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Looking Ahead:

A 10-Year Outlook for the Canadian Labour Market (2006-2015)

Background Briefing on

Current and Future Labour Market Shortages in Canada

Several occupations are currently facing labour shortages at the national level

According to a new report by HRSDC, there are currently labour shortages in several occupations, at the national level. These occupations have employment and wages increasing substantially faster than in other occupations. Occupations facing labour shortages also have unemployment markedly lower relative to historic norms for these occupations, and relative to other occupations.

The projections presented in the HRSDC Report are concerned with the national-level occupational labour markets only. This is because available data does permit both labour demand and labour supply projections at the national level, but does not permit labour supply projections by detailed occupation at the provincial level. Looking at only one side of the labour market can give very misleading signals. For instance, for a given province, the projection of strong demand growth in an occupation does not necessarily mean that there will be a shortage situation in that occupation if labour supply in that occupation is also going to increase strongly in future years.

Such indicators suggest that the largest number of occupations where demand currently exceeds supply, at the national level, is found in the health sector.

Pressures are particularly acute for physicians, nurses, pharmacists, medical technologists and technicians and assisting occupations in support of health services (such as nurse aides and dental assistants). Growth in demand for those occupations has been strong, due to rising needs associated with population ageing, increases in government funding for health care and a high number of retirements of existing workers. On the other hand, supply growth in many of these occupations has been relatively weak.

Management occupations (e.g. senior management, human resources managers) are also considered in shortage, largely as a result of the demand associated with high levels of retirement of these typically older workers.

Other occupational groupings currently showing signs of shortages include:

- Occupations related to the oil and gas sector, mainly as a result of large investments in this sector;
- Some occupations in the trades, especially home builders and renovators, as a result of the strong growth over the last several years in residential construction and renovation activities;
- Some occupations in the information technology sector, such as computer

engineers and software engineers, reflecting the sector's recovery from the 2001 meltdown while school enrolment in such fields is still lagging;

- Some occupations in social science and government service, such as university teachers, as a result of retirements and new demand stimulated by increased government funding for post-secondary education.

This list of shortage areas may seem short in the face of the many claims of shortages that have been made in recent years across Canada. There are two important points to note.

- First, the list above is about shortages in the national labour market while claims of labour shortages often refer to the situation in local or regional labour markets. Indeed, in a diverse country such as Canada, with different regions having quite different industrial mixes and demographics, an assessment of pressures in occupational labour markets performed at the national level can easily mask major differences across regions. Some parts of the country may be facing a shortfall in an occupation while other regions have excess supply in that same occupation.
- Second, claims of shortages may sometimes reflect newly heightened competition for workers in a healthy labour market, more than objective indicators of labour shortages (which manifest themselves in strong job growth, low unemployment and upward pressure on wages). When unemployment was in the double digits, few claimed there were labour shortages, because there were plenty of people for the available jobs.

Growing Numbers of Retirements Opening Up Many Jobs

Labour shortages will not be felt only in red-hot economic sectors, where new jobs will be created. Shortage pressures will also be felt in areas where existing jobs will be vacated by retiring workers.

In fact, replacing retiring workers will be a more important driver of labour demand in the decade ahead than economic growth, accounting for over two of every three job openings on average (up from one of every two job openings in the previous decade). As noted earlier, these increasing numbers of retirements are contributing to the breadth of occupations in which shortages are now evident or will materialize.

Most Occupational Shortages Are Expected to Persist Over the Next Ten Years

Most of the occupations that are currently facing shortage pressures at the national level are expected to remain in that situation over the next ten years, as the projections show more job openings than new job seekers in those occupations over that period (see Table 1). For instance, new health care needs due to population ageing will contribute to increase demand for several health care occupations to levels markedly higher than can be met by current projected supply. Shortage pressures are also expected to continue for oil and gas well drillers, servicers, testers and related workers due to the large tar sands development projects in Alberta.

However, a few occupations currently facing shortage pressures are expected to move towards a situation where labour demand and labour supply are more in balance. These include occupations in the residential

construction and real estate sectors, due to an anticipated slowdown in residential investment after the recent, now-peaked, boom.

Challenges to Increase Supply for Some Shortage Occupations

The extent of the shortage in some occupations is quite large. This can be gauged by looking at excess demand relative to some metrics of potential source of supply (see Table 2). A first source could be the unemployed. However, for those occupations facing a shortage situation, unemployment is already very low both relative to other occupations and relative to historic norms for those occupations.

The second potential source is new supply from school leavers (those permanently leaving the Canadian schools system, whether as high school drop outs, high school graduates or college and university graduates) or immigration. In some of the projected shortage occupations, very substantial increases in new supply, unlikely to materialize easily, would be needed to fully meet the projected demand.

Too Much Labour Supply in Other Occupations

We have mentioned specific occupations where labour shortages are currently present or expected to be present in the next ten years. There are also currently indications of excess supply (or labour surplus) in occupations (mainly low-skilled) specific to the primary sector and to processing, manufacturing and utilities, in sales and service occupations and among office equipment operators. All these occupations are expected to remain in an excess supply situation in the decade ahead.

Overall Job Market Experiencing a Balance of Labour Demand and Labour Supply

There is not now nor will there likely be a generalized 'shortage' of labour in Canada. Although the employment rate and the labour force participation rate are at or near record highs and the unemployment rate is close to its lowest value in three decades across much of the country, these results do not reflect a generalized labour shortage situation. They are the outcomes of a healthy labour market where supply has been matched by demand after decades in which there was, on average, considerable underemployment of the available labour force.

Overall labour demand is expected to stay broadly in line with overall labour supply over the decade ahead. This reflects the assumption that monetary conditions in Canada will be successful at keeping aggregate demand for goods and services broadly in line with Canada's production capacity, in order for inflation to stay within its target range.

However, as noted above, when an economy is in overall labour market balance, there are always specific occupations facing shortage pressures while others have more supply than needed. This is because there is so much flux in an economy that no one, neither the government, employers, workers or students can predict with certainty where the job market will be several years from now. Nor can people change quickly: loggers do not become medical technologists and even chemical engineers do not become mechanical engineers without training.

Demand and Supply for Broad Skill Levels to Grow in Line in the Decade Ahead

As for the overall labour market, indicators such as unemployment rates and real wages suggest the absence of significant current imbalances between demand and supply across broad skill levels. What we call “broad skill levels” correspond to large clusters of occupations usually associated with different levels of educational attainment:

- management occupations, which often but not always require university education,
- occupations usually requiring university education,
- occupations usually requiring college education or apprenticeship training,
- occupations usually requiring secondary school and
- occupations requiring only on-the-job training.

The growth in employment demand has been fastest in the most skilled occupational groups, those normally requiring university education, and least in those requiring the least skills. Yet, the evidence suggests that the strong rise in demand within high-skilled occupations over the last twenty years has been largely met by a rising supply of qualified workers in Canada. This is evident in the facts that unemployment rates for most broad skill levels (relative to the average of the other skill levels) have not shown any discernable trends since 1987 while real wages by broad skill level have been fairly constant since 1997.

The HRSDC projections show that future growth in labour supply will also not fall short of demand across broad skill levels. About two thirds of all job openings (those due to new job creation plus those due to retirements) over the next ten years will be in occupations usually requiring a post-secondary education or in management occupations (the latter often but not always require post-secondary education). The HRSDC projections suggest that labour supply will be adequate to meet those needs.

This suggests that the simultaneous existence of detailed occupations where there are jobs without workers and others with workers without jobs are a challenge for matching school leaver and worker skills to the needs of the job market. While the inherent uncertainties of job market prospects mean that matching can never be perfect, it can be improved with better labour market information on future shortages and surpluses by occupation and greater responsiveness of the post secondary education system to those evolving needs.

**Table 1:
Occupations Currently Showing or Expected to Show Shortages**

Occupational group	Occupations	Currently showing signs of shortages	Expected to face shortage pressures over the next 10 years
Business, finance and administration	Senior management	Yes	Yes
	Human resource managers	Yes	Yes
	Human resources and business service professionals	Yes	Yes
Natural and applied sciences	Civil engineers	Yes	Yes
	Mechanical engineers	Yes	No
	Computer engineers	Yes	No
	Software engineers	Yes	No
Health	Managers in health, education, social and community services	No	Yes
	Physicians, dentists and veterinaries	Yes	Yes
	Optometrists, chiropractors and other health diagnosing and treating professionals	Yes	Yes
	Therapy and assessment professionals	Yes	Yes
	Head nurses and supervisors	Yes	Yes
	Other technical occupations in health care (such as registered nursing assistants, audiology technicians and physiotherapy technicians)	Yes	Yes
	Medical radiation technologists	Yes	Yes
	Nurse aides and orderlies	Yes	Yes
Social science, education, government service and religion	Managers in Public Administration	No	Yes
	Lawyers and Quebec notaries	Yes	No
	University professors	Yes	No
Art, culture, recreation and sport	Editors	Yes	No
	Professional occupations in public relations and communications	Yes	No
Sales and service	Accommodation service managers	Yes	No
	Real estate agents and salespersons	Yes	No
Trades, transport and equipment operators and related occupations	Residential home builders and renovators	Yes	Yes
	Contractors and supervisors trades and related workers	Yes	Yes
Occupations specific to primary industry	Supervisors, oil and gas drilling and service	Yes	Yes
	Oil and gas well drillers, servicers, testers and related workers	Yes	Yes
Occupations specific to processing, manufacturing and utilities	Supervisors, processing occupations (such as in petroleum, gas and chemical processing and utilities, and plastic and rubber products manufacturing)	Yes	Yes

Source: HRSDC, Strategic Policy Research Directorate, Looking-Ahead: A 10-Year Outlook for the Canadian Labour Market (2006-2015), October 2006.

Table 2:
Potential Sources of New Labour Supply for Some of the Occupations Facing Shortages

Occupations	Non-student employment in 2005 (000's)	Unemployment Rate*	Excess demand as % of 2005 employment	Excess demand as % of school leavers and immigrants
All occupations	14,565.9	4.5%	0.1%	1.6%
Human resources and business service professionals	138.6	1.8%	2.4%	58%
Physicians, dentists and veterinarians	82.5	0.2%	2.4%	51%
Optometrists, chiropractors and other health professionals	13.2	0.0%	3.5%	124%
Nurse supervisors and registered nurses	252.1	0.7%	3.2%	70%
Other technical occupations in health (except dental)	108.7	1.2%	2.0%	80%
Assisting occupations in health services	254.6	2.5%	2.1%	63%
Underground miners, oil and gas drillers and related workers	38.0	3.5%	3.5%	172%

* The calculation of the all-occupations unemployment rate does not include the unemployed for more than one year (the Labour Force Survey does not report the last occupation of the long-term unemployed) and the unemployed whose occupations are unclassified.

Sources: Labour Force Survey (Statistics Canada) and HRSDC, Strategic Policy Research Directorate, 2006 reference scenario.