



CONSTRUCTION LOOKING FORWARD

An Assessment of Construction
Labour Markets from 2008 to 2016
for **MANITOBA**

PRODUCED BY THE
CONSTRUCTION SECTOR COUNCIL

CONSTRUCTION
SECTOR COUNCIL



CONSEIL SECTORIEL
DE LA CONSTRUCTION

TABLE OF CONTENTS

Section 1	
Highlights and Introduction	1
Section 2	
Economic Environment – international, national and provincial conditions	2
Section 3	
Investment Outlook – building trends and major projects	4
Section 4	
Construction Labour Markets	6
Section 5	
Apprenticeship and Related Training	10
Section 6	
Retirement Demand	10
Section 7	
Market Rankings and Mobility – markets for trades and occupations and potential for labour mobility	12
Appendix A	
Detailed Tables – trades information	17
Appendix B	
Trades Definitions	23

Glossary of terms available at www.constructionforecasts.ca

- | | |
|-------------|---------------------|
| 1. NATIONAL | 5. MANITOBA |
| 2. ATLANTIC | 6. SASKATCHEWAN |
| 3. QUEBEC | 7. ALBERTA |
| 4. ONTARIO | 8. BRITISH COLUMBIA |

1. HIGHLIGHTS AND INTRODUCTION

Manitoba is in the midst of a resource-led expansion that has raised construction activity and employment to record levels. Except for a brief but abrupt downturn in 2010, that growth is expected to continue until the end of the forecast period in 2016.

On the downside, attracting the needed workers is becoming increasingly difficult and expensive. The available workforce of skilled trades and occupations has been fully employed for at least a year. Employers are turning to immigration and temporary foreign workers to fill some jobs.

Employment in the Manitoba construction industry will increase by 16% in 2008 and 7% in 2009 before declining in 2010, when many industrial and engineering projects end. Employment growth will resume in 2011 and remain positive until 2016 with both residential and non-residential construction activity averaging 2% annual growth.

Overall, the prospect of ongoing increases in construction employment in Manitoba over the entire forecast period highlights the need to sustain investments in promoting construction careers to, and recruiting, integrating and training both local entrants and foreign workers.

This is the fourth annual edition of *Construction Looking Forward*, providing labour market assessments from 2008 to 2016 for Manitoba. By combining a macroeconomic scenario with an inventory of underway and planned construction projects, this report analyzes the details of demand and supply for more than 30 trades and occupations and then ranks market conditions over the next nine years.

Construction Looking Forward is an industry planning tool. Findings reported here provide an assessment of labour market conditions that are tied to expected future levels of construction activity. Results depend on one scenario for major projects and other economic conditions. As indicated in the report, it is anticipated that project plans may well change and labour market conditions may adjust in the face of events. Similarly, industry and government initiatives may adapt to expected future conditions.

The system of labour market analysis used in this and all provincial *Construction Looking Forward* reports is the most advanced and detailed industry model available in Canada. It is based on forecasting approaches pioneered by the

Construction Owners Association of Alberta and the Commission de la construction du Québec. These models have been adapted and expanded by the Construction Sector Council (CSC) with input from key players from all sectors of the industry. These organizations – members of the Manitoba Labour Market Information (LMI) Committee – are identified on the inside back cover.

Each year the CSC LMI system is reviewed and improvements are introduced in response to industry suggestions and other opportunities. During 2008, plans include the addition of details for residential construction and the update of labour market measures based on 2006 Census results released by Statistics Canada in early March 2008. Improvements based on this work will be available in the 2009 release of *Construction Looking Forward*.

2. ECONOMIC ENVIRONMENT

The economic environment facing the construction industry determines both supply and demand for construction trades through its impact on investment, employment and the labour force. This environment includes the economic performance of both the provincial economy and that of its trading partners.

The assumptions for the rest of the world are derived from economic outlooks produced by such organizations as the World Bank and the International Monetary Fund. These assumptions reflect the views of world economy performance held near the end of 2007, when they were assembled.

The assumptions for the domestic economic environment were developed under the direction of the provincial LMI Committee. They are based on forecasts of a macroeconomic model of the provincial economy that incorporates the external environment assumptions and those about major project investment provided by the LMI Committee. The forecast starts in 2008.

External Environment

The external environment facing Manitoba over the forecast period continues to be a positive factor behind the province's expected economic performance. Table 1 shows the key assumptions for commodity prices and trading partner performance. These assumptions may be summarized as follows:

- ◆ Oil prices, as measured by West Texas Intermediate oil prices at Cushing, rise to US\$84 per barrel in 2008 and then fall to US\$78 in 2016. Natural gas prices at the Henry Hub recover in 2007 and reach US\$7.7 per MMBTU in 2008. They also weaken with oil prices falling below US\$7 by 2016. These assumptions are based on recent forecasts by the U.S. Energy Information Administration.
- ◆ The agriculture and metals and minerals price indices are composites of commodities – part of Statistics Canada's Raw Materials Price Index. Agriculture product prices generally match inflation over the forecast period, after rising sharply in 2007. Metals and minerals prices are assumed to decline over the period following rapid increases over the past few years.
- ◆ The Canadian dollar depreciates from US\$0.98 in 2007 to US\$0.91 in 2011 in line with lower energy prices, falling commodity prices and weak economic performance in Central Canada. It remains near US\$0.90 over the remainder of the forecast period driven by its purchasing power parity value and Canada-U.S. interest rate differentials.

- ◆ Economic growth weakens in the United States in 2008, but a recession is not assumed to occur. The slowdown is particularly evident in housing investment, which declines sharply in 2008, automobile expenditures and business investment. This slowdown reduces growth in those industries that specialize in these products.
- ◆ The high exchange rate and weak U.S. growth cause growth in Canada as a whole to slow to below 2% in 2008 and recover only slowly in 2009. The rapid increase in the Canadian dollar has had a significant negative impact on the manufacturing and tourism industries. It will take time to adjust to the higher exchange rate. Growth, nevertheless, recovers in 2010 and beyond to average near 2.5% in the last half of the forecast period.
- ◆ Interest rates fall in both Canada and the United States in line with weaker economic growth in 2008, but increase thereafter as growth strengthens. A tightening labour market in Canada causes interest rates to trend upward over the forecast period to allow the Bank of Canada to achieve its target inflation rate of about 2%.
- ◆ Federal and provincial government fiscal policy is assumed to be expansionary over the next 10 years. Corporate tax reductions and additional personal income tax reductions are assumed over the forecast period for the federal government. Provincial governments also are assumed to reduce taxes, and health expenditures continue to rise rapidly.
- ◆ It is assumed the federal government will increase annual immigration levels over the forecast period in line with labour force requirements.

External economic conditions are always subject to change and the likelihood of new developments that might alter these key assumptions are high.

Provincial Environment

Table 1 shows the outlook for the key indicators of the province's economic performance. The highlights include the following:

- ◆ Economic growth averages 2.3% per year over the medium term driven by strong growth in investment. It slows to 2.2% thereafter in line with slower economic growth in the province's major trading partners and increased difficulty in finding workers as retirements from the labour force rise.
- ◆ In the medium term, strong investment performance is the major source of growth in the economy. Important major projects behind this performance include several new wind and hydroelectric power plants, lumber and ethanol plants, the Manitoba Floodway and more than two billion dollars being spent in 2008 and 2009 on pipeline projects.

TABLE 1 KEY ECONOMIC INDICATORS, REST OF THE WORLD AND MANITOBA

	2006	2007	2008f	2009f	2010f	2011f	2012-16f*	2007-16f**
Raw Material Prices								
Agricultural Products \$US Inflation	7.9	14.7	2.1	2.2	2.0	1.7	2.1	3.3
Other Non-Energy Products \$US Inflation	53.9	5.7	-12.9	-7.8	-1.5	-1.8	-1.4	-2.5
WTI Oil Price (@ Cushing) \$US/BBL	66.1	72.0	84.0	80.0	79.3	79.1	78.4	78.6
Henry Hub Gas Price \$US/MMBTU	6.9	7.2	7.7	7.5	7.2	6.9	6.8	7.1
United States Economy								
Real GDP Growth (%)	2.9	2.2	1.8	2.7	2.8	2.4	2.3	2.3
GDP Deflator Inflation (%)	3.1	2.7	2.1	2.2	2.0	1.7	2.1	2.1
3 Month Treasury Bill Rate (%)	4.7	4.5	3.5	4.0	4.2	4.0	3.6	3.8
Canadian Economy								
Real GDP Growth (%)	2.8	2.5	1.8	2.4	2.6	3.0	2.5	2.5
GDP Deflator Inflation (%)	2.4	3.6	2.2	1.9	1.7	0.9	1.7	1.9
3 Month Treasury Bill Rate (%)	4.0	4.2	3.6	3.9	4.2	4.4	5.0	4.5
Exchange Rate \$US	0.88	0.93	0.98	0.95	0.92	0.91	0.90	0.92
Manitoba								
(Growth Rates %)								
Real GDP	3.2	2.1	2.6	2.7	1.4	2.5	2.2	2.3
Consumer Expenditures	3.3	3.3	4.2	3.6	2.8	2.7	2.8	3.0
Government Consumption Expenditures	1.5	1.7	2.2	2.4	2.5	2.6	2.8	2.5
Government Investment Expenditures	15.2	5.2	11.5	2.6	-3.2	0.4	2.4	2.9
Business Investment Expenditures	12.9	4.0	24.5	10.2	-14.6	3.1	1.5	3.5
Exports	2.6	2.1	0.3	1.7	2.2	2.1	1.8	1.7
Imports	6.5	2.3	7.1	4.8	-1.0	2.2	2.3	2.7
Population	0.4	0.7	0.8	0.9	1.0	1.1	1.2	1.0
Employment	1.2	1.6	1.6	1.2	0.3	0.9	0.9	1.0
Labour Force	0.7	1.7	1.1	1.0	0.7	0.9	0.9	1.0
Unemployment Rate (Level %)	4.3	4.4	3.9	3.7	4.0	4.0	3.9	4.0
CPI	2.0	2.0	1.3	1.6	2.3	1.8	2.1	2.0
Labour Income Per Hour	3.8	2.9	3.1	3.4	3.1	3.3	3.5	3.3

f = forecast

* Growth rates are averages for the period, while levels are 2016 values.

** Forecast period average.

Sources: Construction Sector Council; World Bank; International Monetary Fund; Statistics Canada.

- ◆ Employment growth averages 1.1% per year over the medium term in line with gross domestic product (GDP) growth of 2.3% and productivity growth averaging about 1.2%. Over the long term, slower GDP growth reduces employment growth to 0.9%.
- ◆ The labour market remains tight over the forecast period as the unemployment rate continues to trend down, falling below 4% in 2016. This reduction occurs in spite of rising net in-migration over the forecast period and reflects the significant aging of the labour force.
- ◆ The increase in net in-migration causes population growth to strengthen over the forecast period. Population growth averages 0.9% to 2012 and 1.2% thereafter.
- ◆ Consumer price index (CPI) inflation averages 2% over the forecast period. A tight labour market and higher productivity growth cause labour income earned per hour to rise in excess of inflation, averaging 3.3% per year.

3. INVESTMENT OUTLOOK

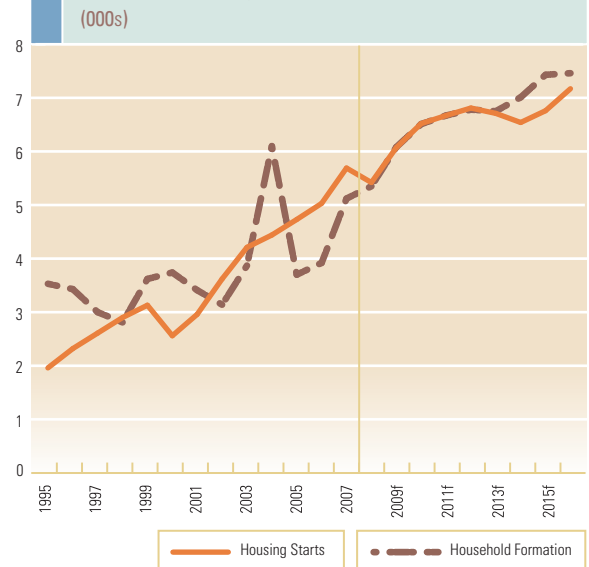
The province's outlook for investment is the key driver for construction trades demand. The current forecast shows strong growth in residential investment over the medium term followed by weaker growth to 2016 (see Table 2). Non-residential investment also exhibits strong growth to 2011 and slower growth thereafter as many large major projects are completed in the medium term.

Residential

The outlook for residential construction investment may be summarized as follows:

- ◆ Household formation rises over the forecast period as net in-migration increases to meet employment requirements in the face of growing retirements from the labour force.
- ◆ Housing starts exceed household formation in 2007 and fall slightly in 2008 (see Figure 1). They then continue to rise to a high of more than 7 thousand units in 2016 driven by rising household formation.
- ◆ New housing investment moves in line with housing starts, with growth averaging 3.8% over the forecast period.
- ◆ Renovation investment expenditures rise continuously throughout the forecast period driven by an increase in the number of households, rising real after-tax household income and continued relatively low interest rates. Such expenditures adjusted for inflation grow on average 2.8%.

Figure 1
HOUSING STARTS AND HOUSEHOLD
FORMATION, MANITOBA



f = forecast

Sources: Construction Sector Council; Statistics Canada; Canada Mortgage and Housing Corporation.

TABLE 2 INVESTMENT EXPENDITURES, MANITOBA
(\$2002 millions)

Investment	2006	2007	2008f	2009f	2010f	2011f	2012-16f*	2007-16f**
Housing Starts (000s)	5.0	5.7	5.4	6.1	6.5	6.7	7.2	6.6
Residential Construction	1,642	1,766	1,766	1,890	1,972	2,014	2,230	
% Change	3.7	7.6	0.0	7.0	4.3	2.1	2.1	3.1
New Housing	694	786	748	838	900	921	989	
% Change	3.2	13.2	-4.8	12.0	7.5	2.3	1.5	3.8
Renovations	948	980	1,018	1,052	1,072	1,093	1,241	
% Change	4.1	3.4	3.9	3.4	1.9	2.0	2.6	2.8
Non-Residential Investment	6,315	6,533	8,452	9,275	7,684	7,906	8,534	
% Change	14.7	3.5	29.4	9.7	-17.1	2.9	1.5	3.6
Engineering Construction	1,491	1,556	2,124	2,293	1,928	2,011	2,107	
% Change	41.1	4.3	36.5	8.0	-15.9	4.3	0.9	4.2
Building Construction	3,770	4,289	4,341	4,632	4,532	4,469	4,538	
% Change	14.6	13.8	1.2	6.7	-2.2	-1.4	0.3	2.0
Industrial	281	296	462	538	346	360	388	
% Change	43.4	5.5	55.9	16.5	-35.6	4.1	1.5	5.4
Commercial	309	310	349	367	347	352	389	
% Change	-2.0	0.4	12.5	5.1	-5.4	1.3	2.1	2.4
Institutional & Government	333	357	391	406	402	406	457	
% Change	-4.7	7.3	9.6	3.9	-1.0	1.0	2.4	3.3
Machinery & Equipment	3,901	4,014	5,126	5,670	4,660	4,776	5,193	
% Change	8.7	2.9	27.7	10.6	-17.8	2.5	1.7	3.4

f = forecast

* Growth rates and housing starts are averages for the period, while levels are 2016 values.

** Forecast period average

Sources: Construction Sector Council; Statistics Canada; Canada Mortgage and Housing Corporation.

Major Projects

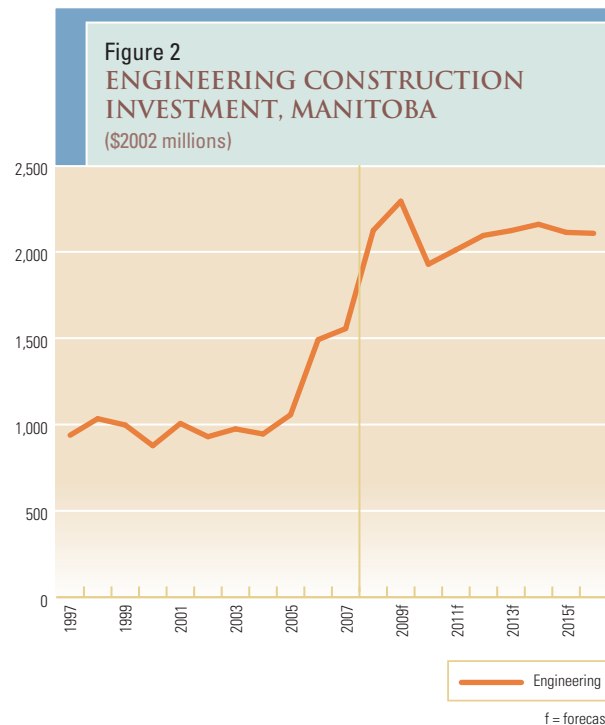
A list of major projects underway or planned for construction in the province provides an important set of information behind the outlook for non-residential investment and associated trades requirements. Economic models have difficulty in accurately predicting the occurrence, lumpiness and exact timing of construction expenditures and the associated number and types of trades required. The use of project information is an attempt to improve the accuracy of the outlook for the economy and trades requirements.

At present, there are a large number of major projects listed for construction in the province. The major projects in the forecast include only those identified before January 2008. While there are too many to list here, following are a few examples:

The projects of highest value in the forecast come from TransCanada and Enbridge pipelines, Manitoba Hydro and the Government of Manitoba. These include the development of major hydro facilities, the construction of the new Manitoba Hydro office building, the Manitoba Floodway project, the conversion of one pipeline from gas to oil and the construction of two more pipelines.

Other major projects include a new convention centre and a sports complex in Winnipeg, new ethanol plants throughout the province, food-processing facilities, the Winnipeg and Southport airport redevelopment and various Inco projects.

Additionally, a number of infrastructure projects scheduled for development include a Winnipeg water treatment plant, pipelines and highway construction throughout the province.

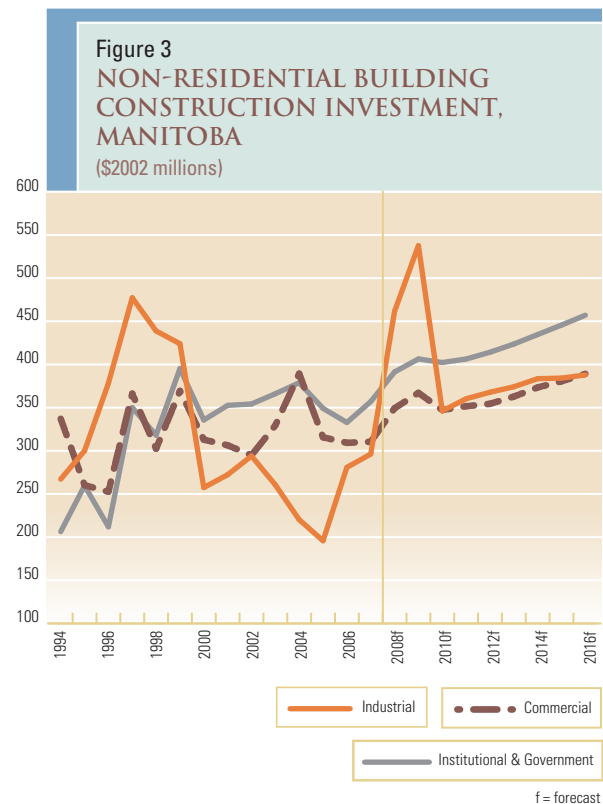


Sources: Construction Sector Council; Statistics Canada.

Non-Residential

The outlook for non-residential construction investment may be summarized as follows:

- Engineering construction expenditures experience a rapid increase over the medium term driven by the large increases in investment in electric power facilities, the Manitoba Floodway and three pipelines (see Figure 2). With the completion of many of these projects, engineering construction growth slows after a drop in 2010. Growth averages 4.2% over the forecast period.
- Increases in manufacturing and transportation and warehousing investment are responsible for the higher level of industrial building construction in 2008 and 2009 (see Figure 3). Over the 2007–2016 period, expenditure growth averages 5.4% with the largest increase observed in 2008.
- Commercial building construction grows in line with increased business activity and population growth. Expenditure growth averages about 2.4% over the forecast period.
- Institutional and government building investment expenditures trend up over the forecast period in line with increased population and additional spending on infrastructure projects.



Sources: Construction Sector Council; Statistics Canada.

4. CONSTRUCTION LABOUR MARKETS

The previously mentioned construction plans imply specific labour requirements for trades and occupations. In the CSC LMI system, employment in each trade and occupation is linked to spending on specific building types. Each link is defined by a measure of labour required for each million dollars of construction. This model structure distributes the changing mix of construction activity to the trades based on their specialization.

The CSC LMI system tracks employment, labour force, excess supply,¹ unemployment, apprenticeship and mobility for up to 31 selected trades and occupations (the CSC trades cover approximately 70% of total construction industry employment). Estimates are based on the 2001 Census, input from the industry and analysis of building patterns and labour requirements.² These estimates for Manitoba are sometimes limited by difficulties allocating workers to occupations, the small size of the workforce and the associated risks in statistical measurement. In some cases, information for the smaller trades and occupations is suppressed because of limited statistical reliability.³

Employment Trends

The CSC analysis of the construction labour market starts by linking employment in the trades and occupations to building activity by sector. Figure 4 tracks the cumulative growth of the value of residential and non-residential building construction, as well as total employment for the 31 CSC trades and occupations. The data is presented using index numbers (2001 = 100) to reflect the cumulative growth in each measure starting from 2001.

During the recent past, 2001–2007, Manitoba enjoyed generally steady growth in construction employment. Highlights for this period include the following:

- ◆ In 2001, the starting point for the analysis, Manitoba's construction industry was entering a short downturn in activity that included 2002.
- ◆ From 2003 to 2005, employment growth was moderate and spread equally among most of the 31 CSC trades and occupations.
- ◆ New industrial and engineering projects started in 2006 and boosted employment significantly.

The forecast period can be broken down into two distinct periods: 2008–2011 and 2012–2016.

The first forecast period is marked by big gains in every construction sector and trade for 2008 and 2009. Highlights include the following:

- ◆ Major engineering and industrial building projects start in 2007 and 2008.
- ◆ A modest drop in housing starts and a pause in residential work occur in 2008.

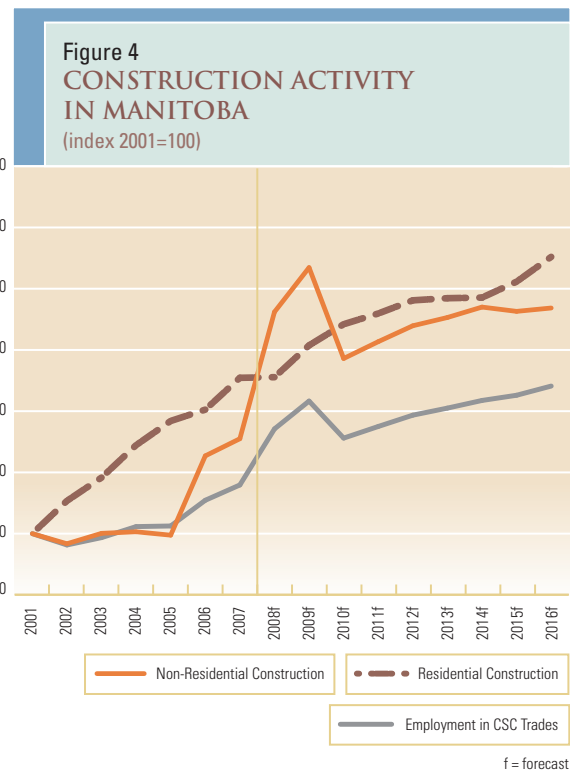
Near the end of the period, starting in 2010, many industrial and engineering projects end and there is a drop in activity. Highlights include the following:

- ◆ There is continuing growth, but with some moderation in residential activity.
- ◆ A decline in construction and employment occurs across all non-residential sectors.

The second forecast period, 2012–2016, features steady and manageable growth in all sectors. Highlights include the following:

- ◆ Overall employment in construction grows by less than 3% each year.
- ◆ The pace of expansion matches the general growth of the provincial economy and labour force.

While many trades and occupations work in several construction sectors, there are patterns of specialization that drive job growth as these cycles unfold. For example,



Sources: Construction Sector Council; Statistics Canada.

1 The CSC LMI system uses the concept of excess supply rather than the more traditional measure of unemployment. Excess supply measures the difference between the simulated value of the provincial construction labour force and employment. Excess supply can be measured as the number of workers or as a percentage of the labour force. The simulated labour force estimates all the workers employed or seeking employment in the province independent of their province of residence. Measures of the unemployment rate sometimes allocate construction workers to their province of residence rather than their province of employment.

2 Statistics Canada released detailed statistics for occupations and industries from the 2006 Census in early March 2008 and these results will be used to update the CSC LMI system for the 2009 release.

3 The CSC, in consultation with the provincial LMI committees, determines which trades and occupations are suppressed. In some cases industry input on the number of employed in the workforce is used to refine Census and other Statistics Canada sources. Construction millwrights and industrial mechanics and industrial instrument technicians and mechanics are the only trades suppressed in Manitoba.

engineering construction activity is linked to big projects and provides employment for the following trades and occupations:

- ◆ Concrete finishers
- ◆ Construction managers
- ◆ Heavy equipment operators
- ◆ Heavy-duty equipment mechanics
- ◆ Trades helpers and labourers
- ◆ Truck drivers
- ◆ Welders

These trades and occupations also contribute to industrial projects and work with the following trades:

- ◆ Boilermakers
- ◆ Construction millwrights
- ◆ Electricians
- ◆ Ironworkers
- ◆ Steam, pipe and gasfitters

Employment in these trades responds to the timing of non-residential building projects.

The following trades are tied to new residential, commercial and institutional building and renovation:

- ◆ Bricklayers
- ◆ Carpenters
- ◆ Electricians
- ◆ Painters and decorators
- ◆ Plasterers, drywall installers and finishers
- ◆ Plumbers
- ◆ Refrigeration and air conditioning mechanics
- ◆ Roofers and shinglers
- ◆ Sheet metal workers

These rough allocations of trades and occupations to sectors help evaluate the employment trends reported in Table 3.⁴ For example, employment in all the trades grows rapidly from 2007 to 2009 with overall growth in jobs averaging close to 10%. During the big decline in 2010, markets are weaker for all the trades.

The Available Workforce

Employers and workers respond in many ways to changing conditions in construction and related industries. Table 4 notes the projected change in the labour force⁵ given the scenario for construction activity. These projections suggest recruiting strategies that fit shifting circumstances in Manitoba construction markets. Conditions related to attracting and retaining the construction workforce change across the recent past and forecast period.

During the recent past, 2001–2007, market realities included the following:

- ◆ The growth in the construction labour force (9.6%) exceeded the overall growth in the province's labour force (7.1%).
- ◆ Moderate and manageable recruiting demands were up to 2005.
- ◆ In 2006, Manitoba began a general economic expansion led by construction that drove down excess supply.
- ◆ Overall provincial labour force growth fell below 1% in 2005 and 2006, setting the stage for significant competition for workers and the threat of labour shortages.
- ◆ The provincial response included a major turnaround in population growth and significant in-migration.
- ◆ Recruiting challenges for projects beginning in 2006 and 2007 included finding new entrants to the workforce that may have lacked needed skills.
- ◆ Competition to attract skilled workers from outside construction was intense.
- ◆ Shortages of skilled labour had been widely associated with delays in construction and rising costs.

The first forecast period, 2008–2011, calls for big gains in 2008 and 2009:

- ◆ Competition for industrial and engineering trades intensifies as the needed growth in this group rises as much as 10% annually, or between 20% and 40% over three or four years.
- ◆ For many of these trades, the people needed in the labour force are not available:
 - Unemployment has been drawn down to below minimum levels.
 - Skilled workers have been hired from other industries and regions.
- ◆ Government provisions to allow workers into Canada on temporary status may be important.
- ◆ The really intense competition occurs for workers with specialty skills.

Near the end of the period, it will be important to evaluate the timing of projects ending in 2010 and manage the release of many skilled workers at that time. This scenario anticipates that work will begin again as early as 2011. There will be significant demand in other industries and regions for these workers and plans might be made to retain as many as possible in Manitoba.

For the second forecast period, 2012–2016, Manitoba enjoys a balanced period of growing employment in the trades:

- ◆ There will be an ongoing need to integrate newly arrived workers into the construction industry, but the pace of arrival will be manageable.

⁴ Note that percentage changes reported in the last column of tables 3 and 4 are average annual compound growth rates over the period in consideration.
⁵ The labour force is defined as those people identifying themselves as members of the trade or occupation and working and/or seeking work in the industry.

TABLE 3 EMPLOYMENT CHANGE IN TRADES AND OCCUPATIONS IN MANITOBA, 2007-2016 (levels and annual percentage change)

Trades		2007e	2008f	2009f	2010f	2011f	2012-16f*
Boilermakers	(#)	9	77	37	-87	8	26
	(%)	4%	36%	13%	-26%	3%	1.9%
Bricklayers	(#)	12	14	14	-4	7	34
	(%)	5%	5%	5%	-1%	3%	2.3%
Carpenters	(#)	159	212	191	-48	95	436
	(%)	5%	6%	5%	-1%	3%	2.1%
Concrete Finishers	(#)	11	33	16	-18	9	35
	(%)	4%	11%	5%	-5%	3%	2.1%
Construction Managers	(#)	81	391	184	-314	55	159
	(%)	5%	25%	9%	-15%	3%	1.6%
Contractors and Supervisors	(#)	102	513	236	-415	85	238
	(%)	5%	23%	9%	-14%	3%	1.7%
Crane Operators	(#)	4	24	9	-17	3	8
	(%)	4%	27%	8%	-14%	3%	1.5%
Drillers and Blasters	(#)	3	19	6	-13	3	4
	(%)	4%	32%	8%	-15%	4%	1.3%
Electricians (including industrial and power system)	(#)	67	221	126	-177	47	198
	(%)	4%	14%	7%	-9%	3%	2.1%
Elevator Constructors and Mechanics	(#)	3	6	3	-2	1	9
	(%)	4%	8%	4%	-2%	2%	2.2%
Floor Covering Installers	(#)	22	9	20	12	12	62
	(%)	5%	2%	4%	2%	2%	2.3%
Gasfitters	(#)	3	33	15	-38	3	7
	(%)	5%	47%	15%	-32%	4%	1.6%
Glaziers	(#)	4	4	4	1	2	12
	(%)	4%	4%	4%	1%	2%	2.4%
Heavy Equipment Operators (except crane)	(#)	73	549	176	-352	85	130
	(%)	4%	31%	8%	-14%	4%	1.2%
Heavy-Duty Equipment Mechanics	(#)	10	77	27	-57	11	16
	(%)	5%	35%	9%	-17%	4%	1.1%
Insulators	(#)	5	12	7	-8	5	24
	(%)	3%	7%	4%	-4%	3%	2.4%
Ironworkers and Structural Metal Fabricators and Fitters	(#)	4	17	9	-13	4	18
	(%)	3%	13%	6%	-8%	3%	2.2%
Painters and Decorators	(#)	65	52	69	10	37	187
	(%)	5%	4%	5%	1%	2%	2.3%
Plasterers, Drywall Installers and Finishers, and Lathers	(#)	38	29	38	12	19	108
	(%)	5%	4%	5%	1%	2%	2.3%
Plumbers	(#)	40	110	68	-81	27	116
	(%)	5%	12%	7%	-7%	3%	2.1%
Refrigeration and Air Conditioning Mechanics	(#)	10	35	18	-27	7	36
	(%)	4%	13%	6%	-8%	2%	2.3%
Residential and Commercial Installers and Servicers	(#)	22	49	34	-31	14	62
	(%)	5%	10%	6%	-5%	3%	2.2%
Roofers and Shinglers	(#)	36	60	47	-23	17	99
	(%)	5%	8%	6%	-3%	2%	2.2%
Sheet Metal Workers	(#)	12	50	24	-37	8	35
	(%)	4%	17%	7%	-10%	3%	2.0%
Steamfitters, Pipefitters and Sprinkler System Installers	(#)	7	13	10	-5	6	39
	(%)	3%	5%	4%	-2%	2%	2.6%
Tilsetters	(#)	5	4	5	2	3	15
	(%)	5%	3%	4%	1%	2%	2.2%
Trades Helpers and Labourers	(#)	120	582	231	-364	114	311
	(%)	4%	19%	7%	-10%	3%	1.7%
Truck Drivers	(#)	22	140	49	-88	22	41
	(%)	5%	28%	8%	-13%	4%	1.3%
Welders and Related Machine Operators	(#)	12	107	43	-100	12	21
	(%)	5%	41%	12%	-24%	4%	1.3%
Total CSC Trades	(#)	960	3,462	1,727	-2,307	724	2,500
	(%)	5%	16%	7%	-9%	3%	1.9%

e = estimation

f = forecast

* The percentage changes in the final column are calculated as average annual compound growth rates over the 2012-2016 period.

Sources: Construction Sector Council; Statistics Canada.

**TABLE 4 LABOUR FORCE CHANGE IN TRADES AND OCCUPATIONS
IN MANITOBA, 2007-2016 (levels and annual percentage change)**

Trades		2007e	2008f	2009f	2010f	2011f	2012-16f*
Boilermakers	(#)	-1	68	43	-53	-14	14
	(%)	-1%	28%	14%	-15%	-5%	0.9%
Bricklayers	(#)	9	11	13	3	5	30
	(%)	3%	4%	4%	1%	2%	1.8%
Carpenters	(#)	127	173	183	45	73	385
	(%)	4%	5%	5%	1%	2%	1.7%
Concrete Finishers	(#)	12	25	20	-3	4	34
	(%)	4%	8%	6%	-1%	1%	1.1%
Construction Managers	(#)	85	366	217	-158	-26	112
	(%)	5%	22%	11%	-7%	-1%	1.1%
Contractors and Supervisors	(#)	130	497	282	-213	-28	188
	(%)	6%	20%	10%	-7%	-1%	1.3%
Crane Operators	(#)	5	23	11	-9	-2	6
	(%)	5%	25%	10%	-7%	-1%	1.0%
Drillers and Blasters	(#)	5	22	6	-7	-1	3
	(%)	8%	34%	7%	-8%	-1%	0.7%
Electricians (including industrial and power system)	(#)	58	168	137	-69	3	161
	(%)	4%	10%	7%	-3%	0%	1.6%
Elevator Constructors and Mechanics	(#)	0	4	4	1	1	9
	(%)	0%	5%	4%	1%	1%	2.0%
Floor Covering Installers	(#)	15	10	16	15	13	58
	(%)	3%	2%	3%	3%	2%	2.0%
Gasfitters	(#)	7	29	16	-23	-6	2
	(%)	9%	36%	15%	-18%	-6%	0.4%
Glaziers	(#)	2	3	3	2	2	11
	(%)	2%	3%	3%	2%	2%	2.1%
Heavy Equipment Operators (except crane)	(#)	130	503	243	-160	-8	109
	(%)	7%	27%	10%	-6%	0%	0.9%
Heavy-Duty Equipment Mechanics	(#)	24	60	28	-26	-3	13
	(%)	11%	24%	9%	-8%	-1%	0.8%
Insulators	(#)	-5	5	6	-3	2	22
	(%)	-3%	3%	3%	-1%	1%	2.0%
Ironworkers and Structural Metal Fabricators and Fitters	(#)	0	17	6	-6	0	14
	(%)	0%	11%	3%	-4%	0%	1.7%
Painters and Decorators	(#)	48	47	59	32	35	171
	(%)	3%	3%	4%	2%	2%	1.9%
Plasterers, Drywall Installers and Finishers, and Lathers	(#)	22	24	32	22	20	101
	(%)	2%	3%	3%	2%	2%	1.9%
Plumbers	(#)	34	81	75	-22	8	100
	(%)	4%	8%	7%	-2%	1%	1.7%
Refrigeration and Air Conditioning Mechanics	(#)	6	24	20	-9	1	29
	(%)	2%	8%	6%	-3%	0%	1.7%
Residential and Commercial Installers and Servicers	(#)	17	36	35	-5	6	53
	(%)	3%	7%	6%	-1%	1%	1.7%
Roofers and Shinglers	(#)	16	42	45	4	11	85
	(%)	2%	5%	5%	0%	1%	1.8%
Sheet Metal Workers	(#)	9	45	27	-17	-2	26
	(%)	3%	14%	7%	-5%	-1%	1.4%
Steamfitters, Pipefitters and Sprinkler System Installers	(#)	0	4	7	0	3	35
	(%)	0%	2%	2%	0%	1%	2.1%
Tilesetters	(#)	4	3	4	3	3	14
	(%)	3%	3%	3%	2%	2%	1.9%
Trades Helpers and Labourers	(#)	175	475	227	-65	46	300
	(%)	6%	14%	6%	-2%	1%	1.4%
Truck Drivers	(#)	36	133	56	-35	0	36
	(%)	7%	24%	8%	-5%	0%	1.0%
Welders and Related Machine Operators	(#)	14	103	46	-54	-12	11
	(%)	5%	36%	12%	-13%	-3%	0.6%
Total CSC Trades	(#)	985	3,020	1,880	-828	133	2,136
	(%)	4%	13%	7%	-3%	1%	1.5%

e = estimation

f = forecast

* The percentage changes in the final column are calculated as average annual compound growth rates over the 2012-2016 period.

Sources: Construction Sector Council; Statistics Canada.

- ◆ Demographic trends indicate that a relatively large number of older workers will consider retirement. Government, industry and contractor human resources strategies can target retaining these older workers.

These expected conditions confirm the wisdom of the many career promotion and industry recruiting projects that have been launched by the industry and government. Sustaining this momentum and adding targeted efforts is a natural response to the expected conditions. General promotion of construction and careers in the trades can be combined with trade-specific efforts aimed at filling the most dramatic gaps.

5. APPRENTICESHIP AND RELATED TRAINING

Labour market conditions noted above confirm the growing need for training facilities, programs and instructors. While apprenticeship provides the traditional and most important source of skilled labour, a need also exists for in-house and specialized programs aimed at new entrants for basic health and safety preparation, equipment and material suppliers, labour groups and industry associations providing training for supervisors/managers and upgrading skills.

The Apprenticeship Branch in Manitoba's Department of Competitiveness, Training and Trade has updated data on registrations and completions in apprenticeship programs. Analysis presented here invites a comparison of trends in the numbers of apprenticeship registrations and completions with the apparent needs of the industry. The Branch has approached the needs of the industry by both successfully encouraging new entrants into traditional programs and offering new programs.

Table 5 looks at both short- and long-term trends in registrations and completions for the construction trades up to 2007. The total number of registered apprentices in the system grew by 16% in 2007, adding to the 19% gain in 2006, indicating the immediate response to the growing demands. Completions declined 7% after rising 2% last year.

Looking at the longer term, the number of certificates issued in 2007 was far higher than the average number issued from 1998 to 2007. The data show above-average gains in registrations for key trades such as carpenters, crane operators, industrial electricians, industrial welders, insulators, sheet metal workers and steam and pipefitters, many of which have important skills to contribute to growing construction activity. Above-average gains in completions were also recorded for key trades such as boilermakers, bricklayers, industrial electricians, plumbers and steam and pipefitters.

At the same time, completions declined across all trades in a pattern repeated across the country. Indeed, completions declined in key trades such as carpenters, construction electricians, crane operators, refrigeration and air conditioning mechanics and sheet metal workers.

All apprenticeship programs are facing the frustrating reality that employers in a tight labour market will hold apprentices out of school. Hiring fourth year apprentices is an attractive strategy in today's high risk recruiting environment.

It will be important to sustain and grow apprenticeship and other training programs over the coming years. As 2010 approaches and major projects are scheduled for completion, the release of skilled trades into the labour market should not be regarded as a signal to ease up on these programs. As noted in the next sections, there will be continuing demands for skilled workers, especially to meet replacement demands as workers retire.

6. RETIREMENT DEMAND

The calculation of retirement demand estimates the number and proportion of the workforce in each trade that is expected to retire and be replaced between 2007 and 2016 to sustain the workforce present in 2006.

Table 6 notes the following trades and occupations with an above-average age profile. Retirement demand for the following trades could exceed 3% of the workforce each year later in the forecast period:

- ◆ Bricklayers
- ◆ Concrete finishers
- ◆ Construction managers
- ◆ Contractors and supervisors
- ◆ Crane operators
- ◆ Glaziers
- ◆ Heavy equipment operators
- ◆ Heavy-duty equipment mechanics
- ◆ Insulators
- ◆ Ironworkers
- ◆ Tilesetters
- ◆ Welders

The following trades are young and retirement demand rarely exceeds 2% of the workforce in the later period:

- ◆ Elevator constructors and mechanics
- ◆ Floor covering installers
- ◆ Gasfitters
- ◆ Roofers and shinglers
- ◆ Sheet metal workers
- ◆ Trades helpers and labourers

Other trades fall close to the average age profile for all construction workers.

TABLE 5 APPRENTICESHIP REGISTRATIONS AND COMPLETIONS, MANITOBA, 2007

	Total Apprentice Registrations December 31, 2007	% Change in Registrations 2006-07	New Apprenticeship Registrations	Completed Apprenticeships	Certificates of Qualifications Issued ⁸	% Change in Certificates of Qualifications Issued 2006-07	Average Number of Completed Apprenticeships 1998-2007	Red Seals Issued ⁹
Boilermaker	41	-5%	8	14	14	27%	7.8	14
Bricklayer	60	-15%	17	6	6	50%	3.7	6
Cabinetmaker	46	31%	14	6	6	20%	5.8	6
Carpenter	920	24%	290	58	84	-1%	43.3	84
Concrete Finisher ³	5	67%	1	0	0	-	0	0
Construction Electrician ¹	1,038	12%	304	110	127	-5%	84.8	127
Crane and Hoisting Equipment Operator ^{1 & 4}	51	24%	27	5	11	-21%	3.3	9
Drywall Mechanic ²	0	-	0	0	0	-	0.1	0
Floor Covering Installer ⁵	2	100%	1	0	0	-	0	0
Glazier	0	-100%	0	0	1	0%	0.1	1
Heavy-Duty Equipment Technician	213	29%	71	15	20	-39%	20.5	20
Industrial Electrician ¹	67	29%	29	11	28	47%	6.4	28
Industrial Mechanic (millwright)	176	19%	59	30	53	-35%	29.4	53
Industrial Welder	129	45%	48	9	30	-42%	12.2	30
Insulator (heat and frost) ⁶	41	86%	21	0	0	-	0	0
Ironworker ⁷	43	-17%	12	5	17	750%	2.5	17
Lather ²	0	-	0	0	0	-	0	0
Lather (interior systems mechanic) ²	51	6%	19	5	5	0%	0.5	5
Painter and Decorator	29	-38%	2	4	7	600%	3.4	7
Plumber	444	4%	123	39	43	5%	36.4	43
Power Electrician	126	18%	0	23	24	-20%	12.7	0
Refrigeration and Air Conditioning Mechanic ¹	243	10%	72	19	25	-17%	18.8	20
Roofer	34	89%	16	0	0	-100%	0.1	0
Sheet Metal Worker	109	24%	39	8	8	-38%	9.8	8
Sprinkler System Installer ¹	48	23%	21	9	9	125%	6.2	9
Steam/Pipefitter ¹	67	29%	30	10	10	25%	7.7	10
Steel Fabricator	3	0%	0	0	1	0%	0.8	1
Total	3,986	16%	1,224	386	529	-7%	316.3	498

¹ Compulsory certification trades

² In 2001, the regulations for the trades of lather and drywall mechanic were repealed and replaced by lather (interior systems mechanic).

³ The trade of concrete finisher was not designated until March 6, 2003.

⁴ The trade of crane and hoisting equipment operator was not designated until July 6, 2000.

⁵ The trade of floor covering installer was not designated until January 18, 2006.

⁶ The trade of insulator (heat and frost) was not designated until January 18, 2006.

⁷ The trade of ironworker was not designated until November 6, 2000.

⁸ Includes certificates issued through trades qualification and grandparenting

⁹ Includes certificates issued through trades qualification

Source: Apprenticeship Branch, Manitoba Department of Competitiveness, Training and Trade.

The age distribution patterns are combined with historical trends of exit (and mortality) for the industry. This analysis highlights work-related factors that are naturally associated with occupations, including the need for managers, supervisors and foremen to have more experience, and the reality that trades such as roofers and shinglers, helpers and labourers and floor covering installers are physically challenging for older workers.

As the expected number of exits grows later in the forecast period, it is possible for retirement demand to actually exceed the demand for new workers related to additional construction activity. These demographic trends will gradually erode the available workforce and will create labour shortages in the face of what might now be considered moderate demand.

TABLE 6 RETIREMENT DEMAND IN MANITOBA

Trades	Average Age	Exits from the Labour Force (Retirement Demand)			Retirement Demand as a % of Labour Force (Previous Year)	
		2007	2007	2016	Total 2007-16	2007 (%)
Boilermakers	36	2	4	27	0.7	2.0
Bricklayers	48	12	7	94	4.5	3.8
Carpenters	41	71	78	762	1.9	2.6
Concrete Finishers	44	5	8	65	1.6	3.1
Construction Managers	44	34	43	387	2.2	3.4
Contractors and Supervisors	44	44	66	558	2.0	3.8
Crane Operators	44	2	2	23	2.3	3.5
Drillers and Blasters	41	1	1	12	1.8	2.5
Electricians (including industrial and power system)	39	29	31	312	1.7	2.2
Elevator Constructors and Mechanics	30	0	0	1	0.1	0.2
Floor Covering Installers	37	4	8	64	0.8	1.9
Gasfitters	40	2	1	9	2.1	1.1
Glaziers	45	1	3	23	1.3	4.1
Heavy Equipment Operators (except crane)	43	43	42	431	2.5	3.1
Heavy-Duty Equipment Mechanics	43	3	6	39	1.1	3.0
Insulators	43	6	6	57	2.8	4.2
Ironworkers and Structural Metal Fabricators and Fitters	49	4	6	53	2.7	5.9
Painters and Decorators	40	27	33	311	1.8	2.7
Plasterers, Drywall Installers and Finishers, and Lathers	38	8	16	129	0.9	2.1
Plumbers	41	16	21	195	1.6	2.7
Refrigeration and Air Conditioning Mechanics	42	8	7	62	2.7	2.9
Residential and Commercial Installers and Servicers	37	4	10	68	0.7	2.2
Roofers and Shinglers	36	7	14	103	0.8	1.9
Sheet Metal Workers	37	2	5	31	0.6	1.8
Steamfitters, Pipefitters and Sprinkler System Installers	41	7	7	70	2.2	2.8
Tilesetters	48	3	4	39	2.7	4.6
Trades Helpers and Labourers	34	27	45	368	0.8	1.6
Truck Drivers	42	9	12	111	1.8	2.9
Welders and Related Machine Operators	41	4	7	58	1.3	3.0
Total CSC Trades	40	395	496	4,487	1.7	2.6

Source: Construction Sector Council; Statistics Canada.

7. MARKET RANKINGS AND MOBILITY

This section draws together industry input and analysis of labour requirements, supply features, retirements and training systems to create a summary view of market conditions.

Rankings

An annual measure of regional market conditions is shown for each trade and occupation in the form of a ranking from 1 (excess supply) to 5 (intense competition for qualified workers). Each ranking represents conditions for a construction trade or occupation in the province. Each ranking is based on four measures:

- ◆ The rate of excess supply at the seasonal peak of activity
- ◆ The annual change in employment
- ◆ Retirement demand as a percentage of the workforce
- ◆ Industry consultation

Each of these measures is assigned a ranking based on market conditions from the employer's point of view.

When market conditions tighten, labour shortages are rarely observed directly. It is common, however, to observe symptoms of a shortage, such as changes in market conditions, including delays in projects, increases in overtime payments, modified hiring practices and concerns about safety and quality.

At the end of this section, the analysis considers how provincial and regional market assessments might be altered by mobility. New workers entering a tight market could

potentially ease conditions and reduce the ranking. Similarly, workers may leave a weak market to seek jobs elsewhere.

Figure 5 provides a broad overview of the construction labour market in the province.⁶ It tracks total employment, the labour force and the rate of excess supply in the 31 trades and occupations included in the CSC LMI system.

Highlights of local construction labour market conditions over the 2001–2007 period include the following:

- ◆ Employment growth exceeded labour force growth and the capacity of the training system to teach needed skills.
- ◆ Excess supply dropped to record low levels in 2006 and 2007, suggesting that needed workers were not available during summer peaks.

The increase in employment in 2008 and 2009 drives excess supply rates even lower.

In 2010, the sudden 8.5% drop in overall employment drives excess supply up over 5%. Excess supply jumps 8% or more for some of the industrial and engineering construction trades.

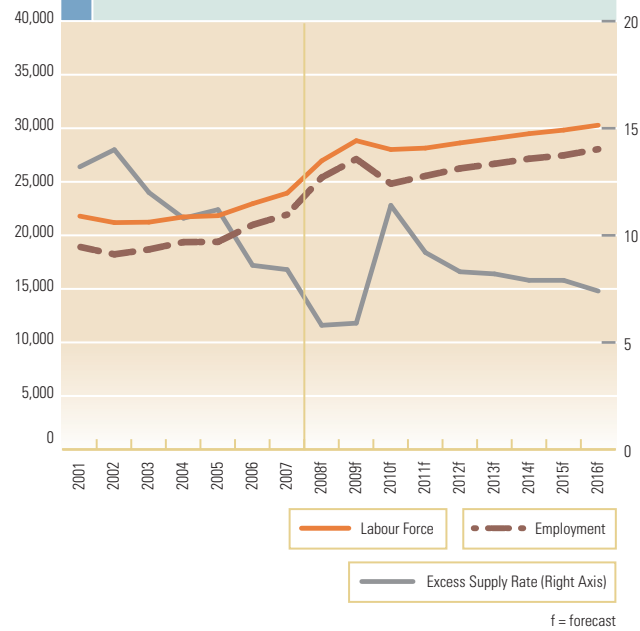
The remainder of the forecast shows the following:

- ◆ Moderate growth resumes and almost half of the new unemployed from 2010 are absorbed back into the workforce by 2014.
- ◆ Modest growth in the construction workforce exceeds the trend rate of growth in the overall provincial labour force.
- ◆ Retirement demands of more than 2% make market conditions tight for several trades and occupations.

Table 7 draws together all the analysis into a regional ranking with comments on the specific conditions for individual trades and occupations. Rankings include the results of consultations with contractors and the building trades unions on market conditions for 2007 and 2008. Industry stakeholders reported their observations by both ranking each trade on the scale noted on page 14, as well as offering specific comments. These rankings were compared to the initial results using the CSC LMI system.

Stakeholders responding to an industry survey reflected the general conclusions reported here that all construction labour markets are tight and ranked 4 or 5. Many also reflected the change anticipated here that markets will tighten further from 2007 to 2008 with several trade rankings rising from 4 to 5, for example. In many of the survey comments, the stakeholders cited the start up of new projects and refer to the same trades noted in Table 7.

Figure 5
CONSTRUCTION LABOUR MARKET
CONDITIONS FOR CSC TRADES IN
MANITOBA, 2001-2016



Sources: Construction Sector Council; Statistics Canada.

Mobility

Rankings noted on the following pages refer to conditions in the Manitoba construction labour markets before any allowance is included for mobility across other industries or provinces.

Two specific situations can be evaluated. First, labour markets for the trades are assessed in industries outside construction in Manitoba. Second, the rankings for each trade are assessed in other provinces. In some situations and market conditions, the CSC LMI system identifies the potential for mobility. Cases where this potential mobility is likely to actually balance markets (workers actually relocate) are described below.⁷

Mobility across industries in Manitoba is not likely to change the rankings for trades and occupations over the forecast period. There are several examples of declining employment in the CSC trades working outside construction in the 2008–2010 period, but these involve small numbers of workers and unemployment rates in these markets are already low. There are just a few examples of trades where employment declines outside construction and this coincides with tight markets in construction. These include sheet

6 Readers will notice the excess supply rate in Figure 5 is higher than the average unemployment rate reported by Statistics Canada's Labour Force Survey for the construction industry as a whole. This occurs because the 31 trades and occupations selected for the CSC LMI system do not represent the entire construction industry workforce. About one third to one quarter of the construction workforce does not work on job sites (e.g., estimators, office support, engineers, managers) and this group of workers faces lower seasonal fluctuations in employment. As a consequence, the reported unemployment rate for that group is well below the rates reported here for the CSC trades and occupations. The CSC LMI system is managed to broadly reconcile these differences and assure that over the long term the CSC measures are consistent with Statistics Canada trends.

7 There are many circumstances when potential mobility will not lead to actual market changes. For example, the numbers of available workers may be small, thus reducing the likelihood that anyone will move. In other cases workers may lack needed skills or experience.

MARKET RANKINGS

- 1 Workers meeting employer qualifications are available in local markets to meet an increase in demand at the current offered rate of compensation and other current working conditions. Excess supply is apparent and there is a risk of losing workers to other markets.
- 2 Workers meeting employer qualifications are available in local or adjacent markets to meet an increase in demand at the current offered rate of compensation and other working conditions.
- 3 The availability of workers meeting employer qualifications in the local market may be limited by large projects, plant shutdowns or other short-term increases in demand. Similar or weaker conditions exist in adjacent markets so that mobility is an option. Employers may need to compete to attract needed workers. Established patterns of recruiting and mobility are sufficient to meet job requirements.
- 4 Workers meeting employer qualifications are generally not available in local and adjacent markets to meet any increase. Employers will need to compete to attract additional workers. Recruiting and mobility may extend beyond traditional sources and practices.
- 5 Needed workers meeting employer qualifications are not available in local or adjacent markets to meet current demand so that projects or production may be delayed or deferred. There is excess demand, competition is intense and recruiting reaches to remote markets.

TABLE 7 MARKET RANKINGS AND COMMENTS FOR TRADES AND OCCUPATIONS IN MANITOBA

Trades	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Boilermakers	3	4	4	3	3	3	3	3	3	3
<i>Comments: Industrial construction projects increase 80% between 2007 and 2009. The workforce is fully employed in 2008. Projects drop by 35% in 2010. Growth in industrial building gradually decelerates from 5% to 1% over the remainder of the forecast period. Stable markets in the later period of the scenario restore more normal recruiting and job search conditions. The relatively young age profile creates moderate pressures on the market later in the period.</i>										
Bricklayers	4	4	4	3	4	4	4	4	4	4
<i>Comments: Moderately strong employment growth from 2007 to 2009 tightens markets. After the dip in 2010, growth is stable and recruiting conditions revert to normal. This trade has among the oldest age profiles and high levels of retirement demand add to recruiting challenges late in the forecast period.</i>										
Carpenters	4	4	4	4	4	4	3	3	3	4
<i>Comments: Moderately strong employment growth from 2007 to 2009 tightens markets. After the dip in 2010, growth is stable and recruiting conditions revert to normal. This trade has an average age profile and moderate levels of retirement demand do not tighten markets until the very end of the forecast period.</i>										
Concrete Finishers	4	4	4	4	3	4	3	3	4	4
<i>Comments: Strong employment growth from 2007 to 2009 tightens markets. After the dip in 2010, growth is stable and recruiting conditions revert to normal. This trade has an average age profile and moderate levels of retirement demand do not tighten markets until the very end of the forecast period.</i>										
Construction Managers	4	4	4	3	3	3	3	3	3	4
<i>Comments: Led by strong industrial construction, work for this group expands 36% from 2007 to 2009. Recruiting experienced and skilled managers is extremely difficult at this time. Employment drops 15% in 2010 and there is a risk that managers may retire. Stable employment later in the forecast period allows training to catch up and recruiting returns to normal. The older age profile gradually adds to demand and markets are tight at the end of the period.</i>										
Contractors and Supervisors	4	4	4	3	3	3	3	4	4	4
<i>Comments: Led by strong industrial construction, work for this group expands 33% from 2007 to 2009. Recruiting experienced and skilled supervisors is extremely difficult during this period. Employment drops 14% in 2010 and there is a risk that supervisors may retire. Stable employment later in the forecast period allows training to catch up and recruiting returns to normal. The older age profile gradually adds to demand and markets are tight at the end of the period.</i>										
Crane Operators	4	4	4	3	3	4	4	4	4	4
<i>Comments: Driven by industrial and engineering projects, employment grows 38% between 2007 and 2009. The workforce is fully employed in 2008. Employment drops 17% in 2010 and there is a risk that workers may retire. Growth in employment gradually decelerates from 3% to 1% over the remainder of the forecast period. Stable markets in the later period of the scenario restore more normal recruiting and job search conditions. This trade has one of the oldest age profiles and hiring pressures grow later in the period.</i>										
Drillers and Blasters – Surface Mining, Quarrying and Construction	4	4	3	3	3	3	3	3	3	3
<i>Comments: Driven by industrial and engineering projects, employment grows 43% between 2007 and 2009. Employment drops 15% in 2010 and there is a risk that workers may retire. Growth in employment gradually decelerates from 4% to 1% over the remainder of the forecast period. Stable markets later in the scenario restore more normal recruiting and job search conditions. This trade has an average age profile and hiring pressures are moderate later in the period.</i>										
Electricians (including industrial and power system)	4	4	4	3	3	4	3	3	3	3
<i>Comments: Working across many sectors smoothes out the cycles in the early years, but employment grows 22% from 2007 to 2009 and the available workforce is fully employed. Employment falls 9% in 2010. This is a young workforce and retirement demand does not interfere with stable market conditions later in the forecast period.</i>										
Elevator Constructors and Mechanics	3	4	4	3	3	3	3	3	3	3
<i>Comments: The balance of work across sectors creates moderate employment growth averaging 2% across most of the forecast period. The age profile is very young and retirement demand is minimal across the period.</i>										
Floor Covering Installers	4	4	4	4	3	3	3	3	3	3
<i>Comments: Moderately strong employment growth from 2007 to 2009 tightens markets. After the dip in 2010, growth is stable and recruiting conditions revert to normal. This trade has a young age profile and relatively low levels of retirement demand do not interfere with stable markets late in the forecast period.</i>										

Trades	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Gasfitters	3	4	4	3	3	3	3	3	3	3
<i>Comments: Driven by industrial and engineering projects, employment grows 70% between 2007 and 2009. The workforce is fully employed in 2008. Employment drops 32% in 2010. Growth in employment gradually decelerates from 4% to 1% over the remainder of the forecast period. Stable markets in the later period of the scenario restore more normal recruiting and job search conditions. This trade has an average age profile and hiring pressures are moderate later in the period.</i>										
Glaziers	3	4	4	4	4	4	4	4	4	4
<i>Comments: The balance of work across sectors creates moderately strong employment growth of between 1% and 4%. Markets remain tight.</i>										
Heavy Equipment Operators (except crane)	4	4	4	3	3	3	3	3	3	3
<i>Comments: Driven by industrial and engineering projects, employment grows 41% between 2007 and 2009. The workforce is fully employed in 2008. Employment drops 15% in 2010. Growth in employment gradually decelerates from 4% to 1% over the remainder of the forecast period. Stable markets in the later period of the scenario restore more normal recruiting and job search conditions. This trade has an average age profile and hiring pressures are moderate later in the forecast period.</i>										
Heavy-Duty Equipment Mechanics	3	4	4	3	3	4	3	3	3	4
<i>Comments: Driven by industrial and engineering projects, employment grows 47% between 2007 and 2009. The workforce is fully employed in 2008. Employment drops 17% in 2010. From 2011 to 2016, growth in employment gradually decelerates from 4% to 1%. Stable markets in the later period of the scenario restore more normal recruiting and job search conditions. This trade has an average age profile and hiring pressures are moderate later in the forecast period.</i>										
Insulators	3	4	4	3	4	4	4	4	4	4
<i>Comments: Employment growth for this trade is strong from 2007 to 2009, dips in 2010 and resumes moderate growth late in the forecast period. The trade has an older age profile and retirement demand tightens markets late in the period.</i>										
Ironworkers and Structural Metal Fabricators and Fitters	3	4	4	3	4	4	4	4	4	4
<i>Comments: Employment growth is 19% from 2007 to 2009 with an 8% dip in 2010. This is a typical cycle for trades in Manitoba and markets are tight in 2008 and 2009. Normal recruiting conditions resume late in the forecast period. The trade has an older age profile and retirement demand tightens markets late in the period.</i>										
Painters and Decorators	3	4	4	4	4	4	3	3	3	4
<i>Comments: The balance of work in residential and commercial sectors creates moderately strong employment growth of between 1% and 4%. Markets remain tight. The age profile is average and retirement demand does not tighten markets until the end of the forecast period.</i>										
Plasterers, Drywall Installers and Finishers, and Lathers	3	3	4	3	3	3	3	3	3	3
<i>Comments: The balance of work in residential and commercial sectors creates moderately strong employment growth of between 1% and 4%. Markets rarely get tight. The age profile is younger than average and retirement demand does not tighten the market.</i>										
Plumbers	3	4	4	3	3	3	3	3	3	4
<i>Comments: Employment growth is 19% from 2007 to 2009 with a 7.5% dip in 2010. This is a typical cycle for trades in Manitoba and markets are tight in 2008 and 2009. Normal recruiting conditions resume late in the forecast period. The trade has an average age profile and retirement demand tightens markets at the end of the period.</i>										
Refrigeration and Air Conditioning Mechanics	3	4	4	3	3	3	3	4	4	4
<i>Comments: Employment growth is 20% from 2007 to 2009 with an 8% dip in 2010. This is a typical cycle for trades in Manitoba and markets are tight in 2008 and 2009. Normal recruiting conditions resume late in the forecast period. The trade has an older average age profile and retirement demand tightens markets at the end of the period.</i>										
Residential and Commercial Installers and Servicers	4	4	4	3	3	3	3	3	3	3
<i>Comments: The balance of work in residential and commercial sectors creates moderately strong employment growth of between 1% and 4%. Markets remain tight. The age profile is average and retirement demand does not tighten markets until the end of the forecast period.</i>										
Roofers and Shinglers	4	4	4	4	3	3	3	3	3	4
<i>Comments: The balance of work in residential and commercial sectors creates moderately strong employment growth of between 1% and 4%. Markets are tight between 2007 and 2010. The age profile is younger than average and retirement demand does not tighten markets.</i>										
Sheet Metal Workers	4	4	4	3	3	3	3	3	3	3
<i>Comments: Employment growth is 26% from 2007 to 2009 with a 10% dip in 2010. This is a moderate cycle for trades in Manitoba and the available workforce is fully employed in 2008 and 2009. Normal recruiting conditions resume late in the forecast period. The trade has a young average age profile and retirement demand does not tighten markets.</i>										
Steamfitters, Pipefitters and Sprinkler System Installers	3	3	4	3	4	4	3	4	3	4
<i>Comments: This trade has a very smooth pattern of demand with employment growing up to 5%. Balanced growth creates normal recruiting conditions after 2011. The trade has an average age profile and retirement demand tightens markets in 2016.</i>										
Tilesetters	4	4	4	4	4	4	4	4	4	4
<i>Comments: Employment growth averages 2% and the older age profile keeps markets tight every year.</i>										
Trades Helpers and Labourers	4	4	4	3	3	3	3	3	3	3
<i>Comments: Driven by industrial and engineering projects, employment grows 27% between 2007 and 2009. Employment drops 10% in 2010 when many industrial and engineering projects end. Growth in employment gradually decelerates from 4% to 1% over the remainder of the forecast period. Stable markets in the later period of the scenario restore more normal recruiting and job search conditions. This trade has a young age profile and hiring pressures are limited later in the period.</i>										
Truck Drivers	4	4	4	3	3	4	4	4	4	4
<i>Comments: Driven by industrial and engineering projects, employment grows 38% between 2007 and 2009. The workforce is fully employed in 2008. Employment drops 13% in 2010 when many industrial and engineering projects end. Growth in employment gradually decelerates from 4% to 1% over the remainder of the forecast period. Stable markets in the later period of the scenario restore more normal recruiting and job search conditions. This trade has an older age profile and hiring pressures tighten markets later in the period.</i>										
Welders and Related Machine Operators	3	4	4	3	3	3	3	3	3	3
<i>Comments: Driven by industrial and engineering projects, employment grows 58% between 2007 and 2009. The workforce is fully employed in 2008. Employment drops 12% in 2010 when many industrial and engineering projects end. From 2012 to 2016, growth in employment gradually decelerates from 4% to 1% over the remainder of the forecast period. Stable markets in the later period of the scenario restore more normal recruiting and job search conditions. This trade has an older age profile and hiring pressures tighten markets later in the period.</i>										

Source: Construction Sector Council.

metal workers and welders. These circumstances likely relate to the ongoing weakness in manufacturing industries. For construction employers to take advantage of the situation, the skills available in manufacturing must be close to those needed in construction.

The potential for regional mobility is estimated by comparing the rankings for each trade and province with the values developed here for Manitoba. Workers are more likely to move when the following conditions exist:

- ◆ Job opportunities are available outside their province.
- ◆ A significant number of workers are unemployed locally.⁸
- ◆ There is a tradition of past mobility for the trades.

Conditions in other provinces in 2008 and 2009 have created limited supplies of the trades needed in Manitoba. This makes it unlikely that workers will move among markets unless Manitoba is able to attract skilled trades who left the province and are now employed in other provinces. The dramatic downturn in 2010 raises the potential for Manitoba trades to be drawn into other provinces.

This pattern of projects that are scheduled to end in 2010 and 2011 is common to many provinces. LMI committees, noting this scheduling, have commented that the risk of coincident demands in 2008 and 2009 may well cause projects to be extended or delayed such that work will continue over the 2010 and 2011 period. While this change was not apparent in project schedules available to the CSC early in 2008, the situation will be revisited in the 2009 *Construction Looking Forward*.

If the big resource-based project schedules are not altered, many of the key industrial and engineering trades in Manitoba will find work in other provinces. These trades include the following:

- ◆ Boilermakers
- ◆ Cement finishers
- ◆ Construction managers
- ◆ Contractors and supervisors
- ◆ Heavy equipment operators
- ◆ Heavy-duty equipment mechanics
- ◆ Insulators
- ◆ Truck drivers
- ◆ Welders

Patterns that emerge later in the forecast period may shift the regional movement noted previously. Construction activity and employment in Manitoba in all sectors and trades rises across the last years of the scenario. This pattern is reversed in the other Western provinces as activity and employment either flattens out or declines. This suggests the long-term possibility that Manitoba may draw workers back from neighbouring provinces.

A more detailed description of the potential for regional mobility among the provinces will be provided in the national summary.

⁸ Research funded by the CSC shows that the strongest motivator for mobility is a weak market in the region of origin. This suggests that mobility in the CSC LMI system is more likely to occur when the market rankings are 1 or 2 in the source regions for workers. This finding implies lower levels of regional mobility in the current national labour markets as most of the "weaker" conditions occur in markets that have reached a balance. Few construction labour markets in Canada have excess supply conditions.

APPENDIX A – DETAILED TABLES

LABOUR FORCE, EMPLOYMENT AND EXCESS SUPPLY RATES FOR CONSTRUCTION TRADES, MANITOBA

Trades	2007e	2008f	2009f	2010f	2011f	2012f	2013f	2014f	2015f	2016f
Total CSC Trades										
Labour Force	23,943	26,962	28,842	28,015	28,147	28,629	29,056	29,494	29,829	30,284
Change	985	3,020	1,880	-828	133	481	427	438	335	455
% Change	4.3	12.6	7.0	-2.9	0.5	1.7	1.5	1.5	1.1	1.5
Employment	21,938	25,400	27,127	24,820	25,544	26,250	26,680	27,152	27,470	28,044
Change	960	3,462	1,727	-2,307	724	706	430	472	318	574
% Change	4.6	15.8	6.8	-8.5	2.9	2.8	1.6	1.8	1.2	2.1
Construction	14,962	18,322	19,935	17,450	17,977	18,487	18,717	18,991	19,095	19,465
Maintenance	6,976	7,078	7,192	7,370	7,567	7,763	7,963	8,161	8,375	8,579
Excess Supply Rate %	8.4	5.8	5.9	11.4	9.2	8.3	8.2	7.9	7.9	7.4
Boilermakers										
Labour Force	247	315	358	305	291	289	291	296	300	304
Change	-1	68	43	-53	-14	-2	3	5	4	4
% Change	-0.5	27.6	13.5	-14.9	-4.5	-0.7	0.9	1.7	1.3	1.2
Employment	218	295	332	245	253	258	264	271	274	278
Change	9	77	37	-87	8	5	6	7	4	4
% Change	4.2	35.5	12.5	-26.3	3.3	2.1	2.3	2.5	1.3	1.5
Construction	138	215	251	162	168	172	175	179	179	181
Maintenance	80	80	82	83	85	87	90	92	95	97
Excess Supply Rate %	11.9	6.4	7.2	19.7	13.1	10.6	9.3	8.6	8.6	8.4
Bricklayers										
Labour Force	283	294	307	310	316	322	327	332	338	346
Change	9	11	13	3	5	6	5	5	6	8
% Change	3.2	4.0	4.4	0.9	1.7	2.0	1.6	1.4	1.9	2.4
Employment	256	269	283	279	286	293	298	303	310	320
Change	12	14	14	-4	7	7	5	5	7	10
% Change	4.7	5.3	5.2	-1.4	2.5	2.4	1.6	1.6	2.5	3.1
Construction	133	144	157	149	153	156	157	159	162	168
Maintenance	123	125	127	130	134	137	141	144	148	151
Excess Supply Rate %	9.6	8.5	7.8	10.0	9.3	8.9	8.9	8.8	8.2	7.6
Carpenters										
Labour Force	3,787	3,960	4,142	4,187	4,261	4,348	4,414	4,472	4,545	4,645
Change	127	173	183	45	73	87	67	58	73	100
% Change	3.5	4.6	4.6	1.1	1.7	2.0	1.5	1.3	1.6	2.2
Employment	3,437	3,649	3,840	3,792	3,887	3,987	4,048	4,109	4,199	4,323
Change	159	212	191	-48	95	99	62	60	90	125
% Change	4.8	6.2	5.2	-1.2	2.5	2.6	1.6	1.5	2.2	3.0
Construction	1,997	2,185	2,352	2,267	2,321	2,380	2,401	2,420	2,467	2,550
Maintenance	1,440	1,463	1,488	1,525	1,566	1,606	1,647	1,688	1,731	1,773
Excess Supply Rate %	9.2	7.9	7.3	9.4	8.8	8.3	8.3	8.1	7.6	6.9

Trades	2007e	2008f	2009f	2010f	2011f	2012f	2013f	2014f	2015f	2016f
Concrete Finishers										
Labour Force	320	344	364	361	365	372	379	386	391	398
Change	12	25	20	-3	4	7	7	7	6	7
% Change	3.8	7.7	5.8	-0.9	1.2	2.0	1.8	1.8	1.5	1.7
Employment	290	322	339	321	330	339	346	353	358	366
Change	11	33	16	-18	9	9	6	7	5	8
% Change	3.9	11.2	5.0	-5.3	2.9	2.8	1.9	2.0	1.5	2.2
Construction	131	161	175	153	158	162	164	167	167	170
Maintenance	159	161	163	168	172	177	181	186	191	195
Excess Supply Rate %	9.3	6.4	7.0	11.1	9.6	8.9	8.8	8.5	8.5	8.1
Construction Managers										
Labour Force	1,671	2,037	2,254	2,096	2,070	2,091	2,113	2,140	2,155	2,182
Change	85	366	217	-158	-26	21	22	27	15	27
% Change	5.4	21.9	10.7	-7.0	-1.2	1.0	1.1	1.3	0.7	1.3
Employment	1,581	1,971	2,156	1,841	1,897	1,948	1,974	2,007	2,018	2,055
Change	81	391	184	-314	55	52	26	32	12	37
% Change	5	25	9	-15	3	3	1	2	1	2
Excess Supply Rate %	5.4	3.2	4.4	12.1	8.4	6.8	6.5	6.2	6.4	5.8
Contractors and Supervisors										
Labour Force	2,373	2,870	3,152	2,939	2,912	2,949	2,988	3,034	3,061	3,101
Change	130	497	282	-213	-28	37	39	46	27	39
% Change	5.8	20.9	9.8	-6.7	-0.9	1.3	1.3	1.5	0.9	1.3
Employment	2,264	2,777	3,013	2,598	2,683	2,760	2,803	2,853	2,872	2,921
Change	102	513	236	-415	85	77	43	51	18	49
% Change	4.7	22.7	8.5	-13.8	3.3	2.9	1.6	1.8	0.6	1.7
Construction	1,702	2,206	2,433	2,003	2,072	2,133	2,160	2,194	2,196	2,229
Maintenance	562	571	580	595	611	627	643	659	676	692
Excess Supply Rate %	4.6	3.2	4.4	11.6	7.9	6.4	6.2	5.9	6.2	5.8
Crane Operators										
Labour Force	95	119	130	121	119	120	122	124	124	125
Change	5	23	11	-9	-2	1	2	2	0	1
% Change	5.2	24.5	9.7	-7.3	-1.3	1.1	1.3	1.6	0.4	0.6
Employment	87	111	120	103	106	109	111	113	113	114
Change	4	24	9	-17	3	3	2	2	0	1
% Change	4.3	27.4	7.9	-14.4	3.2	3.0	1.7	2.1	-0.2	1.0
Construction	79	103	111	94	97	100	101	104	103	104
Maintenance	8	8	9	9	9	9	9	10	10	10
Excess Supply Rate %	8.5	6.4	7.9	14.9	11.1	9.4	9.1	8.6	9.1	8.7
Drillers and Blasters										
Labour Force	65	87	93	86	85	86	88	89	89	88
Change	5	22	6	-7	-1	1	1	1	0	0
% Change	7.5	34.1	6.8	-7.6	-1.0	1.6	1.3	1.5	-0.3	-0.1
Employment	61	81	87	74	77	80	81	83	81	82
Change	3	19	6	-13	3	3	1	1	-1	0
% Change	4.4	31.6	7.9	-14.8	3.9	3.7	1.5	1.8	-1.3	0.3
Construction	58	77	83	70	73	76	77	78	77	77
Maintenance	4	4	4	4	4	4	4	4	4	4
Excess Supply Rate %	5.5	7.3	6.3	13.6	9.4	7.5	7.4	7.1	7.9	7.5
Electricians										
Labour Force	1,723	1,891	2,028	1,959	1,962	1,989	2,018	2,050	2,084	2,124
Change	58	168	137	-69	3	26	29	33	33	40
% Change	3.5	9.7	7.3	-3.4	0.1	1.3	1.5	1.6	1.6	1.9
Employment	1,577	1,798	1,924	1,747	1,793	1,836	1,870	1,907	1,943	1,991
Change	67	221	126	-177	47	43	34	37	36	48
% Change	4.4	14.0	7.0	-9.2	2.7	2.4	1.8	2.0	1.9	2.5
Construction	931	1,143	1,259	1,066	1,094	1,118	1,134	1,152	1,169	1,197
Maintenance	645	655	665	681	700	718	736	755	774	793
Excess Supply Rate %	8.5	4.9	5.1	10.9	8.6	7.7	7.3	7.0	6.7	6.3

Trades	2007e	2008f	2009f	2010f	2011f	2012f	2013f	2014f	2015f	2016f
Elevator Constructors and Mechanics										
Labour Force	85	89	92	93	94	96	97	100	102	104
Change	0	4	4	1	1	1	2	2	2	2
% Change	0.3	4.8	4.2	0.6	1.2	1.6	1.9	2.3	2.3	2.4
Employment	75	82	85	83	85	86	88	90	92	95
Change	3	6	3	-2	1	1	2	2	2	2
% Change	3.8	8.4	4.0	-2.0	1.6	1.8	2.2	2.5	2.3	2.5
Construction	55	61	64	62	63	64	65	67	68	70
Maintenance	20	20	21	21	22	22	23	23	24	25
Excess Supply Rate %	10.9	7.8	8.0	10.4	10.0	9.9	9.6	9.4	9.4	9.3
Floor Covering Installers										
Labour Force	507	517	533	547	560	573	582	590	602	617
Change	15	10	16	15	13	13	9	8	12	16
% Change	3.1	2.0	3.1	2.7	2.4	2.3	1.6	1.4	2.0	2.6
Employment	466	475	495	507	519	532	540	548	562	581
Change	22	9	20	12	12	13	8	8	14	19
% Change	4.9	2.0	4.3	2.4	2.4	2.5	1.5	1.4	2.6	3.3
Construction	241	246	263	269	274	281	283	284	292	304
Maintenance	225	229	232	238	245	251	258	264	271	277
Excess Supply Rate %	8.1	8.1	7.0	7.3	7.3	7.1	7.2	7.1	6.5	5.8
Gasfitters										
Labour Force	81	111	127	104	98	96	97	98	99	100
Change	7	29	16	-23	-6	-1	0	1	1	1
% Change	8.9	36.1	14.7	-18.3	-5.9	-1.3	0.4	1.5	0.7	0.9
Employment	71	104	120	82	85	87	88	90	91	92
Change	3	33	15	-38	3	2	2	2	0	1
% Change	5.2	47.1	14.8	-31.6	3.7	2.1	1.8	2.5	0.5	1.2
Construction	65	98	114	76	79	80	82	84	84	85
Maintenance	6	6	6	6	6	6	6	7	7	7
Excess Supply Rate %	12.9	5.8	5.7	21.1	13.1	10.1	8.8	7.9	8.1	7.7
Glaziers										
Labour Force	103	105	108	110	112	115	117	119	121	124
Change	2	3	3	2	2	2	2	2	2	3
% Change	2.0	2.7	3.0	1.8	1.9	2.0	1.8	1.7	2.0	2.4
Employment	93	96	100	101	103	105	107	110	112	116
Change	4	4	4	1	2	2	2	2	3	3
% Change	4.1	3.9	3.7	0.9	2.2	2.3	1.9	2.0	2.5	2.9
Construction	46	49	52	51	52	53	54	55	56	58
Maintenance	47	48	48	50	51	52	54	55	56	58
Excess Supply Rate %	9.6	8.5	7.9	8.7	8.4	8.1	8.0	7.8	7.3	6.8
Heavy Equipment Operators (except crane)										
Labour Force	1,887	2,391	2,634	2,475	2,467	2,517	2,554	2,592	2,581	2,576
Change	130	503	243	-160	-8	50	37	38	-11	-5
% Change	7.4	26.7	10.2	-6.1	-0.3	2.0	1.5	1.5	-0.4	-0.2
Employment	1,751	2,299	2,475	2,123	2,208	2,293	2,325	2,366	2,333	2,339
Change	73	549	176	-352	85	85	32	41	-34	6
% Change	4.3	31.3	7.6	-14.2	4.0	3.8	1.4	1.8	-1.4	0.3
Construction	1,604	2,151	2,324	1,968	2,049	2,129	2,158	2,194	2,156	2,158
Maintenance	147	149	151	155	159	163	167	172	176	180
Excess Supply Rate %	7.2	3.8	6.0	14.2	10.5	8.9	9.0	8.7	9.6	9.2
Heavy-Duty Equipment Mechanics										
Labour Force	251	311	338	313	309	314	318	323	322	322
Change	24	60	28	-26	-3	5	4	5	-1	0
% Change	10.5	23.9	8.9	-7.6	-1.0	1.6	1.3	1.5	-0.4	-0.2
Employment	223	300	327	270	281	291	295	300	296	297
Change	10	77	27	-57	11	10	4	5	-4	1
% Change	4.5	34.8	8.9	-17.3	3.9	3.6	1.4	1.9	-1.3	0.3
Construction	218	295	321	265	275	285	289	295	291	291
Maintenance	5	5	5	5	5	5	6	6	6	6
Excess Supply Rate %	11.3	3.5	3.5	13.6	9.3	7.5	7.4	7.1	7.9	7.5

Trades	2007e	2008f	2009f	2010f	2011f	2012f	2013f	2014f	2015f	2016f
Insulators										
Labour Force	194	200	206	203	205	208	212	217	222	226
Change	-5	5	6	-3	2	3	4	5	5	5
% Change	-2.6	2.7	3.2	-1.4	0.8	1.5	2.1	2.1	2.3	2.1
Employment	172	184	192	183	188	192	197	202	208	212
Change	5	12	7	-8	5	4	5	5	5	5
% Change	2.8	7.2	4.1	-4.4	2.5	2.3	2.7	2.5	2.7	2.3
Construction	29	40	45	34	35	35	36	37	37	38
Maintenance	143	144	146	150	153	157	161	165	170	175
Excess Supply Rate %	11.5	7.7	6.9	9.8	8.2	7.6	7.0	6.7	6.3	6.1
Ironworkers and Structural Metal Fabricators and Fitters										
Labour Force	152	169	175	168	168	170	173	177	180	183
Change	0	17	6	-6	0	2	3	3	3	3
% Change	0.2	11.4	3.4	-3.6	-0.1	1.2	1.8	2.0	1.8	1.8
Employment	137	154	163	150	154	157	161	165	168	172
Change	4	17	9	-13	4	4	4	4	3	3
% Change	3.3	12.7	5.6	-8.1	2.6	2.4	2.5	2.3	2.0	2.0
Construction	53	70	77	62	64	65	67	68	68	69
Maintenance	84	84	86	88	90	92	95	97	100	102
Excess Supply Rate %	9.8	8.7	6.8	11.1	8.8	7.7	7.1	6.8	6.6	6.4
Painters and Decorators										
Labour Force	1,558	1,605	1,664	1,697	1,732	1,769	1,798	1,823	1,858	1,904
Change	48	47	59	32	35	37	29	25	34	46
% Change	3.1	3.0	3.7	1.9	2.1	2.2	1.6	1.4	1.9	2.5
Employment	1,419	1,472	1,541	1,551	1,588	1,628	1,653	1,678	1,720	1,775
Change	65	52	69	10	37	39	26	25	42	55
% Change	4.8	3.7	4.7	0.7	2.4	2.5	1.6	1.5	2.5	3.2
Construction	756	797	856	849	867	887	894	900	923	958
Maintenance	663	674	685	702	722	741	759	778	798	817
Excess Supply Rate %	8.9	8.3	7.4	8.6	8.3	8.0	8.1	8.0	7.4	6.8
Plasterers, Drywall Installers and Finishers, and Lathers										
Labour Force	913	937	970	991	1,012	1,032	1,049	1,064	1,085	1,112
Change	22	24	32	22	20	21	17	15	21	27
% Change	2.4	2.6	3.4	2.2	2.0	2.0	1.6	1.4	1.9	2.5
Employment	821	850	888	900	919	940	956	971	996	1,028
Change	38	29	38	12	19	21	15	15	25	32
% Change	4.8	3.5	4.5	1.3	2.2	2.3	1.6	1.6	2.6	3.2
Construction	504	528	561	564	574	586	593	599	615	637
Maintenance	317	322	328	336	345	354	363	372	381	391
Excess Supply Rate %	10.1	9.3	8.4	9.2	9.1	8.9	8.9	8.7	8.2	7.6
Plumbers										
Labour Force	1,013	1,093	1,168	1,146	1,154	1,172	1,189	1,208	1,228	1,253
Change	34	81	75	-22	8	18	18	19	20	25
% Change	3.5	8.0	6.8	-1.9	0.7	1.6	1.5	1.6	1.7	2.0
Employment	924	1,034	1,102	1,021	1,048	1,074	1,093	1,113	1,135	1,165
Change	40	110	68	-81	27	25	19	20	22	30
% Change	4.5	11.9	6.6	-7.4	2.7	2.4	1.7	1.9	2.0	2.6
Construction	531	635	697	605	621	635	643	652	663	681
Maintenance	394	400	406	416	428	439	450	461	473	484
Excess Supply Rate %	8.7	5.4	5.6	10.9	9.1	8.4	8.1	7.9	7.5	7.0
Refrigeration and Air Conditioning Mechanics										
Labour Force	293	317	337	328	329	333	338	345	351	358
Change	6	24	20	-9	1	4	5	7	6	7
% Change	2.0	8.0	6.4	-2.7	0.2	1.2	1.6	2.0	1.9	1.9
Employment	270	305	323	296	303	310	316	324	331	339
Change	10	35	18	-27	7	6	7	8	7	8
% Change	3.7	13.1	5.9	-8.4	2.4	2.1	2.2	2.5	2.1	2.3
Construction	141	175	191	160	164	166	170	174	177	180
Maintenance	129	130	132	136	139	143	147	150	154	158
Excess Supply Rate %	8.0	3.6	4.1	9.8	7.8	6.9	6.4	5.9	5.7	5.4

Trades	2007e	2008f	2009f	2010f	2011f	2012f	2013f	2014f	2015f	2016f
Residential and Commercial Installers and Servicers										
Labour Force	538	574	609	604	610	620	629	639	650	664
Change	17	36	35	-5	6	10	9	9	11	14
% Change	3.2	6.7	6.1	-0.9	1.0	1.7	1.5	1.5	1.7	2.2
Employment	490	539	573	542	555	569	578	588	601	618
Change	22	49	34	-31	14	13	9	10	13	17
% Change	4.7	9.9	6.3	-5.4	2.5	2.4	1.7	1.7	2.1	2.8
Construction	304	349	380	344	352	360	364	369	376	388
Maintenance	187	190	193	198	203	208	214	219	224	230
Excess Supply Rate %	8.9	6.1	6.0	10.3	8.9	8.3	8.1	7.9	7.5	6.9
Roofers and Shinglers										
Labour Force	837	879	923	927	938	954	967	982	1,000	1,023
Change	16	42	45	4	11	15	14	14	18	24
% Change	2.0	5.0	5.1	0.4	1.2	1.6	1.5	1.5	1.8	2.4
Employment	764	823	870	847	864	882	897	912	934	962
Change	36	60	47	-23	17	18	15	16	22	28
% Change	4.9	7.8	5.7	-2.7	2.0	2.1	1.7	1.8	2.4	3.0
Construction	573	629	673	644	656	669	678	688	705	727
Maintenance	190	194	197	202	208	213	219	224	229	235
Excess Supply Rate %	8.8	6.3	5.8	8.7	8.0	7.5	7.3	7.1	6.6	6.0
Sheet Metal Workers										
Labour Force	316	361	387	370	368	372	377	383	389	395
Change	9	45	27	-17	-2	4	5	6	5	6
% Change	2.9	14.1	7.4	-4.5	-0.5	1.0	1.4	1.7	1.4	1.6
Employment	290	340	364	327	335	343	349	357	362	370
Change	12	50	24	-37	8	8	6	8	5	8
% Change	4.4	17.2	7.1	-10.3	2.5	2.3	1.9	2.2	1.5	2.1
Construction	216	265	288	249	255	261	265	270	273	279
Maintenance	74	75	76	78	80	82	84	87	89	91
Excess Supply Rate %	8.2	5.7	6.0	11.7	9.0	7.9	7.4	7.0	6.9	6.4
Steamfitters, Pipefitters and Sprinkler System Installers										
Labour Force	301	306	313	313	316	321	328	335	343	351
Change	0	4	7	0	3	5	7	7	8	8
% Change	0.1	1.5	2.4	-0.1	1.1	1.6	2.2	2.1	2.4	2.2
Employment	267	280	290	284	290	297	305	312	322	329
Change	7	13	10	-5	6	6	9	7	9	8
% Change	2.8	4.9	3.5	-1.8	2.1	2.1	2.9	2.3	3.0	2.4
Construction	56	67	73	63	65	66	67	68	70	71
Maintenance	211	213	217	221	226	231	238	244	252	258
Excess Supply Rate %	11.4	8.4	7.4	9.0	8.1	7.5	6.9	6.7	6.2	6.1
Tilesetters										
Labour Force	127	130	134	137	140	143	146	148	151	154
Change	4	3	4	3	3	3	2	2	3	4
% Change	2.9	2.5	3.3	2.1	2.1	2.2	1.7	1.5	2.0	2.5
Employment	116	120	125	127	130	133	135	137	141	145
Change	5	4	5	2	3	3	2	2	4	4
% Change	4.6	3.1	4.3	1.3	2.4	2.4	1.6	1.6	2.6	3.2
Construction	58	61	65	65	66	68	68	69	71	73
Maintenance	58	59	60	62	64	65	67	68	70	72
Excess Supply Rate %	8.2	7.8	6.9	7.7	7.4	7.2	7.2	7.1	6.5	5.9
Trades Helpers and Labourers										
Labour Force	3,326	3,801	4,028	3,963	4,010	4,099	4,170	4,239	4,268	4,309
Change	175	475	227	-65	46	89	71	69	30	41
% Change	5.6	14.3	6.0	-1.6	1.2	2.2	1.7	1.7	0.7	1.0
Employment	2,997	3,579	3,810	3,447	3,561	3,674	3,736	3,806	3,819	3,873
Change	120	582	231	-364	114	113	62	69	13	54
% Change	4.2	19.4	6.5	-9.5	3.3	3.2	1.7	1.9	0.3	1.4
Construction	1,988	2,557	2,772	2,383	2,469	2,554	2,587	2,627	2,609	2,633
Maintenance	1,010	1,023	1,039	1,064	1,092	1,120	1,150	1,178	1,210	1,240
Excess Supply Rate %	9.9	5.8	5.4	13.0	11.2	10.4	10.4	10.2	10.5	10.1

Trades	2007e	2008f	2009f	2010f	2011f	2012f	2013f	2014f	2015f	2016f
Truck Drivers										
Labour Force	545	678	734	699	698	712	722	733	732	734
Change	36	133	56	-35	0	14	10	11	-1	2
% Change	7.1	24.4	8.2	-4.8	0.0	1.9	1.5	1.5	-0.1	0.2
Employment	504	644	693	605	626	648	658	669	663	668
Change	22	140	49	-88	22	22	9	11	-6	5
% Change	4.6	27.7	7.5	-12.7	3.6	3.5	1.4	1.7	-0.8	0.7
Construction	479	618	666	577	598	619	628	638	632	636
Maintenance	26	26	27	28	28	29	30	31	31	32
Excess Supply Rate %	7.4	5.0	5.6	13.4	10.3	9.0	9.0	8.7	9.4	8.9
Welders and Related Machine Operators										
Labour Force	287	390	436	382	370	371	374	380	380	381
Change	14	103	46	-54	-12	1	3	6	0	1
% Change	5.1	36.0	11.7	-12.5	-3.2	0.3	0.9	1.5	0.1	0.2
Employment	260	367	410	310	322	331	336	343	342	344
Change	12	107	43	-100	12	9	5	7	-2	2
% Change	4.8	41.0	11.7	-24.4	3.8	2.9	1.6	2.1	-0.6	0.7
Construction	256	363	406	305	317	326	332	339	337	339
Maintenance	4	4	4	4	4	4	5	5	5	5
Excess Supply Rate %	9.4	6.1	6.0	18.8	13.0	10.7	10.1	9.5	10.1	9.7

e = estimation

f = forecast

Note: Excess supply = (Labour Force – Employment)/Labour Force

Source: Construction Sector Council.

APPENDIX B - TRADES DEFINITIONS

Definitions are based on Human Resources and Skills Development Canada, National Occupational Classification 2001 (NOC 2001). Developed in co-operation with Statistics Canada, NOC-S 2001 provides a standard framework for collecting and analyzing labour market information.

Boilermakers

Boilermakers fabricate, assemble, erect, test, maintain and repair boilers, vessels, tanks, towers, heat exchangers and other heavy-metal structures.

Example titles: boilermaker, boilermaker apprentice, boiler fitter, boiler installer, construction boilermaker, industrial boilermaker, marine boilermaker, pressure vessel fabricator

Bricklayers

Bricklayers lay bricks, concrete blocks, stone and other similar materials to construct or repair walls, arches, chimneys, fireplaces and other structures in accordance with blueprints and specifications.

Example titles: apprentice bricklayer, bricklayer, brickmason, refractory bricklayer, stonecutter, stonemason

Carpenters

Carpenters construct, erect, install, maintain and repair structures and components of structures made of wood, wood substitutes and other materials.

Example titles: apprentice carpenter, carpenter, finish carpenter, journeyman/woman carpenter, maintenance carpenter, renovation carpenter, rough carpenter

Concrete Finishers

Concrete finishers smooth and finish freshly poured concrete, apply curing or surface treatments and install, maintain and restore various masonry structures such as floors, ceilings, sidewalks, roads and patios.

Example titles: cement finisher apprentice, cement mason, concrete finisher, concrete mason, precast concrete finisher

Construction Managers

Managers plan, organize, direct, control and evaluate the activities of a construction company or a construction department within a company, under the direction of a general manager or other senior manager. They are employed by residential, commercial and industrial construction companies and by construction departments of companies outside the construction industry.

Example titles: commercial construction manager, construction manager, construction superintendent, general contractor, housing construction manager, industrial construction manager, pipeline construction manager, project manager – construction, residential construction manager

Construction Millwrights and Industrial Mechanics (except textile)

Construction millwrights and industrial mechanics install, maintain, troubleshoot and repair stationary industrial machinery and mechanical equipment.

Example titles: construction millwright, industrial mechanic, industrial mechanic apprentice, maintenance millwright, millwright, millwright apprentice, plant equipment mechanic, treatment plant mechanic

Contractors and Supervisors

This unit group includes trade contractors who own and operate their own businesses and supervisors who supervise and co-ordinate the activities of workers. They are employed by construction companies and maintenance departments of industrial, commercial and manufacturing establishments.

Example titles: contractor, foremen, supervisor

Crane Operators

Crane operators operate cranes or draglines to lift, move, position or place machinery, equipment and other large objects at construction or industrial sites, ports, railway yards, surface mines and other similar locations.

Example titles: boom truck crane operator, bridge crane operator, climbing crane operator, construction crane operator, crane operator, dragline crane operator, gantry crane operator, hoist operator (except underground mining), mobile crane operator, tower crane operator, tractor crane operator

Drillers and Blasters – Surface Mining, Quarrying and Construction

Drillers in this unit group operate mobile drilling machines to bore blast holes in open-pit mines and quarries and to bore holes for blasting and for building foundations at construction sites. Blasters in this unit group fill blast holes with explosives and detonate explosives to dislodge coal, ore and rock or to demolish structures.

Example titles: blaster – construction, blaster – surface mining, driller, construction foundation drill operator, open-pit blaster, open-pit driller, rotary drilling machine operator

Electricians, including industrial and power system

(trades combined and reported under an aggregate trade/occupation)

ELECTRICIANS (EXCEPT INDUSTRIAL AND POWER SYSTEM)

Electricians in this unit group lay out, assemble, install, test, troubleshoot and repair electrical wiring, fixtures, control devices and related equipment in buildings and other structures.

Example titles: apprentice electrician, construction electrician, construction electrician apprentice, domestic and rural electrician, electrician

INDUSTRIAL ELECTRICIANS

Industrial electricians install, maintain, test, troubleshoot and repair industrial electrical equipment and associated electrical and electronic controls.

Example titles: shipyard electrician, industrial electrician, industrial electrician apprentice, marine electrician, mill electrician, mine electrician, plant electrician, plant maintenance electrician

POWER SYSTEM ELECTRICIANS

Power system electricians install, maintain, test and repair electrical power generation, transmission and distribution system equipment and apparatus.

Example titles: apprentice power system electrician, power electrician, power station electrician, power system electrician

Elevator Constructors and Mechanics

Elevator constructors and mechanics assemble, install, maintain and repair freight and passenger elevators, escalators, moving walkways and other related equipment.

Example titles: elevator constructor, elevator mechanic, elevator mechanic apprentice, escalator repairer

Floor Covering Installers

Floor covering installers install carpet, wood, linoleum, vinyl and other resilient floor coverings in residential, commercial, industrial and institutional buildings.

Example titles: carpet installer, carpet layer, floor covering installer, floor covering installer apprentice, floor covering mechanic, resilient floor installer, rug installer, vinyl floor installer

Gasfitters

Gasfitters install, inspect, repair and maintain gas lines and gas equipment such as meters, regulators, heating units and appliances in residential, commercial and industrial establishments.

Example titles: gas customer servicer, gasfitter, gasfitter apprentice, gas servicer, gas technician

Glaziers

Glaziers cut, fit, install and replace glass in residential, commercial and industrial buildings, on exterior walls of buildings and other structures, and in furniture and other products.

Example titles: glazier, glazier and metal mechanic, glazier apprentice, plate glass installer, stained glass glazier, structural glass glazier

Heavy-Duty Equipment Mechanics

Heavy-duty equipment mechanics repair, troubleshoot, adjust, overhaul and maintain mobile heavy-duty equipment used in construction, transportation, forestry, mining, oil and gas, material handling, landscaping, land clearing, farming and similar activities.

Example titles: construction equipment mechanic, diesel mechanic – heavy equipment, farm equipment mechanic, heavy-duty equipment mechanic apprentice, heavy-duty equipment technician, heavy equipment mechanic, heavy mobile logging equipment mechanic, heavy mobile mining equipment mechanic, locomotive mechanic, tractor mechanic

Heavy Equipment Operators (except crane)

Heavy equipment operators operate heavy equipment used in the construction and maintenance of roads, bridges, airports, gas and oil pipelines, tunnels, buildings and other structures, in surface mining and quarrying activities and in material handling work.

Example titles: backhoe operator, bulldozer operator, excavator operator, gradall operator, grader operator, heavy equipment operator, heavy equipment operator apprentice, loader operator – construction, side boom tractor operator, surface mining equipment operator

Industrial Instrument Technicians and Mechanics

Industrial instrument technicians and mechanics repair, maintain, calibrate, adjust and install industrial measuring and controlling instrumentation.

Example titles: apprentice industrial instrument mechanic, industrial instrument mechanic, instrument technician, industrial instrumentation technician, industrial process control equipment mechanic

Insulators

Insulators apply insulation materials to plumbing, air-handling, heating, cooling and refrigeration systems, piping equipment and pressure vessels, and walls, floors and ceilings of buildings and other structures to prevent or reduce the passage of heat, cold, sound or fire.

Example titles: boiler and pipe insulator, building insulator, firestopping insulator, heat and frost insulator, insulation applicator, insulation mechanic, insulator, insulator apprentice, sound insulator

Ironworkers and Structural Metal Fabricators and Fitters

(trades combined and reported under an aggregate trade/occupation)

IRONWORKERS

Ironworkers fabricate, erect, hoist, install, repair and service structural ironwork, precast concrete, concrete reinforcing materials, curtain walls, ornamental iron and other metals used in the construction of buildings, bridges, highways, dams and other structures and equipment.

Example titles: ironworker, ironworker apprentice, ironworker – metal building systems erector, ornamental ironworker, reinforcing ironworker, structural steel erector

STRUCTURAL METAL AND PLATEWORK FABRICATORS AND FITTERS

Structural metal and platework fabricators and fitters fabricate, assemble, fit and install steel or other metal components for buildings, bridges, tanks, towers, boilers, pressure vessels and other similar structures and products.

Example titles: metal fabricator, plater, platework fitter, shipfitter, shipfitter apprentice, steel fabricator, structural steel fitter

Painters and Decorators

Painters and decorators apply paint, wallpaper and other finishes to interior and exterior surfaces of buildings and other structures.

Example titles: construction painter, maintenance painter, painter, painter and decorator, painter and decorator apprentice, paperhanger

Plasterers, Drywall Installers and Finishers, and Lathers

Plasterers apply finish and maintain and restore plaster or similar materials on interior and exterior walls, ceilings and building partitions to produce plain or decorative surfaces. Drywall installers and finishers install and finish drywall sheets and various types of ceiling systems. Lathers install support framework for ceiling systems, interior and exterior walls and building partitions.

Example titles: acoustical ceiling installer, ceiling installer, drywall applicator, drywall finisher, drywall installer and finisher apprentice, drywall taper, interior systems mechanic, lather, lather apprentice, plasterer, plasterer apprentice, sheetrock applicator, wood lather

Plumbers

Plumbers install, repair and maintain pipes, fixtures and other plumbing equipment used for water distribution and waste water disposal in residential, commercial and industrial buildings.

Example titles: maintenance plumber, plumber, plumber apprentice, plumbing mechanic

Refrigeration and Air Conditioning Mechanics

Refrigeration and air conditioning mechanics install, maintain, repair and overhaul residential central air conditioning systems, commercial and industrial refrigeration and air conditioning systems and combined heating, ventilation and cooling systems. Transport refrigeration mechanics are included in this unit group.

Example titles: central air conditioning mechanic; commercial air conditioning mechanic; heating and cooling mechanic; heating, ventilation and air conditioning (HVAC) mechanic; refrigeration and air conditioning mechanic apprentice; refrigeration mechanic; transport refrigeration mechanic

Residential and Commercial Installers and Servicers

Workers in this unit group install and service a wide variety of interior and exterior prefabricated products such as windows, doors, electrical appliances, water heaters, fences, play structures and septic systems at residential or commercial properties.

Example titles: aluminum window installer, eavestrough installer, electric appliance installer, exterior cladder, fence erector, hot tub installer, kitchen cupboard and vanity installer, recreation structure erector, siding installer, sign installer, swimming pool installer, water conditioner servicer, water heater servicer, window installer

Roofers and Shinglers

Roofers install, repair or replace flat roofs and shingles, shakes or other roofing tiles on sloped roofs. Shinglers install and replace shingles, tiles and similar coverings on sloped roofs.

Example titles: apprentice roofer, asphalt roofer, built-up roofer, flat roofer, residential steep roofer, roofer, shingler, single-ply roofer

Sheet Metal Workers

Sheet metal workers fabricate, assemble, install and repair sheet metal products.

Example titles: apprentice sheet metal worker, sheet metal fabricator, sheet metal mechanic, sheet metal worker, tinsmith

Steamfitters, Pipefitters and Sprinkler System Installers

Steamfitters and pipefitters lay out, assemble, fabricate, maintain, troubleshoot and repair piping systems carrying water, steam, chemicals and fuel in heating, cooling, lubricating and other process piping systems. Sprinkler system installers fabricate, install, test, maintain and repair water, foam, carbon dioxide and dry chemical sprinkler systems in buildings for fire protection purposes.

Example titles: apprentice pipefitter-steamfitter, fire sprinkler fitter, marine pipefitter, sprinkler system fitter, sprinkler system installer, sprinkler system installer apprentice, steamfitter

Tilesetters

Tilesetters cover interior and exterior walls, floors and ceilings with ceramic, marble and quarry tile, mosaics or terrazzo.

Example titles: apprentice tilesetter, ceramic tile installer, marble setter, terrazzo polisher, terrazzo worker, tile installer, tilesetter

Trades Helpers and Labourers and Other Trades Helpers/Labourers

(trades combined and reported under an aggregate trade/occupation)

TRADES HELPERS AND LABOURERS

Construction trades helpers and labourers assist skilled tradespersons and perform labouring activities at construction sites.

Example titles: asphalt spreader, bricklayer helper, carpenter helper, concrete mixer helper, construction helper, construction labourer, demolition worker, drywall sander, flagman/woman, glazier helper, labourer – concrete paving, labourer – excavation, pipeline mandrel operator, plumber helper, roofer helper, stabber – pipeline construction

OTHER TRADES HELPERS AND LABOURERS

This unit group includes trades helpers and labourers not elsewhere classified who assist skilled tradespersons and perform labouring activities in the installation, maintenance and repair of industrial machinery, refrigeration and heating and air conditioning equipment, in the maintenance and repair of transportation and heavy equipment, in the installation and repair of telecommunication and power cables and in other repair and service work settings.

Example titles: aerial spraying assistant, aircraft mechanic helper, cable installer helper, diesel mechanic helper, ground worker – telecommunications, mechanic's helper – automotive, millwright helper, refrigeration mechanic helper, splicer helper – telecommunications, surveyor helper

Truck Drivers

Truck drivers operate heavy trucks to transport goods and materials over urban, interurban, provincial and international routes.

Example titles: bulk goods truck driver, dump truck driver, flatbed truck driver, logging truck driver, long-haul truck driver, moving van driver, tow truck driver, truck driver, truck driver – heavy truck, truck driver – tractor-trailer

Welders and Related Machine Operators

Welders operate welding equipment to weld ferrous and non-ferrous metals. This unit group also includes machine operators who operate previously set up production welding, brazing and soldering equipment.

Example titles: aviation welding technician, brazing machine operator, brazing machine setter, electric arc welder, journeyman/woman welder, laser welding operator, pressure vessel welder, production welder, soldering machine operator, spot welder, welder, welder apprentice, welder-fitter

OUR THANKS TO...

The production of *Construction Looking Forward – 2008-2016* would not have been possible without the valuable input from the following organizations:

- Construction Labour Relations Association of Manitoba
- International Union of Operating Engineers
- Manitoba Building and Construction Trades Council
- Manitoba Competitiveness, Training and Trade
- Manitoba Floodway Authority
- Manitoba Heavy Construction Association
- Manitoba Home Builders' Association
- Manitoba Hydro
- Mechanical Contractors Association of Manitoba
- Merit Contractors Association of Manitoba UA Local 254
- Winnipeg Construction Association

The Construction Sector Council accepts no responsibility or liability connected with the use or reproduction of the information contained in this report. It is provided "as is" and is intended for informational use only, without warranty, express or implied. Any significant changes in economic conditions as a result of unforeseen world events and provincial policy changes, as well as unforeseen projects in the public and private sector will alter the long-term outlook.

ABOUT CSC

The Construction Sector Council is a national organization committed to the development of a highly skilled workforce – one that will support the future needs of the construction industry in Canada. Created in April 2001, and financed by both government and industry, the CSC is a partnership between labour and business.

Like many industries, the construction industry faces a number of human resource challenges. These include the need to accurately forecast labour demand and supply, to increase the mobility of workers, to make the most of new technologies and to cope with an aging workforce.

This report is part of the CSC's Labour Market Information Program. It is available electronically at www.csc-ca.org.



For more information or additional copies contact

The Construction Sector Council
220 Laurier Ave. West, Suite 1150
Ottawa, Ontario, K1P 5Z9
Phone: (613) 569-5552
Fax: (613) 569-1220
info@csc-ca.org

May 2008

The CSC would like to acknowledge support from the Government of Canada's Sector Council Program.

Canada