

Canada's unemployment mosaic in the 1990s

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One of the most serious structural problems affecting the Canadian labour market is regional inequality. The traditional picture has been one of high unemployment in such areas as the Atlantic provinces, combined with much lower rates elsewhere.

This picture was especially evident in the late 1980s. After several years of economic growth, the economies of Toronto and nearby areas were experiencing tight labour markets, as evidenced by low unemployment rates and a proliferation of "help-wanted" signs. At the same time, double-digit unemployment rates remained in such areas as the Gaspé and rural Newfoundland (Gower, 1989).

Since then, Canada has gone through a recession and a slow recovery. This has affected regional unemployment rates to various degrees, and created a pattern that differs in many ways from that of the late 1980s (see *Definitions*).

Entering the recession: patterns differed

For the country as a whole, 1989 marked the lowest unemployment rates before the onset of the recession of the early 1990s. However, in some areas unemployment had begun to rise between 1988 and 1989.

For example, the unemployment rate in Toronto rose from 3.7% in 1988 to 4.0% in 1989. Moreover, four areas had unemployment rate increases of one percentage point or more: Prince Edward Island (12.9% to 14.0%), Sherbrooke (7.1% to 9.2%), Ottawa-Hull (5.1% to 6.1%)

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Definitions

As a rule, provinces are used to analyze regional differences. In this paper, however, **census metropolitan areas (CMAs)** are the main unit of measurement. The Labour Force Survey (LFS) defines a CMA as the "main labour market area of an urbanized core (or continuously built-up area) having at least 100,000 inhabitants." In the LFS files, CMA benchmark estimates (derived from the Census of Population) were tabulated back to 1987. As a result, the series contained in this paper can be tabulated only as far back as that year. The CMAs are then subtracted from the provinces, to produce provincial residuals consisting of smaller urban and rural areas.

and Regina (6.9% to 7.9%). The downturn leading to the recession was not reflected at the same time or with equal intensity in all regional unemployment rates (Table 1).

As the recession deepened through 1991 and 1992, the Canadian unemployment rate rose to reach 11.3%, almost 4 points higher than it had been in 1989 (7.5%). However, the effect on unemployment was not evenly spread.

The Atlantic area, which had higher rates to begin with, had a slower rate of growth in unemployment (12.2% to 14.9%, or 2.7 points). The Quebec increase between 1989 and 1992 was close to the national average (9.3% to 12.8%, or 3.5 points). A much more dramatic rise was seen in Ontario, which jumped nearly 6 percentage points, from 5.1% to 10.9%.

In contrast, western unemployment rate increases were less than 2 points (7.4% to 9.3% in the Prairies, 9.1% to 10.5% in British Columbia).

Obviously, these provincial residuals contain many local variations in labour market conditions. Such detail is outside the scope of this article; readers who wish to see data on smaller areas can consult Statistics Canada's *Labour Force Annual Averages*.

The employment figures and unemployment rates used in this article are LFS annual averages. The LFS measures employment and unemployment by place of residence rather than by place of work. So, for example, the employment figure associated with a region refers to the number of residents of that region who are employed, not to the number of persons who work within the region.

The more detailed regions show even greater variation. Toronto and Oshawa jumped well over 7 points between 1989 and 1992. In contrast, Saint John showed little effect from the recession (from 10.7% in 1989 to 11.4% in 1992). Perhaps more remarkable, unemployment rates remained stable or actually dropped in some western localities, such as non-metropolitan Manitoba, Regina, and Victoria. Furthermore, in most other western regions the increase was relatively small.

Unemployment is the end product of a complex combination of supply and demand factors, but a key explanation for the stability of western unemployment rates can be found in employment trends. The number of jobs held up well in the West, particularly in Alberta and British Columbia. For example, Vancouver employment increased more than 50,000 between 1989 and 1992, while in Toronto it declined by over 140,000 (Appendix Table 1).

The big story now: Toronto and environs staying cool

The economic pressures in the Toronto area vanished dramatically with the onset of the recession in 1990. As of the end of 1995, there was no sign of their returning. The Toronto CMA itself, with an annual average unemployment rate of 8.5%, was far from resuming its status of "hotspot" enjoyed seven

years earlier. However, its unemployment rate had improved substantially from 11.4% three years earlier.

Other CMAs in southern Ontario were also showing moderate though not spectacular improvement in their unemployment picture. Only Hamilton could boast a rate below 7%.

In the Atlantic and Quebec regions, unemployment rates remained well into the double digits, with the sole exception of Halifax.

The lowest 1995 unemployment rates were to be found in the West, specifically in the non-metropolitan areas of the Prairies. Even these rates, however, were near 6%, well above the rates seen around Toronto in the late 1980s.

Table 1
Unemployment rate by region

	1987	1988	1989	1990	1991	1992	1993	1994	1995
	%								
Canada	8.9	7.8	7.5	8.1	10.4	11.3	11.2	10.4	9.5
Atlantic	13.9	12.3	12.2	12.7	14.0	14.9	15.4	14.8	13.4
St. John's	12.5	11.2	10.8	11.9	13.3	15.6	14.1	14.1	12.6
Non-CMA Newfoundland	20.8	19.2	18.2	19.8	21.2	22.8	23.7	24.3	21.9
Prince Edward Island	13.1	12.9	14.0	14.9	16.9	17.9	18.1	17.1	14.7
Halifax	9.0	7.9	6.9	7.9	9.1	10.0	11.2	9.4	8.9
Non-CMA Nova Scotia	14.6	11.8	11.9	12.4	14.1	15.3	17.1	16.1	14.4
Saint John	13.0	11.2	10.7	9.6	11.8	11.4	10.5	12.2	10.3
Non-CMA New Brunswick	13.2	12.2	12.8	12.6	13.0	13.2	13.1	12.5	11.8
Quebec	10.3	9.4	9.3	10.2	12.0	12.8	13.2	12.2	11.3
Chicoutimi-Jonquière	10.8	11.2	9.5	10.2	12.8	14.1	15.3	14.3	15.3
Québec	9.1	8.5	6.9	7.6	9.5	11.4	11.2	11.3	10.3
Trois-Rivières	10.8	10.3	9.4	9.4	11.4	15.0	13.3	13.0	11.2
Sherbrooke	10.6	7.1	9.2	8.9	13.2	13.5	11.7	9.3	11.1
Montréal	10.0	9.3	9.2	10.2	12.3	13.2	13.7	12.5	11.3
Non-CMA Quebec	11.2	10.2	10.4	11.3	12.6	12.7	13.3	12.3	11.5
Ottawa-Hull *	7.5	5.1	6.1	5.9	7.3	8.8	8.4	8.2	9.8
Ontario	6.1	5.0	5.1	6.3	9.6	10.9	10.6	9.6	8.7
Sudbury	11.6	9.8	8.0	8.2	10.2	11.9	10.3	10.6	9.1
Oshawa	6.2	5.5	4.1	6.8	9.7	11.9	11.4	9.8	8.7
Toronto	4.5	3.7	4.0	5.3	9.7	11.4	11.0	10.3	8.5
Hamilton	6.4	5.8	5.2	6.3	10.0	10.7	11.4	8.2	6.6
St. Catharines-Niagara	9.4	6.4	7.2	7.4	11.4	12.5	13.9	10.4	9.1
London	7.1	4.7	4.3	6.0	8.0	8.8	8.7	7.7	8.0
Windsor	9.1	7.7	8.2	9.0	12.5	12.9	11.5	9.1	8.5
Kitchener-Waterloo	5.8	5.2	5.0	6.5	9.4	9.6	8.9	6.6	7.9
Thunder Bay	8.2	6.1	5.6	7.9	9.5	10.0	11.4	11.0	8.1
Non-CMA Ontario	7.1	6.2	6.0	7.5	10.0	10.8	10.5	9.9	9.4
Prairies	8.7	7.9	7.4	7.1	8.2	9.3	9.3	8.4	7.6
Winnipeg	7.9	8.3	7.9	7.9	10.1	11.3	10.9	10.9	8.2
Non-CMA Manitoba	6.5	7.1	7.0	6.2	6.7	6.7	6.4	6.0	6.0
Regina	6.9	6.9	7.9	6.8	6.5	7.9	8.3	7.2	7.4
Saskatoon	9.7	9.4	9.2	9.0	10.6	11.0	9.8	9.1	8.2
Non-CMA Saskatchewan	6.6	6.9	6.6	6.3	6.2	7.2	7.2	6.1	6.1
Calgary	9.1	7.9	7.0	7.0	8.7	10.0	10.4	9.2	8.1
Edmonton	11.1	9.1	8.4	7.8	9.4	10.8	11.2	10.4	8.9
Non-CMA Alberta	8.9	7.4	6.5	6.4	6.9	7.9	7.7	6.4	6.5
British Columbia	12.0	10.3	9.1	8.4	10.0	10.5	9.7	9.4	9.0
Vancouver	11.5	9.4	7.4	7.1	8.4	9.3	9.3	9.0	8.3
Victoria	10.9	10.2	8.9	7.7	8.2	8.3	8.6	7.6	9.2
Non-CMA British Columbia	12.9	11.5	11.4	10.1	12.6	12.6	10.5	10.3	9.7

Source: Labour Force Survey

* Because the Ottawa-Hull CMA includes portions in both Ontario and Quebec, it is listed separately from these provinces. Each provincial total includes the relevant portion of the CMA.

Ranks help tell the story

One way to demonstrate how the distribution of unemployment rates has shifted is to use ranks, starting with number 1 for the region with the lowest unemployment rate (Table 2). To simplify the examination this section concentrates on three years: 1989, just prior to the last recession, 1992, the year with the highest national unemployment rate,¹ and 1995, the most recent data available.

Toronto dropped from first to nineteenth spot as the recession deepened, but improved by 5 places by 1995. Oshawa, undoubtedly following the fortunes of the auto industry, plunged from second to twenty-first place between 1989 and 1992, and then regained 6 of those rank positions. Non-metropolitan Ontario, which was in seventh spot in 1989, dropped to fourteenth by 1992 and slipped further to twenty-first position in 1995.

West of Ontario, many areas improved their relative position dramatically between 1989 and 1992. Many maintained these favourable positions into 1995.

Perhaps the most dramatic roller-coaster ride was experienced by Victoria, which soared 17 rank positions from twenty-second to fifth spot by 1992, and then dropped 15 positions by 1995 (Table 3).

Ottawa-Hull ranked eighth in unemployment rate in 1989, and kept this approximate position through 1992. Between 1992 and 1995, however, it fell sharply to twenty-third spot, reflecting public sector cut-backs.

In Quebec and the Atlantic regions, rank shifts were generally less dramatic. Most of these areas had relatively high unemployment before the recession, and followed the overall trends during the next six years. There were exceptions,

Table 2
Regions ranked * by unemployment rate

	1989	1992	1995	Loss or gain in position **	
				1989 to 1992	1992 to 1995
St. John's	30	33	31	-3	2
Non-CMA Newfoundland	35	35	35	-	-
Prince Edward Island	34	34	33	-	1
Halifax	11	10	16	1	-6
Non-CMA Nova Scotia	32	32	32	-	-
Saint John	29	20	24	9	-4
Non-CMA New Brunswick	33	27	30	6	-3
Chicoutimi-Jonquière	27	30	34	-3	-4
Québec CMA	12	18	25	-6	-7
Trois-Rivières	26	31	27	-5	4
Sherbrooke	24	29	26	-5	3
Montréal	25	28	28	-3	-
Non-CMA Quebec	28	25	29	3	-4
Ottawa-Hull	8	6	23	2	-17
Sudbury	19	22	18	-3	4
Oshawa	2	21	15	-19	6
Toronto	1	19	14	-18	5
Hamilton	5	13	4	-8	9
St. Catharines-Niagara	15	23	19	-8	4
London	3	7	7	-4	-
Windsor	20	26	13	-6	13
Kitchener-Waterloo	4	9	6	-5	3
Thunder Bay	6	12	8	-6	4
Non-CMA Ontario	7	14	21	-7	-7
Winnipeg	18	17	10	1	7
Non-CMA Manitoba	13	1	1	12	-
Regina	17	3	5	14	-2
Saskatoon	23	16	11	7	5
Non-CMA Saskatchewan	10	2	2	8	-
Calgary	14	11	9	3	2
Edmonton	21	15	17	6	-2
Non-CMA Alberta	9	4	3	5	1
Vancouver	16	8	12	8	-4
Victoria	22	5	20	17	-15
Non-CMA British Columbia	31	24	22	7	2

Source: Labour Force Survey

Note: Small changes in rank can be caused by differences in the unemployment rate that are below acceptable levels of reliability. Rank variations of less than 5 should be treated with caution.

* Rank 1 corresponds to the lowest unemployment rate each year.

** A negative number indicates a worsening of relative position, that is, the rank has increased.

however. Québec CMA dropped 6 ranks from 1989 to 1992, and a further 7 in the following three years, moving from twelfth to twenty-fifth place over the six years. Halifax slid from tenth to sixteenth place between 1992 and 1995 (see *Dispersion increases with prosperity*).

Life in the big city...

So far the discussion has focused on the various regions of the country. But how about metropolitan areas as a whole? How does their unemployment picture compare with the rest of the country?

Dispersion increases with prosperity

As already noted, areas with the lowest unemployment rates in the late 1980s also had the greatest increases in the following three years, suggesting that unemployment distribution is closely tied to the state of the economy. In good times, unemployment is distributed much less evenly.

The evenness or inequality of the distribution of unemployment can be measured in many different ways. For

this study, the average difference of regional unemployment rates from the Canada figure was used to represent dispersion of unemployment.

In this paper, dispersion is calculated as a weighted mean of the differences between the regional and national unemployment rates. Specifically, the absolute difference between each regional rate and the national rate is multiplied by the regional labour force.

These products are summed, and the total is divided by the national labour force, to produce aggregate dispersion. Finally, the dispersion is divided by the national unemployment rate to produce percent dispersion.

In equation form, the percent dispersion is calculated as:

$$\frac{\sum |U_r - U_c| \times LFr}{U_c \times LFc}$$

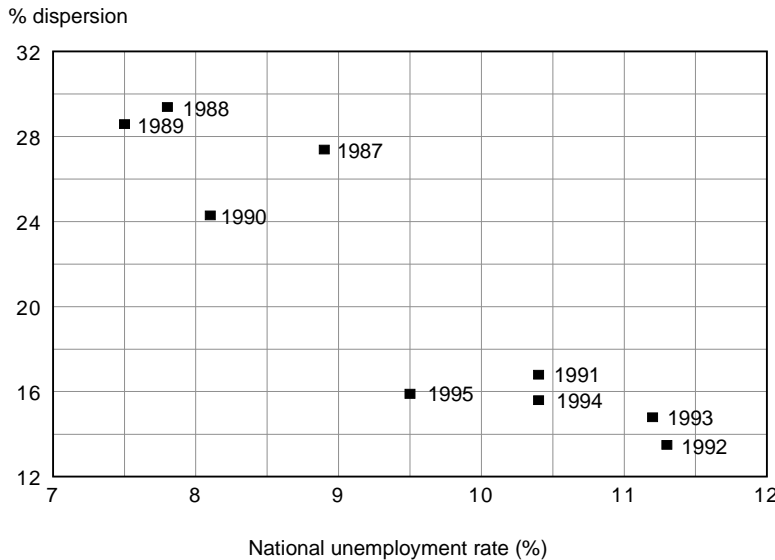
where

- U_r = unemployment rate in region r
- U_c = national unemployment rate
- LFr = labour force in region r
- LFc = national labour force

During the late 1980s, when unemployment was quite low in some areas, the dispersion of unemployment was high, approaching 30% in 1988 and 1989. This reflected the fact that areas such as non-metropolitan Newfoundland did not participate in the prosperity.

Since the former hotspots in southern Ontario suffered disproportionately from the recession, unemployment became more evenly distributed, with dispersion dropping to around 14% in 1992. By 1995, the national unemployment rate was down to 9.5% and unemployment dispersion was back up to approximately 16%. Both movements are modest compared with those of the late 1980s, however.

Unemployment dispersion varies inversely with the national unemployment rate.



Source: Labour Force Survey

Over the period studied, unemployment rates were lower in metropolitan areas than elsewhere (Chart). But they were also more variable, being much lower in good times and rising somewhat faster as the economy deteriorated. One explanation may be the industry mix (for example, agriculture may not suffer from cyclical fluctuations in demand as much as manufacturing).

Differences between metropolitan areas and the surrounding ter-

ritories vary across the country. In Newfoundland in 1994 and 1995, St. John's experienced unemployment rates around 10 percentage points lower than the remainder of the province (Appendix Table 2), a contrast undoubtedly affected by the decline of fishing. In Nova Scotia, the Halifax rate varied between 5 and 7 points below that for the rest of the province.

In New Brunswick, Quebec, Ontario and British Columbia, metropolitan area unemployment rates

were typically less than 2 percentage points below non-metropolitan rates. However, in all three Prairie provinces, the opposite was true: metropolitan areas had higher unemployment rates. This was particularly noticeable in Manitoba, where Winnipeg has been as much as 5 percentage points higher than the remainder of the province. This gap was widest between 1991 and 1994; before then the difference was closer to one percentage point.

Table 3
The largest changes* in unemployment rate rank

1989 to 1992		1992 to 1995	
Improved position			
Victoria	17	Windsor	13
Regina	14	Hamilton	9
Non-CMA Manitoba	12	Winnipeg	7
Saint John	9	Oshawa	6
Non-CMA Saskatchewan	8	Toronto	5
Vancouver	8	Saskatoon	5
Lost position			
Oshawa	-19	Ottawa-Hull	-17
Toronto	-18	Victoria	-15
Hamilton	-8	Québec CMA	-7
St. Catharines-Niagara	-8	Non-CMA Ontario	-7
Non-CMA Ontario	-7	Halifax	-6

Source: Labour Force Survey

* Five regions with the largest rank changes, negative or positive, were selected within each comparison period. However, where regions were tied, both cases are included in the list.

Note

1 The trough of the recession, as measured by monthly unemployment rates, occurred in April 1992. Annual average data such as those used here do not show the full detail of the trends over time.

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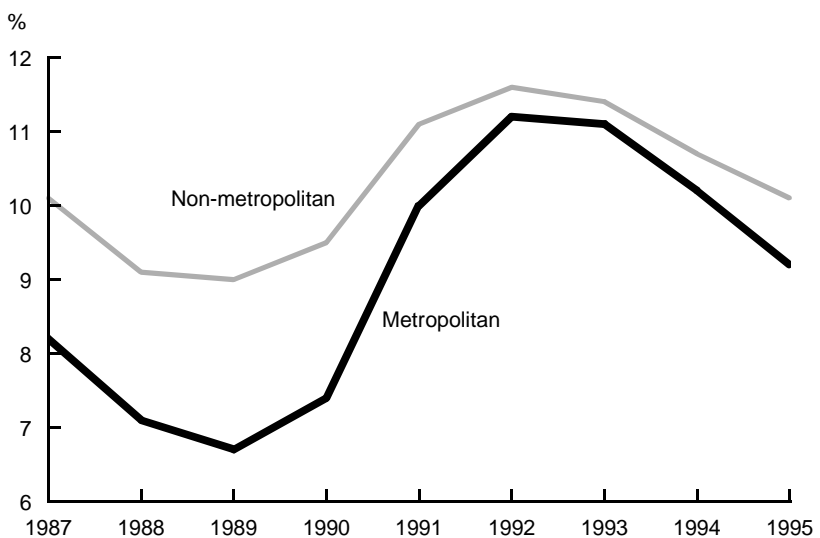
Summary

The national unemployment rate is a mosaic of many pieces. Some areas of the country, for example, demonstrate stability, but other regions are much more variable. Metropolitan areas in general tend to show wider fluctuations, though their unemployment rates are usually lower.

These differences have important consequences for the country. As the economy improves, certain regions tend to develop shortages of particular kinds of workers. At the same time, unemployment remains stubbornly high in other areas.

Although unemployment rates have fallen in most regions, these declines have been mostly moderate, so unemployment dispersion has risen only slightly. The lowest unemployment rates remain well above those of 1988 and 1989, and the location of the tightest labour markets has shifted from southern Ontario to the West. □

Chart
Unemployment rates in metropolitan areas are lower but more variable.



Source: Labour Force Survey

Appendix Table 1
Employment trends by region

	1989	1992	1995	Change	
				1989 to 1992	1992 to 1995
			'000		
Canada	13,086	12,842	13,506	-244	664
All CMAs combined	8,543	8,336	8,754	-207	418
All non-CMA regions combined	4,543	4,506	4,752	-37	246
Atlantic	941	921	954	-19	32
St. John's	74	74	82	-	8
Non-CMA Newfoundland	132	119	115	-12	-4
Prince Edward Island	55	54	59	-	5
Halifax	160	156	166	-4	10
Non-CMA Nova Scotia	224	215	218	-9	3
Saint John	56	59	59	3	-
Non-CMA New Brunswick	240	243	254	3	12
Quebec	3,157	3,067	3,204	-90	137
Chicoutimi-Jonquière	64	62	62	-2	-
Québec	304	310	316	6	6
Trois-Rivières	62	58	63	-4	5
Sherbrooke	68	61	66	-6	4
Montréal	1,557	1,493	1,544	-64	51
Non-CMA Quebec	987	960	1,025	-26	64
Ottawa-Hull	493	498	510	5	12
Ontario	5,241	5,001	5,231	-240	231
Sudbury	71	69	78	-1	9
Oshawa	126	119	128	-8	9
Toronto	2,165	2,021	2,123	-144	102
Hamilton	323	295	312	-28	16
St-Catharines-Niagara	152	153	159	1	6
London	198	198	208	-	10
Windsor	132	119	127	-13	8
Kitchener-Waterloo	197	194	205	-3	10
Thunder Bay	62	59	64	-3	5
Non-CMA Ontario	1,437	1,397	1,448	-40	51
Prairies	2,224	2,233	2,355	9	121
Winnipeg	336	321	344	-14	23
Non-CMA Manitoba	177	177	178	-	1
Regina	96	97	99	1	2
Saskatoon	102	100	106	-2	6
Non-CMA Saskatchewan	259	253	255	-6	2
Calgary	391	394	427	3	33
Edmonton	417	429	453	12	25
Non-CMA Alberta	446	462	492	16	31
British Columbia	1,524	1,619	1,762	96	142
Vancouver	806	861	910	55	50
Victoria	131	134	144	3	10
Non-CMA British Columbia	587	625	707	38	83

Source: Labour Force Survey

Appendix Table 2									
Metropolitan and non-metropolitan unemployment rates									
	1987	1988	1989	1990	1991	1992	1993	1994	1995
	%								
Canada	8.9	7.8	7.5	8.1	10.4	11.3	11.2	10.4	9.5
CMA	8.2	7.1	6.7	7.4	9.9	11.2	11.1	10.2	9.2
Non-CMA	10.1	9.1	9.0	9.5	11.1	11.6	11.4	10.7	10.1
Atlantic	13.9	12.3	12.2	12.7	14.0	14.9	15.4	14.8	13.4
CMA	10.7	9.4	8.7	9.3	10.7	11.8	11.8	11.2	10.1
Non-CMA	15.3	13.6	13.8	14.2	15.4	16.3	17.0	16.5	14.9
Newfoundland	18.0	16.4	15.7	17.0	18.3	20.2	20.1	20.4	18.3
CMA	12.5	11.2	10.8	11.9	13.3	15.6	14.1	14.1	12.6
Non-CMA	20.8	19.2	18.2	19.8	21.2	22.8	23.7	24.3	21.9
Prince Edward Island	13.1	12.9	14.0	14.9	16.9	17.9	18.1	17.1	14.7
Nova Scotia	12.4	10.2	9.8	10.5	12.0	13.2	14.7	13.3	12.1
CMA	9.0	7.9	6.9	7.9	9.1	10.0	11.2	9.4	8.9
Non-CMA	14.6	11.8	11.9	12.4	14.1	15.3	17.1	16.1	14.4
New Brunswick	13.1	12.0	12.4	12.1	12.8	12.8	12.6	12.4	11.5
CMA	13.0	11.2	10.7	9.6	11.8	11.4	10.5	12.2	10.3
Non-CMA	13.2	12.2	12.8	12.6	13.0	13.2	13.1	12.5	11.8
Quebec	10.3	9.4	9.3	10.2	12.0	12.8	13.2	12.2	11.3
CMA	9.9	9.1	8.8	9.6	11.7	12.8	13.0	12.1	11.1
Non-CMA	11.2	10.2	10.4	11.3	12.6	12.7	13.3	12.3	11.5
Ontario	6.1	5.0	5.1	6.3	9.6	10.9	10.6	9.6	8.7
CMA	5.7	4.6	4.7	5.8	9.5	10.9	10.6	9.5	8.5
Non-CMA	7.1	6.2	6.0	7.5	10.0	10.8	10.5	9.9	9.4
Prairies	8.7	7.9	7.4	7.1	8.2	9.3	9.3	8.4	7.6
CMA	9.3	8.4	7.9	7.6	9.2	10.5	10.6	9.8	8.3
Non-CMA	7.7	7.2	6.6	6.3	6.7	7.5	7.3	6.2	6.3
Manitoba	7.4	7.9	7.6	7.3	8.9	9.7	9.3	9.2	7.5
CMA	7.9	8.3	7.9	7.9	10.1	11.3	10.9	10.9	8.2
Non-CMA	6.5	7.1	7.0	6.2	6.7	6.7	6.4	6.0	6.0
Saskatchewan	7.4	7.5	7.5	7.0	7.3	8.2	8.0	7.0	6.9
CMA	8.3	8.2	8.6	7.9	8.6	9.5	9.1	8.2	7.9
Non-CMA	6.6	6.9	6.6	6.3	6.2	7.2	7.2	6.1	6.1
Alberta	9.7	8.1	7.3	7.0	8.3	9.5	9.7	8.6	7.8
CMA	10.2	8.5	7.7	7.4	9.1	10.4	10.8	9.8	8.5
Non-CMA	8.9	7.4	6.5	6.4	6.9	7.9	7.7	6.4	6.5
British Columbia	12.0	10.3	9.1	8.4	10.0	10.5	9.7	9.4	9.0
CMA	11.4	9.5	7.6	7.2	8.3	9.1	9.2	8.8	8.4
Non-CMA	12.9	11.5	11.4	10.1	12.6	12.6	10.5	10.3	9.7

Source: Labour Force Survey