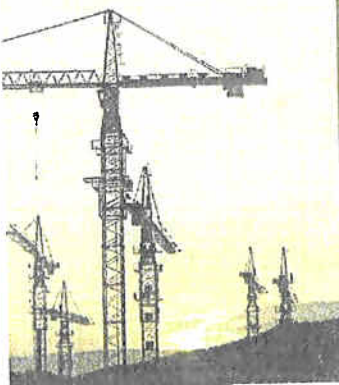
Skilled immigrants are often presented as another largely untapped resource to meet the needs. The PCL Group of Companies, for example, has worked with governments in B.C. and Alberta to source selected tradespeople from Germany and other areas of Europe.

But the method of assessing the credentials of this pool of workers has been inconsistent and informal, according to the Construction Sector Council.

“The credentials of a tradesperson from Southeast Asia are assessed in the same way as the one who just came through the apprenticeship system here. The Asian man could be very skilled at his trade, but if his English is poor, or he doesn’t have the right documents, he will not likely get the job,” says George Gritziotis, executive director of the council.

There have been some efforts to overcome the language barrier, notes Keith Lancaster, executive director of the Canadian Apprenticeship Forum, referring to how those taking related exams in Ontario can be accompanied by translators who are not familiar with a trade. But there is still the need to train these new workers in building codes and safety practices that are specific to Canada.

Still, immigration isn’t expected to solve every issue. “Even taking an optimistic view of immi-



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gration, and assuming that levels increase to 236,000 by 2010 and 285,000 by 2020, there will not be enough immigrants to offset the lasting effects of lower fertility rates and an aging population," according to the Conference Board of Canada.

Governments and unions may also be reluctant to call for offshore workers when skilled tradespeople are unemployed elsewhere in Canada. While Alberta and B.C. are in dire need of operation engineers and pipefitters, along with any other trade involved in massive infrastructure projects, the Ontario market has softened, Gritziotis says.

"Mobility is a huge issue," Lancaster agrees. "We have 45 'Red Seal' trades—these are the more common trades, welders, electricians and so on—and if you have a Red Seal endorsement on your trade qualifications, you can work anywhere in the country."

The question is whether they would want to move. A decision to shift from one province to another can be a social issue as much as an economic one. Such decisions can involve moves away from families or pulling children away from their schools and friends.

"Aboriginal youth were identified in earlier [Construction Sector Council] research as an important untapped labour source for the industry," Gritziotis adds. "There are lots of opportunities to connect them with construction work. It's a perfect fit."

Companies bemoaning the shortage of workers may also need to take a look at their own apprenticeship programs, to see if they're grooming any workers for the future.

"They are not offering apprenticeships as often as they should, but they want skilled people," Ellis observes. "A lot of people talk about problems, but you have to ask, 'What are you doing to solve the problem?'"

Granted, that can present a challenge for smaller companies that need employees who can offer "billable skills" right away, Trump says, referring to their lack of resources to offer defined mentorships and job shadowing programs. "The bigger companies buy in. The smaller companies, they have a difficult time, because rather than looking at an investment in the future, they're looking at it as a cost for today ... smaller companies look at this and say, 'We'd rather let the big guys do the training, and we can hire from them.'"

For that matter, there may also need to be a renewed focus on existing apprenticeship programs, to ensure the experience is positive enough to retain those who choose to follow the career path, Gritziotis says. "We put a lot of effort into the classroom and theory, and that's where the public dollars are spent. There are a lot of great employers out there providing a very

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It's undeniably part of a long-term strategy since skilled workers are hardly created overnight. While registration in apprenticeship programs hit an all-time high in 2002 with gains in every major trade group—reaching 234,460 — there was a 9.7 per cent drop in the number of apprentices who completed their training. Granted, the drop in completed training can be the indication of an overheated economy. When times are good, apprentices may be reluctant to abandon the option of overtime to go back to school. For that matter, the schools may not be able to offer classes at the

exact moment they have some downtime.

Yet Ellis challenges companies that don't invest in apprentices because they're worried that newly trained employees will simply jump to a competitor.

"When someone leaves you," he says, "you have to take a look at yourself."

The most radical solutions to the shortage of workers may not involve people at all. PCL, for example, is re-examining the way it will complete future projects.

There will need to be a greater focus on modular construction efforts, says Douglas, referring to approaches with higher costs, but lower labour needs. The company has already doubled the size of the largest module yard in Canada, located just south of Edmonton in Nisku, Alta. From there, pipes, spools and 60x20-foot steel frames are trucked into Fort McMurray, where smaller crews can mate the parts.

"But this is not a simple problem," Lancaster says, referring to the proposed solutions to the shortage of workers.

"There's not going to be a 'silver bullet' that's going to address it. ♦"

John G. Smith is the president of WordSmith Media Inc., a custom publishing and marketing service based in Ajax, Ontario.

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