
Demographic Change and Alberta's Building Trades: Is the Elephant Still in the Room?

A Presentation to
*Building Trades of Alberta
2009 Convention
"Adapting to Economic Realities"*

By

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Kananaskis, Alberta
September 29, 2009

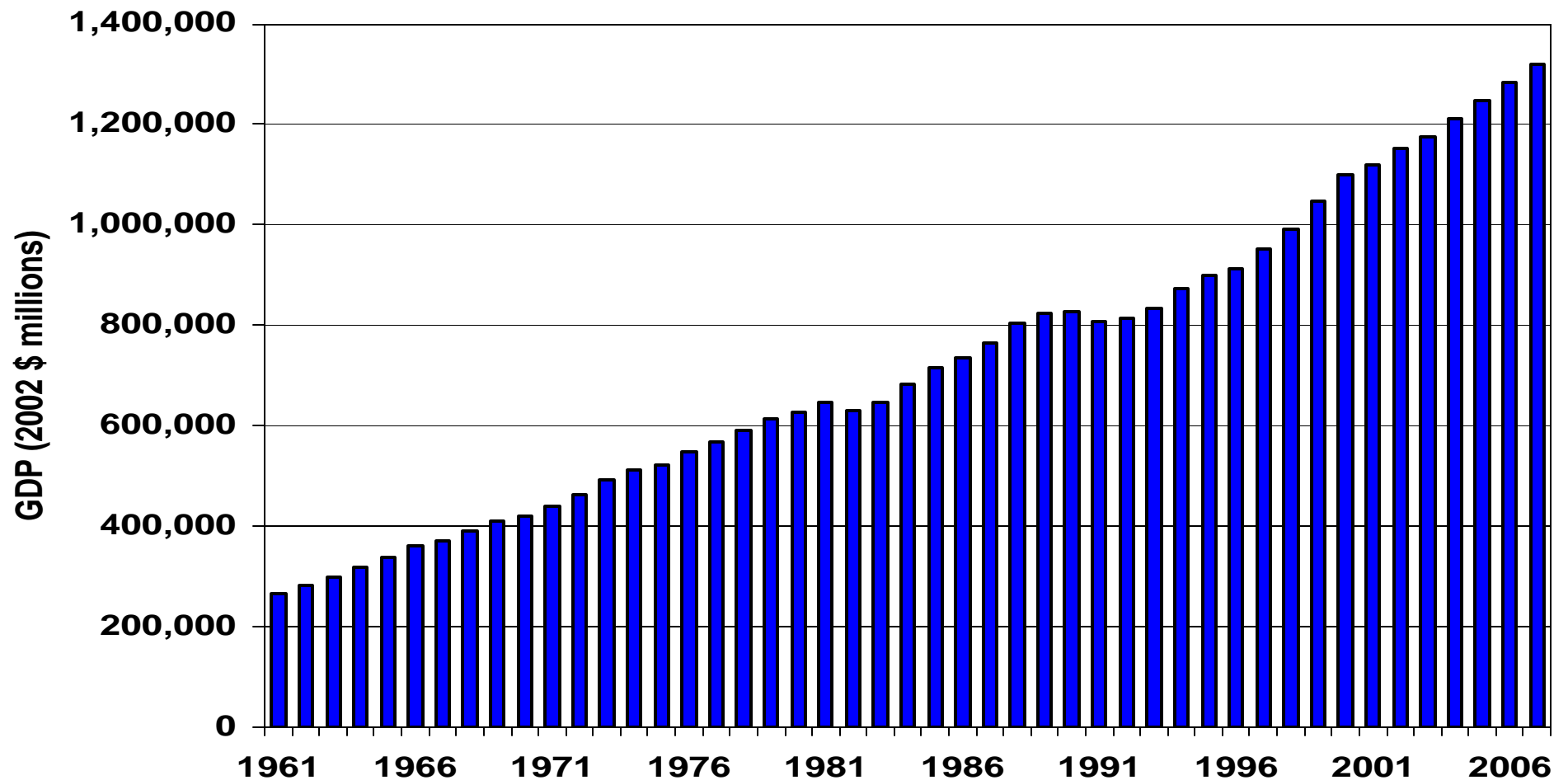


QUESTION?

***Given the current economic crisis,
does demography matter?***

Gross Domestic Product (2002 \$)

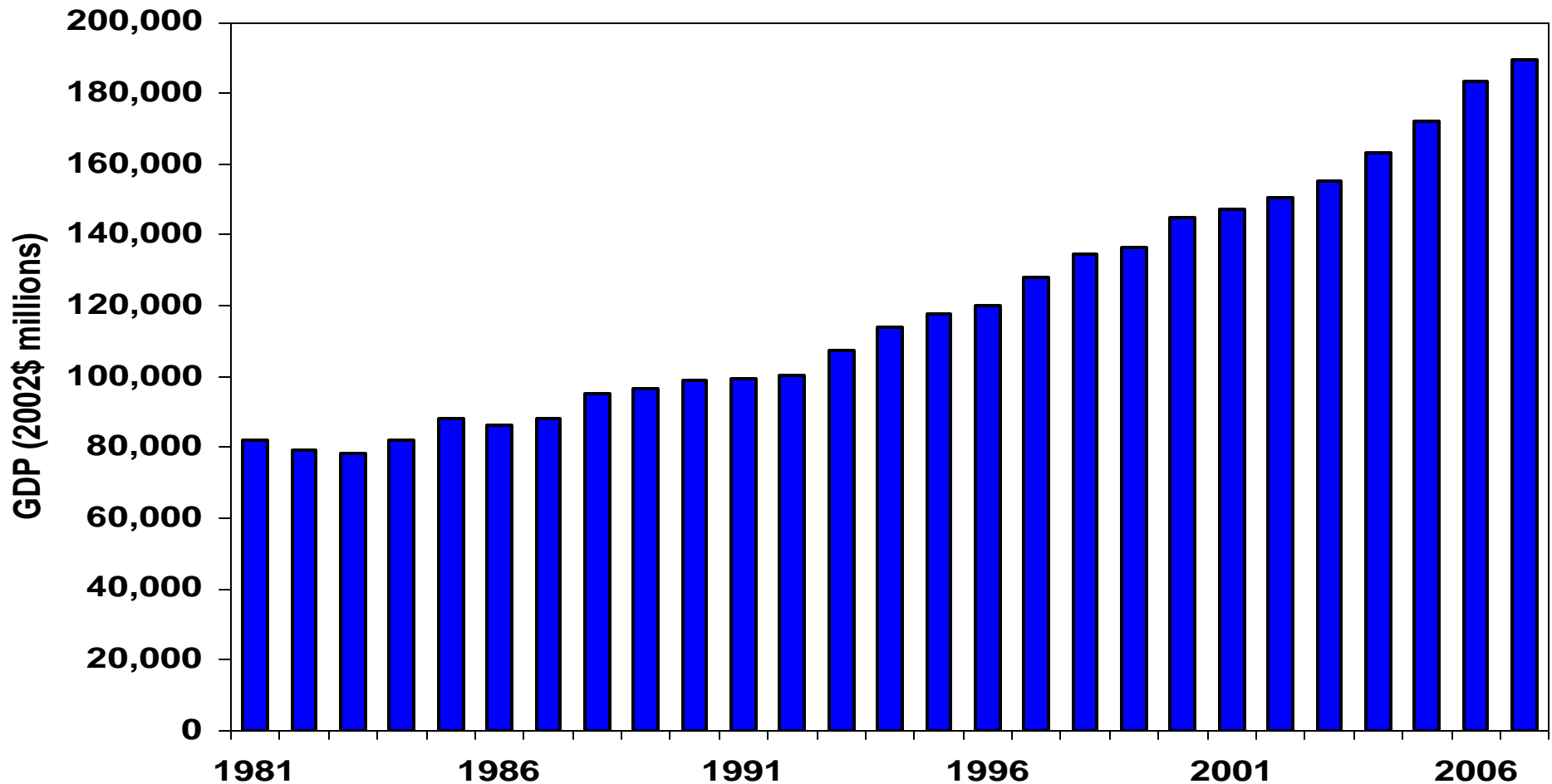
Canada, 1961 to 2007



Source: Statistics Canada and R.A.L. Consulting Limited

Gross Domestic Product (2002 \$)

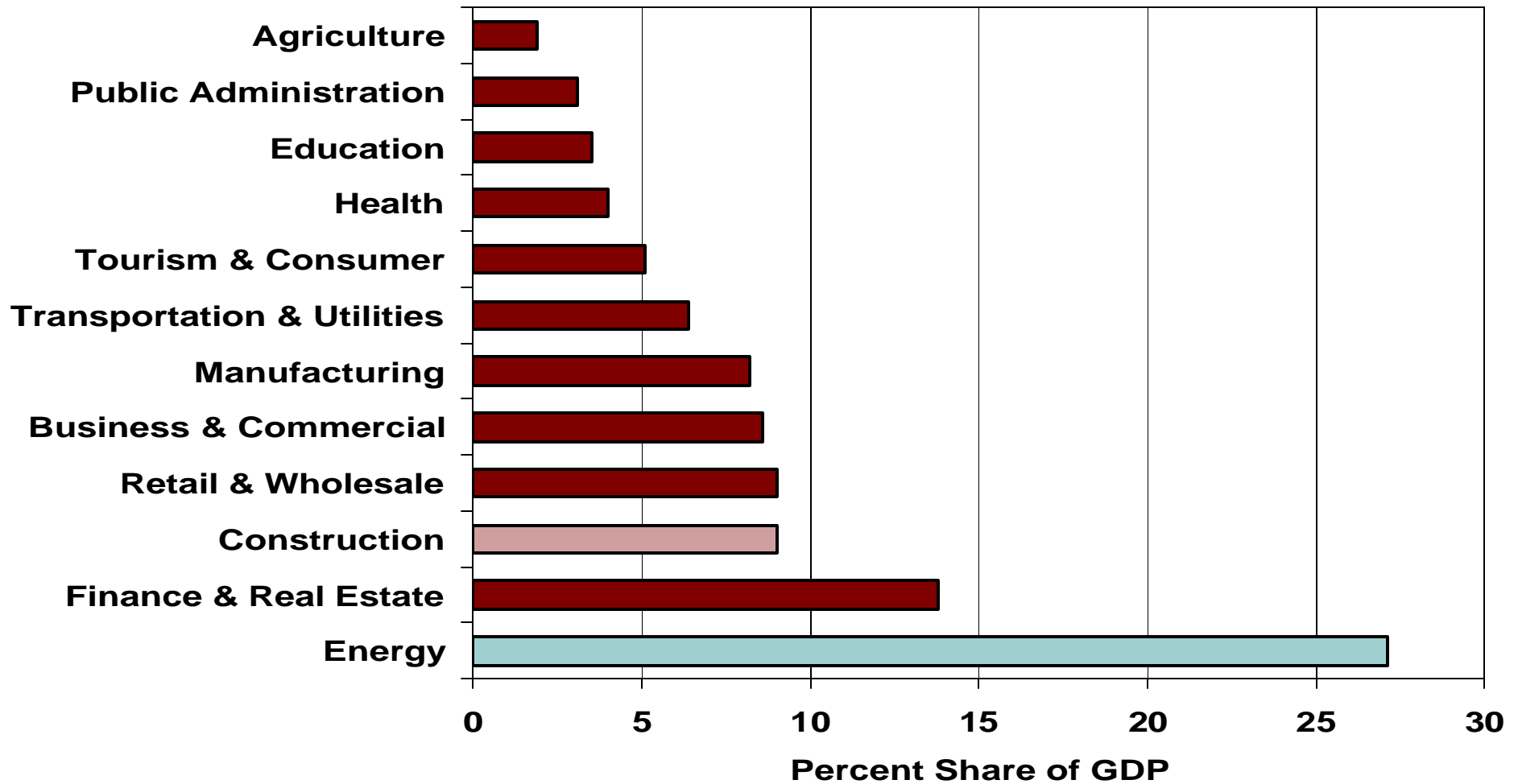
Alberta, 1981 to 2007



Source: Statistics Canada and R.A.L. Consulting Limited

Gross Domestic Product by Sector

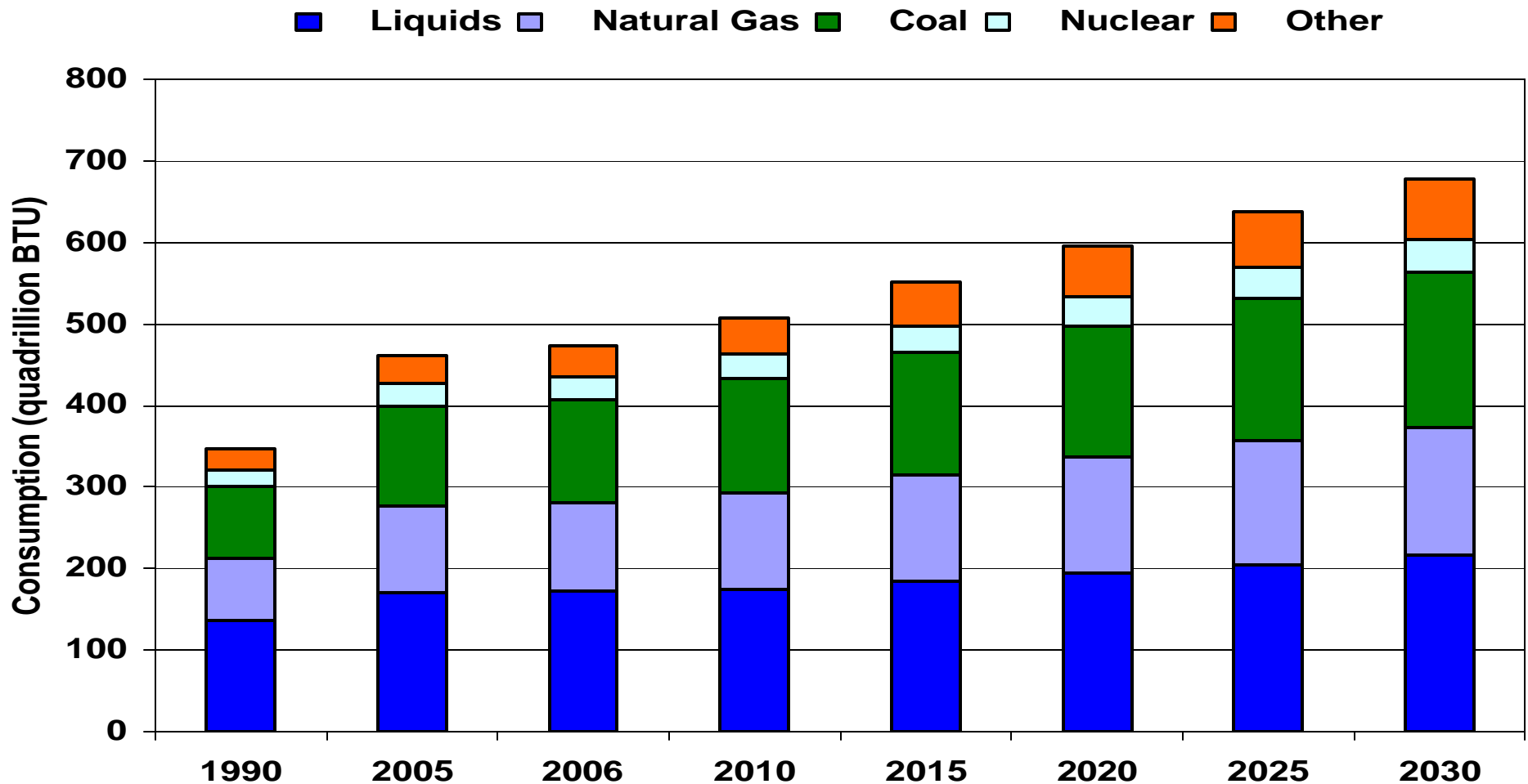
Alberta, 2007



Source: Alberta Finance

Energy Use by Fuel Type (quadrillion Btu)

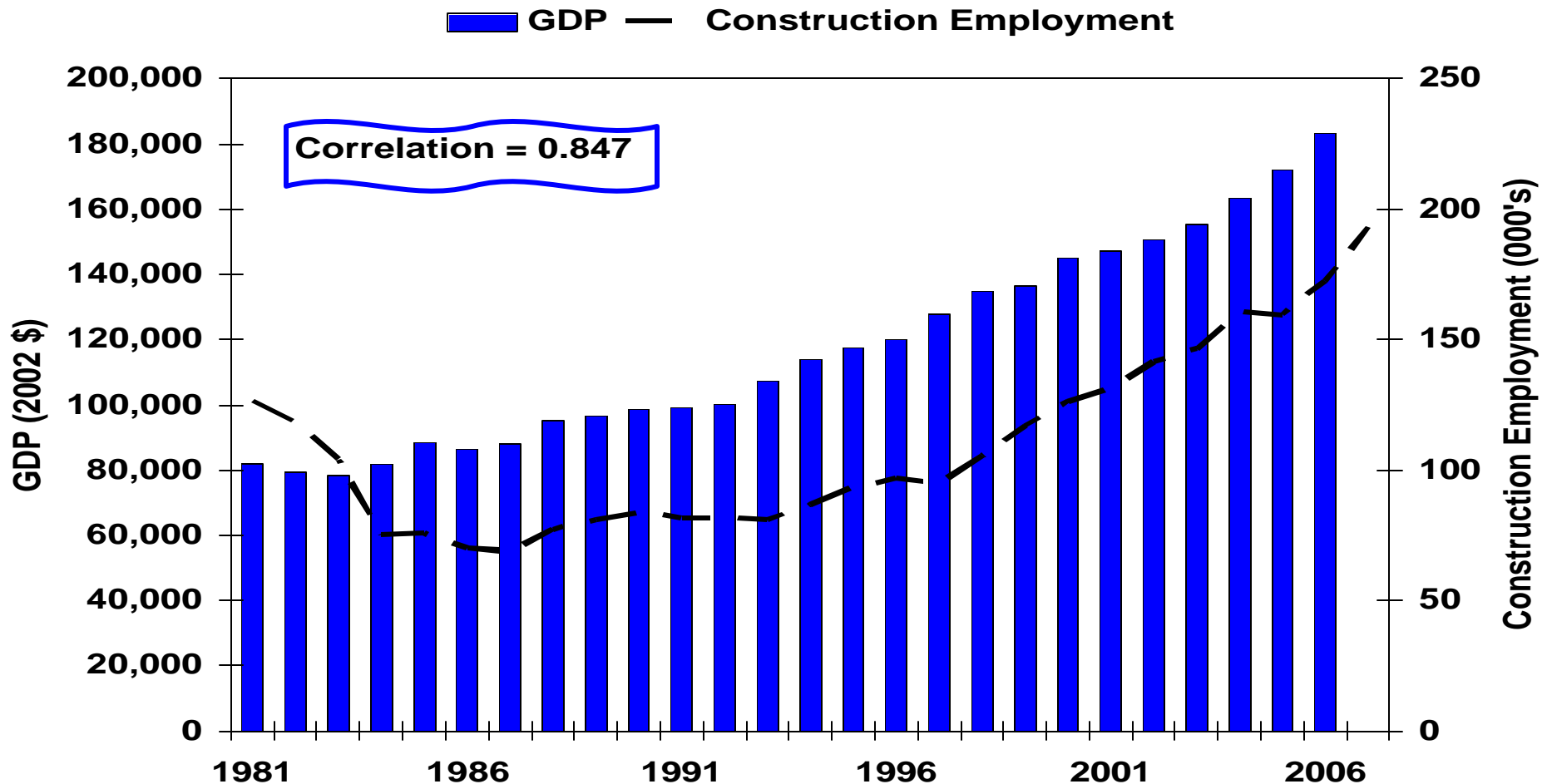
World, 1990-2030 (historical and projected)



Source: U.S. Energy Information Administration, *International Energy Outlook 2009*.

GDP and Construction Employment

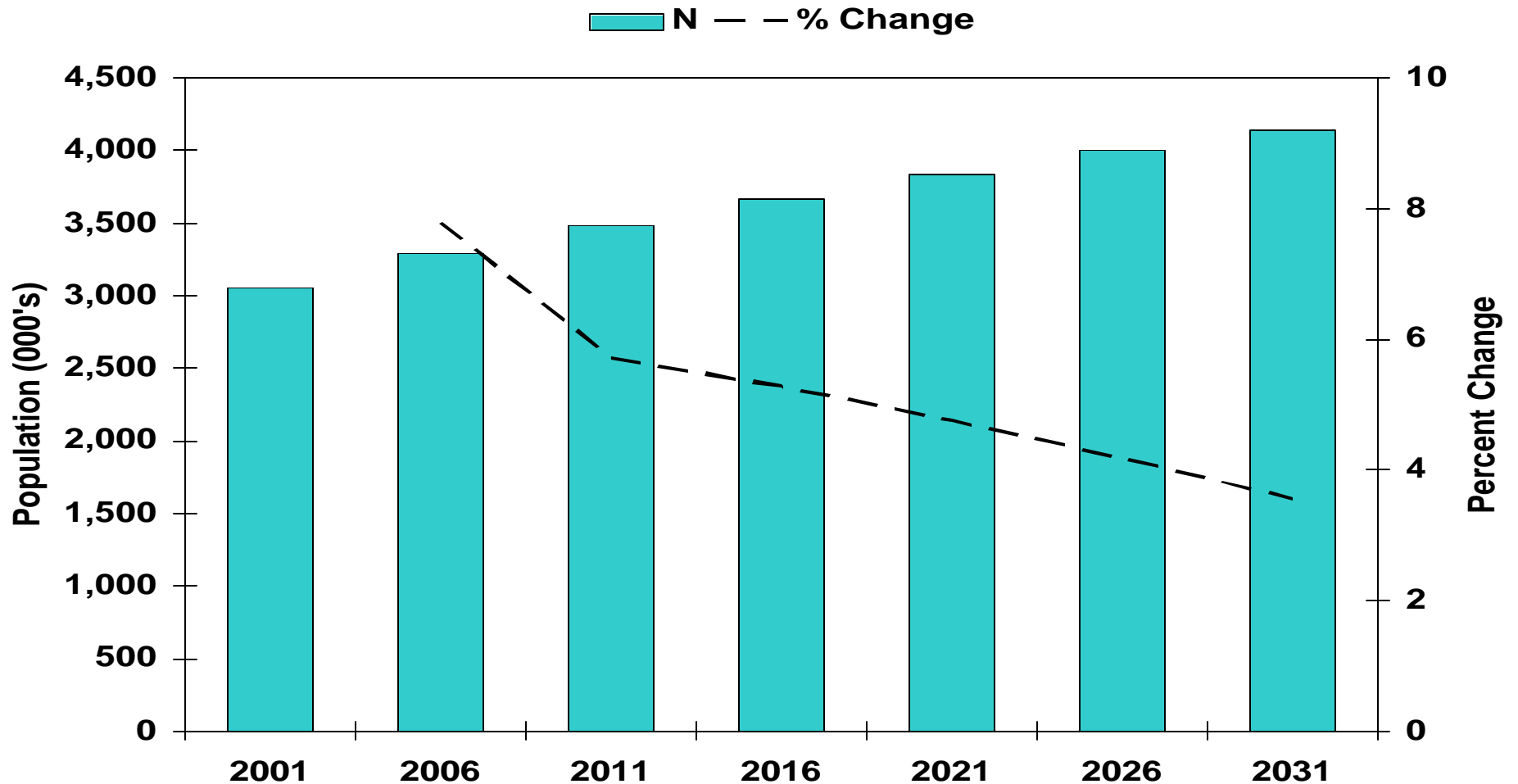
Alberta, 1981 to 2007



Source: Statistics Canada and R.A.L. Consulting Limited

Alberta's Projected Population

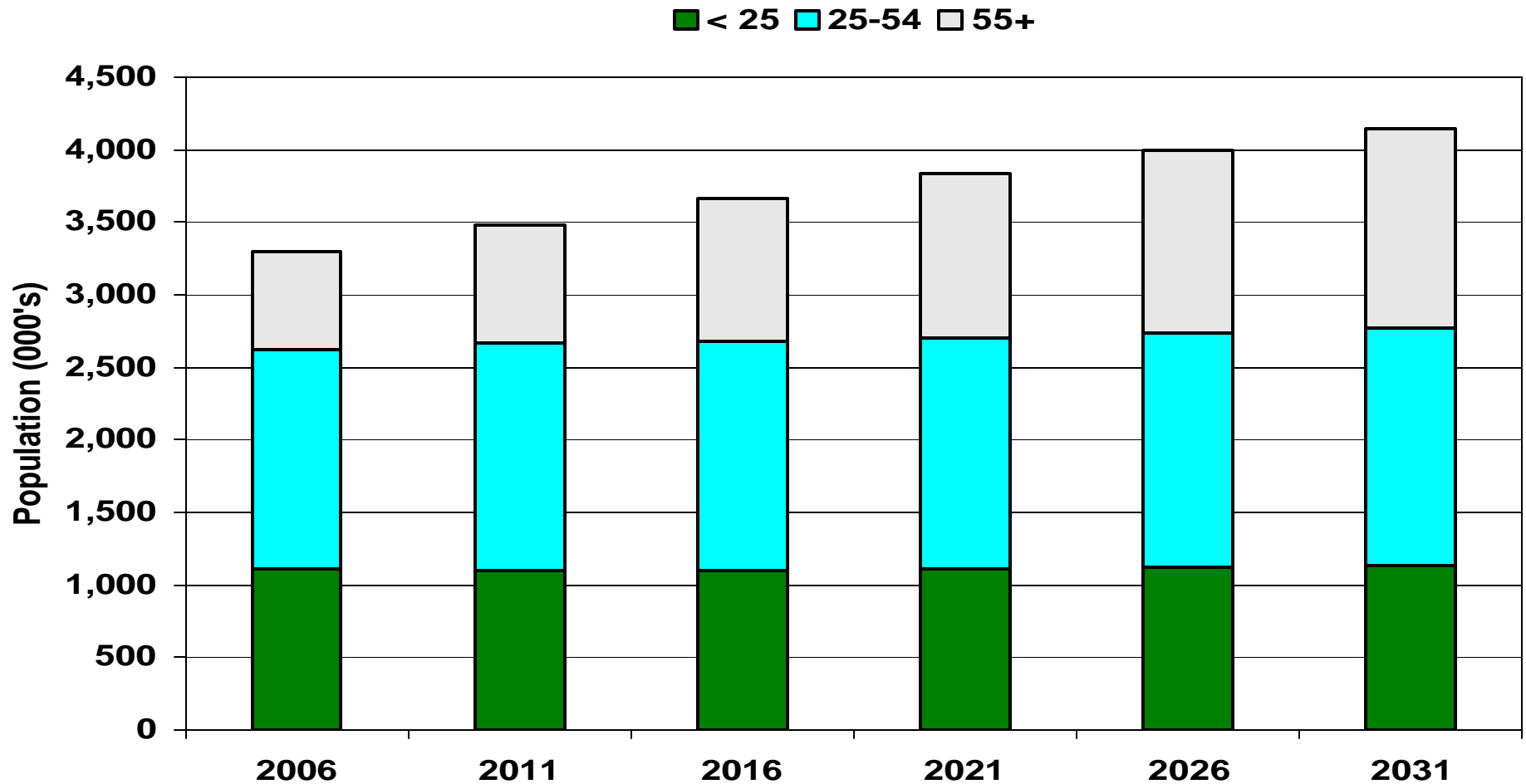
Total and Percentage Change (five-year), 2001-2031



Source: Statistics Canada and R.A.L. Consulting Limited

Alberta's Population by Age Group

2006-2031 (thousands)



Source: Statistics Canada and R.A.L. Consulting Limited

Given the current economic crisis, does demography matter?

- ***Yes. Alberta's economy is positioned for future growth. Construction employment tracks economic growth. Two challenges for the unionized industry:***
 - ✓ ***SUPPLY***: Recruitment and retention in an aging labour market (demographics).
 - ✓ ***DEMAND***: Increasing market share (economics).

Demographic Analysis

Overview

- Study of human populations
- Key factors of analysis:
 - » Sex
 - » Ethnicity/race
 - » Marital status and family structure
 - » Births and deaths
 - » Migration
 - » **AGE**

Demographic Analysis

Overview

***To become an amateur demographer
you must understand:***

- ***Two assumptions***
- ***Template of “cohorts”***

Demographic Analysis

Assumptions

Assumption #1

Every year you get a year older

Demographic Analysis

Assumptions

Assumption #2

You tend to act your age

or

***Someday you will be like your
parents***

Demographic Analysis

Assumptions

- *Acting your age:*

- » “Two-thirds of everything” (David K. Foot, *Boom, Bust & Echo 2000*)
- » Life cycle analysis of **economic behaviour**: how you spend your time and money
- » **Strategic and long-term** (10-20 years)
- » **Baseline analysis** (don't forget the survey research, economic forecasting, policy analysis, etc.)

Demographic Analysis

Cohorts

- **Boom:** 1947-1966
 - » 43-62 in 2009
 - » 30 percent of Canada's population
 - » 28 percent of Alberta's population
- **Bust:** 1967-1979
 - » 30-42 in 2009
 - » 18 percent of Canada's population
 - » 20 percent of Alberta's population
- **Echo:** 1980-1995
 - » 14-29 in 2009
 - » 22 percent of Canada's population
 - » 24 percent of Alberta's population

Demographic Analysis

This Morning's Presentation

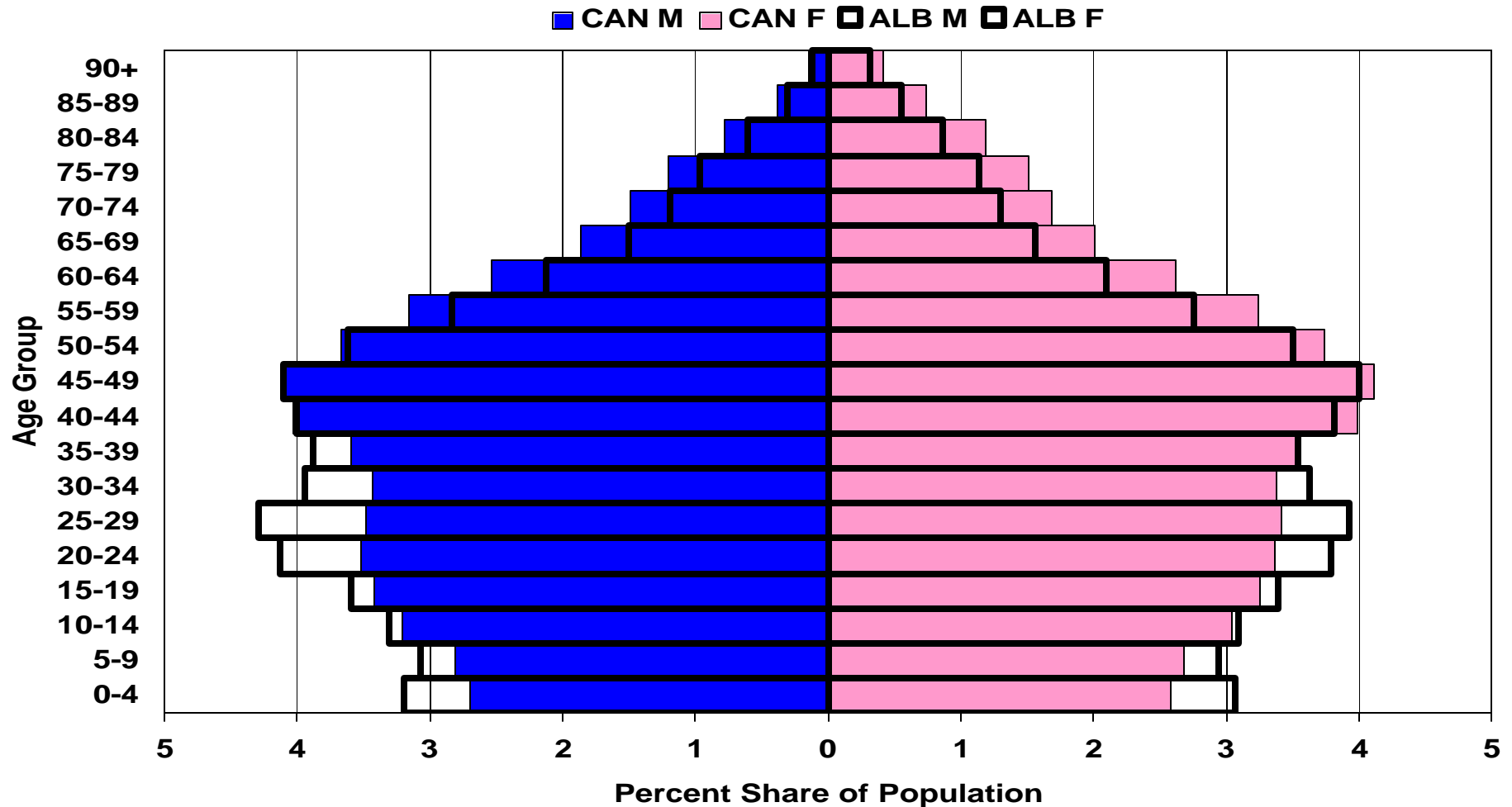
- Major demographic trends in Alberta:
 - Population
 - Labour market
- How demographic change creates opportunities and challenges in the labour market:
 - Youth (under 25)
 - Under-represented groups
 - Visible minorities
 - Mature workers (55-plus)
- Implications for industry strategy

Demographic Trends - Alberta

Population Aging

Alberta (outline) versus Canada (colour)

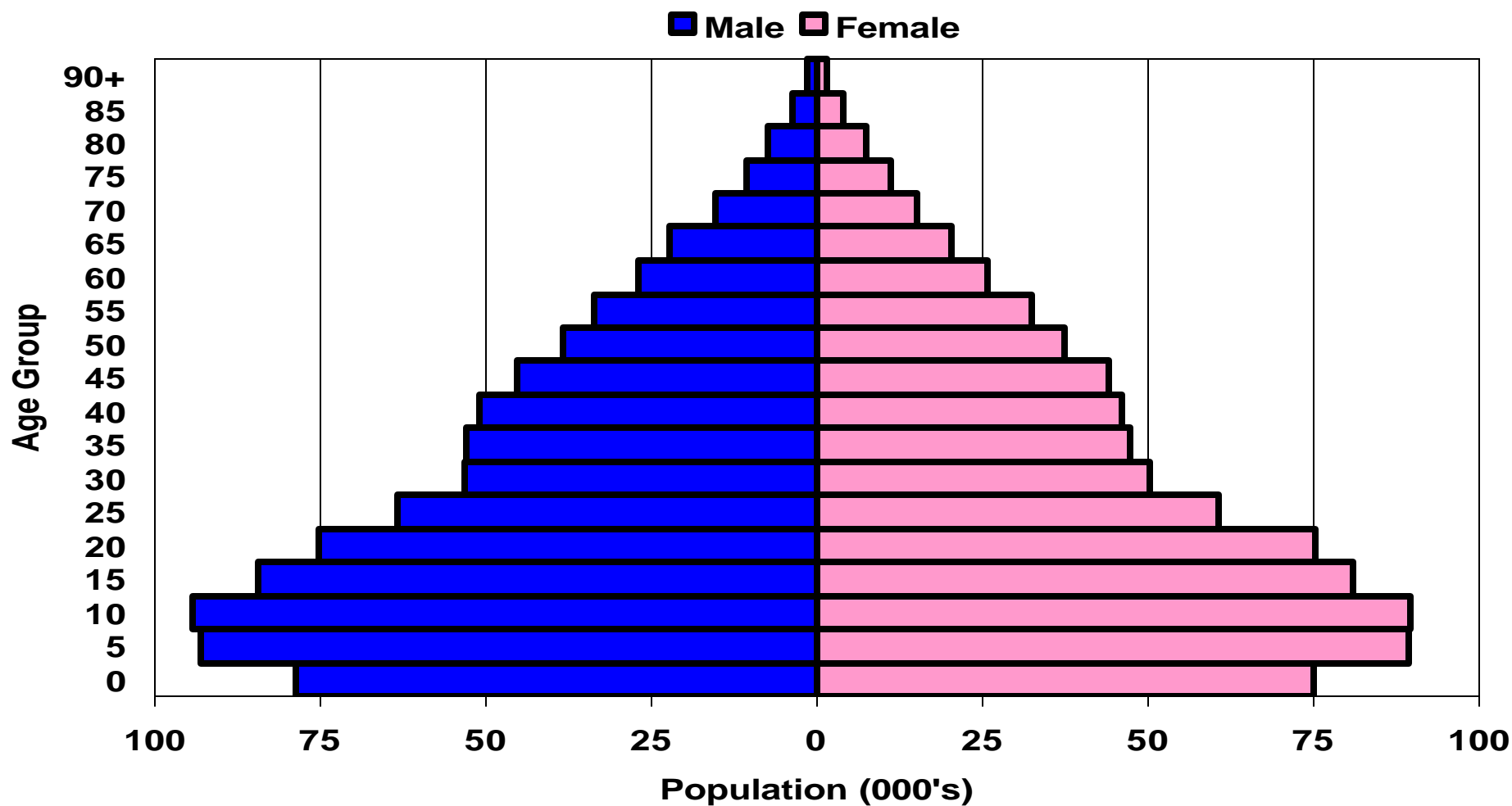
Five-year Population Pyramid, 2007 (percent)



Source: Statistics Canada and R.A.L. Consulting Limited

Alberta

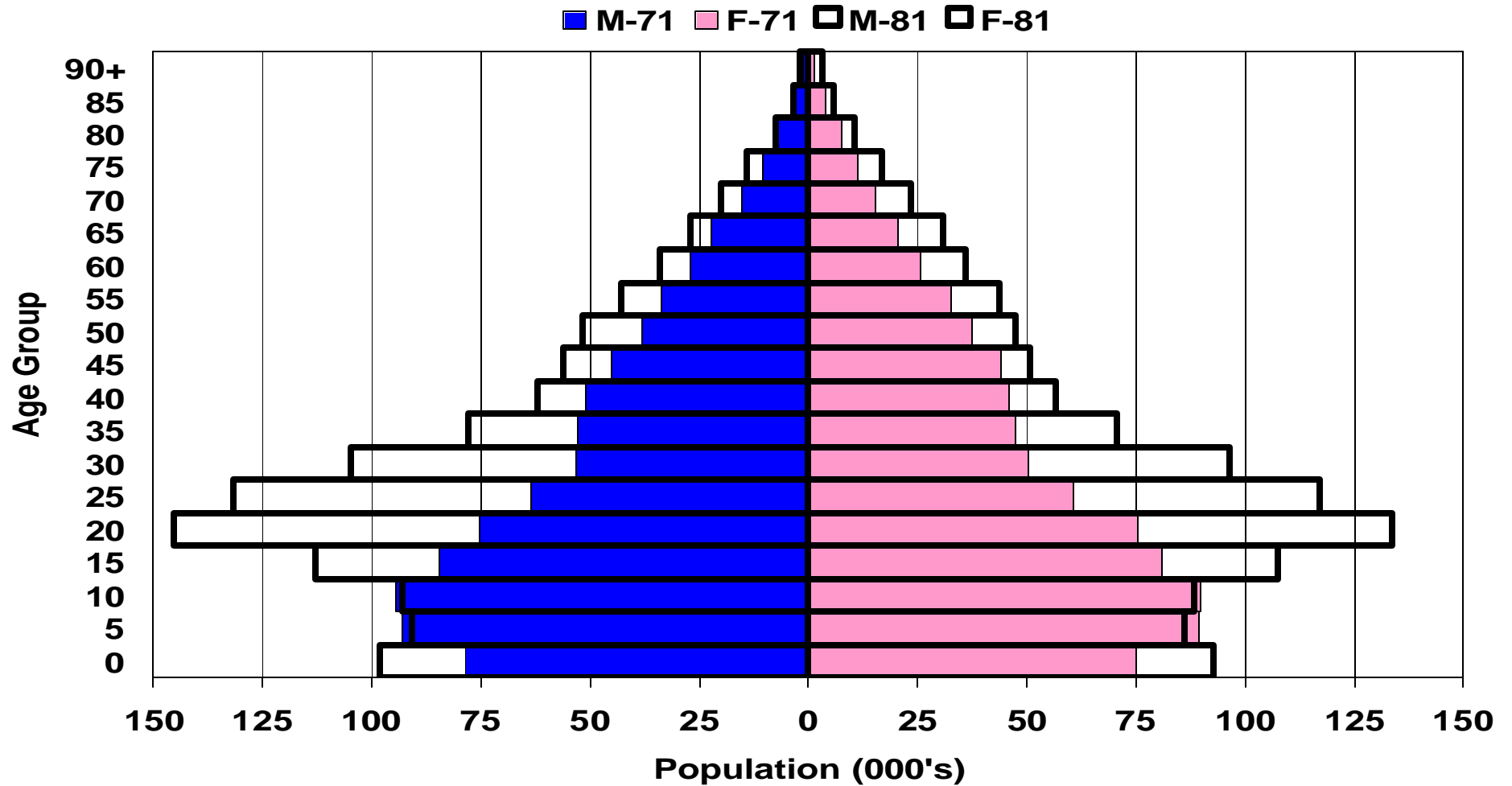
Population Pyramid, 1971 (thousands)



Source: Statistics Canada and R.A.L. Consulting Limited

Alberta

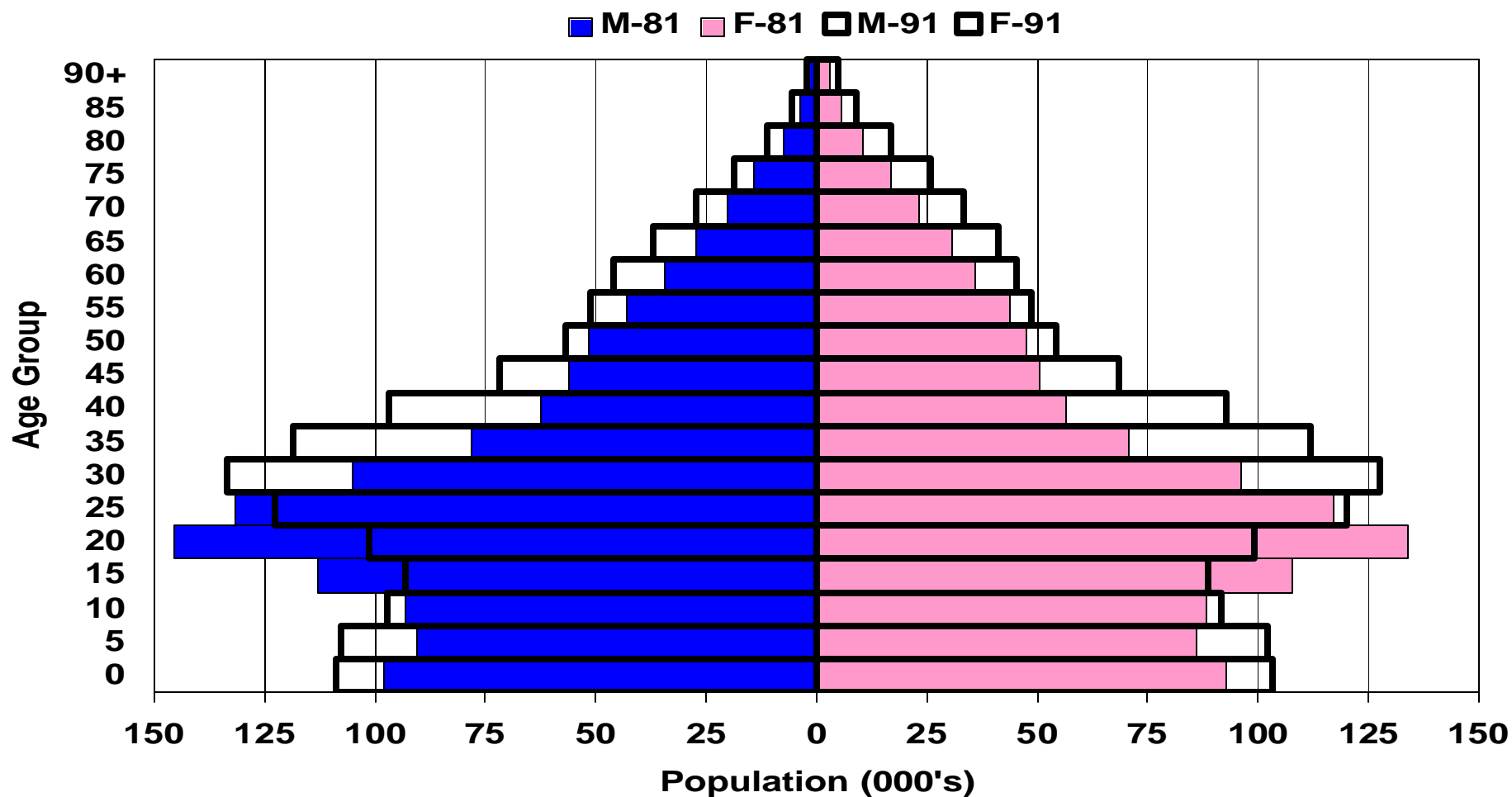
Population Pyramid, 1971 (colour) versus 1981 (outline)



Source: Statistics Canada and R.A.L. Consulting Limited

Alberta

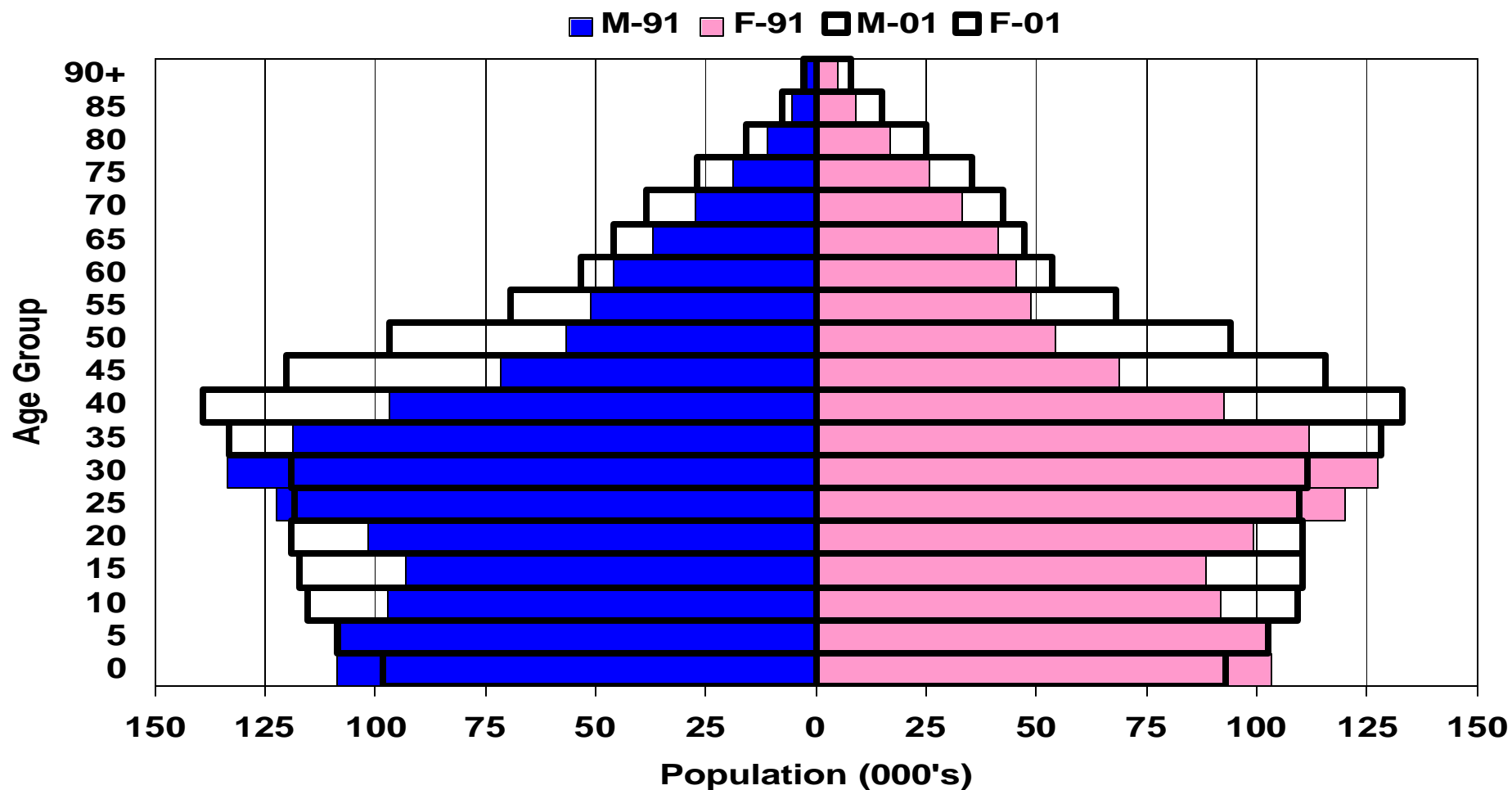
Population Pyramid, 1981 (colour) versus 1991 (outline)



Source: Statistics Canada and R.A.L. Consulting Limited

Alberta

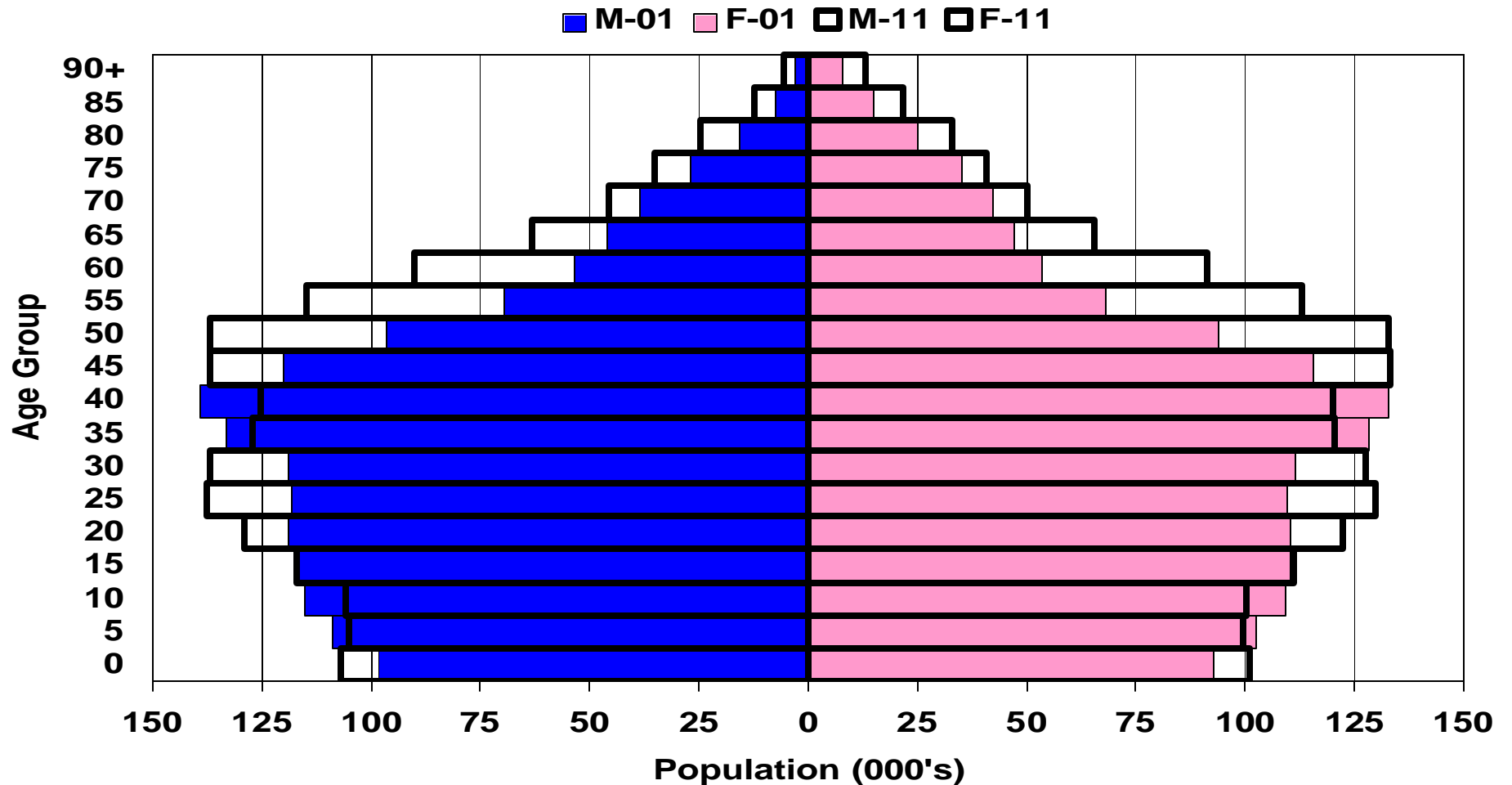
Population Pyramid, 1991 (colour) versus 2001 (outline)



Source: Statistics Canada and R.A.L. Consulting Limited

Alberta

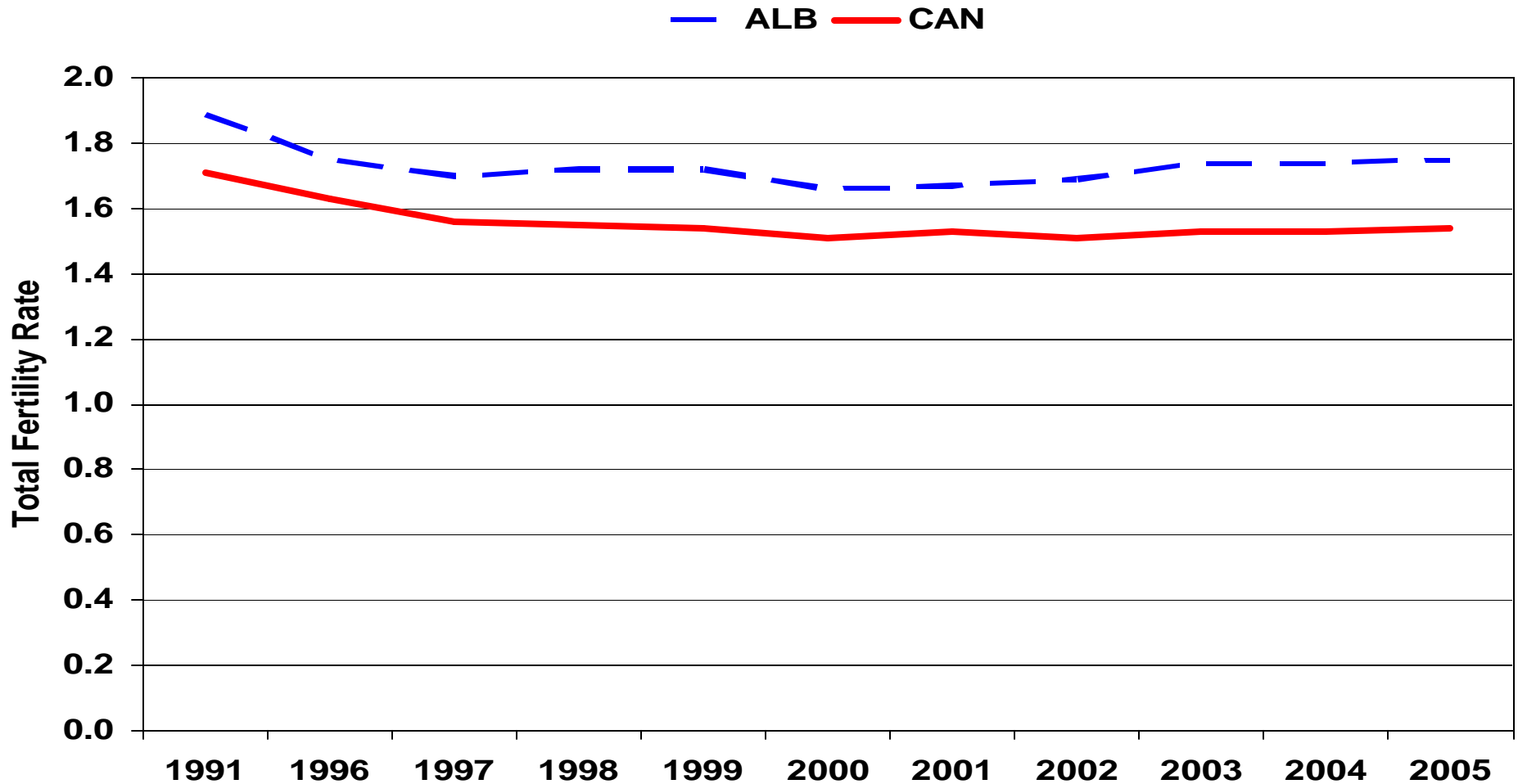
Population Pyramid, 2001 (colour) versus 2011 (outline)



Source: Statistics Canada and R.A.L. Consulting Limited

Total Fertility Rate

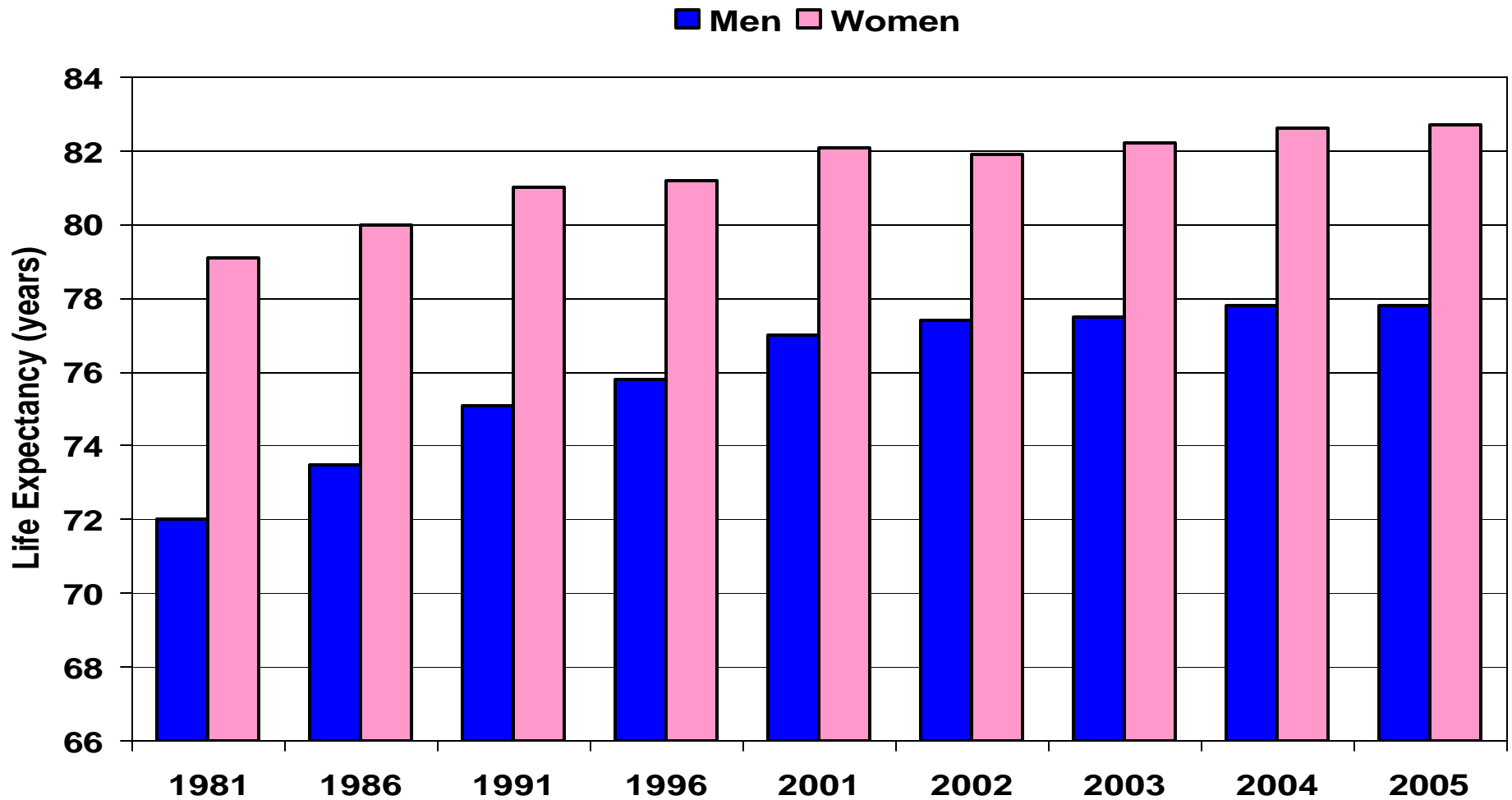
Canada and Alberta, 1991 to 2005



Source: Statistics Canada

Life Expectancy at Birth by Sex

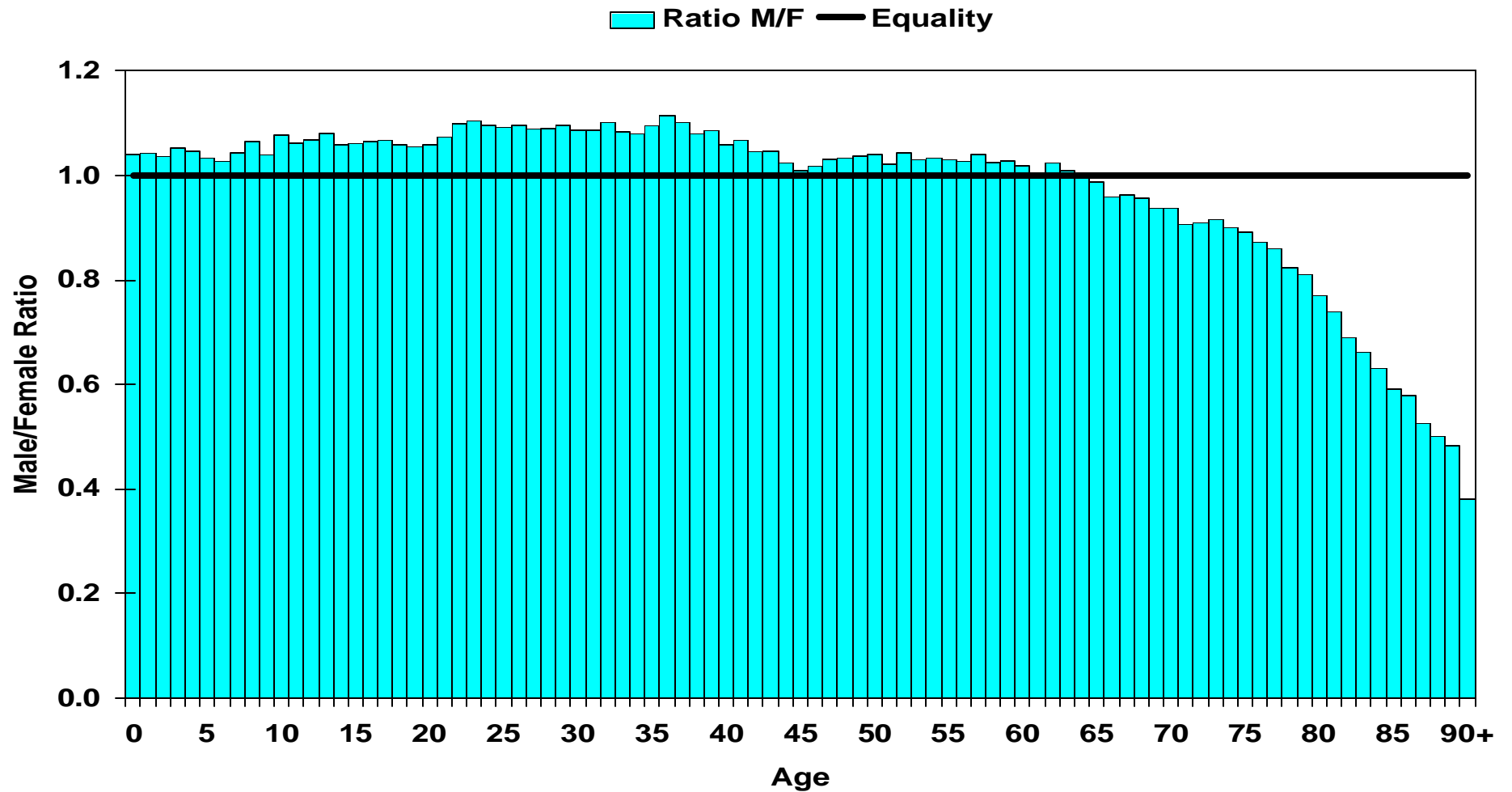
Alberta, 1981 to 2005



Source: Statistics Canada

Alberta

Male/Female Ratio by Age, 2007



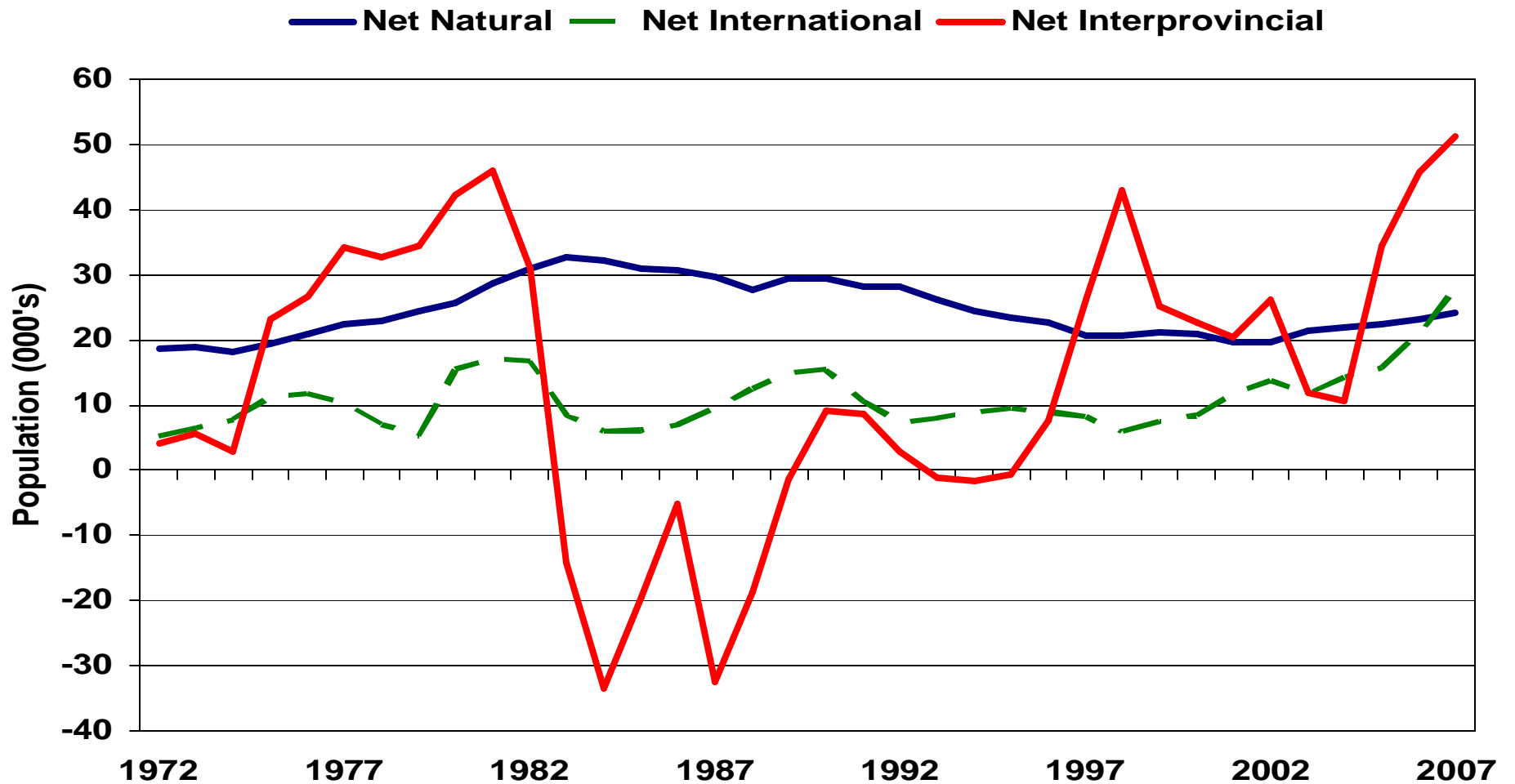
Source: Statistics Canada and R.A.L. Consulting Limited

Demographic Trends - Alberta

Population Change and Diversity

Alberta

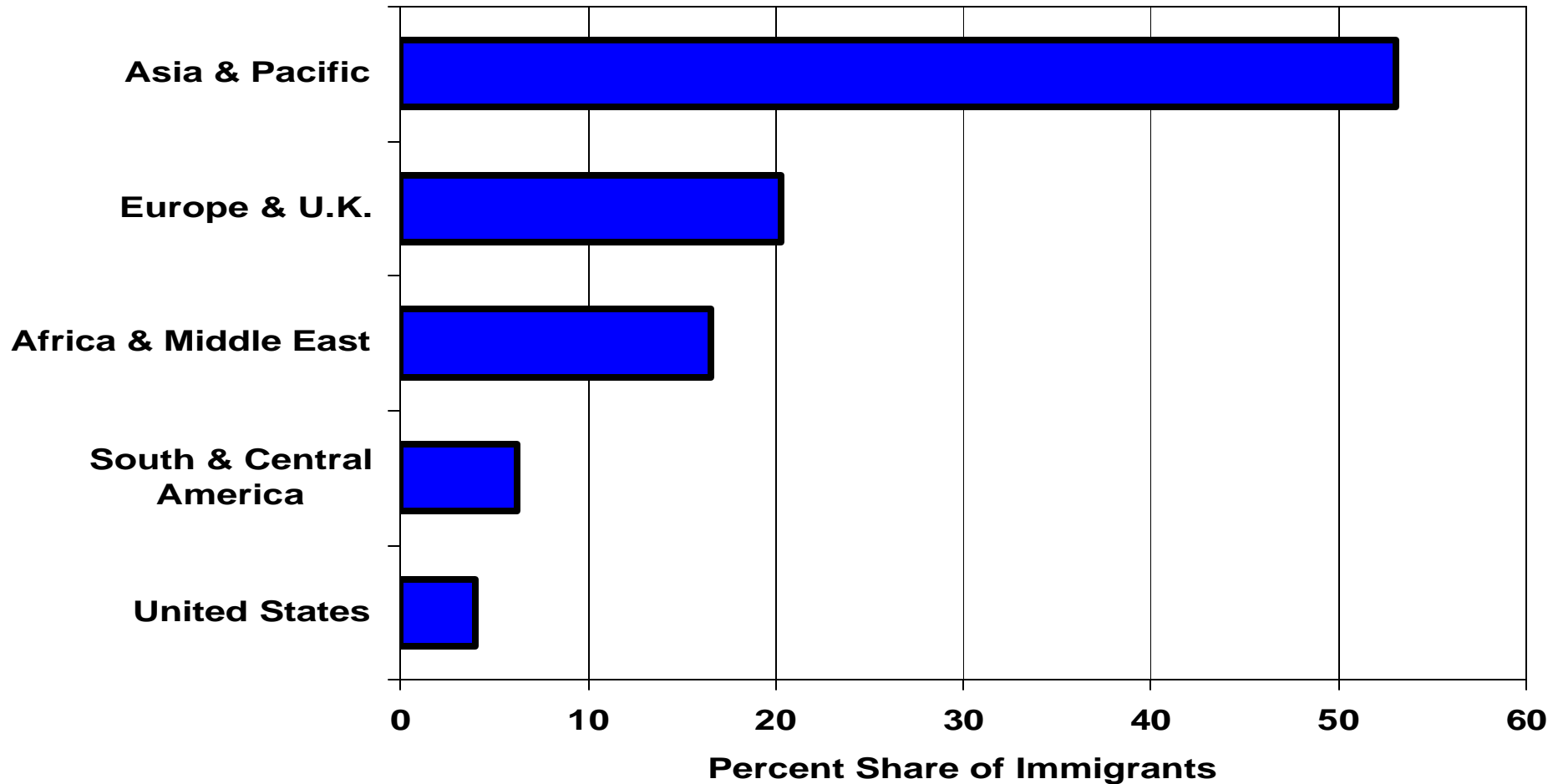
Population Change by Source, 1972-2007



Source: Statistics Canada and R.A.L. Consulting Limited

Alberta

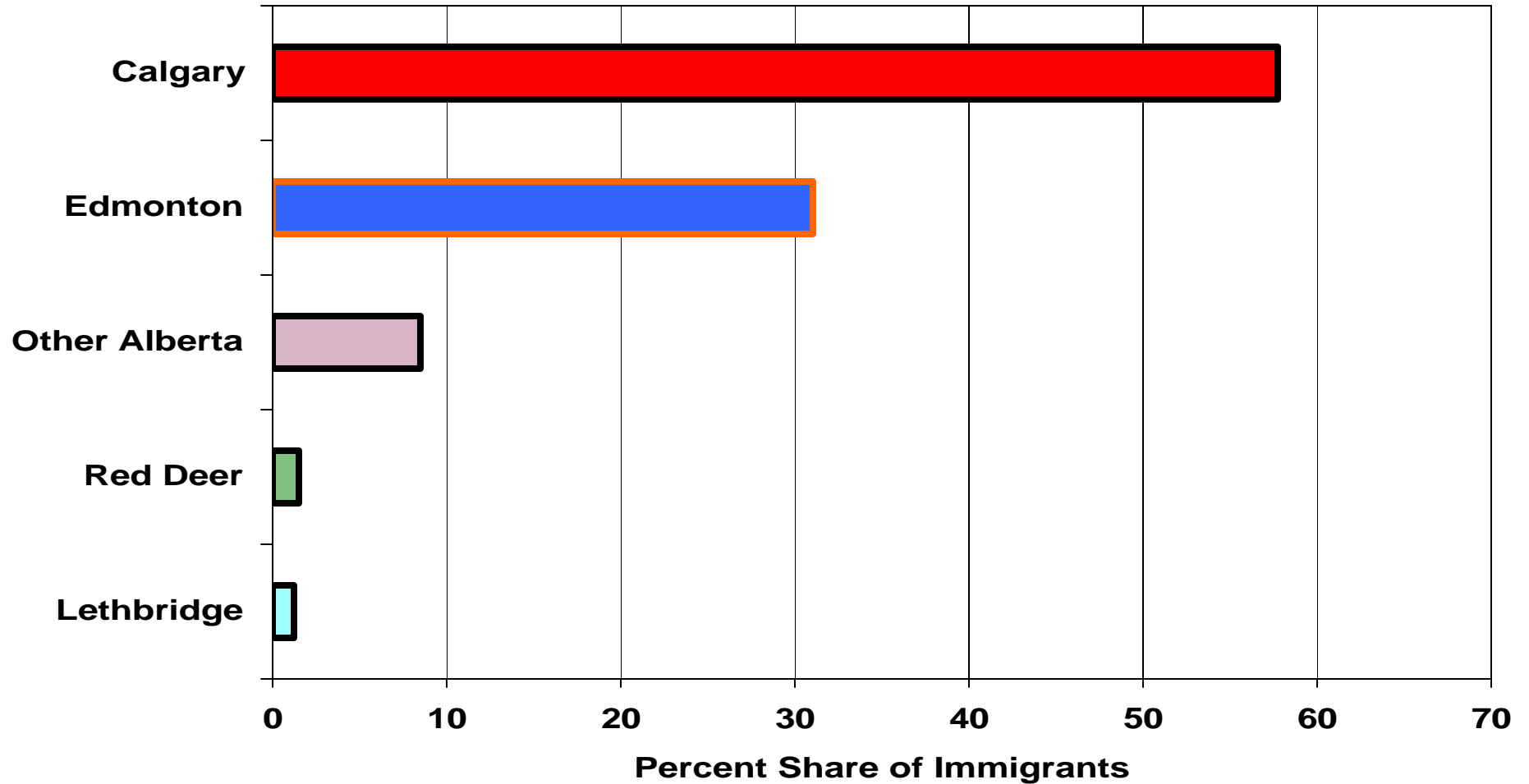
Average Share of Immigrants by Source Region, 1997-2006



Source: Citizenship and Immigration Canada and R.A.L. Consulting Limited

Alberta

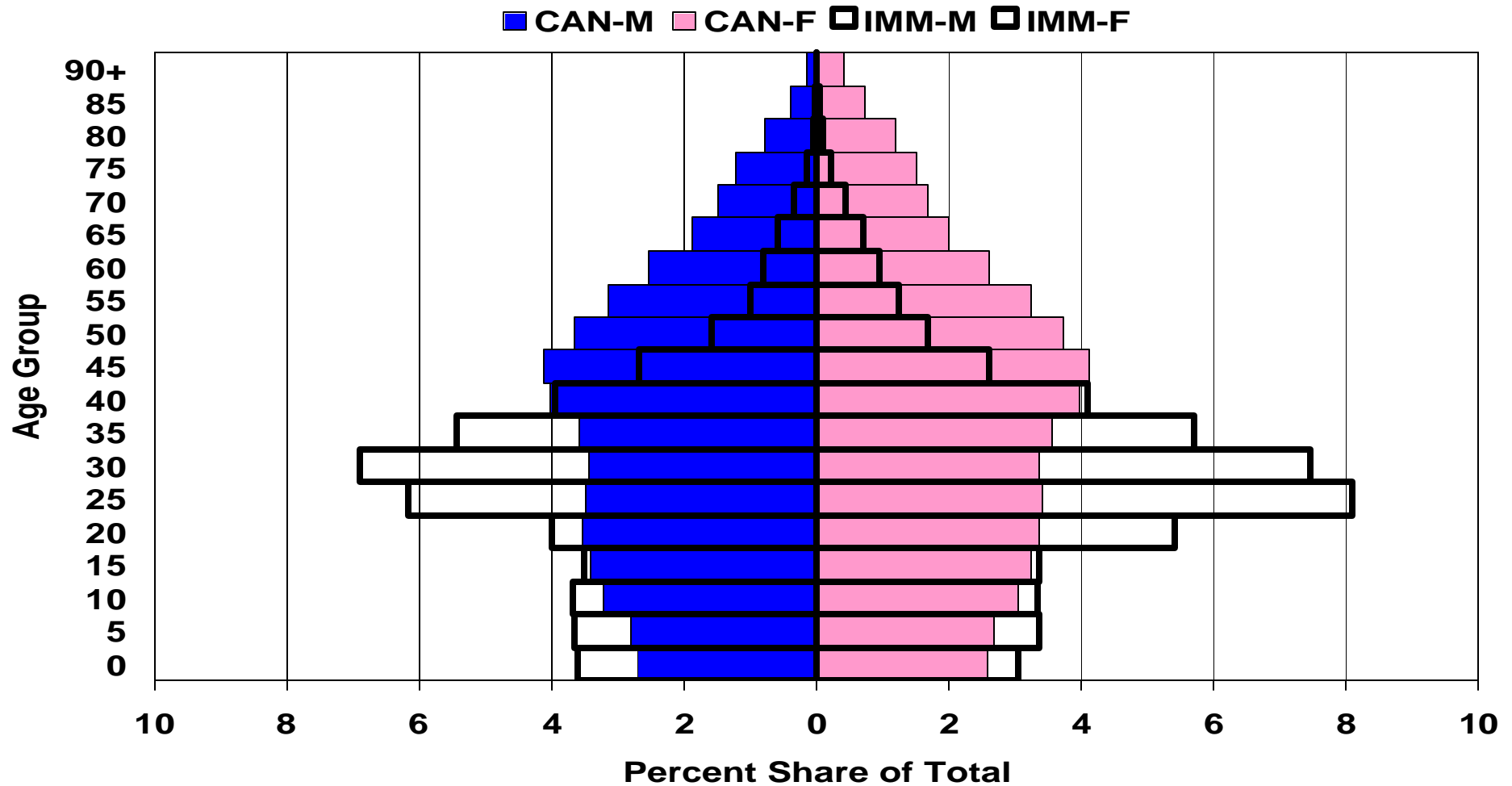
Average Share of Immigrants by Destination, 1997-2006



Source: Citizenship and Immigration Canada and R.A.L. Consulting Limited

Immigrants (outline) versus Canada (colour)

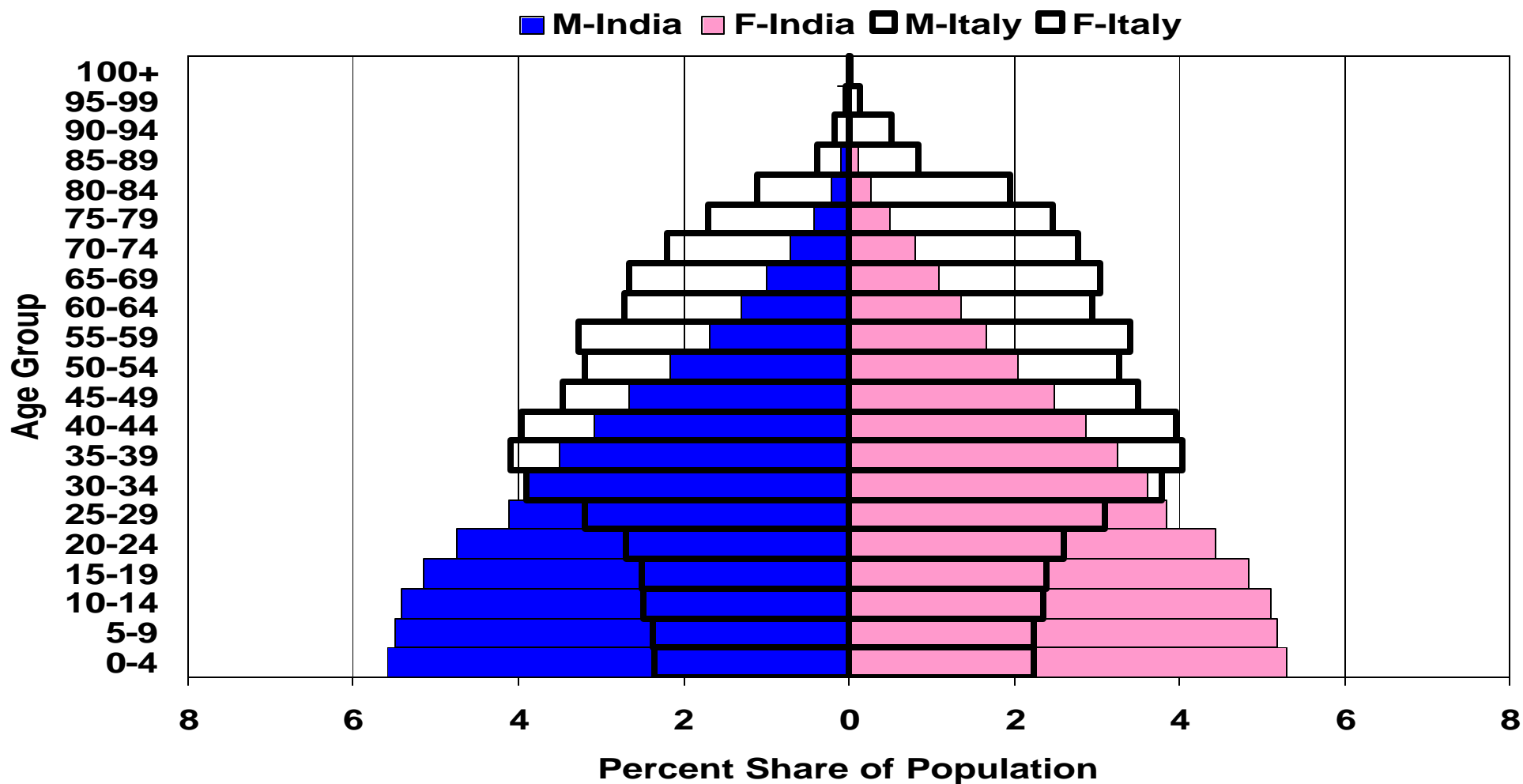
Population Pyramid, 2007 (percent)



Source: Statistics Canada and R.A.L. Consulting Limited

Italy (outline) versus India (colour)

Population Pyramid, 2005 (percent)

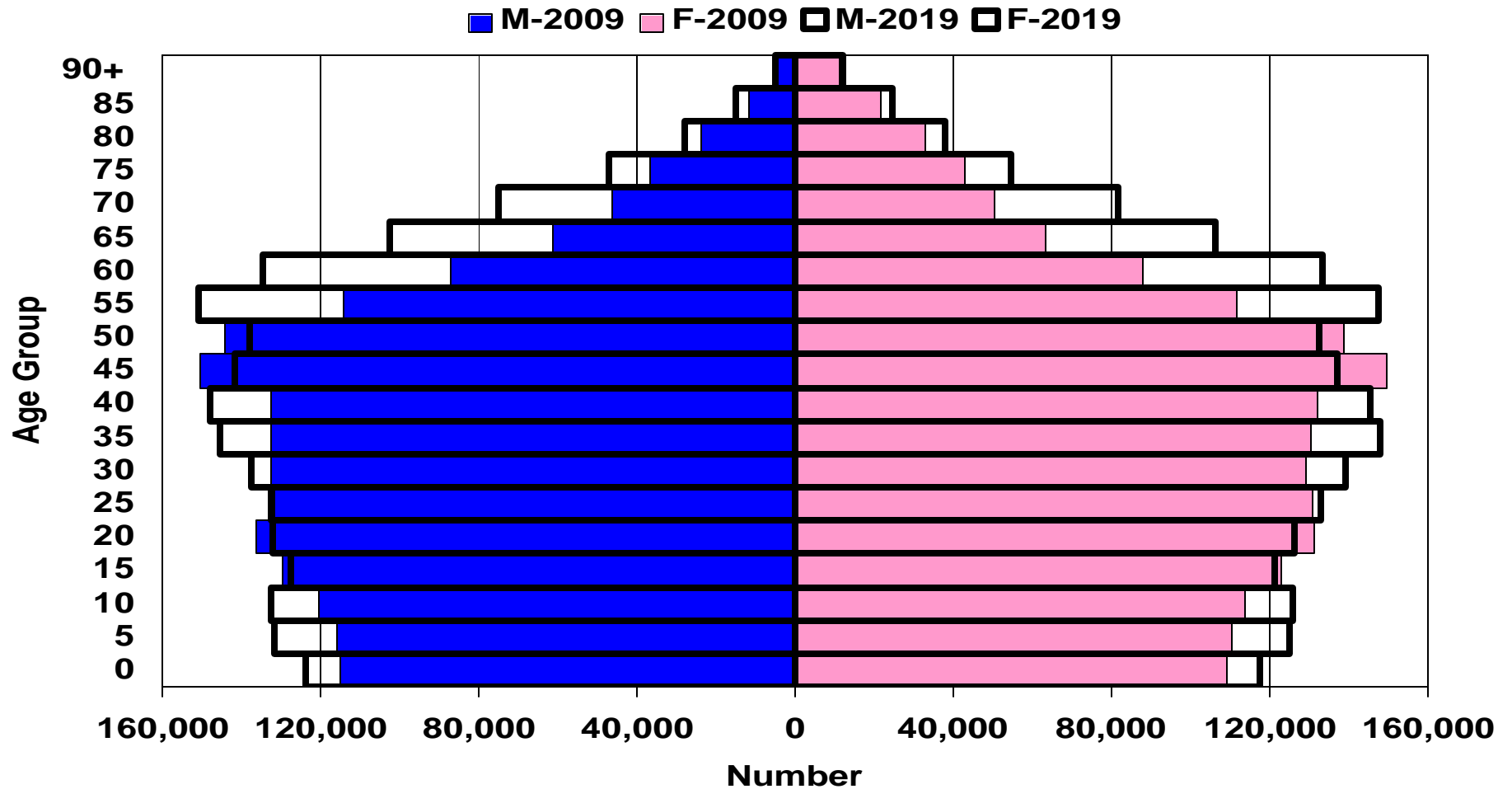


Source: United Nations and R.A.L. Consulting Limited

Demographic Trends - Alberta

Population Projections

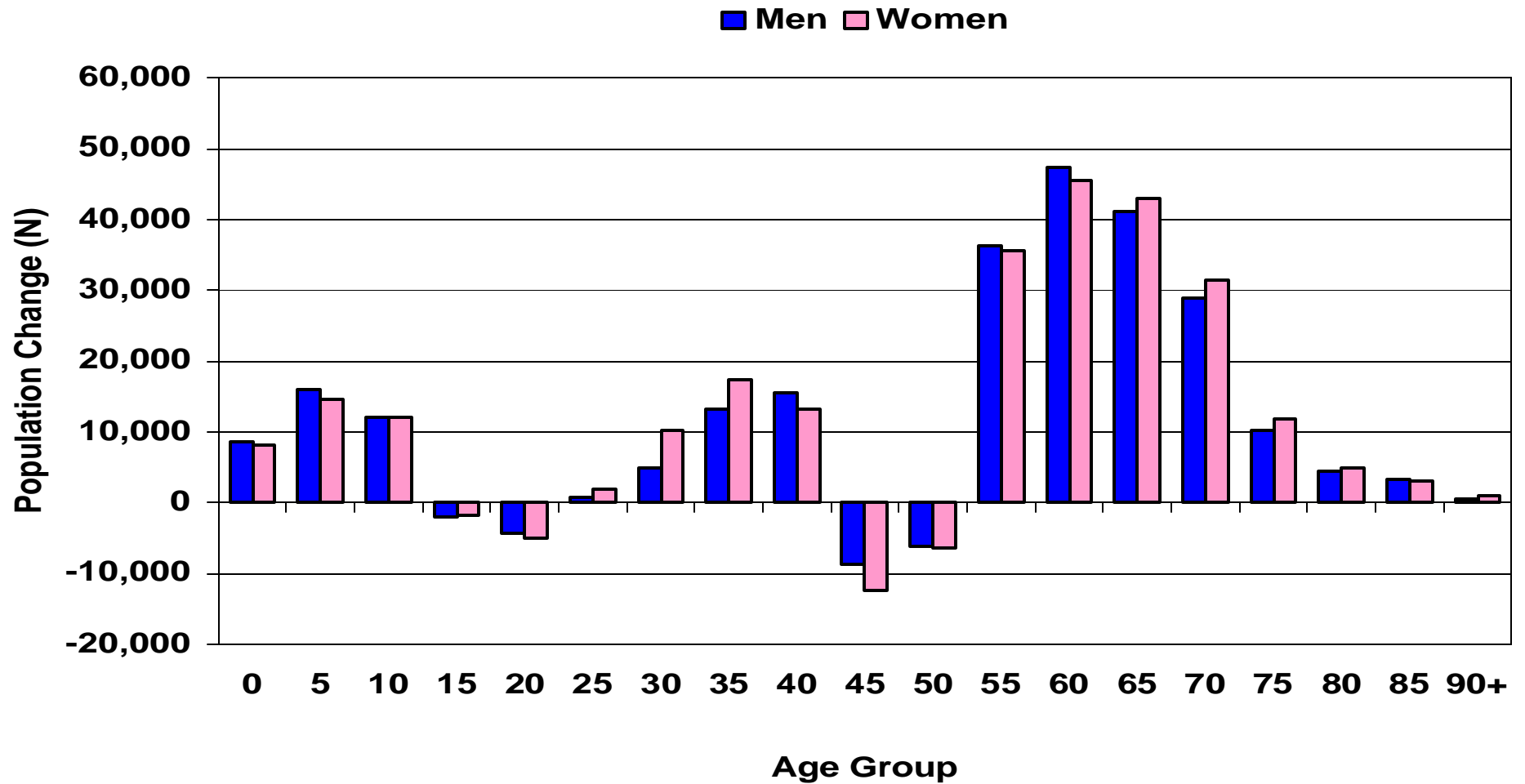
Alberta, 2009 and 2019 (projected) Population Pyramid



Source: Alberta Finance and R.A.L. Consulting Limited

Alberta, 2009-2019 (projected)

Population Change by Age Group



Source: Alberta Finance and R.A.L. Consulting Limited

Demographic Trends - Alberta

- Alberta is Canada's youngest province but its population is gradually aging
- Recent population growth fueled mainly by **interprovincial** migration
- **International** migration is the key to future population growth
- Visible minorities dominate the international migration flow
- Immigrants gravitate to the largest urban centres
- Over next ten years, greatest growth in 30-44 and 55+ age groups

Demographic Trends - Alberta

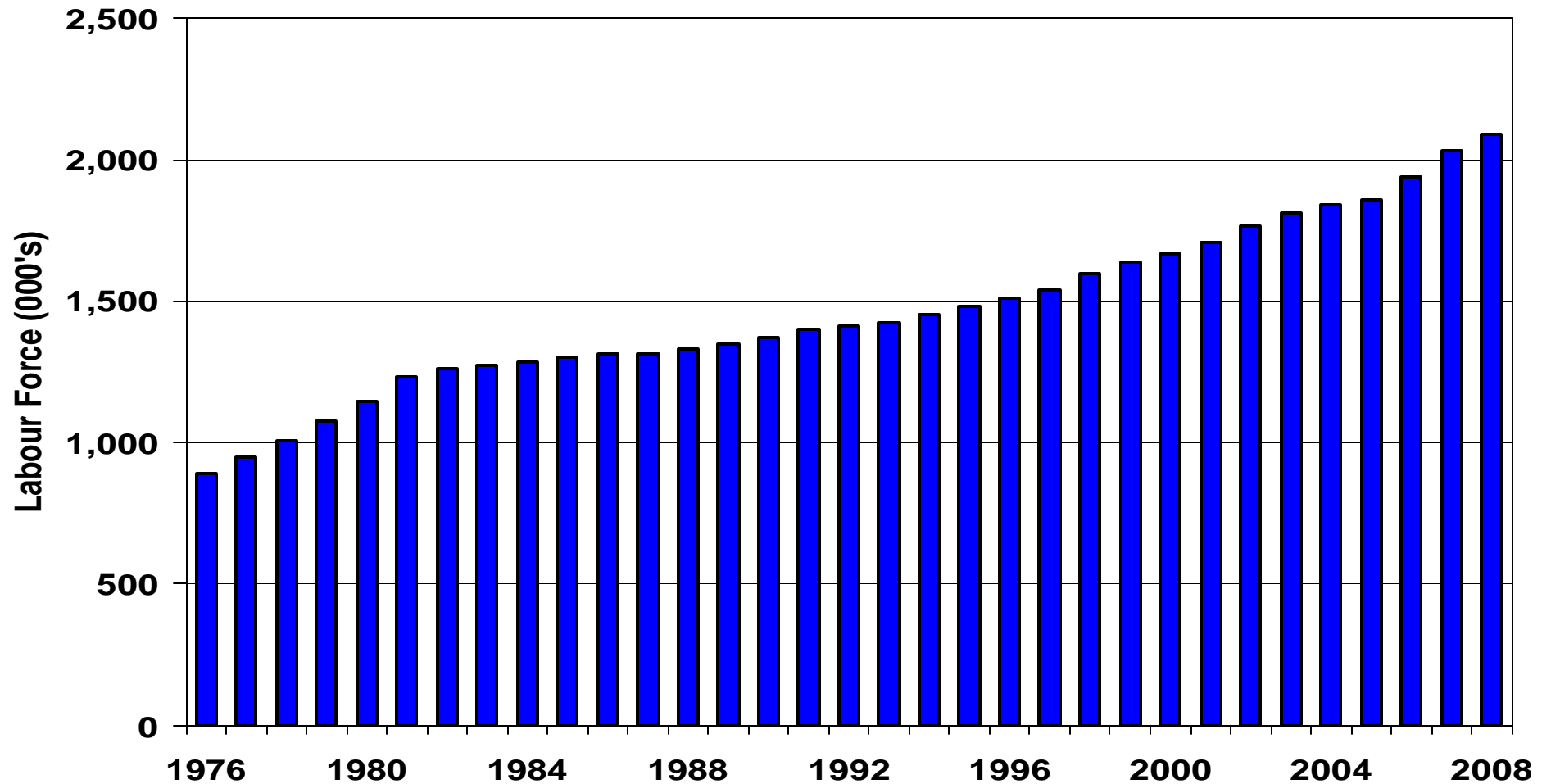
Labour Market

Definition

- **Labour Force** = 15+ population (non-institutionalized) working full-time, working part-time (<30 hours per week), or who are unemployed across all industries (**unionized and non-union**).

Labour Force (all industries)

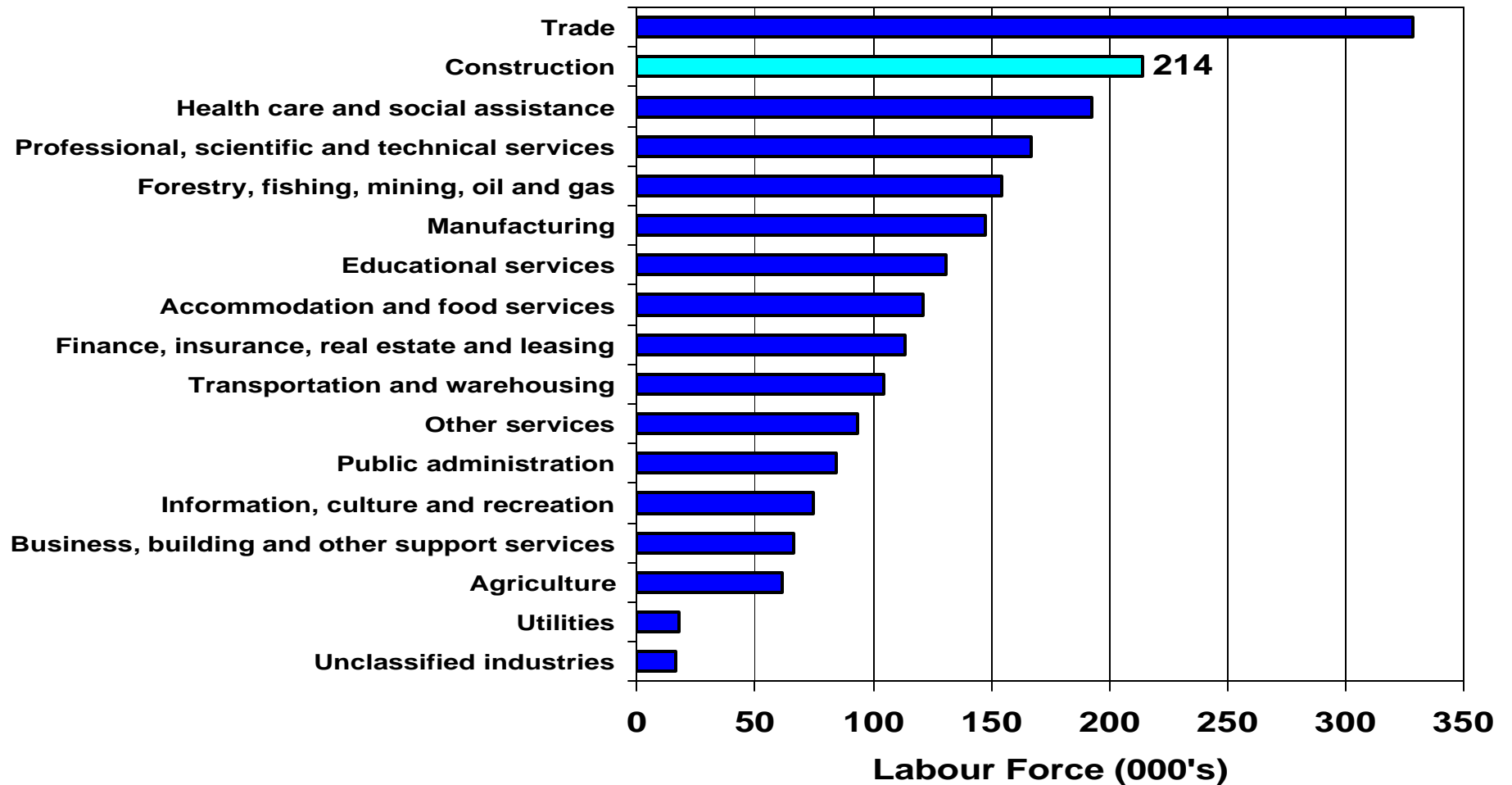
Alberta, 1976-2008 (thousands)



Source: Statistics Canada and R.A.L. Consulting Limited

Labour Force by Industry

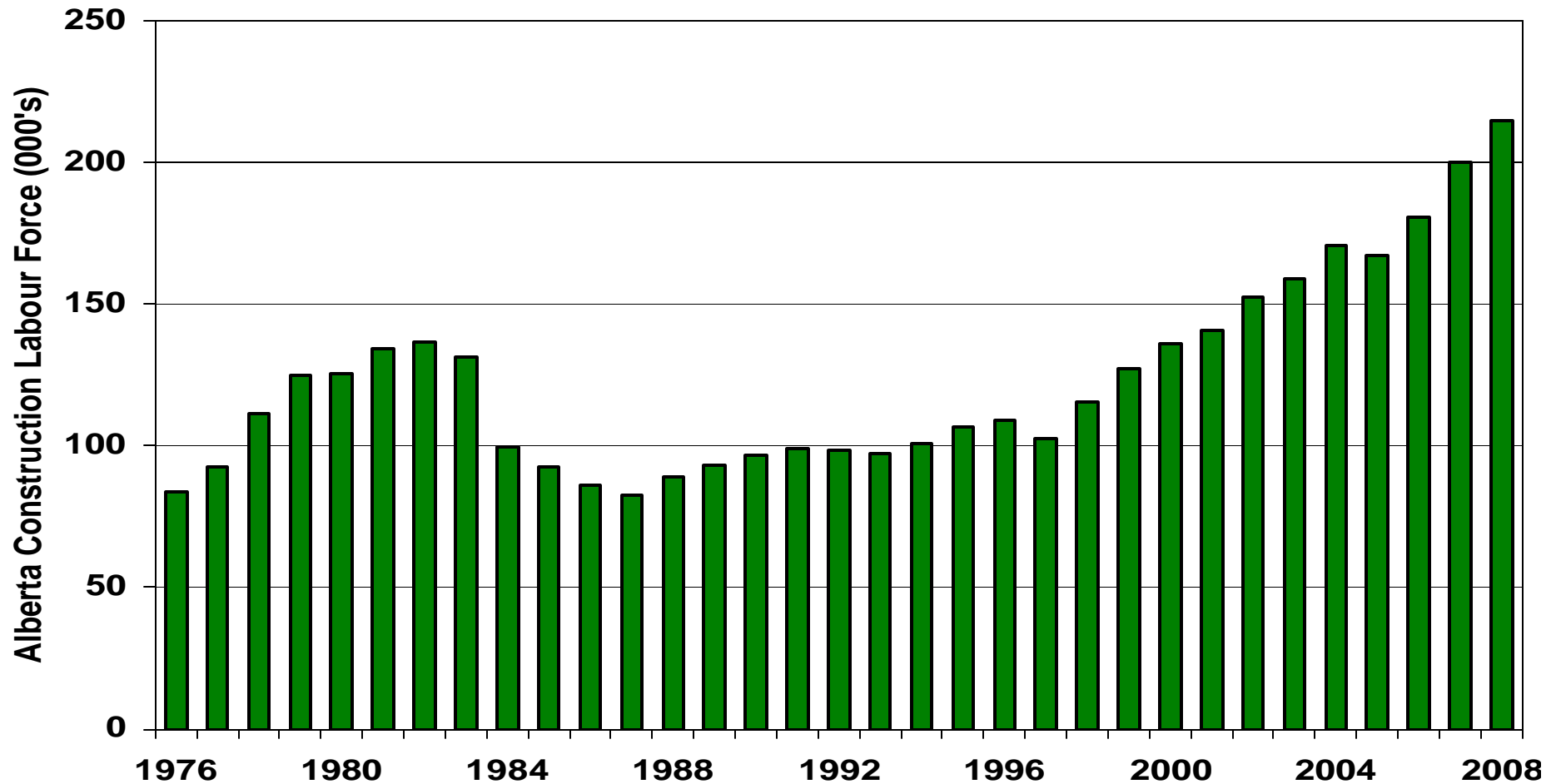
Alberta, 2008 (thousands)



Source: Statistics Canada and R.A.L. Consulting Limited

Labour Force, Construction Industry

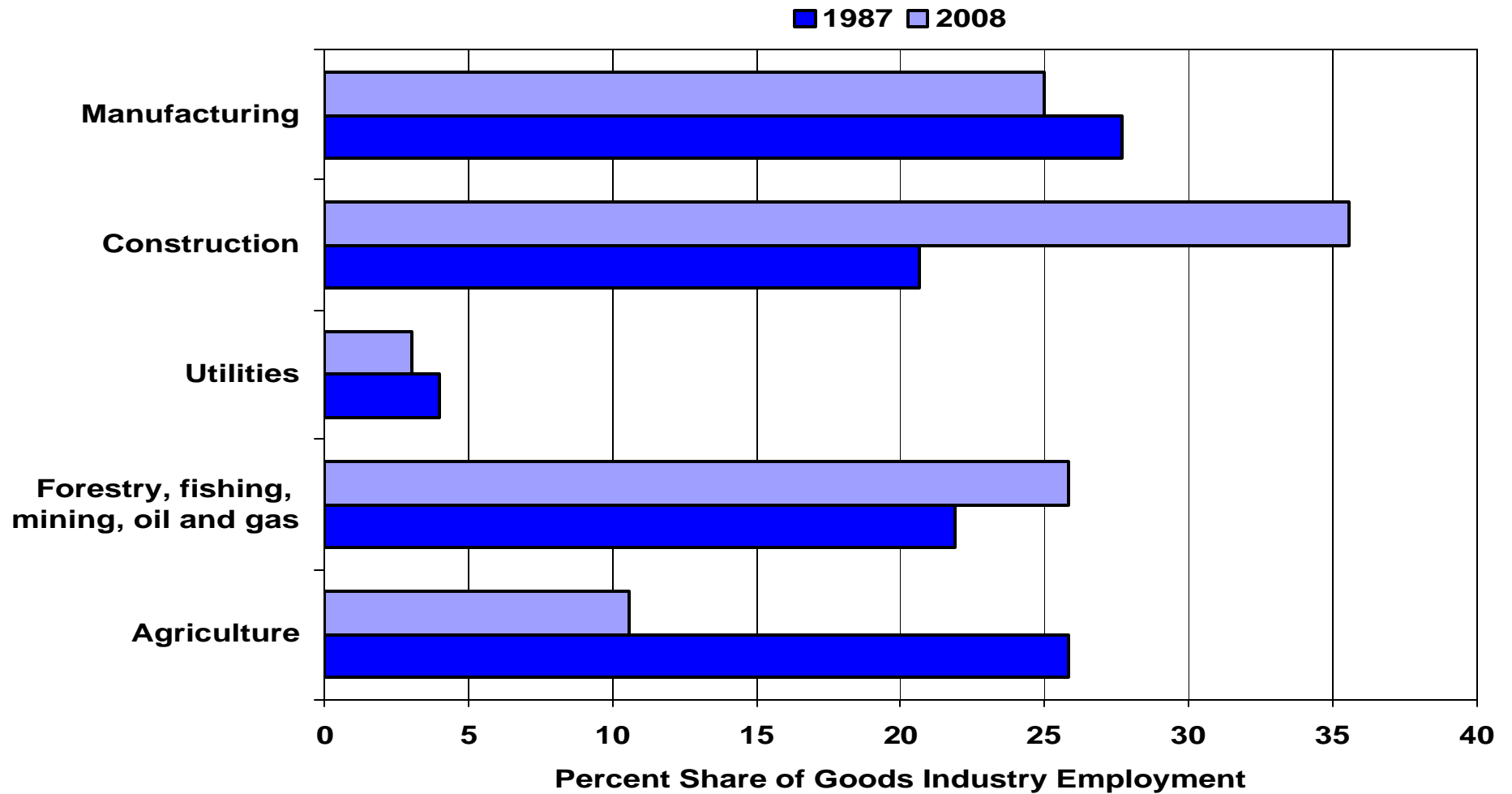
Alberta, 1976-2008 (thousands)



Source: Statistics Canada and R.A.L. Consulting Limited

Employment Share, Goods Sector

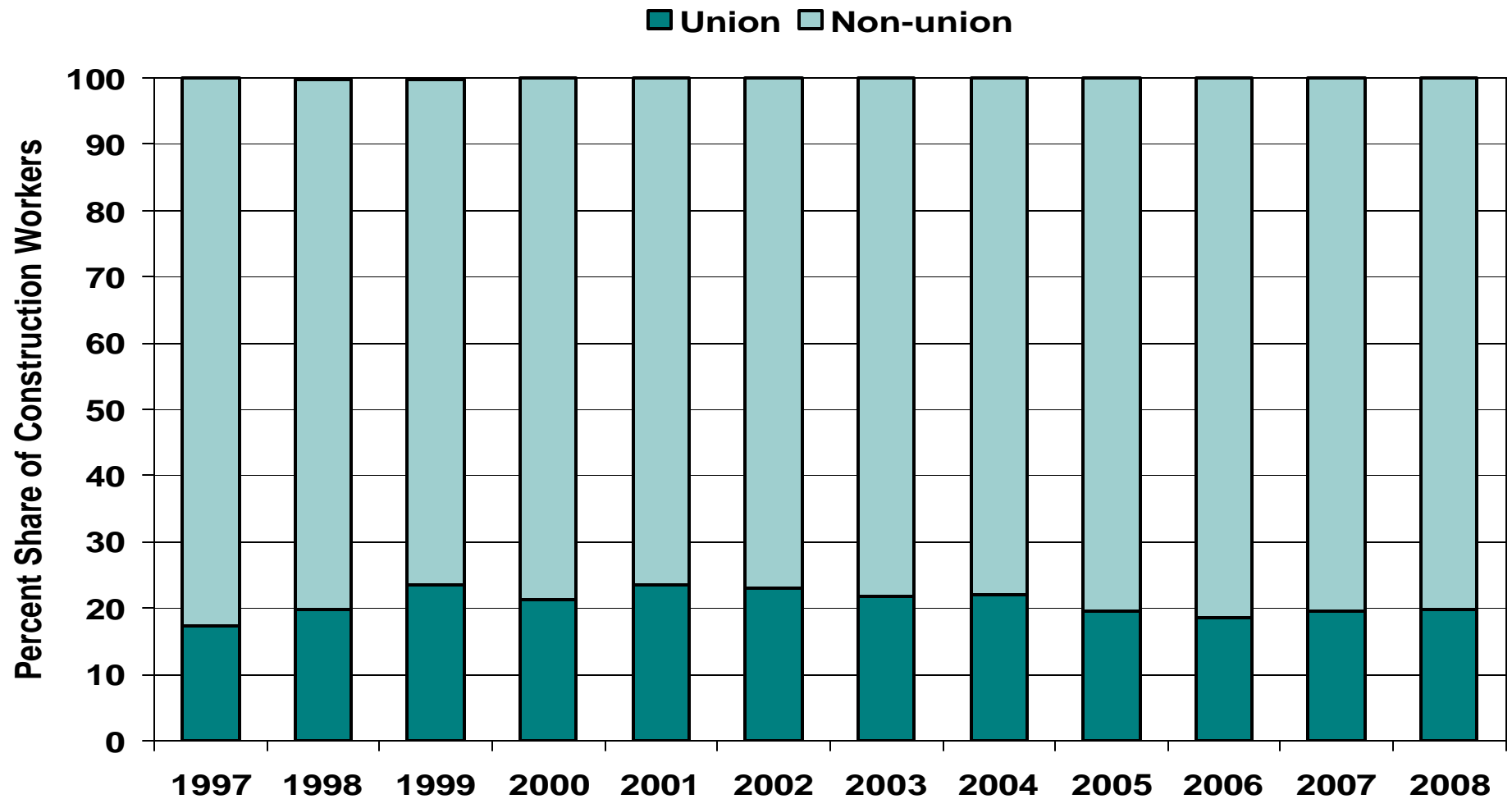
Alberta, 1987-2008 (percent)



Source: Statistics Canada and R.A.L. Consulting Limited

Worker Share by Union Status

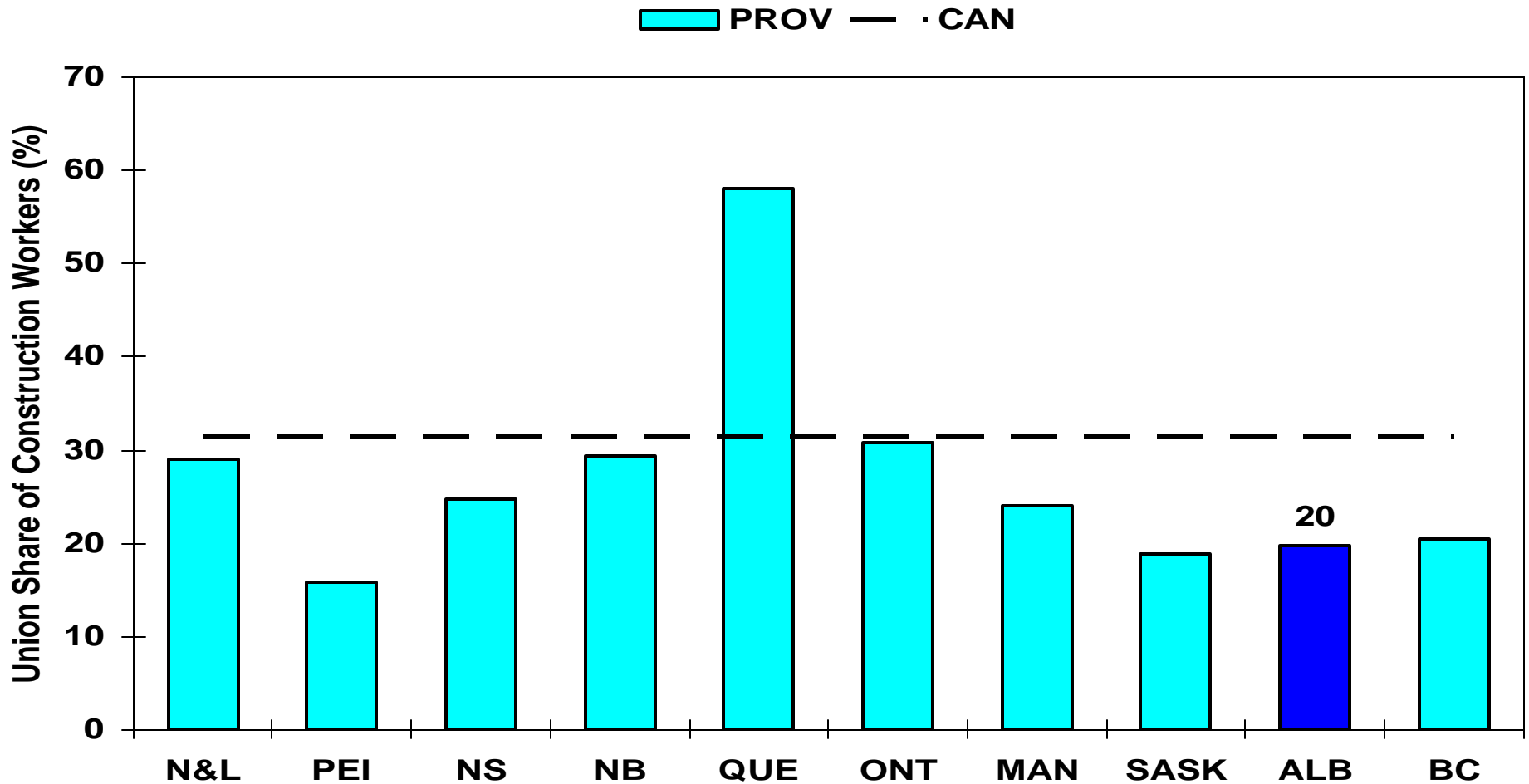
Alberta, Construction Industry, 1997-2008 (percent)



Source: Statistics Canada and R.A.L. Consulting Limited

Union Worker Share

Canada, Construction Industry, 2008 (percent)



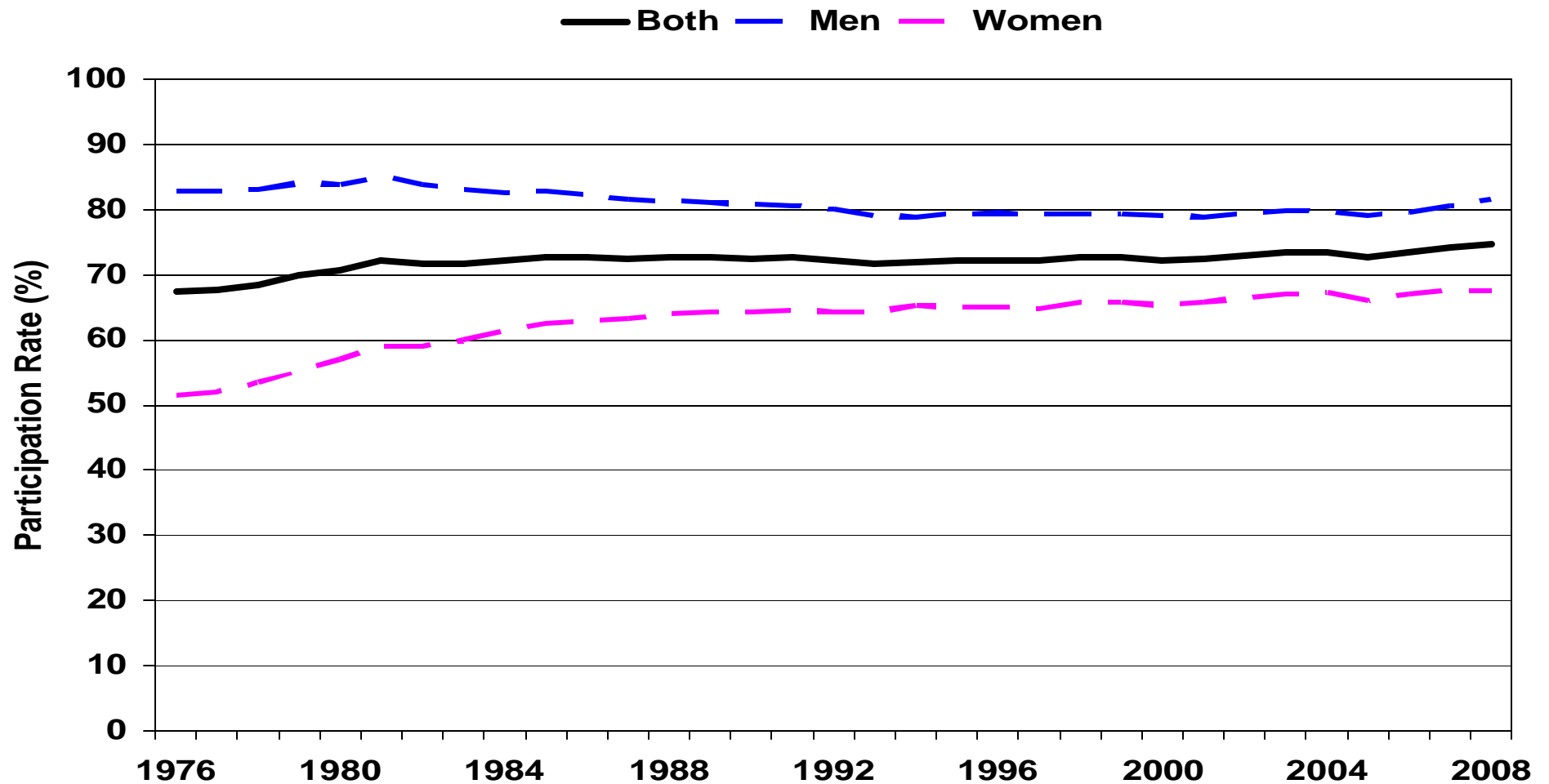
Source: Statistics Canada and R.A.L. Consulting Limited

Definition

- **Participation rate** = Percentage share of the population 15-plus who are in the labour force.

Participation Rate by Sex

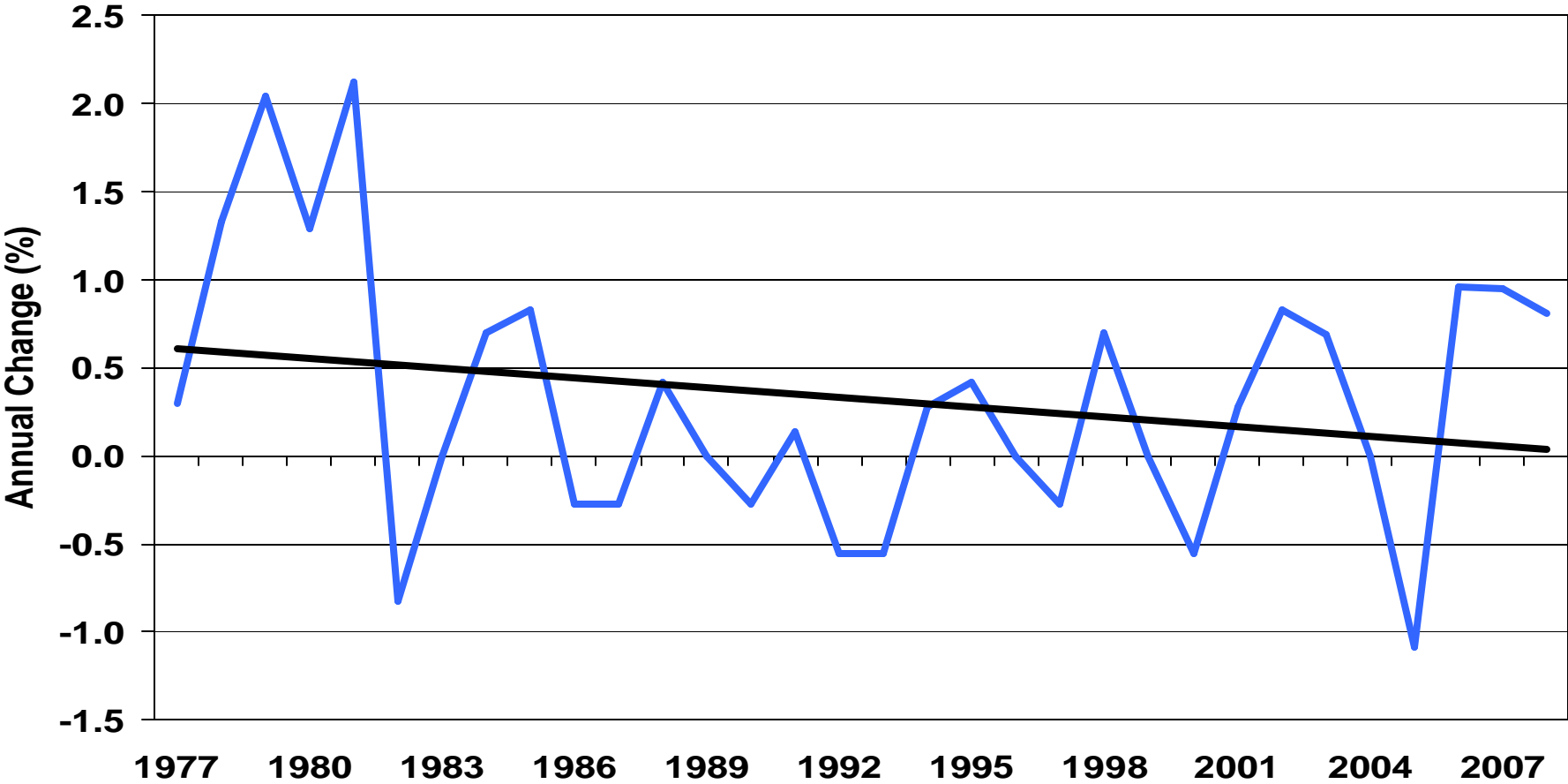
Alberta, All Industries, 1976-2008



Source: Statistics Canada and R.A.L. Consulting Limited

Participation Rate, Annual Change (percent)

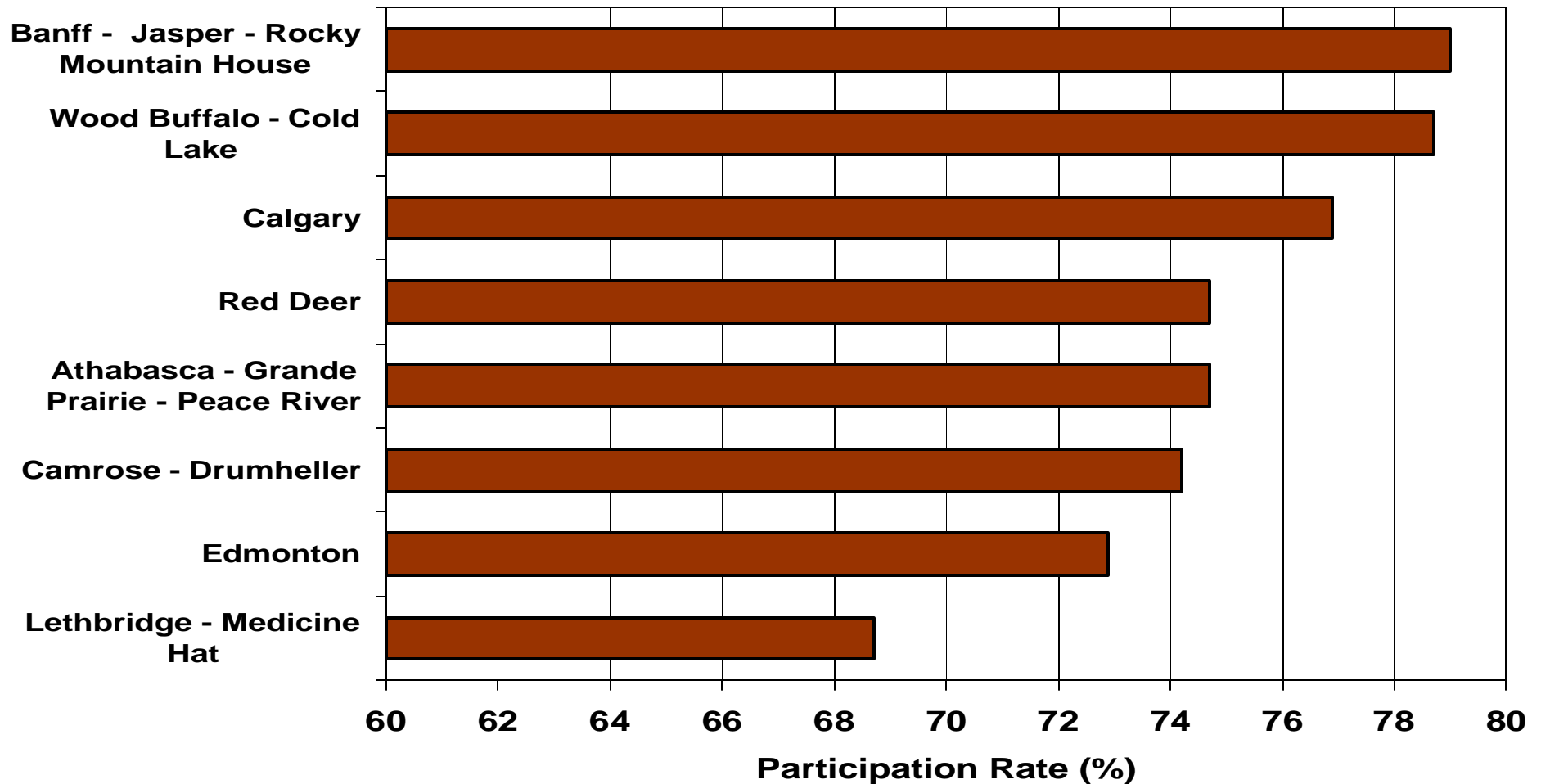
Alberta, All Industries, 1976-2008



Source: Statistics Canada and R.A.L. Consulting Limited

Participation Rate

Alberta, Economic Regions, 2008



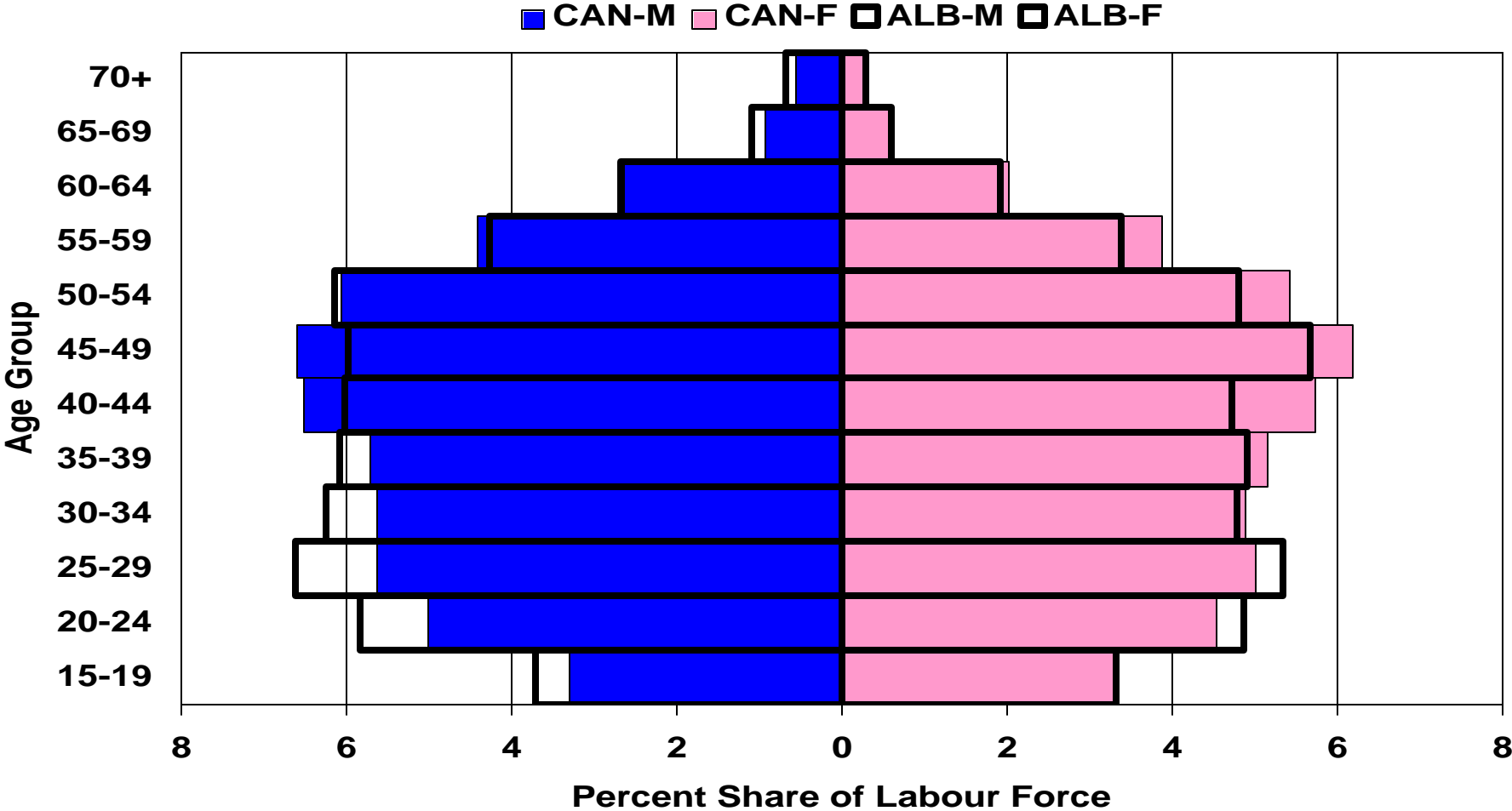
Source: Statistics Canada and R.A.L. Consulting Limited

Definition

- **Demographic “Footprint”**: comparing the industry distribution of workers by age and sex with another group of workers (e.g., the provincial or national labour force)
- **Demographic Imbalance**: areas of over- and under-representation in terms of age and/or sex that may create strategic recruitment or retention challenges

Demographic Footprint

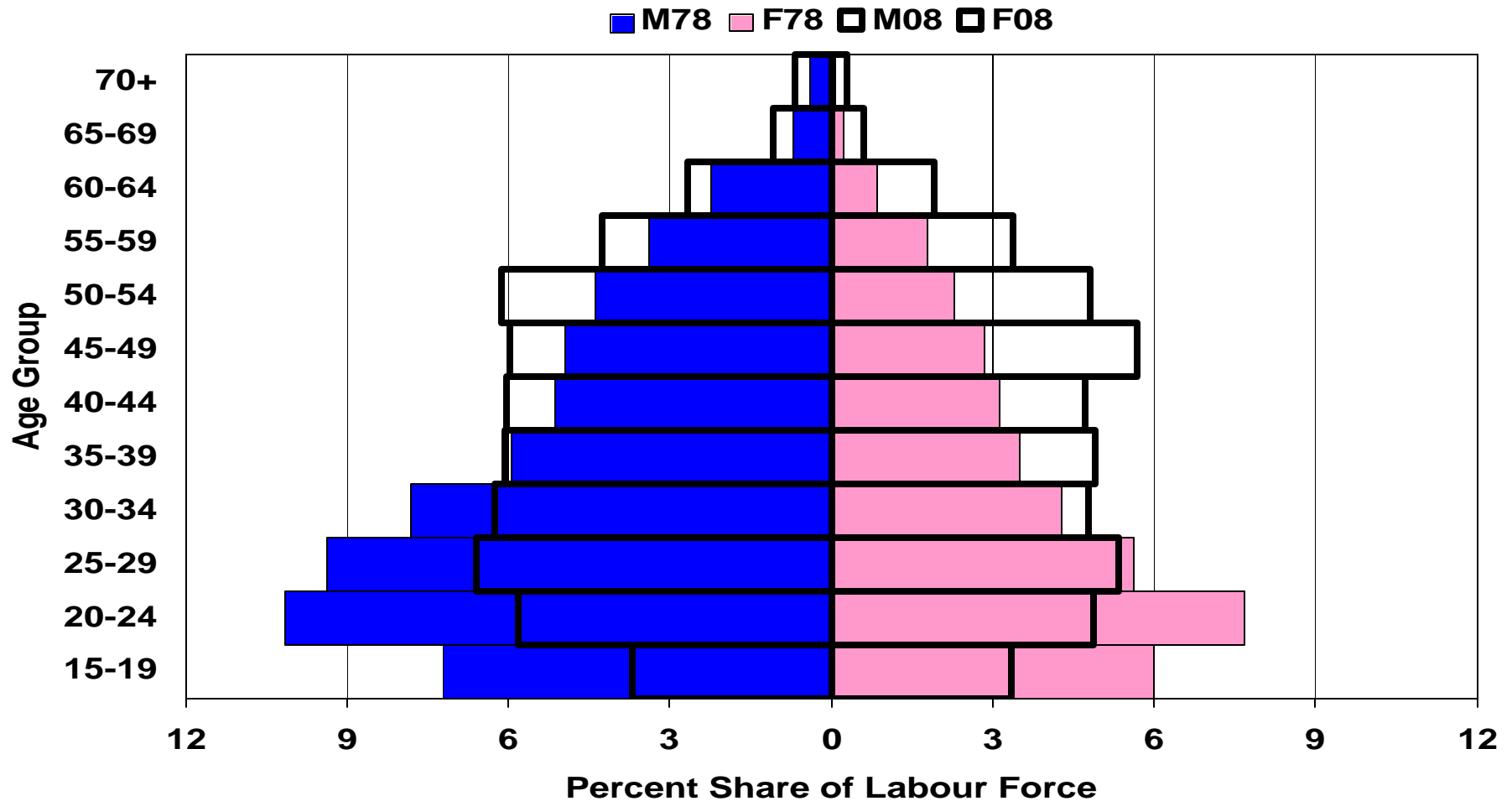
Canada (colour) versus Alberta (outline), Labour Force, 2008 (percent)



Source: Statistics Canada and R.A.L. Consulting Limited

Demographic Footprint

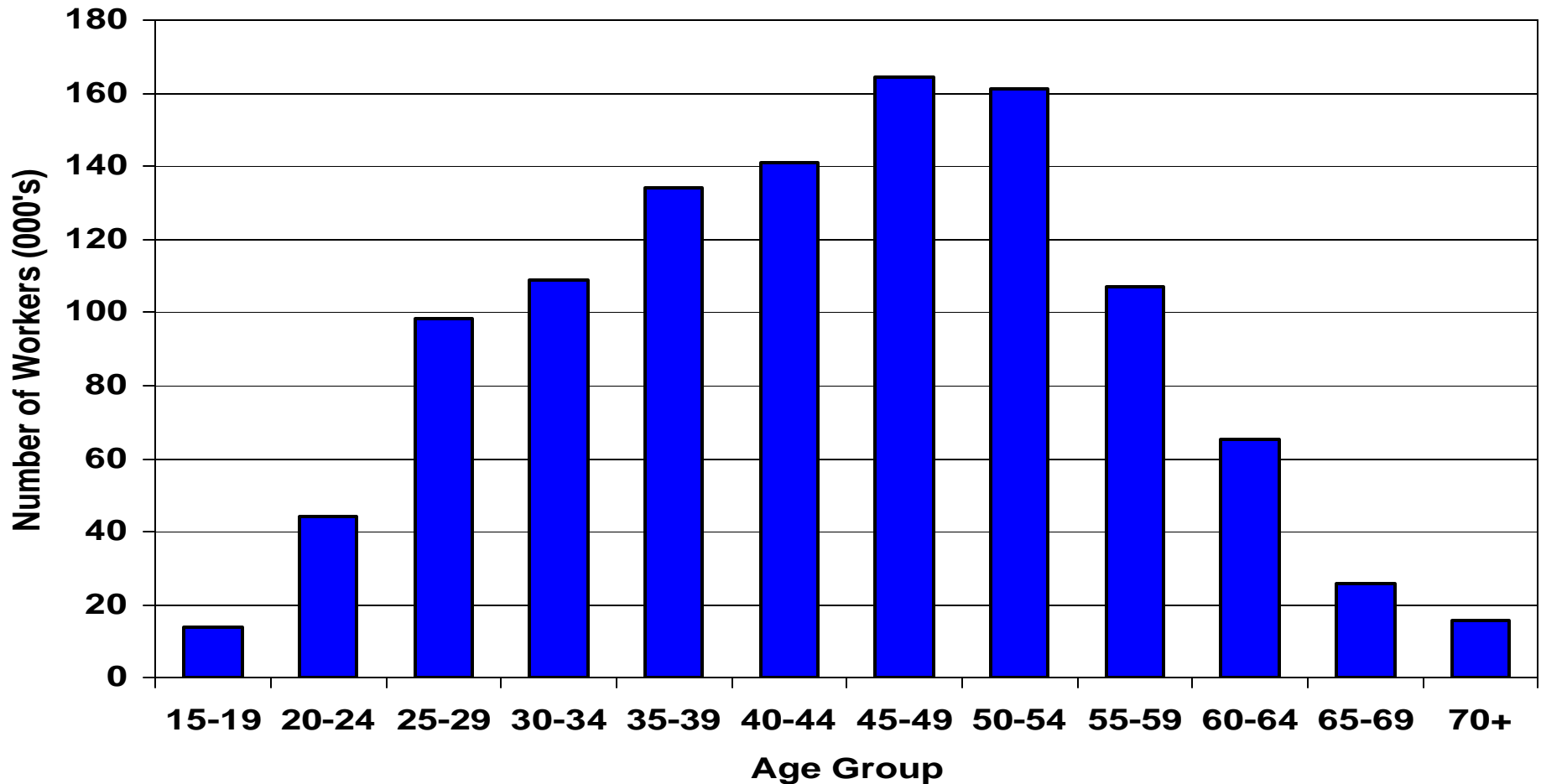
Alberta, Labour Force, 1978 and 2008 (percent)



Source: Statistics Canada and R.A.L. Consulting Limited

Labour Force Change

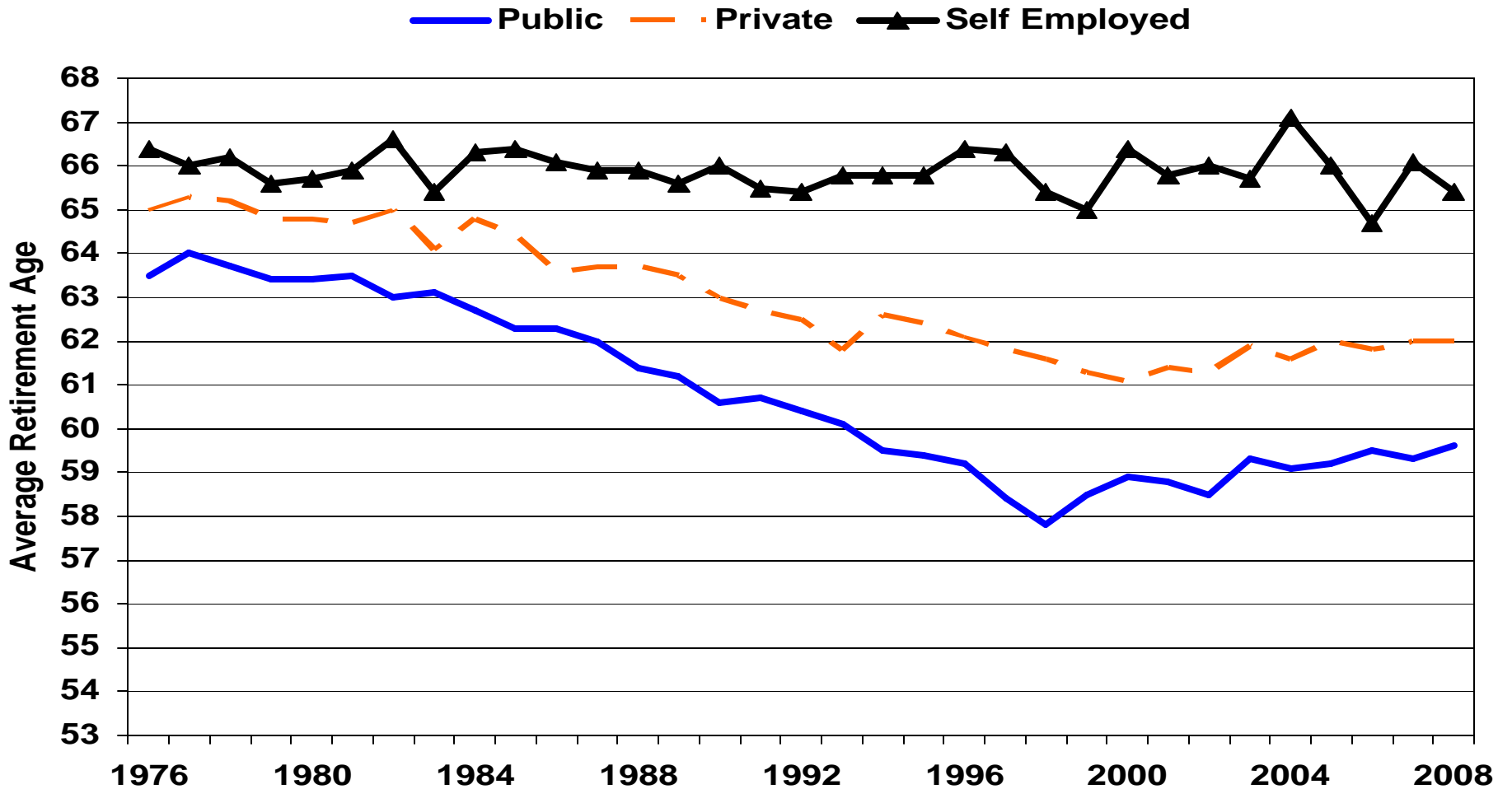
Alberta, 1978-2008 (thousands)



Source: Statistics Canada and R.A.L. Consulting Limited

Canada

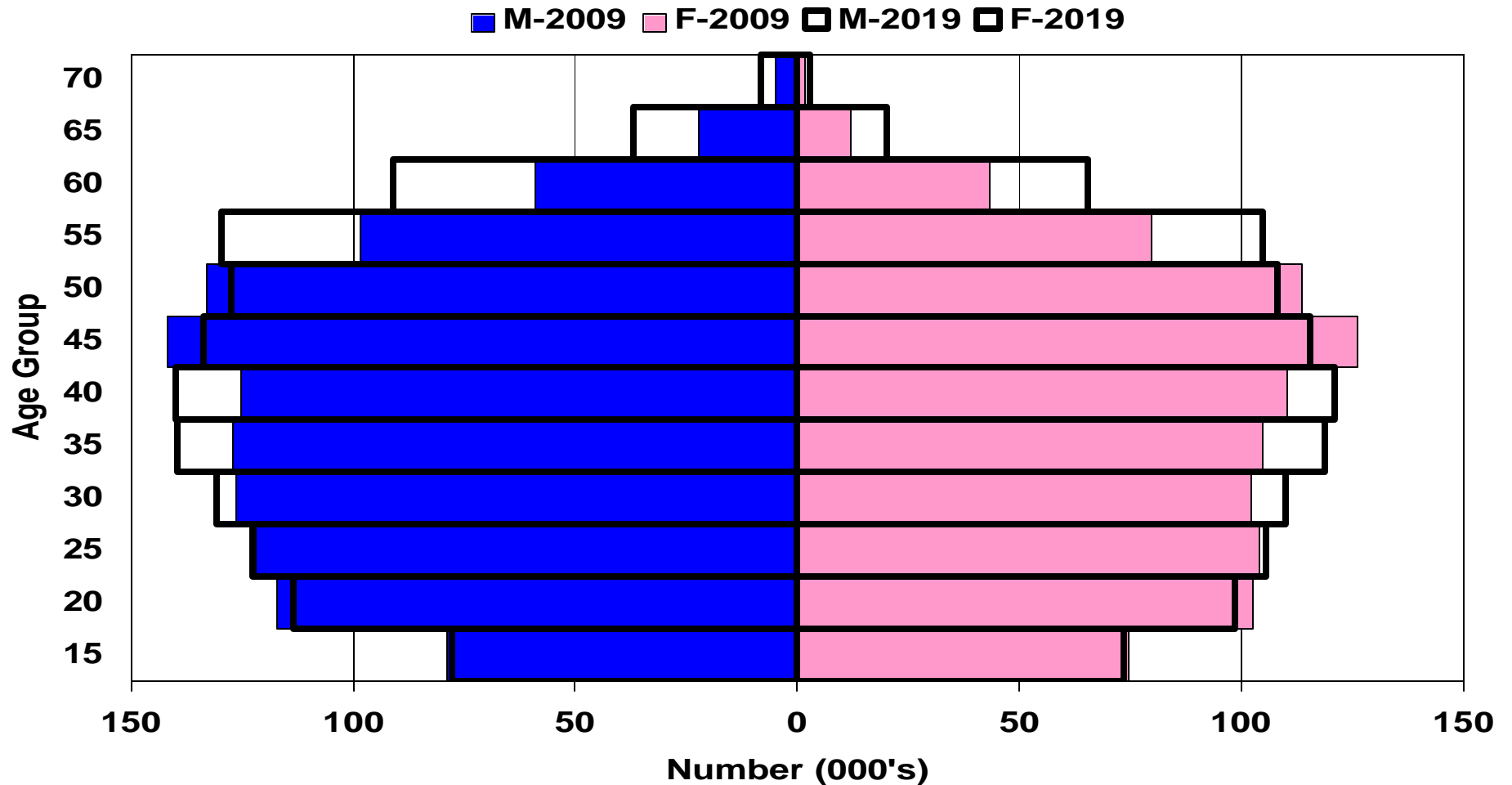
Average Retirement Age by Sector, 1976-2008



Source: Statistics Canada and R.A.L. Consulting Limited

Demographic Footprint

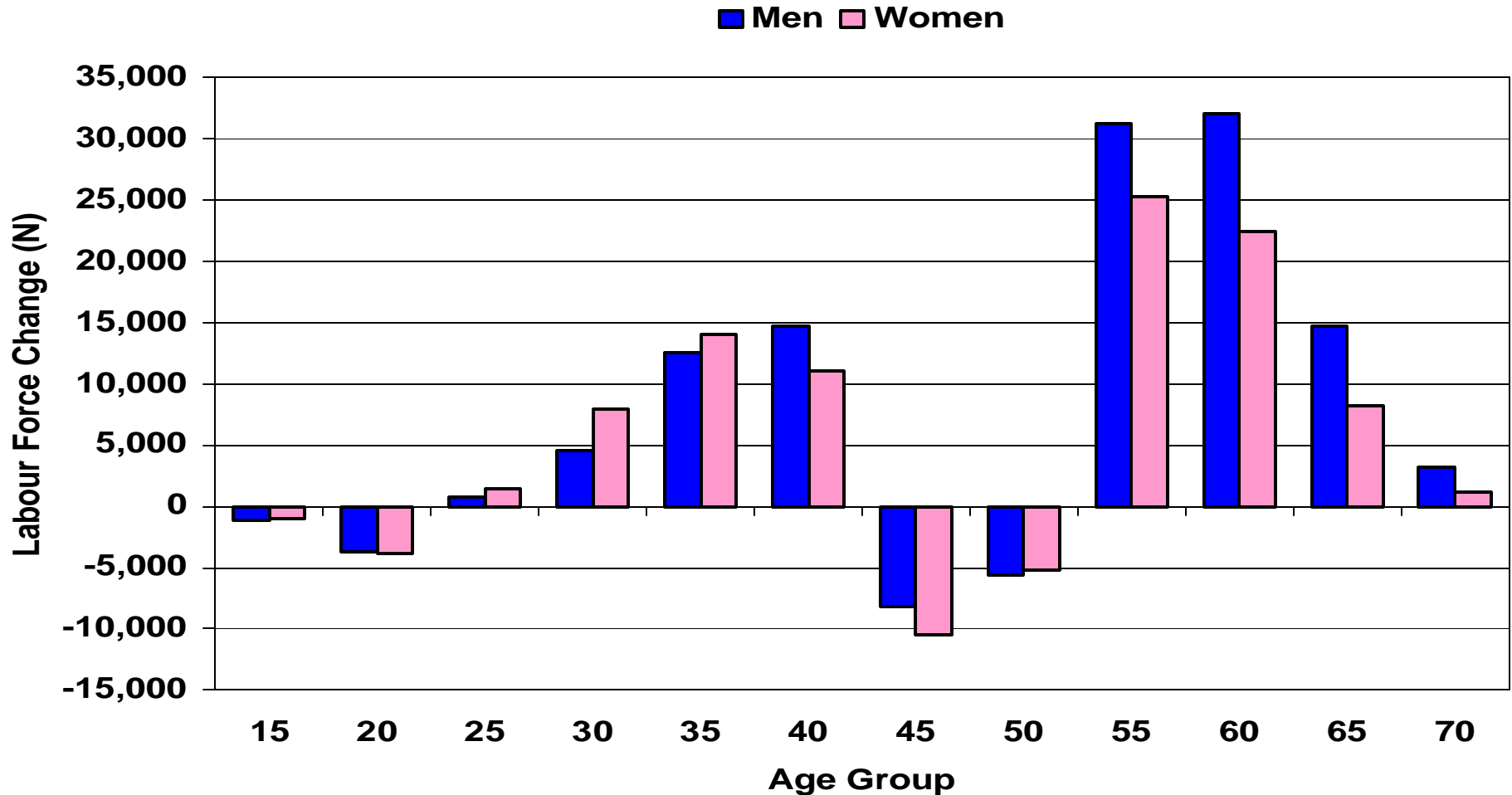
Alberta, Labour Force, 2009 and 2019 (projected)



Source: Alberta Finance, Statistics Canada and R.A.L. Consulting Limited

Labour Force Change by Age Group

Alberta, 2009-2019 (projected)



Source: Alberta Finance, Statistics Canada and R.A.L. Consulting Limited

Demographic Trends – Alberta's Labour Market

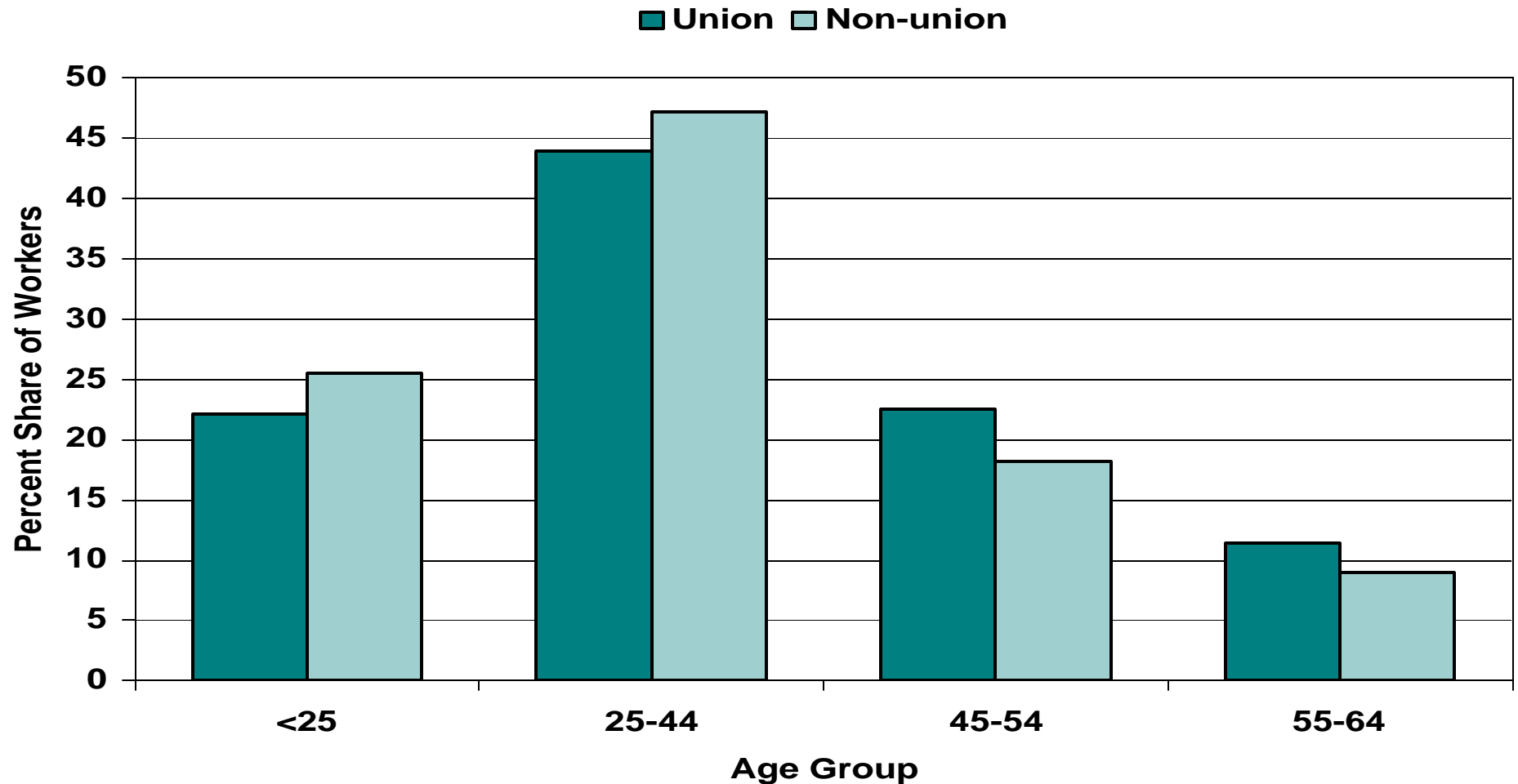
- Alberta has Canada's youngest labour force but it is gradually aging
- Participation rate is high but varies by sex and region
- Construction industry labour force has grown dramatically over the past 30 years:
 - » Union share has increased modestly
 - » Alberta's union share lower than majority of provinces
- Over next ten years, greatest growth is in core worker (25-44) and mature worker (55+) labour market cohorts

Opportunities and Challenges

Recruiting Youth in a Competitive Labour Market

Age Profile, Construction Industry

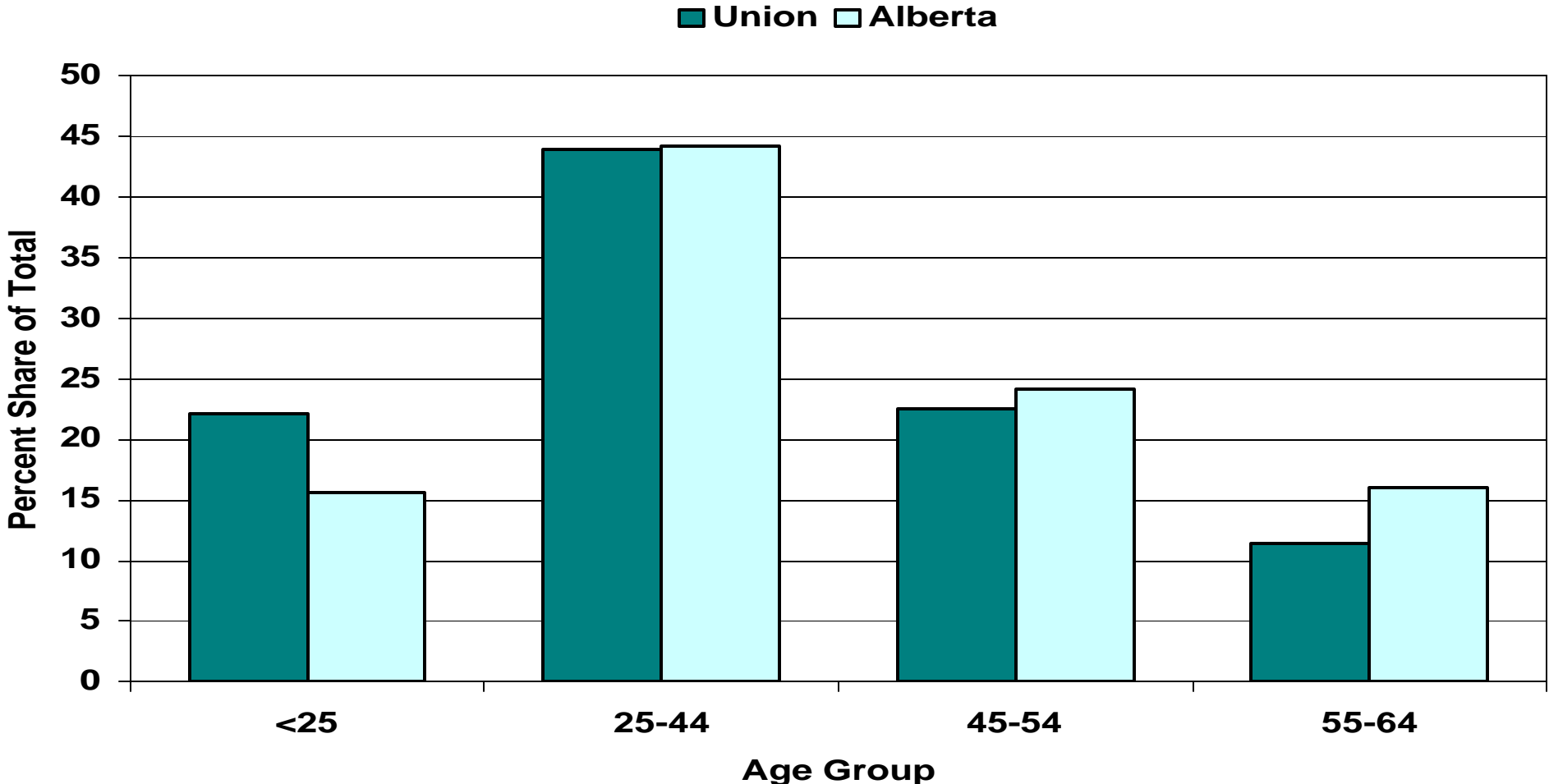
Alberta, Union and Non-Union Workers, 2008 (percent)



Source: Statistics Canada and R.A.L. Consulting Limited

Age Profile

Alberta, Construction Industry versus Population 18-64, 2008 (percent)



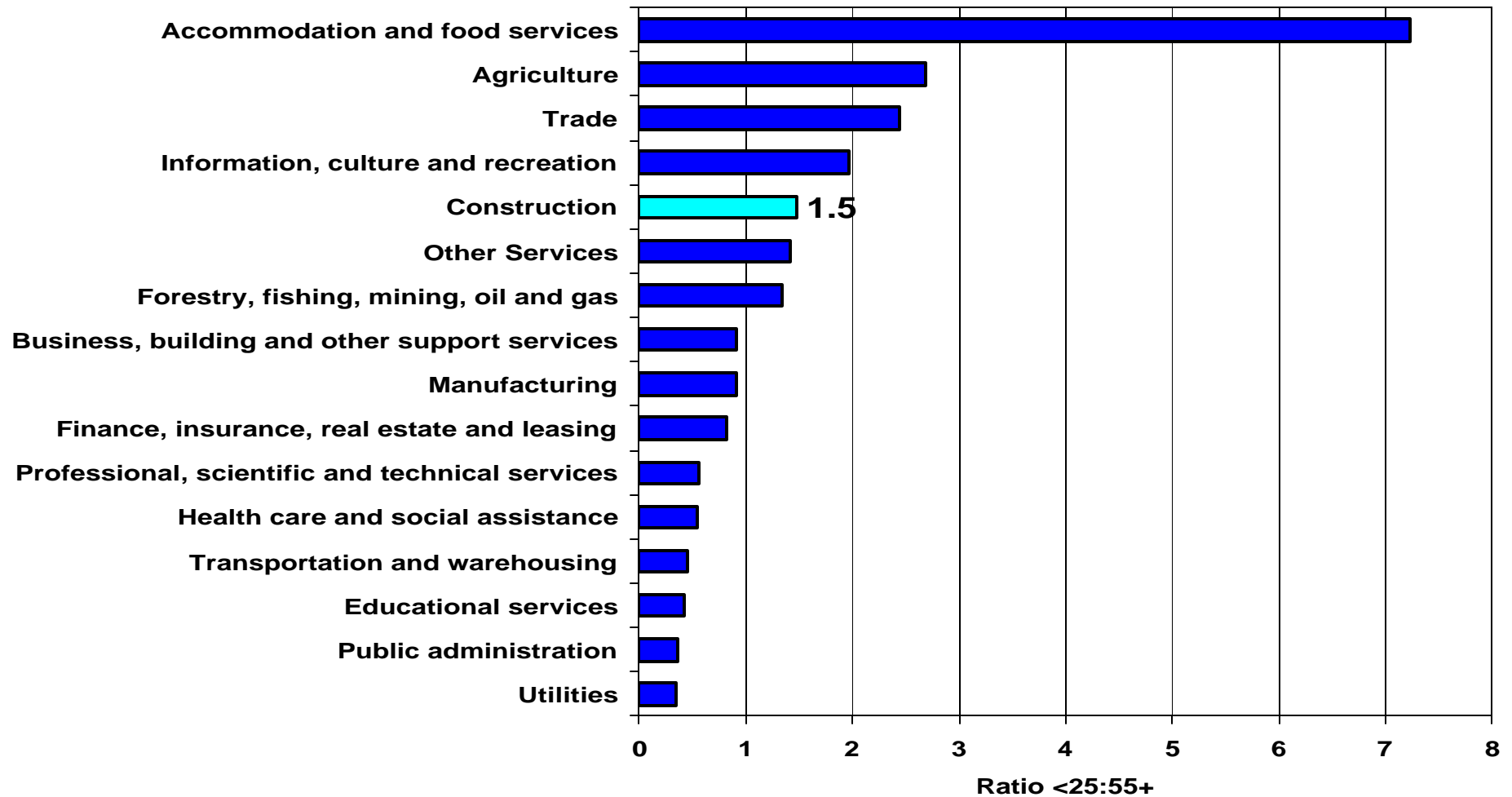
Source: Statistics Canada and R.A.L. Consulting Limited

Definition

- **Entry to Exit Ratio** = Number of workers 15-24 (who are entering the labour force) to the number of workers 55-plus (who may retire).

Alberta

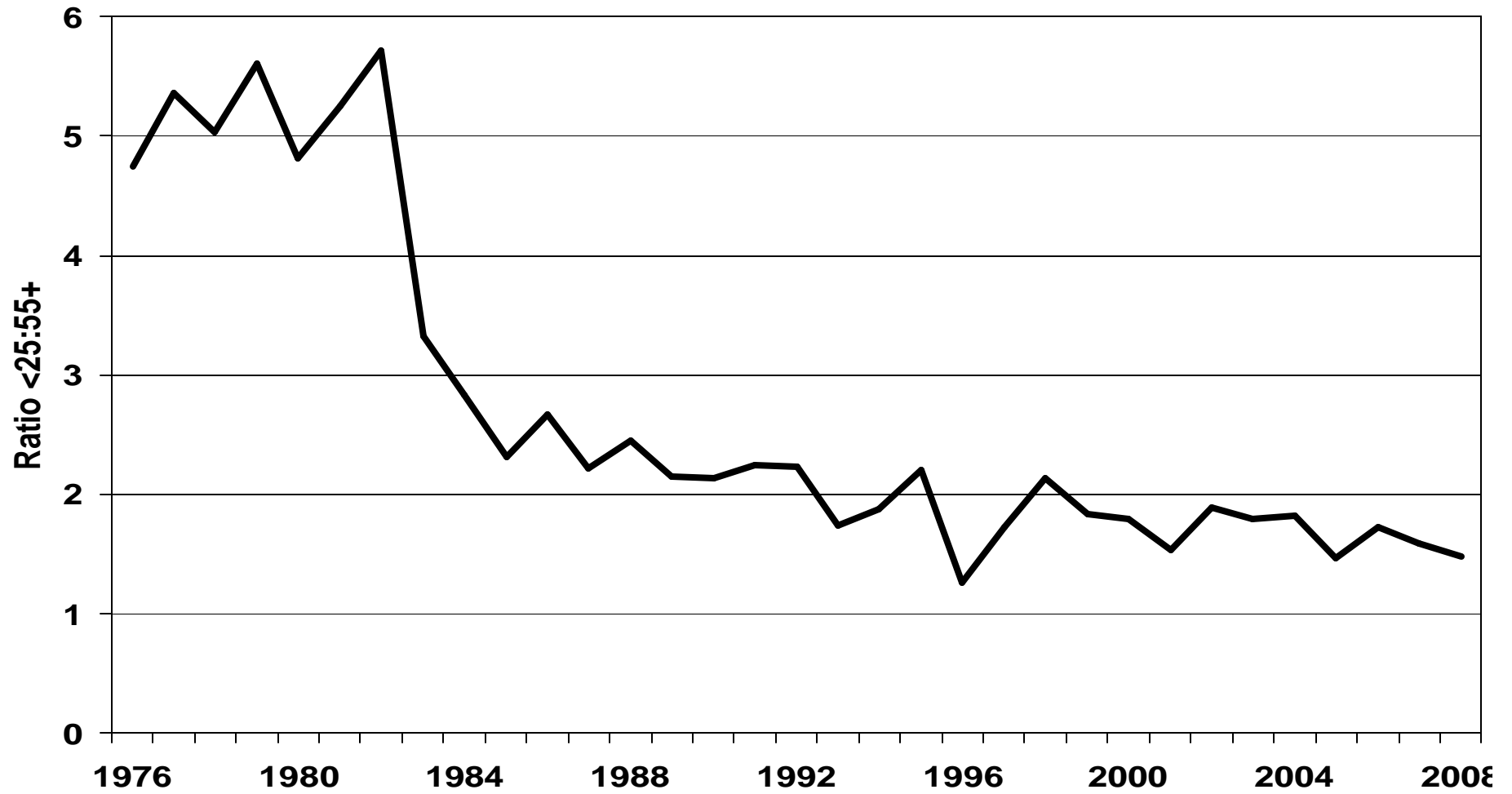
Entry/Exit Ratio (<25:55+) by Industry, 2008



Source: Statistics Canada and R.A.L. Consulting Limited

Alberta

Entry/Exit Ratio (<25:55+), Construction Industry, 1976-2008



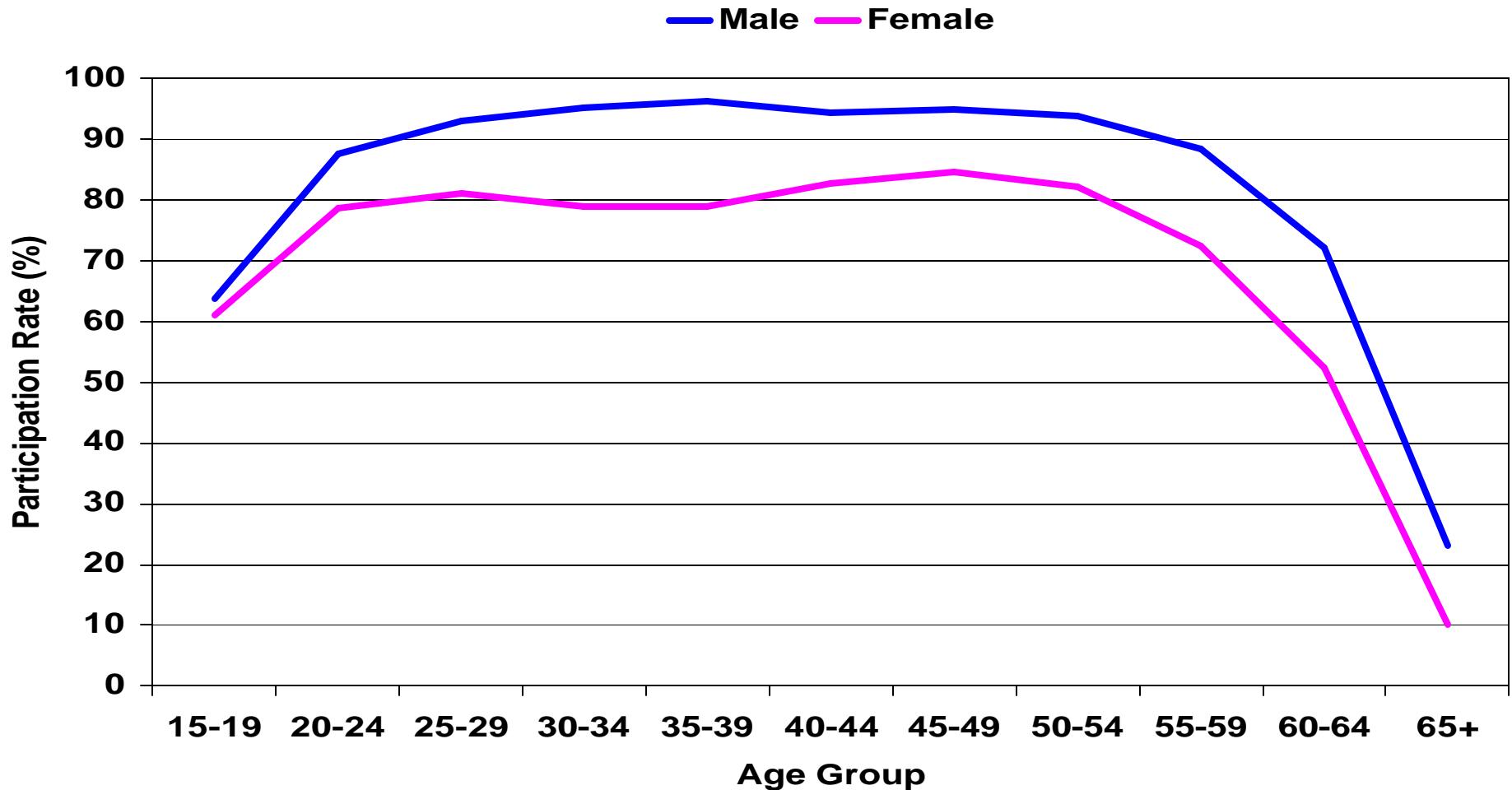
Source: Statistics Canada and R.A.L. Consulting Limited

Opportunities and Challenges

Maximizing the Participation of Under-represented Groups

Labour Force Participation Rates

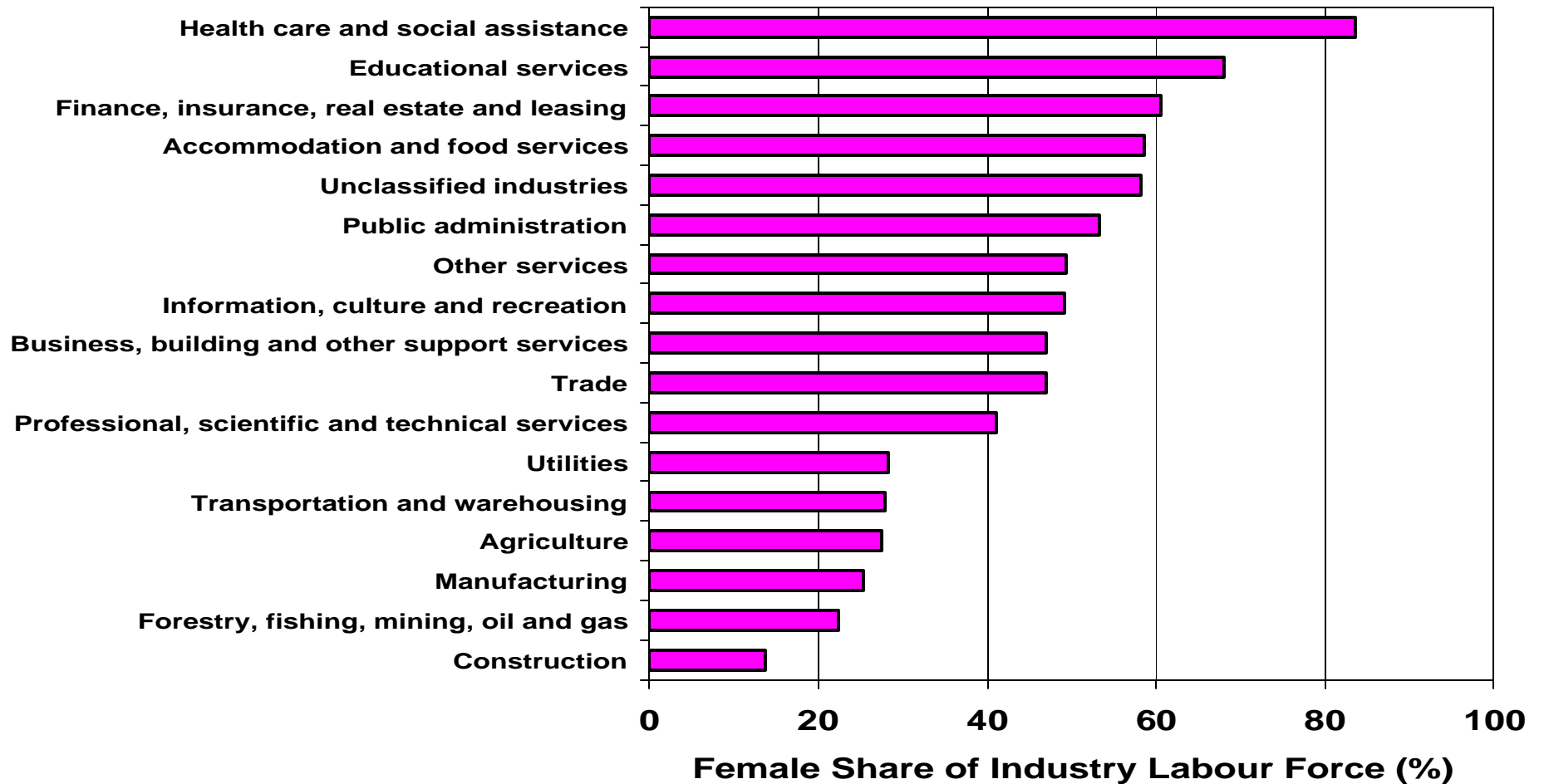
Alberta, 2008



Source: Statistics Canada and R.A.L. Consulting Limited

Female Labour Force Share by Industry

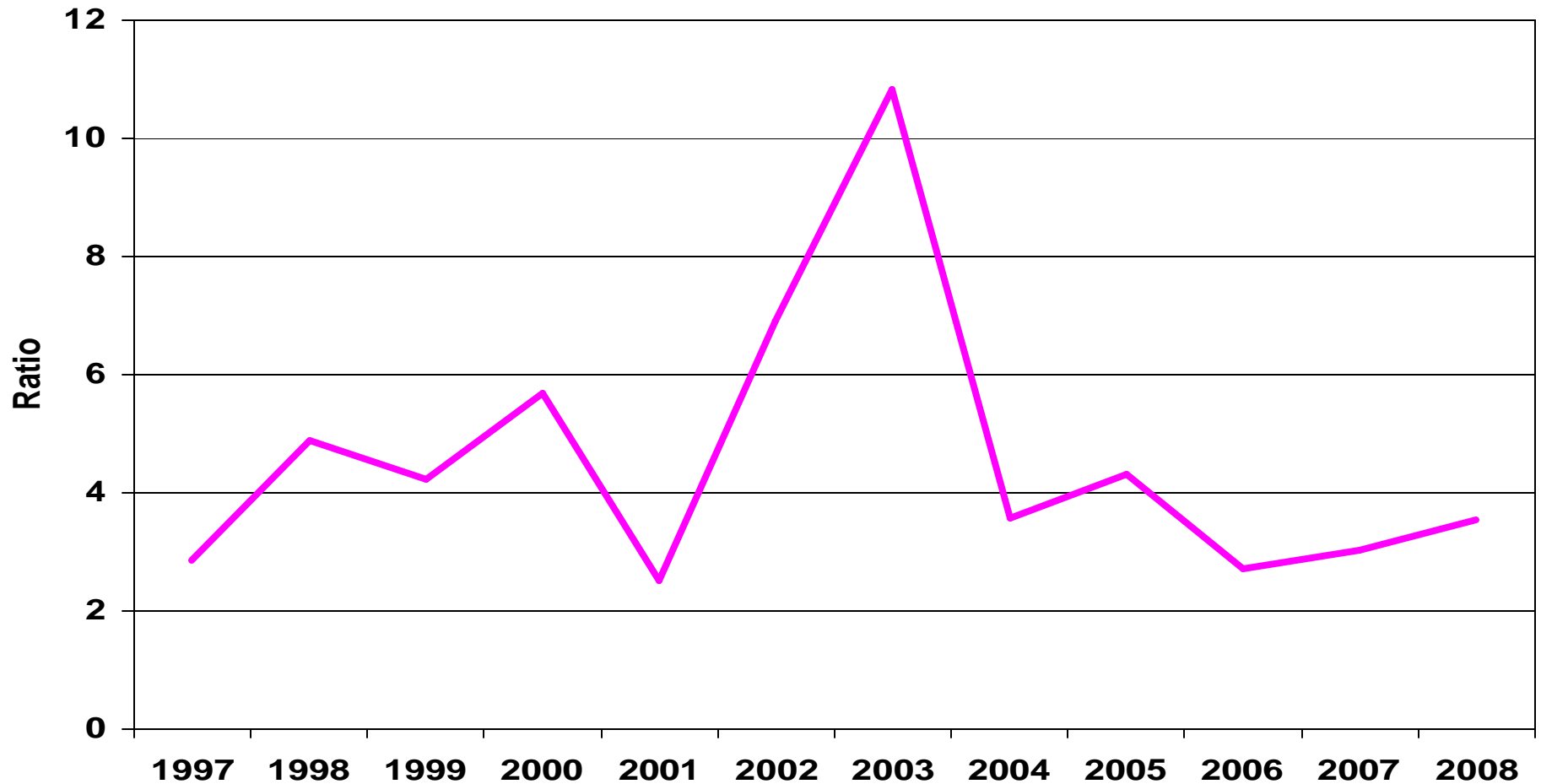
Alberta, 2008



Source: Statistics Canada and R.A.L. Consulting Limited

Non-Union:Union Ratio, Female Workers

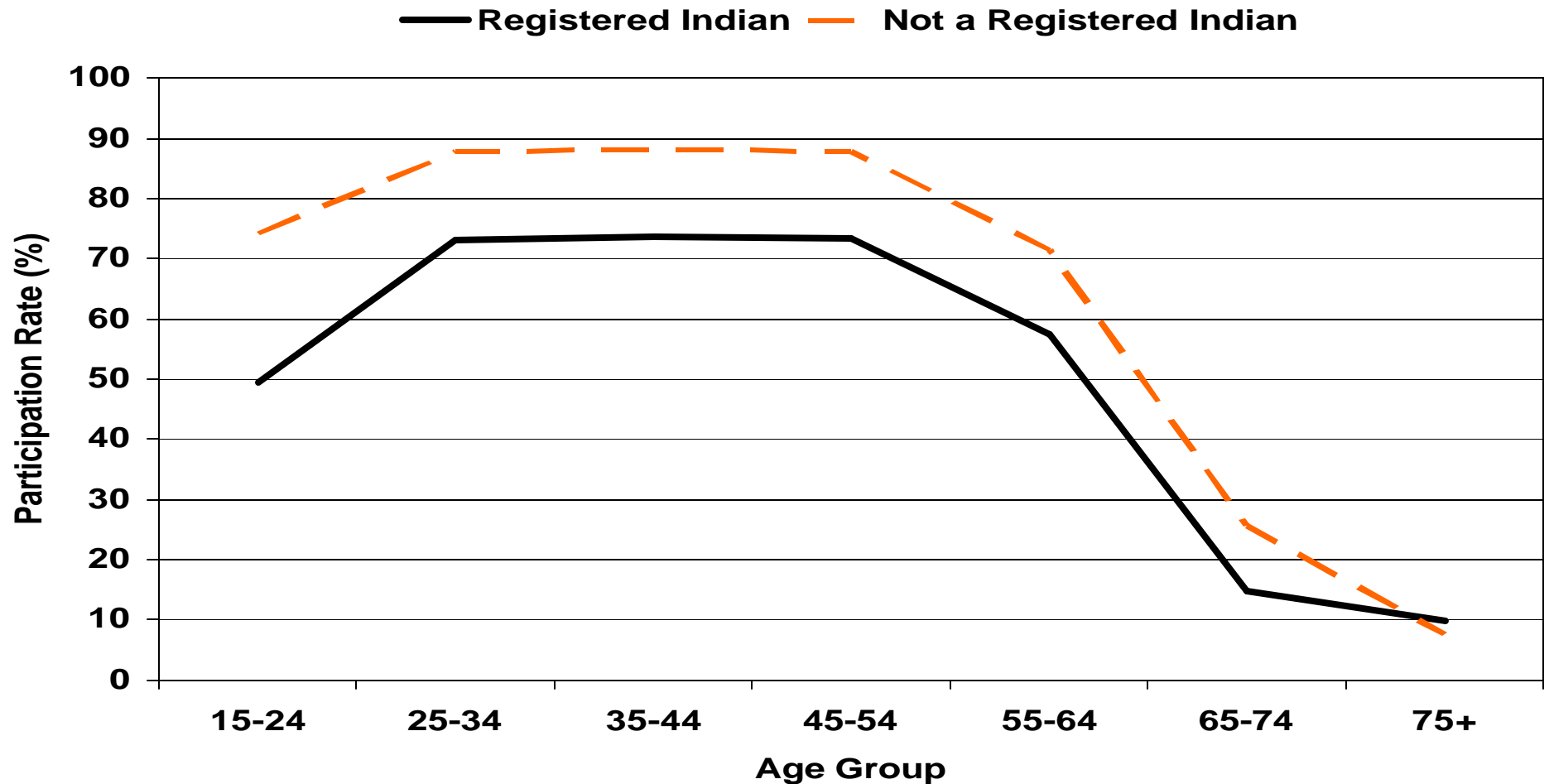
Alberta, Construction Industry, 1997-2008



Source: Statistics Canada and R.A.L. Consulting Limited

Labour Force Participation Rates

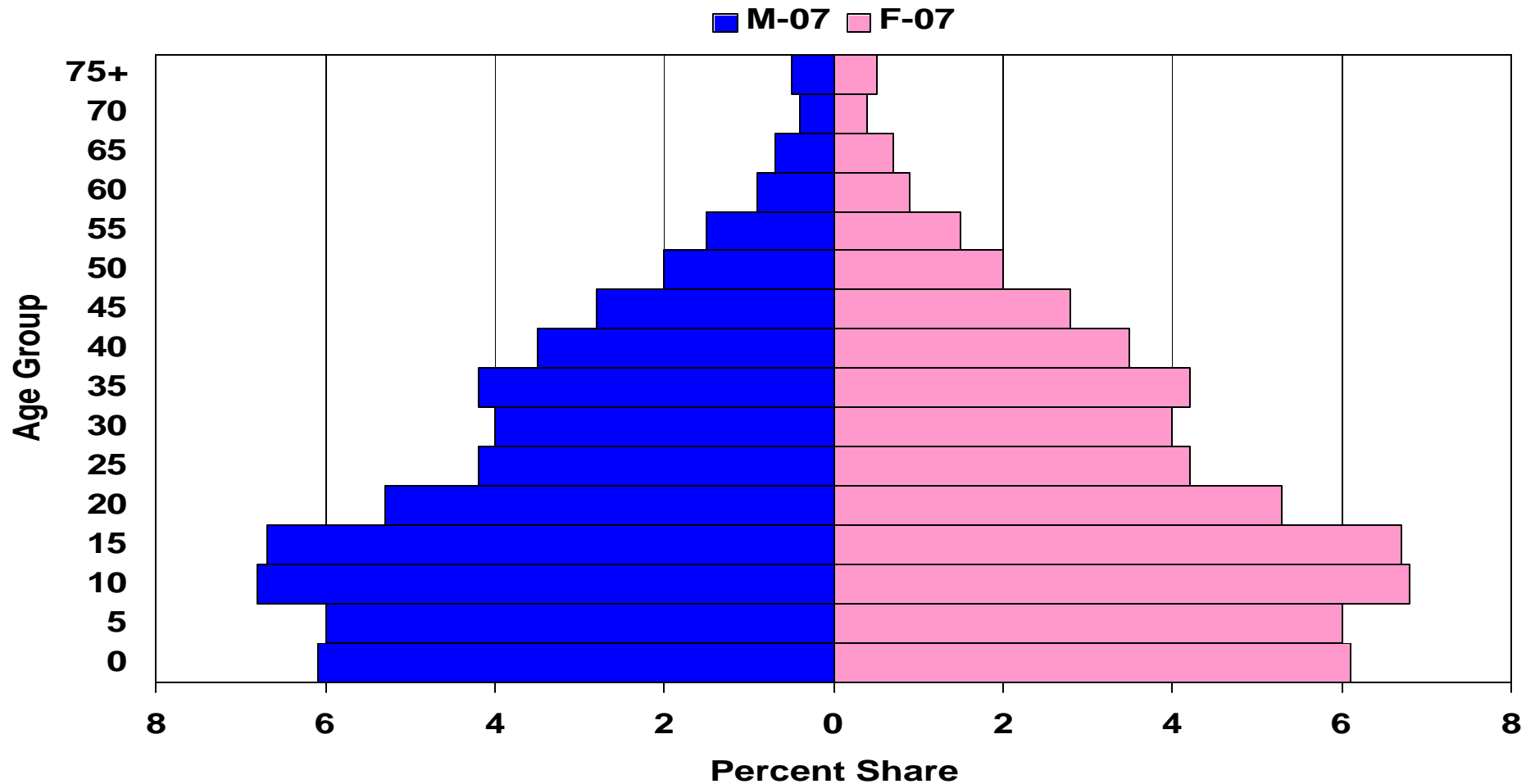
Alberta, Registered Indians & Not a Registered Indian, 2006



Source: Statistics Canada

Population Pyramid

North American Indian & Inuit Population , Alberta, 2007



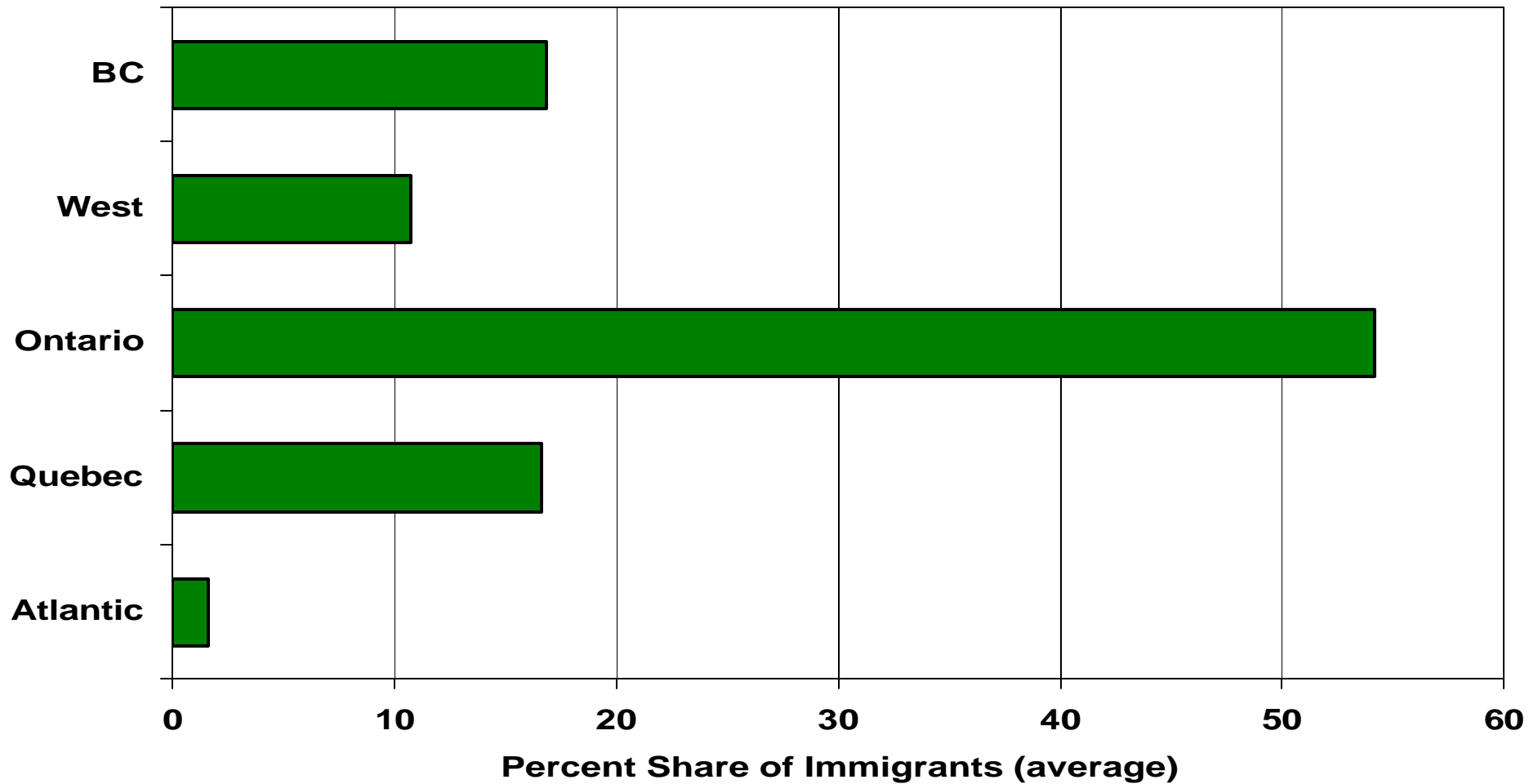
Source: Statistics Canada and R.A.L. Consulting Limited

Opportunities and Challenges

Recruiting and Integrating Visible Minorities

Canada

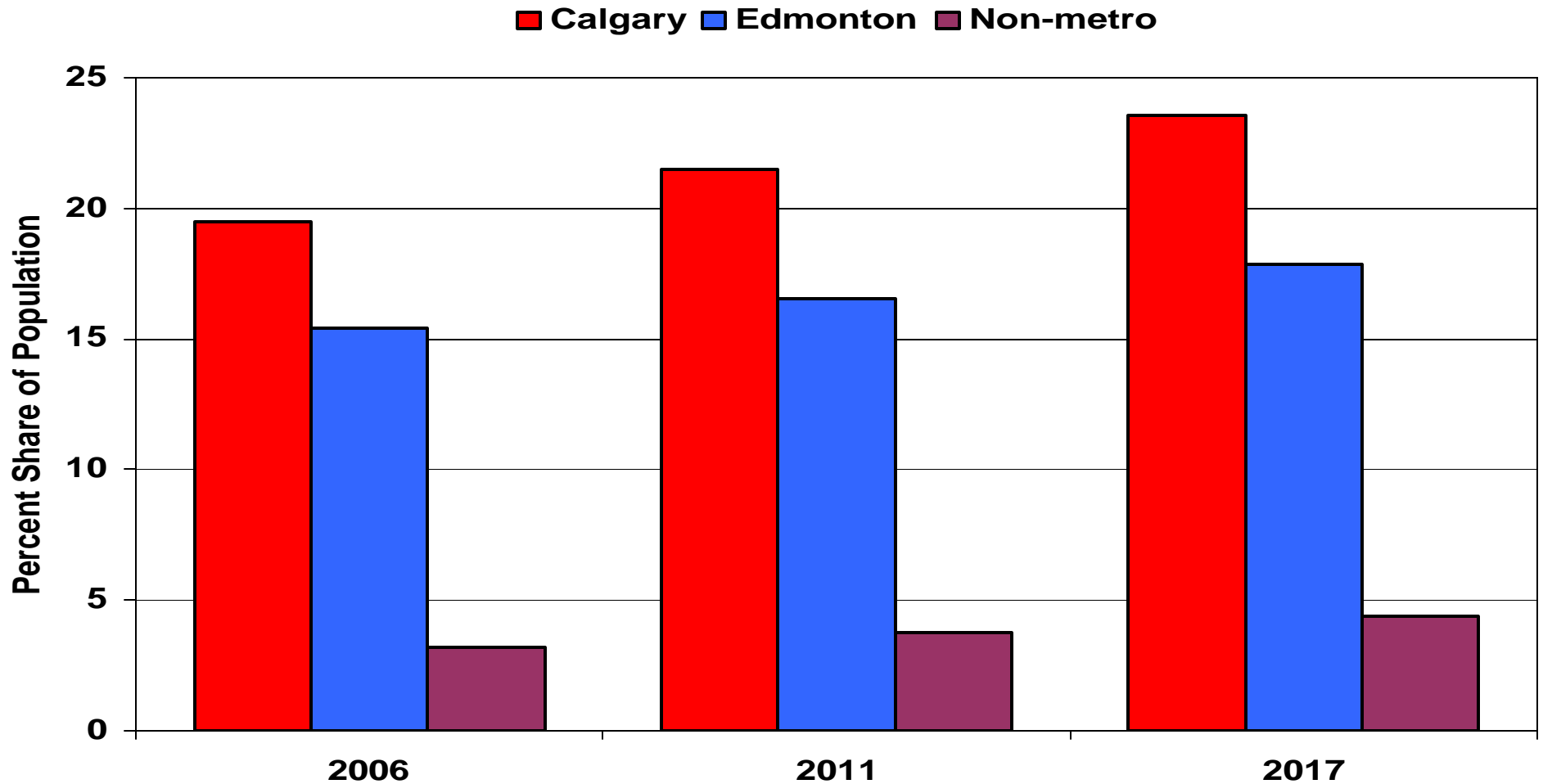
Average Share of Immigrants by Destination, 1998-2007



Source: Citizenship and Immigration Canada and R.A.L. Consulting Limited

Alberta

Visible Minority Population Share, 2006-2017 (percent)



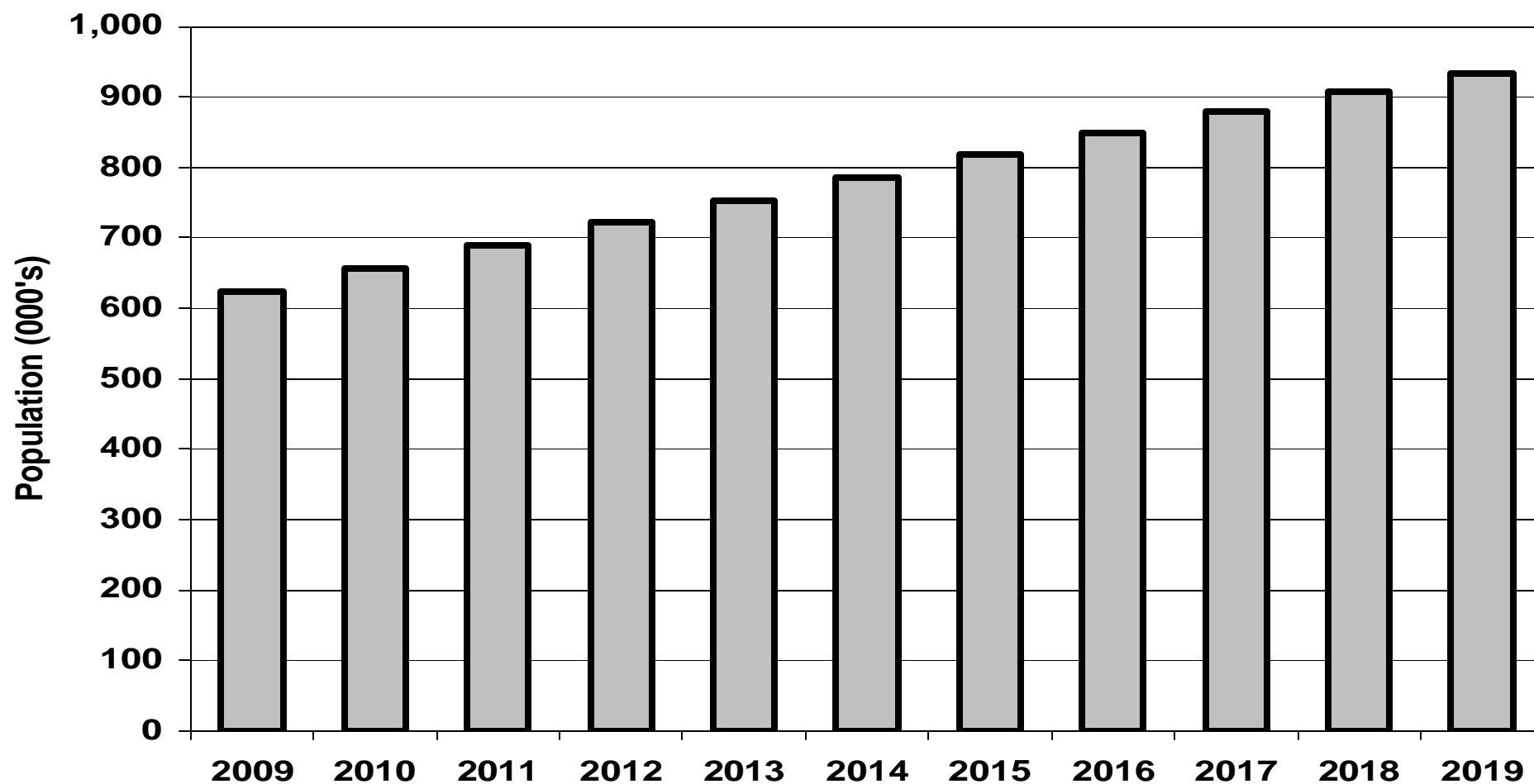
Source: Statistics Canada and R.A.L. Consulting Limited

Opportunities and Challenges

Re-inventing the Mature Worker

Population 55-74

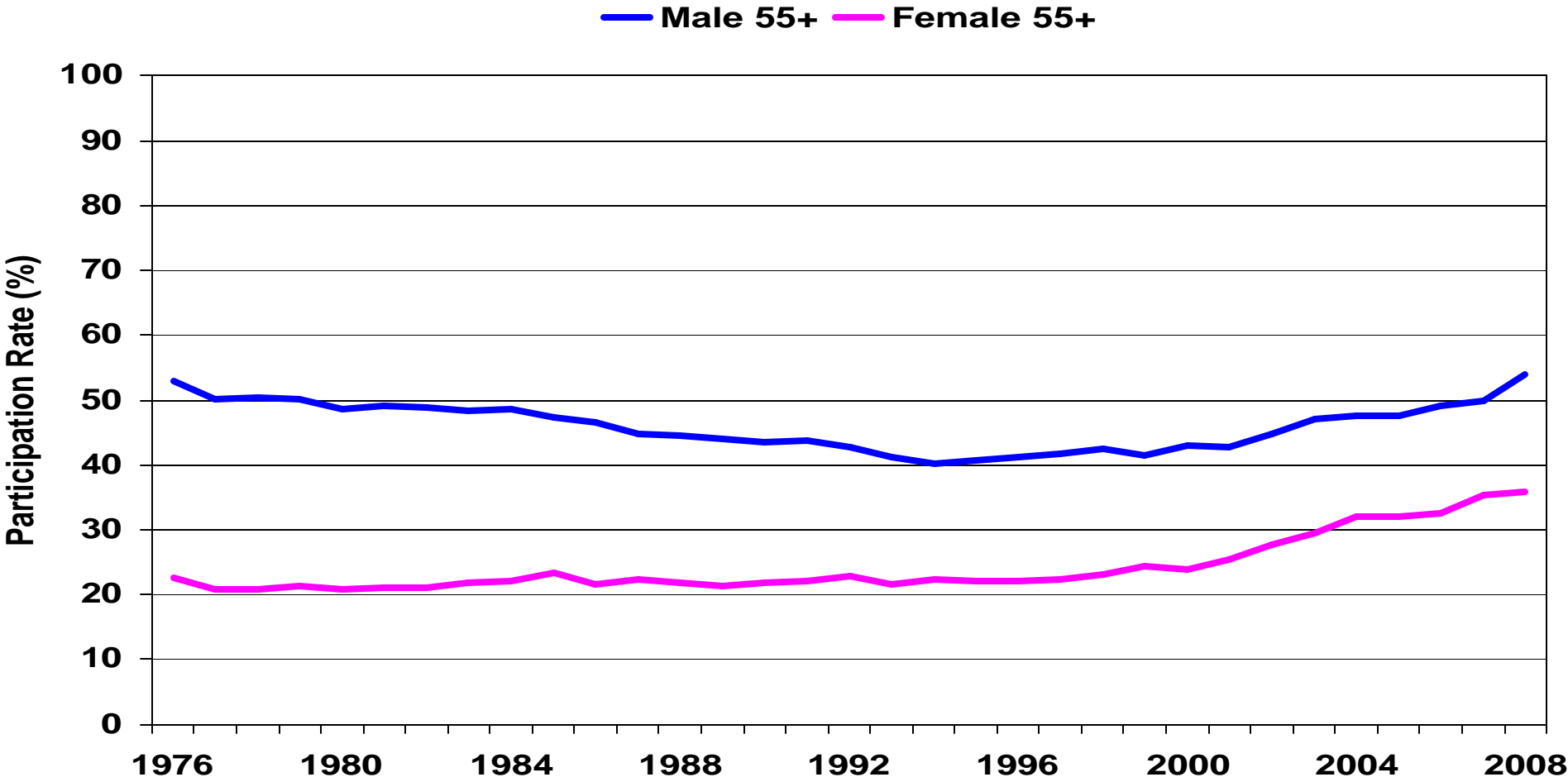
Alberta, 2009-2019 (projected)



Source: Alberta Finance and R.A.L. Consulting Limited

Labour Force Participation Rates, 55-plus

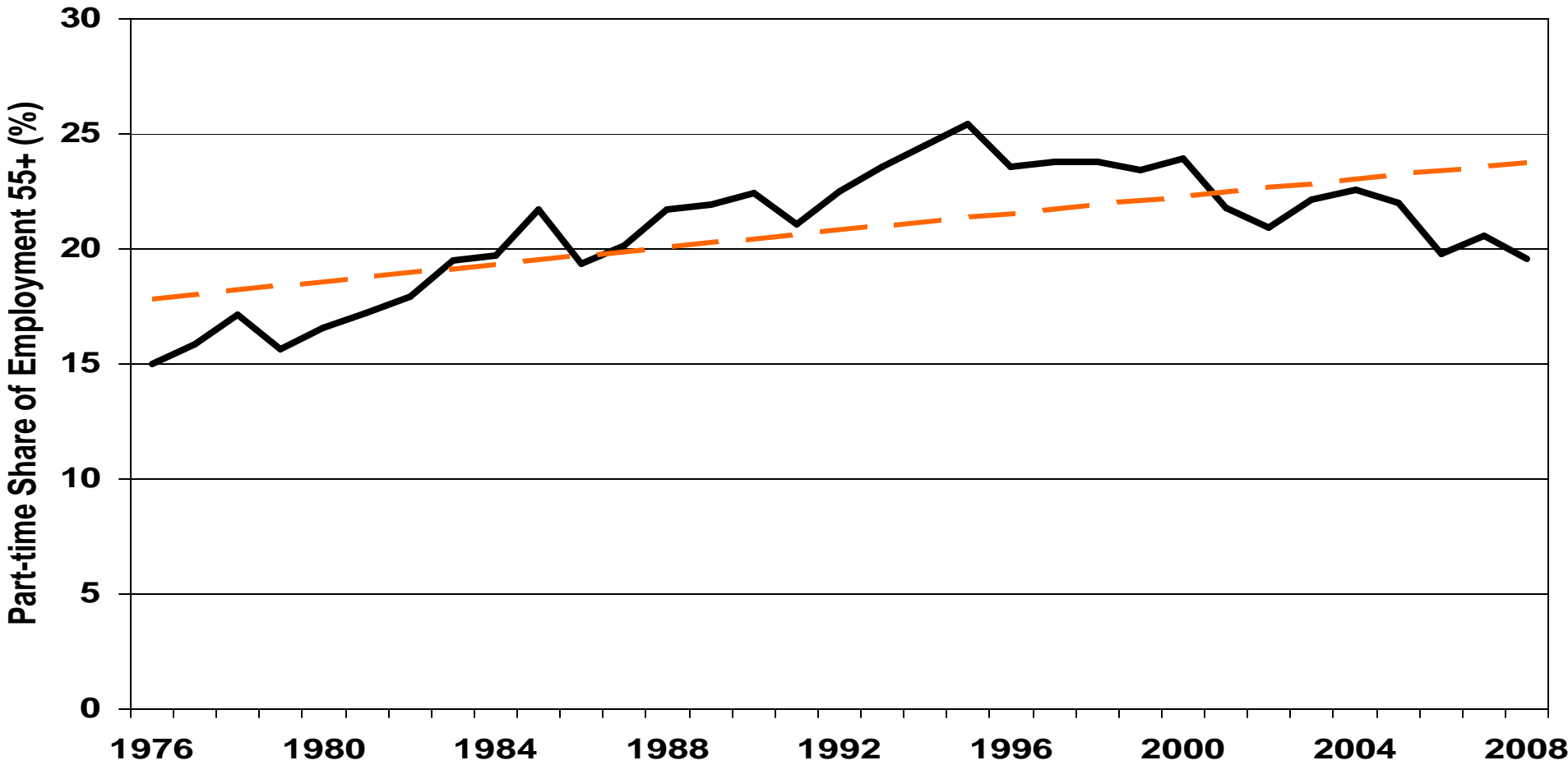
Alberta, 1976-2008



Source: Statistics Canada and R.A.L. Consulting Limited

Part-time Share of Employment 55+

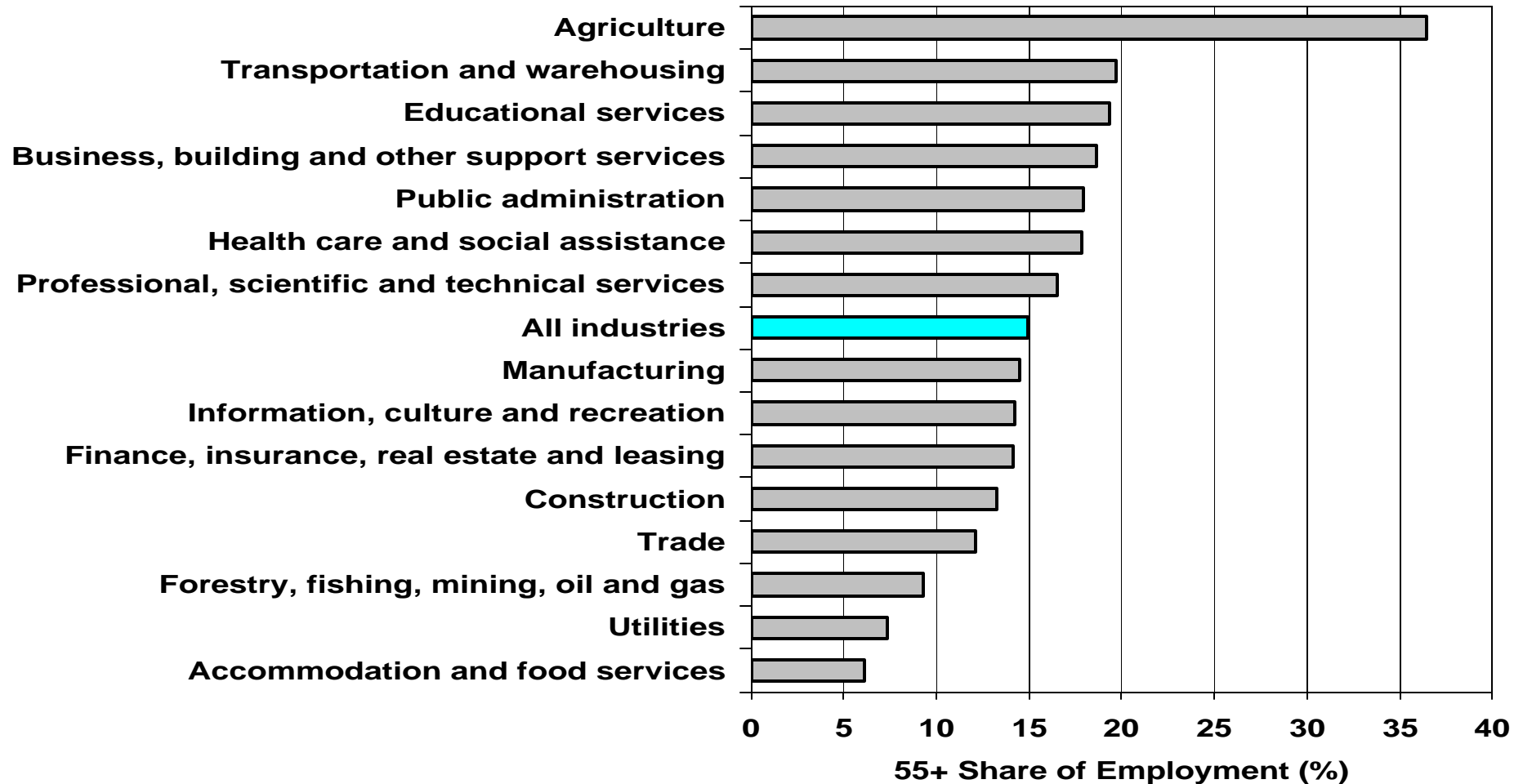
Alberta, 1976-2008



Source: Statistics Canada and R.A.L. Consulting Limited

55-plus Share of Industry Labour Force

Alberta, 2008



Source: Statistics Canada and R.A.L. Consulting Limited

What should Alberta's construction industry do to manage demographic and economic change?

- Demographic trends will have an unprecedented impact on Alberta's population and labour market well into the 21st century
- Human resource management must become a strategic priority in the construction industry even in poor economic times
- The aging and diversification of the labour market present both opportunities and challenges
- Effective HR strategy should be based on solid analysis and be multi-faceted:
 - » Demographic profiling and projections
 - » **Recruitment**: youth, under-represented groups, visible minorities, older workers outside the industry
 - » **Retention**: core workers and mature workers inside the industry
- Supply must respond to demand (i.e., market share)
- What is the construction industry's "brand"?

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