

The Occupational Structure of Northern Ontario



Northern Ontario Training Boards

The Training Boards of Northern Ontario:

North Superior Training Board #24

Northwest Training & Adjustment Board #25

Muskoka, Nipissing, Parry Sound Local Training & Adjustment Board #20

Sudbury and Manitoulin Training & Adjustment Board #21

Far Northeast Training Board #23

**2001 Census Research Paper Series: Report #7
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THE OCCUPATIONAL STRUCTURE OF NORTHERN ONTARIO

2001 Census Research Paper Series: Report #7

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EXECUTIVE SUMMARY

Background to the Report:

This study has been prepared for the 5 existing Local Training and Adjustment Boards in Northern Ontario. Due to the particular economic conditions in Northern Ontario, it is very important for the Northern Boards to properly understand the demographic and economic trends occurring in their region. This is the seventh research report in a series that examines the current trends in Northern Ontario using data from the 2001 Census. Based on concerns expressed in Environmental Scans, this report attempts to examine the current occupational structure in Northern Ontario. It focuses on comparisons with the occupational structure of Ontario as a whole, and internal regional differences.

Methodology:

This report is based on newly released data from the 2001 Census as prepared by Statistics Canada. Data is also used from other Census years as compiled by Statistics Canada.

Findings:

The analysis of the 2001 Census data for occupation has shown us several important facts about occupational structures in Northern Ontario. They are as follows:

- The occupational structure of Northern Ontario differs from that of Ontario.
 - Northern Ontario has a higher percentage of trades, and primary industry occupations.
 - Northern Ontario has a higher percentage of sales and service occupations
 - Northern Ontario has a lower percentage of management, business, and natural and applied science occupations
 - Northern Ontario has a lower percentage of occupations unique to processing, manufacturing and utilities
- All Districts of Northern Ontario, with the exception of the Muskoka District Municipality and the Manitoulin District, show the same key structural differences from that of Ontario.
- Occupational trends in Northern Ontario are difficult to analyze due to changes in classifying systems from 1996 to 2001. Despite this, it is apparent that from 1996 to 2001:
 - Management and professional business occupations increased in Northern Ontario
 - The largest decreases in occupations were in low-skill occupations such as cashiers, food and beverage workers and retail trade workers
- The occupational structure of Aboriginal communities in Northern Ontario differs considerably from that of Northern Ontario as a whole.
- Occupational skill levels in Northern Ontario are lower than Ontario as a whole.
- The only occupational skill group showing growth in Northern Ontario is that requiring university level education.

Section One: Introduction

1.1 Background to the Report

This study has been prepared for the 5 existing Local Training and Adjustment Boards in Northern Ontario. The Muskoka, Nipissing, Parry Sound Local Training and Adjustment Board (Board #20), the Sudbury and Manitoulin Training and Adjustment Board (Board #21), the Far Northeast Training Board (Board #23), the North Superior Training Board (Board #24) and the Northwest Training and Adjustment Board (Board #25) are among the 25 Local Training and Adjustment Boards established in Ontario in 1994.¹ These Boards were created to assist in assessing the training needs and issues of each area. Each Board is made up of representatives of the key labour market partner groups including primarily business and labour but also including educators and trainers, women, persons with disabilities, francophones, and racial minorities. The Boards also have non-voting representatives from the municipal, provincial, and federal governments. The Boards are sponsored by Human Resources and Development Canada and the Ontario Ministry of Training, Colleges and Universities.

Due to the particular economic conditions in Northern Ontario, it is very important for the Northern Boards to properly understand the demographic and economic trends occurring in their region. Economic growth in Northern Ontario has been significantly less than the provincial average since the 1970s. Since training is seen as an important development tool by most people in the region, regional Boards are therefore necessarily involved in economic development discussions. Understanding the unique occupational structure of Northern Ontario is essential to understanding economic development in the region.

This is the seventh research report in a series that examines the current trends in Northern Ontario using data from the 2001 Census. The first report analyzed the general population trends following release of that data in March, 2002. The second report looked at trends in youth out-migration using the 2001 Census data released in July, 2002. The third report looked at the extent to which the population of Northern Ontario is aging. The fourth report examined trends in migration patterns. The fifth report examined labour force participation in the region and the sixth report analyzed the industrial structure.

Section Two: Background to the Issue in Northern Ontario

2.1 Introduction to Northern Ontario

Northern Ontario comprises almost 89% of the land mass of Ontario but represents only 7.4% of the total population of the province (2001 Census). As the region has no legislated boundaries, the definition of the region varies, especially as concerns its southern border. Currently, for the purpose of statistical analysis, the federal government has defined Northern Ontario as comprising the Greater Sudbury Division and the following districts: Kenora,

Rainy River, Thunder Bay, Algoma, Cochrane, Manitoulin, Sudbury, Timiskaming, Nipissing, and Parry Sound. Prior to 2000, this definition of Northern Ontario was also used by the provincial government for program delivery. In 2000, however, the Ontario government decided to also include the Muskoka District Municipality in its definition of Northern Ontario. This inclusion is somewhat problematic in that the socio-economic characteristics of the Muskoka District Municipality differ from that of the other districts in Northern Ontario. Despite this, this study will use the provincial definition of Northern Ontario since one of the Northern Ontario Training Boards (LTAB #20) also includes the Muskoka District Municipality.

The history of continuous settlement by non-Natives in Northern Ontario is relatively recent when compared to the rest of Ontario. Settlement in earnest started with the construction of the Canadian Pacific Railway in the late 1870s and 1880s. This was soon followed by the construction of the Canadian Northern Railway and the Grand Trunk and National Transcontinental Railways. Most non-Native communities in the region were initially railway towns.

Following the building of the railways, the region's growth has been driven primarily by the forest industry and by mining. For the most part, communities were developed by large resource extraction corporations based outside the region rather than by local entrepreneurs. This fact has meant that the social and economic structure of this region exhibits several unique characteristics such as:²

1) An overdependence on natural resource exploitation - This has meant a high degree of vulnerability to resource depletion, world commodity prices, corporate policy changes, the boom and bust cycles of the resource industries, changes in the Canadian exchange rate, and changes in government policies regarding Northern Ontario.³

2) A high degree of dependency on external forces - The fact that most communities were developed by outside forces means that local entrepreneurship has been more limited than in other areas. This has served as a barrier to the cultivation of an entrepreneurial culture in these communities. This dependence is also seen in the area of political decision-making. Unlike most areas of Ontario, Northern Ontario is made up of Districts instead of Counties. Unlike Counties, Districts do not have regional governments. Northern Ontario is unique in Ontario in that unlike the Counties of Southern Ontario there is no regional government serving as an intermediary between the provincial government and municipalities.⁴

While all communities in the region share some common characteristics, Northern Ontario can be divided internally into three different types of communities:

Small and Medium-sized cities - Northern Ontario includes 5 cities with over 40,000 inhabitants. They are, in order of size, Sudbury (155,219), Thunder Bay (109,016), Sault Ste. Marie (74,566), North Bay (52,771), and Timmins (43,686).⁵ While these centers are heavily dependent on resource industries they are also relatively diversified in that they tend to be important centers for health, education, and other services for the outlying regions.

Resource Dependent Communities - The vast majority of the remaining non-Native communities in the region are resource dependent communities, or single industry towns, which share many distinct characteristics.⁶ These communities are smaller and less

diversified economically than the small and medium-sized cities. They are much more directly dependent on resource industries.

First Nations Communities - The region of Northern Ontario is unique in terms of its large number of Aboriginal communities. As of 2001, the Aboriginal population makes up between 10 and 11.5% of the population of the region.⁷ The population in the area of the region north of the 50th parallel is almost entirely made up of these communities. First Nations communities face the greatest number of social and economic challenges of all the communities in the region.

2.2 The History of the Occupational Structure of Northern Ontario

As was pointed out in the Northern Ontario Training Boards' Regional Outlook of 2000, jobs in "blue collar" industries had been the largest single group of jobs in the regional economy since the arrival of the railways and the origins of the forest industries and mining industries.⁸ Historically this has been a factor which differentiated the region from many other regions in Ontario. Northern Ontario still has a substantially higher percentage of these types of jobs than for the province as a whole. The structure of these types of jobs differ from the province as a whole in that the percentage of manufacturing jobs in the North is less than for the province. This is countered however by a higher percentage of jobs in logging and forestry, mining, construction, and transportation.

From 1986 to 1996 the total number of blue collar industrial jobs declined from 151,010 to 120,095, or by 20.5%. In general this shift appears to be the result of changes in technology but other, more specific factors, such as the decline in the importance of the grain trade in Thunder Bay, has also played a role.

The 2000 Regional Outlook also noted that along with the decline in blue collar industrial employment has been a rise in service sector employment.⁹ If the industrial sector lost 30,915 jobs from 1986 to 1996, the service sector gained 30,365 jobs during this period. In 1986 this sector represented 226,325 jobs, or 60% of all employment in Northern Ontario. By 1996 the number of jobs in this sector had risen to 256,690 or 66.3% of all employment. It should also be pointed out that the number of jobs in this sector actually decreased by 2,265 from 1991 to 1996. Most of this loss came from a 31% decrease in government service employment in Northern Ontario, from 41,440 in 1991 to 28,630 in 1996.

The occupational structure data used in this report does not allow us to properly compare the current occupational structure of Northern Ontario with the occupational structure of past census years. For the 2001 Census, Statistics Canada used a new system of classifying occupations: the 2001 National Occupational Classification for Statistics (NOC-S 2001). This is a revision of the 1991 Standard Occupational Classification (SOC). This change makes comparisons with previous years very difficult. For some occupational categories comparison is impossible. Others, however, remained unchanged from that of the 1996 Census. This report studies the changes in occupations for Northern Ontario from 1996 to 2001 for those categories that remained unchanged from the 1991 Standard Occupational Classification.

Both the 1991 classifications system and the 2001 classification system have several levels of categories. The one digit level is the most general and is composed of 10 categories. The two digit level is more specific and includes 49 additional categories placed within the categories of the one

digit level. There are two more levels: the three digit level, with 140 categories and the four digit level, with 520 categories. The four digit level is the most specific level.

In order to allow for historical comparison with data from 1991 and 1996, Statistics Canada also created a new occupational variable: occupation (historical). This is a variation of the 1991 Standard Occupational Classification. They made this data publicly available for some geographical areas but not at the census division level, a level necessary for the construction of data for Northern Ontario. Such data is available but only through costly custom tabulations.

While historically comparable data for Northern Ontario and its districts is not accessible, data is available for all Census Metropolitan Areas (CMA) and Census Agglomerations (CA) in Canada, including those in Northern Ontario. This data is used in this report as an indicator of occupational changes in Northern Ontario as a whole.

Section 3: Methodology

This report attempts to describe the occupational structure of Northern Ontario based on newly released data from the 2001 Census as prepared by Statistics Canada. The description will be done through a comparison of the occupational structure of Ontario as a whole and through an examination of internal regional differences. Data for the 2001 Census is from special profiles ordered from Statistics Canada by the researcher.

3.1 Potential problems with our method

Our method has three potential problems which must be mentioned: sampling error, the “random rounding” technique used by Statistics Canada, and problems with data for Aboriginal communities in Northern Ontario.

Unlike the first three reports in this series, the data used in this report is not from 100% of the population. Statistics Canada has two census forms; a short one that goes to all residences, and a long one, Form 2B, which goes to 20% of residences. The data analyzed here is from Form 2B. This data is therefore a “sample” of total possible responses. It is meant to represent 100% of the population but, being a sample, it often does not. When the responses from the sample differ from what the responses would be from the entire population, we say there is “sampling error”.¹⁰

Using statistical analyses, we can calculate what the likelihood of sampling error is for a given number of responses. Generally speaking, the larger the number of respondents, the less sampling error is a problem. In our study, the data from smaller communities has a higher possibility of sampling error.

Another potential problem is the use of random rounding by Statistics Canada in its census data.¹¹ In order to ensure confidentiality, census data is round up or down to the nearest 5 count. This has an insignificant effect on large numbers. On very small numbers however this process can introduce a significant degree of error. This does not have a significant effect on numbers for the districts of Northern Ontario. This limits our ability to be confident about numbers for very small communities in Northern Ontario.

The third problem was mentioned in the first report in this series dealing with population change. The population figures for the census divisions in Northern Ontario are not as reliable as the census divisions in most of Ontario. This is due to the large number of Aboriginal communities which, for various reasons, are improperly counted. If Statistics Canada can not properly count a community, the population of that community is not included in the population totals for that census division. As a result, the population figures for almost all the census divisions in Northern Ontario are incomplete. Comparison from census year to census year becomes difficult when a particular community was not counted in one year but counted in another year.

In the report on population change, the statistics were “adjusted” to try and deal with this problem. This was not done for this report. This means that there is a certain degree of error in the statistics used in the report. This type of error only applies to the section of the report that compares data from 1996 with that of 2001. It does not affect the historical comparisons based on CMA and CA data.

Section 4: The Occupational Structure of Northern Ontario

4.1 The Occupational Structure of Northern Ontario Differs from that of Ontario

Figure 1 compares the occupational structure of Northern Ontario with that of Ontario. The adoption of the new 2001 National Occupational Classification system by Statistics Canada for the 2001 Census means that it is impossible to compare with precision the situation in 2001 with previous years. Still, one can see in Figure 1 that many of the differences in occupational structure between Northern Ontario and Ontario noted in earlier Training Board documents continue to exist in 2001.¹²

Occupational Structure 2001

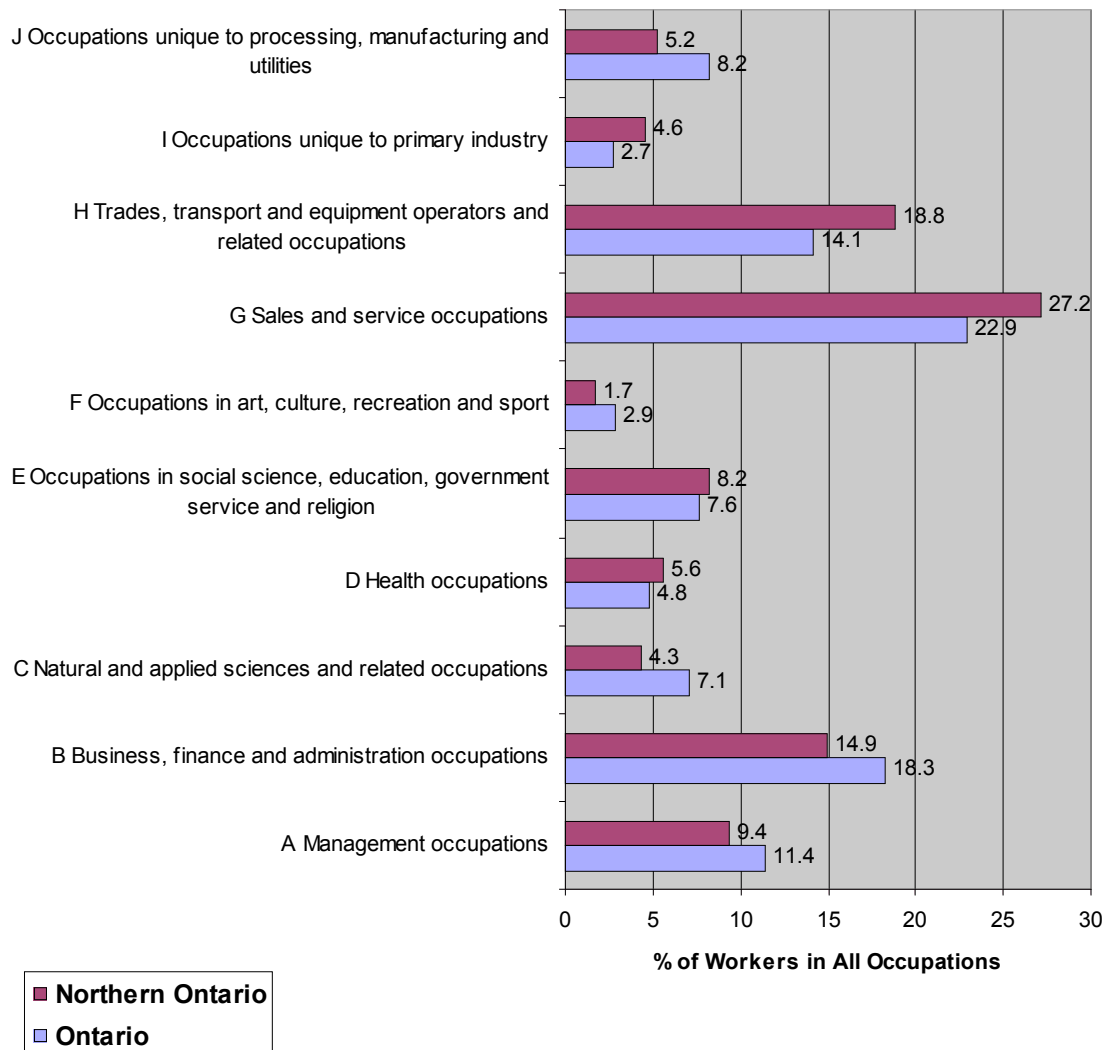


Figure 1: Source: Statistics Canada, Census of Canada, 2001.

4.1.1 Northern Ontario has a higher percentage of trades, and primary industry occupations.

Northern Ontario continues to have a higher percentage “blue collar” jobs in trades, transport and equipment operators and related occupations. At 18.8% this is the second largest category of occupations in Northern Ontario. In Ontario as a whole these jobs represent 14.1% of all occupations. As is shown in Appendix A, the biggest differences are in the larger percentages in Northern Ontario of transportation equipment operators and related workers, mechanics, and heavy equipment and crane operators.

It is not surprising that Northern Ontario also continues to have a larger percentage of occupations unique to primary industries. These occupations represent 4.6% of all occupations in Northern Ontario compared to 2.7% for Ontario. Within this category, Northern Ontario has less

dependence on occupations unique to agriculture but a higher percentage of occupations unique to forestry operations and mining.

4.1.2 Northern Ontario has a higher percentage of sales and service occupations

Northern Ontario also has a higher dependence on sales and service occupations. These are, by far, the largest category of occupations in the North. They represent 27.2% of all jobs in the region compared to 22.9% for Ontario as a whole. Within this category, Northern Ontario has a higher percentage of lower pay occupations such as retail sales clerks, cashiers, cooks, and food and beverage servers.

4.1.3 Northern Ontario has a lower percentage of management, business, and natural and applied science occupations.

Northern Ontario continues to have a lower percentage of higher pay management occupations. All management occupations represent 9.4% of the jobs in Northern Ontario whereas in Ontario as a whole these occupations represent 11.4% of all jobs. Within this category, Northern Ontario has a higher percentage of lower paid retail trade, food and accommodation managers. It has a relatively fewer jobs in the “specialist managers” category.

The region also has relatively fewer business, finance and administration occupations. For Ontario as a whole, these jobs represent 18.3% of all occupations. In Northern Ontario the percentage is 14.9%. Within this category, Northern Ontario has a higher proportion of secretaries and a lower proportion of professional occupations in business and finance.

In Ontario, natural and applied sciences and related occupations represent 7.1% of all jobs. In Northern Ontario these occupations constitute 4.3% of the workforce.

4.1.4 Northern Ontario has a lower percentage of occupations unique to processing, manufacturing and utilities

Despite the presence of a large number of pulp and paper mills and sawmills in Northern Ontario, it is perhaps surprising that Northern Ontario has a lower percentage of occupations unique to processing, manufacturing and utilities. This reflects the historical inability to develop secondary industries in the regions. These occupations represent 8.2% of the workforce in Ontario and only 5.2% of the workforce in Northern Ontario.

4.2 All Districts of Northern Ontario, with the Exception of the Muskoka District Municipality and the Manitoulin District, Show the Same Key Structural Differences from that of Ontario

Variances in the types of occupations between the different districts of Northern Ontario were also studied.¹³ Compared to the norm for Northern Ontario, almost all districts in Northern Ontario had variances of less than that between Northern Ontario and Ontario. The variance between Northern Ontario and the Muskoka District Municipality was above that of Northern Ontario and Ontario. As well, the variance between Northern Ontario and the District of Manitoulin was slightly above that between Northern Ontario and Ontario.¹⁴

Table 1: Occupations by District: Eastern Areas of Northern Ontario 2001

	Muskoka		Nipissing		Parry Sound		Manitoulin	
	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.
All occupations	26190		38845		18770		5650	
Management	3120	11.9	4185	10.8	2270	12.1	660	11.7
Business, finance and administration	3430	13.1	6230	16.0	2330	12.4	800	14.2
Natural and applied sciences and related	850	3.2	1825	4.7	600	3.2	120	2.1
Health	1180	4.5	2465	6.3	1105	5.9	345	6.1
Social science, education, government service and religion	1885	7.2	3225	8.3	1260	6.7	540	9.6
Art, culture, recreation and sport	675	2.6	700	1.8	390	2.1	175	3.1
Sales and service	7315	27.9	11050	28.4	5125	27.3	1420	25.1
Trades, transport and equipment operators and related	5380	20.5	6630	17.1	3775	20.1	1030	18.2
Primary industry	840	3.2	1000	2.6	810	4.3	435	7.7
Processing, manufacturing and utilities	1525	5.8	1525	3.9	1110	5.9	125	2.2

Source: Statistics Canada, Census of Canada, 2001.

4.2.1 The Muskoka District Municipality has more managers and less business occupations

While the occupational similarities of most of the district of Northern Ontario are more important than any differences, there are occupational particularities for each district. Table 1 shows that 11.9% of all the occupations in the Muskoka District Municipality are managerial. This is considerably greater than the Northern Ontario average of 9.4%. An analysis of the two digit level categories shows that the greatest difference in the type of managers is the relatively large number of managers in retail trade, food and accommodation in the Muskoka District Municipality.

The district also had less business, finance and administration occupations than the average for Northern Ontario. When looking at the two digit level categories, the main reason for this difference was the relatively few secretaries and clerical occupations.

4.2.2 The Nipissing District has less primary industry and trades occupations and more management jobs

The Nipissing District has an occupational structure that is quite close to that of the averages for Northern Ontario. Still, as Table 1 shows, there are a few notable differences. Only 2.6% of all occupations in the district are unique to primary industry. This is considerably less than the 4.6% for Northern Ontario as a whole. As well, trades, transport and equipment operators and related occupations represent only 17.1% of all occupations compared to 18.8% for Northern Ontario. Finally, more than 10.8% of all occupations in the Nipissing District are managerial. The comparative percentage for Northern Ontario is 9.4.

4.2.3 The District of Parry Sound has more managers and less business occupations

While the occupational structure of the District of Parry Sound is more similar to that of Northern Ontario than that of the Muskoka District Municipality, it has similar particular characteristics. Table 1 shows that 12.1% of all the occupations in the District of Parry Sound are managerial. This is considerably greater than the Northern Ontario average of 9.4%. As was the case with Muskoka, an analysis of the two digit level categories shows that the greatest difference in the type of managers is the relatively large number of managers in retail trade, food and accommodation.

Also, the district also had less business, finance and administration occupations than the average for Northern Ontario. The percentage share of these occupations was 12.4% compared to 14.9% in Northern Ontario. When looking at the two digit level categories, the main reason for this difference was the relatively few clerical occupations in the District of Parry Sound compared to the North as a whole.

4.2.4 The District of Manitoulin has more agricultural related and management occupations and less manufacturing and natural and applied science related occupations

As was pointed out above, the occupational structure of the District of Manitoulin differs significantly from that of Northern Ontario as a whole. These differences are fairly widespread among the general categories. The most significant difference is that 7.7% of all occupations in the District of Manitoulin are primary industry related occupations. This compares with a regional average of 4.6%. An analysis of the two digit occupational categories shows that most of this difference is explained by agricultural related occupations. These make up 4.5% of all occupations in Manitoulin compared to a 1.2% average in Northern Ontario as a whole. The District of Manitoulin also has a higher percentage of managerial occupations, especially in retail trade, food and accommodation.

The District has a significantly lower percentage of processing, manufacturing and utilities related occupations, 2.2% compared to a Northern Ontario average of 5.2%. As well, only 2.1% of all occupations in the District of Manitoulin are natural and applied sciences and related compared to a regional average of 4.3%.

Table 2: Occupations by District: Central Areas of Northern Ontario 2001

	Sudbury		Greater Sudbury		Timiskaming		Cochrane	
	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.
All occupations	10335		75815		15735		40680	
Management	930	9.0	7270	9.6	1485	9.4	3020	7.4
Business, finance and administration	1295	12.5	13945	18.4	2335	14.8	5570	13.7
Natural and applied sciences and related	295	2.9	3500	4.6	580	3.7	1795	4.4
Health	345	3.3	4410	5.8	765	4.9	2130	5.2
Social science, education, government service and religion	675	6.5	6085	8.0	1445	9.2	3260	8.0
Art, culture, recreation and sport	100	1.0	1330	1.8	225	1.4	450	1.1
Sales and service	2650	25.6	21165	27.9	3695	23.5	10515	25.8

Trades, transport and equipment operators and related	2705	26.2	12690	16.7	3255	20.7	8320	20.5
Primary industry	565	5.5	3475	4.6	1235	7.8	2635	6.5
Processing, manufacturing and utilities	770	7.5	1945	2.6	720	4.6	3000	7.4

Source: Statistics Canada, Census of Canada, 2001.

4.2.5 The District of Sudbury has more trades and manufacturing occupations and less health and business occupations

Table 2 shows the occupational structure of the districts in the central areas of Northern Ontario. The District of Sudbury has a relatively large number of differences with Northern Ontario in terms of occupations. The most important is that 26.2% of all occupations in the District of Sudbury are trades, transport and equipment operators and related occupations compared to Northern Ontario where these occupations make up only 18.8% of all jobs. As well, a larger percentage of workers have processing, manufacturing and utilities related occupations: 7.5% compared to 5.2% for Northern Ontario.

Only 3.3% of all occupations in the District of Sudbury are health related. This compares to 5.6% for Northern Ontario. Business, finance and administration related occupations make up only 12.5% of all jobs in the district compared to a regional share of 14.9%.

4.2.6 The Greater Sudbury Division has more business occupations and less manufacturing and trades occupations

The Greater Sudbury Division has an occupational structure quite similar to that of Northern Ontario as a whole. Still, there are three significant differences. The first is that Greater Sudbury has a higher percentage of business, finance and administration related occupations. These types of jobs represent 18.4% of all occupations in this area. This is compared to a Northern Ontario average of 14.9%. Most of this difference is explained by a relatively large number of clerical occupations in Greater Sudbury.

The next significant difference is that this area has a lower percentage of processing, manufacturing and utilities related occupations. The percentage for Greater Sudbury is 2.6% while the average for Northern Ontario is 5.2%. Finally, Greater Sudbury has a lower percentage of trades, transport and equipment operators and related occupations at 16.7% compared to 18.8% for Northern Ontario.

4.2.7 The District of Timiskaming has more agriculture related and trades related occupations and less sales and service occupations.

The District of Timiskaming, along with the District of Manitoulin has the highest percentage of agriculture related occupations. These types of jobs represent 4.5% of all occupations in both districts compared to a Northern Ontario average of 1.2%. This fact explains why, at the single digit level of occupational categories, Timiskaming has a higher percentage of primary industry jobs than for the region as a whole. At 20.7% of the total workforce, this district also has a higher percentage of trades, transport and equipment operators and related occupations when compared to the Northern Ontario average of 18.8%.

The lack of a large urban centre in this district also partially accounts for relatively fewer sales and service occupations. These types of occupations represent 23.7% of all occupations in Timiskaming compared to 27.2% for the region as a whole.

4.2.8 The District of Cochrane has more manufacturing related and primary industry related occupations and less management occupations.

The most notable unique characteristics of the occupational structure in the District of Cochrane are first, a higher percentage of manufacturing related occupations. These occupations represent 7.4% of all jobs in the district compared to 5.2% for Northern Ontario. Following this, the District of Cochrane, at 6.4%, has a higher percentage of primary industry related occupations than the region as a whole.

An examination of two digit occupational categories shows that this difference is explained by the fact that the District of Cochrane has the highest proportion of occupations unique to forestry operations and mining in all of Northern Ontario. This category represents 4.2% of all jobs in the district compared to a regional average of 2.1%. Finally, the District of Cochrane has fewer management occupations than in Northern Ontario as a whole.

Table 3: Occupations by District: Western Areas of Northern Ontario 2001

	Algoma		Thunder Bay		Rainy River		Kenora	
	Number	Pct.	Number	Pct.	Number	Pct.	Number	Pct.
All occupations	53915		76305		10720		29640	
Management	4385	8.1	6345	8.3	985	9.2	3145	10.6
Business, finance and administration	7680	14.2	11045	14.5	1365	12.7	3815	12.9
Natural and applied sciences and related	2620	4.9	3590	4.7	320	3.0	1345	4.5
Health	3370	6.3	4670	6.1	595	5.6	1350	4.6
Social science, education, government service and religion	4545	8.4	6605	8.7	835	7.8	2795	9.4
Art, culture, recreation and sport	900	1.7	1500	2.0	165	1.5	395	1.3
Sales and service	15555	28.9	20300	26.6	2480	23.1	8045	27.1
Trades, transport and equipment operators and related	9515	17.6	14840	19.4	2130	19.9	5595	18.9
Primary industry	1900	3.5	3180	4.2	720	6.7	1630	5.5
Processing, manufacturing and utilities	3440	6.4	4235	5.6	1125	10.5	1530	5.2

Source: Statistics Canada, Census of Canada, 2001.

4.2.9 The District of Algoma has more sales and service occupations and less management occupations.

The District of Algoma has an occupational structure remarkably similar to that of Northern Ontario as a whole. The only notable differences are first, that the District has more sales and service occupations, at 28.9% of all occupations, than Northern Ontario, whose comparable

proportion is 27.2%. This difference is due to the importance of Sault Ste. Marie as a service centre. The district also has slightly less management occupations than the regional average.

4.2.10 The District of Thunder Bay has less management occupations

Of all the districts in Northern Ontario, the District of Thunder Bay has an occupational structure most like that of Northern Ontario as a whole. There are very few noteworthy differences. The only real significant difference is that the District of Thunder Bay has a slightly lower percentage of management occupations. These jobs represent 8.3% of all occupations in the district compared to a regional figure of 9.4%.

4.2.11 The District of Rainy River has more manufacturing and primary industry related occupations and less sales and service and business occupations.

The most important difference between the occupational structure of the District of Rainy River and that of Northern Ontario is the higher percentage of processing, manufacturing and utilities related occupations. The proportion in Rainy River is significantly higher at 10.5% compared to 5.2% for the region. It also has a higher percentage of occupations unique to primary industries. The proportion for the district is 6.7% while the figure for Northern Ontario is 4.6%.

Another distinguishing characteristic of Rainy River's occupational structure is that it has less sales and service occupations. The percentage in the district is 23.1% compared to the regional average of 27.2%. As well, the District of Rainy River has a lower percentage of business related occupations.

4.2.12 The District of Kenora has less business related occupations and more management and social science related occupations.

The District of Kenora has fewer business, finance and administration related occupations than for Northern Ontario as a whole. This category's share of jobs is 12.9% in the district while for the region it is 14.9%. As well, the District of Kenora has a slightly higher percentage of management occupations and social science, education, government service and religion related occupations.

4.3 Occupational Trends in Northern Ontario

As was pointed out above, the occupational structure data used in this report does not allow us to properly compare the current occupational structure of Northern Ontario with the occupational structure of past census years. For the 2001 Census, Statistics Canada used a new system of classifying occupations. This change makes comparisons with previous years very difficult. For some occupational categories comparison is impossible. Others, however, remained unchanged from that of the 1996 Census. Part of this section of the report examines the changes in occupations for Northern Ontario from 1996 to 2001 for those categories that remained unchanged from the 1991 Standard Occupational Classification.

It was also pointed out above that in order to allow for historical comparison with data from 1991 and 1996, Statistics Canada created a new occupational variable: occupation (historical). This is a variation of the 1991 Standard Occupational Classification. They made this data publicly available for some geographical areas but not at the census division level, a level necessary for the construction of data for Northern Ontario. While historically comparable data for Northern

Ontario and its districts is not accessible, data is available for all Census Metropolitan Areas (CMA) and Census Agglomerations (CA) in Canada, including those in Northern Ontario. This data is used in the second part of this section as an indicator of occupational changes in Northern Ontario as a whole.

4.3.1 Management and Professional Business Occupations Increased in Northern Ontario from 1996 to 2001

Table 4 shows that, of those categories under consideration, those that show the most important increases are in management occupations and specialized business occupations. This is an indication the fastest growing occupations tend to be those requiring a university-level education. At the same time, there was growth in several selected “trades” occupations, notably transportation equipment operators and related workers and construction trades. It is also highly probable that there was a considerable increase in machinists, metal forming, shaping and erecting occupations from 1996 to 2001 (see endnote 15). Appendix B contains all categories.

Table 4: Fastest Growing Occupations by Total Number: Two Digit Level Occupational Categories¹⁵

	1996	2001	Increase	Pct. Increase
B0 Professional occupations in business and finance	3395	5335	1940	57.14
A2 Managers in retail trade, food and accom. services	14410	16275	1865	12.94
A1 Specialist managers	4865	6040	1175	24.15
G0 Sales and service supervisors	2060	3150	1090	52.91
A3 Other managers n.e.c.	11150	12195	1045	9.37
H7 Transportation equipment operators and related workers	17825	18825	1000	5.61
H1 Construction trades	9500	10210	710	7.47
A0 Senior management occupations	2715	3295	580	21.36
I2 Primary production labourers	4515	5070	555	12.29
B3 Administrative and regulatory occupations	5340	5885	545	10.21

Source: Statistics Canada, Census of Canada, 1996 and 2001. Nine categories were excluded from the calculations due to changes in these categories (see endnote 15). Despite this exclusion it does appear that several of these categories, especially H3 Machinists, metal forming, shaping and erecting occupations and E2 Paralegals, social services workers and occupations in education and religion n.e.c., would also show significant increases (see endnote 15).

4.3.2 The largest decreases in occupations from 1996 to 2001 were in low-skill occupations such as cashiers, food and beverage workers and retail trade workers

Table 5 shows those occupational categories that had the largest decrease in total number from 1996 to 2001. The category with the most significant decrease was occupations unique to forestry, mining, and fishing. In general, most of the occupational categories with significant decreases are considered “low-skill” occupations requiring little training beyond a high school education. There are also a few “trades” occupations that showed significant decreases; notably mechanics and contractors and supervisors in trades and transportation.

Table 5: Occupations with the Greatest Decrease by Total Number: Two Digit Level Occupational Categories¹⁶

	1996	2001	Decrease	Pct. Decrease
I1 Occupations unique to forestry operations, mining, fishing, etc.	12005	8570	-3435	-28.61
G3 Cashiers	9705	7910	-1795	-18.50
H4 Mechanics	14385	12840	-1545	-10.74
G5 Occupations in food and beverage service	9515	7980	-1535	-16.13
G1 Wholesale, technical, insurance, real estate sales specialists, and retail, wholesale and grain buyers	7280	5840	-1440	-19.78
E1 Teachers and professors	17985	16560	-1425	-7.92
H0 Contractors and supervisors in trades and transportation	5390	4075	-1315	-24.40
G2 Retail salespersons and sales clerks	17755	16550	-1205	-6.79
B2 Secretaries	11020	10125	-895	-8.12
G4 Chefs and cooks	7575	6800	-775	-10.23

Source: Statistics Canada, Census of Canada, 1996 and 2001. Nine categories were excluded from the calculations due to changes in these categories (see endnote 15).

4.3.3 The largest general changes in occupations in Urban Northern Ontario are decreases in primary industry related and trades occupations.

Percentage Changes in Occupations 1991 to 2001

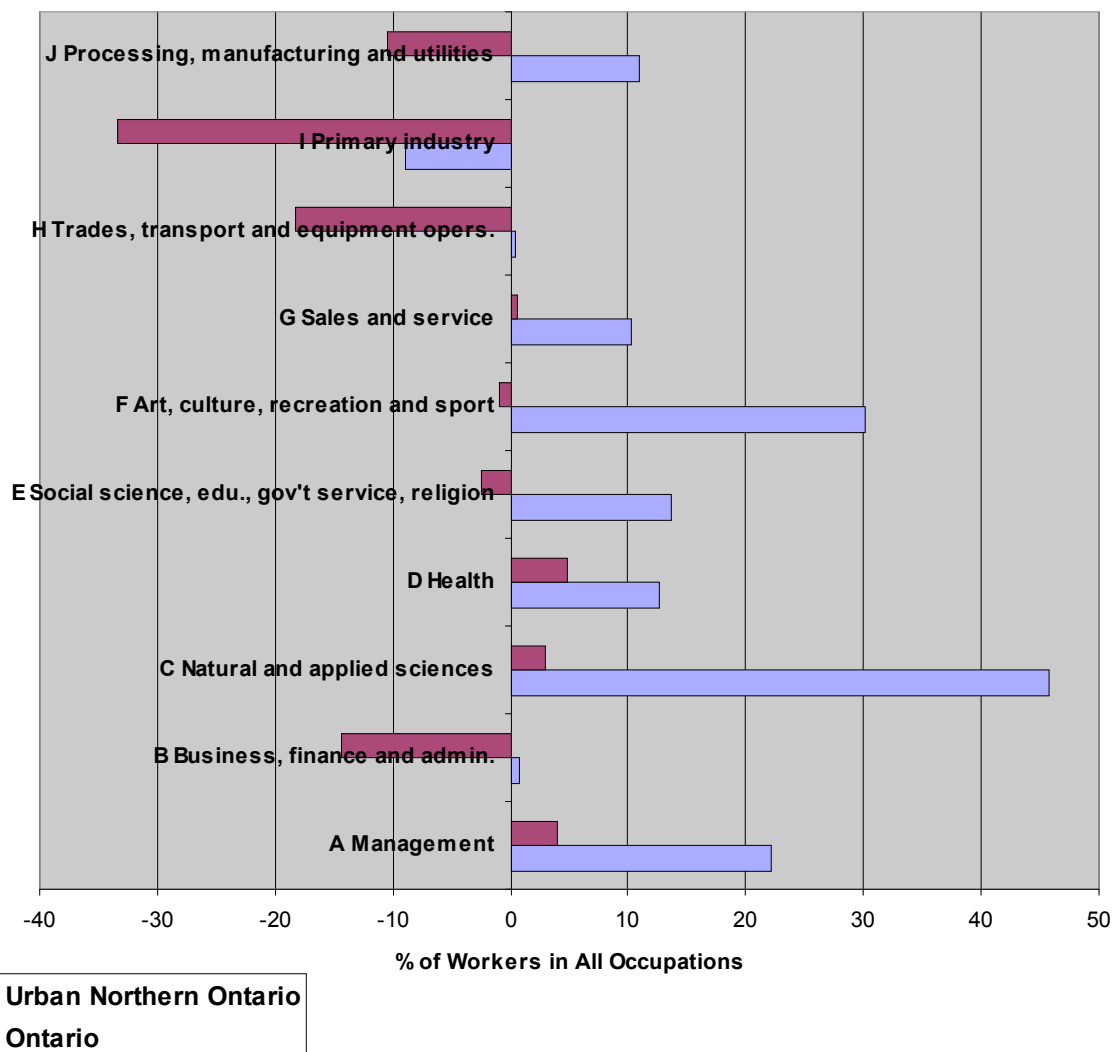


Figure 2: Source: Statistics Canada, Census of Canada, 2001. Statistics Canada - Cat. No. 97F0012XCB01022

Figure 2 represents the percentage changes in the one digit occupational categories from 1991 to 2001 for Ontario as a whole and the combined CMAs and CAs in Northern Ontario.¹⁷ For Urban Northern Ontario, the most significant changes were decreases in primary industry related occupations and decreases in trades, transport and equipment operators and related occupations. From 1991 to 2001, the primary industry related occupations decreased by 33.3% or slightly over 4,200 jobs. Further analysis using two, three, and four digit categories showed that the majority of these job losses came in one four digit level category: underground production and development miners. This single category decreased by 2,645 jobs and as such accounted for 62% of all job losses in primary industry related occupations. At the same time, no other sub category showed significant growth in terms of increases in total job numbers.

While primary industry related occupations represented the largest percentage decrease, the largest decrease in total numbers of jobs occurred in the trades, transport and equipment operators and related occupations. This category decreased by 8,830 jobs from 1991 to 2001, or 18.2%. An analysis of changes using the two digit, three digit and four digit categories show that the decreases were fairly general across most occupations in this category. At the same time there were selected occupations that did show significant growth during this period. The most notable of these were truck drivers. From 1991 to 2001 truck drivers in Urban Northern Ontario increased by 26.6%, or 1040 jobs.

In addition to the above trends, the two, three, and four digit level category data was analyzed to see what other notable decreases took place within all the one digit categories.¹⁸ They are as follows:

- For the category B531 Accounting and related clerks, the number of jobs in Urban Northern Ontario decreased by 2,760, or 58%, from 1991 to 2001.
- For the category B211 Secretaries (except legal and medical), the number of jobs in Urban Northern Ontario decreased by 2,615, or 37%, from 1991 to 2001
- For the category G515 Food and Beverage Servers, the number of jobs decreased by 1,310, or 27%, from 1991 to 2001.

4.3.4 The largest increases in occupations in Urban Northern Ontario were in Health and Management related occupations

Figure 2 also shows that while no occupational category had the type of growth seen in Ontario as a whole, several categories did show some growth. Health related occupations showed the largest percentage growth from 1991 to 2001. These occupations increased by 4.9% or 715 jobs. Within this category, an analysis of two, three, and four digit categories shows the largest growth in total numbers occurred among registered nurses. This four digit category of occupation increased by 430 jobs, or 8.3%.

The next highest general category to show growth was management occupations. From 1991 to 2001, these types of occupations increased by 860, or 4%. Within this category, an analysis of two, three, and four digit categories shows the largest growth in total numbers occurred among sales, marketing and advertising managers and restaurant and food service managers.

In addition to the above trends, the two, three, and four digit level category data was analyzed to see what other notable increases took place within all the one digit categories.¹⁹ Indeed, this type of analysis showed several significant increases in occupations that are not apparent in Figure 2. They are as follows:

- For the category G973 Other elemental sales occupations, the number of jobs in Urban Northern Ontario increased by 2,385 jobs, or 430%, from 1991 to 2001. Much of this increase is likely due to the establishment of call centres.
- For the category B553 Customer service, information and related clerks, the number of jobs in Urban Northern Ontario increased by 1695, or 155%, from 1991 to 2001. Once again, much of this increase is likely due to the establishment of call centres.

- For the category G960 Food counter attendants, kitchen helpers and related occupations, the number of jobs in Urban Northern Ontario increased by 1055, or 19.9%, from 1991 to 2001.
- For the category C070 Computer and information systems occupations, the number of jobs in Urban Northern Ontario increased by 1000, or 60.3%, from 1991 to 2001.

4.4 The Occupational Structure of Aboriginal Communities in Northern Ontario differs considerably from that of Northern Ontario

While there are few major differences in occupational structure among the individual districts of Northern Ontario, there are fairly important differences between the structures of Aboriginal communities in the region and Northern Ontario as a whole. Figure 3 compares the combined statistics for all Reserves listed by Statistics Canada for Northern Ontario with that of the occupational structure of Northern Ontario as a whole.²⁰ The most notable difference is the importance of occupations in social science, education, government service and religion in these communities. These jobs represent 14.6% of all occupations in reserve communities compared to 8.2% for Northern Ontario as a whole. These communities also have a higher percentage of trades, transport and equipment operators and related occupations and a lower percentage of health related occupations.

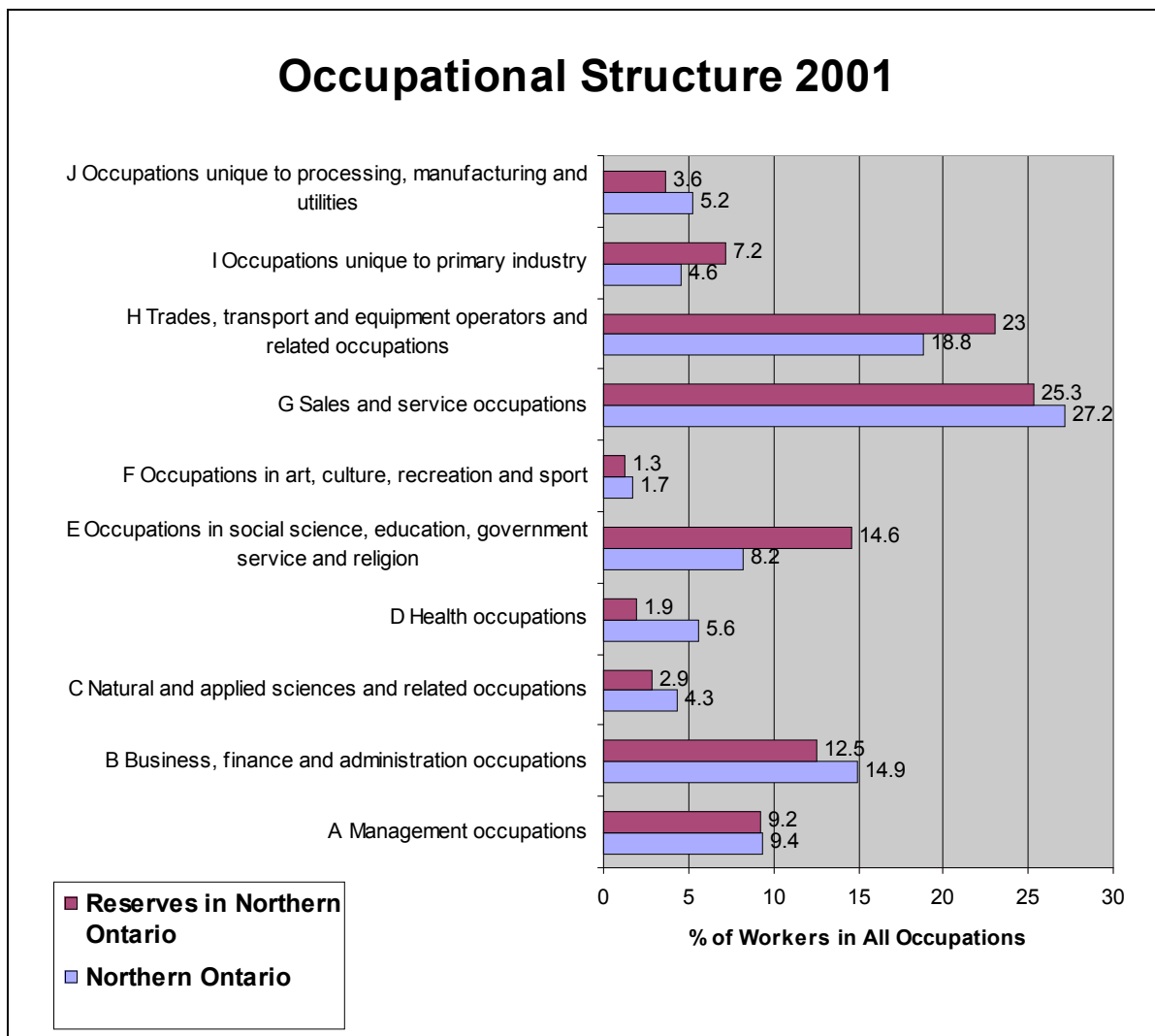


Figure 3: Source: Statistics Canada, Census of Canada, 2001. The figures for Northern Ontario Reserves represent the combined statistics for all Reserves listed by Statistics Canada for Northern Ontario.

4.5 Occupational Skill Levels in Northern Ontario are Lower than Ontario as a whole

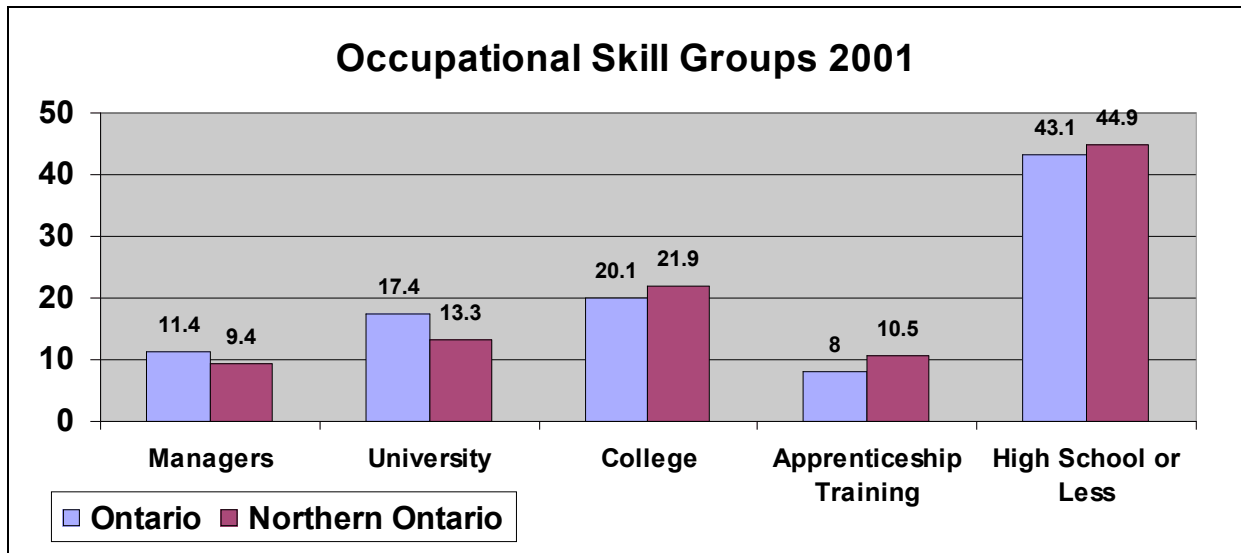


Figure 4 Source: Statistics Canada, Census of Canada, 2001

Statistics Canada created a new classification system with for the 2001 census data which groups occupations by skill levels. According to Statistics Canada,

“Workers can be classified into one of more than 500 occupations, depending on the nature of their work and duties. These occupational groups can be assigned an estimated skill level that reflects the level of education normally required in the labour market for a particular occupation.

There are three broad skill level categories:

- highly skilled occupations normally requiring a university education;
- skilled occupations normally requiring a college diploma or certificate or apprenticeship training;
- low-skilled occupations normally requiring a high school diploma or less.

Managers, as an occupational group, are not included in this skill-based classification since there is great variation in their background and educational attainment.”²¹

Figure 4 compares Northern Ontario’s occupational skill groups’ levels with that of Ontario as a whole. The most notable difference is that Northern Ontario skill levels are lower than that for the entire province. The occupations with the highest skill levels, those that normally require university qualifications, represent only 13.3% of all occupations in Northern Ontario. The figure for Ontario is significantly higher, at 17.4%. Occupations that require high school or less education represent 44.9% of all jobs in Northern Ontario compared to 43.1% for Ontario as a whole.

4.6 The Only Occupational Skill Group showing Growth in Northern Ontario is that Requiring University Level Education

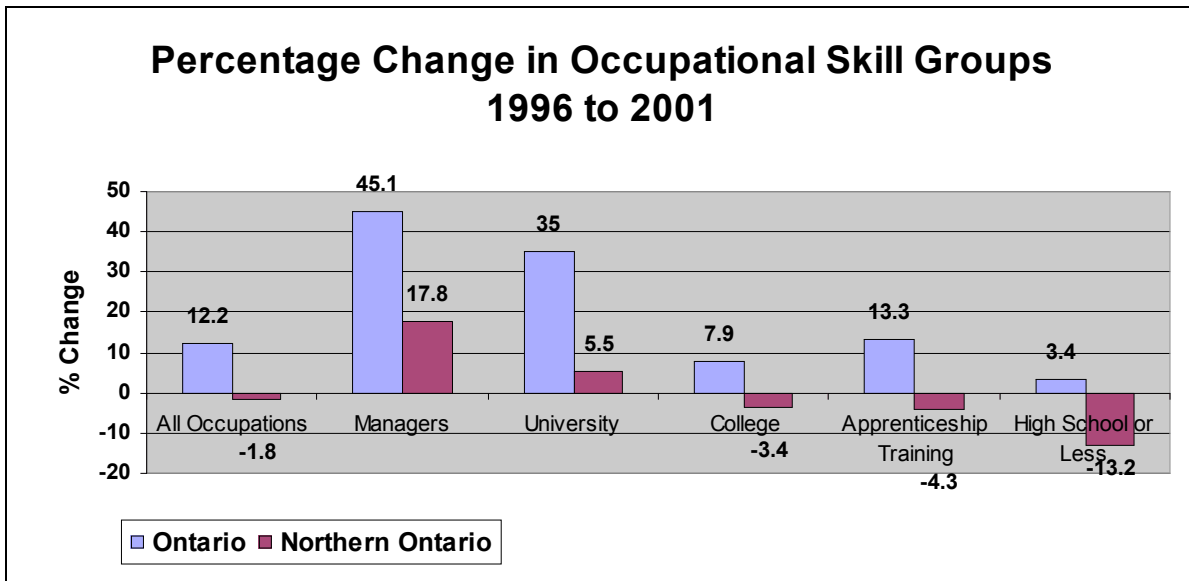


Figure 5: Source: Statistics Canada, Census of Canada, 2001

In their analysis of national trends, Statistics Canada noted that over one half of all new jobs created in Canada between 1991 and 2001 are occupations that normally require university qualifications.²² Figure 5 shows the percentage changes for occupational skill groups from 1996 to 2001 for Ontario and Northern Ontario. While managers showed significant growth, as noted above, this group falls outside the occupational skill group classification system. Of the occupational skill groups only those occupations that normally require university qualifications showed growth. While all occupations in Northern Ontario decreased from 1996 to 2001 by 1.8%, the university group increased by 5.5%. The largest decrease was among those occupations that normally require a high school education or less.

Section 5: Comparing the Training Board Areas of Northern Ontario

Table 6: Local Boards by Occupational Structure: Percentage of Workers 2001

	All occupations	Management and Business Occupations ¹	Professional Service Occupations ²	Sales and service occupations ³	Blue Collar Occupations ⁴
LAB #20	83805	25.7	19.3	28.0	27.0
LAB# 21	90255	27.3	19.6	27.5	25.6
LAB #22	53215	22.5	21.3	28.9	27.2
LAB #23	59040	21.8	18.7	25.2	34.3
LAB #24	76805	22.8	21.5	26.6	29.2
LAB #25	39480	23.1	19.2	25.9	31.5

Source: Statistics Canada, Census of Canada, 2001. 1. Management and Business Occupations are those contained in A Management occupations and B Business, finance and administration occupations. 2. Professional Service Occupations are those contained in C

Natural and applied sciences and related occupations, D Health occupations, E Occupations in social science, education, government service and religion, and F Occupations in art, culture, recreation and sport. 3. Sales and service occupations are those contained in G Sales and service occupations. 4. Blue Collar Occupations are those contained in H Trades, transport and equipment operators and related occupations, I Occupations unique to primary industry, and J Occupations unique to processing, manufacturing and utilities.

5.1 The Muskoka, Nipissing, Parry Sound Local Training and Adjustment Board (Board #20)

Table 6 shows the 2001 occupational structure for each of the Local Boards in Northern Ontario. Local Board #20, which includes the District Municipality of Muskoka and the Districts of Parry Sound and Nipissing, has the second highest percentage of Management and Business occupations and the second highest percentage of sales and service occupations. It also has the second lowest percentage of blue collar jobs.

Table 7: The Occupational Structure of Communities in Local Board #20: Number of Workers 2001

	Type of Community	All	Management and Business	Professional Service	Sales and service	Blue Collar
LAB #20		83805	21565	16160	23490	22595
Gravenhurst	T	4815	1115	820	1315	1565
Bracebridge	T	7265	1785	1430	1965	2075
Lake of Bays	TP	1325	375	245	315	390
Huntsville	T	8855	2285	1605	2540	2435
Muskoka Lakes	TP	3060	825	390	920	935
Georgian Bay	TP	780	155	95	230	300
Moose Point 79	R	80	20	10	25	40
South Algonquin	TP	610	160	10	175	250
Papineau-Cameron	TP	475	60	120	90	220
Mattawan	TP	75	15	30	10	30
Mattawa	T	830	135	165	205	325
Calvin	TP	330	55	60	70	145
Bonfield	TP	985	245	175	175	400
Chisholm	TP	590	130	75	125	260
East Ferris	TP	2300	645	545	530	580
North Bay	C	25355	7285	5705	7805	4565
West Nipissing	T	5335	1175	1020	1345	1795
Temagami	T	495	200	30	160	100
Nipissing 10	R	595	140	150	135	165
Nipissing, Unorganized, South Part	UNO	20	0	0	0	10
Nipissing, Unorganized, North Part	UNO	845	160	165	215	305
Seguin	TP	1960	535	260	585	565

The Archipelago	TP	215	95	10	50	55
McMurrich/Mont eith	TP	355	60	35	50	205
Perry	TP	1090	225	120	320	420
Kearney	T	290	40	50	115	75
Armour	TP	610	170	100	150	190
Burk's Falls	VL	415	70	60	95	195
Ryerson	TP	270	65	10	85	105
McKellar	TP	495	95	120	170	105
McDougall	TP	1310	360	245	370	330
Parry Sound	T	2935	645	690	1030	575
Carling	TP	430	70	80	155	130
Whitestone	TP	430	160	50	100	135
Magnetawan	TP	565	170	65	140	180
Strong	TP	585	155	115	90	220
Sundridge	VL	415	105	115	105	100
Joly	TP	165	20	10	40	100
Machar	TP	355	110	95	40	100
South River	VL	320	50	45	75	145
Powassan	T	1595	330	250	430	580
North Himsworth	TP	1800	585	405	400	410
Nipissing	TP	865	235	165	175	285
Shawanaga 17	R	75	20	10	20	20
Parry Island First Nation	R	140	30	40	25	40
French River 13	R	40	0	20	10	20
Dokis 9	R	90	10	10	15	35
Magnetewan 1	R	30	0	10	0	10
Parry Sound, Unorganized, North East Part	UNO	75	0	40	10	35
Parry Sound, Unorganized, Centre Part	UNO	855	160	115	265	305

Source: Statistics Canada, Census of Canada, 2001. For a description of the occupational categories see the notes under Table 6.

5.2 Sudbury and Manitoulin Training and Adjustment Board (Board #21)

Local Board #21, also known as the Sudbury and Manitoulin Training and Adjustment Board, includes the District of Manitoulin, the Greater Sudbury Division, and most of the District of Sudbury. This Board area has the highest percentage of management and business occupations and the lowest percentage of blue collar occupations.

Table 8: The Occupational Structure of Communities in Local Board #21: Number of Workers 2001

	Type of Community	All	Management and Business	Professional Service	Sales and service	Blue Collar
LB# 21		90255	24610	17715	24850	23105
Tehkummah	TP	245	70	35	40	100
Central Manitoulin	TP	810	195	210	155	240
Assiginack	TP	425	145	80	105	105
Northeastern Manitoulin and the Islands	T	1235	330	270	370	265
Billings	TP	270	85	50	70	75
Gordon	TP	270	130	15	70	65
Gore Bay	T	420	105	105	115	90
Burpee and Mills	TP	190	50	15	45	75
Killarney	T	245	45	10	90	105
Whitefish River	R	105	20	10	20	40
Sucker Creek 23	R	115	15	25	25	45
Sheguiandah 24	R	50	10	20	15	20
Sheshegwaning 20	R	40	10	0	10	10
M'Chigeeng 22 (West Bay 22)	R	315	65	105	80	65
Manitoulin, Unorganized, West Part	UNO	50	20	20	0	20
French River	T	1270	355	90	340	500
St.-Charles	T	505	125	80	130	180
Markstay-Warren	T	1050	195	140	240	470
Sables-Spanish Rivers	TP	1350	240	180	320	610
Espanola	T	2575	535	390	810	845
Baldwin	TP	290	45	55	75	115
Nairn and Hyman	TP	205	50	10	75	70
Whitefish Lake 6	R	135	40	15	30	50
Mattagami 71	R	70	0	35	15	20
Sudbury, Unorganized,	UNO	1330	330	215	230	555

North Part						
Greater Sudbury	C	75790	21205	15320	21165	18100
Wahnapitei 11	R	25	20	0	10	10

Source: Statistics Canada, Census of Canada, 2001. For a description of the occupational categories see the notes under Table 6.

5.1 Local Board #22²³

Local Board #22 comprises most of the District of Algoma. The most unique aspect of the occupational structure of this Board area is the fact that it has the highest percentage of sales and service occupations.

Table 9: The Occupational Structure of Communities in Local Board #22: Number of Workers 2001

	Type of Community	All	Management and Business	Professional Service	Sales and service	Blue Collar
LAB #22		53215	11990	11335	15395	14490
Jocelyn	TP	130	15	40	25	50
Hilton	TP	135	25	25	40	55
Hilton Beach	VL	100	25	0	20	45
St. Joseph	TP	585	175	110	110	185
Laird	TP	490	165	55	100	175
Tarbutt and Tarbutt Additional	TP	270	50	45	65	110
Johnson	TP	240	50	35	55	110
Plummer Additional	TP	325	55	40	70	160
Bruce Mines	T	275	55	45	80	105
Thessalon 12	R	55	20	10	0	25
Thessalon	T	565	70	110	160	220
Huron Shores	TP	835	180	100	185	370
Blind River	T	1885	480	395	615	385
Shedden	TP	250	35	40	80	100
North Shore	TP	255	80	60	45	65
Elliot Lake	C	3680	905	895	1010	875
Macdonald, Meredith and Aberdeen Additional	TP	690	115	150	130	295
Sault Ste. Marie	C	34885	7950	8020	10715	8190
Prince	TP	580	165	140	120	150
Sagamok	R	305	60	50	60	125
Serpent River 7	R	125	30	25	30	40
Mississagi River 8	R	145	35	60	25	40
Garden	R	355	80	70	100	100

River 14						
Michipicoten	TP	2035	505	355	550	630
Gros Cap 49	R	35	20	10	10	20
Dubreuilville	TP	620	75	15	100	430
White River	TP	555	90	10	140	305
Algoma, Unorganized, North Part	UNO	2820	505	415	745	1160

Source: Statistics Canada, Census of Canada, 2001. For a description of the occupational categories see the notes under Table 6.

5.4 The Far Northeast Training and Adjustment Board (Board #23)

Local Board #23, also known as the Far Northeast Training and Adjustment Board, comprises the Districts of Cochrane and Timiskaming and small parts of the Districts of Kenora, Algoma, and Sudbury. The occupational structure of this area is relatively unique in the region. It has the highest percentage of blue collar occupations of all the Training Boards in Northern Ontario. It also has the lowest percentage of professional service occupations, sales and service occupations, and management and business occupations.

Table 10: The Occupational Structure of Communities in Local Board #23: Number of Workers 2001

	Type of Community	All	Management and Business	Professional Service	Sales and service	Blue Collar
LAB #23		59040	12850	11045	14880	20270
Coleman	TP	265	85	45	55	70
Latchford	T	145	55	10	30	50
Cobalt	T	455	70	40	140	205
Haileybury	T	2030	490	490	500	560
Harris	TP	280	65	60	85	65
Dymond	TP	680	150	110	205	215
New Liskeard	T	2370	660	525	640	545
Hudson	TP	305	90	40	75	95
Kerns	TP	195	30	35	50	85
Harley	TP	335	70	30	75	160
Casey	TP	200	65	10	35	85
Brethour	TP	80	15	0	10	60
Hilliard	TP	125	30	10	30	60
Armstrong	TP	620	85	85	135	305
Thornloe	VL	45	10	0	10	25
James	TP	235	40	10	45	135
Dack	TP	240	25	25	20	145
Charlton	T	100	25	10	25	35
Evanturel	TP	295	85	75	45	85
Englehart	T	685	165	115	165	240
Chamberlain	TP	215	45	50	25	90
Matachewan	TP	95	10	20	25	35
Matachewan 72	R	25	0	10	10	0
McGarry	TP	260	60	40	30	130
Larder Lake	TP	320	70	45	65	135

Gauthier	TP	40	10	0	0	20
Kirkland Lake	T	3695	1035	860	930	875
Timiskaming, Unorganized, West Part	UNO	1415	260	215	245	680
Black River- Matheson	TP	1210	235	170	280	535
Timmins	C	21195	4705	4315	5680	6500
Iroquois Falls	T	2355	425	450	605	885
Cochrane	T	2785	625	435	770	955
Smooth Rock Falls	T	910	190	155	190	385
Fauquier- Strickland	TP	245	20	35	45	135
Moonbeam	TP	525	95	80	135	220
Kapusking	T	4415	970	855	1060	1525
Val Rita-Harty	TP	480	90	85	135	185
Opasatika	TP	135	20	20	25	70
Hearst	T	3260	630	465	875	1280
Mattice-Val Côté	TP	380	55	20	100	205
Cochrane, Unorganized, North Part	UNO	1470	250	265	280	670
Fort Albany (Part) 67	R	135	30	15	40	40
Hornepayne	TP	700	75	100	160	365
Duck Lake 76B	R	50	10	10	0	25
Chapleau 75	R	40	0	0	10	15
Chapleau	TP	1455	280	195	375	595
Attawapiskat 91A	R	320	55	70	105	95
Peawanuck	R	60	20	20	20	10

Source: Statistics Canada, Census of Canada, 2001. For a description of the occupational categories see the notes under Table 6.

5.5 North Superior Training Board (Board #24)

Local Board #24 is also known as the North Superior Training Board. It comprises the District of Thunder Bay and several Aboriginal communities just north of the boundaries of the District of Thunder Bay. The occupational structure of this area is very similar to the occupational structure of Northern Ontario as a whole. Its unique characteristic is that it has the highest percentage of professional service occupations.

Table 11: The Occupational Structure of Communities in Local Board #24: Number of Workers 2001

	Type of Community	All	Management and Business	Professional Service	Sales and service	Blue Collar
LAB #24		76805	17500	16480	20455	22430
Neebing	TP	1175	190	185	215	580
Thunder Bay	C	54405	13160	12520	15555	13170
Oliver	TP	3195	825	640	635	1090

Paipoonge						
Gillies	TP	200	25	35	45	100
O'Connor	TP	395	85	100	75	135
Conmee	TP	435	50	80	85	210
Shuniah	TP	1380	325	430	260	355
Dorion	TP	220	30	45	20	135
Red Rock	TP	560	125	90	110	235
Nipigon	TP	1005	200	120	235	460
Schreiber	TP	725	145	80	220	285
Terrace Bay	TP	1035	140	150	245	500
Marathon	T	2470	400	415	675	975
Manitouwadge	TP	1530	265	230	270	765
Ginoogaming First Nation	R	95	10	10	20	50
Greenstone	T	3020	490	580	680	1260
Aroland 83	R	120	20	20	25	70
Osnaburgh 63A	R	40	0	0	10	10
Thunder Bay, Unorganized	UNO	3290	720	485	695	1385
Fort Hope 64	R	250	50	40	70	85
Lansdowne House	R	80	10	40	25	35
Webequie	R	170	50	35	60	55

Source: Statistics Canada, Census of Canada, 2001. For a description of the occupational categories see the notes under Table 6.

5.6 The Northwest Training and Adjustment Board (Board #25)

Local Board #25 is also known as the Northwest Training and Adjustment Board. It is comprised of the District of Rainy River and most of the District of Kenora. The distinguishing characteristics of this area's occupational structure are that it has the second lowest percentage of professional service occupations, the second lowest percentage of sales and service occupations, and the second highest percentage of blue collar occupations.

Table 12: The Occupational Structure of Communities in Local Board #25: Number of Workers 2001

	Type of Community	All	Management and Business	Professional Service	Sales and service	Blue Collar
LAB #25		39480	9125	7595	10245	12450
Atikokan	TP	1790	340	215	450	775
Alberton	TP	565	130	135	75	215
Fort Frances	T	4015	940	890	985	1200
La Vallee	TP	515	75	80	140	215
Emo	TP	600	120	70	155	245
Chapple	TP	515	110	60	75	285
Morley	TP	210	25	35	30	115
Dawson	TP	315	30	10	95	165
Rainy River	T	365	85	80	105	90
Lake of the Woods	TP	155	35	20	45	65
Big Grassy	R	55	10	10	10	20

River 35G						
Rainy Lake 18C	R	40	20	20	10	20
Rainy Lake 26A	R	45	20	20	10	10
Seine River 23A	R	70	20	10	20	25
Rainy River, Unorganized	UNO	865	245	135	160	335
Ignace	TP	885	175	110	240	355
Whitefish Bay 33A	R	20	0	20	0	0
Sioux Narrows Nestor Falls	TP	315	135	35	90	55
Kenora	C	8190	1850	1835	2505	1990
Machin	TP	635	130	70	175	265
Dryden	C	4390	1035	880	1230	1240
Ear Falls	TP	635	125	50	160	305
Sioux Lookout	T	2850	775	845	660	575
Red Lake	T	2415	535	575	525	785
Slate Falls	R	65	10	15	10	15
Pickle Lake	TP	215	75	55	40	45
Osnaburgh 63B	R	85	20	0	30	45
Lac Seul 28	R	250	65	40	65	95
Wabigoon Lake 27	R	70	20	10	20	35
English River 21	R	120	10	25	45	30
Lake Of The Woods 37	R	40	20	10	10	10
Kenora 38B	R	40	10	10	0	20
Poplar Hill	R	100	10	10	25	60
Shoal Lake (Part) 39A	R	155	35	30	30	55
Rat Portage 38A	R	75	20	20	25	35
Deer Lake	R	225	45	35	75	80
Sandy Lake 88	R	485	90	95	155	145
Fort Severn 89	R	130	40	15	35	25
Wabauskang 21	R	30	10	0	0	10
Wapekeka 2	R	110	30	20	25	25
The Dalles 38C	R	50	10	10	15	20
Kenora, Unorganized	UNO	4220	1045	625	995	1560
Muskrat Dam Lake	R	30	10	10	10	15
Kee-Way-Win	R	70	25	35	20	10

Source: Statistics Canada, Census of Canada, 2001. For a description of the occupational categories see the notes under Table 6.

Section 6: Observations

The analysis of the 2001 Census data for occupation has shown us several important facts about the occupational structures in Northern Ontario. They are as follows:

- The occupational structure of Northern Ontario differs from that of Ontario.
 - Northern Ontario has a higher percentage of trades, and primary industry occupations.
 - Northern Ontario has a higher percentage of sales and service occupations
 - Northern Ontario has a lower percentage of management, business, and natural and applied science occupations
 - Northern Ontario has a lower percentage of occupations unique to processing, manufacturing and utilities
- All Districts of Northern Ontario, with the exception of the Muskoka District Municipality and the Manitoulin District, show the same key structural differences from that of Ontario. Despite this there are certain internal differences.
 - The Muskoka District Municipality has more managers and less business occupations
 - The Nipissing District has less primary industry and trades occupations and more management jobs
 - The District of Parry Sound has more managers and less business occupations
 - The District of Manitoulin has more agricultural related and management occupations and less manufacturing and natural and applied science related occupations
 - The District of Sudbury has more trades and manufacturing occupations and less health and business occupations
 - The Greater Sudbury Division has more business occupations and less manufacturing and trades occupations
 - The District of Timiskaming has more agriculture related and trades related occupations and less sales and service occupations.
 - The District of Cochrane has more manufacturing related and primary industry related occupations and less management occupations.
 - The District of Algoma has more sales and service occupations and less management occupations.
 - The District of Thunder Bay has less management occupations
 - The District of Rainy River has more manufacturing and primary industry related occupations and less sales and service and business occupations.
 - The District of Kenora has less business related occupations and more management and social science related occupations.
- Occupational trends in Northern Ontario are difficult to analyze due to changes in classifying systems from 1996 to 2001. Despite this, it is apparent that from 1996 to 2001:
 - Management and professional business occupations increased in Northern Ontario

- The largest decreases in occupations were in low-skill occupations such as cashiers, food and beverage workers and retail trade workers
- Comparisons from 1991 to 2001 for Northern Ontario as a whole are impossible with existing public data. Nonetheless, data for comparing the occupational structure of the largest urban areas of Northern Ontario is available. This data shows that from 1991 to 2001:
 - The largest general changes in occupations in Urban Northern Ontario are decreases in primary industry related and trades occupations.
 - The largest increases in occupations in Urban Northern Ontario were in Health and Management related occupations
- The occupational structure of Aboriginal communities in Northern Ontario differs considerably from that of Northern Ontario as a whole.
- Occupational skill levels in Northern Ontario are lower than Ontario as a whole.
- The only occupational skill group showing growth in Northern Ontario is that requiring university level education.

Endnotes

¹ As this report is being written, Board #22, covering most of the Algoma District, does not actually exist as a formal training board, having been dissolved in 2001. Despite this, the report includes data for this Board area.

² This has been pointed out by several government studies undertaken over the past 30 years including the Royal Commission on the Northern Environment (Fahlgren Commission). Final Report, Toronto, 1985 and the Task Force on Resource Dependent Communities in Northern Ontario, (the Rosehart Report) Final Report, 1986.

³ For an elaboration on these points see Dadgostar, B., Jankowski, W.B., and Moazzami, B. The Economy of Northwestern Ontario: Structure, Performance and Future Challenges, Thunder Bay: Centre for Northern Studies, Lakehead University, 1992.

⁴ For a detailed discussion of this aspect of Northern Ontario see McBride, Stephen, McKay, Sharon, and Hill, Mary Ellen. "Unemployment in a Northern Hinterland: The Social Impact of Political Neglect" in Chris Southcott (ed.) A Provincial Hinterland: Social Inequality in Northwestern Ontario, Halifax: Fernwood, 1993.

⁵ Canada, 2001 Census.

⁶ An elaboration on these unique characteristics can be found in Randall, James and R. G. Ironside "Communities on the Edge: An Economic Geography of Resource-Dependent Communities in Canada" The Canadian Geographer 40(10):17-35, 1996.

⁷ The percentage varies according to whether the respondents claim Aboriginal identity or Aboriginal origins. In Northern Ontario, 9.9% of the population claim an Aboriginal identity while 11.5% claim Aboriginal origins.

⁸ Southcott, Chris. A Regional Outlook for Northern Boards: A Northern Approach to Regional Labour Force Development, Dryden: Training Boards of Northern Ontario, 2000, p.5,6. Blue collar industrial employment includes the following census categories as contained in the 1980 Standard Industrial Categories: Logging and Forestry, Mining and Quarrying, Manufacturing, Construction, Transportation and Storage, Communication and Utilities. Longitudinal consistency requires that the categories of Agriculture and Trapping and Fishing also be included in this definition as the 1986 public profile categories did not separate these categories from Mining and Primary Forestry employment.

⁹ Southcott, Chris. A Regional Outlook for Northern Boards: A Northern Approach to Regional Labour Force Development, Dryden: Training Boards of Northern Ontario, 2000, p.6.

¹⁰ The following is the explanation of sampling error found in the 2001 Census Dictionary:
Sampling Errors

Estimates obtained by weighting up responses collected on a sample basis are subject to error due to the fact that the distribution of characteristics within the sample will not usually be identical to the distribution of characteristics within the population from which the sample has been selected. The potential error introduced by sampling will vary according to the relative scarcity of the characteristics in the population. For large cell values, the potential error due to sampling, as a proportion of the cell value, will be

relatively small. For small cell values, this potential error, as a proportion of the cell value, will be relatively large.

The potential error due to sampling is usually expressed in terms of the so-called “standard error”. This is the square root of the average, taken over all possible samples of the same size and design, of the squared deviation of the sample estimate from the value for the total population.

The following table provides approximate measures of the standard error due to sampling. These measures are intended as a general guide only.

Table: Approximate Standard Error Due to Sampling for 2001 Census Sample Data

Cell Value Approximate Standard Error

50 or less 15

100 - 20

200 - 30

500 - 45

1,000 - 65

2,000 - 90

5,000 - 140

10,000 - 200

20,000 - 280

50,000 - 450

100,000 - 630

500,000 - 1,400

Statistics Canada, 2001 Census Dictionary, Ottawa: Ministry of Industry, 2002, p. 295,296.

¹¹ The following is the explanation of random rounding found in the 2001 Census Dictionary:

Confidentiality and Random Rounding The figures shown in the tables have been subjected to a confidentiality procedure known as **random rounding** to prevent the possibility of associating statistical data with any identifiable individual. Under this method, all figures, including totals and margins, are randomly rounded either up or down to a multiple of “5”, and in some cases “10”. While providing strong protection against disclosure, this technique does not add significant error to the census data. The user should be aware that totals and margins are rounded independently of the cell data so that some differences between these and the sum of rounded cell data may exist. Also, minor differences can be expected in corresponding totals and cell values among various census tabulations. Similarly, percentages, which are calculated on rounded figures, do not necessarily add up to 100%. Order statistics (median, quartiles, percentiles, etc.) and measures of dispersion such as the standard error are computed in the usual manner. When a statistic is defined as the quotient of two numbers (which is the case for averages, percentages, and proportions), the two numbers are rounded before the division is performed, except for income, owner’s payments, value of dwelling, hours worked, weeks worked and age. For these variables, the two numbers in the quotient are not rounded. The sum is invariably defined as the product of the average and the rounded weighted frequency. It should also be noted that small cell counts may suffer a significant distortion as a result of random rounding. Individual data cells containing small numbers may lose their precision as a result. Statistics Canada, 2001 Census Dictionary, Ottawa: Ministry of Industry, 2002, p. 296.

¹² See Southcott, Chris. A Regional Outlook for Northern Boards: A Northern Approach to Regional Labour Force Development, Dryden: Training Boards of Northern Ontario, 2000, p.6 and 7.

¹³ Comparisons of variance in occupational structure were done by calculating the total variance for each district from the norm for Northern Ontario. The two digit-level occupational categories were used. The differences between the percentage for Northern Ontario and the percentage for the district were calculated for each of the two digit-level occupational categories. These differences were then squared. The square root of each was then calculated. These answers were then added together to give a figure for total variance.

¹⁴ The total variances in occupational structure with that of Northern Ontario was as follows: Ontario 31.7, Muskoka District Municipality 34.9, District of Manitoulin 32.6, District of Sudbury 28.3, District of Rainy River 24.8, Parry Sound 23.3, District of Kenora 20.1,

District of Timiskaming 19, Cochrane 17.5, Greater Sudbury Division, 15.7, District of Nipissing 14.4, District of Algoma 10.6, District of Thunder Bay 9.2.

¹⁵ Comparisons were made using the conversion table contained in Statistics Canada, 2001 Census Dictionary, Ottawa: Ministry of Industry, 2002 p. 77. A total of 9 two digit level categories, out of 47, were affected by the changes from the 1991 Standard Occupational Classification (SOC) to the 2001 National Occupational Classification for Statistics (NOC–S 2001). These categories are H3 Machinists, metal forming, shaping and erecting occupations, E2 Paralegals, social services workers and occupations in education and religion n.e.c., G9 Sales and service occupations n.e.c., C1 Technical occupations related to natural and applied sciences, C0 Professional occupations in natural and applied sciences, D3 Assisting occupations in support of health services, G8 Childcare and home support workers, J1 Machine operators in manufacturing, and B5 Clerical occupations. These categories were excluded from calculations. At the same time, the researcher attempted to “adjust” these categories to get a very rough idea of whether these categories would show an increase or decrease from 1996 to 2001. This rough adjustment was made by adding and subtracting the categories based on 1996 data for Northern Ontario. These rough estimates indicate that H3 Machinists, metal forming, shaping and erecting occupations, and E2 Paralegals, social services workers and occupations in education and religion n.e.c. would show significant increases. Increases would also be seen in G9 Sales and service occupations n.e.c., C1 Technical occupations related to natural and applied sciences, and C0 Professional occupations in natural and applied sciences. J1 Machine operators in manufacturing, and B5 Clerical occupations would show significant decreases.

¹⁶ Ibid.

¹⁷ Urban Northern Ontario includes the figures for the Elliot Lake CA, Haileybury CA, North Bay CA, Kenora CA, Sault Ste. Marie CA, Timmins CA, Thunder Bay CMA and Greater Sudbury CMA. It should be pointed out that comparisons between Urban Northern Ontario and Ontario as a whole are problematic in the sense that the figures for Ontario as a whole include the rural areas as well as the urban areas. As such, the structures would show important differences based on the presence of rural areas in one of the geographical areas.

¹⁸ In this context, changes were defined as notable if the decreases within a four digit category exceeded 1000 jobs.

¹⁹ In this context, changes were defined as notable if the increases within a four digit category exceeded 1000 jobs.

²⁰ Only communities identified as a reserve (classified as an R community) are included in these totals. The totals represent the combined statistics for 52 communities.

²¹ Statistics Canada, The changing profile of Canada's labour force: 2001 Census: analysis series, Ottawa, 2003, Catalogue no. 96F0030XIE2001009, p. 6.

²² Ibid, p. 5.

²³ Once again, as this report is being written the Local Board #22 does not actually exist as a formal training board, having been dissolved in 2001.

Appendix A

Occupational Structure of Northern Ontario 2001: One and Two Digit Categories

	Ontario		Northern Ontario		Differences in Real Percentage Points
	Number	% of All Occupations	Number	% of All Occupations	
All occupations	5992765		402600		
A Management occupations	685390	11.4	37800	9.4	2.0
A0 Senior management occupations	85590	1.4	3295	0.8	0.6
A1 Specialist managers	187705	3.1	6040	1.5	1.6
A2 Managers in retail trade, food and accommodation services	194400	3.2	16275	4.0	-0.8
A3 Other managers, n.e.c.	217690	3.6	12195	3.0	0.6
B Business, finance and administration occupations	1097835	18.3	59840	14.9	3.5
B0 Professional occupations in business and finance	161695	2.7	5335	1.3	1.4
B1 Finance and insurance administration occupations	74190	1.2	5365	1.3	-0.1
B2 Secretaries	119125	2.0	10125	2.5	-0.5
B3 Administrative and regulatory occupations	128485	2.1	5885	1.5	0.7
B4 Clerical supervisors	36305	0.6	1885	0.5	0.1
B5 Clerical occupations	578040	9.6	31240	7.8	1.9
C Natural and applied sciences and related occupations	422510	7.1	17440	4.3	2.7
C0 Professional occupations in natural and applied sciences	252335	4.2	7230	1.8	2.4
C1 Technical occupations related to natural and applied sciences	170175	2.8	10205	2.5	0.3
D Health occupations	286310	4.8	22730	5.6	-0.9
D0 Professional occupations in health	64330	1.1	3695	0.9	0.2
D1 Nurse supervisors and registered nurses	90255	1.5	8525	2.1	-0.6

D2 Technical and related occupations in health	65695	1.1	5700	1.4	-0.3
D3 Assisting occupations in support of health services	66020	1.1	4840	1.2	-0.1
E Occupations in social science, education, government service and religion	455825	7.6	33155	8.2	-0.6
E0 Judges, lawyers, psychologists, social workers, ministers of religion, and policy and program officers	129000	2.2	8485	2.1	0.0
E1 Teachers and professors	219045	3.7	16560	4.1	-0.5
E2 Paralegals, social services workers and occupations in education and religion, n.e.c.	107790	1.8	8110	2.0	-0.2
F Occupations in art, culture, recreation and sport	171840	2.9	7005	1.7	1.1
F0 Professional occupations in art and culture	75520	1.3	2490	0.6	0.6
F1 Technical occupations in art, culture, recreation and sport	96320	1.6	4520	1.1	0.5
G Sales and service occupations	1371245	22.9	109315	27.2	-4.3
G0 Sales and service supervisors	43710	0.7	3150	0.8	-0.1
G1 Wholesale, technical, insurance, real estate sales specialists, and retail, wholesale and grain buyers	143055	2.4	5840	1.5	0.9
G2 Retail salespersons and sales clerks	236455	3.9	16550	4.1	-0.2
G3 Cashiers	100270	1.7	7910	2.0	-0.3
G4 Chefs and cooks	70740	1.2	6800	1.7	-0.5
G5 Occupations in food and beverage service	95260	1.6	7980	2.0	-0.4
G6 Occupations in protective services	89725	1.5	7180	1.8	-0.3
G7 Occupations in travel and accommodation, including attendants in recreation and sport	49015	0.8	3360	0.8	-0.0

G8 Child care and home support workers	94040	1.6	8960	2.2	-0.7
G9 Sales and service occupations, n.e.c.	448975	7.5	41580	10.3	-2.8
H Trades, transport and equipment operators and related occupations	845125	14.1	75865	18.8	-4.7
H0 Contractors and supervisors in trades and transportation	48245	0.8	4075	1.0	-0.2
H1 Construction trades	122015	2.0	10210	2.5	-0.5
H2 Stationary engineers, power station operators and electrical trades and telecommunications occupations	65570	1.1	6525	1.6	-0.5
H3 Machinists, metal forming, shaping and erecting occupations	90610	1.5	5375	1.3	0.2
H4 Mechanics	124770	2.1	12840	3.2	-1.1
H5 Other trades, n.e.c.	47175	0.8	2415	0.6	0.2
H6 Heavy equipment and crane operators, including drillers	30045	0.5	5895	1.5	-1.0
H7 Transportation equipment operators and related workers, excluding labourers	184830	3.1	18825	4.7	-1.6
H8 Trades helpers, construction and transportation labourers and related occupations	131865	2.2	9665	2.4	-0.2
I Occupations unique to primary industry	164360	2.7	18425	4.6	-1.8
I0 Occupations unique to agriculture, excluding labourers	107745	1.8	4780	1.2	0.6
I1 Occupations unique to forestry operations, mining, oil and gas extraction and fishing, excluding labourers	12510	0.2	8570	2.1	-1.9
I2 Primary production labourers	44100	0.7	5070	1.3	-0.5
J Occupations unique to processing, manufacturing and utilities	492320	8.2	21050	5.2	3.0
J0 Supervisors in manufacturing	40625	0.7	2375	0.6	0.1
J1 Machine operators in manufacturing	182730	3.0	9580	2.4	0.7
J2 Assemblers in manufacturing	157180	2.6	2255	0.6	2.1

J3 Labourers in processing, manufacturing and utilities	111785	1.9	6850	1.7	0.2
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Source: Statistics Canada, Census of Canada, 2001.

Appendix B

Northern Ontario: Change in Occupational Structure 1996 to 2001 Two Digit Categories

	1996	2001	Change in Number	% Change
All occupations	410820	402600	-8220	-2.0
A Management occupations	33135	37800	4665	14.1
A0 Senior management occupations	2715	3295	580	21.4
A1 Specialist managers	4865	6040	1175	24.2
A2 Managers in retail trade, food and accommodation services	14410	16275	1865	12.9
A3 Other managers, n.e.c.	11150	12195	1045	9.4
B Business, finance and administration occupations	65000	59840	-5160	-7.9
B0 Professional occupations in business and finance	3395	5335	1940	57.1
B1 Finance and insurance administration occupations	5710	5365	-345	-6.0
B2 Secretaries	11020	10125	-895	-8.1
B3 Administrative and regulatory occupations	5340	5885	545	10.2
B4 Clerical supervisors	1840	1885	45	2.4
B5 Clerical occupations	37690	31240	-6450	-17.1
C Natural and applied sciences and related occupations	15710	17440	1730	11.0
C0 Professional occupations in natural and applied sciences	6515	7230	715	11.0
C1 Technical occupations related to natural and applied sciences	9190	10205	1015	11.0
D Health occupations	21525	22730	1205	5.6
D0 Professional occupations in health	3430	3695	265	7.7
D1 Nurse supervisors and registered nurses	8250	8525	275	3.3
D2 Technical and related occupations in health	5345	5700	355	6.6
D3 Assisting occupations in support of health services	4475	4840	365	8.2
E Occupations in social science, education, government service and religion	30650	33155	2505	8.2
E0 Judges, lawyers, psychologists, social workers, ministers of religion, and policy and program officers	8290	8485	195	2.4
E1 Teachers and professors	17985	16560	-1425	-7.9
E2 Paralegals, social services workers and occupations in education and religion, n.e.c.	4360	8110	3750	86.0

F Occupations in art, culture, recreation and sport	7245	7005	-240	-3.3
F0 Professional occupations in art and culture	2760	2490	-270	-9.8
F1 Technical occupations in art, culture, recreation and sport	4480	4520	40	0.9
G Sales and service occupations	116710	109315	-7395	-6.3
G0 Sales and service supervisors	2060	3150	1090	52.9
G1 Wholesale, technical, insurance, real estate sales specialists, and retail, wholesale and grain buyers	7280	5840	-1440	-19.8
G2 Retail salespersons and sales clerks	17755	16550	-1205	-6.8
G3 Cashiers	9705	7910	-1795	-18.5
G4 Chefs and cooks	7575	6800	-775	-10.2
G5 Occupations in food and beverage service	9515	7980	-1535	-16.1
G6 Occupations in protective services	7580	7180	-400	-5.3
G7 Occupations in travel and accommodation, including attendants in recreation and sport	3370	3360	-10	-0.3
G8 Child care and home support workers	11550	8960	-2590	-22.4
G9 Sales and service occupations, n.e.c.	40245	41580	1335	3.3
H Trades, transport and equipment operators and related occupations	74610	75865	1255	1.7
H0 Contractors and supervisors in trades and transportation	5390	4075	-1315	-24.4
H1 Construction trades	9500	10210	710	7.5
H2 Stationary engineers, power station operators and electrical trades and telecommunications occupations	6475	6525	50	0.8
H3 Machinists, metal forming, shaping and erecting occupations	2380	5375	2995	125.8
H4 Mechanics	14385	12840	-1545	-10.7
H5 Other trades, n.e.c.	2530	2415	-115	-4.5
H6 Heavy equipment and crane operators, including drillers	5680	5895	215	3.8
H7 Transportation equipment operators and related workers, excluding labourers	17825	18825	1000	5.6
H8 Trades helpers, construction and transportation labourers and related occupations	10420	9665	-755	-7.2
I Occupations unique to primary industry	21265	18425	-2840	-13.4
I0 Occupations unique to agriculture, excluding labourers	4745	4780	35	0.7
I1 Occupations unique to forestry operations, mining, oil and gas extraction and fishing, excluding labourers	12005	8570	-3435	-28.6
I2 Primary production labourers	4515	5070	555	12.3
J Occupations unique to processing, manufacturing and utilities	24895	21050	-3845	-15.4
J0 Supervisors in manufacturing	2760	2375	-385	-13.9
J1 Machine operators in manufacturing	12955	9580	-3375	-26.1
J2 Assemblers in manufacturing	1935	2255	320	16.5
J3 Labourers in processing, manufacturing and utilities	7225	6850	-375	-5.2

