

Non-metro employment: forestry and mining

Vol. 3, No. 10, 2015

Highlights

- Since 2001, non-metro employment in mining and oil & gas has increased by about 3,800 workers while non-metro employment in forestry has declined by 3,300 workers.
- About 46% of Ontario's employment in this sector is located in the Northeast Economic Region, which includes the metro area of Greater Sudbury.

Why look at employment in forestry and mining?

The forestry and mining sectors are major exportable¹ sectors, particularly for northern Ontario.

This FactSheet portrays the level and change of employment in these sectors in non-metro census divisions (CDs).

Findings²

The level of employment in non-metro CDs in mining, quarrying and oil & gas extraction increased from 7K³ to 11K in 2014 (Figure 1 and Table 1, Row #14). In 2014, this sector represented 1.1% of employment in non-metro CDs, up from 0.8% in 2001 (Row #14 as a percent of Row #21).

The magnitude of the non-metro decline in forestry employment was similar to the increase in mining – forest employment declined from 7K in 2001 to 4K by 2014. This represented 0.4% of non-metro 2014 employment, down from 0.8% in 2001.

We report an employment “performance”⁴ indicator that compares the “expected” change in employment in each sector, based on national patterns, and the “actual” change in employment⁵. Sectors with a positive value are leading national patterns while sectors with negative values are lagging.

¹ An “exportable” good or service is one that can be sold to a client in another jurisdiction – either sent to the client (e.g. a box of chocolates) or the client comes to your jurisdiction to consume the item (e.g. a day on a ski hill).

² For the level of employment for each subsector, see [Appendix Table](#): Employment in non-metro CDs by industry sector.

³ Where “K” indicates “thousand”.

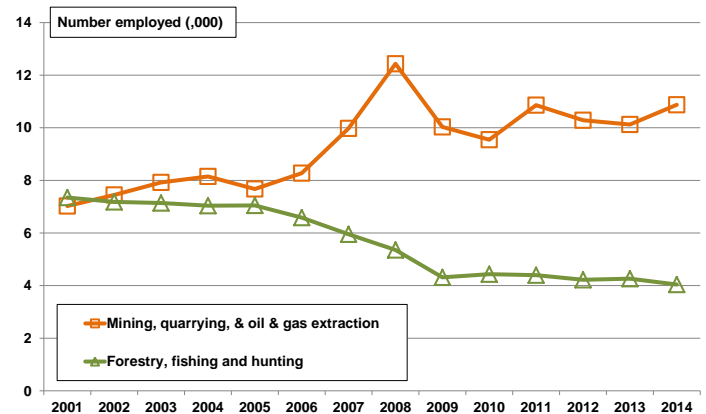
⁴ As defined in Footnote #1 in Table 1.

⁵ This is a useful indicator for analysts who are monitoring changes in *employment levels*. Employment across all sectors in non-metro CDs grew by 78K from 2001 to 2004 but this growth was about ½ of expected growth, based on national patterns (last line of Table 1). However, for analysts concerned with the *viability of a sector*, the change in GDP or the change in GDP per worker provides a better indicator of “economic performance.”

For the forestry sector (Row #3), the expected change in employment from 2001 to 2014 was -2.8K but the actual change was -3.4K which indicates a lagging job performance of -0.6K jobs in Ontario's non-metro forestry sector. Within the forestry sector, support activities for forestry (Row #12) reported an employment gain of 0.3K yielding a leading job “performance” of 0.6K as national patterns predicted a job decline of 0.3K.

Figure 1

From an employment level of 7,000 in 2001, FORESTRY declined to 4,000 in 2014 and MINING increased to 11,000 in 2014 in non-metro census divisions, Ontario



Source: Ontario Ministry of Agriculture, Food and Rural Affairs, ANALYST EMSI database.

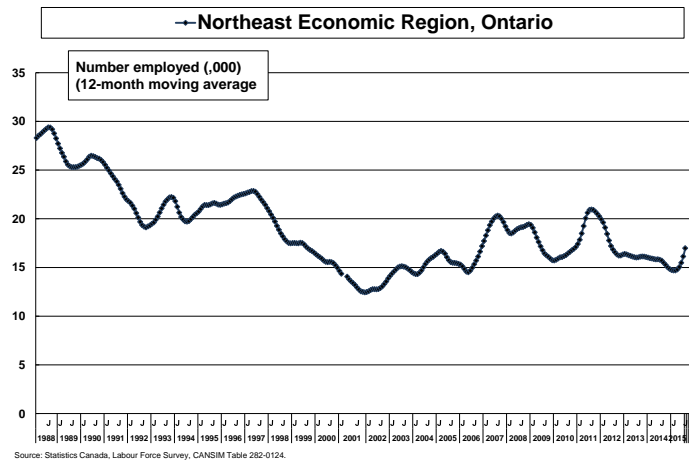
From 2001 to 2014, employment in mining (Row #14) increased by 3.8K but the expected growth, based on national patterns, was 4.9, which indicates a lagging employment performance of -1.0K. Within the mining sector, there was employment growth with positive “job” performance of 0.4K in non-metallic mineral mining (e.g. diamonds) & quarrying (e.g. gravel) (Row #19) and a positive “job” performance of 0.7K in support activities for mining (Row #20).

Note that employment is growing faster than the national patterns for “support activities” in both forestry and in mining. Part of this growth is an

“exportable” which means the provision of technical expertise to projects outside of non-metro Ontario.

Figure 2

Number employed in forestry, mining and oil & gas



In August, 2015, the level of employment for the forestry, mining and oil & gas sector across all of Ontario was 37K (as shown in the on-line [Appendix Charts](#) Employment Trends by Industry Sector).

Employment in this sector in the Northeast Economic Region (ER) (which includes the metro area of Greater Sudbury) was 17K (Figure 2), equal to 7% of Northeast ER employment and equal to 46% of the provincial employment in this sector. The present employment level (17K) is within a range of 15K to 20K workers in this sector since 2001.

Summary

Within non-metro CDs since 2001, employment in mining and oil & gas has increased by about 3,800 workers while non-metro employment in forestry has declined by 3,300 workers.

About 46% of Ontario’s employment in forestry and mining is in the Northeast Economic Region, which includes the metro area of Greater Sudbury.

The growth in employment in support activities for forestry and mining suggests that this expertise may be an exportable to projects outside non-metro Ontario.

Table 1

Non-metro employment in the sectors of FORESTRY, MINING and OIL and GAS EXTRACTION, employment change & performance relative to national patterns, Ontario, 2001 to 2014																									
Row #	NAICS Code	Level	Industry sector (displayed for each category of NAICS = North American Industry Classification System)	Estimated number employed (,000)														Expected change (based on national patterns) (1), 2001 to 2014 (,000)	Actual change, 2001 to 2014 (,000)	"Performance" = Actual minus Expected (,000)	Intensity(2) (LQ) relative to:				
				2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014				Ontario		Canada		
1	11	1	Agriculture, forestry, fishing & hunting	54.6	49.6	47.8	47.4	48.4	50.4	49.0	47.5	45.5	45.3	47.4	48.4	47.5	45.2	-10.3	-9.4	0.9	3.4	3.5	2.0	2.2	
2	111-112	2	Farms	45.4	41.1	39.5	39.4	40.4	43.0	42.3	41.3	40.4	39.9	41.9	43.2	42.0	39.9	-6.0	-5.5	0.5	3.3	3.4	2.2	2.4	
3	113	2	Forestry & logging	6.0	5.7	5.8	5.8	5.7	5.3	4.7	4.1	3.2	3.2	3.1	2.9	3.0	2.7	-2.8	-3.4	-0.6	4.5	5.2	1.7	1.6	
4	1131	3	Timber tract operations	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	4.2	2.9	2.0	1.1	
5	1132	3	Forest nurseries & gathering of forest products	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.5	4.3	0.8	1.3
6	1133	3	Logging	5.8	5.6	5.6	5.6	5.5	5.1	4.6	4.0	3.1	3.0	3.0	2.8	2.9	2.6	-2.7	-3.2	-0.6	4.6	5.3	1.7	1.6	
7	114	2	Fishing, hunting & trapping	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.3	0.4	0.3	0.3	0.2	0.2	-0.2	-0.3	-0.1	4.2	3.7	0.3	0.2	
8	1141	3	Fishing	0.5	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	-0.1	-0.3	-0.1	4.4	3.6	0.3	0.2	
9	1142	3	Hunting & trapping	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	5.4	0.6	1.8
10	115	2	Support activities for agriculture & forestry	2.7	2.3	2.1	1.8	1.9	1.7	1.6	1.6	1.6	1.9	2.1	2.1	2.3	2.4	-0.5	-0.3	0.3	3.6	3.3	1.4	1.8	
11	1150	3	Support activities for farms	1.8	1.3	1.2	0.9	0.9	0.8	0.8	0.9	0.8	1.0	1.1	1.0	1.2	1.2	0.1	-0.6	-0.7	3.3	2.7	2.8	2.0	
12	1153	3	Support activities for forestry	0.8	1.0	1.0	0.9	1.0	0.9	0.8	0.8	0.8	0.9	1.0	1.1	1.1	1.2	0.0	0.3	0.6	4.3	4.3	0.7	1.6	
13			Subtotal: Forestry, fishing and hunting	7.3	7.2	7.1	7.0	7.0	6.6	6.0	5.4	4.3	4.4	4.4	4.2	4.3	4.0								
14	21	1	Mining, quarrying, & oil & gas extraction	7.0	7.4	7.9	8.1	7.7	8.3	10.0	12.4	10.0	9.5	10.9	10.3	10.1	10.9	4.9	3.8	-1.0	2.5	3.2	0.8	0.8	
15	211	2	Oil & gas extraction	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.2	0.2	0.1	0.1	0.0	2.0	2.6	0.1	0.1	
16	212	2	Mining & quarrying (except oil & gas)	5.6	6.0	6.2	6.0	5.4	5.5	6.6	8.2	6.9	6.1	6.8	6.2	6.4	7.3	1.5	1.7	0.2	2.5	3.2	1.9	2.1	
17	2121	3	Coal mining	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	1.3	2.6	0.1	0.1	
18	2122	3	Metal ore mining	3.5	3.6	3.6	3.3	2.8	2.7	3.4	5.0	3.8	3.2	3.9	3.3	3.6	4.4	0.9	0.9	-0.1	2.5	3.0	2.4	2.6	
19	2123	3	Non-metallic mineral mining (e.g. diamonds) & quarrying (e.g. sand)	2.1	2.4	2.6	2.6	2.5	2.8	3.2	3.2	3.0	2.9	2.9	2.8	2.8	2.9	0.4	0.8	0.4	2.7	3.7	1.8	2.3	
20	213	2	Support activities for mining, & oil & gas extraction	1.3	1.3	1.6	2.1	2.3	2.7	3.3	4.1	3.0	3.1	3.9	3.9	3.5	3.4	1.4	2.1	0.7	2.6	3.2	0.4	0.6	
21			Total: All sectors in non-metro Ontario	874.6	890.3	901.6	910.7	922.1	932.6	930.6	960.1	923.5	913.0	919.7	938.4	948.4	952.4	150.6	77.8	-72.8					

1. The expected change is estimated from a shift-share calculation that shows the change that would have occurred if non-metro employment had changed at the same rate as national employment and if the employment in the given sector had changed at the same rate as the national employment in the given sector.

2. A location quotient (LQ) indicates the relative intensity of a sector (in this case, in non-metro census divisions), relative to the provincial pattern and relative to the national pattern. It is calculated as the non-metro percent employed in a sector divided by the provincial (or national) percent employed in a sector.

Source: Ontario Ministry of Agriculture and Food, ANALYST EMSI database.

Rural Ontario Institute gratefully acknowledges the work of Ray Bollman in preparing this edition of [Focus on Rural Ontario](#). Questions on data sources can be directed to RayD.Bollman@sasktel.net. Any comments or discussions can be directed to NRagettie@RuralOntarioInstitute.ca.