

TRENDS ANALYSIS: EMPLOYMENT

FALL 2015



What does this measure & why is it important?

This indicator tracks the total number of people employed in Basin-Boundary Development Regions. Data are reported by sector and industry. Employment rates are also considered in this analysis. The employment rate measures the percentage of Canadian adults (15 years of age and over) working for pay. Data for this indicator were sourced from Statistics Canada's [Labour Force Survey \(LFS\)](#).

Employment figures indicate whether there are increasing opportunities for the people of the region, and in which sectors they will find them. Economists rely on employment data to track economic diversity, resilience and regional prosperity.

Three Development Regions (DRs) are contained in whole or in part by the Basin-Boundary region. The Kootenay DR includes the Regional Districts of Kootenay Boundary, Central Kootenay, and East Kootenay. In our region, the Thompson-Okanagan DR is represented by the areas surrounding Golden and Revelstoke, and the Cariboo DR is represented by the Village of Valemount.

What are the trends & current conditions?

Raw figures from the Labour Force Survey (Table 1) show overall job growth in the Thompson-Okanagan DR (2,400 jobs) and the Cariboo DR (3,700 jobs), and a loss in the Kootenay DR (9,000 jobs). In all three regions, the services-producing sector performed better than the goods-producing sector.

Industry	Thompson-Okanagan			Kootenay			Cariboo		
	2013	2014	1 Year Change	2013	2014	1 Year Change	2013	2014	1 Year Change
Total, All Industries	246.6	249	1.0%	76.5	67.5	-11.8%	81.6	85.3	4.5%
Goods-producing sector	60.6	60.3	-0.5%	21.1	18.3	-13.3%	24.1	23.5	-2.5%
Agriculture	6.1	5	-18.0%	1.6	-	N/A	-	-	N/A
Forestry, fishing, mining, quarrying, oil & gas	8	8.6	7.5%	5.9	7.2	22.0%	6.1	6.9	13.1%
Utilities	1.7	1.5	-11.8%	-	-	N/A	-	-	N/A
Construction	26.2	24.8	-5.3%	7.8	4.6	-41.0%	7.7	6.2	-19.5%
Manufacturing	18.6	20.5	10.2%	5.2	4.7	-9.6%	9.4	9.2	-2.1%
Services-producing sector	186	188.7	1.5%	55.4	49.3	-11.0%	57.5	61.8	7.5%
Trade	40.5	40.6	0.2%	11.9	11.8	-0.8%	12.9	13.7	6.2%
Transportation & warehousing	8.3	10.6	27.7%	3.8	3.3	-13.2%	5.2	4.4	-15.4%
Finance, insurance, real estate & leasing	14.2	11.3	-20.4%	2.7	3.1	14.8%	2.6	2.9	11.5%
Professional, scientific & technical services	14.8	14.2	-4.1%	3.8	1.9	-50.0%	2.7	3.3	22.2%
Business, building & other support services	10.5	8.3	-21.0%	2.1	1.7	-19.0%	2	2.7	35.0%
Educational services	15.9	15.1	-5.0%	4	5	25.0%	5.6	6.8	21.4%
Health care & social assistance	31.8	33.4	5.0%	10.7	9.5	-11.2%	10	10	0.0%
Information, culture & recreation	11.6	11.1	-4.3%	3.1	2.5	-19.4%	1.9	2.9	52.6%

Accommodation & food services	20.6	26	26.2%	7.9	5.2	-34.2%	7.4	6.4	-13.5%
Other services	10	10.2	2.0%	2.9	3.3	13.8%	3.2	5.4	68.8%
Public administration	7.9	7.9	0.0%	2.4	1.9	-20.8%	4	3.4	-15.0%

Table 1: Employment by sector and Development Region (in thousands), 2013-2014

Source: Statistics Canada, 2015

Variability

Labour Force Survey data are based on a survey of a sample of an area's residents. Statisticians take the answers from the sample and, based on this information, make estimations of how the whole population would answer the same questions (Wooldridge, 2002). This process, or estimation, can be very accurate under favourable conditions. With smaller sample sizes, however, variability and the likelihood of estimation error increase. Please refer to the RDI's report, *Understanding Labour Force Survey Variability for the Basin-Boundary Region*, for a complete discussion of this issue and resultant recommendations. To compensate for this level of variability, the RDI uses three-year moving averages for Labour Force Survey estimates with high variability.

Applying this technique to our constituent DRs (Table 2) shows far more modest changes in employment levels. Using this technique, we find that only the Cariboo DR saw job growth (1,400 jobs) from 2013 to 2014, while the Thompson-Okanagan DR (-400 jobs) and the Kootenay DR (-1,000 jobs) saw job losses.

This analysis shows the most significant job increases being driven by the *Forestry, Fishing, Mining, Quarrying, Oil & Gas* industry in both the Thompson-Okanagan and in the Kootenay DRs. While this industry also saw significant growth in the Cariboo DR, there was an even bigger relative increase in employment in the *Other Services* industry.

Largest job losses were seen in the *Utilities* industry in the Thompson-Okanagan DR, *Business, Building & Other Support Services* in the Kootenay DR, and *Transportation & Warehousing* in the Cariboo DR.

Resource industries continue to influence employment and wages (See the RDI's 2015 Trends Analysis for the Wages indicator). In the *Goods-Producing* sector, resource extraction was followed in job growth by the *Manufacturing* industry for both the Thompson-Okanagan DR and the Cariboo DR. Wages in these industries tend to be significantly higher than those found in the *Services-Producing* sector.

In the *Service-Producing* sector, the biggest employment industries are *Trade* (Retail & Wholesale) and *Health Care & Social Assistance*. The *Services-Producing* sector employs more people than the *Goods-Producing* sector. Despite the generally lower wages, this sector is extremely important because of its size.

Industry	Thompson-Okanagan			Kootenay			Cariboo		
	2013	2014	1 Year Change	2013	2014	1 Year Change	2013	2014	1 Year Change
Total, All Industries	249.8	249.4	-0.1%	73.3	72.3	-1.4%	82.5	83.9	1.7%
Goods-producing sector	57.5	58.5	1.7%	21.0	20.3	-3.6%	23.7	24.6	3.7%
Agriculture	5.6	5.4	-4.2%	1.6	1.6	0.0%	-	-	N/A
Forestry, fishing, mining, quarrying, oil & gas	6.7	7.8	15.9%	6.2	6.8	9.1%	5.7	6.6	15.8%
Utilities	2.1	1.6	-23.8%	-	-	N/A	-	-	N/A
Construction	25.2	25.5	1.1%	7.9	6.7	-15.1%	7.1	6.9	-2.3%
Manufacturing	18.3	18.6	1.5%	5.0	4.8	-4.0%	9.6	9.9	2.8%
Services-producing sector	192.3	190.9	-0.7%	52.3	52.0	-0.4%	58.7	59.2	0.9%
Trade	40.5	40.1	-1.0%	11.0	11.4	4.3%	13.2	13.5	1.8%

Transportation & warehousing	9.8	9.9	1.0%	3.2	3.2	1.0%	5.8	5.1	-11.6%
Finance, insurance, real estate & leasing	13.4	13.0	-2.5%	2.4	2.5	4.1%	2.8	2.7	-5.9%
Professional, scientific & technical services	14.9	15.1	1.1%	3.3	3.2	-4.0%	3.3	3.1	-6.0%
Business, building & other support services	9.5	9.5	-0.4%	2.6	2.0	-20.8%	2.3	2.3	2.9%
Educational services	15.9	15.9	0.0%	4.4	4.8	9.0%	5.8	6.1	5.2%
Health care & social assistance	33.7	33.2	-1.5%	9.6	9.8	1.7%	10.3	10.2	-0.6%
Information, culture & recreation	11.1	11.2	1.2%	2.5	2.6	5.4%	2.2	2.4	7.6%
Accommodation & food services	22.8	24.0	5.4%	7.2	6.7	-7.0%	6.6	6.7	1.0%
Other services	11.7	10.8	-7.4%	3.6	3.4	-4.6%	3.0	3.9	30.0%
Public administration	9.0	8.2	-8.9%	2.5	2.3	-9.3%	3.3	3.3	-1.0%

Table 2: Employment by sector and Development Region (in thousands) with 3-year moving average applied, 2013-2014

Source: Statistics Canada, 2015; moving averages calculated by the RDI

It is interesting to note the different weights of the *Service:Goods* sector employment levels. In 2014, the Thompson-Okanagan DR had 3.3 times as many service jobs as goods-producing jobs. In the Kootenay DR, there were 2.6 times as many service jobs, and in the Cariboo DR, 2.4 times as many service jobs. This is due to the influence of large urban population centres within the Thompson-Okanagan (Kelowna, Kamloops and Vernon). Service industries generally thrive in proximity to their clients; large population centres will tend promote faster growth of services.

Employment Rate

Table 3 and Figure 1 show the employment rates for BC Development Regions and three-year moving average employment Rates for Basin-Boundary Development Regions, respectively. Table 1 data show that the Kootenay DR has the second lowest estimated employment rate, while the Thompson-Okanagan DR is third lowest and the Cariboo DR is second highest.

Figure 1 shows three-year moving average trends for Basin-Boundary DRs. This analysis shows that the Thompson-Okanagan DR is following the general trends of BC, albeit at a weaker rate. The Cariboo and Kootenay DRs, however, are following a different path, with generally increasing employment rates. However, even with three-year moving averages applied, the Kootenay DR demonstrated a significant decrease in its employment rate in 2014.

Employment Rate by Development Region											
Region	2006	2007	2008	2009	2010	2011	2012	2013	2014	5 Year Change	1 Year Change
Vancouver Island and Coast	60.0	60.4	61.8	59.2	59.4	56.0	55.8	56.1	54.2	-8.4%	-3.4%
Kootenay	56.6	62.6	57.7	56.8	54.7	56.8	58.7	62.1	55.2	-2.8%	-11.1%
Thompson - Okanagan	61.0	60.6	60.7	58.4	59.4	58.4	58.9	57.5	58.0	-0.7%	0.9%
North Coast & Nechako	63.4	62.4	66.7	62.2	60.7	64.2	59.1	60.8	58.7	-5.6%	-3.4%
British Columbia	62.2	63.2	63.2	60.7	60.7	60.2	60.4	59.8	59.5	-2.0%	-0.5%
Lower Mainland - Southwest	63.1	64.1	63.9	61.7	61.2	61.3	61.4	60.6	60.8	-1.5%	0.3%

Cariboo	65.6	66.8	65.3	59.3	62.8	64.0	67.0	64.5	67.2	13.3%	4.2%
Northeast	66.7	71.2	72.4	69.6	72.0	71.8	75.9	74.0	70.1	0.7%	-5.3%

Table 4: Employment rate by Development Region, 2006-2014

Source: Statistics Canada, 2015

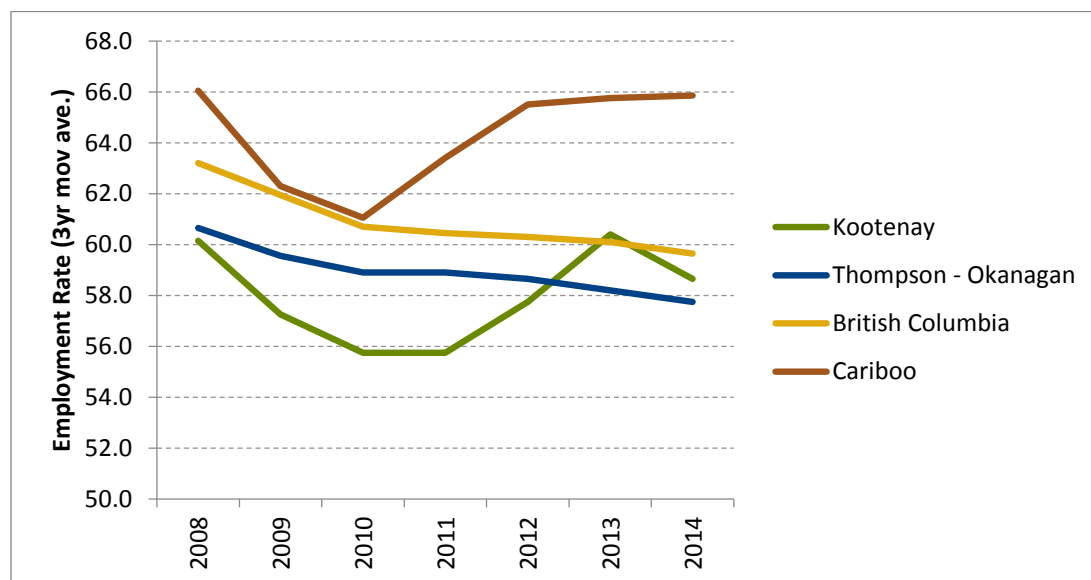


Figure 1: Employment Rate by Basin-Boundary Development Region with 3-year moving average applied, 2006-2014

Source: Statistics Canada, 2015; moving averages calculated by the RDI

References

Columbia Basin Rural Development Institute. (2015). Understanding Labour Force Survey Variability for the Basin-Boundary Region. RDI, Castlegar, BC

Statistics Canada. (2014). Labour Force Survey [custom tables]. Based on Table Nos.: 282-0002, 282-0004, 282-0008, 282-0072.

Wooldridge. (2002). *Introductory Econometrics: A Modern Approach*. South-Western College Pub.



The Columbia Basin Rural Development Institute, at Selkirk College, is a regional research centre with a mandate to support informed decision-making by Columbia Basin-Boundary communities through the provision of information, applied research and related outreach and extension support. Visit www.cbrdi.ca for more information.