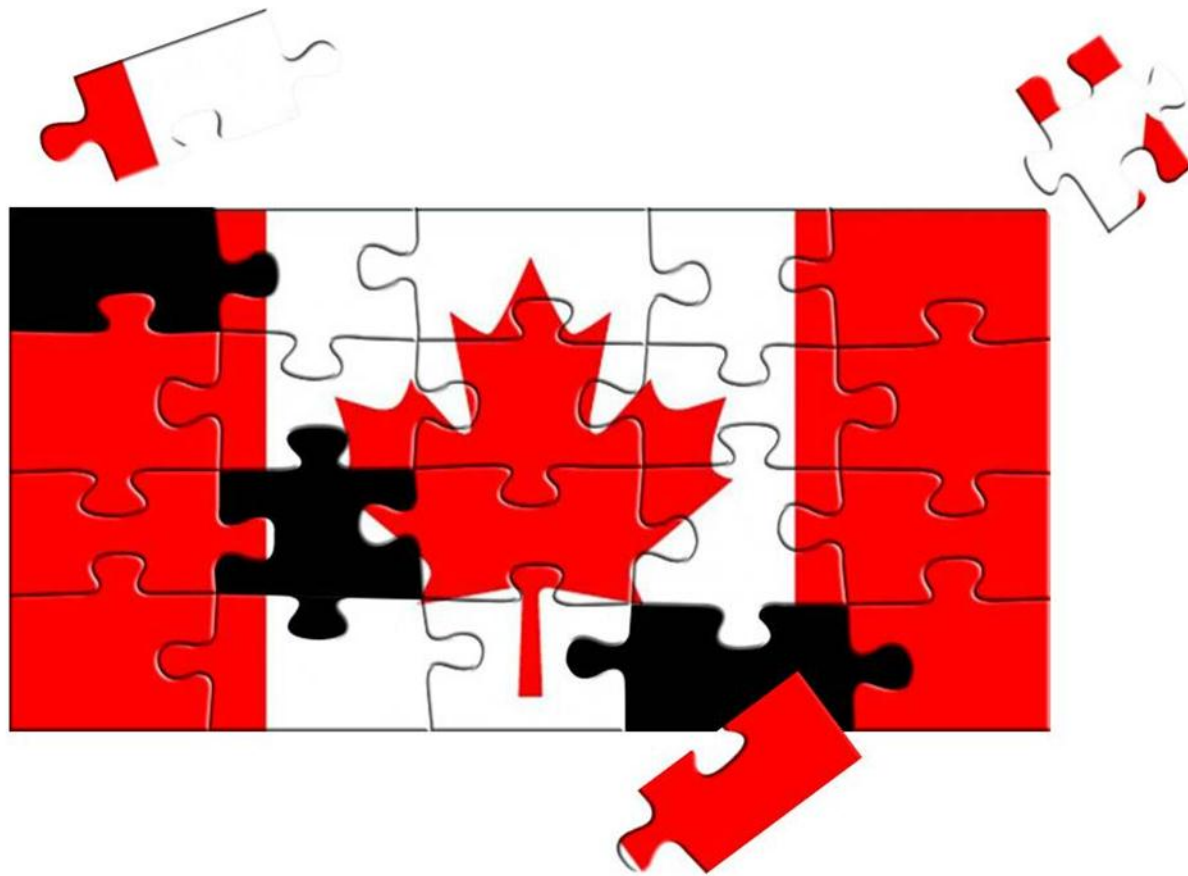


II

The Great Canadian Skills Mismatch:

People Without Jobs, Jobs Without People and MORE



II

Two Mega Trends:

- Aging population resulting in lower labour force participation rates
- Knowledge economy requiring a more educated/trained work force

II

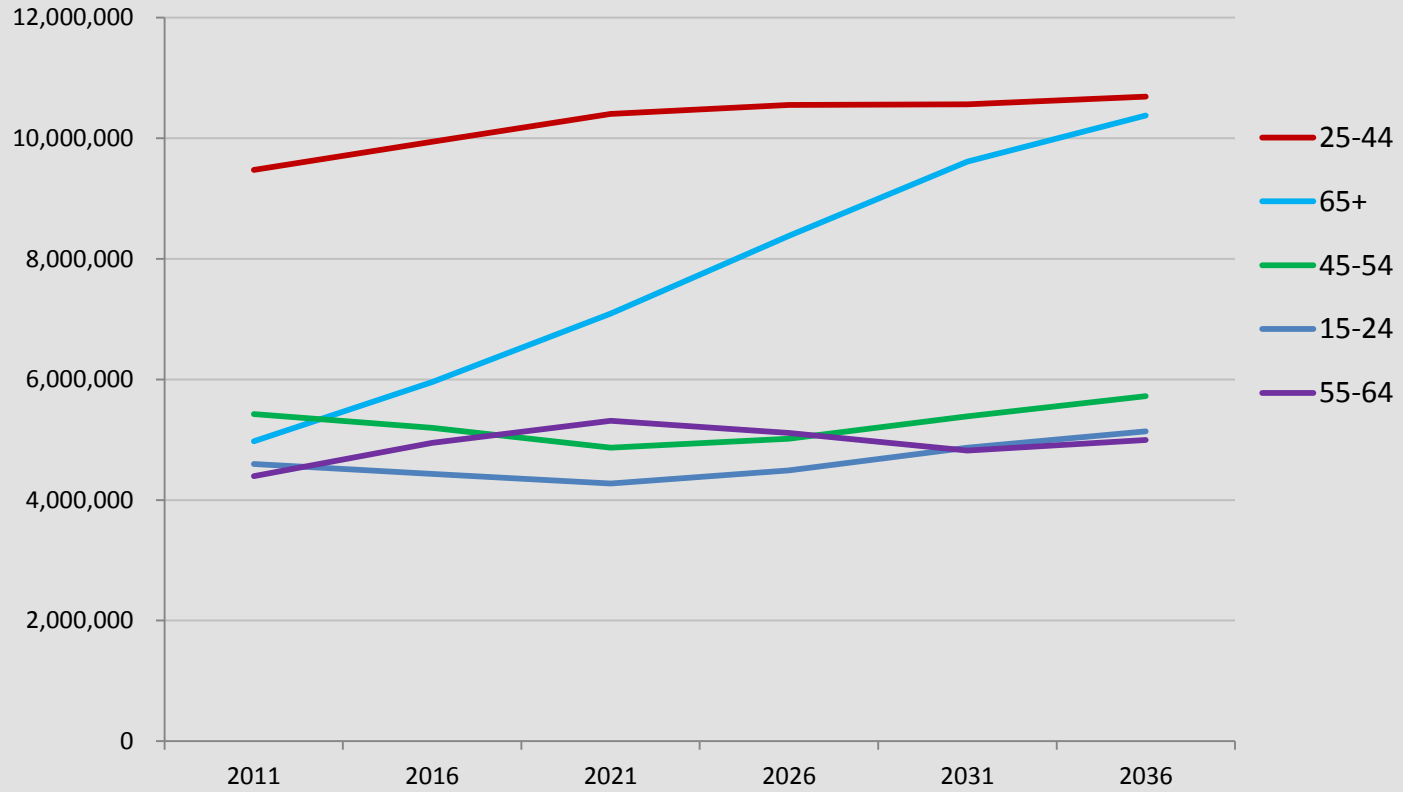
Changes

A Lot Has Changed Since 2010:

- Updated Population Projections and New Census Data
- Increased Levels of Educational Attainment
- Labour Force Participation Rate Changes
- Labour Force Demand Projections Have Lowered
- Canada Job Grant Program
- Gradual Changes to Retirement (65 to 67)
- Stricter Employment Insurance Regulations
- Targeted Educational Funding
 - Aboriginals
 - Persons with Disabilities
- Significant Immigration Policy Changes
 - Canadian Experience Class
 - Foreign Skilled Worker Program
 - Foreign Skilled Trade Worker Program
 - New Entrepreneur Program
 - Temporary Foreign Skilled Worker Program

II

Figure 2. Canada Population Projections by Age



Source: Statistics Canada, 2010

II

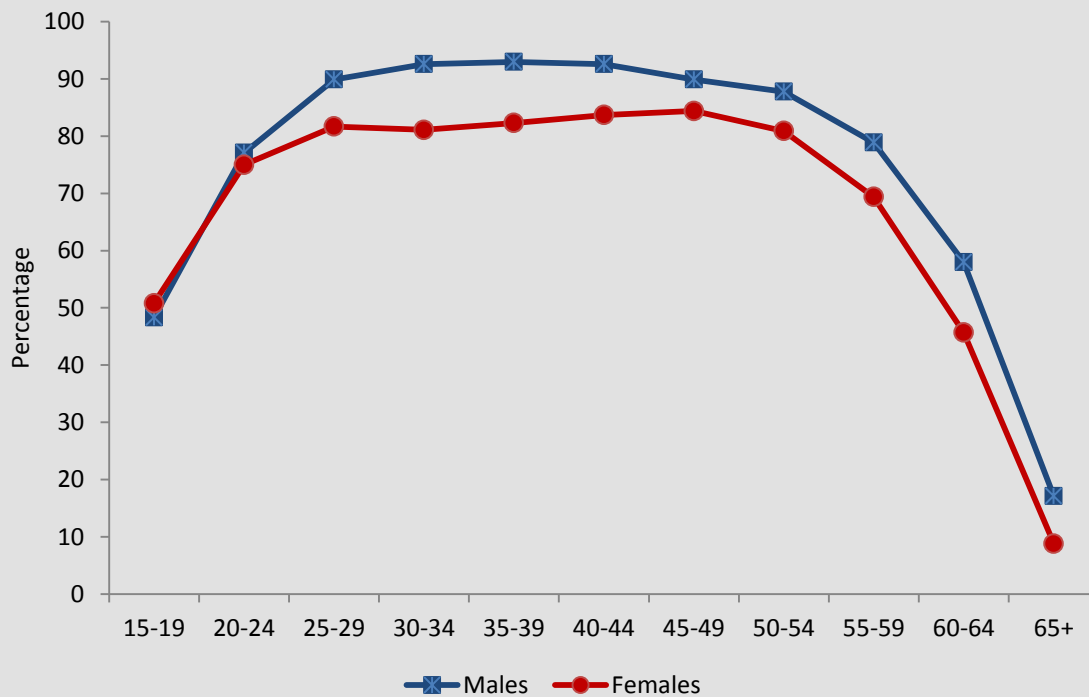
**Table 1. Canadian Labour Force Participation Rates
2012 vs. 2007**

Age group (years)	2007	2012	<i>difference</i>
15-19	55.2	49.5	-5.7
20-24	78.4	76.1	-2.3
25-29	86.1	85.9	-0.2
30-34	87.6	86.8	-0.8
35-39	87.8	87.6	-0.2
40-44	87.7	88.1	0.4
45-49	86.8	87.1	0.3
50-54	83.7	84.4	0.7
55-59	70.6	74.1	3.5
60-64	47.1	51.7	4.6
65+	8.9	12.6	3.7

Source: Statistics Canada, 2013

II

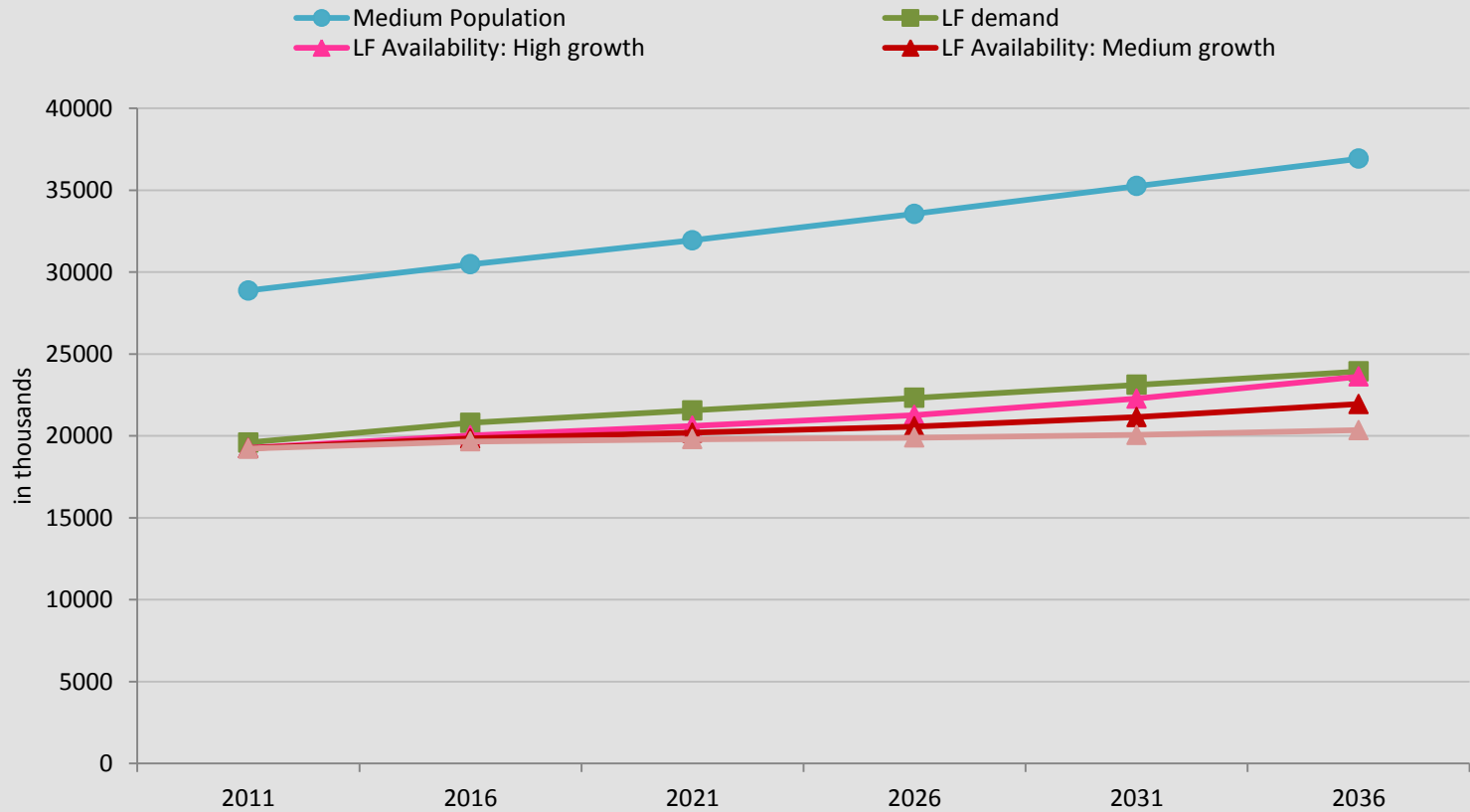
Figure3. Canadian Participation Rates by Gender and Age



Source: Statistics Canada, 2012

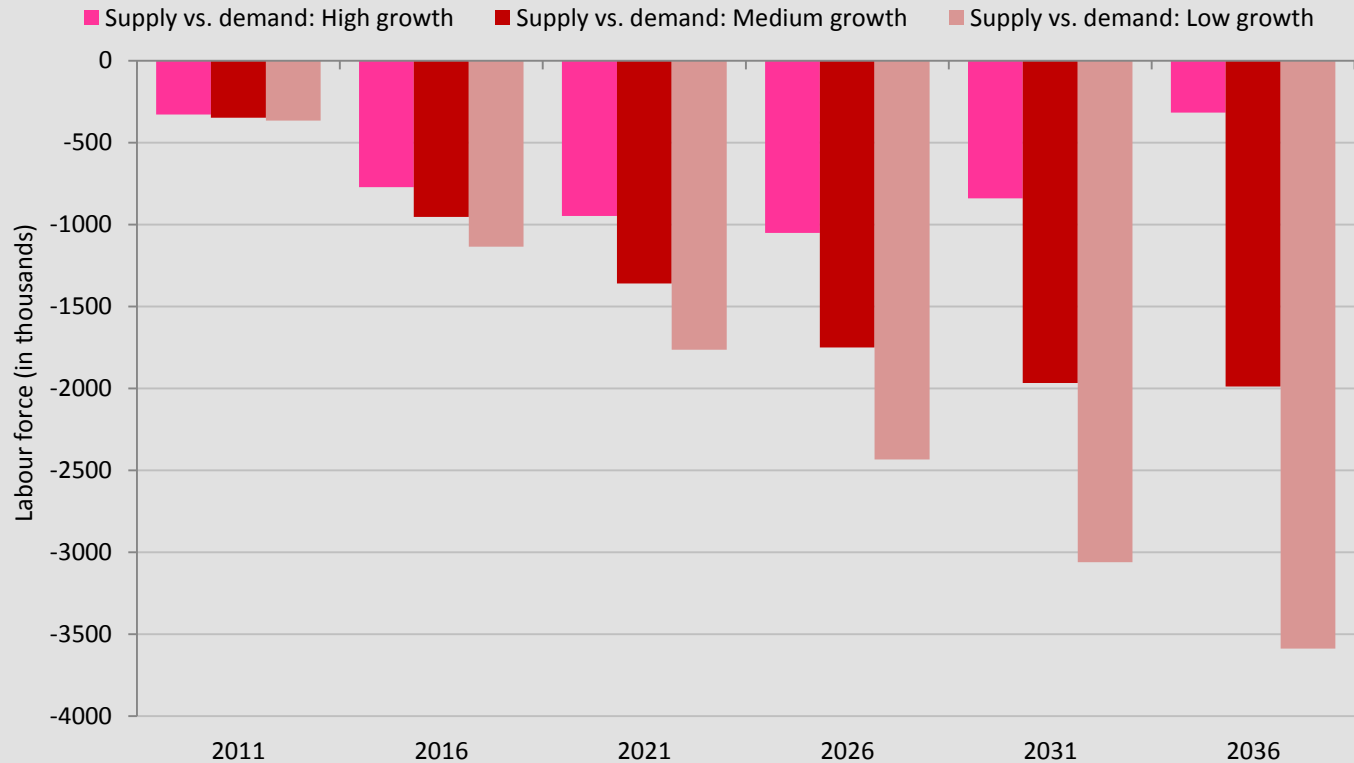
II

Figure 4. Canadian Population and Work Force Projections: 2011-2031



II

Figure 5. Canadian Labour Force Supply and Demand: High, Medium and Low Population Growth Projections



II

**What kind of jobs/workforce does
Canada need?**

II

Estimates of Current & Future “New Job” Requirements:

- 65% (HRSDC, 2007): 75% (HRSDC, 2011)
 - (Now Employment and Social Development Canada: ESDC)
- 67% (Canadian Council on Learning, 2009)
- 75/76% (B.C. Ministry of Advanced Education & Labour Market Development, 1997 and 2009)
- 78% (U.S. Skills2Compete, 2007)
- Ontario targets 70% attainment level (Speech from the Throne, 2010)
- BC targeting an 80% attainment rate for 2030 and a 90% transition rate by 2020 (Skills for Growth, 2010)

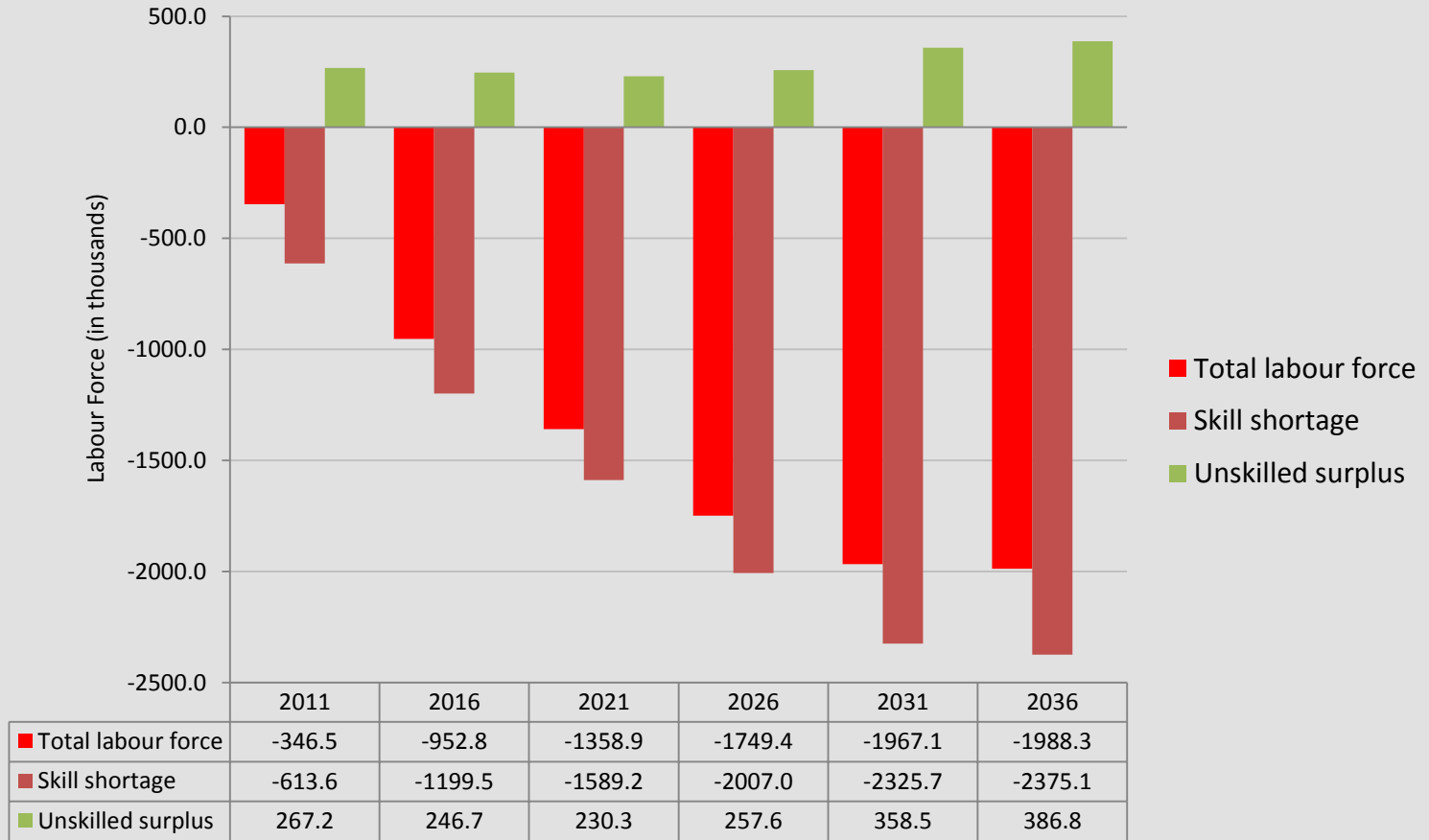
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Table 2. Labour Force Skill Assumptions

Skill Requirements	2011	2016	2021	2026	2031
New Job Skill Requirements	70.0%	72.5%	75.0%	77.5%	80.0%
Labour Force Skill Availability	64.0%	65.0%	66.0%	67.0%	68.0%
Overall Labour Force Skill Requirements	66.0%	67.8%	69.2%	70.7%	72.3%

II

**Figure 6. Canadian Labour Force
Balance: Medium Population Growth**



II

Table 3. Labour Force Projection Comparisons: 2010 - 2013

Current and Previous Projections (,000)	2011	2016	2021	2026	2031
New Labour Force Shortage Projections (2013)	-346.5	-952.8	-1,358.9	-1,749.4	-1,967.1
Previous Labour Force Shortage Projections (2010)	-472.9	-914.4	-1,526.3	-2,117.7	-2,700.7
Difference	-126.4	38.4	-167.4	-368.3	-733.6
New Skills Shortage (2013)	-613.6	-1,199.5	-1,589.2	-2,007.0	-2,325.7
Previous Skills Shortage (2010)	-560.9	-1,464.1	-2,643.9	-3,402.5	-4,204.2
Difference	52.7	-264.6	-1,054.7	-1,395.5	-1,878.5
New unskilled Surplus (2013)	267.2	246.7	230.3	257.6	358.5
Previous Unskilled Surplus (2010)	88.0	549.7	1,117.6	1,284.8	1,503.5
Difference	179.2	-303.0	-887.3	-1,027.2	-1,145.0

II

The labour force objective requires increased involvement of:

- Immigrants
- Aboriginal individuals
- Persons with Disabilities
- Women
- Younger workers
- Older workers

II

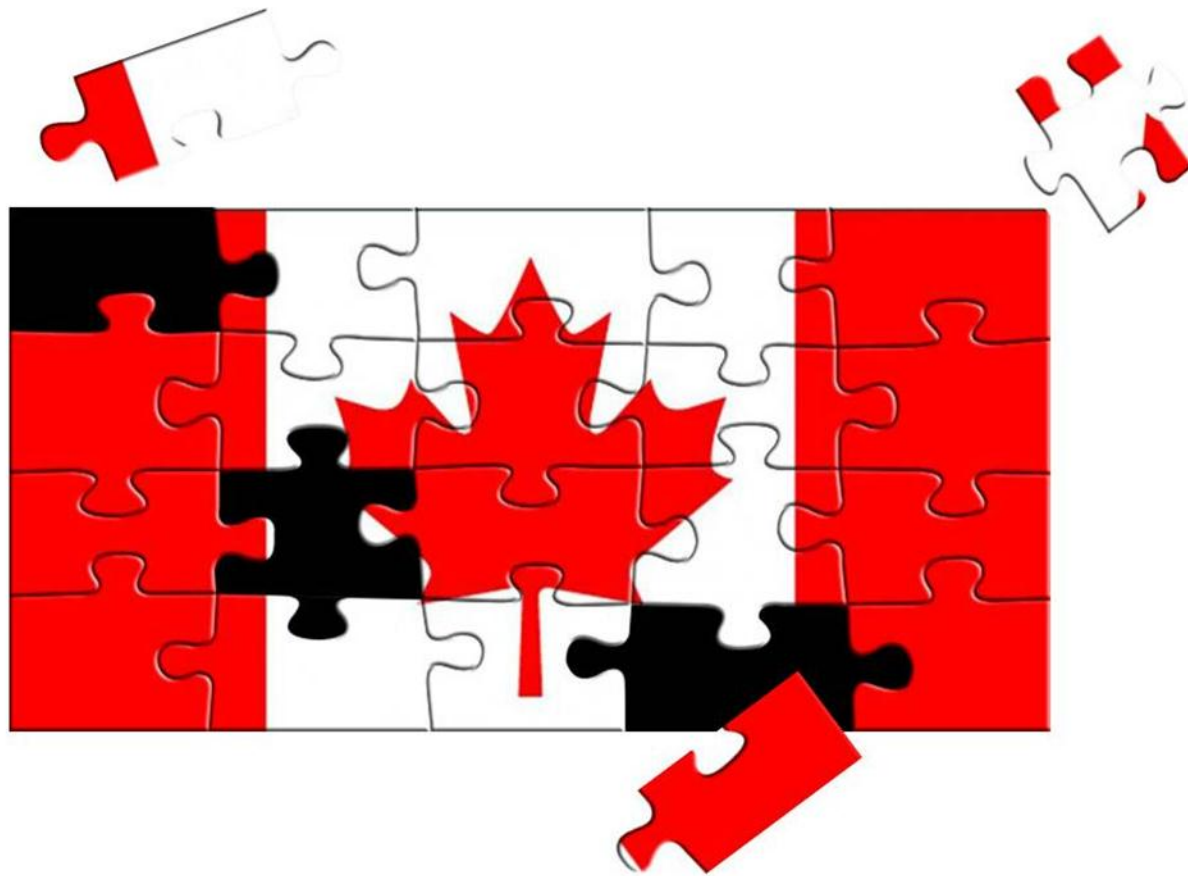
Table4. By The Numbers
Caution: “Double Counting” Exists

Projections	2011	2016	2021	2026	2031
SHORTAGE	346,500	952,800	1,358,900	1,748,000	1,967,100
Low Projection Impact	0	351,394	650,182	904,042	1,108,452
High Projection Impact	0	516,679	1,142,917	1,607,908	2,103,153
Low Projection Net	-346,500	-601,406	-708,718	-843,958	-858,648
High Projection Net	-346,500	-436,121	-215,983	-140,092	+136,053
OTHER OPTIONS					
PSE Efficiency to 10%	0	100,000	100,000	100,000	100,000
50,000 More FSWs/CECs/FSTWPs	0	41,600	249,600	416,000	624,000

II

So We Have a Labour Shortage

But Do We Have a Skills Mismatch?



II

Careful: What Type of Mismatch?

Actually We Have Four Mismatches

- Supply-Demand Mismatch
- Geographical Mismatch
- Over Qualified Mismatch (Under Employment)
- Under Qualified Mismatch (Over Employment)

II

Table 5. The “Evidence” Says: Yes

Source	Areas	Shortage	Comment(s)	Time Frame
Mismatch Study	Various	2.3 million	Analysis Follows	2031
IBM	Cloud, Mobile Analytical and Social Computing	100,000	Specialized Areas	2016
Engineers Canada	Various Engineers	95,000	Retirees	2020
Agriculture Council	Various	90,000	Additions	2013
Construction Council	Various	219,000	Retirees	2020
Environmental Careers	Various	100,483	Retirees	2022
Electrical Councils	Various	45,000	New	2016

II

Source (Continued)	Areas	Shortage	Comment(s)	Time Frame
Food Processing Council	Various	32,500	Retirees	2015
Information and Communications	Various	105,000		2017
Petroleum Council	Various	15,000	New	2015
Printing Industry Council	Various	41% of Industry Retiring	Retirees	Soon
Supply Chain Council	Various	27,000	Current Vacancies	Now
Supply Chain Council	Various	60,000	Replacements	Annual
Tourism Council	Various	114,000 228,000	Unfilled Unfilled	2020 2036

II

Source (Continued)	Areas	Shortage	Comment(s)	Time Frame
Trucking Council	Various	199,800	New	2017
OECD	Various	33.6% Under Qualified	2005 Data	“Now”
OECD	Various	23.7% Over Qualified	2005 Data	“Now”
CIBC (2012)	Various	25 Shortage Occupations	1% unemployed	Now
CIBC (2012)	Various	20 Surplus Occupations		Now
Certified General Accounts of Canada (2012)	Various	24.5% Under Employment	Recent University Graduates	Now
C. D Howe Institute	Various	Accepted Skills Mismatch	Suggestions to Improve	Now

II

Table 6. Job Educational Requirements Are Shifting

Education	Conference Board (2013) Employer Needs	HRSDC Projection (2012)	BC Projection (2012)
University	44%	21.3%	35%
College	57%		42%
College/Trades		34.3%	
Trades	41%		
Management		10.8%	
On The Job		8.6%	
High School		24.9%%	19%
Below High School			3%

II

Preparing for an Uncertain Future

Our LMI Systems Need to Be Enhanced

Our Educational Systems Need to be More Responsive

Our Businesses and Unions Need to Invest More in Education and Training

Our Governments Need to Think About the Future as Much as They Think about the Present

II

Possible “Solutions”

Supply-Demand & Under/Over Employment Mismatches
(Some Elements of the Geographical Mismatch as well)

LMI

- More Robust Data
- Back To The Long Form Census
- Significantly better education/training data
- More Frequent and Detailed Labour Market Surveys
- Alternative Labour Market Projections
 - Existing Jobs
 - Evolving Jobs
 - Future Jobs

II

Possible Solutions (Continued)

**“Mandatory” Career Counselling/Updates
(assuming better data is available) For:**

- Students
- Parents
- Educators
- Politicians
- Employers

II

Possible Solutions (Continued)

Include Basic Employability and Literacy Skills in All Forms of Education

- High Schools and Earlier
- Universities
- Colleges
- Private Career Colleges
- Polytechnics
- Apprenticeships
- On The Job Training

II

Possible Solutions (Continued)

Educational “Reform”

- University/College Integrated degree/applied Programs (Applied at the End)
- Reduction of Enrolments in Non-Applied Programs
- University/College 3 + 1 Programs With Applied at the End
- Expand Entrepreneurship Programs
- More “Stand Alone” Compressed Programs (Applied)
- Apprenticeship Reform (Make Part of PSE)
 - Grow Enrolments
 - Improve Completion Rates
 - Change Journeyman-Apprentice Ratios

II

Possible Solutions (Continued)

Educational “Reform” (Continued)

- Expand College and Polytechnic Enrolments
- Move Toward Competency Based Education/Training
- Shorten Interval Between Applied Learning and Employment
- Shift the Balance Between Teaching and Research
- Change Attitudes About Educational Hierarchies

II

Possible Solutions (Continued)

Businesses

- Invest More In Education and Training
- Increase Co-op, Internship and Apprenticeship Opportunities
- Financially Support (Scholarships, Bursaries, Donations, etc.) Educational/Training Programs Providing for Human Resource Needs
- Improve Hiring Practices to Recognize Credentials and Competencies as Much as Academic Qualifications
- Talk about Future Directions (Jobs) More Publically

II

Possible Solutions (Continued)

Governments

- Move Toward a National Educational/Training Strategy
- Financial Investment in Educational/Training Institutions
Developing Curriculum For the Jobs of the Future
- Accept Failure
- Help Change Attitudes about the “Hierarchy” of Education
- Major LMI Investments
- Invested in Training Under Represented Groups
(Immigrants, Aboriginals, Persons With Disabilities, etc.)

Thank you

MINER

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