



***The Aging Workforce and  
Human Resources Development Implications  
For Sector Councils***

Prepared for:

The Alliance of Sector Councils

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## EXECUTIVE SUMMARY

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*The Aging Workforce and Human Resource Implications for Sector Councils* is an examination of the issue of the aging Canadian workforce and the projected human resources challenges to be confronted over the next decade. It also provides examples of best human resources practices and potential actions that could be adopted for use by sector councils and industry to address the issue of the aging workforce.

The report presents the findings of a comprehensive review of a wide range of material, published between 1999 and 2002.

This literature review includes an exploration of the following issues:

- Aging in Canada, as well as internationally;
- Canadian labour market trends and projections;
- The aging workforce and Canadian industry;
- Human resource implications and best practices in Canada and abroad;
- Possible sector council approaches to the issue of the aging workforce.

Highlighted below are the key findings of *The Aging Workforce and Human Resource Implications for Sector Councils*.

### **Canada's workforce is old and aging.**

- The median age of Canada's "active" population reached 41.3 years in 2001, up from 38.1 just a decade previously. By the year 2011, the median age is expected to reach a high of 43.7 years.<sup>1</sup>
- According to Human Resources Development Canada (HRDC) estimates, as much as 41% of the working-age population will be between the age of 45 and 64 by 2011, up from 29% in 1991.<sup>2</sup>

### **Canadian workers are retiring earlier.**

- Between 1997 and 2000, 43% of people who retired did so before the age of 60, up from 29% between 1987 and 1990.<sup>3</sup>
- The median age of retirement in 1999 stood at 61 years, down from 64.9 years in 1976.<sup>4</sup>

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<sup>1</sup> Statistics Canada. "Profile of the Canadian population by age and sex: Canada ages". P.28

<sup>2</sup> Human Resources Development Canada. "Challenges of an Aging Workforce: An Overview of the Issue, May 2002". <http://labour.hrdc-drhc.gc.ca/worklife/aw-overview-current-practices-en.cfm>

<sup>3</sup> Statistics Canada. "Early Retirement Trends ". [Perspective on Labour and Income](http://www.statcan.ca/english/indepth/75-001/feature/pehi2001013004s4a01.htm). Winter 2001. Vol.13, no.4. <http://www.statcan.ca/english/indepth/75-001/feature/pehi2001013004s4a01.htm>

<sup>4</sup> Schetagne. P.10

**Younger workers will account for a less likely source of new employees, making the retention of older workers an important human resource strategy.**

- While older workers are exiting the labour market earlier than ever, younger workers are entering the workforce later. The school-to-work transition is now longer due to the tendency of youths to remain in school much longer.
- The baby boom generation accounts for a large segment of the workforce across all sectors and, by 2011, is expected to represent 41% of the workforce in Canada. Retention of these workers will become an important strategy in order to avoid a loss of skills, experience, and corporate knowledge. It will also be key to avoiding labour shortages.<sup>5</sup>

**Research suggests that there has been little done in terms of developing pro-active strategies to attract, retain and/ or maintain older workers in the Canadian workplace.**

- The general aging of the Canadian population is likely to have an enormous impact on the labour force in the coming decade yet “Canadian research on older workers is quite recent and not plentiful”.<sup>6</sup>
- More research should be done in order to establish Canadian “best practices” in this area.

**This research has identified several issues for consideration:**

- There is limited data at the sectoral level in terms of the aging workforce, which suggests that more research needs to be done.
- Review of the literature suggests that there are some directions that should be examined, such as youth strategies and older worker retention strategies.

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<sup>5</sup> Human Resources Development Canada. “Challenges of an Aging Workforce: An Overview of the Issue, May 2002”. <http://labour.hrdc-drhc.gc.ca/worklife/aw-overview-current-practices-en.cfm>

<sup>6</sup> Victor Marshall. “Canadian Research on Older Workers”. Institute on Aging, Department of Sociology, University of North Carolina. Chapel Hill, North Carolina, USA. 2001. P.1

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## SECTION 1: INTRODUCTION

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### 1.1 Background on Aging and the Workforce

Declining birth rates and increased longevity have resulted in a “greying” of the population around the world. By the year 2050, the proportion of persons aged 60 years and older is expected to double, and will account for 21% of the total global population.<sup>7</sup> At the same time, birth rates are falling: in the year 2000, children represented 30% of the world’s population, but by 2050, they will account for only 21%.<sup>8</sup> Developed countries, in particular, have a significantly older population and have birth rates lower than the level needed to replace generations.<sup>9</sup>

In Canada, this demographic trend has been mirrored. By the year 2026, one in five Canadians will be 65 years of age or older—up from one in eight in 2001.<sup>10</sup> Canada’s birth rate has also been falling rapidly and, in the year 2000, stood at an all time low of 1.5 children per woman.<sup>11</sup>

This so-called “demographic bomb”<sup>12</sup> is expected to have a profound effect on the Canadian labour market. Over the next ten years, the number of Canadian workers aged 55 to 64 will increase by more than 50% and, by the year 2015, they will make up a total of 48% of the labour force.<sup>13</sup>

Recent literature on this subject suggests that there are a number of challenges associated with an older workforce: the comparative lack of transferable skills in older workers, higher wage expectations, less mobility, and other issues.<sup>14</sup> In addition the high rate of retirement and employer perceptions of older workers are challenges that affect human resource issues such as hiring and retraining practices. All of these factors will have a large impact on the planning and structuring of human resources practices.

### 1.2 Background and Purpose of *The Aging Workforce and Human Resource Implications for Sector Councils*

The Alliance of Sector Councils (TASC), created in 1999, is a coordinating body for approximately 30 sector councils that bring together business, labour, education, and other professional groups to examine sector-wide human resource issues.<sup>15</sup>

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<sup>7</sup> United Nations. “International Plan of Action on Ageing 2002” (Second World Assembly on Ageing, Madrid, 2002). <http://www.globalaging.org>. P.1

<sup>8</sup> Ibid

<sup>9</sup> Peter Auer & Mariangels Fortuny. ILO. “Ageing of the Labour Force in OECD Countries: Economic and Social Consequences”. <http://www.ilo.org/public/english/employment/strat/download/ep2.pdf>. 2000. Geneva.

<sup>10</sup> Health Canada in collaboration with the Interdepartmental Committee on Aging and Seniors Issues. “Canada’s Aging Population”. [http://www.hc-sc.gc.ca/seniors-aines/pubs/fpt\\_docs/fec\\_paper/toc\\_e.htm](http://www.hc-sc.gc.ca/seniors-aines/pubs/fpt_docs/fec_paper/toc_e.htm) 2002. Ottawa, ON. P.1

<sup>11</sup> <http://www.statcan.ca/Daily/English/020926/d020926c.htm>

<sup>12</sup> Human Resources Development Canada. “Older Workers in the Labour Market: Employment Challenges, Programs and Policy Implications”. [http://www.hrdc-drhc.gc.ca/sp-ps/imp/owe\\_toc.shtml](http://www.hrdc-drhc.gc.ca/sp-ps/imp/owe_toc.shtml). 2002.

<sup>13</sup> Ibid.

<sup>14</sup> Forum of Labour Market Ministers, *Older Workers in the Labour Market*. [http://www.hrdc-drhc.gc.ca/sp-ps/imp/owe\\_situations.shtml](http://www.hrdc-drhc.gc.ca/sp-ps/imp/owe_situations.shtml)

<sup>15</sup> [http://www.councils.org/1office/index\\_e.cfm](http://www.councils.org/1office/index_e.cfm)

TASC requires information on the issue of the aging workforce to assist industry associations, industry and government. *The Aging Workforce and Human Resource Implications for Sector Councils* was designed to help TASC and its member sector councils to understand this issue and to plan human resource strategies for the future. The project also provides recommendations to The Alliance of Sector Councils (TASC) and to Canadian sector councils for the effective preparation and management of human resource issues in light of the aging of the general workforce in Canada.

The purpose of *The Aging Workforce and Human Resource Implications for Sector Councils* is to identify, analyze and critique the most current research and existing studies on the aging workforce. It is also intended to provide examples of best human resources practices and potential actions that could be adopted for use by sector councils and industry to confront the issue of the aging workforce.

The report will outline:

- The issue of aging in Canada, as well as internationally;
- Canadian labour market trends and projections;
- The aging workforce and Canadian industry;
- Human resource implications and best practices in Canada and abroad;
- Possible sector council approaches to the issue of the aging workforce.

The report includes the main findings from the literature reviews undertaken for the project.

### **1.3 Definitions**

#### Older Workers

There is no universally agreed upon definition of the terminology “older worker”; it varies by country and even within countries. Definitions have also shifted over recent years due to increasing life expectancies and more active and productive lifestyles: “people are not aging now the way they used to”.<sup>16</sup> Workers over the age of 45 were considered “older” less than a decade ago, but now, with the mass entry of the Baby boomers into the 45 to 64 age group, these workers will become central to human resource planning and to the economy as a whole.<sup>17</sup>

Across the literature (from Canada and selected OECD countries) that has been reviewed for this project, “older adult”, or “older worker”, has been defined as 45 years and older, 55 years and older, or 65 years and older. For the purposes of this project and for simplicity, “older worker” will refer to those workers aged 45 and older, unless otherwise stated. It should be noted that “older workers” are not a homogenous group. The literature indicates that it is important that policy makers and employers take into consideration such issues as gender, regional, and cultural differences across the group.

<sup>16</sup> National Advisory Council on Aging. “1999 and Beyond: Challenges of an Aging Canadian Society”. [http://www.hc-sc.gc.ca/seniors-aines/pubs/beyond1999/beyond\\_e.pdf](http://www.hc-sc.gc.ca/seniors-aines/pubs/beyond1999/beyond_e.pdf). 1999. P.4

<sup>17</sup> Health, Safety and Industrial Relations Training Fund. “The Aging Workforce”. [http://www.cep.ca/health\\_safety/files/aging-e.pdf](http://www.cep.ca/health_safety/files/aging-e.pdf). 2002. p.11

## Productive and Active Aging

Older adults are starting to receive greater recognition for their productivity in society: through continued full or part-time work, as volunteers and through contributions to community and family life. Although “scholarship on productive aging has failed to establish a standard definition of productive behaviour”, a general definition that has been given for “productive aging” is that of older adults being “involved in meaningful roles, utilizing their potential, contributing to their families and communities, while, at the same time, preserving their health and well-being”.<sup>18</sup>

Likewise, the International Labour Organization (ILO) describes productive aging, or “active aging”, as having many dimensions such as “the general participation of the older population in society and in the economy, in family life and in salaried and self employment, or in voluntary employment”.<sup>19</sup> Active aging may also refer to the physical activity and health of older persons in later life.

Productive, or active aging, is becoming an increasingly important concept with the aging of the Baby boomers and the growing realization of the integral role they will play in the labour force over the next decade (i.e., by the year 2011, they will account for 41% of the Canadian labour force).<sup>20</sup> The promotion of active aging by employers and government will help prolong the working lives of the Baby boomers and perhaps ease some of the expected labour shortages.

### **1.4 Methodology**

Literature reviews were undertaken on a wide range of material, published between 1999 and 2002, on the issue of the aging workforce. Research staff conducted searches of the Internet, as well as journal and article databases. Visits were also made to the University of Alberta for the research of academic literature on the subject. Some resources were provided to the Consultant by The Alliance of Sector Councils (TASC).

In addition to this, a letter was drafted and sent out to all members of TASC on December 11, 2002, requesting that relevant sector-specific research/documentation be forwarded to the Consultant (i.e., in order for the Consultant to provide a more in-depth look at the issue of the aging workforce at the sectoral level).

A copy of the literature reviews undertaken for the project is included in the **Technical Appendix** of this report. Over 50 sources were catalogued in this manner. Other sources that were used were primarily Internet sites that were used for reference, rather than as material for the content of this report. Some of the main web sites used for this report are also included in the literature database.

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<sup>18</sup> Washington University in St. Louis. “An Agenda on Productive Aging: Research, Policy, and Practice”. [http://www.gwbweb.wustl.edu/csd/Areas\\_Work/Productive\\_aging/concept\\_paper.pdf](http://www.gwbweb.wustl.edu/csd/Areas_Work/Productive_aging/concept_paper.pdf). p.2

<sup>19</sup> Peter Auer & Mariangels Fortuny. “Ageing of the Labour Force in OECD Countries: Economic and Social Consequences”. Employment Sector, International Labour Office. Geneva. 2000. P.

<sup>20</sup> Human Resources Development Canada. “Challenges of an Aging Workforce: An Overview of the Issue, May 2002”. <http://labour.hrdc-drhc.gc.ca/worklife/aw-overview-current-practices-en.cfm>



The literature review database contains the following fields:

- Title: the name of the article, report, or study;
- Key words: the important words, or general ideas, that may help facilitate the search for articles of interest to sector councils;
- Name of source: the name of the journal in which the article was published; the name of the organization to produce the study; etc;
- Author(s): the various authors and/or organizations to have conducted the study or written the article/report;
- Year: the year of publication of the article, report or study. All literature selected for this project was published between 1999 and 2002;
- Location: the city and country in which the literature was published;
- Internet address: if applicable, the Internet site where the literature was found;
- Subject: the general subject of the literature;
- Main findings: an overview of the main points of the article, report, or study.

## SECTION 2: AGING POPULATIONS: BACKGROUND & CONTEXT

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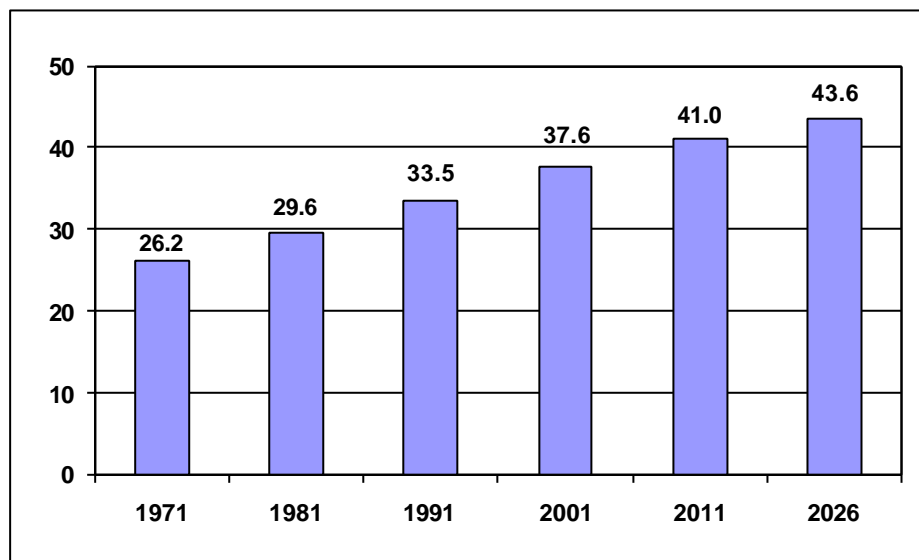
### 2.1 Canada's Changing Demographics

Canada's population is aging at an ever-increasing speed. This aging of the population has been attributed to rising life expectancies and slowing birth rates. The Baby Boom generation, that is, those persons born between 1946 and 1965, comprises 30% of Canada's population, and accounts for the general aging of Canadian society.<sup>21</sup>

Recent literature on Canada's aging population presents a number of revealing statistics on this demographic trend. For example:

- By the year 2026, one in five Canadians will be 65 years of age or older—this is a significant increase from one in eight in 2001;<sup>22</sup>
- As seen in Figure 2-1, the median age in Canada has been steadily increasing since 1971. In 2001, the median age stood at an all-time high of 37.6, an increase of 2.3 years from 1996.<sup>23</sup> If current trends continue, it is expected that one-half of Canada's population will be over the age of 43.6 years in 2026;<sup>24</sup>

**Figure 2-1**  
**Median Age of Total Canadian Population (1971-2026)**



Source: Statistics Canada- Profile of the Canadian population by sex and age. Catalogue 96F0030XIE2001002

<sup>21</sup> CBC News. "Labour market, health care, may be affected by older population".

[http://www.cbc.ca/stories/2002/07/16/census\\_age020716](http://www.cbc.ca/stories/2002/07/16/census_age020716). July 16, 2002.

<sup>22</sup> Health Canada in collaboration with the Interdepartmental Committee on Aging and Seniors Issues. "Canada's Aging Population". P.1

<sup>23</sup> Statistics Canada. "Profile of the Canadian population by age and sex: Canada ages".

P.3 <http://www.12.statcan.ca/english/census01/Products/Analytic/companion/age/images/96F0030XIE2001002.pdf>. 2002. P.3

<sup>24</sup> Sylvain Schetagne. "Building Bridges Across Generations in the Workplace: a response to aging of the workforce".

<http://www.ccsd.ca/pubs/2001/bridges/bbeng.pdf>. p.2

- Life expectancy for Canadians is higher than ever before, standing at 75.8 years for men and 81.4 years for women.<sup>25</sup> These estimates are likely to rise due to future innovations, progress in health care, and healthier lifestyles;
- From the 1940s to the mid-1960s the average fertility rate was three children or more per woman. However, Canada's birth rate has remained below the rate of population replacement (i.e., 2.1 children per woman) for more than thirty years now, with the current fertility rate at its lowest ever at 1.5 children per woman.<sup>26</sup>

The literature suggests that if these aging trends continue, Canada's population growth will stagnate, and may even decline, by 2026 if Canada's immigration rates do not meet expectations. Although the number of immigrants admitted to Canada between 1991 and 2001 was nearly twice as many the number admitted the previous decade, Canada's median age still increased significantly over this period.<sup>27</sup>

### A Regional Perspective

These statistics provide an interesting picture of the issue of the aging population at the national level, however, variations exist at the regional level. According to the Statistics Canada 2001 Census population data, Nunavut and the Northwest Territories, with their large Aboriginal communities, have the lowest median ages in the country. The median age in the Northwest Territories is 30.1, while Nunavut's median age is at a low 22.1 years (i.e., 15.5 years lower than the national average). It is interesting to note that nearly half of the Nunavut population is under the age of 19.<sup>28</sup>

It has also been found that Alberta and Saskatchewan have relatively young populations, with median ages at 35.0 years and 36.7 years, respectively.<sup>29</sup> Meanwhile, the populations of Quebec and the Atlantic provinces are older than the Canadian average. For example, in Quebec and Nova Scotia, the median age is 38.8 years, that is, 1.2 years higher than the national average.<sup>30</sup> These variations in population aging might have important implications for labour force planning in future years.

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<sup>25</sup> Health Canada in collaboration with the Interdepartmental Committee on Aging and Seniors Issues. p5

<sup>26</sup> Ibid. p.4

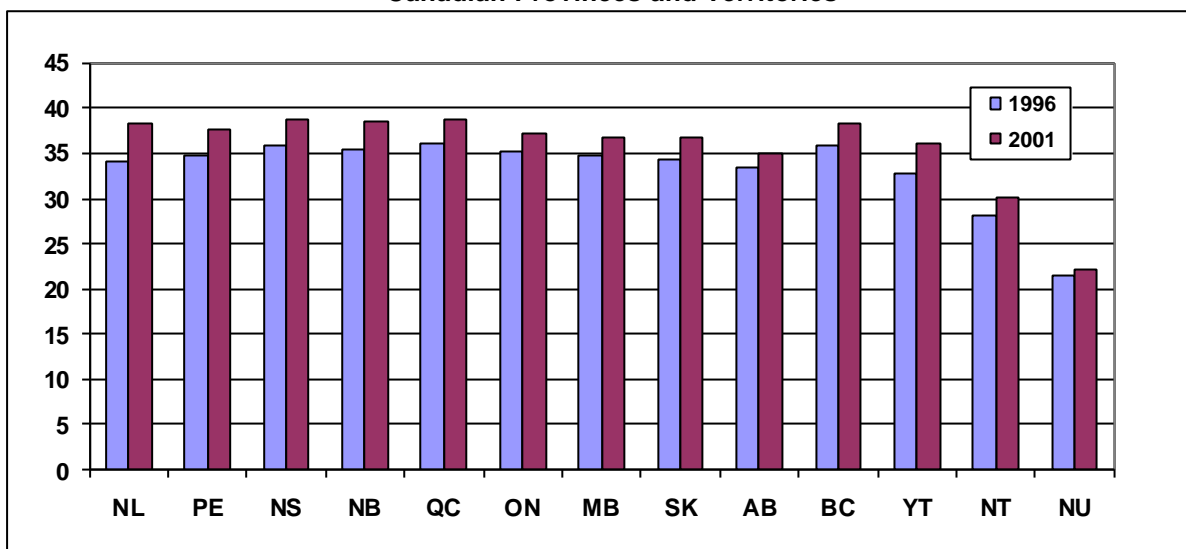
<sup>27</sup> Statistics Canada. "Profile of the Canadian population by age and sex: Canada ages".. p.5

<sup>28</sup> Ibid

<sup>29</sup> Ibid

<sup>30</sup> Ibid

**Figure 2-2**  
**Median Age of Populations in**  
**Canadian Provinces and Territories**



Source: Statistics Canada- Profile of the Canadian population by sex and age.  
 Catalogue 96F0030XIE2001002

All regions in Canada appear to have a median age hovering around 35, with the exception of Nunavut and the Northwest Territories. Newfoundland and Labrador have aged the fastest, with the median age rising from 34.2 in 1996 to 38.4 in 2001.<sup>31</sup>

It is important to note that, although there are areas of Canada that are not as “old” as others, in terms of median age, all provinces and territories across the country have experienced an aging of their populations over the last five years (see Figure 2-2).

## **2.2 Aging as a Global Issue**

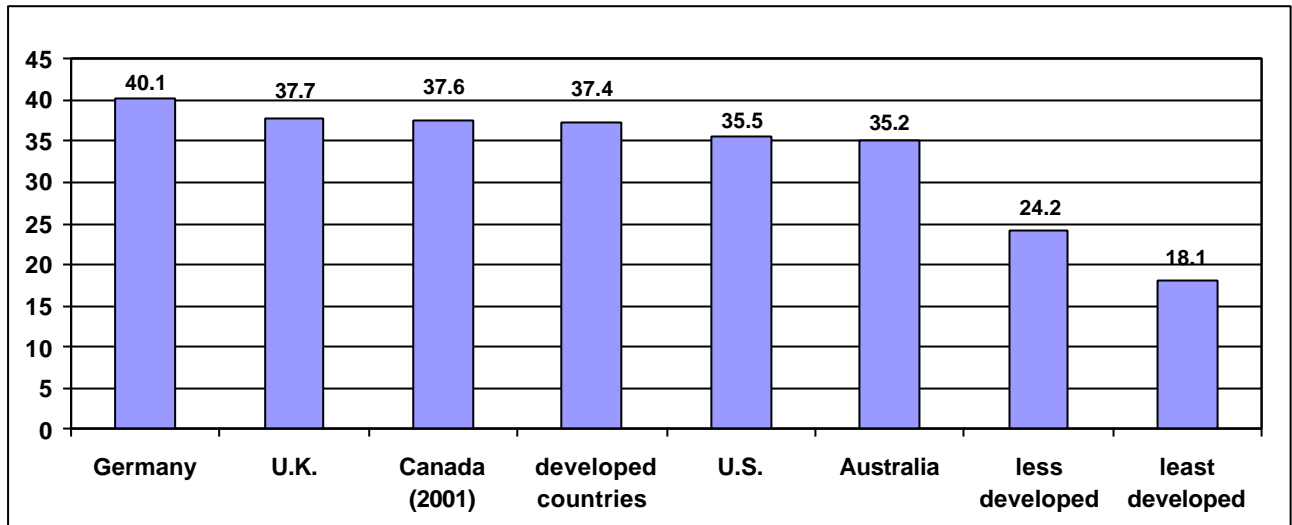
The aging of the population across Canada is a reflection of a growing global trend. The population of the world is expected to age much faster in the near future, for the same reasons of steadily declining birth rates and increased life expectancies. This projection includes less developed countries, but at present, the trend is more pronounced in developed regions.

As seen in Figure 2-3, the average median age in developed countries has reached a high 37.4 years. The less developed and least developed countries are still young in comparison, with median ages of 24.2 years and 18.1 years, respectively.

It is interesting to note that the average median age in Canada has surpassed the average median age of the developed countries, and, as indicated previously, it is likely to rise further still.

<sup>31</sup> Ibid

**Figure 2-3**  
**Median Age of Populations in Selected OECD Countries (2000)**



Source: United Nations Population Division. "World Population Prospects: The 2000 Revision". New York, USA. 2001.

Since 1950, the global average life expectancy at birth has risen to 66—an increase of twenty years—and this figure is expected to reach 76 by 2050.<sup>32</sup> According to United Nations population projections, by mid-century, average life expectancy will reach 82 years in developed countries (up from 75 in 2000) and 75 years in less developed countries (up from 63 in 2000).<sup>33</sup> The population aged 60 and older will more than triple between now and 2050, and will account for one third of the world's population (up from 20% in 2000).<sup>34</sup>

Fertility decline has been blamed as "the major reason of population ageing".<sup>35</sup> Globally, the average number of births per woman has dropped from 5.0 to 2.8 since the mid-1960s. In almost all developed countries, the fertility rate has dropped well below the replacement level of 2.1 children per woman.<sup>36</sup> The population of children around the world is expected to drop from 30% of the total global population in 2000, down to 21% by 2050.<sup>37</sup>

<sup>32</sup> United Nations. "International Plan of Action on Ageing 2002" (Second World Assembly on Ageing, Madrid, 2002). P.1

<sup>33</sup> United Nations Population Division. "World Population Prospects: The 2000 Revision". New York, USA. 2001.

<sup>34</sup> <http://www.un.org>. p.v

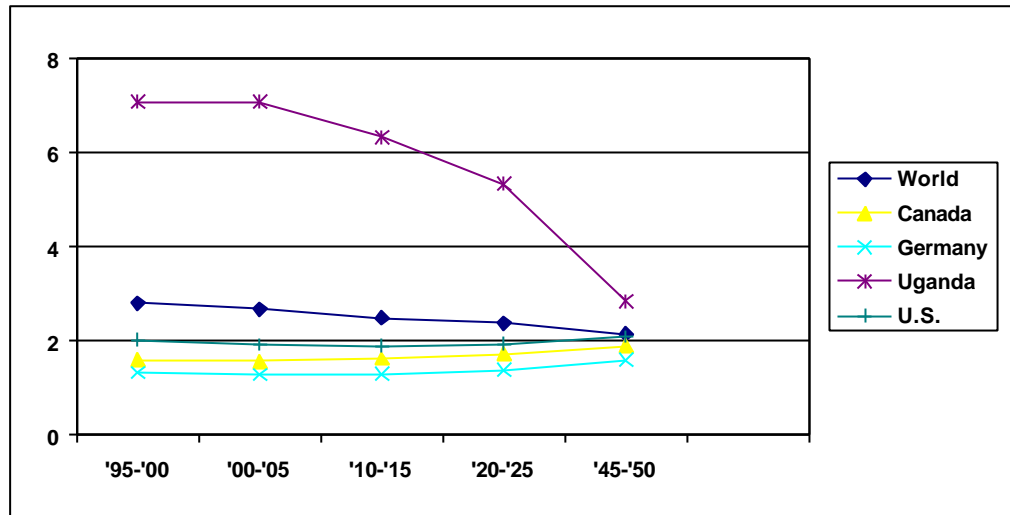
<sup>35</sup> Ibid. vii

<sup>36</sup> Peter Auer & Mariangels Fortuny

<sup>37</sup> Richard Jackson. "The Global Retirement Crisis: The Threat to World Stability and What to Do About it". Center for Strategic and International Studies. [http://www.csis.org/gai/global\\_retirement.pdf](http://www.csis.org/gai/global_retirement.pdf). 2002. P.13

<sup>37</sup> United Nations. "International Plan of Action on Ageing 2002" (Second World Assembly on Ageing, Madrid, 2002). P.1

**Figure 2-4**  
**Fertility Rate by Selected Country (1995-2050)**



Source: United Nations Population Division. 2001.

As seen in Figure 2-4, the average global fertility rate has been declining steadily since 1995 and is projected to continue to decline until mid-century. The United Nations population is predicting substantial declines in fertility in the least developed countries (e.g., Uganda), while the more developed areas (e.g., Canada, Germany, the U.S. and the UK) might see a slight increase in their birth rates (due to immigration), although they will remain below the 2.1 rate of replacement. However, it has been noted that there is no evidence that this will occur:

*“None of the trends that have suppressed fertility since the 1960s, from growing affluence to more working women to the widespread availability of effective birth control and abortion, have been reversed. And in fact, over the past decade fertility has only risen in two developed countries: Denmark and the United States. Everywhere else it is flat or still falling”.*<sup>38</sup>

This so-called “birth-dearth” has turned the traditional population pyramid upside down in many developed countries. According to United Nations population prospects, many countries facing declining population rates may eventually face depopulation. For example, annual growth rates up until 2050 will remain below 0.5% for such countries as Canada, Australia and the United States. However, other countries, such as Germany, will face negative population growth as early as 2005.<sup>39</sup>

Countries with aging populations will face numerous challenges in the coming years. For example, how to maintain standards of living and economic competitiveness at the global level. Labour force planning, in particular, will become vital in the years ahead.

<sup>38</sup> Richard Jackson. P.19

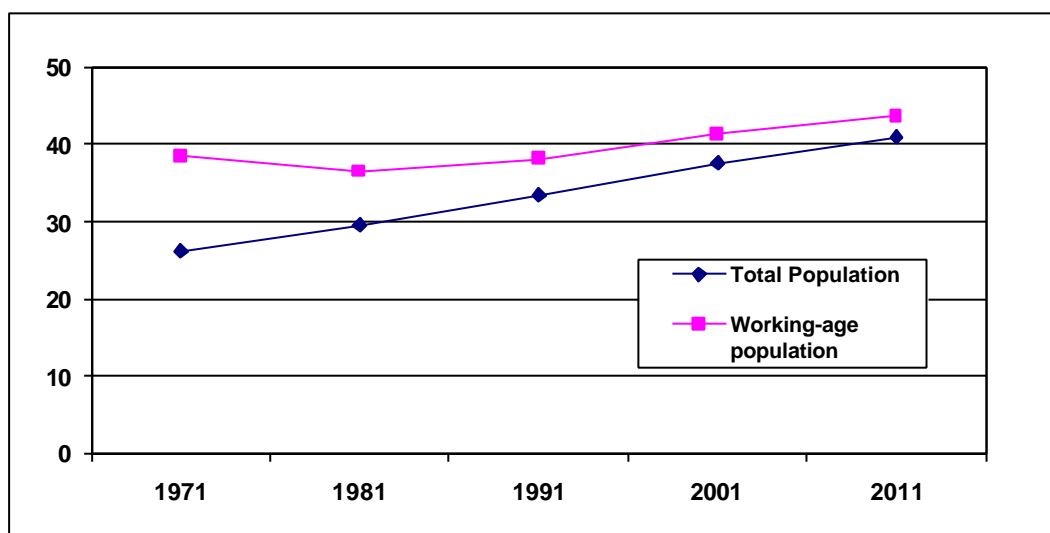
<sup>39</sup> United Nations Population Division. 2001

## SECTION 3: OVERVIEW OF LABOUR MARKET TRENDS & PROJECTIONS IN CANADA

### 3.1 Increased Aging of the Workforce

The general aging of the population is expected to have serious implications for Canada's labour force. It has been noted that as the median age of the Canadian population has risen, so too has the median age of the working population. The working population refers to those persons 15 to 65 years of age.

**Figure 3-1**  
Median Age of Total Population  
and Working-Age Population in Canada



Source: Statistics Canada- Profile of the Canadian population by sex and age.  
Catalogue 96F0030XIE2001002

As seen in Figure 3-1, the median age of Canada's "active" population reached 41.3 years in 2001, up from 38.1 just a decade previously. By the year 2011, the median age is expected to reach a high of 43.7 years.<sup>40</sup>

This signifies an important growth in the proportion of older workers in the Canadian labour force over the next decade. According to Human Resources Development Canada (HRDC) estimates, as much as 41% of the working-age population will be between the age of 45 and 64 by 2011, up from 29% in 1991.<sup>41</sup>

<sup>40</sup> Statistics Canada. "Profile of the Canadian population by age and sex: Canada ages". P.28

<sup>41</sup> Human Resources Development Canada. "Challenges of an Aging Workforce: An Overview of the Issue, May 2002". <http://labour.hrdc-drhc.gc.ca/worklife/aw-overview-current-practices-en.cfm>

### 3.2 The Baby Boom Effect

The baby boomers, that is, those persons born between 1946 and 1966, are said to be responsible for the rapid aging of the workforce. They represent one-third of Canada's total population and, as previously mentioned, will account for 41% of the labour force by 2011.

Already 46% of workers in this generation are close to their retirement or pre-retirement years.<sup>42</sup> There is expected to be a mass exodus of these workers from the Canadian labour market within the next ten years, when the first of the baby boomers begin to turn 65. Labour shortages, skilled and unskilled, are thought to be looming with their exit. As stated by one Canadian economist, "the impact of retiring baby boomers on Canada's total supply of labour is almost guaranteed to be dramatic".<sup>43</sup>

However, many analysts agree that, with healthier lifestyles and increasingly more active aging, trends towards greater labour force participation by older people may follow.<sup>44</sup>

### 3.3 Increased Female Participation

Another recent labour market trend in Canada is that of the increased participation of women. Twenty-five years ago, 48.2% of women aged 45 to 54, and 31.9% of women aged 55 to 64, participated in the labour force. In 2001, this proportion had increased to 76.3% and 41.8%, respectively.<sup>45</sup> The overall participation rate of Canadian women in 2002 was a record-high 60.7%.<sup>46</sup>

It is generally thought that this increased participation of women in the labour force will help to mitigate the anticipated labour shortages that will emerge with the retirement of the baby boomers:

*"The result will be some easing of the labour shortage issues in the workplace, but this will not happen without some significant reforms, including changes to recruitment programs that do not provide equal access to women...and changes in work design and technology that allow women to hold down some jobs that have traditionally been done by men."<sup>47</sup>*

However, it is expected that the growth in the level of female participation will eventually taper off.

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<sup>42</sup> Ibid

<sup>43</sup> Derek Burleton. "The Demographic Challenge". TD Forum on Standards of Living. <http://www.td.com/economics/standard/full/Burleton.pdf>. p.7

<sup>44</sup> William B.P. Robson & BNAC "Aging Populations and the Workforce: Challenges for Employers". British-North American Committee. Winnipeg, Manitoba. 2001. [http://www.cdhowe.org/pdf/BNAC\\_Aging\\_Populations.pdf](http://www.cdhowe.org/pdf/BNAC_Aging_Populations.pdf). p.7

<sup>45</sup> Human Resources Development Canada. "Challenges of an Aging Workforce". P.5

<sup>46</sup> Statistics Canada. "Latest release from the Labour Force Survey". <http://www.statcan.ca/english/Subjects/Labour/LFS/lfs-en.htm>

<sup>47</sup> Health, Safety and Industrial Relations Training Fund. P.13



### 3.4 Decreasing Length of Work Life

While the participation of women in the labour force has increased over the past 25 years, the participation of men has decreased. Labour force participation for men stood at 78% in 1980, but by 2000 had decreased to 72.5%.<sup>48</sup> This decline has been linked to the growing trend towards early retirement.

Women, like men, however, are retiring earlier, even though the increased participation rate of women would seem to indicate otherwise. The reason for this may be that “the cohort effect of increased labour force participation of women in the post-war period has coincided with many of the factors influencing male participation rates in later life”.<sup>49</sup> In fact, according to Statistics Canada, more women than men retire early. This has been attributed to the average two-year age difference between spouses, and to the fact that a greater number of women work in the public sector, where the average retirement age is lower (i.e., the average retirement age is 58.5 years in the public sector, compared with 61.3 in the private sector).<sup>50</sup>

Between 1997 and 2000, 43% of people who retired did so before the age of 60, up from 29% between 1987 and 1990.<sup>51</sup> The median age of retirement in 1999 stood at 61 years, down from 64.9 years in 1976.<sup>52</sup> This trend towards early retirement tends to be most popular among workers with higher incomes and higher levels of education.

While older workers are exiting the labour market earlier than ever, younger workers are entering the workforce later. The school-to-work transition is now longer due to the tendency of youths to remain in school much longer. This transition is also harder, even though they are more highly educated, as a result of a current labour surplus.<sup>53</sup>

The consequence of this late entry and early exit from the labour force is the decrease in the average working life of Canadians. It is predicted that this phenomenon will exacerbate the expected labour shortages in the coming years.

### 3.5 Labour and Skilled Labour Shortages

As indicated in the literature, some labour market analysts believe that the labour market will adjust itself and that there will not be a labour shortage due to increased technology (and the reduced need for workers). It has also been argued that there should not be a skilled labour shortage as there is a “stockpile” of formal skills available, as a result of the ever-increasing education level of youths:

*“The premature departure of baby boomers from the labour market may reveal shortages in certain sectors... but these shortages have occurred before and will likely always occur. As well, professions that suffer the consequences of poor planning (or no planning), or those that are not esteemed by youth may also*

<sup>48</sup> Statistics Canada. “Early Retirement Trends “. Perspective on Labour and Income. Winter 2001. Vol.13, no.4. <http://www.statcan.ca/english/indepth/75-001/feature/pehi2001013004s4a01.htm>

<sup>49</sup> Department for Education and Employment. “Factors Affecting Retirement: Book 1”. <http://www.dfes.gov.uk/research/data/uploadfiles/RR236a.pdf>. p.4

<sup>50</sup> Statistics Canada. “Early Retirement Trends “. Perspective on Labour and Income. Winter 2001. Vol.13, no.4. <http://www.statcan.ca/english/indepth/75-001/feature/pehi2001013004s4a01.htm>

<sup>51</sup> Ibid

<sup>52</sup> Schetagne. P.10

<sup>53</sup> Ibid

*experience labour shortages. Nonetheless, there is a considerable stockpile of workers with the minimum formal education necessary to address labour demands caused by the retirement of baby boomers”.*<sup>54</sup>

However, a survey of business and labour representatives conducted by the Canadian Labour and Business Centre in 2000, reveals that skill shortages are already being felt as the baby boomers begin to leave the labour force. In 1998, training was the only action taken to confront the issue of the impending labour shortage, but by 2000, active recruitment had become the main focus.<sup>55</sup>

In a similar vein, a national report released in 2001 by the Canadian Federation of Independent Business, revealed that 44% of Canadian businesses claimed to have difficulties in finding qualified labour.<sup>56</sup>

The literature generally suggests that a labour shortage, skilled and unskilled, is impending: planning should start immediately in all sectors of the economy in order to reduce its impact.

### **3.6 The Changing Work Environment**

The work environment of today, continually changing with technology, is one that demands greater skills (and the continuous updating of these skills). The increase of technology in the 1990s, especially in the high tech industries, resulted in a skills shortage due to skills mismatch: “with the aging of the baby boomers, shortages are likely to deepen and spread throughout the economy”.<sup>57</sup> Training of employees of all ages is required in the growing knowledge economy.

### **3.7 Other Sources of Labour**

The Aboriginal population in Canada is growing faster than the average growth rate of the total population: the average annual growth for the Canadian population was 1.6% between 1991 and 1996, while the annual growth rate for the Aboriginal population was 3.6%.<sup>58</sup> The Aboriginal population is also younger, and it is expected that a growing number of Aboriginal youth will be entering the labour force over the next few years. However, one issue that may need to be addressed in the coming years is the educational gap that Aboriginal populations experience.

It is expected that immigration will also help support Canada's shrinking labour force. Between 1996 and 2001 immigration accounted for more than one-half of Canada's total population growth.<sup>59</sup> It is also expected that, within the next five to ten years, immigration

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<sup>54</sup>Ibid. p.17

<sup>55</sup> Canadian Labour and Business Centre. “Where Did All the Workers Go? The Challenges of the Aging Workforce”. Ottawa, Ontario, 2001. <http://www.clbc.ca/engdocs/reports/pdf/workersgo/pdf>.

<sup>56</sup> <http://www.nic.bc.ca/olderworkers/index.asp>

<sup>57</sup> Burleton. P.9

<sup>58</sup> Canadian Labour and Business Centre. “Skills & Skill Shortages: trends in demographics, education and training”. CLBC Handbook. Ottawa, Canada. 2002 P.8

<sup>59</sup> Statistics Canada. “A profile of the Canadian population: where we live”. 2001 Census analysis Series. Catalogue 96F0030XIE010012001. P.2

will be responsible for all net labour force growth. It has been suggested that immigration is the only way for the labour force to grow in Canada<sup>60</sup> :

*“The current population of Canada cannot maintain the current size of its labour force in the future. More importantly, it cannot expand its labour force to support the economic growth and labour supply to support its aging population...Increased immigration and reduced emigration will be required if our labour force is to grow.”<sup>61</sup>*

Much of the literature discusses efforts that are being made, or that need to be made, by the Canadian government and employers, to recognize the credentials of foreign workers.

### **3.8 Increased Competition for Labour**

The average annual growth rate of the labour force has been declining since the 1970s. However, between 2005 and 2009, annual growth is expected to drop down below 1%.<sup>62</sup> As a result, it is predicted that there will be increased competition for labour in Canada, due to the reduced number of available candidates (i.e., the number of retiring workers is expected to be much greater than the number of youths entering the labour force).

There will also be increased competition internationally, as most developed countries are experiencing similar labour shortages with the aging of their workforce. Although Canada may gain workers through immigration, there have been recent fears that Canada is losing workers (i.e., experiencing a “brain drain”): workers leaving Canada tend to be younger and more educated.

### **3.9 Working Beyond 65**

According to Statistics Canada, a growing number of older adults are returning to the workforce after retirement. Nearly 69% of those retired workers aged 50 to 54, either went back to work full time or part-time within two years of retirement. Of those retirees aged 55 to 59, 39% went back to work, while 11% of those over 60 decided to go back to work after retirement.<sup>63</sup> It is interesting to note that the average age of retirement for the self-employed is 65 (compared with averages of 61.8 in the private sector, and 58.8 in the public sector)<sup>64</sup>.

Healthier and more active aging are offered as explanations for this recent phenomenon. This trend is expected to help lessen the impact of labour shortages in coming years.

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<sup>60</sup> Canadian Labour and Business Centre. “Skills & Skill Shortages: trends in demographics, education and training”. CLBC Handbook. P.26

<sup>61</sup> David Baxter. “Trends that count” Business in Vancouver. June 5-11, 2001. <http://www.businessinvancover.com>

<sup>62</sup> Canadian Labour and Business Centre. “Skills & Skill Shortages”. P.2

<sup>63</sup> Dawn Walton. “Retirees returning to the work force”. The Globe and Mail. Sept. 27, 2002. <http://www.globeandmail.com/>

<sup>64</sup> Statistics Canada. “Fact Sheet on Retirement”. Labour Force Survey, 2001. <http://www.statcan.ca/>

## SECTION 4: WORKFORCE AGING AND CANADIAN INDUSTRY

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### 4.1 Aging by Industry

It has generally been acknowledged that the impact of Canada's aging workforce will be felt in all sectors of the economy, and in all occupations. However, the effects of the aging phenomenon are expected to impact some sectors more than others, and in some cases, these effects are already starting to be noticed.

As seen in Figure 4-1, in 2001, the proportion of workers aged 45 years and older across all industries was 34%, and nearly one-third of this group was over the age of 55. The "oldest" industry, however, is agriculture, with nearly half (48%) of its workforce over the age of 45, and 27% over the age of 55. This high proportion of older workers can be accounted for by the higher median retirement age within the industry. As seen in Figure 4-2, between 1996 and 2000, the median age of retirement for a worker in the agriculture industry was 68.8 years –the highest across all industries.

**Figure 4-1**  
**Industry Composition by Age (2001)**

	Proportion 45+ years	Proportion 55+ years
<b><i>Goods-producing sector</i></b>		
Agriculture	48%	27%
Utilities	40%	6%
Forestry, Fishing, Mining, Oil & Gas (Primary)	35%	9%
Construction	35%	12%
Manufacturing	35%	10%
<b><i>Services-producing sector</i></b>		
Educational Services	44%	13%
Public Administration	43%	9%
Transportation & Warehousing	40%	13%
Health Care & Social Assistance	39%	11%
Finance, Insurance, Real Estate & Leasing	38%	12%
Other Services	36%	14%
Professional, Scientific & Technical Services	33%	12%
Management of Companies & Administrative	31%	13%
Trade	27%	10%
Information, Culture & Recreation	27%	8%
Accommodation & Food Services	22%	7%
<b>All Industries</b>	<b>34%</b>	<b>11%</b>

Source: Francois Lamontagne. "Demographic Profile of the Natural Resources Sector". Canadian Labour and Business Centre. [http://www.clbc.ca/engdocs/reports/pdf/naturalresourcesprofile\\_e.pdf](http://www.clbc.ca/engdocs/reports/pdf/naturalresourcesprofile_e.pdf).

Other industries that have relatively high proportions of older workers include Utilities (40%); Educational Services (44%); Public administration (43%); Transportation and warehousing (40%); Health care and social assistance (39%); and Finance, insurance, real estate and leasing (38%).

The industries with the highest proportion of workers closest to retirement (i.e., aged 55 years and older) in the Goods-producing sector include Agriculture (27%) and Construction (12%). In the Services-producing sector, Educational services (13%) and Transportation and warehousing (13%), have relatively high proportions of workers over the age of 55.

The high proportion of older workers in the health care and social assistance sector, and the relatively low proportion of workers aged 15-24 in the workforce (see Fig.4-3), could have serious implications for this industry in the near future. The labour shortage in this sector may be amplified due to the projected need for increased health and social services that will be required to satisfy the needs of an aging Canadian population.

#### **4.2 Retirement by Industry**

Across all industries, the median age of retirement has been steadily declining. As can be seen in Fig.4-2, the median age of retirement between 1996 and 2000 was 61, a decrease of 1.2 years from half a decade earlier. The median age of retirement in the Service-producing sector declined more over the past decade than it did in the Goods-producing sector: there was a 0.3-year decline in the Goods-producing sector, while there was a 1.6-year decline in the Service-producing sector.

Every industry, with the exception of the Agriculture and Primary sectors, witnessed a decline in its median age of retirement.

Workers in the Utilities and the Educational services industries were found to retire the earliest, with the median age of retirement at 56.6 and 57.4, respectively. These industries have also seen the greatest drop in their median age of retirement over the past decade. The Educational services industry has seen the most significant decline in its median retirement age, dropping by 3.3 years over the last decade to reach a low 57.4 years. The Utilities industry likewise had a considerable fall in its median age of retirement, dropping from 59.1 to 56.6 over the same period.

Other industries experiencing relatively low median ages of retirement are: Public administration (58.4 years); Information, culture and recreation (59.6 years); Finance, Insurance, real estate, and leasing (60.1 years); and Health care and social assistance (60.3 years).

**Figure 4-2**  
**Median Age of Retirement by Industry (1991-1995, 1996-2000)**

	1991-1995	1996-2000	Years change
<b>Goods-producing sector</b>	<b>62.9</b>	<b>62.6</b>	<b>-0.3</b>
Primary	64.6	65.3	0.7
Agriculture	65.8	68.8	3.0
Other	62.2	61.2	-1.0
Utilities	59.1	56.6	-2.5
Construction	64.7	63.3	-1.4
Manufacturing	61.9	61.6	-0.3
<b>Service-producing sector</b>	<b>62.0</b>	<b>60.4</b>	<b>-1.6</b>
Trade	64.4	62.6	-1.8
Transportation & Warehousing	60.3	61.6	1.3
Finance, Insurance, Real Estate, & Leasing	62.4	60.1	-2.3
Professional, Scientific & Technical Services	65.1	64.8	-0.3
Management, Administrative & Other	65.3	64.6	-0.7
Educational Services	60.7	57.4	-3.3
Health Care & Social Assistance	62.3	60.3	-2.0
Information, Culture & Recreation	60.7	59.6	-1.1
Accommodation & Food Services	64.9	64.0	-0.9
Other Services	64.8	63.6	-1.2
Public Administration	59.6	58.4	-1.2
<b>All Industries</b>	<b>62.2</b>	<b>61.0</b>	<b>-1.2</b>

Statistics Canada. "Fact Sheet on Retirement". Labour Force Survey, 2001. <http://www.statcan.ca/>

### 4.3 Youth by Industry

The proportion of youth is greatest in the Services-producing sector, with workers aged 15 to 24 making up 18.8% of the workforce. By comparison, this age group accounts for only 13.2% of the workforce in the Goods-producing sector.

The Accommodations and food services industry has the greatest proportion of youth, with nearly half (45.9%) of the workforce composed of workers aged 15 to 24. Out of all the industries, this industry also has the smallest (22%) proportion of older workers (see Fig.4-1). The average median age of retirement is also relatively high at 64. These figures indicate that it is unlikely that the Accommodations and food services industry will be affected in the same manner as other industries, with regards to an aging workforce and labour shortage issues.

**Figure 4-3  
Industry Composition by Age Group (2000)**

	<b>15-24 years</b>
<b>Goods-producing sector</b>	<b>13.2%</b>
Agriculture	35.6%
Forestry, Fishing, Mining, Oil & Gas	11.2%
Utilities	3.1%
Construction	16.0%
Manufacturing	12.0%
<b>Services-producing sector</b>	<b>18.8%</b>
Trade	29.6%
Transportation & Warehousing	9.0%
Finance, Insurance, Real Estate & Leasing	10.7%
Professional, Scientific & Technical Services	12.4%
Management of Companies & Administrative	23.8%
Educational Services	7.5%
Health Care & Social Assistance	8.6%
Information, Culture & Recreation	25.3%
Accommodation & Food Services	45.9%
Other Services	16.6%
Public Administration	7.2%
<b>All industries</b>	<b>17.4%</b>

Source: Sylvain Schetagne. "Building Bridges Across Generations in the Workplace: a response to aging of the workforce". <http://www.ccsd.ca/pubs/2001/bridges/bbeng.pdf>. p.2

Other industries with a comparatively high proportion of youths include Agriculture (35.6%); Trade (29.6%); Information, culture, and recreation (25.3%); and Management, Administrative, and other (23.8%).

The utilities industry has the lowest proportion of youth out of all industries, with only 3.1% of its workforce composed of young workers aged 15 to 24. This industry will likely be greatly affected by the aging of its workforce, not only because of this low proportion of young workers, but also because the industry has a relatively high (40%) proportion of older workers and the lowest (56.6 years) median retirement age of all industries.

Another industry that will be similarly impacted is the Public Administration sector. Youths account for only 7.2% of the workforce, while older adults account for 41%. The median retirement age is also quite low in this industry at 58.4 years.

A similar situation can be seen in the Educational services industry where youth represent only 7.5% of the workforce. Older adults make up 44% of the workforce and tend to retire at an earlier age (i.e., 57.4 years of age).

#### 4.4 Sectoral Studies

Reflected in the literature is the notion that the general aging of Canadian society will affect every occupation and sector. Some of the effects are likely to include such things as shortages of labour, skilled and unskilled, as older workers retire. Additionally, workplaces are changing, or will change, to accommodate the growing proportion of older workers. Even “young” industries, such as the Accommodation and food services industry, will have to be prepared for an aging clientele (e.g., perhaps by adjusting the composition of their workforce to reflect their aging clientele; by providing different services, etc.).

With this increasing awareness of the potentially large impact the aging of Canada’s population and workforce can have on industry, some sectors have begun to study the issue in more detail.

##### The Automotive Repair and Service Industry

In a 1999 study produced by the Canadian Automotive Repair and Service Council (CARS) and Human Resources Development Canada (HRDC), it was found that the industry will experience a labour shortage in the near future. The extent of the impact was said to be hard to predict due to the difficulty in forecasting retirement and determining to what extent improvements in technology and procedures will reduce the need for labour.

However, the proportion of workers in the Automotive Repair and Service industry appears to decline by age (i.e., nearly 50% of the workforce is over 40; 34.7% are aged 31 to 40; 10.3% are aged 26 to 30; and only 6.8% are 20 to 25 years of age).<sup>65</sup> Based on these figures, it is “obvious that there will not be sufficient numbers of employees to keep pace with the attrition that will result.”<sup>66</sup>

The report also indicates that already there are skills gaps (technical and non-technical) that are emerging, and that these gaps are likely to widen as a large proportion of workers begin to retire. Training is thus a high priority within this industry (i.e., as changes in technology and processes create a mismatch of skills within the industry).

One of the greatest priorities, however, is the need to attract youth to the industry. The Automotive Repair and Service Industry must deal with its negative image before it will be able to attract the workers it needs.

##### Educational Services Sector

As was discussed in Section 4.3, the Educational services sector is aging quickly, with 44% of its workforce over the age of 45. And, with a relatively early retirement age of 57.4, a labour shortage can be expected in the near future.

A 2002 study conducted by Canada’s Education Sector Human Resources, “The ABCs of Educator Demographics”, discusses the issue of potential labour shortages in the sector. It is expected that a number of positions will need to be filled over the 1998-2008 period due

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<sup>65</sup> Canadian Automotive Repair and Service. “Bridging the Gaps: Issues and Challenges Facing the Canadian Automotive Repair and Service Industry”. [http://www.strategis.ic.gc.ca/pics/am/cars\\_e.pdf](http://www.strategis.ic.gc.ca/pics/am/cars_e.pdf). p.10

<sup>66</sup> Ibid.



to the retirement of a large proportion of workers.<sup>67</sup> The low unemployment rate (1.8% in 1996) indicates that the industry will have to rely on university graduates to fill the positions.

The representation of Aboriginal persons was found to be very low in this industry, which will likely require change in the near future: “Self-government and an emphasis on Aboriginal education, along with the larger proportion of youth in the overall Aboriginal population create increasing requirement for Aboriginal teachers.”<sup>68</sup>

The Educational Services sector will have a key role to play over the next decades in dealing with the aging workforce. As aptly stated in the report,

*“We must ask ourselves not only whether Canada will have enough workers to perform the tasks required to keep our country functioning and economically viable but if we will have the kind and numbers of teachers to ensure that our work force can develop the skills it needs.”<sup>69</sup>*

### Professional Engineering

The Canadian Council for Engineers recently supported a study on the Canadian Engineering Profession. This study does not specifically address the issue of the aging workforce, but a number of interesting facts on the issue emerge nevertheless:

- It was found that 23% of the engineers are over the age of 51, while 30% are between the age of 42 and 51.<sup>70</sup> Nearly 50% are considered older workers;
- The median age of engineers is 43. This is slightly above the national median age of the active population at 41.3;
- The youngest engineers are found in Quebec, while the oldest are concentrated in the Yukon and the Northwest Territories;
- Only 3% of engineers are unemployed, well below the national average of 7.5% (NB. The industry will have to rely more on university graduates to fill labour shortages);
- The average income for engineers is \$87,800, well above the national average of \$30,000 (NB. Workers with higher salaries tend to retire at younger ages);
- Women are underrepresented in this industry, especially in the areas of mining, electrical, mechanical and metallurgical engineering.

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<sup>67</sup> The Steering Group for the Situational Analysis of Canada’s Education Sector Human Resources. “The ABCs of Educator Demographics”. 2002

<sup>68</sup> Ibid

<sup>69</sup> Ibid

<sup>70</sup> Ekos Research Associates, Inc. “National Survey of the Canadian Engineering Profession, 2002: Presentation of Preliminary Results”. 2002. <http://www.ekos.com>.

## SECTION 5: HUMAN RESOURCE CHALLENGES & BEST PRACTICES

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The aging of Canada's population and its workforce is likely to have numerous human resource implications over the coming years. These challenges will be in the areas of: workforce planning; retention of older workers; health, safety & ergonomic strategies; work environment strategies; as well as recruitment and training methods.

The following section will provide an outline of these challenges as well as examples of best practices. Many of the examples are from Europe, as this continent has been part of the growing global aging trend for longer than Canada (and, as a result, more human resource practices are in place to confront the issue).

### 5.1 Workforce Planning

The retirement of the baby boomers is projected to have a large impact in all sectors of the economy, so it is essential for organizations to begin planning now to address the shortage in labour (skilled and unskilled). As seen in Section 4.4, various sectors have already started planning, however, the limited amount of sector-specific literature on the subject seems to indicate that the aging of the workforce has not been addressed adequately to date.

Workforce planning includes such things as analyzing the demographics of the workforce; reviewing retirement projections and turnover statistics; and developing strategies to meet future needs (and perhaps current needs). It has been defined as a

*“proactive way of determining future staffing needs based on the strategic goals and objectives of the organization, and implementing strategies to ensure that the people and competencies are in place to meet those needs.”<sup>71</sup>*

The four phases of workforce planning include: 1) setting a strategic direction; 2) workforce analysis (i.e., analysis of supply/demand projections and analysis of gaps); 3) implementation of the workforce plan; 4) Monitoring, evaluation, and revision.<sup>72</sup>

All parties in the labour force have a role to play in workforce planning “whether they are workers themselves, their representatives, sectoral associations, employers, employers’ associations, educational institutions or the state.”<sup>73</sup>

#### Example of Best Practice

- The Canadian Forces, anticipating workforce gaps, conducted research to find out what Canadian youth were looking for in an employer. This research led to a new “youth strategy”, with advertising campaigns targeting youth. In addition to this, a new state-of-the-art recruitment Internet site, with numerous action pictures and other alluring characteristics, was created to entice younger workers into joining the armed forces.<sup>74</sup>

<sup>71</sup> Department of Personnel. “Workforce Planning is Essential to Meet Future Staffing Needs”. Washington, USA. 2001. <http://hr.dop.wa.gov/managernews/sept2001/wfplanning.htm>

<sup>72</sup> Ibid

<sup>73</sup> Schetagne. P.20

<sup>74</sup> The Conference Board of Canada. “Building Tomorrow’s Public Service Today: Challenges and Solutions in Recruitment and Retention”. Ottawa, Canada .2002. p. 20

## 5.2 Retention Strategies

The baby boom generation accounts for a large segment of the workforce across all sectors and, by 2011, is expected to represent 41% of the workforce in Canada. Retention of these workers will become an important strategy in order to avoid a loss of skills, experience, and corporate knowledge. It will also be key to avoiding labour shortages.

In order to retain older workers, it is important to consider the reasons why some employees decide to retire while others continue working. For instance, one of the main reasons for workers taking early retirement is to have more control over their own time. This may be for such things as health care, personal fulfillment (e.g., travel, education), or family care. The care of elderly family members, in particular, will become a much greater concern for older workers as the proportion of Canadians aged 85 and older is expected to increase to 4% of Canada's population over the next four decades.<sup>75</sup>

For such reasons, it is suggested that employers provide employees with flexible work scheduling. Examples of this include part-time versus full-time work; intermittent work; contract work; job-sharing; flexible time; phased retirement; and leave options. Although there may be some difficulty in implementing flexible work scheduling, research has shown that "flexible employees may be more productive, suffer less end-of-day fatigue, and show lower absenteeism rates".<sup>76</sup> However, the literature suggests that, although many employers have flexible work provisions, most are not intended to accommodate older workers.<sup>77</sup>

As well as flexibility in work scheduling, flexibility in the type of work given to an employee is also an important retention strategy. For example, changes in assignments or job redesign may relieve ennui and dissatisfaction with one's job. Likewise, offering opportunities for advancement may lead to greater job satisfaction and may persuade older workers to stay in the workforce.

The flexibility in workplace location, such as telecommuting, is considered to be another effective human resource strategy for retaining older workers. With recent advances in technology and decreasing costs of communications, it is no longer necessary to work from the office. Although one disadvantage of this arrangement is the inability of employers to closely monitor employees, it is thought that this problem "is probably less acute with older employees", who are seen as being more reliable.<sup>78</sup>

Retention of older workers will become increasingly important to Canadian organizations over the next decade as a greater number of workers reach retirement age. The departure of these older workers signifies a loss of skills, experience, and knowledge. It is therefore essential that these workers be retained long enough for the transfer of their knowledge and skills to younger generations to take place (i.e., through such practices as job sharing between young and old; job-shadowing; older workers as supervisors of internships/mentorships).<sup>79</sup>

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<sup>75</sup> Health Canada in collaboration with the Interdepartmental Committee on Aging and Seniors Issues. P.3

<sup>76</sup> William B.P. Robson & BNAC. P.23

<sup>77</sup> Ibid

<sup>78</sup> William B.P. Robson & BNAC. P.57

<sup>79</sup> Stratégie du Conseil consultatif du travail et de la main-d'oeuvre. "Adapter les milieux de travail au vieillissement de la main-d'oeuvre. Montréal, Québec. 2002. P.15

### Examples of Best Practices

- Canada's Work Sharing program, created in the 1980s, is a voluntary program that was designed to retain skilled workers during economic downturns. Workers are able to maintain their jobs by sharing the number of hours worked with co-workers, with income support provided for the hours no longer worked.<sup>80</sup> Although not specifically designed for older workers, it provides a flexible work arrangement that may help retain these workers.
- Fidisco NV, a medium-sized finance company in Belgium, successfully implemented flexible work scheduling for its older employees (i.e., men aged 60 or over, and women aged 55 or over). With this flexible arrangement, older workers are able to reduce their workweek by two hours, without losing any earnings. An added benefit is the ability to convert the reduced hours worked into additional holidays.<sup>81</sup>

### **5.3 Health, Safety & Ergonomic Strategies**

Recent literature on aging and the workforce reveals that older workers experience physical changes that may affect their work performance if their workplace is not accommodating. Such physical changes include: loss of muscular strength and range of joint movement; decreased ability to maintain good posture and balance; reduced ability to regulate sleep; reduced vision and auditory capabilities; etc..<sup>82</sup>

It has been noted that a "less physically and psychologically demanding environment might help keep older workers on the job longer"<sup>83</sup> and might also increase the productivity of these workers. Restructuring the workplace to accommodate older workers will therefore become increasingly important in the coming years. Some examples of such restructuring include: the reduction of physically and mentally stressful tasks; more ergonomically designed work stations; adjustable chairs and work stations; insulation from excessive noise; greater illumination; the promotion of healthy lifestyles (i.e., to increase mobility and flexibility of older workers); etc.

#### Example of Best Practice

- Hazenberg Construction, a Dutch construction company, accommodates its aging workforce through job adaptation and medical supervision. This involves a company doctor examining older workers and offering advice on the appropriate workloads for employees. Some of the job adaptations include: switching to supervisory positions; mentoring of younger workers, with the younger workers carrying out the more strenuous tasks; and the adjustment of the pace of work.<sup>84</sup>

<sup>80</sup> Human Resources Development Canada. "Older Workers in the Labour Market: Employment Challenges, Programs and Policy Implications". [http://www.hrdc-drhc.gc.ca/sp-ps/lmp/owe\\_lessons.shtml](http://www.hrdc-drhc.gc.ca/sp-ps/lmp/owe_lessons.shtml)

<sup>81</sup> European Foundation for the Improvement of Living and Working Conditions. "Managing an Ageing Workforce: A Guide to Good Practice". <http://www.eurofound.ie/publications/files/EF9865EN.pdf>, p.5

<sup>82</sup> Canadian Centre for Occupational Health and Safety. "Aging Workers". [http://www.ccohs.ca/oshanswers/psychosocial/aging\\_workers.html?print](http://www.ccohs.ca/oshanswers/psychosocial/aging_workers.html?print)

<sup>83</sup> Schetagne. P.19

<sup>84</sup> European Foundation for the Improvement of Living and Working Conditions. "Managing an Ageing Workforce: A Guide to Good Practice". P.5

#### 5.4 Work Environment Strategies/Evolution of Social Behaviour

One of the most important changes that needs to take place to accommodate older workers, is that of the workplace culture. Management and employees need to be educated about older workers in order to reduce harmful stereotypes and biases. Inaccurate views (such as older workers being less productive, inflexible, and unable to learn new technologies) have traditionally created barriers for older workers in training and in employment.

It has been found, for example, that there is no significant difference between the productivity of older and younger workers: “in almost every study, variations within an age group far exceed the average differences between age groups”.<sup>85</sup> Also, older workers generally recognize the need for training: it is employer bias that prevents them from receiving training, and thus perpetuates the stereotype of older workers being unable to adapt to new technologies.

Ageism in the workplace needs to be addressed, as older workers will make up a larger proportion of the workforce in the coming years.

##### Examples of Best Practices

- The American cosmetics manufacturer, Bonne Bell Inc., has created a special unit of employees designed “to protect older employees from unpleasant interactions with younger bosses and workers”.<sup>86</sup>
- Volvo Penta, a Swedish car manufacturer, has introduced a program to change the attitudes towards older employees and internal mobility. The program allocates funds to older workers for personal development/training that would allow advancement within the company.<sup>87</sup>

#### 5.5 Recruitment Strategies

New methods of recruitment will be necessary with the increased number of older workers exiting the labour market, and a declining number of youths entering it. The environment in which employers are recruiting is likely to become more competitive as labour shortages are expected. As a result, recruitment strategies will need to become more aggressive and innovative.

It has been suggested that a good strategy for finding workers is by “recruiting from population subgroups that are relatively underexplored—fishing where the most fish are”.<sup>88</sup> In Canada it is expected that a great deal of “fish” will be found abroad: over the next five years, “immigration will account for *all* of Canada’s net labour force growth”.<sup>89</sup> Canada, however, still needs to make progress in recognizing the credentials of foreign workers.<sup>90</sup>

Although most organizations have not targeted older adults as of yet, active recruitment of older workers is expected to become more common. Effective strategies include recruiting

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<sup>85</sup> Human Resources Development Canada. “Challenges of an Aging Workforce”. P.12

<sup>86</sup> The Task Force on the Changing Age Profile of the Washington State Government Workforce. P.39

<sup>87</sup> European Foundation for the Improvement of Living and Working Conditions. P.6

<sup>88</sup> Robson & BNAC. P.12

<sup>89</sup> Canadian Labour and Business Centre. “Skills and skill shortages”.P.26

<sup>90</sup> Ibid. p.32

through non-traditional channels (e.g., posting notices in senior citizens centres, journals, and professional societies); developing a reputation as a good employer and recruiter of older workers; and offering flexible work arrangements that might be attractive to older adults.<sup>91</sup>

The Aboriginal population has been growing at a faster rate and is considerably younger than the total Canadian population. For this reason, it will become increasingly important for employers to actively recruit Aboriginal youth. Challenges for educators, employers, sector councils, and government will be shrinking the education and skills gap, as well as decreasing barriers to employment of Aboriginal youth.<sup>92</sup>

New strategies to recruit youth will likewise become essential. Efforts are already beginning to be made in the areas of career awareness programs and materials, coop programs and internships, and outreach programs with educational institutions.<sup>93</sup> However, it is expected that greater efforts will have to be made in this area in the near future, as competition for scarce labour becomes fiercer.

#### Example of Best Practice

- RAPID, a Swedish company employing metal workers, has begun actively recruiting older workers in order to avoid shortages in skilled labour and to ensure an age-mixed workforce.<sup>94</sup>
- CVS Corp., one of the largest drugstore chains in the United States, has hired over 2000 older workers in entry level positions. The company has found that the turnover rate for these workers is far lower than that of younger employees.<sup>95</sup>

## **5.6 Training Strategies**

Much of the literature on the aging workforce reveals that barriers have often existed to older workers receiving employer-sponsored training. As mentioned in Section 5.4, employer bias often restricts older employees from receiving necessary training. This, in turn, makes these workers incapable of adapting to new technologies, and in effect, becoming redundant.

Research has found, however, that investment in training is no more costly for older workers than it is for younger ones: older workers tend to have lower turnover rates and, in addition to this, the “term for return on investment in training is getting shorter”.<sup>96</sup> Also, contrary to popular belief, older workers also have the ability to learn new technologies as effectively as younger workers. The methods of training simply need to be adjusted to accommodate different learning patterns. According to a recent survey, 71% of human resources directors reported that workers over the age of 55 are able to learn new skills just as well as younger workers. This opinion will most likely become more common in the future since, “with the passage of time, the typical worker’s years of formal education are rising”.<sup>97</sup>

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<sup>91</sup> Robson & BNAC. P.17

<sup>92</sup> Canadian Labour and Business Centre. “Skills and skill shortages”.p.8

<sup>93</sup> Health, Safety and Industrial Relations Training Fund. P.22.

<sup>94</sup> European Foundation for the Improvement of Living and Working Conditions. P.4

<sup>95</sup> The Task Force on the Changing Age Profile of the Washington State Government Workforce. P.39

<sup>96</sup> Human Resources Development Canada. “Challenges of an Aging Workforce: An overview of the issue”. P.13

<sup>97</sup> Robson & BNAC. P.35

Not only are older workers capable trainees, they are also good trainers for younger workers. By allowing older workers to play mentoring and training roles, the transfer of skills and knowledge to younger generations is facilitated. Older workers are likely to play a larger role as trainers in the future, as they become a larger segment of the workforce and, as they are better educated, “their skills can be a continuing source of competitive advantage to many firms.”<sup>98</sup>

The literature generally acknowledges that it is important for all workers, young and old alike, to upgrade their skills on a continual basis, in order to remain productive. Skills and knowledge become quickly obsolete in a growing knowledge-economy.<sup>99</sup> The training of younger workers to take over leadership roles, that is, succession planning, is expected to become a priority in the near future.

#### Example of Best Practice

- Hellas Can, an aluminum manufacturing company in Greece, actively encourages the participation of older workers in all of its training programs, including computer and information technology training. Older workers also take part in providing on-the-job training to other workers.<sup>100</sup>
- The St. Lawrence Seaway Management Corporation in Canada encourages all employees to learn the work of other positions, so that they might be selected for promotions. However “applicants for training for promotion shall be selected in order of seniority...”, which directly benefits older workers.<sup>101</sup>

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<sup>98</sup> Robson & BNAC. P.39

<sup>99</sup> Human Resources Development Canada. “Challenges of an Aging Workforce: An overview of the issue”. P.13

<sup>100</sup> European Foundation for the Improvement of Living and Working Conditions. P.4

<sup>101</sup> Michel Fourzly & Marc Gervais, Human Resources Development Canada. “Collective Agreements and Older Workers in Canada”. P.83

## SECTION 6: POSSIBLE SECTOR COUNCIL APPROACHES

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The following section will outline possible sector council approaches to confront the issue of the aging workforce.

### 6.1 Support Research Initiatives

The general aging of the Canadian population is likely to have an enormous impact on the labour force in the coming decade. However, “Canadian research on older workers is quite recent and not plentiful”.<sup>102</sup> In particular, there appears to be a limited amount of sector-specific research that has been conducted. For this reason, it is suggested that sector councils provide greater support of sector-specific research initiatives.

### 6.2 Youth Strategies

- Promotion of sector image: Sector Councils need to work in conjunction with educational institutions, in order to change negative images that youth may have of working in certain sectors. In addition, greater publicity, or the creation of a “youth campaign”, may help in transforming negative images and attracting more youth to various sectors that might otherwise suffer labour shortages.
- Create easier access to information for youth: Sector Councils need to supply more information to guidance counsellors at the high school level, and also work in conjunction with post-secondary institutions, so that students might be aware of options that are open to them upon graduation. The design of a “youth-friendly” web-site may also allow easier access to information and may stimulate greater interest in various sectors.
- Greater promotion of school-to-work transition programs: Sector councils can also help promote their sectors by offering greater opportunities to youth through coop programs, job-shadowing, and internship programs. The promotion of such school-to-work transition programs might help alleviate the skills gap that is expected to emerge over the next decade.
- Create more opportunities/decrease barriers to employment for Aboriginal youth: More work needs to be done in terms of on-reserve recruitment and promotion. In addition to this, there is a need to promote greater recognition of other customs/cultures in the workplace.

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<sup>102</sup> Victor Marshall. “Canadian Research on Older Workers”. Institute on Aging, Department of Sociology, University of North Carolina. Chapel Hill, North Carolina, USA. 2001. P.1



### **6.3 Older Adult Strategies**

- Promote greater awareness of older workers: Employees and employers alike need to be educated about older workers and their contribution in the workplace. Stereotypes and biases need to be eliminated in order to retain older workers.
- Promote greater access to training for older adults/promote active aging: Employer bias often restricts older employees from receiving necessary training. This, in turn, makes these workers incapable of adapting to new technologies, and in effect, becoming redundant. However, it has been found that older workers can be trained as effectively as younger workers and it is no more costly to train them. With the knowledge that older workers will become increasingly important over the next decade, it is essential for Sector Councils to promote greater access to training for older adults.
- Advance the recruitment of older adults: Review of the literature suggests that very few Canadian organizations actively recruit older workers. Effective strategies for the recruitment of older workers include recruiting through non-traditional channels (e.g., posting notices in senior citizens centres, journals, and professional societies); developing a reputation as a good employer and recruiter of older workers; and offering flexible work arrangements that might be attractive to older adults.
- Work with government to promote anti-discrimination policies: There is a need to work closely with government to promote anti-discrimination policies with regards to such human resource issues as recruitment, retention, and training opportunities for workers of all ages.
- Increased recognition of credentials within Canada in order to facilitate labour movement: In order to permit easier movement of workers from one area of the country to another (i.e., from areas with a surplus of labour to areas with labour shortages, or from “younger” areas to “older” areas) it will be necessary to ensure that these workers’ credentials are recognized nationally. The literature also suggest there is a greater need to recognize the credentials of foreign workers, as immigrants will become an important source of skilled labour within the next decade.

## BIBLIOGRAPHY

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- The Alliance of Sector Councils. [http://www.councils.org/1office/index\\_e.cfm](http://www.councils.org/1office/index_e.cfm)
- Auer, Peter & Fortuny, Mariangels. ILO. "Ageing of the Labour Force in OECD Countries: Economic and Social Consequences". <http://www.ilo.org/public/english/employment/strat/download/ep2.pdf>. Employment Sector, International Labour Office. Geneva. 2000
- Baxter, David. "Trends that count" Business in Vancouver. June 5-11, 2001. <http://www.businessinvancover.com>
- Burleton, Derek. "The Demographic Challenge". TD Forum on Standards of Living. <http://www.td.com/economics/standard/full/Burleton.pdf>. Toronto, Canada. 2002
- Canadian Automotive Repair and Service. "Bridging the Gaps: Issues and Challenges Facing the Canadian Automotive Repair and Service Industry". [http://www.strategis.ic.gc.ca/pics/am/cars\\_e.pdf](http://www.strategis.ic.gc.ca/pics/am/cars_e.pdf). Richmond Hill, ON, Canada. 1999.
- Canadian Centre for Occupational Health and Safety. "Aging Workers". [http://www.ccohs.ca/oshanswers/psychosocial/aging\\_workers.html?print](http://www.ccohs.ca/oshanswers/psychosocial/aging_workers.html?print). 2002
- Canadian Labour and Business Centre. "Skills & Skill Shortages: trends in demographics, education and training". CLBC Handbook. Ottawa, Canada. 2002
- Canadian Labour and Business Centre. "Where Did All the Workers Go? The Challenges of the Aging Workforce". Ottawa, Ontario, 2001. <http://www.clbc.ca/engdocs/reports/pdf/workersgo/pdf>.
- CBC News. "Labour market, health care, may be affected by older population". [http://www.cbc.ca/stories/2002/07/16/census\\_age020716](http://www.cbc.ca/stories/2002/07/16/census_age020716). July 16, 2002.
- The Conference Board of Canada. "Building Tomorrow's Public Service Today: Challenges and Solutions in Recruitment and Retention". Ottawa, Canada .2002.
- Department for Education and Employment. "Factors Affecting Retirement: Book 1". <http://www.dfes.gov.uk/research/data/uploadfiles/RR236a.pdf>.
- Department of Personnel. "Workforce Planning is Essential to Meet Future Staffing Needs". Washington, USA. 2001. <http://hr.dop.wa.gov/managernews/sept2001/wfplanning.htm>
- Ekos Research Associates, Inc. "National Survey of the Canadian Engineering Profession, 2002: Presentation of Preliminary Results". 2002. <http://www.ekos.com>.
- European Foundation for the Improvement of Living and Working Conditions. "Managing an Ageing Workforce: A Guide to Good Practice". <http://www.eurofound.ie/publications/files/EF9865EN.pdf>.
- Fourzly, Michel & Gervais, Marc. "Collective Agreements and Older Workers in Canada". Human Resources Development Canada Labour Program. Hull, QC, Canada. 2002
- Health, Safety and Industrial Relations Training Fund. "The Aging Workforce". [http://www.cep.ca/health\\_safety/files/aging-e.pdf](http://www.cep.ca/health_safety/files/aging-e.pdf). 2002.

- Health Canada in collaboration with the Interdepartmental Committee on Aging and Seniors Issues. "Canada's Aging Population". [http://www.hc-sc.gc.ca/seniors-aines/pubs/fpt\\_docs/fec\\_paper/toc\\_e.htm](http://www.hc-sc.gc.ca/seniors-aines/pubs/fpt_docs/fec_paper/toc_e.htm) 2002. Ottawa, ON, Canada.
- Human Resources Development Canada. "Challenges of an Aging Workforce: An Overview of the Issue, May 2002". <http://labour.hrdc-drhc.gc.ca/worklife/aw-overview-current-practices-en.cfm>
- Human Resources Development Canada. "Older Workers in the Labour Market: Employment Challenges, Programs and Policy Implications". [http://www.hrdc-drhc.gc.ca/sp-ps/lmp/owe\\_toc.shtml](http://www.hrdc-drhc.gc.ca/sp-ps/lmp/owe_toc.shtml). 2002.
- Jackson, Richard. "The Global Retirement Crisis: The Threat to World Stability and What to Do About it". Center for Strategic and International Studies. [http://www.csis.org/gai/global\\_retirement.pdf](http://www.csis.org/gai/global_retirement.pdf). 2002.
- Lamontagne, Francois. "Demographic Profile of the Natural Resources Sector". Canadian Labour and Business Centre. [http://www.clbc.ca/engdocs/reports/pdf/naturalresourcesprofile\\_e.pdf](http://www.clbc.ca/engdocs/reports/pdf/naturalresourcesprofile_e.pdf)
- Marshall, Victor. "Canadian Research on Older Workers". Institute on Aging, Department of Sociology, University of North Carolina. Chapel Hill, North Carolina, USA. 2001.
- National Advisory Council on Aging. "1999 and Beyond: Challenges of an Aging Canadian Society". [http://www.hc-sc.gc.ca/seniors-aines/pubs/beyond1999/beyond\\_e.pdf](http://www.hc-sc.gc.ca/seniors-aines/pubs/beyond1999/beyond_e.pdf).
- North Island College. "Older Worker Pilot Project". <http://www.nic.bc.ca/olderworkers/index.asp>. British Columbia, Canada. 2002
- Robson, William B.P. & BNAC "Aging Populations and the Workforce: Challenges for Employers". British-North American Committee. Winnipeg, Manitoba. 2001. [http://www.cdhowe.org/pdf/BNAC\\_Aging\\_Populations.pdf](http://www.cdhowe.org/pdf/BNAC_Aging_Populations.pdf).
- Statistics Canada. "Early Retirement Trends ". Perspective on Labour and Income. Winter 2001. Vol.13, no.4. <http://www.statcan.ca/english/indepth/75-001/feature/pehi2001013004s4a01.htm>
- Statistics Canada. "Latest release from the Labour Force Survey". <http://www.statcan.ca/english/Subjects/Labour/LFS/lfs-en.htm>. 2002
- Statistics Canada. "Profile of the Canadian population by age and sex: Canada ages". P.3 <http://www.12.statcan.ca/english/census01/Products/Analytic/companion/age/images/96F0030XIE2001002.pdf>. 2002.
- Statistics Canada. "A profile of the Canadian population: where we live". 2001 Census analysis Series. Catalogue 96F0030XIE010012001.
- Statistics Canada. "Fact Sheet on Retirement". Labour Force Survey, 2001. <http://www.statcan.ca/>
- Statistics Canada. <http://www.statcan.ca/Daily/English/020926/d020926c.htm>
- The Steering Group for the Situational Analysis of Canada's Education Sector Human Resources. "The ABCs of Educator Demographics". Canadian Alliance of Education and Training Organizations (CAETO). Ottawa, Canada. 2002
- Stratégie du Conseil consultatif du travail et de la main-d'oeuvre. "Adapter les milieux de travail au vieillissement de la main-d'oeuvre". Montréal, Québec. 2002

- Sylvain Schetagne. "Building Bridges Across Generations in the Workplace: a response to aging of the workforce". <http://www.ccsd.ca/pubs/2001/bridges/bbeng.pdf>. Vancouver, BC, Canada. 2001.
- The Task Force on the Changing Age Profile of the Washington State Government Workforce. "Impact of Aging Trends on the State Government Workforce". <http://hr.dop.wa.gov/workforceplanning/agingreport.pdf>. 2000
- United Nations. "International Plan of Action on Ageing 2002" (Second World Assembly on Ageing, Madrid, 2002). <http://www.un.org>
- United Nations Population Division. "World Population Prospects: The 2000 Revision". New York, USA. 2001. <http://www.un.org>.
- Walton , Dawn. "Retirees returning to the work force". The Globe and Mail. Sept. 27, 2002. <http://www.globeandmail.com/>
- Washington University in St. Louis. "An Agenda on Productive Aging: Research, Policy, and Practice". [http://www.gwbweb.wustl.edu/csd/Areas\\_Work/Productive\\_aging/concept\\_paper.pdf](http://www.gwbweb.wustl.edu/csd/Areas_Work/Productive_aging/concept_paper.pdf).

## OTHER TOOLS AND RESOURCES

---

- ARA Consulting Group. "People in Plastics: Creating the Competitive Advantage, A Strategic Plan for Human Resources and Training Needs in the Canadian Plastics Industry". Order online at : [http://www24.hrdc-drhc.gc.ca/def/pub/orti.asp?VarParam=203&Param\\_Lang=0&Switch=ortie.asp](http://www24.hrdc-drhc.gc.ca/def/pub/orti.asp?VarParam=203&Param_Lang=0&Switch=ortie.asp)
- Bachmann, Kimberley. "Work-Life Balance: Are Employers Listening?". Ottawa. Conference Board of Canada. 2000
- Department of Education Victoria. "Flexible Work Handbook: Achieving Work-life Balance". <http://www.sofweb.vic.edu.au/hrm/mandiv/pdf/flex.pdf>. Victoria, Australia. 1998
- Department of Personnel. "State of Washington Workforce Planning Guide". <http://hr.dop.wa.gov/workforceplanning/wfpguide.pdf>. 2000.
- Encel, Sol. "Later-life employment". *Journal of Aging and Social Policy* 11(4): 7-13. The Haworth Press, Inc. 2000.
- The Paget Consulting Group Inc. "Building Long-term Capability Now: Canadian Human Resources Study in Biotechnology". Can be ordered online at: [http://www24.hrdc-drhc.gc.ca/def/pub/commd.asp?VarParam=191&Param\\_Lang=0&Switch=commd.asp](http://www24.hrdc-drhc.gc.ca/def/pub/commd.asp?VarParam=191&Param_Lang=0&Switch=commd.asp)
- Government of Alberta. "The Job Share Guide Book for Employees and Supervisors". <http://www.pao.gov.ab.ca/health/flexible-work/jobshare/index.html>. 2002
- Human Resources University of Central Florida. "Telecommuting manual". <http://pegasus.cc.ucf.edu/~perspay/policies/tmpart1.html>. 1996
- Labour Program, Human Resources Development Canada. "Moving beyond Policies and Programs to Bring About Culture Change" *Work-Life Balance in Canadian Workplaces*. <http://labour-travail.hrdc-drhc.gc.ca/worklife/imt-en.cfm#cc>. 2001.
- Molinié, Anne-Françoise . "Age and Working Conditions in the European Union"..European Foundation for the Improvement of Living and Working Conditions. <http://www.eurofound.eu.int/publications/EF02106.htm>. 2002
- Price Waterhouse. "Canadian Trucking Industry, Human Resource Challenges and Opportunities". Order online: [http://www24.hrdc-drhc.gc.ca/def/pub/orti.asp?VarParam=210&Param\\_Lang=0&Switch=ortie.asp](http://www24.hrdc-drhc.gc.ca/def/pub/orti.asp?VarParam=210&Param_Lang=0&Switch=ortie.asp)
- Rothwell, William J., Prescott, Robert K., Taylor, Maria W. "Strategic Human Resource Leader: How to Prepare Your Organization for the Six Key Trends Shaping the Future", Palo Alto, CA: Davies-Black Publishing 1998.
- United States Department of Agriculture. "Family-friendly workplace guide". <http://www.usda.gov/da/shmd/guide.html>.
- University of Toronto: Centre for Studies of Aging; Canadian Aging Research Network."Work organization and the aging workforce : a literature review." <http://www.utoronto.ca/lifecourse/deptpubs.htm>.

## **APPENDIX A: LITERATURE REVIEW DATABASE**