

**Industry and Employment Trends  
in Northern Alberta  
1991-1996  
Data Summary**

Prepared for the  
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## Introduction

This report looks at changes in the number of businesses and the number of employees by industry in northern Alberta over the period 1991 to 1996.

The data used in this report comes from Statistics Canada's Business Register File (BRF). The BRF contains counts on all businesses with paid employees, but excludes owner-operated businesses with no paid employees. The report looks at the BRF data three different ways. First, it examines the number of companies in given size ranges; second, it look at the number of businesses in different industries; and finally, the report shows estimates of the number of employees in the various industries. In each case, the figures are tracked for the years 1991, 93, 95, and 96.

The data shows that in northern Alberta from 1991 to 1996, the number of businesses in all industries increased 25%, with most of this growth coming from small businesses. However, an increase in the number of firms within an industry did not necessarily translate into a significant increase in the number of employees.

## Methodology

The data is broken down by:

- eighteen industries based on Standard Industry Classification (SIC) divisions:

Agriculture and related services	Finance and insurance
Fishing and trapping	Real estate operators and insurance agents
Logging and forestry	Business services
Mining, quarrying and oil well	Government services
Manufacturing	Educational services
Construction	Health and social services
Transportation and storage	Accommodation, food and beverage services
Communication and other utilities	Other services
Wholesale trade	

Retail trade

- eight employee size ranges - 1 to 4, 5 to 9, 10 to 19, 20 to 49, 50 to 99, 100 to 199, 200 to 499, 500 and over
- four years 1991, 1993, 1995 and 1996.

For the purposes of this report, northern Alberta consists of an approximation of the NADC region and the areas served by the Clearinghouse partner institutions following Statistics Canada geographies. The study area encompasses Census Divisions 10, 12, 13, 16, 17, 18 and 19.

## **Limitations of the data**

Two main limitations must be taken into account when using the data in this report. The first is what can be called the “head office effect”. A business as defined in the BRF could be a single entity or a large company with many branch operations across the country. The BRF counts do not show the number of “locations” of offices of a business. Consider, for example, an oil company with branch operations in northern Alberta and its head office in Calgary. If the branches report to Revenue Canada as separate businesses, they would be included in our data. If they are reported as part of head office, they would not appear in our data.

The second limitation has to do with the margin of error in the estimates of numbers of employees. The BRF provides counts of businesses, not counts of employees. To estimate the number of employees, we multiplied the number of businesses for each employee size range by the midpoint of the range, and then added the totals from each range. For example, a company in the 50 to 99 employee range would be deemed to have 75 employees and one in the 200 to 499 range would be deemed to have 350. The exception to this is for companies with 500 or more employees, which are deemed to have 500. Since the employee size ranges are broad, the error in the estimated number of employees is large, about 35% to 40%.

## **Results**

The number of businesses in northern Alberta has grown significantly, though the estimated number of employees has not grown as much. Two major trends account for much of this apparent discrepancy:

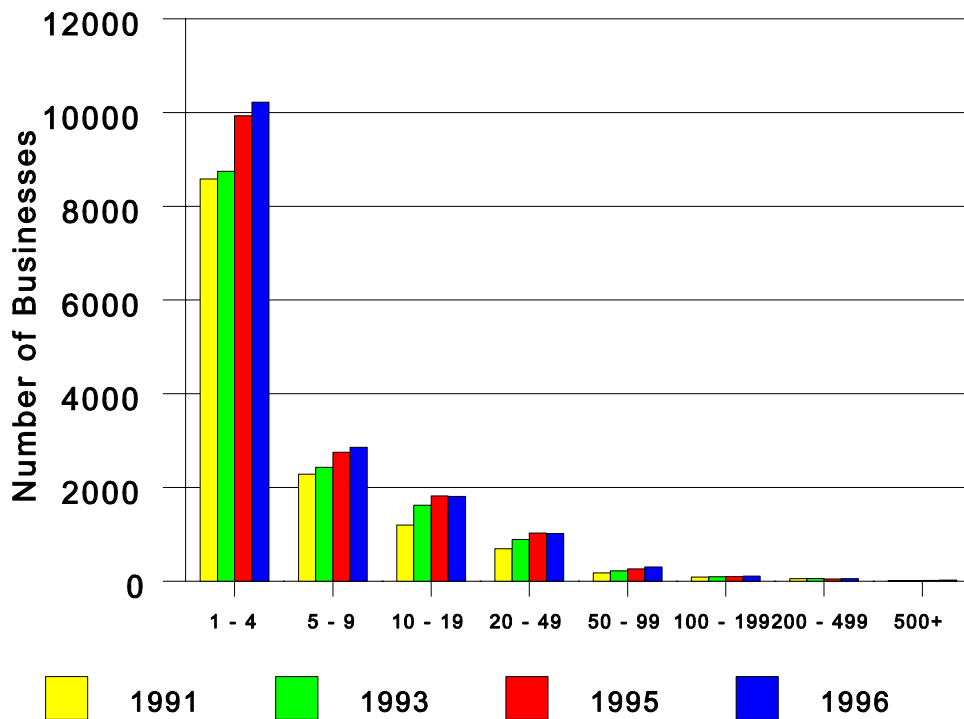
- new technology is allowing many companies, especially those in resources and manufacturing, to expand their operations without expanding their workforces
- many large companies are downsizing and replacing direct employees with contractors. This has reduced the workforce of larger companies while creating opportunities for smaller contracting firms in many fields.

### *Distribution of Businesses by Size*

In 1996, there were 16,384 businesses in northern Alberta. About 80% of these businesses have less than ten employees. The region saw an increase of 3,294 businesses from 1991 to 1996, of which 2,212 or 67% had less than ten employees (Figures 1a, 1b). The increase includes both new business entries and businesses that exit or stop operating. This growth was largely driven by the primary industries of forestry and energy, which then rippled through the secondary and tertiary industries.

**Figure 1a - Number of Businesses by Employee #s**

**All Industries, 1991 - 96**



**Figure 1b: Number of Businesses by Employee Size Range for all industries, 1991 to 1996**

Year	Employee size range								Total
	1-4	5-9	10-19	20-49	50-99	100-199	200-499	500+	
1991	8580	2283	1201	694	179	90	51	12	13090
1993	8749	2426	1619	889	219	92	59	10	14063
1995	9932	2753	1818	1027	263	101	47	17	15958
1996	10222	2853	1810	1017	300	112	51	19	16384
91 to 96 % change	1642 19%	570 25%	609 51%	323 47%	121 68%	22 24%	0 0%	7 58%	3294 25%

*Industry Trends Based on Number of Businesses*

Every industry saw an increase in the number of firms from 1991 to 1996 (Figures 2a, 2b). The largest percentage increases occurred in: logging and forestry; mining, quarrying and oil well; transportation and storage; and business services. These four industries accounted for 1,216 or 37% of the 3,294 net increase in businesses. They are also the fastest-growing industries in terms of percentage growth (if we do not include fishing and trapping, whose small sample size makes its figures unreliable).

The high level of activity in the forestry and energy sectors was the driving factor in the growth of other industries in the region. Most growth industries joined the resource sectors in enjoying their greatest expansion between 1993 and 1995.

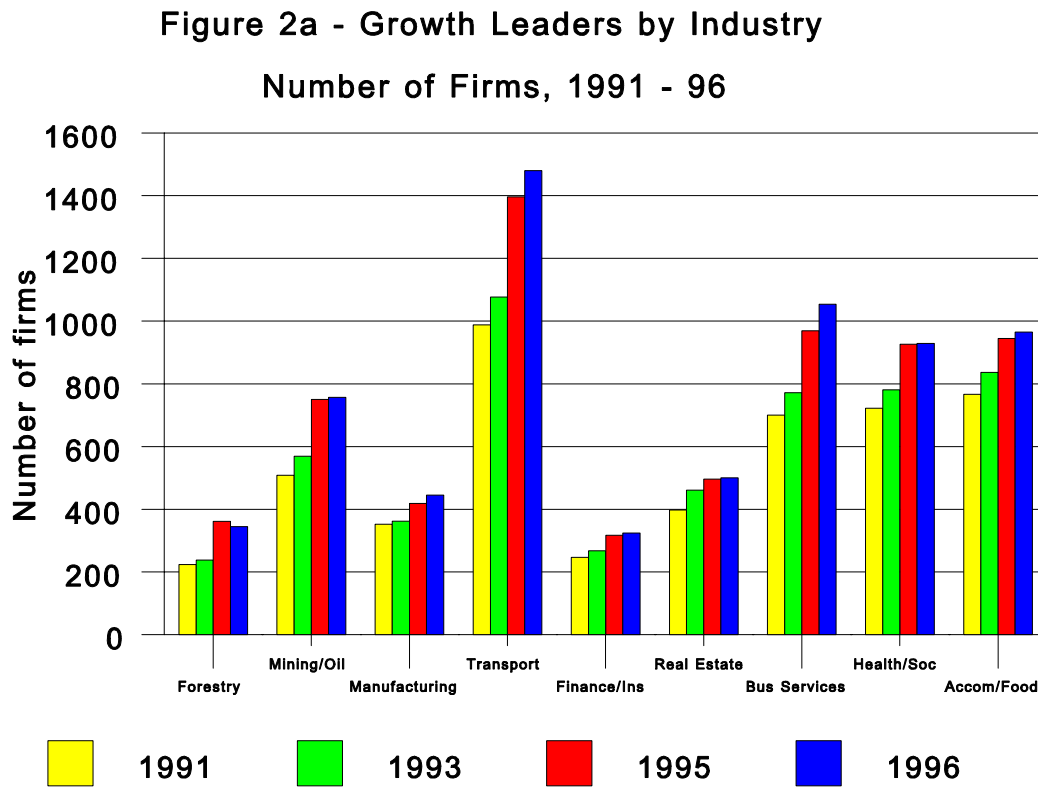


Figure 2b: Number of Businesses by Industry, 1991 to 1996

Industry	Year				Change	% Change
	1991	1993	1995	1996	91 to 96	91 to 96
Agriculture and related	1663	1868	1794	1730	67	4%
Fishing and trapping	5	7	7	9	4	80%
Logging and forestry	224	238	361	345	121	54%
Mining, quarrying and oil well	508	569	750	757	249	49%
Manufacturing	352	362	419	445	93	26%
Construction	1579	1645	1880	1974	395	25%
Transportation and storage	988	1077	1396	1480	492	50%
Communication and utilities	80	81	107	99	19	24%
Wholesale trade	740	743	834	905	165	22%
Retail trade	2059	2202	2419	2470	411	20%
Finance and insurance	247	267	317	324	77	31%
Real estate and insurance agents	397	461	496	500	103	26%
Business services	700	772	969	1054	354	51%
Government services	144	146	169	178	34	24%
Educational services	234	238	235	253	19	8%
Health and social services	722	781	926	929	207	29%
Accom. food and beverage	767	837	944	965	198	26%
Other services	1681	1769	1935	1967	286	17%
Total	13090	14063	15958	16384	3294	25%

### *Industry Trends Based on Number of Employees*

Although every industry saw an increase in the number of firms, they did not all experience an increase in the number of employees. This is because, among other reasons, an increase in the number of small businesses may have been offset by a decrease in the number of large businesses.

Nine industries saw an increase in the number of employees (Figure 3a, 3c):

mining, quarrying and oil well	communication and other utilities
manufacturing	finance and insurance
construction	real estate and insurance agents
transportation and storage	business services
other services	

Employment in the other nine industries was relatively stable. The numbers employed in many industries appear to have changed but any percentage change that is less than the estimated margin of error (40%) must be deemed insignificant.

Percentage growth in estimated employment did not necessarily follow the pattern of

percentage growth in the number of firms. Of the top six growing industries in terms of numbers, only two held roughly the same rank in terms of employment growth (not counting fishing and trapping).

- Mining and oil held fourth place in both categories, and business services varied slightly from second place in numerical to third in employment growth.
- The number of companies in logging and forestry grew by the highest percent (54%), yet the percentage increase in employment in that industry was too low to be significant. Likewise, the sixth and seventh ranked percentage growth industries in terms of number of companies, health and social services, and accommodation, food and beverages, also did not register in terms of employment growth.
- Two of the top growth industries (finance and insurance, and transportation and storage) ranked higher in terms of percentage employment growth than in percentage increase in firms.

These differences are probably due to two main factors; the extent to which different industries have been able to grow through technology, and the average size of the new companies in a given industry. In addition, the level of accuracy of the employment estimates may play a role.

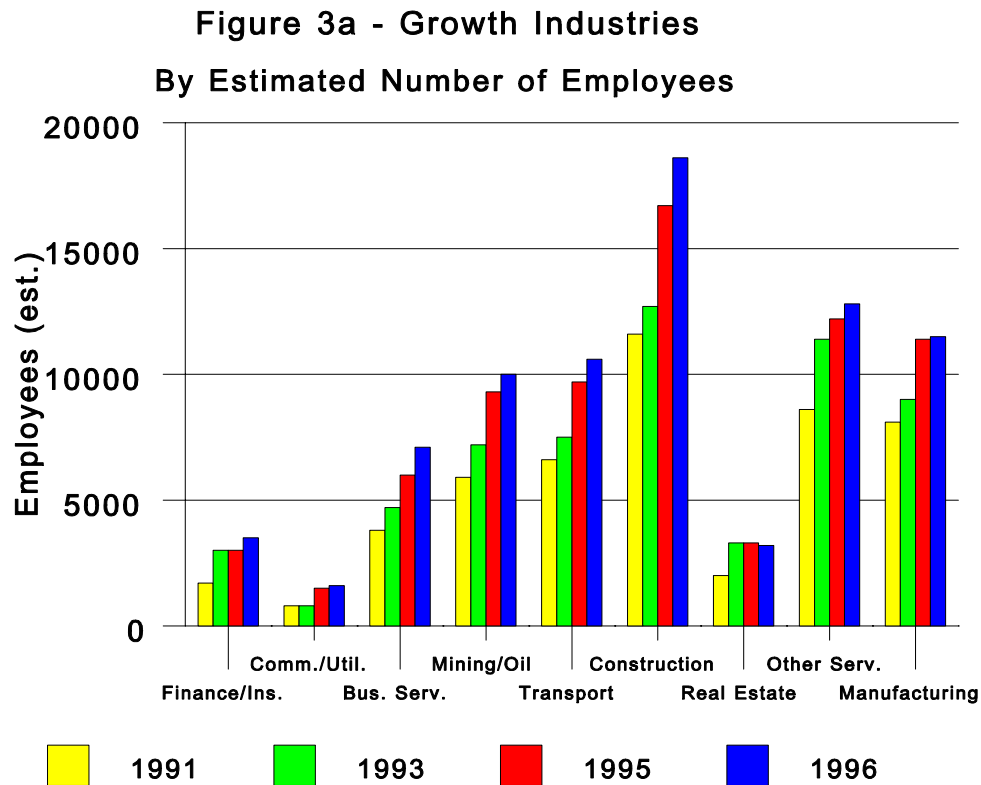


Figure3b: Estimated Number of Employees by Industry, 1991 to 1996

Industry	Business Register File				Change 91 to 96	% Change 91 to 96	Comment
	1991	1993	1995	1996			
Agriculture and related	6800	7100	7000	6300	-500	-7%	not significant
Fishing and trapping	30	18	22	23	-7	-23%	not significant
Logging and forestry	2100	2200	3300	2800	700	33%	not significant
Mining, quarrying and oil well	5900	7200	9300	10000	4100	69%	
Manufacturing	8100	9000	11400	11500	3400	42%	
Construction	11600	12700	16700	18600	7000	60%	
Transportation and storage	6600	7500	9700	10600	4000	61%	
Communication and utilities	800	800	1500	1600	800	100%	
Wholesale trade	5900	6700	7800	8200	2300	39%	not significant
Retail trade	18700	22000	23500	24600	5900	32%	not significant
Finance and insurance	1700	3000	3000	3500	1800	106%	
Real estate and insurance agents	2000	3300	3300	3200	1200	60%	
Business services	3800	4700	6000	7100	3300	87%	
Government services	7200	7300	7700	7900	700	10%	not significant
Educational services	15300	15400	11800	12700	-2600	-17%	not significant
Health and social services	13900	16300	17300	17700	3800	27%	not significant
Accom. food and beverage	11400	13500	15500	15900	4500	39%	not significant
Other services	8600	11400	12200	12800	4200	49%	
<b>Total</b>	<b>130500</b>	<b>150100</b>	<b>167100</b>	<b>174900</b>	<b>44400</b>	<b>34%</b>	not significant

## Summary

The bulk of the increase in the number of businesses operating in northern Alberta came from small businesses with less than ten employees each. As a result, employment growth does not necessarily match the increase in the number of businesses in the region. In fact, the loss of one major business could cancel out a large increase in the number of small businesses.

Many companies, particularly in primary resource industries, are using technology to greatly expand their operations with a relatively small increase in their workforce. As a result, the jobs that are created will generally need a higher level of technical expertise than in the past, and employees will need to continually upgrade their skills to keep up with changes in technology.

Also, many large businesses now hire contractors to perform tasks that their own employees would have done in the past. This increases the market for small contracting firms, many of which are owned and/or staffed by former employees of the large businesses. As a result, in addition to higher technical skill levels, employees would do well to develop small business and entrepreneurial skills.



**Source**

Data in this report was generated from Statistics Canada Business Register Files for Alberta Census Divisions, 1991, 1993, 1995, 1996. Catalogue # 61C0024.