HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities

HUMA • NUMBER 029 • 1st SESSION • 41st PARLIAMENT

EVIDENCE

Wednesday, March 14, 2012

Chair

Mr. Ed Komarnicki

Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities

Wednesday, March 14, 2012

● (1530)

[*English*]

The Chair (Mr. Ed Komarnicki (Souris—Moose Mountain, CPC)): Thank you, everyone. We will commence our meeting.

We have with us representatives from Statistics Canada, which is well represented. I understand we're going to have Tracey Leesti, the director, presenting along with Josée Bégin. And on behalf of Informetrica Limited, Michael C. McCracken will be sharing for a few moments.

After the presentations, each of the members of the various parties will be allowed to ask questions in a five-minute round.

With that, we would invite Statistics Canada to begin their presentation.

Tracey, go ahead.

Ms. Tracey Leesti (Director, Labour Statistics, Statistics Canada): Thank you.

Good afternoon. My name is Tracey Leesti, and I'm director of the labour statistics division at Statistics Canada. I'm joined by Josée Bégin, director for the centre for education statistics; Marc Lachance, assistant director, labour statistics division; and Kathryn McMullen, chief of education matters and integrated analysis at Statistics Canada.

We'd like to thank the committee for the opportunity to speak to you today about the data relevant for your studies on labour shortages in high-demand occupations and understanding labour shortages.

While at Statistics Canada we do not generally calculate current or future occupational labour shortages—that work is usually left to external analysts, including provincial and federal governments—we are the primary data provider of key data sources on the Canadian labour market that can be used to assess labour market conditions, as well as observe certain aspects of supply and demand.

Data on employment, unemployment, wages, and job vacancies can be evaluated to assess the existence of, or potential for, a shortage, as well as to corroborate anecdotal reports of employers' difficulties in filling jobs. Data on enrolment and graduation can also identify a potential source for filling unmet demand.

There are a number of data sources available at Statistics Canada. The monthly labour force survey produces timely information about employment, unemployment, labour force participation, wages, as well as demographic information. The monthly survey of employment, payrolls and hours provides detailed industry and earnings information for payroll employees. There's also new data on job vacancies, as well as data on enrolment and graduation.

A picture of the labour market over time allows for an evaluation of changes in demand and supply for a particular occupation. In the first graph you will see that relative to total employment in Canada, employment in professional, scientific, and technical services and in health care and social assistance has shown long-term, steady growth, even during the recession, indicating a likely rise in the demand for these occupations.

As well, in mining, quarrying, and oil and gas, following a decline in the labour market during the recent downturn, this industry has been expanding again, and employment is back to its pre-recession level. This recent growth in employment again signals labour demand within this industry.

The next slide looks at job vacancy. The number of unfilled vacancies provides another potential measure of unmet labour. This measure....

Sorry?

A voice: There's a question.

● (1535)

Ms. Kellie Leitch (Simcoe—Grey, CPC): I apologize; I have just a quick question.

On the first graph, what is the axis label? I just don't see it. Is it tens of thousands, hundreds of thousands, or...?

Ms. Tracey Leesti: It's the change in employment over time.

Ms. Kellie Leitch: Thank you very much. But is that as a change of employment in...?

It says “100”, and “120”, and “130”: is that people, or a percentage, or...?

Ms. Tracey Leesti: It's an index.

Ms. Kellie Leitch: What is the index based on, then? What is the ratio for the index?

I apologize; I'm just trying to figure out what the axis means.

Mr. Marc Lachance (Assistant Director, Labour Statistics, Statistics Canada): Basically, the way the number works is that in order to picture the growth, we start with an index. In that graph, we started in January 2000, and that's 100.

So when you go up, it means—

Ms. Kellie Leitch: But 100 what? Is it 100 people?

A voice: It's just a figure.

Ms. Kellie Leitch: Oh. So you're just using it as a—

Mr. Marc Lachance: It's like a percentage.

Ms. Tracey Leesti: It's like a base number so that you can do comparative analysis across the different occupations.

Ms. Kellie Leitch: Okay, and you're starting at 100.

Thank you.

The Chair: We won't hold that against your time.

Ms. Leesti, carry on with your presentation.

Ms. Tracey Leesti: Returning to the job vacancy slide, the number of unfulfilled vacancies provides another potential measure of unmet labour. This is a measure that StatsCan had not collected for many years, but with funding from HRSDC for the development and initial collection in January 2011, we began collecting information on job vacancies, fulfilling a critical data gap, as identified by the advisory panel on labour market information.

The vacancy statistics complement the LFS data by providing insight into whether the supply of labour is matched by the demand for labour in terms of geography and sector. The job vacancy rate is defined as the number of vacant positions divided by the total labour demand; that is, vacant positions plus payroll employment.

In the three months ending in September 2011, the national job vacancy rate was 1.7%. This is the time period for which we have the most recent data, and it's a very new survey. As we saw in the previous graph on employment, the sector of mining, quarrying, and oil and gas extraction has been the fastest growing in employment since July 2010. This is reflected in the overall labour demand. As can be seen in this graphic, mining, quarrying, and oil and gas has the highest vacancy rate, at 4%.

The category of professional, scientific, and technical services had one of the highest vacancy rates, at 2.5%. The health sector is slightly above the Canadian average.

The Chair: Just a moment.

Go ahead.

Ms. Tracey Leesti: This type of data on job vacancies will also provide important information on the relationship between the number of vacancies and unemployment. For example, an increase in the number of vacancies at the same time as an increase in unemployment—or even if unemployment remains flat—could reflect a mismatch due to structural factors.

The next slide shows vacancy rates, the unmet demand, by provinces and territories. As you can see, both Alberta and Saskatchewan had the highest vacancy rate of 2.6%, while the eastern provinces posted the lowest vacancy rates as of September 2011.

Now that we've looked at the demand side, we can turn to the next slide and look at the supply side. A low unemployment rate for a specific occupation may be an indicator of tight labour supply. In this graph we present the unemployment rate by occupation groups at the national level. The graph shows that health-related occupations have the lowest unemployment rate at 0.9% and 1.9% for the first two categories on the graph in red. They're well below the national rate of 7.4%, potentially indicating a short supply of labour in these occupations.

Also of potential interest are the natural and applied sciences and related occupations, as well as transport and equipment operators. Again both bars are in red, and you can see that they're below the national average in unemployment.

At the other end of the spectrum, lower-skilled labourers and trade helpers have had the highest unemployment rates at around 12%. One must remember, however, that not all workers in one occupation can fill all the jobs in the group. For example, a shortage of nurses cannot be filled by other workers in the health sector. Another reason why there can be higher unemployment is related to the location of the supply and demand.

Turning to the next slide, we look at unemployment rates for selected occupation groups across provinces. In this graph, among the occupation groups of interest for this committee we see that the unemployment rate was lower for the higher-skilled occupations in natural and applied sciences, as well as in health in all provinces. They were lower and relatively even across the provinces.

On the other hand, while the unemployment rate was also low for occupations in the primary industry and processing, manufacturing, and utilities in the prairie provinces and Alberta, it was higher in all other provinces, indicating there may be potential supply in other areas of the country. The LFS data are also available by economic region, which could also identify regional differences within each province.

Now that we've covered some of the indicators of labour demand and supply, we'll focus on some of the characteristics of potential labour supply, namely graduates and immigrants.

I will pass the presentation over to Josée.

● (1540)

[*Translation*]

Ms. Josée Bégin (Director, Centre for Education Statistics, Statistics Canada): Thank you, Tracey.

The chart on slide 7 shows the total number of university graduates in Canada, by field of study, in 1992 and 2008. Fields of study are ranked by the total number of graduates in 2008. The top two fields of study in both 1992 and 2008 were business administration, management and public administration and the social and behavioural sciences and law.

Ranked at or near the bottom in terms of number of graduates in both years were mathematics, computer and information sciences and the physical and life sciences. Health-related fields of study and to a somewhat lesser extent, architecture and engineering, saw relatively large increases in the number of graduates between 1992 and 2008.

That being said, data for 2000, not shown in the chart, show that in the case of mathematics, computer and information sciences, the number of graduates stood at 6,000, a number that was much higher than in both 1992 and 2008. That was a reflection of the very high demand for workers in the high tech sector in the early 2000s. The number of graduates in that field then dropped off sharply in 2008, following the high tech bubble burst in the early 2000s, likely having an impact on the field of study choices made by students first entering university in 2003/2004.

Women accounted for 56% of those who graduated from university in 1992; by 2008, the female share had risen to over 60%. Women also increased their share of graduates from less than 50% in 1992 to over 50% in 2008 in physical and life sciences, and technologies, and agriculture, natural resources and conservation.

In fact, women have increased their share of university graduates such that, in 2007, they accounted for more than half of graduates in all fields of study, except for three: architecture and engineering; mathematics and computer sciences; and personal, protective and transportation services.

Let’s look at slide 8 now. The following chart presents the proportion of employed university graduates in low- to moderate-skill jobs. By low- to moderate-skill jobs, we refer to those classified as occupations that usually require secondary school and/or occupation-specific training as well as those where on-the-job training is usually provided.

This chart indicates that the proportion of university graduates employed in low- or moderate-skilled jobs—termed underutilization —has increased in the past two decades.

That being said, it is important to note that the rate of underutilization for Canadian-born graduates remains essentially unchanged: the increase in underutilization is almost entirely an immigrant phenomenon. This corresponds to an increasing earnings gap between Canadian-born and immigrant graduates. Not shown is that there is also an underutilization gap for women, but it is small compared to that for immigrants and shows no clear trend.

There you go.

● (1545)

[*English*]

The Chair: Thank you very much. There are certainly some interesting trends that you've picked up from your charts. Thank you very much for that presentation.

I'll ask Mr. McCracken to present on behalf of Informetrica.

Mr. Michael McCracken (Chair and Chief Operating Officer, Informetrica Limited): Thank you very much for the opportunity to meet with you. I thought it would be useful for me to share with you some comments as we look at the skills gap stuff. Maybe I can turn a few lights on for those of you who are preparing what sound to be two very interesting documents.

When we think about the labour market, some carry an image of a barbell—two weights on the end of a thinner pipe. The one end is manual services, the middle is sort of the routine medium skills, and the ball at the other end represents the abstract high skills. If that's the way the labour market looks, and some would say that it's close enough, you can begin to probe those terms—manual services, routine skills, and abstract—and concern yourself with what needs to be there and what the skills actually translate into. Certainly formal education is needed less for the manual services. More is needed for the routine, and it's almost a necessity for the abstract, high-skill jobs.

The people who work in what's called STEM—science, technology, engineering, and mathematics—are found in the abstract block. Of course, this isn't a static picture. People move around. People move from the manual services to routine, and from routine to abstract. Indeed, as StatsCan's nice chart shows, people also move from what might be viewed as abstract high skills into medium skills and they are underutilized.

Another way of looking at it is a slightly more complicated view. It says that every job or occupation is made up of two characteristics: the knowledge work and the service work. What combinations might there be? You think of a fast-food worker as someone whose service component is high. The knowledge and subject matter specialization may be relatively low. A production worker in a plant, on the other hand, may have fair knowledge or medium knowledge of what he or she is doing, but the service emphasis—the interactions with other people, with customers—is less.

When you move out further, on to the high knowledge workers, you find some, again, who don't have a very large service component. These are people such as R and D engineers and research scientists. You have another group that relies, in a sense, on that combination of service and knowledge. A simple example you see running around town are Nerds on Site. They fix people's personal computers on a regular basis, which combines a service element with high-tech knowledge. There's a whole bunch of higher-tech jobs that are combinations of those two, such as consultant, sales engineer, and software application tech support. All of these require the ability to interact with people as well as a knowledge base that is crucial for what they're doing.

Let's talk about the services jobs very quickly. Some are low wage. There is little formal education and a short on-the-job training period. The interaction between customer and worker is important, and literacy is important. Literacy supports training and communication in that group. Park those thoughts, because we're going to come back to that in a moment.

The policy thrust you'd like to emphasize for low-skill jobs would include high school education and literacy at or above level three. You may want to think about increasing the minimum wage so that people who are working in those areas have the time and resources to take some further training. You might also encourage employers to offer training during working hours.

● (1550)

For the knowledge workers it's a little different. They need more formal education. They need some communication skills with clients and with other employees. But for that group, your policy is really for the post-secondary education system, including graduate school, initially, training during working hours, reducing immigration backlog in high-demand areas, if you, again, have shortages in that area that you want to do something about.

If you take one step back and ask what it is you're trying to do, I think the aspiration that would be shared by all parties and by all Canadians would be that we want to realize a high-wage workforce. In some sense, we want the results of our overall workforce to have a compensation that is as high as can be obtained in reflecting their various skills. You're going to get that if you move towards full employment.

You should encourage wage increases rather than discourage them. We should try to strengthen some of the institutions that support the way in which labour markets work, particularly the minimum wage system. We should move towards a living wage with indexing. We should be encouraging unions to form and to participate in wage-setting, training, and other conditions of work. Those kinds of approaches will give you that high-wage workforce.

I have a couple of quick comments on the workplace. I know my time is tight. In workplace training, consider a grant-levy system to fund the training of employees. Courses could be in-house or through outside suppliers. Participation requires that training take place during the workday. This is something that came out of the advisory group on working time and distribution of work, where we found that it was key for women particularly, but also for men, who have obligations outside of the workplace and work time, to be able to take their training in normal hours. The notion that you're going to study nights for your job may sound great unless the two of you are raising five kids and trying to get them all into bed.

Apprenticeship programs, a more formalized way of workplace training, can be encouraged, broadened in many occupations. We don't do well there relative to other countries, other than the U.S., which doesn't do very well at all. The co-op programs are useful for those in university, by giving them the opportunity to combine work and education in what they do.

So what should government do? Well, it can certainly help people move permanently or on a temporary basis to tight areas. What should government do about so-called shortages? It can help people move from surplus areas. It can certify skills that will make people able to recognize potential employees who have the necessary skills. Information about the job market is always helpful. Infrastructure is important for doing that, the systems for keeping track of openings.

Sometimes you have to ask, what should government not do? In essence, the one thing we don't want them to do is to avoid a macro response. If wages improve, if people start moving around and saying we have to slow this all down through restrictive fiscal and monetary policy, that would be a mistake.

Employers have a real role to play. They're the ones who are employing these people. They're the ones who are screaming about shortages. They're the ones who are saying government should provide work-ready employees. Well, first off, you should question that. It's not clear that that's the role of the education system or the governments.

On their actions on their own behalf, they could help raise wages if you're having shortages. Recruit more broadly. Provide flexible schedules. Upgrade the skills of your existing workers. Improve productivity. Restore internal career ladders that have, by and large, disappeared in most organizations. Workers and unions can also help. They certainly encourage skill certification, mobility as needed, workplace training participation. Developing literacy levels at every opportunity should be another thing you undertake.

● (1555)

The final message is, don't panic about shortages. Some local labour markets are tight. You've seen some interesting new data now from the vacancy survey. We say something is tight when it's 4% or 7% of the vacancy rate to the total employee base. That's not a terribly difficult issue. If we look at vacancies relative to the unemployed, what we find is that there are many more unemployed than there are vacancies in all industries and in all regions.

Mobility, postponement of projects, and we talked about how higher wages, training, and higher productivity can all help.

You should also realize that the source population in Canada will continue to expand, and those are the people who are 15 years and older. The labour force will continue to expand as new entrants in numbers exceed those who are retiring, leaving, or dying. The labour force participation rate, depending on how you measure it, for the total labour force is going to be declining. If you look at only the 15 to 64 age group, it will continue to rise. Indeed, if you look at every age-sex group, participation rates are rising, and rising out through 2025, 2030, and 2035.

What happens, though, is that you have a weighting issue in which the elderly, in significant numbers, are retiring and bringing down the overall participation rate, even though the elderly participation rates are rising from very low levels.

Let me wrap up, then, by simply saying that I think focusing on the skills rather than on the occupations is an important thing. I think you have to take a long-term view. You heard about a signal being given on the computing side, for example, which transmits to people deciding what career choice to make four, five, or six years earlier, and by not making a choice to go into that field now, it leads up to low numbers four or five years later. So these are lags, and they aren't the kind of thing you run out and fix before the next election. Well, maybe in the next election we could do some work, but you're not going to fix it in the next month.

So take the time, think about what you want to do, and think about the kind of society you want to live in.

Thank you.

The Chair: Thank you very much, Mr. McCracken.

It was interesting. You made some mention about moving people to the tight areas from the surplus areas, and you might have some questions flowing from that. Of course, I know your firm does a certain measure of forecasting and analyzing future labour market demands, and you might have some questions on that too.

We'll start first with Ms. Hughes. Go ahead, please.

Mrs. Carol Hughes (Algoma—Manitoulin—Kapuskasing, NDP): Thank you very much.

Mr. McCracken, that was very informative. This is basically what we have been saying on this side, that we actually have to be proactive instead of reactive.

I wonder if you could just elaborate. You talked about the participation rate. If I interpret correctly what you've indicated, it is that although there are shortages in certain areas, there are people who will be able to take on the demand that's coming up. Is that correct?

Mr. Michael McCracken: Yes. I think if you look at the national view, the participation rate is the fraction of the people who are over 15 and want to work, are looking for work, or are working. The labour force is rising for those who are 15 to 64.

Even for those 15 and over, although the participation rate in aggregate is coming down somewhat, the total labour force continues to expand. There are new bodies—in other words, net—entering into the labour force. This is with some immigration going on. It's sort of the base level we have at the current time, but not extraordinary means of running out and hiring temporary workers and going down that road.

When you start looking at a particular area, however, you have to contend with the issue of mobility of people outside that area, people leaving. There are certain parts of this country that have declining population. If they had a problem trying to find skills, etc., they may be doing that off a smaller base. Unfortunately, of course, what happens when people move is that they often take their jobs with them or are unemployed. Hence you're not, in some sense, losing anything.

We have some very low unemployment communities in Canada, but that's because a lot of the labour force is gone and employment has declined. You're sort of saying that you're not learning the right thing from looking at this unemployment rate for this region.

I would be an optimist, though, in terms of what we can do. Keep in mind that every year, thousands of people move from one part of Canada to another. There's more migration, as we would call it, back and forth from one province to another than there is total net immigration of people from abroad. If you're concerned about getting your labour market to function well in a particular area, then you should be looking at the much broader picture.

For example, Nova Scotia at the moment is trying to increase the number of immigrants. It has a department to do that. I said rather cynically one day that they had more people in the department that they had immigrants. There's a lot of movement of people in migration from the rest of Canada—some going home, some going there to retire, some going there to work with particular skills. You'll see a big jump in that as people go to work in Nova Scotia for the shipbuilding exercises as they get under way.

Just think of that as a fluid exercise. It's awfully easy to fall into the trap of just thinking that these are all sort of fixed containers. You really ought to be thinking of them as a pool. You have coloured water that you pour in one spot, and you pour another colour in here, and you just watch it, and things start moving around and eventually the whole thing is grey.

● (1600)

Mrs. Carol Hughes: Do I still have some time? Okay.

Throughout your presentation you really reinforced what we—our party as well as the labour movement—have been saying: people need living wages, and we need to be able to have employers ensure that if people want to upgrade their education, especially if there's a possibility that the place will be closing down at some point...that's extremely important in order to have better skills or for people to upgrade their skills.

The other thing is that when you're indicating the participation rate, I think it also reinforces the fact that the government stance on the OAS is actually not what it should be. It reinforces again the fact that we shouldn't have to worry about whether or not we can afford the OAS for our seniors.

I just wanted to throw that in there. Again, I'm just wondering if you can talk about the rural aspect and the remote aspects of where the challenges are sometimes.

Mr. Michael McCracken: I'll leave aside the OAS issue, because I don't think I mentioned it. It's outside the HR purview.

Now, let me make my comments brief. It's always a problem in rural Canada just getting the jobs there. There are some, with the construction jobs during resource development, etc., but it is tough, and unemployment rates tend to be higher in rural Canada.

Many of these remote areas that we speak of are dominated by aboriginal populations. They may be on reserves. It may be 50% to 60% aboriginal in a population area. That's another area where we need to do a lot, and we need to do it in a concentrated way. The potential is large.

On the practice of what we've been able to accomplish, there are a few good examples, but there are a lot of missed opportunities. It's a challenge, and obviously what you want to do in planning is to think about what it is that brings everyone along. But the policies appropriate for the 90% of people living in urban areas may not be what you want to use for the 10% of people in the rural areas.

● (1605)

The Chair: Thank you, Mr. McCracken.

We will move now to Mr. Daniel.

Mr. Joe Daniel (Don Valley East, CPC): Thank you, Chair, and thank you to the witnesses for being here.

My question is to Mr. McCracken.

Mr. Michael McCracken: You have to ask them questions too.

Mr. Joe Daniel: I will shortly, so you have to keep your answer brief.

You talked about increasing wages and maximizing payments to employees, which is great. Has your group actually considered what the break point is in terms of competitiveness with the rest of the world?

Mr. Michael McCracken: Sure. I think most economists would say they expect wages to track productivity growth. That is, you would have a 10% increase in wages if your productivity went up by 10%. Historically that's what it looked like until about 1980 in Canada and the U.S. Since that time a gap has been opening, where productivity has been going up, but wages in real terms have not. That hasn't suddenly adjusted. It's still there, and it's staying high.

It's partly staying high because we've been running a higher unemployment rate than we had historically prior to 1979. It's a question of power, when you get right down to it, and that's how you try to write it. But that's the measure people would use who are worried about competitiveness.

Mr. Joe Daniel: Have you looked at it from a global competitive basis? How does Canada stack up against this productivity that's going to be exported to the rest of the world?

Please be very brief so I can ask the other person a question.

Mr. Michael McCracken: If it's a global issue like that, your exchange rate should make your adjustment for you. You shouldn't be trying to do it through your micro policies. You shouldn't do it by screwing one group in your society for the benefit of another. It's why exchange rates exist, and how they work and how they are determined. They should bring about equilibrium on the relative productivity or competitiveness level.

Mr. Joe Daniel: Thank you.

For the Statistics Canada folks, chart 4 shows us the breakdown by province. Chart 5 shows us the breakdown by skills. Does this apply equally across each of the provinces? Do you have statistics based on the skill sets for each province?

Ms. Tracey Leesti: We do have that. Chart 5 shows the unemployment rate by occupation group across Canada.

Mr. Joe Daniel: It doesn't apply to each of the provinces directly.

Ms. Tracey Leesti: We do have it by province, but we don't have it with us.

Mr. Joe Daniel: Can you make it available to us?

Ms. Tracey Leesti: Yes. We can send that to you.

Mr. Joe Daniel: Chart 8 shows that immigrants are filling a lot of the moderate skilled jobs, even though they are university graduates. Have you considered the reasons for that? For example, is there anything to do with credential recognition in the statistics?

Ms. Josée Bégin: We don't have any data to explain the possible factors on that.

Ms. Tracey Leesti: We did a study a number of years back called the longitudinal survey of immigrants in Canada. There were questions on barriers to employment. Among some of the highest indicated were foreign credential recognition and lack of Canadian work experience. That survey is a couple of years old. I think it was from 2006 or 2008. There hasn't been a more recent replication of that one.

Mr. Joe Daniel: So there's no easy way to correlate what each province's needs are from the charts you've given us. Is that what we can conclude here?

Ms. Tracey Leesti: In what sense do you mean?

Mr. Joe Daniel: I mean in terms of where the biggest job vacancies are in Alberta versus Ontario.

Ms. Tracey Leesti: It's a fairly new data source, so we don't have a full year of data or trend data. But we could break down this chart for you by industry.

● (1610)

Mr. Joe Daniel: A breakdown by skill set is what I was thinking of.

Ms. Tracey Leesti: We don't have it by skill set; we have it by industry.

Mr. Joe Daniel: Do you also have a breakdown statistically to show by industry what skills are available in each province—in other words, people who are unemployed and have particular industry skills, by province?

Mr. Marc Lachance: When you look at the occupations chart, the one on unemployment, one thing StatsCan does have is that with these occupation classifications there's some kind of skill that applies. In each of those skills, there's a classification that says in this occupation there's an expectation of university requirements or a person with a degree.

This information is available, so we can collapse those. We can translate those occupations to some kind of skills definitions, within universities and by province.

Mr. Joe Daniel: I was actually looking for...if there are 100 people unemployed in Ontario and you know their skills breakdowns, we could match it with other provinces to see why they can't move to get a job.

Do you understand what I'm saying?

Ms. Tracey Leesti: We have to look to see whether that could be somehow derived. It's not something that's readily available. We'd have to look to see if there's some way of deriving it based on the embedded skills set in the occupation classification system.

The Chair: Thank you, Mr. Daniel. Your time is well up.

I think the point is well made. You have the contact for the clerk. If you're able to get charts to break it down by province, and/or skills set for each of the provinces, in whatever fashion you could do that it would be helpful to the committee. If you send it to the clerk, the clerk will distribute it to the members.

Ms. Crowder.

Ms. Jean Crowder (Nanaimo—Cowichan, NDP): Thank you, Mr. Chair.

I want to thank the witnesses.

It's interesting. Our study is about fixing the skills gap, addressing existing labour shortages in high-demand occupations, and low-demand as well. I think all committee members are probably very interested in avoiding what I call the “ready, fire, aim” method of decision-making, where we get the wrong order around how we gather information to make decisions.

Part of it is having an accurate assessment of where the projected labour shortages are. What I understand Stats Canada to be saying is that you're giving us what has been. You're not in the business of projection. Is that correct?

Ms. Tracey Leesti: Yes. We provide the information. There are occupational projection systems out there that are done by external analysts, government—HRSDC—but we don't necessarily do occupational projections. We have the data sources that feed into that.

Ms. Jean Crowder: I only have five minutes and I have tons of questions on the data sources, so I'm going to pick on one.

On the job vacancy survey, I've been looking at other papers that look at the demand side. You probably are aware of the questions we raised the other day on some of the problems with demand-side analysis.

On job vacancies, one of the problems that's been identified with the demand side is the fact that the signals are available via newspaper job listings, provincial and public employment agencies, social insurance services, and so on and so on, but they go to on to say there's a great deal of difficulty of accurately classifying jobs based on newspaper ads and the fact that many jobs go unposted.

With your job vacancy survey, very briefly, what kind of range of things do you look at?

Ms. Tracey Leesti: I'll maybe let Marc address it. It's not what we call a “help wanted index”, where we go to postings—online postings or newspaper postings. It's attached to one of our monthly employment surveys.

I'll let Marc explain it a bit more.

Ms. Jean Crowder: Is that the one that's distributed to employers?

Mr. Marc Lachance: Yes, that's right.

Ms. Jean Crowder: Before you get into more of the explanation, I assume you use some sort of occupational coding system.

Mr. Marc Lachance: No. That's really.... The job vacancy survey is a new one that has just been implemented. It's attached to our business survey. Every month StatsCan samples about 15,000 employers. It's part of the payroll survey—the earnings we report every month.

In this one we ask each employer whether on the last day of business in that month they had any job vacancies, and if so, how many. We have specific definitions. It has to be a position where there's an intention to fill it.

We know that in some online job postings there's maybe a bit more that's being advertised—

● (1615)

Ms. Jean Crowder: I'm going to interrupt. That's about the vacancy piece, but I'm more interested in the occupational coding.

Mr. Marc Lachance: We don't have the occupational coding in that survey. That survey only gives us the industry.

Ms. Jean Crowder: On the job vacancy survey, though, you do list industrial sectors. Okay. So it's only by industrial sector, not by occupation.

Mr. Marc Lachance: That's right.

Ms. Jean Crowder: So if we're looking at skills shortages, this is an industrial sector rather than necessarily particular skills and a skills set.

Mr. Marc Lachance: That identifies the job vacancies in that industry.

There are some industries, like health, where usually it's all health related. According to the census, about 85% of occupations within that industry are health occupations.

In the other industries we have a breakdown of occupations. If you're interested, we can provide you with the breakdown of those occupations, but that survey does not give that. We don't have the opportunity and we don't have the time. We couldn't ask the employers for the types of occupations that are in higher demand. The only thing we ask of that employer is how many job vacancies they have.

Ms. Jean Crowder: I think what I'm driving at is that I'm sure everybody here has heard of garbage in, garbage out. I'm not suggesting that this is garbage in, garbage out, but our challenge is to determine if the information we're getting is a true representation of what's happening in the labour force.

I'm going to go to Mr. McCracken for one moment here. As we all know, analyzing what's happening in the existing labour market and projecting for future labour shortages is a very complicated matter. There's a whole bunch of factors—demographics, changing technology, the changing economy, government policy, education. There's a huge list that's going to impact on what those future labour shortages are.

Mr. McCracken, I think you made a very good point, that we need to move away from looking at just particular occupations and look at transferrable skills and skill sets.

You talked about lag. Have you any ideas on addressing lag?

The Chair: You might want to put your question because your time is—

Ms. Jean Crowder: I am.

Have you any ideas on addressing lag? That's my question.

Mr. Michael McCracken: Sure. The one reason you forecast is to get a lead time and to anticipate what you can do.

The secret there is to recognize that the very first thing is that the future is not forecastable. None of us know what will be the demand for anything 10 years or 20 years from now. But what you can do is lay out a set of assumptions and look at what we call alternative scenarios.

For example, we supported the construction industry for one of their advisory councils to HRSDC and generated four scenarios of how the construction industry might go ahead over the next decade. That was done about five years ago. That provided the backdrop for them as they began looking at what policies they might pursue to improve labour markets in those areas.

As they came up with an idea, let's say to expand the apprenticeship program, they asked how well that would work under all four scenarios. We asked them if there were some things they could do that are what we call robust, that work under almost anything you can imagine, or if there are some things very particular and very peculiar, and to understand that difference. They were asked to see whether, as time goes on, they could pick up which of these scenarios they thought was the one that's actually going to evolve.

It is, I think, possible to do a lot. It does require the statistical base to develop these models. Fortunately, we have that with Statistics Canada. Certainly, though, in this case, in this field, perhaps most complicated of all, it requires the interaction between employers, economists, government planners, and the education system, all of whom have their own ways of looking at things and their own ways of defining things. So it represents a real challenge for you.

The Chair: Thank you for that.

Mr. Shory.

Mr. Devinder Shory (Calgary Northeast, CPC): Thank you, Mr. Chair, and thank you to the witnesses also. The witnesses have been very informative today. I learned about knowledge workers and service workers.

Mr. McCracken, I will start with you because I myself am an immigrant to this country, and I had my studies from Punjab, India.

You touched on both things. You talked about immigration. You talked about reducing the backlog in high-demand areas as well as.... As a matter of fact, just so that everybody's aware of it, our ministry is actually focused in that direction. Minister Kenney has said a couple of weeks ago, I believe, that he's going to fast-track some immigration applications that are in high-demand occupations.

Coming back to immigration, I'd like to hear your comments. I'm a very firm believer that immigration and the foreign qualifications both can be huge contributors to labour shortage issues. Based on your analysis, I want to know how many new workers you estimate will be gained through immigration within, say, five or ten years or so. Of course, I'll follow my colleague's line on foreign qualification recognition because that's my passion. I have lived through that.

Would you agree that the timely recognition of foreign qualifications, whether it be of an immigrant or a Canadian who has gotten the qualification abroad, would be helpful to alleviate skills shortages and/or to address the issue of labour shortages? I'd like to hear about that.

● (1620)

Mr. Michael McCracken: So all that in two minutes?

I, too, am an immigrant to this country. I feel immigration should have, and has had, a role in Canada's development, not so much in filling skill shortages as in making Canada a more diverse society. Immigrants contribute to our trade relationships with different parts of the world, and they can contribute as employees, whether or not they have credentials.

If you have an immigration policy, as we do in Canada, that is high on trying to get the best of the world to come here, then you'd better know what you're getting, and this has a lot to do with the certification exercise. If you want to be running your immigration policy on the basis of education, then it ought to be that you have someone, usually whom you trust, whether abroad or in Canada, to certify those degrees.

The skills are a little trickier, because they include things like the ability to work with people, to work on a team, and those are a little tougher to measure, period, for anyone, whether you are a Canadian, new or old, or an immigrant. It also may be culturally determined, so that is another factor to keep in mind.

As to the number of jobs, if you have roughly 250,000 immigrants a year, and half of those go into the labour force, you're looking at an increase in the labour force each year of 125,000 to 130,000 for as long as your immigration rate holds. Will they all get employed? That's a little trickier question. It will depend on whether you're able to get a full-employment society where anyone who comes in can be assured of a job.

Mr. Devinder Shory: I represent Calgary Northeast, and I always say that Calgary Northeast is the hardest-working constituency in Canada. We have quite a few business people and entrepreneurs, but what I hear a lot of the time is that there is a shortage of low-skilled workers. That isn't a good thing. In this committee, part of our study will focus on the shortage of low-skilled workers. I see some discrepancy in the analysis and the on-the-ground demand in my riding.

Are there or will there be soon any labour shortages in low-skilled occupations—agriculture, aquaculture, or the service sector?

● (1625)

Ms. Tracey Leesti: There are regional differences among primary industries, which include agriculture and aquaculture. If you look at Alberta, you can see that compared with other provinces they have a much lower unemployment rate for these selected occupation groups. I couldn't comment on whether there is a shortage of workers. We don't have anything on the service sector right now, but we could provide that for you.

Mr. Devinder Shory: Thank you.

The Chair: Mr. McCracken, did you have a comment?

Mr. Michael McCracken: I'm an entrepreneur and I live in centre Ottawa, but I've been out to northeast Calgary on occasion. You have to be very careful when people talk to you about shortages of low-skilled workers. What they may be talking about is a shortage of low-paid workers. If the pay is adequate, then you should see people coming to work there, if not from within northeast Calgary, then from other parts of the area.

The second thing is to push the employer on what shortages of skills they are running into. Is it literacy? Is it something else? If so, then they can put some emphasis on getting that done.

The Chair: Thank you for that intervention. I think you might have some people taking issue with that from some of the provinces —Saskatchewan and Alberta, for sure—but fair enough.

I know Mr. Andrews has been waiting patiently to get a chance to have his turn, so go ahead.

Mr. Scott Andrews (Avalon, Lib.): Thank you very much. It's a pleasure to be here subbing in for my colleague today.

I'm going to take this to a local perspective. I'm looking at your slide 6 and the unemployment rate for selected occupations, and I see it's very high in Newfoundland and Labrador and throughout Atlantic Canada for primary industry and for processing, manufacturing, and utilities. This survey was done in September of...?

Ms. Tracey Leesti: It's a monthly labour force survey, and this is an annual average for 2011.

Mr. Scott Andrews: Okay. What you've projected here is nowhere what we're feeling and seeing on the ground in Newfoundland and Labrador regarding unemployment. There is no way the unemployment rate is over 27% in Newfoundland and Labrador. We're actually in a need of skilled trades now. I've had two calls in the last week for temporary foreign worker permits in Newfoundland and Labrador. So something's amiss here.

When I look at the other slide, slide 5, and you're talking about construction trades and the unemployment rate for Canada being up around 12%, that doesn't jibe with what I'm hearing on the ground back home.

Vale Inco is spending $2.8 billion on a smelter in Newfoundland and Labrador, and they're actually in a labour shortage in Newfoundland and Labrador. One of the things I'd like to just quote is this. I just today actually got their little update from their project on Long Harbour. Dan Donnelly, who's the construction manager says:

> "Labour availability is one of our most pressing concerns right now," Donnelly said. "It has the potential to put us off schedule, which in turn could put us over budget. So we're working aggressively to address this problem. Incidentally, this skills shortage is not unique to our project. Other major developments that are coming down the pipe are anticipating similar challenges. On the plus side, there has never been a better time for a skilled tradesperson in this province and country."

When I met with Vale a little while ago, I found that it is actually applying for temporary foreign workers to supplement the Canadian supply.

So I'm a bit thrown off by your statistics here and what we're actually feeling on the ground in Newfoundland and Labrador and the need for craft labour in the province and the country. They say there is some construction labour available in Atlantic Canada, but again, temporary foreign workers are required to supplement the Canadian supply.

So I'm not seeing how these statistics jibe. I don't know if you have any comments on that.

Ms. Tracey Leesti: Well, I have just two comments on it.

I guess one thing would be to note that these are occupation groupings, so I guess it would mean more in terms of what particular occupations you're in. Perhaps we're showing something different when we break it down than what we have here.

Second, we do know we are seeing lower unemployment rates in Newfoundland. They've come down over time, and that's showing up in the data. There was a phenomenon about the Newfoundlanders going over to Fort McMurray, Alberta, and we're actually seeing a change in that in terms of the unemployment. We see the unemployment rate going down. We're assuming people are staying because they're finding employment in the province. So it's been one of the provinces that has been showing growth in employment.

It could be perhaps the way we've grouped this. Perhaps I can get more information for you.

● (1630)

Mr. Scott Andrews: I think this is what Mr. Daniel was getting at over there about the grouping of this. I think that slide is misleading.

Do you guys do any statistics on temporary foreign worker permits?

Ms. Tracey Leesti: We can't identify them in the labour force survey, no.

Mr. Scott Andrews: I think government would have access to the temporary foreign workers. You probably should ask the department to give you some statistics on that to overlay where some of the problem is, because the labour shortage in our province in the skilled trades right now is huge.

How much time do I have left, Chair?

The Chair: You have one minute.

Mr. Scott Andrews: Okay.

I'm just trying to help. I'm just putting all of this on the table. You guys can decide where you want to go with it, if you want to.

I have one question. Michael, at the end you talked about unions and you talked about working with unions. One of the things we're also hearing in Newfoundland and Labrador is that the unions are not allowing people in. They're trying to keep their union roll fairly low so they don't get an expanded union force. There are people out there wanting to do the job, but these are union projects and they can't get in. I don't know how deep that particular issue goes. They don't mind temporary foreign workers because those temporary foreign workers are coming from another accredited union in the United States or wherever.

I know you briefly mentioned it there at the end. I don't know if you have any comments regarding the union forces allowing people into some of these shortage areas that have been at least pointed out in Newfoundland.

Mr. Michael McCracken: We worked on a number of major projects in the seventies and eighties, and who would be allowed to work was always a contentious issue, even within the union side. It had to do with trying to first get jobs for their own members before going out more broadly.

I thought those had fairly well disappeared, but it sounds like, again, in a hot spot, you're going to get some people reacting to that. I would think it would be worth bringing pressure on both the unions and the labour departments provincially to ask what this is. We don't want them to be in a position of controlling access to the workplace.

Mr. Scott Andrews: We've done that with Vale and the provincial government.

The Chair: Your time is certainly up.

I would like to thank the witnesses for their presentations. We certainly appreciated hearing from you, and we'll certainly take them into account when preparing our report.

Thank you very much.

The meeting is suspended.

● _____ (Pause) _____

●

● (1640)

The Chair: We'll start. I understand we may have bells interrupting, and if that's the case, we'll stop when we think it's appropriate.

One of the witnesses who was to appear is not here. I'll perhaps ask the clerk to just advise us, next meeting, on what the situation was.

We have presenters from Engineers Canada. Marie Carter is chief operating officer, and Alana Lavoie is manager of government relations.

Marie will present, and then, as is the practice, we'll open it up to questioning.

Go ahead, please.

Ms. Marie Carter (Chief Operating Officer, Interim Chief Executive Officer, Engineers Canada): Thank you very much. I do appreciate being invited to come and speak to you.

As indicated, my name is Marie Carter. I'm actually this week the interim chief executive officer, so I'm wearing two hats at the moment.

Engineers Canada is the national body that represents the 12 regulators of engineering in Canada. We represent more than 250,000 licensed engineers in the country.

At Engineers Canada we're aware, very aware, of the current and future labour shortages in engineering. In 2009 we carried out a labour market conditions report, which annually we update, and many of our engineering labour markets are characterized at the moment by a surplus of recent graduates with little or no experience but a shortage of people with five to ten years of experience. Those people who have specialized, practical experience are in quite short supply right now in Canada.

A 2008 report from the Information and Communications Technology Council indicated that between 2008 and 2015, Canadian employers would be looking to recruit some 126,000 to 180,000 workers in the engineering and technology fields.

We're looking at an average of some 16,000 to just over 22,000 people per year, with the supply of our domestic graduates meeting only a half to two-thirds of that demand, depending on what discipline we're looking at. We know that new graduates aren't a substitute for the experienced engineers with the specialized technical skills.

For the civil, mechanical, electrical, and petroleum engineering labour markets, the report projects low excess supply all the way through to 2018 and probably beyond. With retirements as well, we're creating challenges in recruiting experienced engineers in many of these fields in later years.

For the industrial and manufacturing engineering labour market, the report further notes that chronic labour shortages are projected to 2018, given the current levels of immigration and post-secondary enrolments.

We do our own annual report, entitled *Trends in Engineering Enrolment and Degrees Awarded*. The most recent one reported on 2010, when we had a total of 11,450 undergraduate degrees in engineering. In that year, mechanical engineering remained the program in which the most undergraduate degrees were awarded, following by electrical, civil, and chemical. So the standard old engineering programs are the ones that are still attracting a majority of the students.

To attempt to address the shortage that's evident now and into the future, the engineering profession is undertaking several actions. First, we're looking to the under-represented groups in engineering—women and indigenous people—to ensure diversity in the profession and help fill the skills gap.

According to the 2006 census, although women comprised 47% of the total workforce, we comprised only 13% of the engineering workforce. In fact, from our most recent data on actual licensed engineers, we're about 10% of the licensed professional engineers in the country.

The plateau of females pursuing engineering contrasts with the rise of female participation in other previously male-dominated occupations, such as law and medicine. For example, in the 20-year period from 1986 to 2006, the proportion of women who were lawyers and doctors increased by almost 17% and about 13.5% respectively, whereas for engineers we increased by only 6%.

So we do have a big untapped resource there with women, and we know that we have a lot of room for incorporating indigenous people into the engineering profession.

● (1645)

We're setting targets. We're improving access to training programs for engineers and fostering greater flexibility in the delivery of the engineering curriculum.

Secondly, we're forming partnerships with national and provincial indigenous-focused organizations—there is a big drive in Alberta with our Alberta association on this—to develop tools to promote engineering to indigenous students, targeting outreach and support programs that run right from kindergarten to university, because clearly you need to be on the path to get the appropriate high school credits to get going in engineering, and to raise the interest.

We're working to raise industrial and government financial support for programs to assist indigenous students in engineering disciplines. Manitoba has a reasonable bridging program at the University of Manitoba for indigenous people, but this really does need to be more widespread in the country.

Finally, over the last 10 years, Engineers Canada and our constituent associations have undertaken a number of projects to help ensure the timely integration of international engineering graduates into our profession and into the workforce. As a brief example, one of our current initiatives is the international engineering graduate road map, and that will be a comprehensive one-stop shop, essentially. It's a resource to ease the start of the international engineering graduate's navigation through the process of becoming licensed in Canada.

With support from HRSDC, we undertook a big project called “From Consideration to Integration”. One of the items that was identified as an issue was just the understanding from the immigrant's point of view of how our system in Canada works, so this project should really provide a lot more clarity from that perspective.

We've undertaken a lot of our projects in partnership with the federal government, not only with HRSDC but also with Citizenship and Immigration Canada, and we look forward to continuing that very successful working relationship.

From our perspective, we would strongly encourage the federal government and provincial and territorial governments to continue to focus on supporting strong science, technology, engineering, and mathematics education at all levels, with special emphasis on the under-represented groups, while also continuing to work with various professions to improve the foreign qualifications assessment and recognition process.

We know from our contacts in the regulated professions that we're probably leading in a lot of the initiatives in how far we've come with being able to recognize the foreign credentials, and also in making it easier for foreign-trained people to apply from offshore, to get the process started, and to understand what they need to do to get going.

From our perspective, we're quite proud of the work we're doing to address the current and future labour shortages in our profession.

Thank you very much. I'd be happy to answer questions.

● (1650)

The Chair: Thank you for the very interesting presentation.

You have done some good work, and there is more work to be done.

We'll open it up to questions.

Ms. Hughes, you'll go first in this round.

Mrs. Carol Hughes: Thank you very much.

I think it's quite interesting that you've talked about the 6% of untapped resources. You've indicated some of the initiatives that you've undertaken or are starting to take in order to move in that direction and tap into that.

You mentioned the aboriginals and women specifically, so I'm just wondering.... I know that we've talked about foreign credentials. During that study, we also talked about the aboriginal population. We've heard from organizations and businesses about their interventions to ensure that there are education initiatives, and we've heard about the training initiatives they've undertaken, so I'm just wondering if you could elaborate a bit more about some of your initiatives that you're undertaking, especially in the aboriginal.... It's good to say that we're going to go out there and raise the awareness, but if the funding is not there so they can go to school, there's still a problem.

Ms. Marie Carter: Absolutely, yes. The 6% that I referred to is only the increase in women. From the perspective of women, 50% of our population, really, is untapped. From the perspective of the whole aboriginal issue, we entered into an agreement with the Assembly of First Nations to try to work collectively on this issue.

We first started looking at this about eight or nine years ago. We reached out to the Assembly of First Nations, and we got in a number of people who had expertise in the education systems. It really appeared at first to be like trying to hug a cloud, because each little community has a different way of doing things, and they've got different ideas and values. So we wanted to try to get to a point where we could work towards helping to improve the basis—the basic education pieces—without alienating the group that we were trying to help by simply trying to go ahead with it.

So we do a number of things. We support a lot of the workshops and summer camp programs that they've got in the various first nations and aboriginal communities around the country. We've got quite an active program in supporting those workshops just so they get a feeling that science is fun, and math is fun, and subsequently, engineering can be fun as well.

The Alberta association is just in the process of really developing their outreach. They're working with industry. They have worked quite a bit with getting the gas and oil industry, which is predominant in northern Alberta, to help within the communities with that basic primary level education, so that the people will have the opportunity to move forward.

The ongoing program that I mentioned and that we're trying to help get spread across Canada to other universities is called NAEP. That's a bridging program they have, understanding that people coming from some of their local aboriginal communities may not have the math and science from their high schools. It's a program to work with them—and there's some financial support—to take two to three years to get through first-year engineering, so that they have the time to bring those skills up to speed, and then they just go into the regular stream with the rest of the engineers. They have been quite successful with that.

● (1655)

Mrs. Carol Hughes: Thank you.

On that note, there was a labour market study done for engineering and technology by Engineers Canada, and it basically found that employers are overlooking recent graduates with little or no experience and are looking for engineers with five or more years of practical experience. I've heard that from people personally as well.

So what is the hand-up to them? You're telling me there's a shortage, but these people are being overlooked.

Ms. Marie Carter: Exactly. When we got the results of that, I thought, well, you know, you're not going to have any engineers with five to ten years of experience if you're not hiring the people out of university, because in five or ten years, they're the ones who will have the experience that you're looking for.

We've been making our best efforts, as have our constituent associations, to try to connect with industry to talk about mentoring programs, and to assist them with mentoring programs so that they can see that the new graduates who they hire will come up to speed more quickly.

There are a couple of provincial programs with some financial assistance for companies to hire new graduates, but those aren't well known or particularly well funded, so it continues to be a problem, and it continues to be an issue.

They're looking outside of Canada for the people with the five to ten years of experience rather than hiring our own grads. There is a gap.

This also happened in the 1990s because there was a recession in the late 1980s and early 1990s. I graduated in 1989, and I was in the last class where we really got jobs. The next class in 1990 didn't, because there was a recession. I'm a civil engineer. So we ended up five to ten years later, from the mid to late 1990s, not having enough engineers, those middle experience engineers, and again, they were relying on immigrant engineers.

The Chair: Thank you for that response.

We'll now move to Mr. Butt.

Mr. Brad Butt (Mississauga—Streetsville, CPC): Thank you, Mr. Chair.

Thank you very much for presenting today and for being here to answer our questions.

Engineering obviously covers a whole bunch of different areas: civil engineering, mechanical engineering, and on and on. Are there certain discipline areas where there is a greater labour shortage or a greater gap in workforce needs? You may have mentioned that in your presentation. Could you be a little bit more specific?

You mentioned, Ms. Carter, that you're a civil engineer. Is there a greater challenge for civil engineers than there is for chemical engineers versus others? Do we have certain areas we should be focusing on where we're having a bigger challenge?

Ms. Marie Carter: My understanding is that it really crosses all disciplines. However, it depends on what area of the country you're looking at. For example, in Alberta and in Newfoundland, where they have a lot of work going on in the gas and oil industry and where they have a lot of construction going on, they're looking for all kinds of engineers.

I had a call from Hatch, which is a great big international Canadian mining firm.

Mr. Brad Butt: They're in Mississauga.

Ms. Marie Carter: Yes, they are. They're all over the country.

I had a call from them yesterday. It's the second call I've had from this gentleman. I asked what types of engineers they are looking for, and he said they need expertise in oil and gas and mining. They also need the mechanical engineers and electrical engineers. And guess what? They're developing communities around these areas so quickly that they need all the types of engineers to support the infrastructure they need. That means the human side of the infrastructure as well as the hard side of the infrastructure.

● (1700)

Mr. Brad Butt: Are we graduating enough engineers from universities in Canada, Canadian citizens, who plan to practise in Canada? Or are we having a challenge with...? I know this has been mentioned in other areas, such as medicine and others. A lot of the spaces in universities are being taken up by foreign students. They're obviously paying tuition to be there, but when they graduate, they're going back to their countries of origin to actually practise. Are we having any challenges like that? Is that just a fallacy? Do we have enough spots for engineering students in our universities across the country to fill the labour needs of the future once they graduate and are able to practise that profession? Or are we having a bit of a challenge around the number of spots and the number of graduates who are staying in Canada to practise?

Ms. Marie Carter: We're not having the same challenge as they're having in the medical field.

We collect those statistics. I don't have that particular percentage at hand at the moment. We can provide it to you. But certainly the majority of the graduates are homegrown Canadians who are going to be staying in Canada, potentially, unless they're—

Mr. Brad Butt: The last question, Mr. Chairman, I have, and I want to follow up on what Ms. Hughes was getting at, was on this issue of graduating but then not having the work experience. The industry wants people who have at least five years or more of hands-on, direct work experience.

What more can we be doing at the federal level, if anything—and maybe we can't, I don't know—to bridge that gap so that we can get graduates in? We're always in this catch-22. We found this in the foreign credentialling study as well. You know, I can't get any Canadian work experience if you don't hire me to actually work in Canada. But the company wants Canadian workers.

Is there anything else we can be doing at the federal level to help work with your sector and others to get more companies to hire graduates so that they get that work experience and meet that work experience criterion most companies are looking for?

Ms. Marie Carter: I'm going to ask Alana to answer.

Ms. Alana Lavoie (Manager, Government Relations, Engineers Canada): Thank you.

That's obviously a question that is very challenging. As you say, you have come across it already in other areas. There are a couple of things. In a perfect world, and I think we all wish it were a perfect world, there could perhaps be tax incentives for employers or other forms of non-financial benefits at the federal or provincial level to help them. That would be in an ideal, perfect world, where all conditions are perfect.

Another thing the federal government could do is help provinces and other organizations, professional associations, raise the profile of the professions to help people appreciate that they are valued. That goes for the medical profession, the legal professional, and engineering. Work with us to highlight for employers, for industry, those benefits in terms of productivity and the value to Canada in the long term.

The Chair: Thank you.

Ms. Crowder.

Ms. Jean Crowder: Thank you very much for coming before the committee today.

I have a couple of questions. You've indicated there are predicted shortages in a variety of the engineering fields. How do you gather that? How do you know? What do you do to estimate those shortages?

Ms. Marie Carter: We hire a firm. We've hired Prism, which is the name of the firm that does our studies for us.

Ms. Jean Crowder: What parameters do you put in place in terms of their doing the data gathering?

Ms. Marie Carter: We ask them to go out to small, medium, and large companies and we ask them for the following. What is their current situation? What are their projections based on their knowledge of their industry and how their particular company is growing? What is their projected need? How many people are they expecting to have retire over this period of time? So there's a need for replacing the retired people, for filling in. Those are the sorts of parameters. We've also done it by region, by type of industry, so that we have a better handle.

Our initial reason for carrying out the labour market study was so that when we have foreign-trained people asking us where the jobs are—because they're living in Toronto, but they're a marine engineer—we can actually tell them that in a specific area of the country they're looking for their type of engineering, and we ask them whether they have considered applying in that area. We can direct immigrants to the right places.

● (1705)

Ms. Jean Crowder: Have you analyzed the accuracy of the forecasting? Do you do a retro and see if the trends you're predicting actually bear out?

Ms. Marie Carter: Well, we've done updates on an annual basis since we first did the survey—

Ms. Jean Crowder: I'm sorry. When was the survey first undertaken?

Ms. Marie Carter: It was first completed in 2009; it was first published in 2009. So we've done two years of updating and going around and checking. We're getting very similar feedback, results on the next go-around, which to me is the validation of the first go-around.

Ms. Jean Crowder: Yes, that's good to know. It sounds like the questions the company you're working with are asking are actually giving you the information you need.

The previous witness talked about the fact that really what you need to do is develop scenarios. As people pointed out, nobody can predict the future, and what you need to do is develop scenarios based on a variety of factors. He indicated that it's important to have employers, economists, government planners, and educational systems at the table in terms of developing that plan to validate the shortages and to develop a plan.

Are you working with other organizations as well?

Ms. Marie Carter: We're part of a group called the Canadian network of accreditors and regulators. There's another word in there that I've missed. It's the CNNAR, which has most of the regulated professions in it. Aside from that, we work with our partners at the national level, from the engineering perspective, so we work with the Association of Canadian Engineering Companies. We work very closely with the deans of engineering. Most of the studies we do incorporate industry, education, and the profession, and then we reach out to see what other professions are doing.

Ms. Jean Crowder: Do I still have time, Mr. Chair?

The Chair: You do. A minute and a bit.

Ms. Jean Crowder: This is not directly related to engineering, although they do quote an aerospace engineer in this article. There was an article in *The Toronto Star* yesterday around a manufacturing jobless rebound. They said that at one time, a typical manufacturing worker on the shop floor had a high school education, but in the new advanced manufacturing sector, it could be an aerospace engineer with two master's degrees and an MBA. They also indicate that for many employers, what they are not looking at is where they could actually fill some of these jobs at a lower level, for example, with a one- or two-year community college program, where they could actually get the skills. I know there are engineering technicians and whatnot.

Are you working with employers to look at perhaps some other ways of addressing those skill shortages? Or are you looking at some of those jobs as entry-level jobs that they could then ladder into other more advanced degrees, with some support from the employer?

Ms. Marie Carter: We are not specifically as you've outlined it. However, we have a good relationship with the Canadian Council of Technicians and Technologists. We understand very clearly that there's an engineering team that is not just professional engineers but that includes technicians, technologists, and the whole team.

We're currently working on what we're calling a Canadian framework for licensure. In the end, the intent is to have the laddering piece available within that framework.

The Chair: Thank you.

Your time is up.

Mr. McColeman.

Mr. Phil McColeman (Brant, CPC): Thank you for coming today.

I want to go down the road of education and the linkages to education in terms of attracting people into the engineering field to begin with. I'd like you to give us examples, if you could, of some of the things you've done. You mentioned you're in close contact with deans.

What have you done with the schools of engineering that's innovative or that may be on the cutting edge of making sure that graduates who are coming out can perhaps bridge that 5- to 10-year gap? It may be some added curriculum or work experience that they might have gotten in the field. The parallel might not be apprenticeship but maybe internship programs. Is there anything in the Canadian post-secondary realm that you can cite as working towards this gap?

● (1710)

Ms. Marie Carter: Yes, and I'm happy I can answer that one with a firm yes.

We accredit all of the undergraduate engineering degree programs in Canada. One of the things that most of the universities are moving towards are co-op programs. In these, universities actively work with industry to place their students for four-month, eight-month, or full-year terms.

So rather than graduating in four years, you're graduating in five or six, but you've gained a year to two years of work experience within that time. We're finding that a large number of the graduates will be hired by the companies with which they did their co-op portion. That works very well.

Mr. Phil McColeman: So it's a co-op in the traditional sense that while you're studying you're getting a work placement, which could lead to a job.

From an immigration point of view...I met a young engineer this summer in Ireland. He was a caddy at a golf course. Of course, with the way the Irish economy is, caddy was the best job he could get.

Do you have a success story about an immigrant engineer coming to this country that you could tell this committee?

Ms. Marie Carter: We actually have success stories on our website, which are available to have a look at.

Just before Christmas, I was at a Professional Engineers Ontario function, and a fellow came up to me and gave me his card. He said, "I came here as an immigrant. I got through the licensing program with no problem"—he was a structural engineer—"and I now own my own business. I'm hiring immigrant engineers, and if you need to show somebody a success story, I'm it."

The first time Hatch called me I suggested they try Ireland, because we have a mutual recognition agreement with Engineers Ireland, so somebody registered with Engineers Ireland gets recognized fairly easily in Canada. When he phoned me yesterday, he said he had managed to mine all of the engineers that he could out of Ireland, and now he needed to go somewhere else for that.

There are a lot of success stories out there.

Mr. Phil McColeman: Are the engineering schools and the post-secondary engineering faculties full?

Ms. Marie Carter: Yes.

Mr. Phil McColeman: They're at capacity? So is one of the solutions perhaps to build more capacity within post-secondary programs?

Ms. Marie Carter: Absolutely.

Mr. Phil McColeman: My last question is—and I'll try to make it quick because I'm running out of time—what are you doing at the high school level or even the elementary level to attract young people into the engineering field?

Ms. Marie Carter: We're actually doing a few things with that. We're focusing on K to 12 outreach a little bit. Our constituent associations, our members, are getting out into the schools. We support national engineering month. National engineering month is really focused on getting out into the grade schools and the high schools and promoting engineering. All of our associations corral their members, so the professional engineers in the country run programs and competitions at the grade school and high school level.

The Chair: Thank you to Mr. Coleman.

Mr. Andrews, go ahead.

Mr. Scott Andrews: Thank you very much. Welcome folks.

Ms. Carter, you have regional representation in each province as part of your association, am I not correct? I think you recently just had some meetings in Newfoundland, maybe last year, or was it six months ago?

Ms. Marie Carter: Sorry, I missed what you said.

Mr. Scott Andrews: Didn't you just recently have meetings in Newfoundland with your association there last spring?

Ms. Marie Carter: Oh, last spring, yes....

Mr. Scott Andrews: I had an opportunity to meet with some of the engineers that were down at that particular time.

Getting back to your question, you were talking about the different regions of the country. Are you really noticing a need for engineers in the different regions? I know you mentioned Newfoundland. Is there one region over another where the demand is greater?

● (1715)

Ms. Marie Carter: There are bigger demands right now in Saskatchewan and in Alberta, where we have a bit of a more robust economy going. I know that our Newfoundland association has said they're licensing more members than they've ever had coming in there, and that the companies in Newfoundland are looking for more engineers, trying to get them back from Alberta, because a few years ago everybody was fleeing to Alberta.

Mr. Scott Andrews: Do you notice the mobility of your engineers from one part of the country to the other? Do you see a lot of that?

Ms. Marie Carter: Since 1999 we've had an inter-association mobility agreement, whereby engineers would be licensed if they were in good standing in another organization fairly quickly. We've managed over the years, and in anticipation of the agreement on internal trade ramping up a bit, to get that down to 48 to 72 hours, where a member in good standing in one province can get licensed in another province and hit the ground running for work.

Mr. Scott Andrews: Good.

I had this as my fourth question, but I'll ask it since you've brought it up. You just mentioned Ireland, and you have some agreements with them. Are there any other countries that you're dealing with where you have these inter-mobility agreements?

Ms. Marie Carter: Yes. We're part of the Washington accord, which is an agreement that recognizes the education level. We also have full mobility agreements with Hong Kong, Australia, Ireland, and France, which is a bit of a hybrid agreement: we recognize their education and they recognize our licence, simply because they don't have an actual licensing process there. In France, they graduate and are automatically able to practise independently.

Mr. Scott Andrews: Have you noticed a shortage of engineers for government—municipal and provincial levels of government? I once was a municipal councillor and know the trouble of trying to attract and retain engineers for a municipal government. Is that still an issue?

Ms. Marie Carter: I can't answer that definitively. I can answer it anecdotally only, and that is that we still hear from municipalities and provincial governments that they are the training grounds for the consultants and that they continue to lose engineers to the consulting firms.

Mr. Scott Andrews: Is part of that training ground the salary gap maybe? Have you noticed the salary gap over the past little while?

Ms. Marie Carter: We don't have information on that. Our constituent members gather information on salaries, but I don't know that they specify one or the other.

Mr. Scott Andrews: Okay, because I think there has been....

The Chair: Mr. Andrews, if you could....

I understand the bells are now ringing. They're half-hour bells, so I would ask for unanimous consent to conclude with Mr. Andrews. Madame Perreault has a few questions. With that, we'll close. Are there any objections? If not, we'll carry on.

Go ahead.

Mr. Scott Andrews: Have you done any research on the salaries of engineers over the last 10 years? Has it gone up very much? Has that been an issue?

Ms. Marie Carter: I actually do look at the salary reports, certainly for Ontario, because it's where I'm working and it's of interest to me personally. The salaries have gradually increased over the last 10 years. There hasn't been a particular stagnation in salaries for engineers based on the studies they've done.

Mr. Scott Andrews: Okay.

This is the last question.

In the last part of your testimony you mentioned a working relationship with government on a certain initiative. I didn't catch exactly what you said there. Could you elaborate on that a little bit?

Ms. Marie Carter: We've worked over the last 10 years with HRSDC, with CIC, and DFAIT, actually, on all of our initiatives for what we called “from consideration to integration”, which was being better able to process, essentially, foreign-trained people into the profession.

Mr. Scott Andrews: And that was successful?

Ms. Marie Carter: Yes, it's been great.

Mr. Scott Andrews: Okay. Thank you.

The Chair: Thank you.

Madame Perreault, go ahead.

[*Translation*]

Ms. Manon Perreault (Montcalm, NDP): Good afternoon. My question is for Ms. Carter.

Earlier you mentioned to my colleague that classrooms were really full. Are there a lot of Canadian students versus foreign students in those courses?

● (1720)

[*English*]

Ms. Marie Carter: I don't have the exact numbers with me of what the proportion is of Canadian students versus foreign students. It is a majority. It's not the same proportion as we have for medicine. I know they've got a higher proportion of foreign students than we do in engineering.

[*Translation*]

Ms. Manon Perreault: From the foreign students who come here to study, do many of them go back to their home countries?

[*English*]

Ms. Marie Carter: Most of the engineers who come to go to school in Canada do return to their home countries. A small minority of them stay in Canada, but on the whole they do return to their home countries.

[*Translation*]

Ms. Manon Perreault: In that case, do Canadian students who study engineering here also go abroad to work?

[*English*]

Ms. Marie Carter: Yes, for the most part.

[*Translation*]

Ms. Manon Perreault: Does that mean that very few engineering students will stay here in Canada?

[*English*]

Ms. Marie Carter: Most of the people who study engineering in Canada stay in Canada. Most of the people who come from offshore would return to their home countries, but a proportion of them will stay in Canada.

[*Translation*]

Ms. Manon Perreault: But there are Canadian students who study here and go abroad to work.

[*English*]

Ms. Marie Carter: Absolutely, yes, and there are some exchange programs with other countries where our students will then want to go and work in the other countries.

[*Translation*]

Ms. Manon Perreault: What draws our engineering students to go work in other countries?

[*English*]

Ms. Marie Carter: I would think the same thing. A lot of young people want to travel the world, and that's an opportunity to take their engineering skill and get a job in another country. A lot of them are working for Canadian firms, though.

[*Translation*]

Ms. Manon Perreault: So it is not a question of remuneration.

[*English*]

Ms. Marie Carter: No. They want to travel.

[*Translation*]

Ms. Manon Perreault: It's really because they want to travel.

[*English*]

The Chair: Thank you.

Thank you very much for presenting. We appreciate it.

We're adjourned.

Published under the authority of the Speaker of the House of Commons

SPEAKER'S PERMISSION

Additional copies may be obtained from: Publishing and Depository Services
Public Works and Government Services Canada
Ottawa, Ontario K1A 0S5
Telephone: 613-941-5995 or 1-800-635-7943
Fax: 613-954-5779 or 1-800-565-7757
publications@tpsgc-pwgsc.gc.ca
http://publications.gc.ca

Also available on the Parliament of Canada Web Site at the following address: http://www.parl.gc.ca

Publié en conformité de l'autorité du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

On peut obtenir des copies supplémentaires en écrivant à : Les Éditions et Services de dépôt
Travaux publics et Services gouvernementaux Canada
Ottawa (Ontario) K1A 0S5
Téléphone : 613-941-5995 ou 1-800-635-7943
Télécopieur : 613-954-5779 ou 1-800-565-7757
publications@tpsgc-pwgsc.gc.ca
http://publications.gc.ca

Aussi disponible sur le site Web du Parlement du Canada à l'adresse suivante : http://www.parl.gc.ca