Mobility and Migration in 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 #4

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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 trends occurring in their region. This is the fourth 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 current migration trends in Northern Ontario.

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 Migration has shown us several important facts about migration patterns in Northern Ontario. They are as follows:

- Migration patterns in Northern Ontario differ significantly from patterns in Ontario as a whole
- Northern Ontario has few migrants compared to Ontario as a whole
- The differences in percentage of migrants is increasing
- Compared to Ontario, migration rates in Northern Ontario are low
- Almost all migrants to Northern Ontario come from within the Province of Ontario
- There is an increasing divergence in the percentage of migrants coming from the same province.
- Very few migrants from outside Canada come to Northern Ontario
- Fewer and fewer migrants from outside Canada are choosing to come to Northern Ontario
- There is a great deal of variation within the region in terms of the percentage of in-migrants
    - The communities with the highest rates of in-migration tend to be closest to the urban centers of Southern Ontario and tend to be rural
    - The communities with the lowest percentage of in-migrants tend to be the large urban centers of Northern Ontario, Aboriginal communities, and the more isolated resource towns

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 trends occurring in their region. Economic growth in Northern Ontario has been significantly less then 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. Demographic trends are an indicator of economic development. These trends also have an important impact on future development decisions. It, therefore, becomes very important for the Training Boards of Northern Ontario to understand what demographic trends exist in their region.

This is the fourth 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 looks 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.

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. The Aboriginal population makes up almost 8 percent 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 Importance of Understanding Migration Patterns

The study of migration patterns tells us a lot about a particular community or region. If a region has a relatively large number of people moving into the area, it usually means the region is going through a period of economic growth. If the region has a relatively small number of people coming into the area, it usually means the region is going through a period of economic stagnation or decline. A community that has a large number of in-migrants but little population growth, is usually going through a period of economic transition.

Knowing where migrants are coming from helps communities understand how their population in changing and enables them to prepare for shifts in the nature of the population. It also enables a community to compare changes it is experiencing to changes in other communities.

2.3 Migration Patterns in Canada

As was pointed out in the report on youth out-migration in Northern Ontario, there has been a substantial amount of research done in Canada on interprovincial migration.[8] There has been relatively little research done on migration between rural and urban areas and less on migration within provinces themselves.[9]

Several studies concerning rural migration patterns have appeared lately.[10] Although this research is not directly related to the situation of Northern Ontario, the fact that much of Northern Ontario falls within the official Statistics Canada definition of "rural and small town" Canada means that this rural-urban research is a good place to start looking for migration patterns in Canada that are relevant to Northern Ontario.[11]

According to Rothwell et al, in a report released in 2002 using 1996 and earlier census data, rural and small town Canada experienced a net out-migration of people at the end of the 60s.[12] During the 1970s this situation reversed itself. Rural and small town Canada experienced a net in-migration of people due to lower levels of out-migration and higher levels of in-migration.

During the 1980s this trend reversed itself.[13] This decade saw a net out-migration of people from rural and small town Canada due largely to a decrease in the numbers of in-migrants. Finally, from 1991 to 1996 the trend again reversed itself with a return to a net in-migration people due to lower levels of out-migration.

This research also showed that from 1971 to 1996, the percentage of in-migrants for rural and small town Canada for each 5 year census period remained fairly stable at or around 10% of the population.[14]

2.4 History of Migration Patterns in Northern Ontario

For most of the history of Northern Ontario the region has been highly mobile. As the region started to grow in the 1880s, in-migration rates were very high. This lasted until the beginning of the First World War. From 1919 until the late 30s the regions saw selected in-migration and selected out-migration as the resource sector experienced boom and bust periods. Following the Second World War, the region experienced high rates of in-migration until the 1960s, this included large numbers of immigrants from outside Canada.

Following the Second World War, resource-dependent regions such as Northern Ontario experienced labour retention problems which were often costly to resource companies. The small one-industry towns found it hard to keep young male workers in their communities for long periods of time. They would come, work for a while, and then move on, requiring the industry to find new workers and train them. Companies went to considerable effort to find ways of keeping the young male workers in the communities.[15]

Since the 1960s there has been a noticeable change in migration patterns in Northern Ontario. The Regional Outlook of the Training Boards for the year 2000 noted slow population growth, a lack of new immigrants, and continued period of high net youth out-migration .[16]

Section 3: Methodology

This report attempts to describe the migration patterns in Northern Ontario. It examines whether the above mentioned trends can still me seen in 2001. 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. As is pointed out below, the report will only be able to analyze the patterns of in-migration.

Data for Northern Ontario from both the 1996 and 2001 Census is from special profiles ordered from Statistics Canada by the researcher. Data from the1991 and 1986 Census was downloaded from the Census Profiles CDs created by Statistics Canada.

3.1 In-Migrants versus Out-Migrants

In terms of the analysis of all the main migration patterns in Northern Ontario, this report is limited to the analysis of in-migrants. Available data only allows us to find out who is moving into Northern Ontario, where they are moving to, and, to a certain extent, where they are moving from. In the long form census questionnaire which is given to 20% of the population, a question is asked referring to where the person lived 5 years ago. If the person lived in a different community (or census sub-division), she is considered a migrant. Those people who moved from one location to another within the same community are not considered migrants for the purpose of this report. The data which this report analyzes is the responses to this question from everyone who lived in Northern Ontario on May 15, 2001.

It is possible to find out information on out-migrants from Northern Ontario (their characteristics, where they moved from, and where they moved to) but this particular analysis did not have the financial resources to purchase this data from Statistics Canada.

3.2 Potential problems with our method

Our method has two 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 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 which went to 20% of homes. 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".[17]

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.[18] 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 limits our ability to be confident about the percentage of people 65 years of age or older 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.

Section 4: Migration Patterns in Northern Ontario

4.1 Migration Patterns in Northern Ontario Differ Significantly from Ontario as a Whole

4.1.1 Northern Ontario has few migrants compared to Ontario as a whole

When comparing the percentage of the population on Northern Ontario that had moved to a different community over the previous 5 years, to that of Ontario and Canada we see that the population of Northern Ontario is considerably more stable. Only 13.4% of the population of Northern Ontario had changed communities compared to 19.6% for Ontario and 19.5% for Canada.

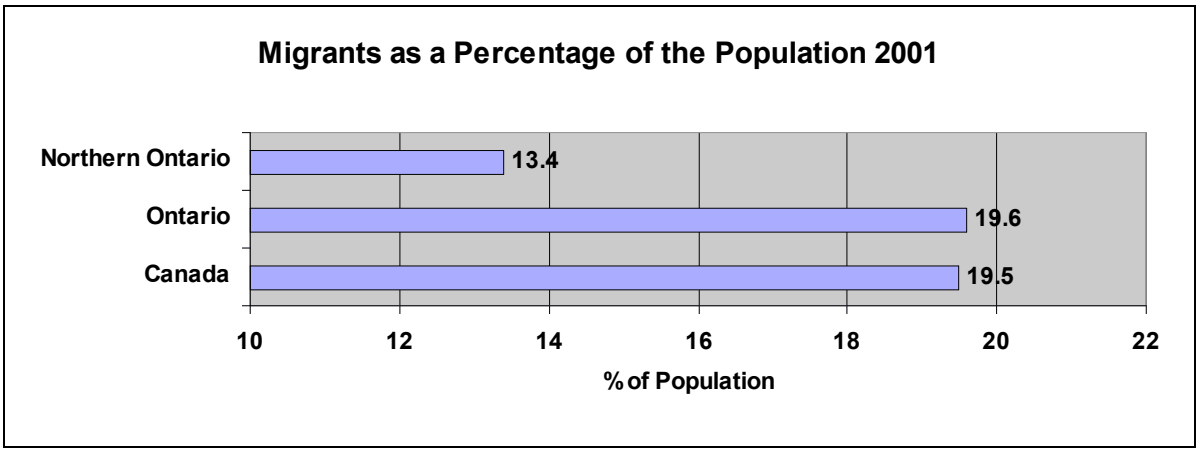

Figure 1 Source: Statistics Canada, Census of Canada, 2001.

4.1.2 The Differences in percentage of migrants is increasing

Figure 2 shows that the percentage of the population who are migrants has decreased since 1991 for Canada, Ontario, and Northern Ontario. In large part this decrease is due to the aging of the population since the older the population the less likely that people are to migrate.[19] From 1996 to 2001, the percentage of the population of Ontario who are migrants decreased by slightly less then 4%. In Northern Ontario, the percentage of the population who are migrants decreased by more than 10%. This divergence in migration patterns between Ontario and Northern Ontario can be seen since 1981.

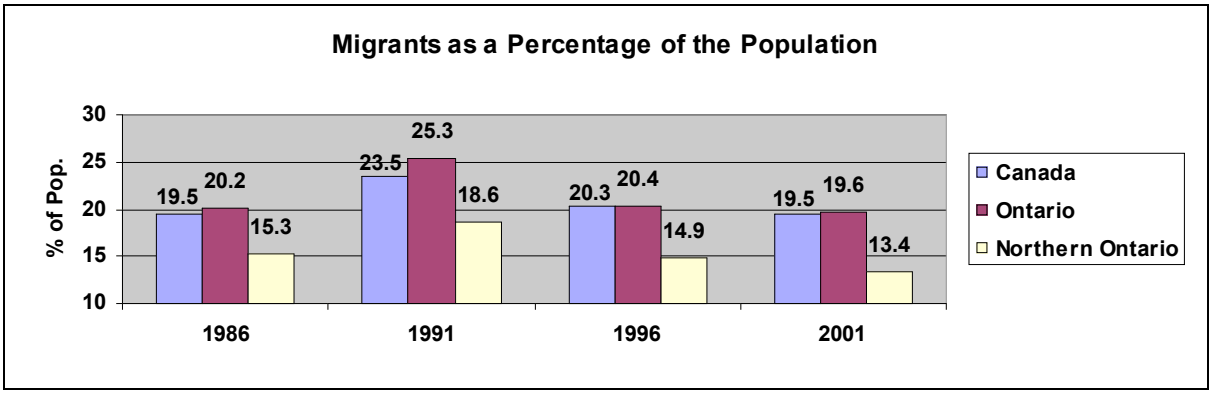

Figure 2 Source: Statistics Canada, Census of Canada, 1986, 1991, 1996, and 2001.

4.1.3 Almost all migrants to Northern Ontario come from within the Province of Ontario

Another difference between the migration patterns for Ontario as a whole and Northern Ontario is that a higher percentage of migrants in Northern Ontario move from another community in the same province (intraprovincial migrants). In 2001, 82.1% of all the migrants in Northern Ontario came from Ontario. Indeed, youth migration research done by the Far Northeast Training Board on their particular region showed that in the 1990s a large percentage of migrants were from another community in Northern Ontario.[20] Corresponding figures for Ontario and Canada were 63.6 and 65.5 respectively.

It is likely that a large percentage of Northern Ontario's migrants are not "in-migrants" from the point of view of the region but residents of Northern Ontario that are simply moving to another location in the same region.

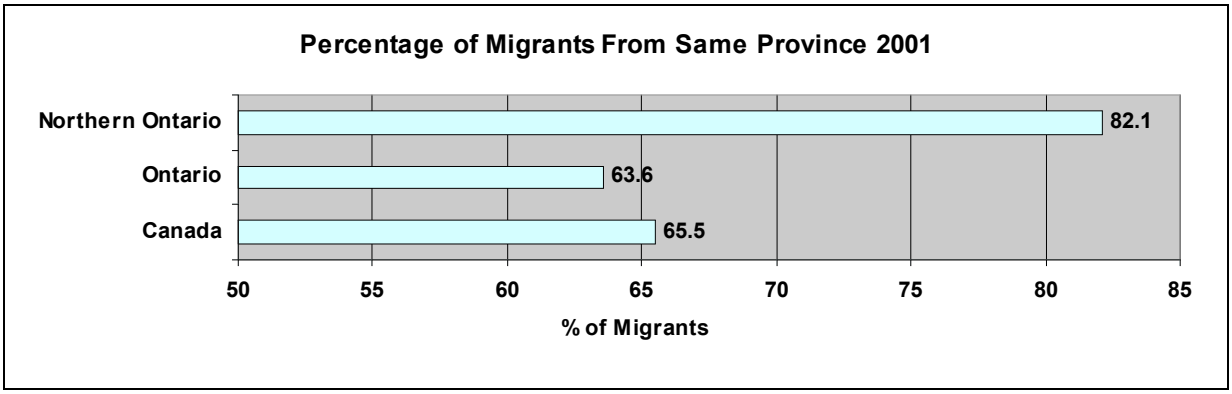

Figure 3 Source: Statistics Canada, Census of Canada, 2001.

4.1.4. There is an increasing divergence in the percentage of migrants coming from the same province.

In Figure 4 we cans see that the differences between Ontario as a whole and Northern Ontario, in terms of the percentage of migrants that are intraprovincial migrants, has increased over the past 20 years. In 1986, the difference between the two regions was less than 8 percentage points. By 2001 this difference had increased to 18.5 percentage points.

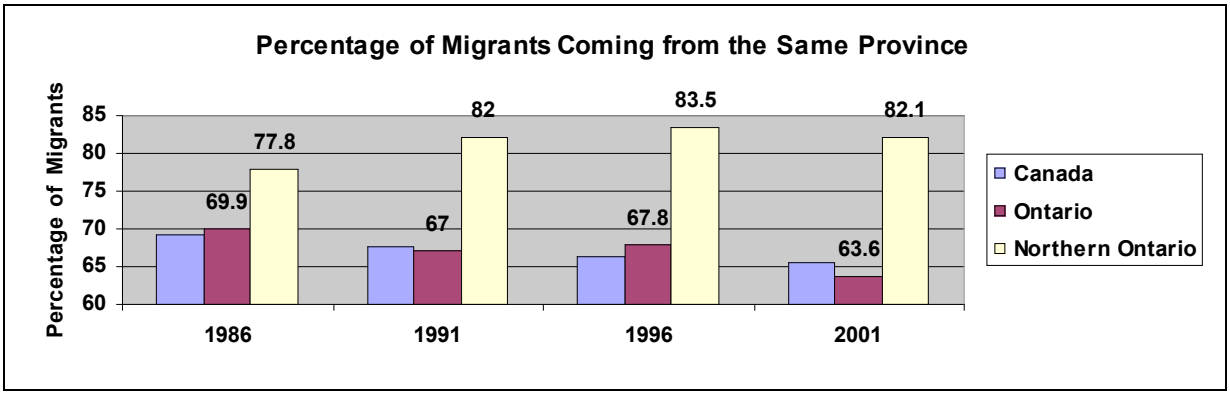

Figure 4 Source: Statistics Canada, Census of Canada, 1986, 1991, 1996, and 2001.

4.1.5 Very few migrants from outside Canada come to Northern Ontario

Another important aspect of migration in Northern Ontario is that the region has very few migrants from outside the country. Figure 5 shows that almost 5% of the population of Ontario as a whole who were 5 years of age or older in 2001 had come to the province from outside the country since 1996. The corresponding figure for Canada was 3.5%. In Northern Ontario, however, only 0.5% of the population, or 3,855 people, had moved to the region from outside the country since 1996.

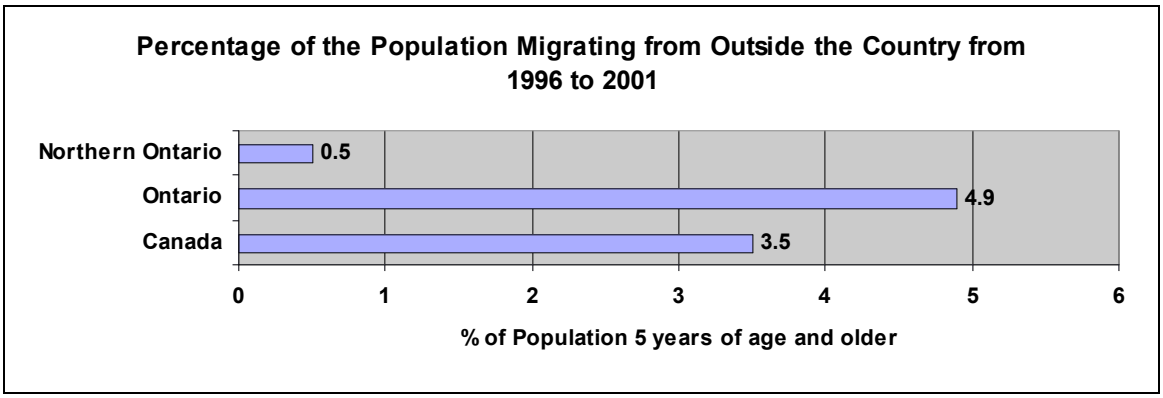

Figure 5 Source: Statistics Canada, Census of Canada, 2001.

4.1.6 Fewer and fewer migrants from outside Canada are choosing to come to Northern Ontario

One of the more important recent migration patterns for Ontario as whole has been a rapid increase in the number of migrants from outside Canada coming to the province. In 1986, 221,325 people had migrated to Ontario from outside the country during the previous 5 years. In 2001 this number had increased to 515,335 – more than double.

In Northern Ontario however, a region which, in the past, had a history of welcoming relatively large numbers of migrants from outside the country, the reverse has been true. As Figure 6 shows, in 1986, Northern Ontario welcomed 5145 migrants from outside the country during the previous 5 years. In 2001, this number had decreased to 3855.

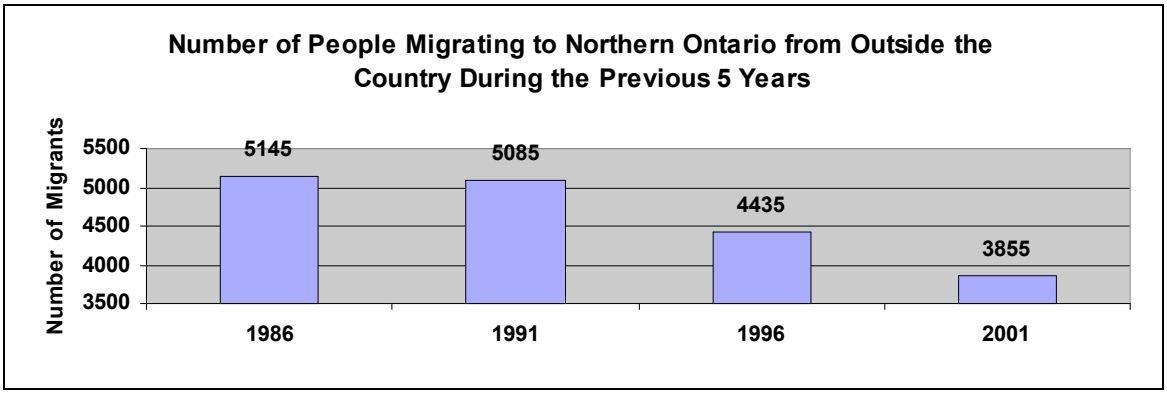

Figure 6 Source: Statistics Canada, Census of Canada, 1986, 1991, 1996, and 2001.

The same is true with landed immigrants. Migrants from outside the country include transient migrants such as university students and people on short-term work contracts. Many of these migrants are temporarily in Northern Ontario and have no intention to stay. When we look at the numbers of recently arrived landed immigrants, those landed immigrants who have arrived in Northern Ontario since 1996, the total number is 2,545, or 0.3% of the population compared to 538,730 for Ontario, or 4.8% of the population of Ontario as a whole.

Another interesting difference between Northern Ontario and the rest of the province is not only in the total number of landed immigrants, but where these immigrants come from. By far the largest source of landed immigrants coming to Northern Ontario since 1996 has been the United States. Almost 22% of all landed immigrants to Northern Ontario came from the United States, followed by the People's Republic of China, at 8.4%, Germany, at 7.3%, and the United Kingdom at 6.4%. For Ontario as a whole the largest source of landed immigrants was the People's Republic of China, at 12.8%, followed by India at 10.9%, Pakistan at 6.5%, and the Philippines at 4.9%. While the largest numbers of landed immigrants to Ontario come from non-traditional sources, the landed immigrants to the North still tend to come from the traditional sources of Europe and America.

4.2 Differences Within Northern Ontario

While it is important to know the migration patterns for Northern Ontario as a whole, it is also important to examine variations in these patterns within Northern Ontario. Such analysis gives us a better idea of which regions and communities within the region are the most affected by either high or low rates of in-migration

4.2.1 There is a great deal of variation between the Districts of Northern Ontario

Table 1: In-Migrants as a Percentage of the Population

	1986	1991	1996	2001
Ontario	20.2	25.3	20.4	19.6
Northern Ontario	15.3	18.6	14.9	13.4
Muskoka District Municipality	22.2	29.5	20.7	21.9
Parry Sound District	21.4	28.4	22.3	21.6
Nipissing District	19.1	23.9	18.1	18.0
Timiskaming District	19.1	20.7	18.1	18.2

Manitoulin District	19.2	22.1	20.6	16.1
Sudbury District	17.8	20.9	16.9	17.0
Kenora District	19.7	19.6	16.6	13.5
Rainy River District	15.4	18.5	14.5	13.7
Cochrane District	12.9	15.2	11.7	12.3
Algoma District	12.6	13.9	12.6	11.9
Thunder Bay District	13.6	13.9	10.9	10.0
Greater Sudbury Division	12.5	18.9	15.0	9.2

Source: Statistics Canada, Census of Canada, 1986, 1991, 1996, and 2001.

Table 1 shows that while migration rates for the regions of Northern Ontario as a whole are less than that of Ontario as a whole, there is a great deal of variation between Districts within Northern Ontario. The two districts closest to the main metropolitan areas of Ontario, the Muskoka District Municipality and the District of Parry Sound have migration rate that are consistently higher than the average for Northern Ontario and Ontario as a whole. As mentioned in earlier reports, it is likely that migration rates in these two Districts are high due to cottage conversions.

The Districts of Nipissing, Timiskaming, Manitoulin, Sudbury and Kenora all have migrations rates that, while below provincial averages, have consistently exceeded the regional average over the past 20 years. The Districts of Cochrane, Algoma, and Thunder Bay have had migration rates consistently below the provincial and regional averages. The Greater Sudbury Division has had the greatest variation in relative migration rates from year to year from 1981 to 2001.

Table 2: Type of Migrants as a Percentage of All Migrants 2001

	Intraprovincial Migrants	Interprovincial Migrants	External Migrants
Ontario	63.6	11.6	24.8
Northern Ontario	82.1	14.2	3.7
Muskoka District Municipality	90.4	6.8	2.8
Nipissing District	82.5	13.9	3.7
Parry Sound District	93.1	4.0	2.9
Manitoulin District	91.3	7.6	1.3
Sudbury District	86.1	12.3	1.5
Greater Sudbury Division	80.5	14.6	4.9
Timiskaming District	87.4	9.4	3.2
Cochrane District	84.4	13.9	1.7
Algoma District	85.8	10.3	4.0
Thunder Bay District	72.9	22.1	5.0
Rainy River District	73.7	21.2	5.2
Kenora District	63.6	31.9	4.4

Source: Statistics Canada, Census of Canada, 2001.

Table 2 shows that not only do the rates of migration vary among districts but there is a great deal of variation as well in terms of the source of these migrants. The Districts of Muskoka, Parry Sound, and Manitoulin all have percentages of intraprovincial migrants significantly above the regional norms. In the case of the Muskoka District Municipality and the District of Parry Sound this is likely the result of cottagers from Southern Ontario converting their cottages upon retirement.

In terms of interprovincial migrants, the Districts of Kenora, Thunder Bay, and Rainy River all have percentages significantly higher than the regional norm. This is likely a reflection of the relative proximity of these districts to Manitoba.

Finally, looking at external migrants, the Districts of Rainy River and Thunder Bay, as well as the Greater Sudbury Division, all have percentages of external migrants significantly higher than the average percentage for the region. In the case of the Greater Sudbury Division and the District of Thunder Bay, this is probably the result of the presence of post-secondary educational institutions in the cities of Sudbury and Thunder Bay. In the case of the District of Rainy River it is the result of its proximity to the American border.

4.2.2 Communities with the Highest Percentage of In-Migrants: Rural and in the South

Table 3: Communities with the Highest Percentage of Migrants 2001

	Type of Community	Population in 2001	Number of In-Migrants	Migrants as % of Pop	District	Board
McMurrich/Monteith	TP	720	305	42.4	Parry Sound	20
Plummer Additional	TP	655	225	34.4	Algoma	22
Larder Lake	TP	770	250	32.5	Sudbury Dist	21
Chisholm	TP	1175	370	31.5	Nipissing	20
Perry	TP	2130	635	29.8	Parry Sound	20
Armour	TP	1275	375	29.4	Parry Sound	20
North Himsworth	TP	3035	855	28.2	Parry Sound	20
Burk's Falls	VL	900	250	27.8	Parry Sound	20
Bonfield	TP	1985	550	27.7	Nipissing	20
Lake of Bays	TP	2760	760	27.5	Muskoka	20
East Ferris	TP	3930	1075	27.4	Nipissing	20
Coleman	TP	535	145	27.1	Sudbury Dist	21
Nipissing	R	1275	330	25.9	Nipissing	20
Billings	TP	510	125	24.5	Manitoulin	21
Gravenhurst	T	9545	2330	24.4	Muskoka	20
Elliot Lake	C	11460	2795	24.4	Algoma	22
North Shore	TP	535	130	24.3	Algoma	22
Temagami	T	865	210	24.3	Nipissing	20
McKellar	TP	870	210	24.1	Parry Sound	20
Red Lake	T	3950	950	24.1	Kenora	25
Michipicoten	TP	3450	820	23.8	Algoma	22
Carling	TP	1060	245	23.1	Parry Sound	20
Georgian Bay	TP	1805	410	22.7	Muskoka	20
Conmee	TP	650	145	22.3	Thunder Bay	24
Nipissing,	UNO	1780	395	22.2	Nipissing	20

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Source: Statistics Canada, Census of Canada, 2001.

Our understanding of migration patterns in Northern Ontario can be helped by a comparison of rates for specific communities within Northern Ontario. In the section above we have compared rates for the Districts within Northern Ontario. These Districts represent the census divisions used by Statistics Canada for Northern Ontario. The Districts, or census divisions, are further broken down into census sub-divisions. These census sub-divisions represent cities, towns, townships, reserves, or unorganized areas. This report refers to these census sub-divisions as communities.

When analyzing migration rates for specific communities within Northern Ontario we have to be aware of the problem of sampling error. This was not the case in the first three reports in this series which dealt with data representing 100 percent of the population. The data used for analyzing migration patterns represents a sample of only 20% of the population. This means two things for our analysis. First, data for very small communities tends not to be very reliable. In our analysis we have decided to exclude communities which had a population of less than 500 in 2001. Second, the order of the communities tends not to be reliable. We can say that a community has a high rate of in-migration. We can not say with a great deal of reliability that, for example, the township of Chisholm, has, in reality, the 4th highest rate of in-migration.

Table 3 shows that communities with the highest rates of in-migration tend to be in the more southern areas of Northern Ontario. Out of the 25 communities listed, 16 were located in the Muskoka District Municipality, the District of Parry Sound, and the District of Nipissing.

The communities with the highest rates of in-migration also tend to be rural or small towns. Of the 25 communities listed in Table 3, 18 are townships that do not contain large communities. There is only one city listed and only 3 towns. There is no apparent relationship between high migration rates and the economic base of the community. In almost all of the communities with high rates of in-migration, a higher than average percentage of migrants came from within Ontario.

4.2.3 Communities with the Lowest Percentage of In-migrants: Aboriginal, Urban, and Isolated

Table 4: Communities with the Lowest Percentage of In-migrants 2001

	Type of Community	Population in 2001	Number of In-migrants	In-Migrants as a % of Pop.	District	Board
Webequie	R	535	15	2.8	Kenora	24
Attawapiskat 91A	R	1095	50	4.6	Kenora	23
Deer Lake	R	655	30	4.6	Kenora	25
Shuniah	TP	2330	140	6.0	Thunder Bay	24
Neebing	TP	1985	125	6.3	Thunder Bay	24
Atikokan	TP	3385	235	6.9	Rainy River	25
Harley	TP	555	40	7.2	Sudbury	21
Sault Ste. Marie	C	69985	5690	8.1	Algoma	22
Sandy Lake 88	R	1465	120	8.2	Kenora	25
Prince	TP	960	80	8.3	Algoma	22

Schreiber	TP	1360	120	8.8	Thunder Bay	24
Thunder Bay	C	101610	9075	8.9	Thunder Bay	24
Greater Sudbury	C	145375	13405	9.2	Greater Sudbury	21
Dubreuilville	TP	915	85	9.3	Algoma	22
Dawson	TP	585	55	9.4	Rainy River	25
Macdonald, Meredith and Aberdeen Additional	TP	1405	135	9.6	Algoma	22
Cochrane	T	5340	540	10.1	Cochrane	23
Terrace Bay	TP	1850	190	10.3	Thunder Bay	24
M'Chigeeng 22 (West Bay 22)	R	660	70	10.6	Manitoulin	21
Cochrane, Unorganized, North Part	UNO	2745	295	10.7	Cochrane	23
Papineau-Cameron	TP	975	105	10.8	Nipissing	20
O'Connor	TP	690	75	10.9	Thunder Bay	24
Timmins	C	40625	4420	10.9	Cochrane	23
White River	TP	965	105	10.9	Algoma	22
Laird	TP	965	105	10.9	Algoma	22

Source: Statistics Canada, Census of Canada, 2001.

Table 4 shows those communities in Northern Ontario, having a population of over 500 in 2001, with the lowest percentage of in-migrants. The first characteristic that is noticeable is that many are Aboriginal communities (R). This fact would have been even more apparent had we included the communities with less than 500 people.

Another interesting characteristic of these communities is that they contain most of the large urban centers of Northern Ontario. The cities of Sudbury, Thunder Bay, Sault Ste. Marie, and Timmins all have relatively low rates of in-migrants. North Bay, at 18%, was the only large urban centre in Northern Ontario to have rates of in-migration higher than the norm for the region.

Finally, the list of communities with low rates of in-migration contains many of the more isolated resource dependent communities of Northern Ontario. Atikokan, Schreiber, Dubreilville, Cochrane, Terrace Bay, and White River are communities that are quite distant from major urban centers.

Section 5: Comparing the Training Board Areas of Northern Ontario

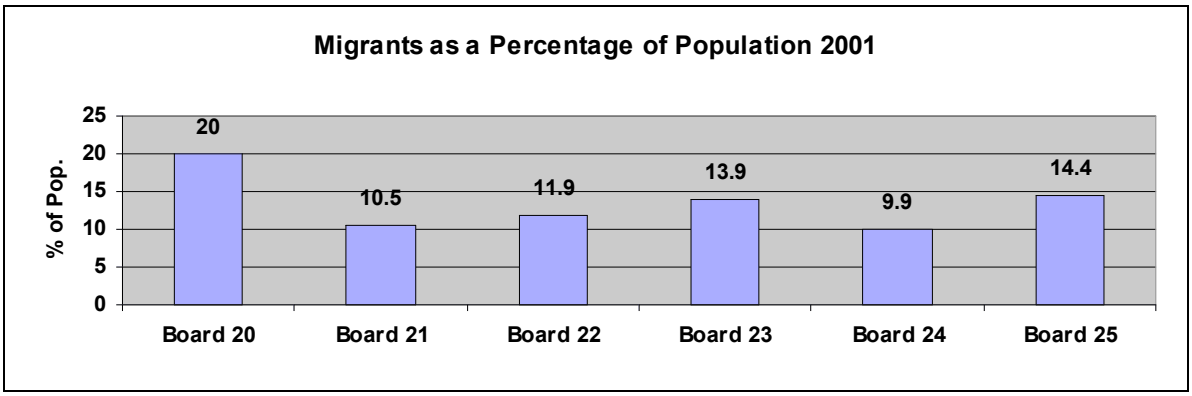

Figure 7 Source: Statistics Canada, Census of Canada, 2001.

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

Figure 7 shows the in-migration rates for 2001 for each of the Local Boards in Northern Ontario. The Board with the highest percentage is Local Board #20 which includes the District Municipality of Muskoka and the Districts of Parry Sound and Nipissing. The communities in this area are characterized by their relative proximity to the major urban areas of Southern Ontario and by the presence in the area of a large number of seasonal residences.

Table 5: Communities in Local Board #20 Area by Percentage of Migrants 2001

	Type	Total Pop 5 years and over	Migrants	Migrants as a % of Pop	Intra provincial migrants	Inter provincial migrants	External migrants
Local Board #20		164065	32790	20.0	28765	2975	1055
McMurrich/Monteith	TP	720	305	42.4	280	10	20
Chisholm	TP	1175	370	31.5	350	0	20
Perry	TP	2130	635	29.8	595	35	10
Armour	TP	1275	375	29.4	330	15	30
North Himsworth	TP	3035	855	28.2	805	45	10
Burk's Falls	VL	900	250	27.8	240	10	0
Bonfield	TP	1985	550	27.7	510	40	0
Lake of Bays	TP	2760	760	27.5	720	20	15
East Ferris	TP	3930	1075	27.4	995	75	10
Mattawan	TP	110	30	27.3	20	10	0
Nipissing 10	R	1275	330	25.9	305	25	0
Gravenhurst	T	9545	2330	24.4	2090	210	30
Temagami	T	865	210	24.3	190	20	0
Joly	TP	290	70	24.1	70	0	0
McKellar	TP	870	210	24.1	210	0	0
Carling	TP	1060	245	23.1	240	10	0
Georgian Bay	TP	1805	410	22.7	395	15	0

Nipissing, Unorganized, South Part	UNO	45	10	22.2	10	0	0
Nipissing, Unorganized, North Part	UNO	1780	395	22.2	275	110	10
Strong	TP	1290	285	22.1	280	0	0
Nipissing	TP	1515	330	21.8	280	35	15
Sundridge	VL	940	200	21.3	190	15	0
Whitestone	TP	825	175	21.2	175	0	0
Magnetawan	TP	1320	280	21.2	265	10	10
Muskoka Lakes	TP	5825	1230	21.1	1180	40	10
Bracebridge	T	12855	2710	21.1	2410	175	125
South River	VL	970	200	20.6	190	10	0
Calvin	TP	560	115	20.5	105	10	0
Huntsville	T	16160	3270	20.2	2895	265	115
Seguin	TP	3525	710	20.1	685	10	15
Parry Sound, Unorganized, Centre Part	UNO	2145	430	20.0	375	0	55
Dokis 9	R	180	35	19.4	35	0	0
Kearney	T	750	145	19.3	145	0	0
McDougall	TP	2520	480	19.0	425	35	25
French River 13	R	105	20	19.0	20	0	0
Moose Point 79	R	165	30	18.2	25	0	0
Parry Sound	T	5680	1030	18.1	950	70	15
Ryerson	TP	610	110	18.0	105	0	0
North Bay	C	49130	8830	18.0	6925	1450	460
Machar	TP	810	140	17.3	120	0	15
Parry Island First Nation	R	330	55	16.7	45	0	0
Shawanaga 17	R	155	25	16.1	20	0	0
Magnetewan 1	R	65	10	15.4	0	0	0
Powassan	T	2940	450	15.3	425	10	15
South Algonquin	TP	1215	185	15.2	165	20	0
Parry Sound, Unorganized, North East Part	UNO	150	20	13.3	15	0	0
The Archipelago	TP	455	55	12.1	45	0	10
Mattawa	T	2035	245	12.0	215	30	0
West Nipissing	T	12310	1470	11.9	1335	120	15
Papineau-Cameron	TP	975	105	10.8	90	20	0

Source: Statistics Canada, Census of Canada, 2001.

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. At 10.5% the Board 21 area has a migration rate below the Northern Ontario average of 13.4%. The main reason for these low numbers of migrants is the fact that the Greater Sudbury

area attracted few migrants as a percentage of the population. Almost all communities on Manitoulin Island had migration rates above the regional average.

Table 6: Communities in Local Board #21 Area by Percentage of Migrants 2001

	Type	Total Pop. 5 Years and Over	Migrants	Migrants as a % of Pop.	Intra provincial Migrants	Inter provincial Migrants	External Migrants
LB #21		173860	18315	10.5	15100	2505	700
Wahnapitei 11	R	50	25	50.0	20	0	0
Whitefish Lake 6	R	300	85	28.3	85	0	0
Mattagami 71	R	155	40	25.8	30	10	0
Billings	TP	510	125	24.5	110	15	0
Gore Bay	T	805	170	21.1	170	0	10
St.-Charles	T	1195	245	20.5	230	15	0
Northeastern Manitoulin and the Islands	T	2330	470	20.2	375	90	0
Baldwin	TP	605	120	19.8	120	10	0
Nairn and Hyman	TP	405	80	19.8	45	40	0
Central Manitoulin	TP	1765	340	19.3	320	15	0
Espanola	T	5165	950	18.4	745	180	20
Whitefish River	R	245	45	18.4	40	10	0
Sudbury, Unorganized, North Part	UNO	2815	515	18.3	485	25	0
Markstay-Warren	T	2480	400	16.1	330	70	0
Sucker Creek 23	R	285	45	15.8	40	0	0
French River	T	2725	430	15.8	415	15	0
Assiginack	TP	915	140	15.3	140	0	0
Sables-Spanish Rivers	TP	3040	455	15.0	400	40	15
Manitoulin, Unorganized, West Part	T	190	25	13.2	25	0	0
Sheguiandah 24	R	115	15	13.0	10	0	0
Sheshegwaning 20	R	80	10	12.5	10	0	0
M'Chigeeng 22 (West Bay 22)	R	660	70	10.6	65	0	0
Gordon	TP	470	45	9.6	40	0	0
Tehkummah	TP	370	35	9.5	30	10	0
Greater Sudbury	C	145375	13405	9.2	10790	1960	655
Burpee and Mills	TP	345	30	8.7	30	0	0
Killarney	T	465	0	0.0	0	0	0

Source: Statistics Canada, Census of Canada, 2001.

5.1 Local Board #22 [21]

Local Board #22 comprises most of the District of Algoma. As was the case with the Board 21 area, the Board 22 area has, at 11.9%, a lower migration rate than for Northern Ontario as a whole. As is the case with area for Board 21, the main reason for the relatively low numbers of migrants was the major urban center in the area. Only 8.1% of the population of the City of Sault Ste. Marie was composed of people who had moved into the city from 1996 to 2001. Those townships in the Southern part of the area that contain lakeshore property tended to have relatively high rates of in-migrants.

Table 7: Communities in Local Board #22 Area by Percentage of Migrants 2001

	Type	Total Pop. 5 Years and Over	Migrants	Migrants as a % of Pop.	Intra provincial Migrants	Inter provincial Migrants	External Migrants
LB #22		110370	13130	11.9	11245	1350	555
Plummer Additional	TP	655	225	34.4	140	0	90
Gros Cap 49	R	60	20	33.3	20	0	0
Hilton Beach	VL	175	55	31.4	45	10	0
Hilton	TP	260	75	28.8	70	0	0
Serpent River 7	R	290	75	25.9	70	0	0
Elliot Lake	C	11460	2795	24.4	2465	275	55
North Shore	TP	535	130	24.3	120	0	10
Michipicoten	TP	3450	820	23.8	710	100	10
Thessalon 12	R	110	25	22.7	30	0	0
Mississagi River 8	R	325	70	21.5	65	0	0
St. Joseph	TP	1140	240	21.1	230	0	15
Sagamok	R	770	155	20.1	135	15	10
Huron Shores	TP	1735	325	18.7	310	0	15
Johnson	TP	625	115	18.4	110	0	0
Shedden	TP	710	115	16.2	115	0	0
Garden River 14	R	775	120	15.5	115	0	10
Bruce Mines	T	585	90	15.4	80	10	0
Thessalon	T	1215	180	14.8	160	15	10
Tarbutt and Tarbutt Additional	TP	420	60	14.3	60	0	0
Blind River	T	3815	520	13.6	480	40	10
Jocelyn	TP	290	35	12.1	35	0	0
Algoma, Unorganized, North Part	UNO	5775	685	11.9	640	35	10
Laird	TP	965	105	10.9	105	0	0
White River	TP	965	105	10.9	85	15	0

Macdonald, Meredith and Aberdeen Additional	TP	1405	135	9.6	135	0	0
Dubreuilville	TP	915	85	9.3	65	20	0
Prince	TP	960	80	8.3	65	0	15
Sault Ste. Marie	C	69985	5690	8.1	4585	815	295

Source: Statistics Canada, Census of Canada, 2001.

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. Surprisingly perhaps, this area had a migration rate slightly above the average for Northern Ontario. One of the reasons for this is the large numbers of migrants who moved into the communities New Liskeard, Haileybury and Smooth Rock Falls. The towns of Kapuskasing and Kirkland Lake also had relatively high rates of in-migrants compared to the rest of Northern Ontario.

Table 8: Communities in Local Board #23 Area by Percentage of Migrants 2001

	Type	Total Pop. 5 Years and Over	Migrants	Migrants as a % of Pop.	Intra provincial Migrants	Inter provincial Migrants	External Migrants
LB #23		113850	15825	13.9	13490	1970	370
Larder Lake	TP	770	250	32.5	205	45	0
Chapleau 75	R	80	25	31.3	25	0	0
James	TP	440	125	28.4	105	15	0
Matachewan 72	R	55	15	27.3	15	0	0
Chamberlain	TP	330	90	27.3	90	0	0
Coleman	TP	535	145	27.1	130	0	15
Gauthier	TP	80	20	25.0	20	0	0
Latchford	T	350	85	24.3	85	0	0
Evanturel	TP	495	120	24.2	125	0	0
Thornloe	VL	90	20	22.2	10	0	0
Smooth Rock Falls	T	1715	375	21.9	320	50	15
New Liskeard	T	4625	1010	21.8	810	190	15
Duck Lake 76B	R	95	20	21.1	20	10	0
Armstrong	TP	1130	225	19.9	175	35	10
Kerns	TP	330	65	19.7	50	15	0
Englehart	T	1400	275	19.6	235	30	10
Val Rita-Harty	TP	970	190	19.6	170	15	0
Haileybury	T	4080	790	19.4	750	35	0
Matachewan	TP	290	55	19.0	55	0	0
Cobalt	T	1140	205	18.0	190	10	0
Black River-	TP	2675	480	17.9	410	70	0

Matheson							
Dymond	TP	1135	200	17.6	165	0	30
Timiskaming, Unorganized, West Part	UNO	3175	530	16.7	470	0	50
Moonbeam	TP	1140	190	16.7	190	0	0
Brethour	TP	155	25	16.1	30	0	0
Charlton	T	255	40	15.7	35	0	0
Kapuskasing	T	8650	1330	15.4	1175	150	10
Kirkland Lake	T	8000	1205	15.1	1060	90	55
Hornepayne	TP	1245	185	14.9	165	20	10
Hearst	T	5410	705	13.0	610	95	0
Fort Albany (Part) 67	R	385	50	13.0	40	10	0
Hudson	TP	480	60	12.5	60	0	0
Chapleau	TP	2590	320	12.4	260	55	10
Opasatika	TP	325	40	12.3	10	30	0
Fauquier-Strickland	TP	655	80	12.2	85	0	0
Harris	TP	500	60	12.0	40	20	0
Mattice-Val Côté	TP	840	100	11.9	95	10	0
McGarry	TP	730	85	11.6	65	20	0
Iroquois Falls	T	4925	565	11.5	460	100	0
Casey	TP	395	45	11.4	35	10	0
Timmins	C	40625	4420	10.9	3600	690	125
Hilliard	TP	230	25	10.9	25	0	0
Dack	TP	415	45	10.8	20	25	0
Cochrane, Unorganized, North Part	UNO	2745	295	10.7	220	65	15
Cochrane	T	5340	540	10.1	490	50	0
Harley	TP	555	40	7.2	40	0	0
Peawanuck	R	180	10	5.6	10	0	0
Attawapiskat 91A	R	1095	50	4.6	40	10	0

Source: Statistics Canada, Census of Canada, 2001.

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. At 9.9%, it had the lowest migration rate of all the Boards in Northern Ontario. The main reason that this area attracted the lowest percentage of migrants from 1996 to 2001 was because of the City of Thunder Bay. Only 8.9% of its population had arrived between 1996 and 2001.

Table 9: Communities in Local Board #24 Area by Percentage of Migrants 2001

	Type	Total Pop. 5 Years	Migrants	Migrants as a % of Pop.	Intra provincial Migrants	Inter provincial Migrants	External Migrants

		and Over					
LB # 24		140440	13955	9.9	10170	3085	710
Conmee	TP	650	145	22.3	110	35	0
Manitouwadge	TP	2810	560	19.9	455	100	0
Osnaburgh 63A	R	155	30	19.4	25	0	0
Red Rock	TP	1155	210	18.2	145	65	0
Greenstone	T	5295	850	16.1	655	195	10
Nipigon	TP	1840	275	14.9	205	75	0
Thunder Bay, Unorganized	UNO	5900	780	13.2	650	55	75
Gillies	TP	495	60	12.1	60	0	0
Dorion	TP	425	50	11.8	30	20	0
Marathon	T	4165	485	11.6	360	100	25
Oliver Paipoonge	TP	5570	620	11.1	530	60	30
Fort Hope 64	R	855	95	11.1	85	10	0
Aroland 83	R	315	35	11.1	35	0	0
O'Connor (3558016) TP 00000	TP	690	75	10.9	55	20	0
Terrace Bay	TP	1850	190	10.3	165	20	0
Ginoogaming First Nation		205	20	9.8	20	0	0
Thunder Bay	C	101610	9075	8.9	6230	2290	560
Schreiber	TP	1360	120	8.8	95	25	0
Neebing	TP	1985	125	6.3	130	0	0
Shuniah	TP	2330	140	6.0	115	15	10
Webequie	R	535	15	2.8	15	0	0
Lansdowne House	R	245	0	0.0	0	0	0

Source: Statistics Canada, Census of Canada, 2001.

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. At 14.4%, this area had the second highest percentage of in-migrants of all the Board areas in Northern Ontario, slightly above the average for the whole of Northern Ontario. The main reason for this higher migration rate was the relatively large numbers of migrants that moved into Sioux Lookout and Red Lake from 1996 to 2001.

Table 10: Communities in Local Board #25 Area by Percentage of Migrants 2001

	Type	Total Pop. 5 Years and Over	Migrants	Migrants as a % of Pop.	Intra provincial Migrants	Inter provincial Migrants	External Migrants
LB # 25		68400	9870	14.4	6475	2890	470
Wabauskang 21	R	40	25	62.5	20	0	0
Whitefish	R	40	15	37.5	10	10	10

Bay 33A							
Rainy Lake 26A	R	80	20	25.0	20	0	0
Red Lake	T	3950	950	24.1	510	345	100
Lake of the Woods	TP	315	75	23.8	50	25	10
The Dalles 38C	R	110	25	22.7	15	10	0
La Vallee	TP	1015	225	22.2	220	0	0
Sioux Lookout	T	4920	1075	21.8	770	270	35
Ear Falls	TP	1040	225	21.6	160	45	15
Kee-Way-Win	R	235	50	21.3	35	15	0
Emo	TP	1290	265	20.5	215	40	15
Pickle Lake	TP	350	70	20.0	60	15	0
Machin	TP	1080	205	19.0	165	35	0
Sioux Narrows Nestor Falls	TP	530	100	18.9	45	45	10
Muskrat Dam Lake	R	55	10	18.2	0	0	0
Rainy River, Unorganized	UNO	1555	280	18.0	215	35	25
Shoal Lake (Part) 39A	R	295	50	16.9	35	15	0
Rainy River	T	890	150	16.9	85	65	0
Ignace	TP	1600	265	16.6	165	95	0
Chapple	TP	820	130	15.9	110	10	10
Rainy Lake 18C	R	65	10	15.4	10	0	0
Slate Falls	R	135	20	14.8	15	0	0
Dryden	C	7700	1085	14.1	755	315	15
Alberton	TP	905	125	13.8	80	30	10
Fort Frances	T	7690	1060	13.8	710	290	55
Kenora, Unorganized	UNO	7280	1000	13.7	630	315	55
Kenora 38B	R	115	15	13.0	0	10	0
Seine River 23A	R	205	25	12.2	15	10	0
Lac Seul 28	R	625	75	12.0	60	15	0
Morley	TP	405	45	11.1	40	0	0
Kenora	C	14810	1630	11.0	800	730	95
Osnaburgh 63B	R	240	25	10.4	20	0	0
Wabigoon Lake 27	R	145	15	10.3	15	10	0
Dawson	TP	585	55	9.4	50	0	0
English River 21	R	405	35	8.6	30	0	0
Sandy Lake 88	R	1465	120	8.2	100	20	0
Atikokan	TP	3385	235	6.9	180	50	10

Poplar Hill	R	315	20	6.3	10	10	0
Rat Portage 38A	R	165	10	6.1	0	0	0
Wapekeka 2	R	290	15	5.2	10	0	0
Deer Lake	R	655	30	4.6	25	10	0
Fort Severn 89	R	355	10	2.8	15	0	0
Lake Of The Woods 37	R	90	0	0.0	0	0	0
Big Grassy River 35G	R	160	0	0.0	0	0	0

Source: Statistics Canada, Census of Canada, 2001.

Section 6: Observations

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

- Migration patterns in Northern Ontario differ significantly from patterns in Ontario as a whole
- Northern Ontario has few migrants compared to Ontario as a whole
- The differences in percentage of migrants is increasing
- Compared to Ontario, migration rates in Northern Ontario are low
- Almost all migrants to Northern Ontario come from within the Province of Ontario
- There is an increasing divergence in the percentage of migrants coming from the same province.
- Very few migrants from outside Canada come to Northern Ontario
- Fewer and fewer migrants from outside Canada are choosing to come to Northern Ontario

In addition, our analysis has shown that there is a great deal of variation within the region in terms of the percentage of in-migrants. The main differences are as follows:

- The communities with the highest rates of in-migration tend to be closest to the urban centers of Southern Ontario and tend to be rural
- The communities with the lowest percentage of in-migrants tend to be the large urban centers of Northern Ontario, Aboriginal communities, and the more isolated resource towns

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] Census population statistics for First Nations communities tend to be less reliable than those for non-Native communities.

[8] See Courchene, T. *Migration, Income and Employment*, Toronto, C.D. Howe Institute, 1974.; Grant, K.E. and J. Vanderkamp, *The Economic Causes and Effects of Migration: Canada,1965-71*, Economic Council of Canada, 1976.; Finnie, R. "Interprovincial Mobility in Canada: A Longitudinal Analysis", Working Paper W-98-5E.a, Applied Research Branch, Human Resources Development Canada, 1998.; and Finnie, R. "Interprovincial Mobility in Canada: Who Moves? A Panel Logit Model Analysis", Working Paper W-98-5E.b, Applied Research Branch, Human Resources Development Canada, 1998.

[9] Dupuy, Richard; Mayer, Francine; and Morissette, René. Rural Youth: Stayers, Leavers and Return Migrants, Canadian Rural Partnership, 2000, p. 1.

[10] See Dupuy, Richard; Mayer, Francine; and Morissette, René. Rural Youth: Stayers, Leavers and Return Migrants, Canadian Rural Partnership, 2000.; Neil Rothwell, Ray D. Bollman, Juno Tremblay and Jeff Marshall, Recent Migration Patterns in Rural and Small Town Canada, Agriculture and Rural Working Paper Series Working Paper No. 55, Agriculture Division, Statistics Canada, 2002.; Tremblay, Juno**.** Rural youth migration between 1971 and 1996, Working Paper# 44, Agriculture Division, Statistics Canada, 2001.; R.A. Malatest & Associates Ltd., Rural Youth Migration: Exploring the Reality Behind the Myths, Canadian Rural Partnership, 2002.

[11] Neil Rothwell, Ray D. Bollman, Juno Tremblay and Jeff Marshall, Recent Migration Patterns in Rural and Small Town Canada, Agriculture and Rural Working Paper Series Working Paper No. 55, Agriculture Division, Statistics Canada, 2002, p. 3.

[12] Ibid, p. 5.

[13] Ibid, p. 6.

[14] Ibid, p. 7.

[15] See Himelfarb, Alex. "The Social Characteristics of Single Industry Towns" in R.T. Bowles (ed) Little Communities and Big Industry, Toronto, Butterworths, 1982.

[16] 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.

[17] 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 thefact 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. Thesemeasures 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.

[18] 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.

[19] Statistics Canada, Profile of the Canadian Population by Mobility Status: Canada, a Nation on the Move. Ottawa, December, 2002, p.5.

[20] Suthey Holler Associates, Youth Out-Migration From The FNETB Area, Hearst: Far Northeast Training Board, 2001.

17. 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

Census Sub-divisions of Northern Ontario by Percentage of Migrants arriving Between 1996 and 2001

	Type of Community	Board Area	Total population 5 years and over	Migrants	Mig as % of Pop
Wabauskang 21	R	25	40	25	62.5
Wahnapitei 11	R	21	50	25	50.0
McMurrich/Monteith	TP	20	720	305	42.4
Whitefish Bay 33A	R	25	40	15	37.5
Plummer Additional	TP	22	655	225	34.4
Gros Cap 49	R	22	60	20	33.3
Larder Lake	TP	23	770	250	32.5
Chisholm	TP	20	1175	370	31.5
Hilton Beach	VL	22	175	55	31.4
Chapleau 75	R	23	80	25	31.3
Perry	TP	20	2130	635	29.8
Armour	TP	20	1275	375	29.4
Hilton	TP	22	260	75	28.8
James	TP	23	440	125	28.4
Whitefish Lake 6	R	21	300	85	28.3
North Himsworth	TP	20	3035	855	28.2
Burk's Falls	VL	20	900	250	27.8
Bonfield	TP	20	1985	550	27.7
Lake of Bays	TP	20	2760	760	27.5
East Ferris	TP	20	3930	1075	27.4
Mattawan	TP	20	110	30	27.3
Chamberlain	TP	23	330	90	27.3
Matachewan 72	R	23	55	15	27.3
Coleman	TP	23	535	145	27.1
Nipissing 10	R	20	1275	330	25.9
Serpent River 7	R	22	290	75	25.9
Mattagami 71	R	21	155	40	25.8
Gauthier	TP	23	80	20	25.0
Rainy Lake 26A	R	25	80	20	25.0
Billings	TP	21	510	125	24.5
Gravenhurst	T	20	9545	2330	24.4
Elliot Lake	C	22	11460	2795	24.4
North Shore	TP	22	535	130	24.3
Latchford	T	23	350	85	24.3
Temagami	T	20	865	210	24.3
Evanturel	TP	23	495	120	24.2
Joly	TP	20	290	70	24.1
McKellar	TP	20	870	210	24.1

Red Lake	T	25	3950	950	24.1
Lake of the Woods	TP	25	315	75	23.8
Michipicoten	TP	22	3450	820	23.8
Carling	TP	20	1060	245	23.1
Thessalon 12	R	22	110	25	22.7
The Dalles 38C	R	25	110	25	22.7
Georgian Bay	TP	20	1805	410	22.7
Conmee	TP	24	650	145	22.3
Nipissing, Unorganized, South Part	UNO	20	45	10	22.2
Thornloe	VL	23	90	20	22.2
Nipissing, Unorganized, North Part	UNO	20	1780	395	22.2
La Vallee	TP	25	1015	225	22.2
Strong	TP	20	1290	285	22.1
Smooth Rock Falls	T	23	1715	375	21.9
Sioux Lookout	T	25	4920	1075	21.8
New Liskeard	T	23	4625	1010	21.8
Nipissing	TP	20	1515	330	21.8
Ear Falls	TP	25	1040	225	21.6
Mississagi River 8	R	22	325	70	21.5
Kee-Way-Win	R	25	235	50	21.3
Sundridge	VL	20	940	200	21.3
Magnetawan	TP	20	1320	280	21.2
Whitestone	TP	20	825	175	21.2
Gore Bay	T	21	805	170	21.1
Muskoka Lakes	TP	20	5825	1230	21.1
Bracebridge	T	20	12855	2710	21.1
St. Joseph	TP	22	1140	240	21.1
Duck Lake 76B	R	23	95	20	21.1
South River	VL	20	970	200	20.6
Emo	TP	25	1290	265	20.5
Calvin	TP	20	560	115	20.5
St.-Charles	T	21	1195	245	20.5
Huntsville	T	20	16160	3270	20.2
Northeastern Manitoulin and the Islands	T	21	2330	470	20.2
Seguin	TP	20	3525	710	20.1
Sagamok	R	22	770	155	20.1
Parry Sound, Unorganized, Centre Part	UNO	20	2145	430	20.0
Pickle Lake	TP	25	350	70	20.0
Manitouwadge	TP	24	2810	560	19.9
Armstrong	TP	23	1130	225	19.9
Baldwin	TP	21	605	120	19.8
Nairn and Hyman	TP	21	405	80	19.8
Kerns	TP	23	330	65	19.7

Englehart	T	23	1400	275	19.6
Val Rita-Harty	TP	23	970	190	19.6
Dokis 9	R	20	180	35	19.4
Haileybury	T	23	4080	790	19.4
Osnaburgh 63A	R	24	155	30	19.4
Kearney	T	20	750	145	19.3
Central Manitoulin	TP	21	1765	340	19.3
McDougall	TP	20	2520	480	19.0
French River 13	R	20	105	20	19.0
Machin	TP	25	1080	205	19.0
Matachewan	TP	23	290	55	19.0
Sioux Narrows Nestor Falls	TP	25	530	100	18.9
Huron Shores	TP	22	1735	325	18.7
Johnson	TP	22	625	115	18.4
Espanola	T	21	5165	950	18.4
Whitefish River	R	21	245	45	18.4
Sudbury, Unorganized, North Part	UNO	21	2815	515	18.3
Muskrat Dam Lake	R	25	55	10	18.2
Moose Point 79	R	20	165	30	18.2
Red Rock	TP	24	1155	210	18.2
Parry Sound	T	20	5680	1030	18.1
Ryerson	TP	20	610	110	18.0
Rainy River, Unorganized	UNO	25	1555	280	18.0
Cobalt	T	23	1140	205	18.0
North Bay	C	20	49130	8830	18.0
Black River-Matheson	TP	23	2675	480	17.9
Dymond	TP	23	1135	200	17.6
Machar	TP	20	810	140	17.3
Shoal Lake (Part) 39A	R	25	295	50	16.9
Rainy River	T	25	890	150	16.9
Timiskaming, Unorganized, West Part	UNO	23	3175	530	16.7
Moonbeam	TP	23	1140	190	16.7
Parry Island First Nation	R	20	330	55	16.7
Ignace	TP	25	1600	265	16.6
Shedden	TP	22	710	115	16.2
Brethour	TP	23	155	25	16.1
Markstay-Warren	T	21	2480	400	16.1
Shawanaga 17	R	20	155	25	16.1
Greenstone	T	24	5295	850	16.1
Chapple	TP	25	820	130	15.9
Sucker Creek 23	R	21	285	45	15.8
French River	T	21	2725	430	15.8

Charlton	T	23	255	40	15.7
Garden River 14	R	22	775	120	15.5
Bruce Mines	T	22	585	90	15.4
Rainy Lake 18C	R	25	65	10	15.4
Magnetewan 1	R	20	65	10	15.4
Kapuskasing	T	23	8650	1330	15.4
Powassan	T	20	2940	450	15.3
Assiginack	TP	21	915	140	15.3
South Algonquin	TP	20	1215	185	15.2
Kirkland Lake	T	23	8000	1205	15.1
Sables-Spanish Rivers	TP	21	3040	455	15.0
Nipigon	TP	24	1840	275	14.9
Hornepayne	TP	23	1245	185	14.9
Slate Falls	R	25	135	20	14.8
Thessalon	T	22	1215	180	14.8
Tarbutt and Tarbutt Additional	TP	22	420	60	14.3
Dryden	C	25	7700	1085	14.1
Alberton	TP	25	905	125	13.8
Fort Frances	T	25	7690	1060	13.8
Kenora, Unorganized	UNO	25	7280	1000	13.7
Blind River	T	22	3815	520	13.6
Parry Sound, Unorganized, North East Part	UNO	20	150	20	13.3
Thunder Bay, Unorganized	UNO	24	5900	780	13.2
Manitoulin, Unorganized, West Part	T	21	190	25	13.2
Sheguiandah 24	R	21	115	15	13.0
Kenora 38B	R	25	115	15	13.0
Hearst	T	23	5410	705	13.0
Fort Albany (Part) 67	R	23	385	50	13.0
Sheshegwaning 20	R	21	80	10	12.5
Hudson	TP	23	480	60	12.5
Chapleau	TP	23	2590	320	12.4
Opasatika	TP	23	325	40	12.3
Fauquier-Strickland	TP	23	655	80	12.2
Seine River 23A	R	25	205	25	12.2
Gillies	TP	24	495	60	12.1
The Archipelago	TP	20	455	55	12.1
Jocelyn	TP	22	290	35	12.1
Mattawa	T	20	2035	245	12.0
Harris	TP	23	500	60	12.0
Lac Seul 28	R	25	625	75	12.0
West Nipissing	T	20	12310	1470	11.9
Mattice-Val C¶tÚ	TP	23	840	100	11.9

Algoma, Unorganized, North Part	UNO	22	5775	685	11.9
Dorion	TP	24	425	50	11.8
Marathon	T	24	4165	485	11.6
McGarry	TP	23	730	85	11.6
Iroquois Falls	T	23	4925	565	11.5
Casey	TP	23	395	45	11.4
Oliver Paipoonge	TP	24	5570	620	11.1
Morley	TP	25	405	45	11.1
Aroland 83	R	24	315	35	11.1
Fort Hope 64	R	24	855	95	11.1
Kenora	C	25	14810	1630	11.0
White River	TP	22	965	105	10.9
Laird	TP	22	965	105	10.9
Timmins	C	23	40625	4420	10.9
O'Connor (3558016) TP 00000	TP	24	690	75	10.9
Hilliard	TP	23	230	25	10.9
Dack	TP	23	415	45	10.8
Papineau-Cameron	TP	20	975	105	10.8
Cochrane, Unorganized, North Part	UNO	23	2745	295	10.7
M'Chigeeng 22 (West Bay 22)	R	21	660	70	10.6
Osnaburgh 63B	R	25	240	25	10.4
Wabigoon Lake 27	R	25	145	15	10.3
Terrace Bay	TP	24	1850	190	10.3
Cochrane	T	23	5340	540	10.1
Ginoogaming First Nation		24	205	20	9.8
Macdonald, Meredith and Aberdeen Additional	TP	22	1405	135	9.6
Gordon	TP	21	470	45	9.6
Tehkummah	TP	21	370	35	9.5
Dawson	TP	25	585	55	9.4
Dubreuilville	TP	22	915	85	9.3
Greater Sudbury	C	21	145375	13405	9.2
Thunder Bay	C	24	101610	9075	8.9
Schreiber	TP	24	1360	120	8.8
Burpee and Mills	TP	21	345	30	8.7
English River 21	R	25	405	35	8.6
Prince	TP	22	960	80	8.3
Sandy Lake 88	R	25	1465	120	8.2
Sault Ste. Marie	C	22	69985	5690	8.1
Harley	TP	23	555	40	7.2
Atikokan	TP	25	3385	235	6.9
Poplar Hill	R	25	315	20	6.3

Neebing	TP	24	1985	125	6.3
Rat Portage 38A	R	25	165	10	6.1
Shuniah	TP	24	2330	140	6.0
Peawanuck	R	23	180	10	5.6
Wapekeka 2	R	25	290	15	5.2
Deer Lake	R	25	655	30	4.6
Attawapiskat 91A	R	23	1095	50	4.6
Fort Severn 89	R	25	355	10	2.8
Webequie	R	24	535	15	2.8
Lansdowne House	R	24	245	0	0.0
Killarney	T	21	465	0	0.0
Lake Of The Woods 37	R	25	90	0	0.0
Big Grassy River 35G	R	25	160	0	0.0

Source: Statistics Canada, Census of Canada, 2001 Note: Due to sampling error, results from smaller census sub-divisions are less reliable than the results from the larger census sub-divisions.