Simcoe County District School Board

Economic Impact of Agriculture on the Economy of Simcoe County

Socio-Economic Profile and Agriculture-Related Business Survey

Draft Report to:

The Simcoe County Board of Education
Simcoe County Federation of Agriculture
Human Resources Development Canada

Harry Cummings & Associates
May 1999

Executive Summary

Over the last 50 years, rural areas in Ontario and across Canada have experienced a decline in the number of farms and farmers. The consequence has been that currently in most rural areas the number of service sector jobs exceeds those in agriculture. Economic development agencies often assume that agriculture is stagnant and strategies should focus on service and secondary industries. However, many people active in agriculture thought that the importance of agriculture to the rural economy was understated and not given its due recognition.

Consequently, a number of Ontario counties have initiated studies on the broader role of agriculture in their areas. This study in Simcoe County is the third one overseen by Dr. Harry Cummings, a professor in the School of Rural Planning and Development at the University of Guelph. The first study was done in Huron County, which has the largest agricultural sector in the province and was completed in 1998. The second study was recently completed on the role of agriculture in the economies of Prescott, Russell, Stormont, Dundas and Glengarry counties. All three studies completed profiles of the economy and agriculture in their particular study areas and focused on the sales and jobs contributed both by farm enterprises and agriculture related businesses. Wherever appropriate, comparisons are made between the results of the work in Simcoe County to these two other similar studies.

In the first phase of this study, Statistics Canada data was used to determine the contribution of farm enterprises to Simcoe County. In the second phase, telephone interviews were conducted of 339 agriculture-related businesses to determine the size of sales and jobs directly related to agriculture within these firms. Further work was done to determine service sector jobs and contribution to the economy resulting from agricultural activities. The report is divided into two parts based on division between Phase 1 and Phase 2 work.

The study found that there were 14,014 jobs tied to agriculture in Simcoe County (9.2 percent of the county's total jobs of 152,595) and $783.6 million in sales per annum. The multipliers indicate that for every job on the farm, there are 1.9 additional jobs outside of agriculture. In the sales area, for each dollar in sales in agriculture, there is $1.95 in agricultural sales in Simcoe County businesses.

There were 167,585 employees in the county in 1996, a 38 percent increase over the 121,060 employees in 1986. The average income for women in Simcoe is $19,211, while the average income for women in the province is $21,048. The average income for males in Simcoe is $31,653, which is 65% higher than that for females, but lower than the $33,599 average for the province. Direct employment on farms declined by 2 percent between 1986 and 1996 (from 4,700 employees to 4,690).

Farm gate sales in the county increased 30 percent from $204.4 million to $264.9 million between 1986 and 1996, while farm employment declined. Over the same ten year period the number of farms declined by 8 percent while the total area farmed remained constant, suggesting larger and more capital intensive farms.

The region had 4.0 percent of the cultivated land area in the province and produced 3.4 percent of the province's farm gate sales in 1996. Census data on farm size indicates that Simcoe County farms are on average slightly smaller than for Ontario. An explanation of this smaller size would be the number of intensive vegetable grower operations in the Holland Marsh area.

With respect to farm enterprises, agriculture in the county is well diversified with beef operations being the largest number (32%). In terms of crops over the past five years, the county has

experienced the 100 percent growth in acreage devoted to soybeans. Simcoe County also has more than 30 percent of the province's total potato crop acreage.

We estimate that there are 573 businesses beyond the farm gate related to agriculture. The sample survey of 339 businesses, completed in the fall of 1999, produced an estimate of 2,237 jobs in agriculture related businesses. This refers to jobs that are supported by farmers and is in addition to the 4,770 jobs (1996) on the farm. In addition, from Census data we estimate that 7,007 jobs in the service sector were supported by direct and indirect agricultural jobs. With respect to sales, we estimate that the $265 million in farm gate sales produced $519 million in agriculture related sales.

Other survey data indicate that agriculture-related businesses sell more of their agricultural products outside the county than inside. Of the three study areas, Simcoe County businesses had higher percentage of exports than Huron County or the Eastern Ontario counties. The largest agriculture related business category is retail industries followed by wholesale and construction industries. In the other two study areas, wholesale industries were the predominant businesses. Because agriculture related businesses in the wholesale category have a high percentage of agriculture sales, this appears to be an underdeveloped area within the county with potential for further development. The average number of employees in the businesses surveyed was 11 (same as in the eastern Ontario counties) and 98 percent of the surveyed businesses were small businesses employing under 50 people.

Agriculture-related businesses were surveyed on the type of training they have undertaken in the past year, the location of this training and their satisfaction with the courses. Over 70% of computer training is taken outside of Simcoe County and does not have as high a satisfaction level when compared to most other training.

STUDY TEAM

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- Marilyn Bidgood, Community Advisor, OMAFRA
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- Doug Lambie, Agriculture and Rural Representative, OMAFRA
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- Ron Lyons, New Tecumseth Economic Development Corporation
- Bob Nevison, Simcoe County Federation of Agriculture
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Socio-Economic Profile of Simcoe County

1.0 Background

This socio-economic profile has been prepared for the Simcoe County Board of Education and the Alliston Learning Centre by Harry Cummings & Associates, a Guelph-based consulting firm with strengths in agricultural economic impact analysis, program evaluation and rural development planning. The study is supported by funding from Human Resources Development Canada, with organizational support from the Simcoe County Federation of Agriculture, the Ontario Federation of Agriculture and the Ontario Ministry of Agriculture Food and Rural Affairs.

The profile comprises Part 1 of a two to three part study to assess the economic impact of agriculture in Simcoe County, in order to guide the development of strategic directions for economic development in the County. Part 2 focuses on the sectors of the economy linked to agriculture as suppliers or inputs or consumers of outputs and involves a survey of agriculturally-related businesses in the County.

Preparation of this report has benefited from the participation of members of the Study Advisory Committee. Members of the committee are:

- Marilyn Bidgood, Community Advisor, OMAFRA
- Louise Carter, Vice-Principal, Alliston Learning Centre, Simcoe County District School Board
- Diane Cowden, Principal, Continuing Education, Simcoe County District School Board
- Brian Jones, Simcoe County Federation of Agriculture
- Doug Lambie, Agriculture and Rural Representative, OMAFRA
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1.1 Purpose of the Socio-Economic Profile

The purpose of the profile is to provide background information on the general socio-economic conditions in Simcoe County, with a focus on the agricultural economy. It has been prepared to better understand the **context** within which the agricultural economy of Simcoe County operates. The profile will be combined with the results of a survey of agriculturally-related businesses in Simcoe County to present a complete picture of the impact that agriculture has on the economy of the County. Understanding this context is

essential for developing effective economic and human resource development strategies in the County.

1.2 Objectives of the Profile

1. To gain an understanding of the interplay of the various components affecting the agricultural sector in Simcoe County.
2. To identify, through analysis of secondary sources of current and historical data, social and economic trends affecting agriculture.
3. To identify the conditions and trends affecting agriculture in the County
4. To determine the importance of agriculture to the Simcoe County economy.

1.3 Audience

This document has been prepared for the study partners, including the Simcoe County Board of Education, with support from Human Resources Development Canada. It has also been prepared with the support of the Simcoe County Federation of Agriculture and the Ontario Ministry of Agriculture Food and Rural Affairs. The intended audience for the report are the Simcoe County Federation of Agriculture, the economic development departments of the municipalities in Simcoe County, as well as the municipal, provincial and federal government.

1.4 Methodology

This study was conducted over five weeks beginning September 4, 1998. To compile the necessary background information for the profile, the consultant contacted municipal and provincial government offices to obtain relevant reports, documents and statistics. This material was reviewed and any issues arising were discussed with ministry officials. The document review was supplemented by a review and analysis of data from the Statistics Canada Census of Population and Census of Agriculture. Other secondary data was obtained from a variety of sources, including internet sites for government ministries and communities and researchers who have completed relevant studies. A brief review was also completed of recent literature on agricultural economics, particularly the Canadian Journal of Agricultural Economics.

To illustrate the various socio-economic features of the County, graphs were prepared by the consultant, from analysis of Census and other data. To further illustrate the geography, land use, physiology and other characteristics of the County, base maps were generated by a cartographer at the University of Guelph, and detailed maps were reviewed from the Simcoe County Official Plan and other sources.

1.5 Limitations

Most of the data used to compile the profile was obtained from the 1986, 1991 and 1996 Population Census and the 1996 Census of Agriculture. The information on labour,

employment, education and income is based on a 20% sample taken in 1996. This raw data is therefore two years old.

The Census data for labour force in different sectors/industries is linked to the respondents' place of residence, not their place of work. It does not distinguish between people who are commuting to work outside the County. Therefore, it cannot be used as an indicator of the industries/sectors operating within the boundaries of Simcoe County.

Another limitation of the study is that it does not give a profile of the agriculturally related jobs being analysed in Part 2, because the existing secondary data is not broken down to that level.

Comparison of Township level Census data over time was difficult because of the extensive boundary changes associated with the amalgamation of several of the townships in the early 1990s.

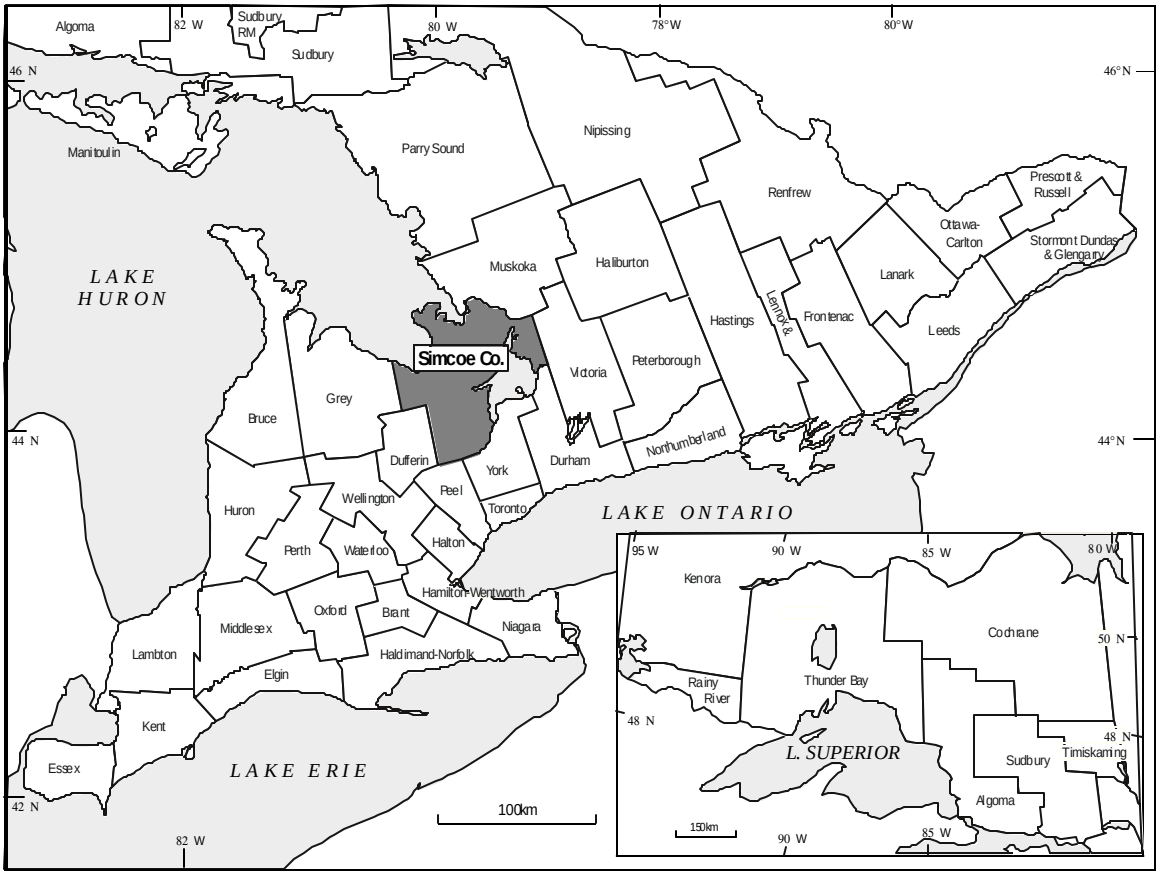
2.0 Introduction

The study area is the County of Simcoe, in 1998 made up of eight townships and eight towns in Western Ontario (Figure 2.1). It is bordered by the Grey County and Dufferin County to the West, Peel and York Regions to the South, Durham Region and Victoria County to the East and Muskoka District to the North. Simcoe also borders three major water bodies - Georgian Bay to the northwest and Lakes Simcoe and Couchiching to the east and northeast.

The Cities of Barrie and Orillia are administered separately from the County, but are adjacent to and interconnected economically with the rest of the County. The population of Simcoe County was approximately 223,000 in 1996, with an additional 107,000 in Barrie and Orillia. With 374 kilometres of shoreline on Lake Simcoe and Georgian Bay, Simcoe also has large seasonal residential communities, which results in a dramatic population increase in the summer months.

One of the major influences on economic development in the County, especially the southern half, is its location immediately to the north of the Greater Toronto Area (GTA), which is a highly urbanised region comprising the Regional Municipalities of Halton, Peel, Durham and York, surrounding the City of Toronto. The rapid growth and urbanisation in the GTA has contributed to residential and industrial development in Simcoe County, especially in City of Barrie, which is located within commuting distance to Toronto. The County as a whole is presently growing at a rate of 2.7% per year.

Figure 2.1: Simcoe County in Ontario



Of particular importance for this report is the on-going pressure of development on agricultural lands. On the other hand, the presence of the Toronto Area markets is a significant opportunity for Simcoe area businesses.

Table 2.1: Townships and Towns in Simcoe County, Before and After Amalgamation

Original Townships/Towns (in 1991 Census)	Current Townships/Towns (in 1996 Census)	Population 1996
Innisfill (South Simcoe)	Town of Innisfill	24,711
Tecumseth Township and Town of Alliston	Town of New Tecumseth	22,902
West Gwillimbury (South Simcoe) and Bradford	Town of Bradford West Gwillimbury	20,213
Oro Township and Medonte Township (North Simcoe)	Township of Oro-Medonte	16,698
Essa (South Simcoe)	Township of Essa	16,363
Town of Collingwood	Town of Collingwood	15,596

Original Townships/Towns (in 1991 Census)	Current Townships/Towns (in 1996 Census)	Population 1996
Town of Midland	Town of Midland	15,035
Flos and Vespra (North Simcoe)	Township of Springwater	14,793
Nottawasaga (South Simcoe) and Sunnidale (North Simcoe)	Township of Clearview	12,407
Tay (North Simcoe)	Township of Tay	10,965
Matchedash and Orillia (North Simcoe)	Township of Severn	10,257
Tosorontio and Adjala (South Simcoe)	Town of Adjala-Tosorontio	9,361
Town of Wasaga Beach	Town of Wasaga Beach	8,698
Tiny (North Simcoe)	Township of Tiny	8,644
Rama and Mara (North Simcoe)	Township of Ramara	7,812
Town of Penetanguishene	Town of Penetanguishene	7,291
	Total Population of Townships/Towns, 1996:	**221,746**

The County is administered through a two-tier municipal government system. The number, size and names of the County's townships and towns have undergone considerable change in the past ten years, especially in the early 1990s when several townships were amalgamated and boundaries were changed, as outlined in the Table 2.1. In some cases, the amalgamation also involved annexation of land from neighbouring townships. This made accurate comparisons of data from 1986 and 1996 complicated. Currently there are sixteen townships and towns (Table 2.1).

It is important to note that the eight townships, above are primarily rural, while the eight towns are urban. The other towns are Midland and Penetanguishene in North Simcoe.

3.0 Natural and Built Environment

3.1 The Natural Environment of Simcoe County

The natural environment of Simcoe County is one of the most diverse areas in Ontario, in terms of its topography, geology, vegetation and animal life. The County is one of the largest in the province of Ontario, with an area of roughly 4300 square kilometres (474,242 hectares), extending from the Canadian Shield in the north, to the Oak Ridges Moraine in the south, and from Lake Simcoe in the east to Georgian Bay in the west (refer to Figure 3.1).

3.1.1 Climate

Simcoe County has a moderate climate with an average annual precipitation of 66.8 cm. (26.7 inches). South Simcoe is particularly well suited to agriculture, with a long growing season. Although cooler than the South, the climate in North Simcoe is warmer than other locations at similar latitudes because of the effect of adjacent large bodies of water, specifically Nottawasaga Bay to the west, Georgian Bay to the north, Lake Couchiching to the north and Lake Simcoe to the east. The northern areas of the County are located in the "snow-belt" and have an average of 317 cm. (127 inches) per year, which has contributed to the development of numerous ski resorts. Summers are hot, which enhances the appeal of the extensive beaches in the north and east to tourists and seasonal residents.

3.1.2. Topography

The highest topographical formations in the County are the Niagara Escarpment, which runs along a portion of the westernmost border of the County, in Clearview Township, and the Oak Ridges Moraine, which is located in the southernmost part of the County. The Niagara Escarpment is recognized as a World Biosphere Reserve and is protected by the Niagara Escarpment Plan, which is a provincial environmental plan that supersedes all land-use-planning decisions by local municipalities.

The most dominant landform in North Simcoe is the Oro or Bass Lake Moraine. With its location in an area of high annual snow fall, the Oro Moraine has served as an ideal location for the development of ski resorts, a major source of tourism/recreation dollars in the County. The other characteristic of North Simcoe is the presence of granitic bedrock (Canadian Shield) in the northeast (Severn and Ramara Townships) and an extensive limestone plain to the east of Lake Simcoe.

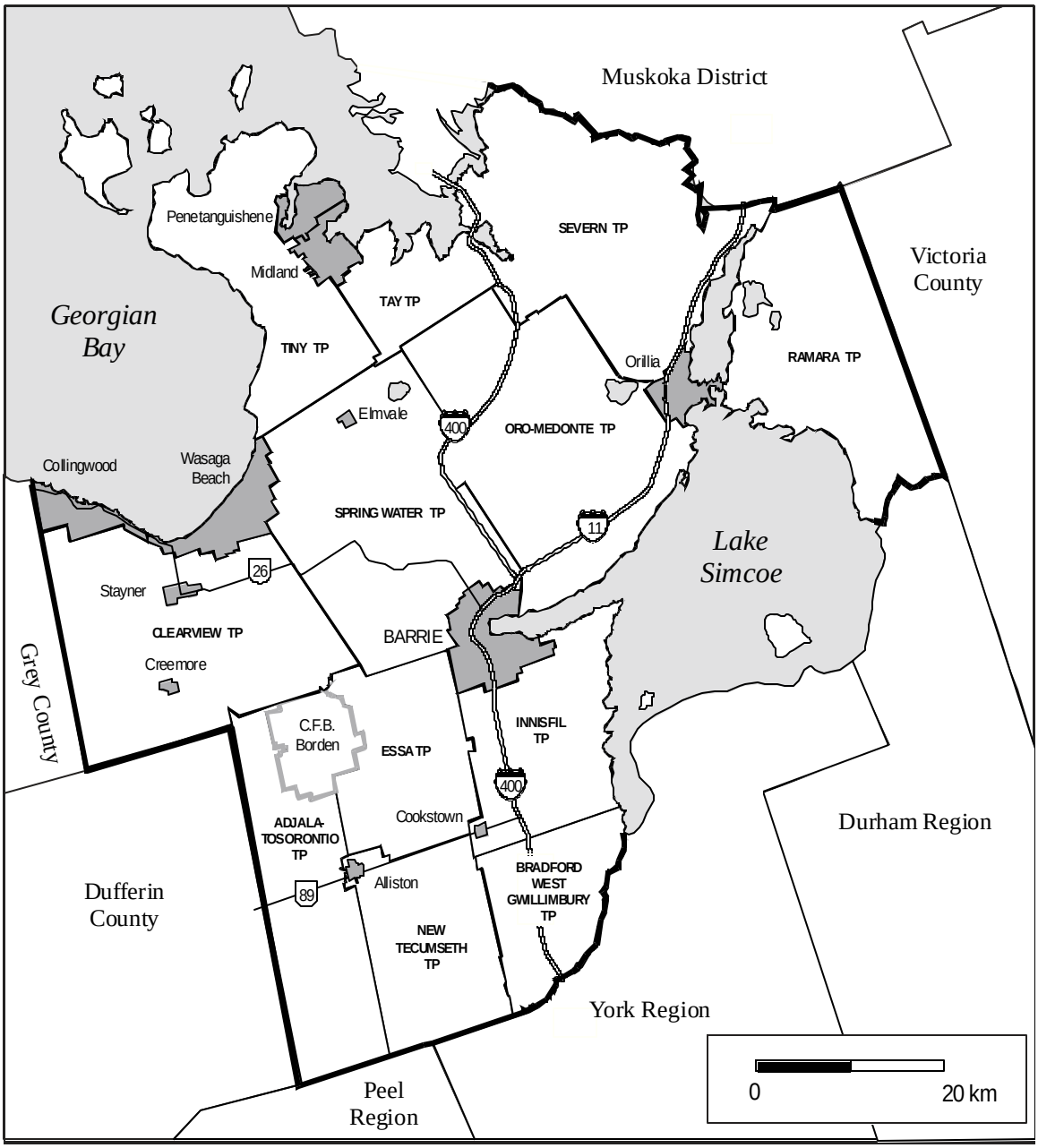
The interior of the County features extensive till, sand and clay plains, including the Innisfill Till Plain, in the southeast region, the Borden Sand Plain, in south-central

Simcoe, and the Elmvale Clay Plain, which extends from the southern border of Springwater Township in central Simcoe, north to the shores of Georgian Bay.

3.1.3 Watersheds

The three major watersheds in Simcoe County are Georgian Bay, Severn Sound and Lake Simcoe. A few river systems wind through the western part of the County, the largest one being the Nottawasaga, which runs from the Orangeville area in neighbouring Dufferin County and eventually drains into Georgian Bay. Several small lakes dot the northern half of the County.

Figure 3.2: County of Simcoe, Townships and Towns, 1996



COUNTY OF SIMCOE

Source: Prepared by Marie Puddister, Cartographer, from Simcoe County Planning Department maps.

There are 66 provincially significant wetlands throughout the County, most notably the Minesing Swamp, in Springwater and Clearview Townships. The Minesing Swamp, which is also a globally significant wetland, was created by the Nottawasaga River System (including the Mad River), which occupies a wide, flat valley underlain by extensive beds of silt and organic deposits. The Wye Marsh, near Midland in the north,

is the other major evaluated wetland in the County. The Official Plan for the County provides some protection against development into these wetlands, in accordance with provincial government policies.

3.1.4 Primary Resources

The main primary resources in the County are its high quality soils, forests and aggregate resources - sand, gravel and stone.

There are extensive areas of high potential Class 1, 2 and 3 soils throughout most of the County, except for the northern parts of Severn and Ramara Townships, where the granitic bedrock of the Canadian Shield predominates. The area around the Oro Moraine in Oro-Medonte Township is also of a lower soil class (Class 5, 6 or 7). Crop production in these areas is more limited than the rest of the County.

Features unique to Simcoe include extensive, potato-loving sandy soils in the Borden Sand Plain, located in the northern half of New Tecumseth and Adjala-Tosorontio. In addition, the soil structures in the Holland Marsh area in Bradford-West Gwillimbury are ideally suited to vegetable production. A large area of organic soil is found in central Simcoe in Springwater Township, while other significant areas of organic soil are located In Bradford West Gwillimbury and in Ramara Township. The total area in crops in 1996 was 351,910 acres, representing 65% of the land in the County.

Extensive forested areas are a mixture of Boreal Forest and Great Lakes - St. Lawrence forest, reflecting the location of the County where the Precambrian Shield meets the moraines and till plains of the south. There are an estimated 28,000 acres of managed forests in the County.

The areas of the County which show a high potential for sand and gravel extraction are located in Adjala-Tosorontio, Innisfill, Springwater, Oro-Medonte and Tiny. Sites with high potential for bedrock aggregate extraction are concentrated in North Simcoe, in the Severn and Ramara Townships. Licensed pits (for sand, gravel) are scattered throughout the County, while licensed quarries are found only in Severn and Ramara Townships, near the main bedrock area.

In recent years, the mineral aggregate areas (sands, gravel) in Simcoe have gained considerably in economic value for the County, because the aggregate resources in the GTA have been depleted to within 50 km. of the GTA. The close proximity of Simcoe to the GTA means that there is a relatively low cost of transporting the extracted aggregates to construction sites in Southern Ontario.

A conflict that often arises is the presence of rich gravel deposits under rich, high quality soil resources. The sites with the greatest development pressure are those adjacent to the Barrie/Orillia urban area and those with easy access to Metropolitan Toronto.

3.2 Built Environment

3.2.1 Transportation and Communication Infrastructure

Economic growth in Simcoe County has benefited greatly from a well-developed transportation system. The main transportation corridor in the County is Highway 400, which is a multi-lane divided highway beginning in Toronto, running through the City of Barrie and extending north into the Muskoka District. Under the County Official Plan, there are provisions to enable Highway 400 to expand to a ten-lane highway between Highway 9 (north of Toronto) and Barrie, in recognition of its importance to economic development in the County. The other multi-lane highway is #11, which connects Simcoe with Newmarket, Markham and Richmond Hill to the south in York Region, and which runs north through Orillia and continues past Lake Couchiching. Highway 11 provides quick access to the new Casino Rama development east of Orillia.

In addition, there are several king's highways (well-maintained, two lane), including #27, which connects Simcoe to the Pearson International Airport in Toronto. Highway #93, which runs northwest to the Midland/Penetanguishene area, and highway #26, which runs from highway 400 west to Wasaga Beach, both provide easy access to extensive seasonal residential/cottage and beach areas. Another main highway is #89, which connects the Town of Alliston with Highway 400, facilitating transportation between Alliston and the GTA.

There are also extensive primary and secondary arterial roads throughout the County, which provide access to farmland and, similarly, link primary producers to external markets.

With recent downloading of services from the province to the county and municipal level, the responsibility for 240 kilometres of provincial roadways has been assumed by the County. In order to ensure that the standard of maintenance remains high, the County may transfer maintenance of some County roads to the lower tier level (i.e. township/town).

Another feature of transportation in the County is its connection to the Great Lakes and Trent-Severn Waterway in the north, with port facilities at Midland, Port McNicoll and Collingwood. It also has six airports, including the new Lake Simcoe Regional Airport, which is able to accommodate commercial jets.

All transportation corridors by their presence represent a significant pressure on soil resources (e.g. the Holland Marsh) because they lead to development activities. Transportation systems also represent a significant opportunity for agriculturally related businesses, as they facilitate access to both agricultural operations and urban markets.

3.2.2. Water and Sewage Facilities

The responsibility for water and sewage facilities and services is at the township/town level. Details on the number and type of water and sewage facilities are available in a background study to the County Official Plan (*The Simcoe County Infrastructure Study*) and will not be provided in this report.

One emerging issue regarding water and sewage in the County is the increasing need for these services and facilities in the Alliston and Barrie areas to accommodate current and future development. Presently, there are plans to construct a new water main from Collingwood to New Tecumseth, which may be accessible to the Towns of Innisfill and Bradford West Gwillimbury.

3.2.3. Settlements in Simcoe County

There are numerous settlements throughout the County, ranging in size from small hamlets to towns of about 15,000 people. The most concentrated areas of settlement are in the southern half of the County, near the high-density urban expanse of the Greater Toronto Area. Other areas of concentration are found along the shores of Georgian Bay and Lake Simcoe, where one finds many clusters of cottages/seasonal dwellings.

There are two cities in the County, Barrie and Orillia, but Barrie has become one of the fastest growing urban centres in Canada and is now considerably larger than Orillia. Roughly, one third of the entire County population resides in the two cities.

Rural and farm settlements are also located throughout the County, except where the bedrock of the Canadian Shield prevails in the northern part of the County.

There is a large Canadian Forces Base, Camp Borden, located in South Simcoe, surrounded by the townships of Adjala-Tosorontio, Essa and Clearview. Although the Base is of considerable size, the area and population contained in the Base are not considered part of the County, and have not been examined in this report.

3.2.4 Housing Characteristics

There is a higher proportion of new housing being constructed in Simcoe County than in the province as a whole. An estimated 37% of the housing in Simcoe was constructed between 1981 and 1996, compared to an average of 25% for the province (Figure 3.2). This reflects the higher than average rate of population growth in Simcoe over the past 15 years, which has increased the demand for housing.

When comparing the numbers of houses built in different time periods in Simcoe County townships and urban areas, it is clear that the rate of housing development is much higher in Barrie than anywhere else in the County, including the City of Orillia. Among the Townships, the highest rate of housing construction during the 1980s was in Innisfill (just south of Barrie) but between 1991 and 1996, the highest number of houses were built in

the urban places of New Tecumseth (1,115 houses), Wasaga Beach (935), Innisfill (930) and Bradford West-Gwillimbury (765).

Wasaga Beach is a prime seasonal residential area on Nottawasaga Bay, while the three other townships are located to the north of the Greater Toronto Area and near Highway 400, which is the major autoroute in the County. The Town of New Tecumseth is the location of a major employer in the County - Honda of Canada Inc. in Alliston.

According to the Simcoe County Official Plan, approximately 41,000 new housing units are expected to be built over the next 20 years. Most of this new housing is expected to comprise mainly detached houses, with multiple housing units concentrated in the larger settlement areas.

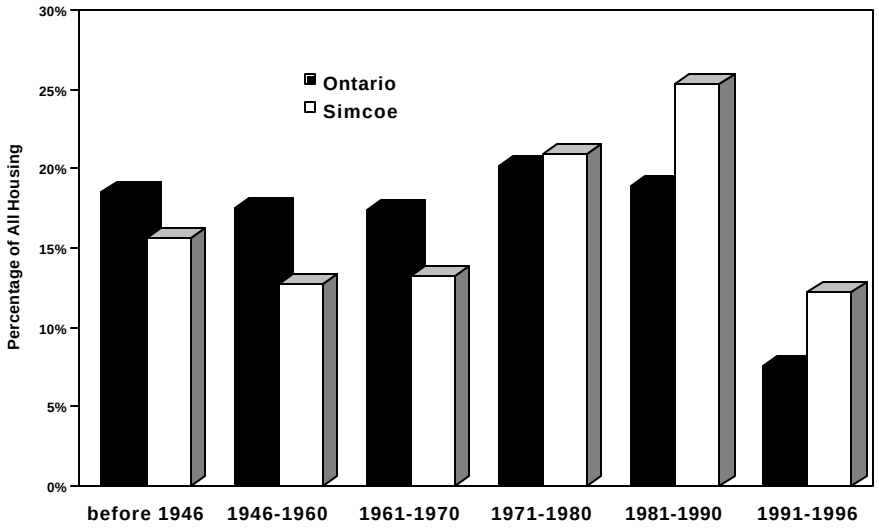
There are approximately 14,600 seasonal dwellings in the County, mostly located in the Town of Innisfill (1,555 units), Wasaga Beach (2,703 units), Tiny Township (4,377 units), Severn (1,590 units) and Ramara (1,843 units). These numbers do not include units located in multi-unit housing which may be used for seasonal residence.

3.2.5 Land Use in the County

Land-use in Simcoe is controlled by the County Official Plan, which was adopted by the Simcoe County Council in October 1997, in accordance with the Ontario Planning Act of 1990. Official plans developed by individual municipalities (Tier 2) are expected to conform to the County Plan (Tier 1).

The various land uses in the County have been identified and mapped using four land-use designations: settlement, rural/agricultural, "greenland" and "special development". Greenlands are environmentally sensitive areas or those with significant natural heritage. "Special development areas" are those which have potential for major economic growth through commercial, industrial and recreational development, especially in areas where adherence to provincial policies on development would mean socio-economic hardship to the community.

Figure 3.3: Housing Construction in Simcoe County



Source: Census of Canada, 1996

Based on the current land-use designations, there are extensive areas allocated for agriculture. Largely, these are consistent with areas having Class 1, 2 or 3 soils, which are indicators of prime agricultural land. However, it should be noted that the only two sites with the "special development" designation are also located in areas of high quality soils to the northeast of Barrie, and on the Eastern Shore of Lake Couchiching.

There are provisions in the Official Plan for the protection of prime agricultural lands, following the ***Provincial Policy Statement*** on Land Use issued under the Planning Act and enforced by the Ministry of Municipal Affairs, which states that *"Prime agricultural Lands will be protected for agriculture"* (MMA, 1997: 6). The specific policies devoted to agricultural protection are contained in section 3.6 of the Plan. The main objective of the policies is:

"to enable the agricultural industry to function effectively in prime agricultural areas by minimizing conflicting and competing uses while accommodating uses and facilities which support the agricultural industry in accordance with the Farm Practices Protection Act and its successors" (Simcoe County O.P., May, 1998)

The policies include directing Townships and Towns to identify and map areas of prime agricultural land, based on the Canada Land Inventory soil classifications or through another acceptable land evaluation process.

The only permitted uses on prime agricultural land are agriculture, agriculture related uses, secondary uses, natural heritage conservation and forestry, processing of

agricultural products and agricultural produce sales. Aggregate development is permitted only if the use is interim and the site is rehabilitated for agricultural use, but under the Provincial Policy Statement, complete agricultural restoration is not required if it is not feasible or if rehabilitation in remaining areas is maximized (MMA, 1997: 8).

New lots on agricultural land can only be created for agricultural uses, to establish a farm retirement lot, farm residence or for residential infilling. However, creating retirement or farm residence lots on agricultural land can potentially have a major negative impact on agriculture in the County, as it represents a loss of land for farming purposes.

Another mechanism that provides some protection for agricultural land is the designation and mapping of "Greenland's" or natural heritage areas in the County. This land-use designation would include wetlands, Areas of Natural or Scientific Interest (ANSI), environmentally sensitive areas, major water systems, fish habitat and areas in the vicinity of the Niagara Escarpment. Existing agricultural uses will be permitted in these areas, while any new agricultural uses will be subject to an Environmental Impact Statement.

A third provision is through policies on urban development. According to the Official Plan, any settlement development is expected to follow a Growth Management Strategy, which directs non-resource (i.e. not agriculture, forestry, aggregates or tourism) growth to existing settlements. This concentration of growth is designed both to protect the natural environment and resource-based development areas, as well as to develop more diversified communities and achieve a more efficient and economical system of providing municipal services (e.g. water, sewage).

These policies are an attempt to curb the creation of new lots for residential or other development on land that is well suited to agriculture. As such, the policies provide some security for the individuals, families and companies who manage agricultural operations in the County.

The issue of agriculture's impact on the **environment** is important. Agricultural lands are subject to surface and sub-surface run-off carrying animal and chemical fertilizers and pesticides. These are potential contaminants for streams, flora, fauna and water supplies. In addition, large intensive livestock operations have been particularly subject to scrutiny because of the smells and surface run-off from such locations.

In this regard, Simcoe County farmers have actively participated in efforts to reduce any negative impact from agriculture on the environment, including projects such as Clean Up Rural Beaches (CURB), the Severn Sound Remedial Action Plan (SSRAP), and the Nottawasaga Valley and South Lake Simcoe Conservation Authorities land owner programs. In addition, Simcoe farmers have participated in the Environmental Farm Plan Project (run jointly by OMAFRA and the Ontario Soil and Crop Improvement Association), which involves learning how to incorporate environmentally sound practices and facilities into individual farm management.

The impact of growth in the City of Barrie on surrounding areas belonging to Simcoe County is one for which there is no clear answer. According to the Simcoe County Planning Department, at its present rate of growth, Barrie has enough land area to accommodate development for at least the next ten years. In the future, it may be necessary for Barrie to annex land from the County, but this is not certain.

4.0 Simcoe County Population Profile

4.1 Population

In 1996, the population of Simcoe County was 329,865, including the Cities of Barrie and Orillia, who are administratively and municipally separate from the County. Excluding the two cities, the population of the County was 222,828. Among the townships and towns:

- The highest populations were found in the southern Towns of Innisfill (24,711), New Tecumseth (22,902) and Bradford West Gwillimbury (20,213).
- The lowest populations were found in the northern townships of Ramara (7,812) and Tiny (8,644), as well as the Town of Wasaga Beach (8,698).

Innisfill, New Tecumseth and Bradford West Gwillimbury are all situated along the highway 400/11/27 corridor between the Greater Toronto Area and Barrie, where recent development has been concentrated in the County. Figure 4.1 illustrates the distribution of population among the townships, for 1991 and 1996.

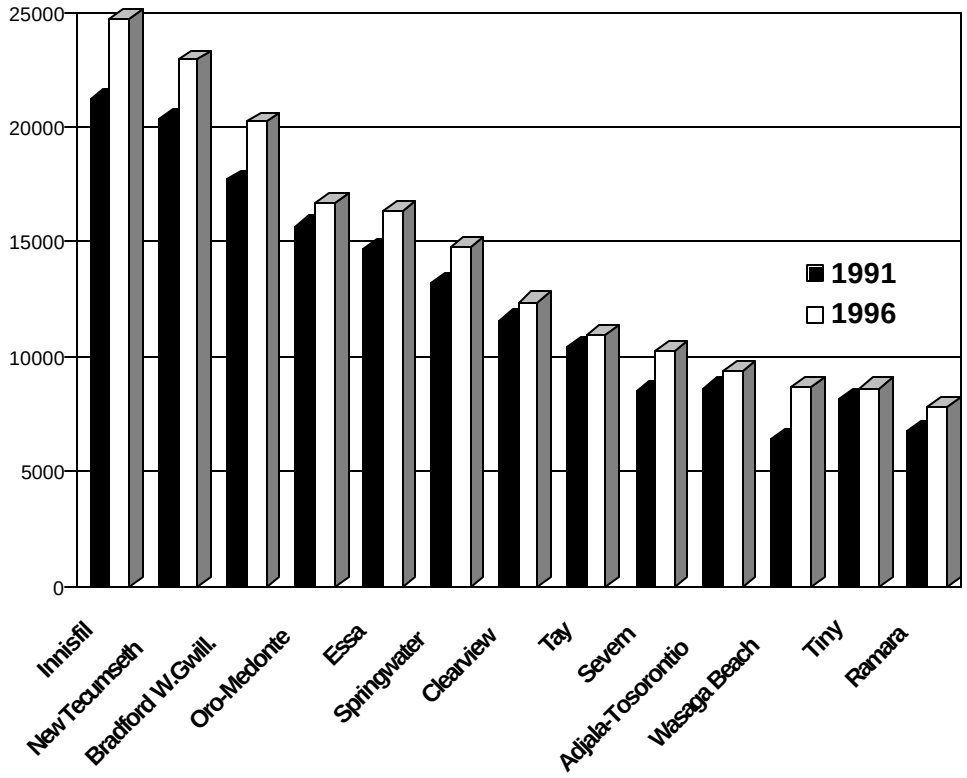
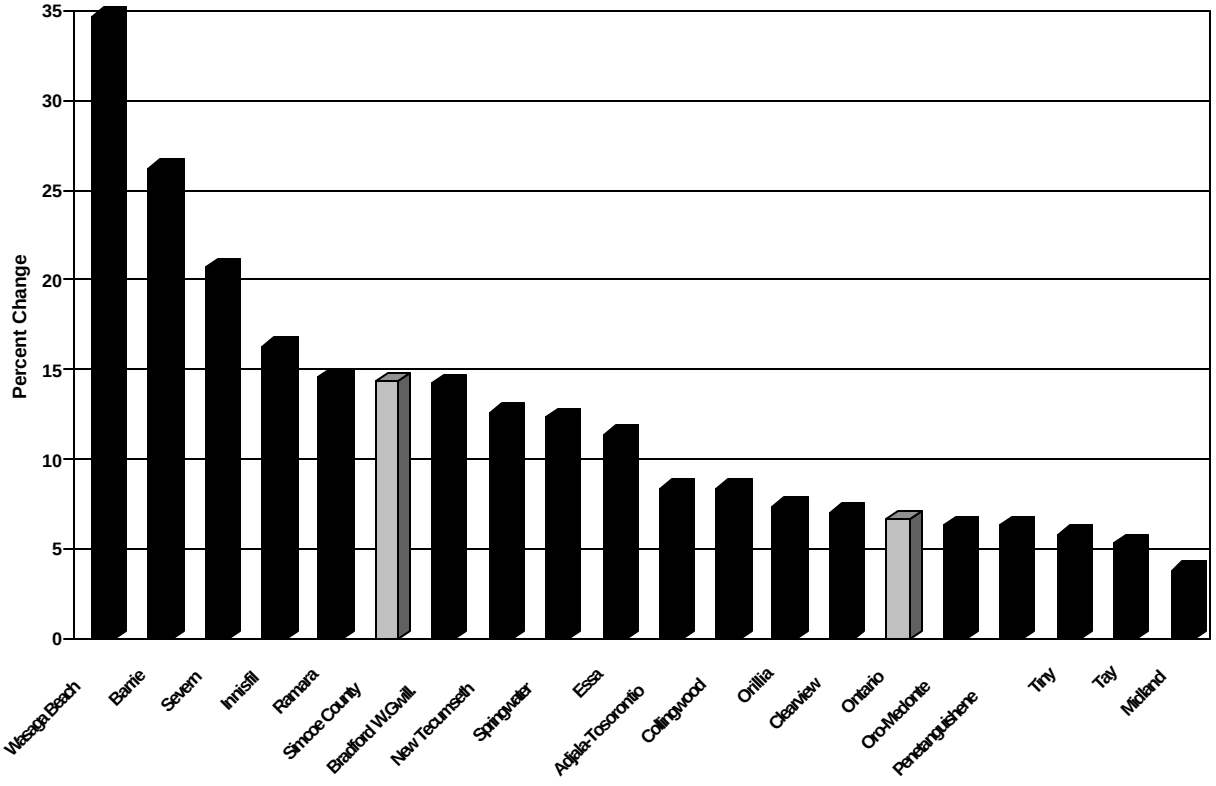


Figure 4.1: Population of Simcoe County Townships/Towns, 1991 and 1996
Source: Statistics Canada Population Census, 1996

The population of urban centres in the County shows a wide variation in size, from the highest population of 79,191 in Barrie, to only 7,291 in Penetanguishene. Orillia is the second largest urban centre in the County, but its population (27,846) is much lower than Barrie's.

4.2 Population Growth Rates

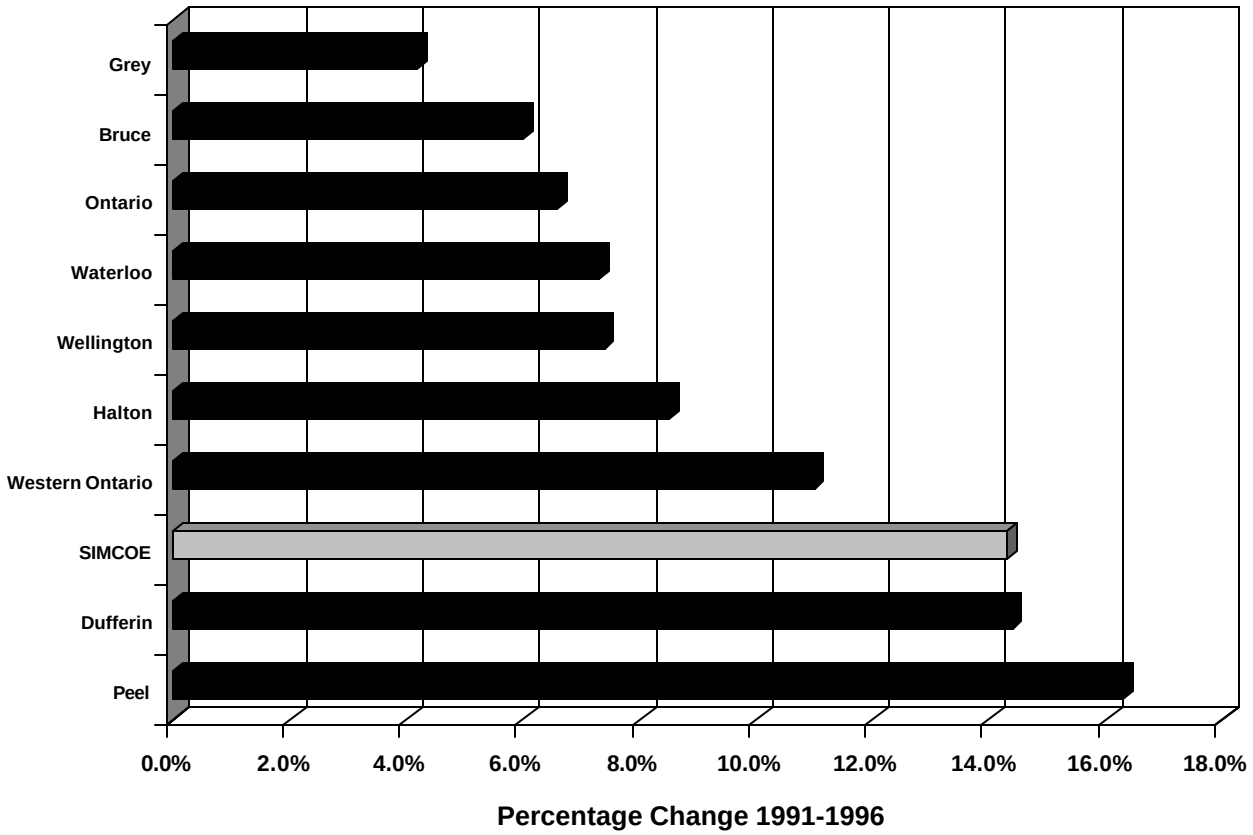
Over the period from 1991 to 1996, the population of the County (including urban centres) increased by 14.3%, which is faster than the overall population growth rate for the province, which was 6.6% (Figure 4.2). The highest increase within the County was in the population of



Wasaga Beach, which increased by 34.7%, even higher than the City of Barrie, which increased by 26.2%. The increase in Wasaga Beach could be attributed to its attractiveness as a residential/retirement community, due to its beaches and the fact that it is within commuting distance (roughly 40 km.) to the City of Barrie.

Figure 4.2: Percentage Change in Population, by Township, Simcoe County, 1991-1996
Interestingly, the next highest increase in population was in Severn Township in North Simcoe, which grew by 20.7% from 1991 to 1996. It is possible that this increase was the result of growth related to the Casino Rama development in the Orillia area on the Rama Reserve. The same explanation may be true for Ramara Township, which experienced a relatively high

increase in population at 14.5%, just below the increase of 16.3% in the southern township of Innisfill. The smallest increases were experienced in Midland, Tay and Tiny Townships, with increases of 3.8%, 5.3% and 5.8% respectively. These three townships are the most remote from the larger urban areas.



Compared to the other counties and regional municipalities in Western Ontario, Simcoe County had **third highest** rate of growth between 1991 and 1996 (Figure 4.3). Its growth was behind Peel Region (16.3%) and Dufferin County (14.4%), and ahead of Halton Region (8.5%), Wellington (7.4%), Waterloo (7.3%), Grey (4.2%), Perth (3.0%), Huron (2.0%) and Bruce (0.6%). Peel Region and Halton Region are both In the Greater Toronto Area (GTA), while Dufferin is, like Simcoe, within easy commuting distance of the GTA. The other counties are further away from the GTA, hence less influenced by the rapid growth in the area.

Figure 4.3: Percentage Change in Population for Counties in Western Ontario, 1991-1996

4.4 Rural/Urban Population

An estimated 34% of the Simcoe County population was living in rural areas in 1996, as defined by the Census. Compared with the nine other counties in Western Ontario, Simcoe is therefore

the sixth most rural county. Huron is the most rural, at 60%, followed closely by Grey (54%) and Bruce County (53%).

To get a better understanding of the trends in Western Ontario with respect to changing rural/urban mix of populations, the percentage change in size of the rural population between 1991 and 1996 was calculated for each of the ten counties/regions. The results were as follows:

- the rural population increased in only three counties: Simcoe (+6.6%), Halton (+7.4%) and Grey (+7.4%)
- all other counties/regions showed no change or decreases in the size of their rural population
- Peel Region (part of the Greater Toronto Area) had the greatest decline (-23.4%).

4.5 Population Projections

According to background research conducted for the 1998 Simcoe County Official Plan, the population of Simcoe is expected to increase to approximately 488,000, including Barrie and Orillia, by the year 2016 (refer to Table 4.1). The main growth is expected to occur in Barrie, where the population doubled between 1978 and 1998, from 35,568 to over 90,000 in 1998. Barrie's growth rate has been the highest in Canada over the past 10 years and roughly twice the provincial average. The combined population of Barrie and Orillia is expected to be 168,800 in 2016.

Table 4.4 : Population Projections for Simcoe County Townships and Urban Centres

Municipality	Population 1996	Population 2016	Growth rate 1996-2016
Bradford West Gwillimbury	20,213	34,400	70%
Wasaga Beach	8,698	14,400	66%
Innisfill	24,711	40,800	65%
Ramara	7,812	12,400	59%
Barrie and Orillia	107,037	168,800	58%
Springwater	14,793	22,600	53%
Tiny	8,644	13,100	52%
Severn	10,257	15,500	51%
Oro-Medonte	16,698	25,000	50%
Adjala-Tosorontio	9,361	13,700	46%

Municipality	Population 1996	Population 2016	Growth rate 1996-2016
Penetanguishene	7,291	10,640	46%
New Tecumseth	22,902	32,300	41%
Clearview	12,407	16,700	35%
Midland	15,035	18,985	26%
Collingwood	15,596	18,900	21%
Essa	16,363	18,400	12%
Tay	10,965	11,175	2%
COUNTY TOTAL	**221,746**	**319,000**	**44%**

Source: The County of Simcoe Official Plan, May 1998

The highest growth rates are expected in the southern towns of Bradford West Gwillimbury and Innisfill, which are affected by growth in the GTA and Barrie; and the Township of Ramara, which is the site of a special development area, including Casino Rama, which is the largest employer in the County.
In the areas where high growth is expected, there will be pressure to expand settlements into the surrounding agricultural areas. Although there are policies in the County Official Plan that restrict the creation of new lots on agricultural land, they may not be enough to prevent further lot creation or the annexation of agricultural land by the larger urban centres, especially Barrie. Currently, demand for land is high in the County, and in 1997 alone there were 441 applications for consent to sever, which usually means applicants are trying to create new lots for residential or other purposes (County of Simcoe, 1998). This was an increase from 1996, when there were 355 applications. It would appear that there will be a further increase in 1998, since between January and June there were already 264 applications.

4.5 Age and Sex Distribution

As illustrated in Figure 4.4 and Figure 4.5, the age distribution in Simcoe County shows a somewhat different pattern than that for the province as a whole:

- In Simcoe, there is a higher proportion of males and females 0 to 14 and 30 to 44 years old, than in the province
- In Simcoe, there is a lower proportion of males and females 15 to 29 years old, than in the province

This phenomenon may indicate that there is a higher than average birth rate in the County associated with the high rate of influx from other counties and provinces because of employment opportunities for adults in their 30s and 40s. The age distribution in Simcoe also reflects a growing number of young families, which is a characteristic of a stable economy.

Figure 4.5 : Age Distribution of Males in Simcoe County, 1996

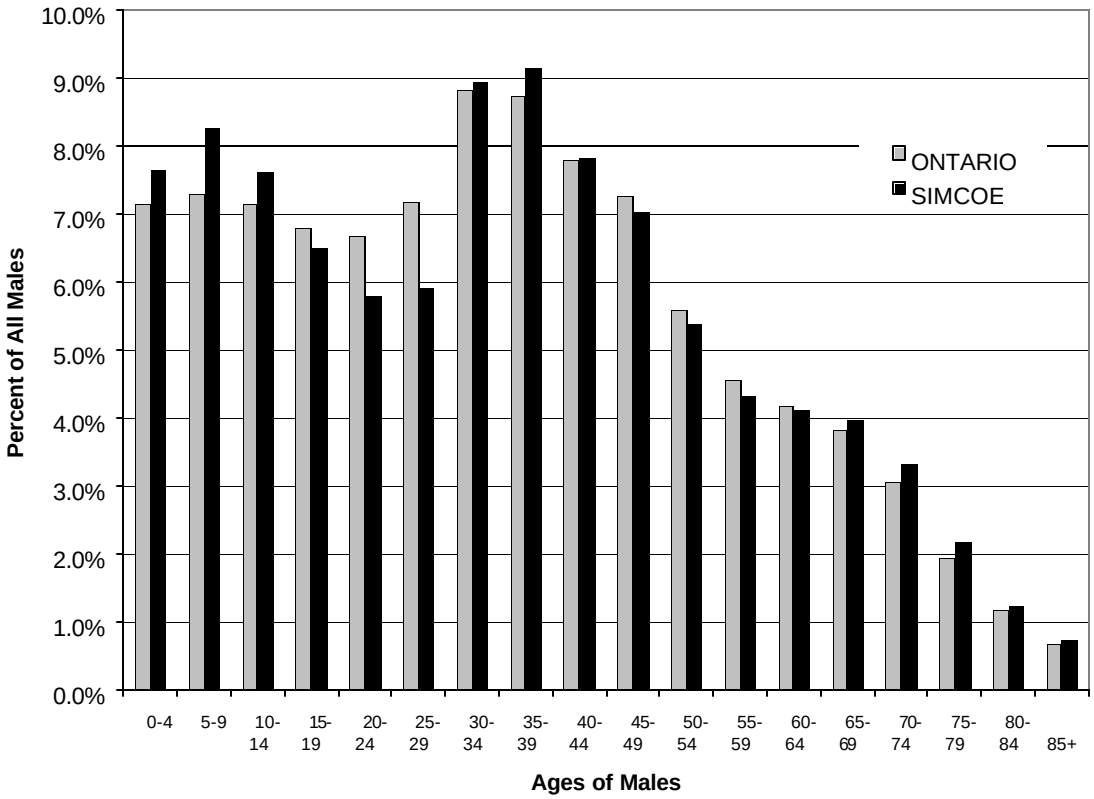
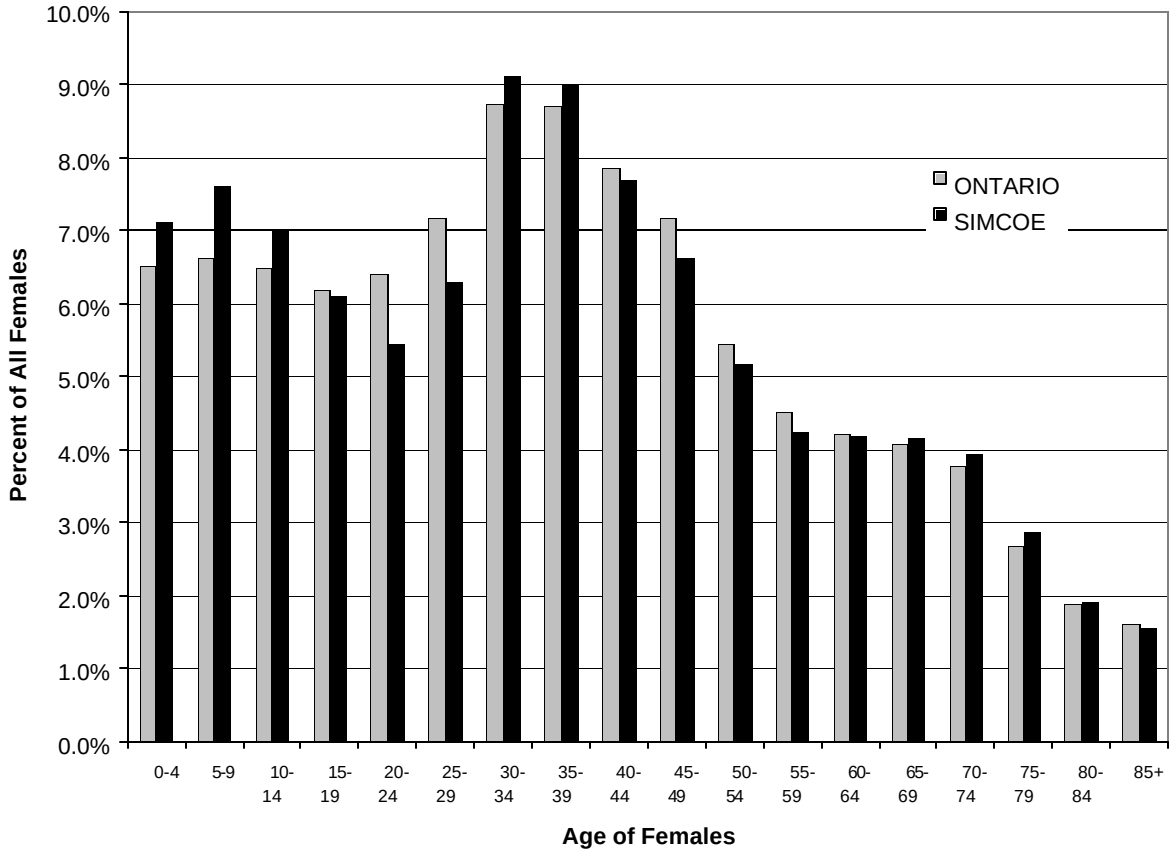


Figure 4.6: Age Distribution of Females in Simcoe County, 1996



When compared with Ontario as a whole, the lower than average proportion of 15 to 29 year olds in Simcoe may indicate that males and females in this age range have left the County to pursue post-secondary or employment opportunities elsewhere.

The other interesting feature of the age distribution in Simcoe is that there is a slightly higher proportion of men and women in the 65 and over age cohorts, which is characteristic of an area with a high number of retirees who have migrated to the area. This would be expected in Simcoe, given the attraction of retirement residence in the communities near the shores of Lake Simcoe and Georgian Bay.

4.6 Ethnic Origin

There are relatively fewer immigrants living in Simcoe (including Barrie and Orillia) than in the province. An estimated 11% of the population of Simcoe are immigrants, compared with 26% for Ontario. Similarly, the country of origin of immigrants to Simcoe is different from the province. For Simcoe, over 35% of immigrants came from the United Kingdom, while next nine largest groups originated in Germany, Netherlands, Italy, Portugal, Poland, Hungary, Yugoslavia, with over 1% from the Philippines.

In contrast, the pattern of immigration for Ontario in 1996 shows that, while the largest percentage (14%) came from the United Kingdom, the other nine most frequent countries of origin are European, American, Asian and Caribbean countries, namely Italy, Portugal, India, Hong Kong, China, Jamaica, United States and the Philippines. This difference reflects the rural characteristics of the County compared to the large urban centres in Ontario, where a higher percentage of the population are non-European immigrants.

5.0 Labour, Employment and Education in Simcoe County

This section of the report will provide a profile of the labour force in Simcoe County, in terms of participation rates, unemployment, part or full-time employment, levels of education, income and occupations.

5.1. Participation Rates and Employment-to-Population Ratios

The overall **labour force participation rates**[1] for males and females in Simcoe County are very similar to the average participation rates for the province. For all ages of men in Simcoe, the participation rate is 73.8%, slightly higher than the provincial average of 73%, while for women, the participation rates for Simcoe and Ontario are both 60% (Figure 5.1). In terms of **employment-to-population ratios**[2], the pattern is similar. The ratio for men in Simcoe is 67.8%, slightly higher than the provincial average of 66.6%, while the employment-population ratio for women in Simcoe, at 54.2%, is identical to the average for the province.

In comparing the situation for men and women, clearly the participation rates and employment-population ratios are higher for men than for women in both Simcoe and in the province as a whole, which reflects the relatively higher numbers of women who are not participating in the labour force because of domestic responsibilities.

When we look at the rates for **different age and gender groups**, we find some interesting differences:

- males 15 to 24 years have **lower** participation rates than males 25 years and over
- females 15 to 24 have **higher** participation rates than women 25 years and over
- males 15 to 24 have **slightly higher** participation rates than females 15 to 24 (67.9% for men, 65.2% for women)
- males 25 years and over have **much higher** participation rates than women 25 and over (74.9% for men and 59.2% for women)

For males, the higher participation rates in the older age group reflects the higher availability of men 25 and over for work (i.e. less likely to be in school). For females, the relatively low participation rates in the higher age groups reflects the limitations on women's participation in the labour force when they have children at home (which is less likely to be the case when women are 15 to 24 years old than in the 25 and over years).

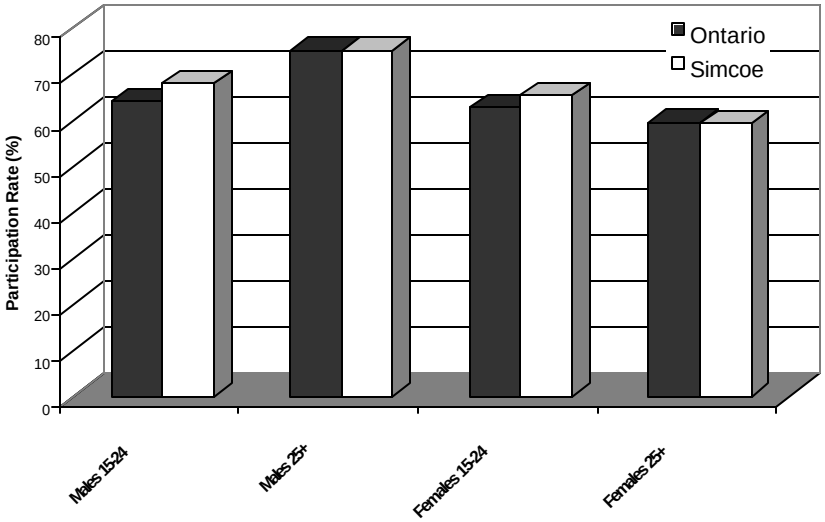
When compared to the province as a whole, we find the following:

- participation rates in Simcoe for men and women 25 and over are virtually **equal** to the rates for the province

[1] The *Labour Force Participation Rate* is the percentage of the total population in a particular age group who are employed or looking for work

[2] The *Employment to Population Ratio* is the percentage of the total population in a particular age group who are actually employed

- for men and women 15 to 24 year cohort, there are **higher** participation rates in



Simcoe than the province

The same observations apply to the employment-to-population ratios. This indicates that a relatively higher number of young people in Simcoe are employed or looking for work, than their counterparts in the rest of the province.

Figure 5.1: Labour Force Participation Rates by Gender and Age, Simcoe County, 1996

When we look at the situation in the different townships and towns in Simcoe, we find that, the highest labour force participation rates in Simcoe are in the southern towns of Bradford West Gwillimbury, Adjala-Tosorontio and New Tecumseth, the southern Township of Essa and the Township of Springwater, which is adjacent to Barrie. Relatively low participation rates are found in the northernmost Townships. A similar north-south pattern is found for employment-to-population ratios in the County, with highest rates in the southern towns and lowest in northern townships and towns (refer to Table 5.1).

Table 5.2: Participation Rates and Employment to Population Ratios, Simcoe County, 1996

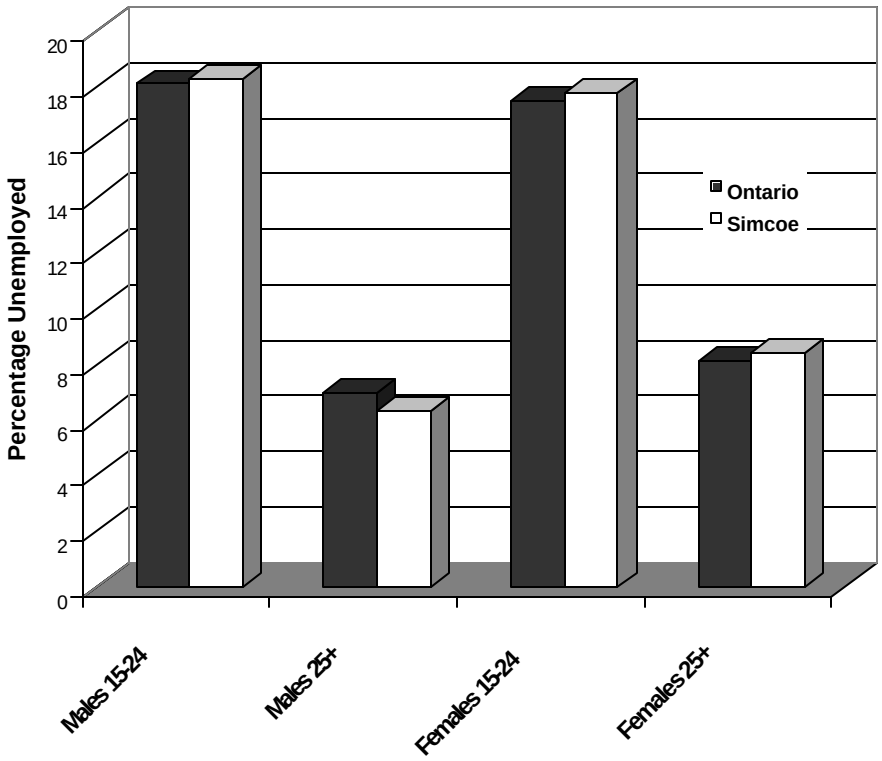
Town/Township (descending order)	Labour Force Participation Rate, 1996	Town/Township (descending order)	Employment-to-population Ratio, 1996
Bradford W.Gwill.	76.3%	Bradford W.Gwill.	71.8%
Essa	74.9%	Adjala-Tosorontio	69.4%
Adjala-Tosorontio	74.2%	Essa	69.0%
Springwater	71.8%	Springwater	66.0%
New Tecumseth	69.7%	New Tecumseth	65.4%

Town/Township (descending order)	Labour Force Participation Rate, 1996	Town/Township (descending order)	Employment-to-population Ratio, 1996
Rama First Nation	69.7%	Oro-Medonte	61.8%
Clearview	67.1%	Innisfil	61.6%
Oro-Medonte	66.9%	Clearview	61.3%
Ontario	66.3%	Ontario	60.2%
Innisfill	65.8%	Rama First Nation	57.9%
Penetanguishene	63.1%	Penetanguishene	56.6%
Severn	62.6%	Tay	56.1%
Tay	62.2%	Severn	56.0%
Collingwood	61.4%	Collingwood	55.0%
Midland	60.3%	Midland	53.1%
Tiny	58.1%	Tiny	52.6%
Ramara	55.8%	Ramara	49.5%
Wasaga Beach	53.1%	Wasaga Beach	45.9%

5.2 Unemployment

As illustrated in Figure 5.2, the levels of unemployment in Simcoe are consistent with the pattern observed in the province as a whole, with high rates of unemployment for both males and females in the younger, 15 to 24 year age group, with a rate of 17.8% for females and 18.3% for males. This reflects the prevailing situation for youth in the province, with a lack of employment opportunities. The lowest rate of unemployment in the County and in the province is for men 25 years and over. In Simcoe, the unemployment rate for men is lower than the provincial rate, with 6.3% unemployed in Simcoe and 7% unemployed in the province. The unemployment rate for women 25 and over is almost the same for Simcoe and the province, both rates being just over 8%.

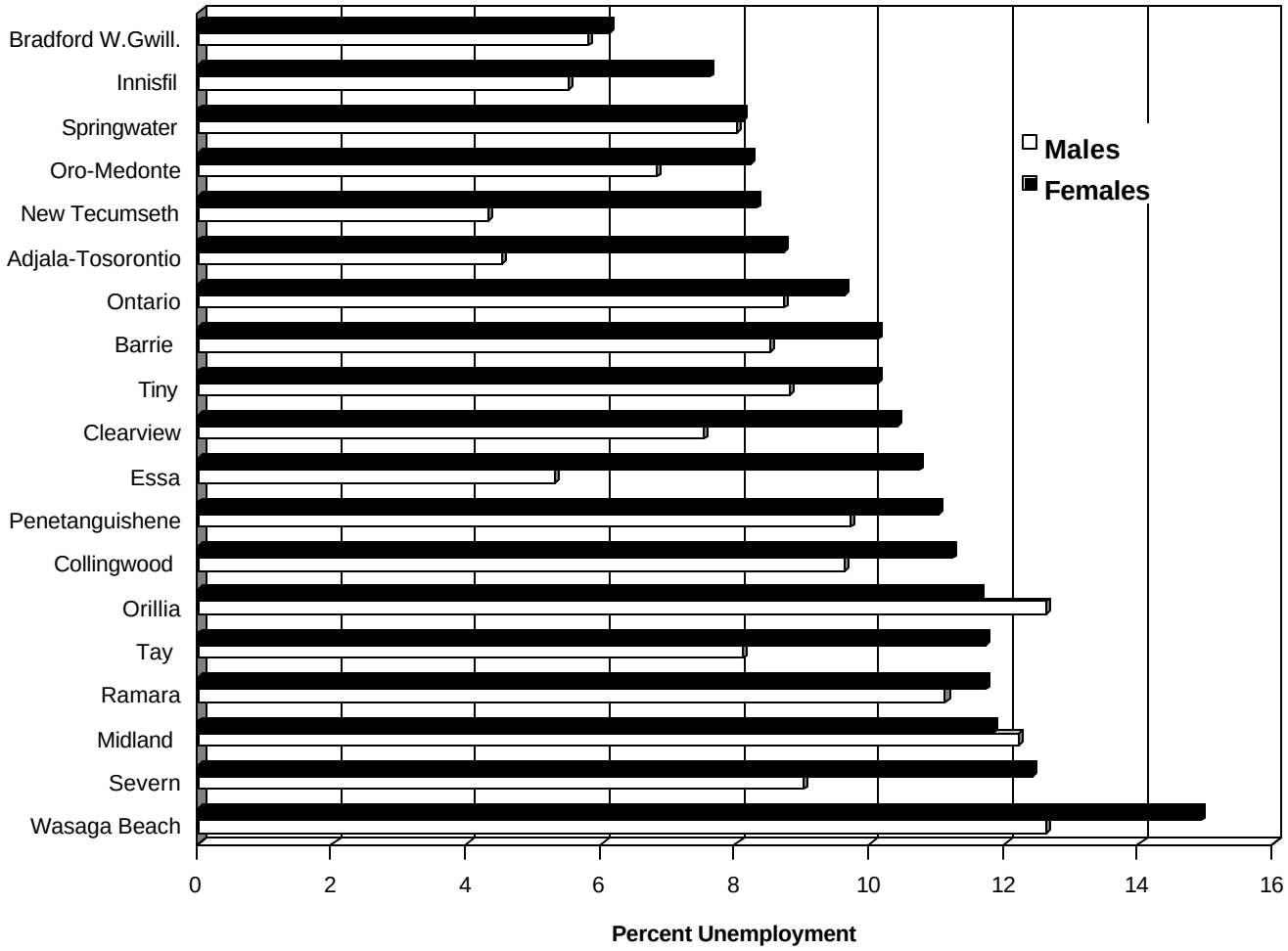
Figure 5.2: Unemployment Rates in Simcoe County, 1996



When we look at the unemployment rates for the different towns and townships in Simcoe, we see a pattern similar to the pattern for labour force participation rates. The unemployment rates in southern Towns (Bradford W. Gwillimbury, New Tecumseth, etc.) are lower than those in the northern Townships and Towns. For example, the rate for Bradford West Gwillimbury is 5.9%, while the rate for Ramara is almost double at 11.4%. The unemployment rates in the south tend to be lower than the provincial average, while in the northern townships unemployment tends to be higher than average.

When unemployment rates for men and women are compared, we find some interesting differences among the townships and towns (Figure 5.3). While the rates for men and women are almost equal in Bradford West Gwillimbury, Springwater, Ramara and Midland, for most other townships or towns the unemployment rates for men are significantly **lower** than those for women. For example, the lowest rate of unemployment for men is in New Tecumseth (4.3%), but the rate for women is almost twice as high at 8.3%. The same phenomenon is observed for Adjala-Tosorontio and Essa. Only in Orillia do men have a significantly higher unemployment rate than women. Further research is necessary to understand why the unemployment levels are as they are.

Figure 5.3: Unemployment Rates for Men and Women in Simcoe County, 1996, by Township/Town



5.3 Migration Rates

5.3.1. In-Migration

As estimated 27% of the Simcoe County labour force had moved to Simcoe within the past five years, as of the 1996 Census. Excluding Barrie, the rate of in-migration was 26%, which is higher than that for the province as a whole (20%), and is reflective of Simcoe's relatively high rate of growth and job opportunities.

As presented in Table 5.2, there was a higher percentage of the labour force in Simcoe that had moved to Simcoe from within Ontario (24%) than was the case for the province as a whole. The rate of in-migration from other provinces is the same in Simcoe as the province (2%), while there was a relatively smaller proportion of the labour force that came from another country to Simcoe (1%), than for the province as a whole (5%).

Table 5.3: In-Migration to Simcoe County Between 1991 and 1995

5 Year Mobility Status	Ontario	Simcoe County
1. Number of Migrants from other counties in Ontario	1,367,085	71,905
% of Labour Force	**14%**	**24%**
2. Number of Migrants from other provinces	194,020	6,260
% of Labour Force	**2%**	**2%**
3. Number of Migrants from other countries	455,615	2,645
% of Labour Force	**5%**	**1%**

Among the townships and towns in Simcoe, the highest rate of in-migration was recorded in the Town of Wasaga Beach, where 41% of the labour force had moved from another part of the province in the past five years. This reflects the Town's attractiveness as a place to live. In-migration from other parts of Ontario to the southern towns ranged from 28% for Innisfill and Essa to 24% for New Tecumseth. For northern townships and towns, in-migration rates were lower, ranging from a high of 24% in Ramara to a low of 18% in Tiny. The high rate in Ramara may be due to the business development connected to Casino Rama.

5.3.2 Simcoe County Labour Force Working Outside the County

As indicated in Table 5.3, an estimated 40,735 men and women living in Simcoe had their usual place of work outside the County in 1996. This represents 22% of the female labour force and 32% of the male labour force, which is higher than the rates for Ontario as a whole (27% for men, 19% for women). The highest percentages of the labour force working outside the County were in the southern towns of Bradford West Gwillimbury, Adjala-Tosorontio, and New Tecumseth, where over 50% of both the male and female labour forces commuted to work outside the County. In Bradford West Gwillimbury, almost 80% of the male labour and 70% of the female labour force commuted to work outside the County, which reflects BWG's close proximity to the Greater Toronto Area and easy access along highway 400.

The percentages of men and women working outside the County drop considerably for the northern townships, although in Ramara, 31% of the male labour force works outside the County, which may be due to Ramara's location adjacent to Durham Region, which is part of the Greater Toronto Area.

5.4 Income

Analysis of income data in the 1996 Population Census showed considerable variations in the pattern of income distribution by gender for Simcoe County, with small differences between the County and the province for both genders.

Table 5.4: Percentage of Male and Female Labour Force Working Outside Simcoe County, 1996, by Township

Township of Residence	% of Male Labour Force working outside Simcoe	% of Female Labour Force working outside Simcoe
Bradford W.Gwill.	79%	70%
New Tecumseth	63%	51%
Adjala-Tosorontio	62%	51%
Innisfil	61%	44%
Wasaga Beach	36%	18%
Simcoe County	32%	22%
Ramara	31%	15%
Barrie	29%	15%
Essa	28%	16%
Ontario	27%	19%
Collingwood	21%	16%
Clearview	20%	11%
Springwater	18%	7%
Severn	17%	10%
Oro-Medonte	16%	9%
Orillia	11%	4%
Tiny	10%	9%
Tay	10%	5%
Midland	6%	3%
Rama First Nation	5%	0%

Township of Residence	% of Male Labour Force working outside Simcoe	% of Female Labour Force working outside Simcoe
Penetanguishene	4%	4%

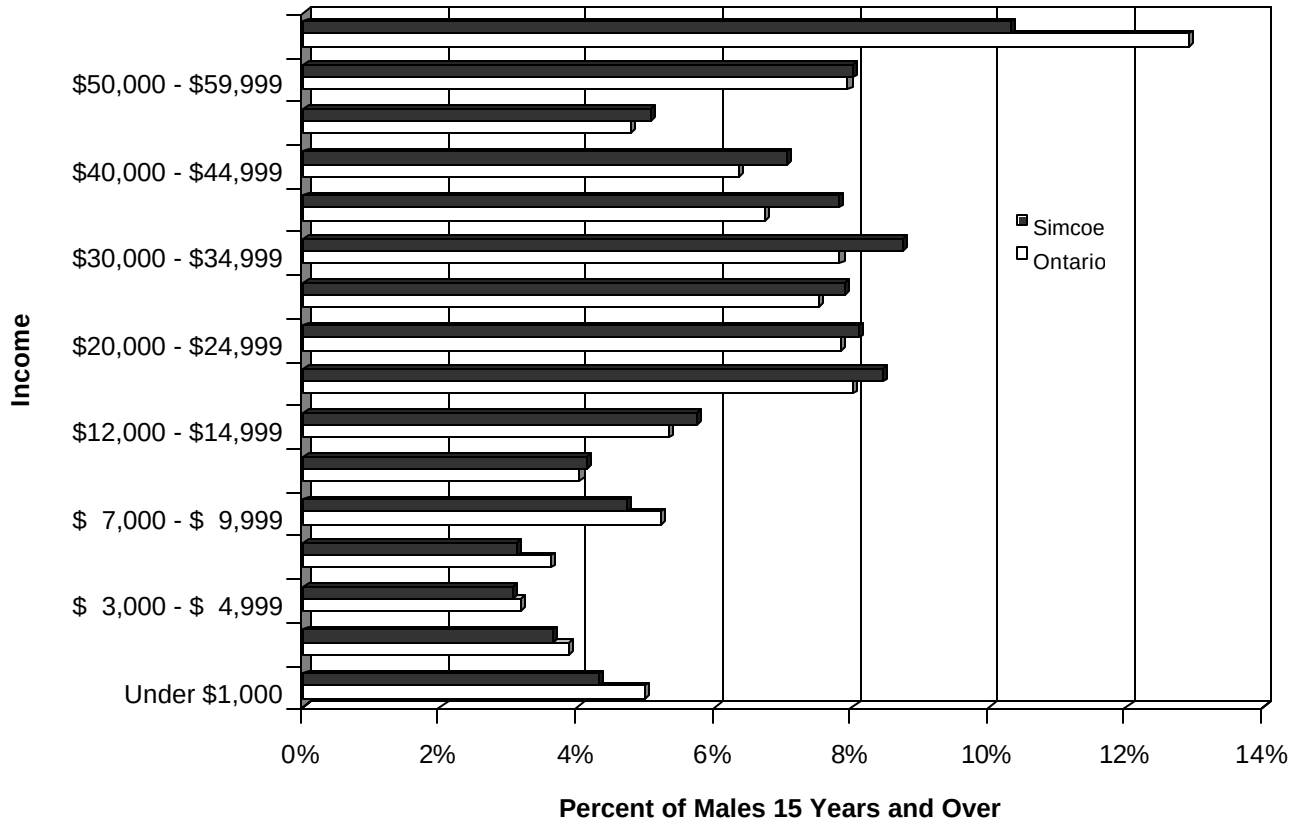
As illustrated in Figures 5.4 to 5.9, the largest proportion (10.4%) of the male population 15 years and over in Simcoe and Ontario is in the highest income level of $60,000 per year and over. In contrast, the largest proportion (11.9%) of the female population 15 years and over for Simcoe and Ontario is in the relatively low-income level of $15,000 to $19,999 per year. Only 2.5% of women were earning $60,000 per year or over in 1996 in Simcoe County. This is certainly not earth shattering, as it is historically common for women to be earning less than men, particularly during childbearing years.

In comparison to Ontario, the levels of income for women are lower than average in Simcoe. The average income for women in Simcoe is $19,211, while the average income for women in the province is $21,048. There is a smaller proportion of women with higher incomes ($35,000 and over) for Simcoe than Ontario and, correspondingly, higher proportions of women with lower incomes ($34,999 and under).

The pattern for men is slightly different from that of women in Simcoe. The average income for males in Simcoe is $31,653, which is 65% higher than that for females, but lower than the $33,599 average for the province. Compared to the province, relatively fewer men in Simcoe have the highest level of income, but there are also relatively fewer men in Simcoe who have incomes in the four lowest levels. Meanwhile, for incomes between $10,000 and $59,999, there are slightly higher percentages of men in Simcoe than in Ontario.

Within the County of Simcoe, average incomes for both men and women tend to be higher in the southern towns and the townships adjacent to Barrie than in the northern townships. There is a wide variation in income for men among the different townships, towns and reserves, but a relatively uniform distribution of income levels for women. As illustrated in Figure 5.4, average incomes for men range from a high of $40,384 in Adjala-Tosorontio to a low of $26,412 in Wasaga Beach and under $17,000 in the two First Nation communities. In contrast, for women in Simcoe (Figure 5.5) the range of incomes is much smaller, from $21,264 in Bradford West Gwillimbury to $16,919 in Clearview. The lowest average incomes for women are found on the Rama and Christian Island reserves, at $15,911 and $12,382, respectively (refer to Figures 5.6 and 5.7).

Figure 5.4: Incomes for Males in Simcoe County and Ontario, 1996



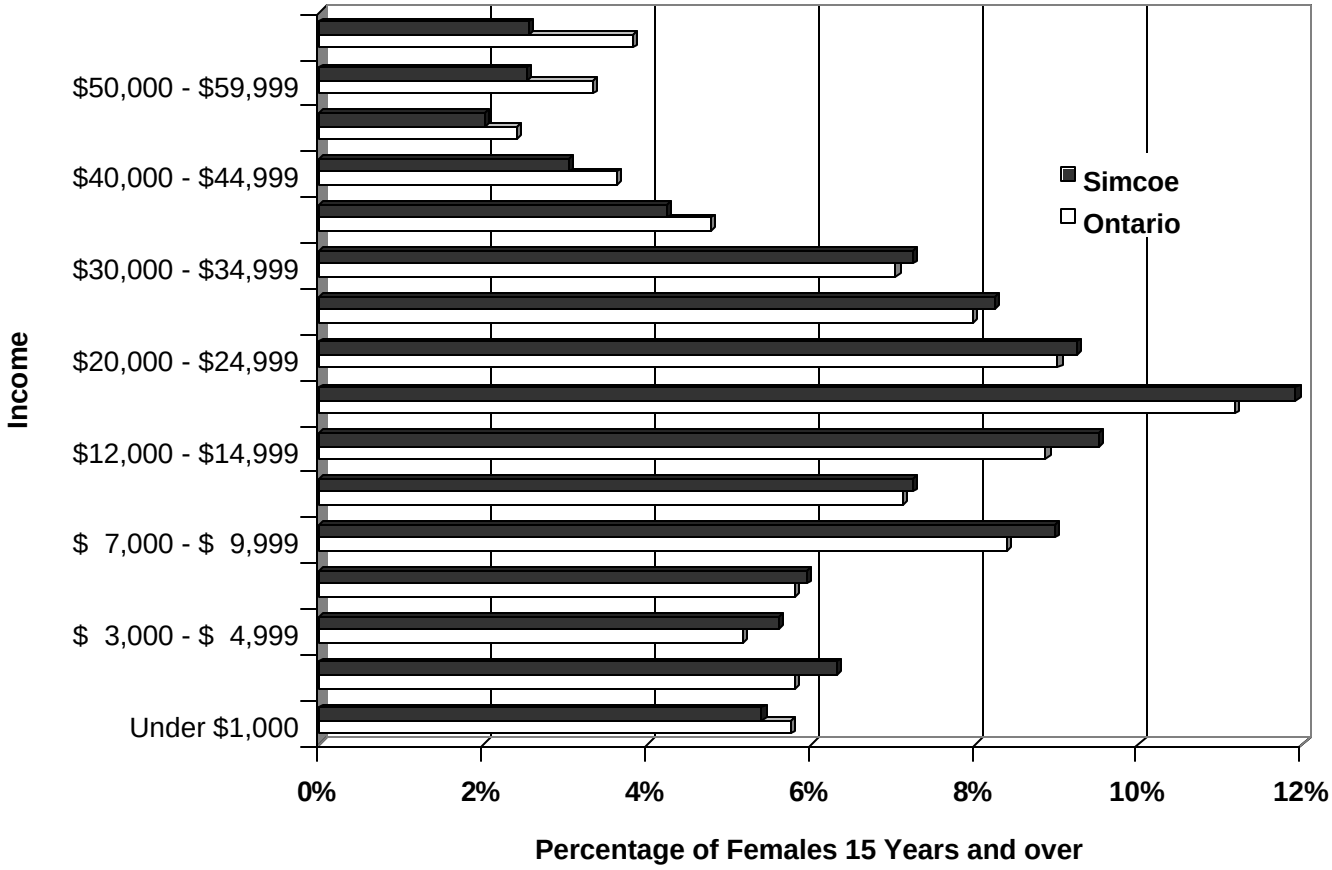


Figure 5.5: Incomes for Females, Simcoe County and Ontario, 1996

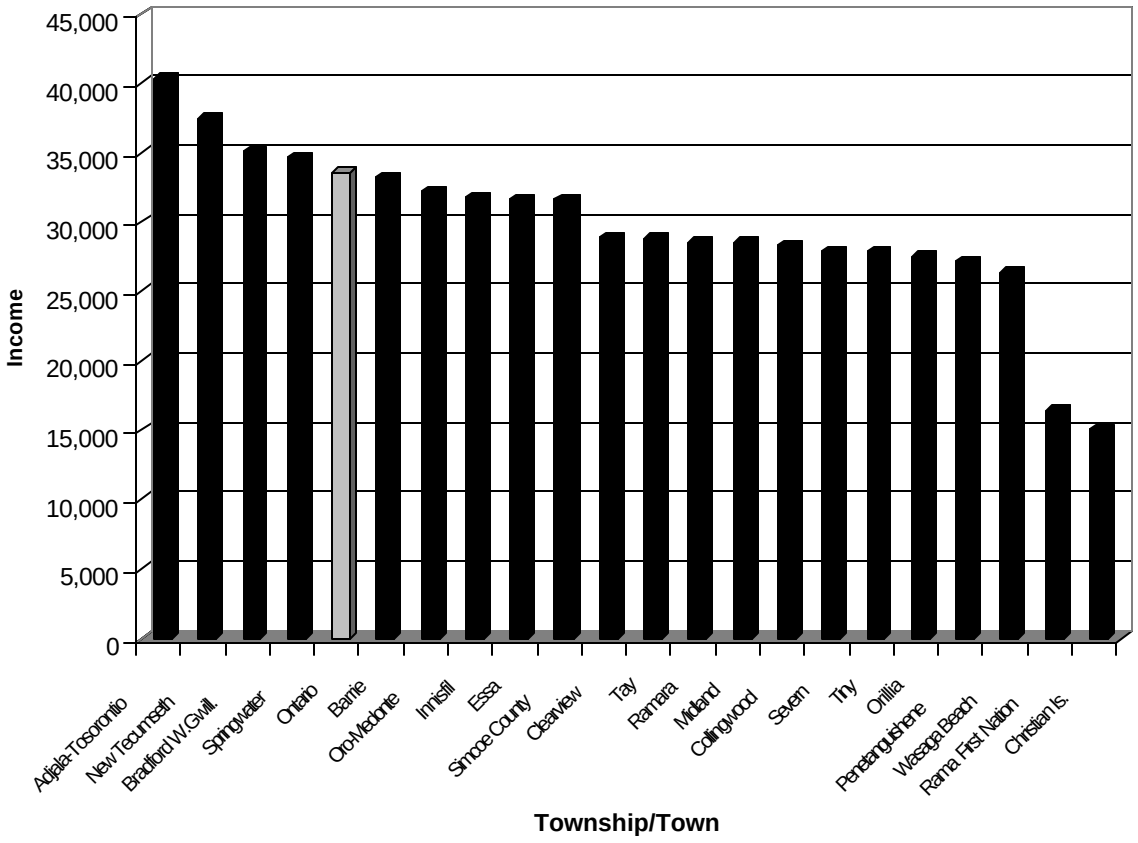
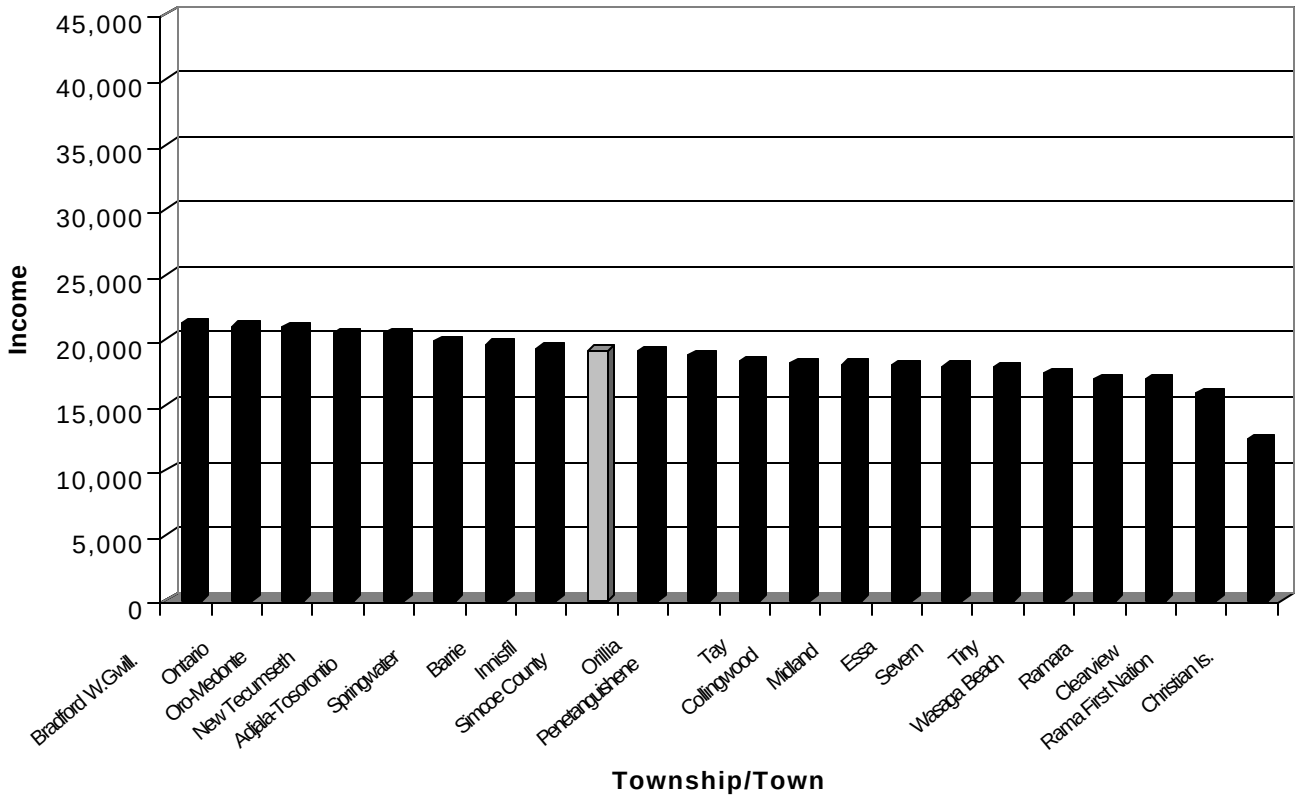


Figure 5.6: Average Incomes for Males, Townships/Towns in Simcoe County, 1996

Figure 5.7: Average Incomes for Females, Townships/Towns in Simcoe County, 1996



5.5 Major Fields of Study for Women and Men in Simcoe County

In 1996, the three most common fields of study for Simcoe County women with post-secondary education were:

- commerce/business (28% of women)

- health (22%) and
- education/recreation (16%) (Figure 5.8)

The next most common fields of study were social sciences (11% of women), fine and applied arts (8%), technology/trades (5%), humanities (5%) and agricultural/biological science (4%). The least common field of study for women in Simcoe was engineering - technology and trades (Figure 5.8). When compared with the province as a whole, the situation for women in Simcoe shows some differences, especially in the field of health, for which there is a higher proportion of women in Simcoe than Ontario. The opposite is true for humanities and math/science, where there are relatively fewer women in Simcoe than for the province.

For **men** with post-secondary education in Simcoe, the pattern is quite different from that of their female counterparts:

- engineering - technology and trades **(over 45% of males)**
- commerce/business (17%)
- social sciences (9%)

All other fields of study had similar percentages, ranging from three to six percent of men with post-secondary education. An estimated 4% of men had agricultural or biological science as their major field of study (Figure 5.9).

The predominance of engineering-technology and trades as a field of study for men, reflects the high level of activity in the manufacturing sector in Simcoe and the Greater Toronto Area.

Compared to the province as a whole, there is a larger proportion of men in Simcoe with engineering - technology/trades as their field of study. Similarly, there are relatively more men in Simcoe than the province whose major field of study is agricultural/biological science or education/recreation.

Compared to other fields of study, the proportion of men and women in agricultural/biological science would appear to be relatively small. However, this only indicates that there are relatively few men and women who have studied in areas directly related to on-farm goods producing agricultural work, while there are other areas of study that are relevant to agriculturally related employment. Moreover, recent studies in Huron County and Eastern Ontario have shown that most employment opportunities related to agriculture are actually in non-farm agricultural occupations, such as financial advisors to agricultural operators or drainage tile workers.

Figure 5.8: Major Fields of Study for Women in Simcoe County and Ontario, 1996

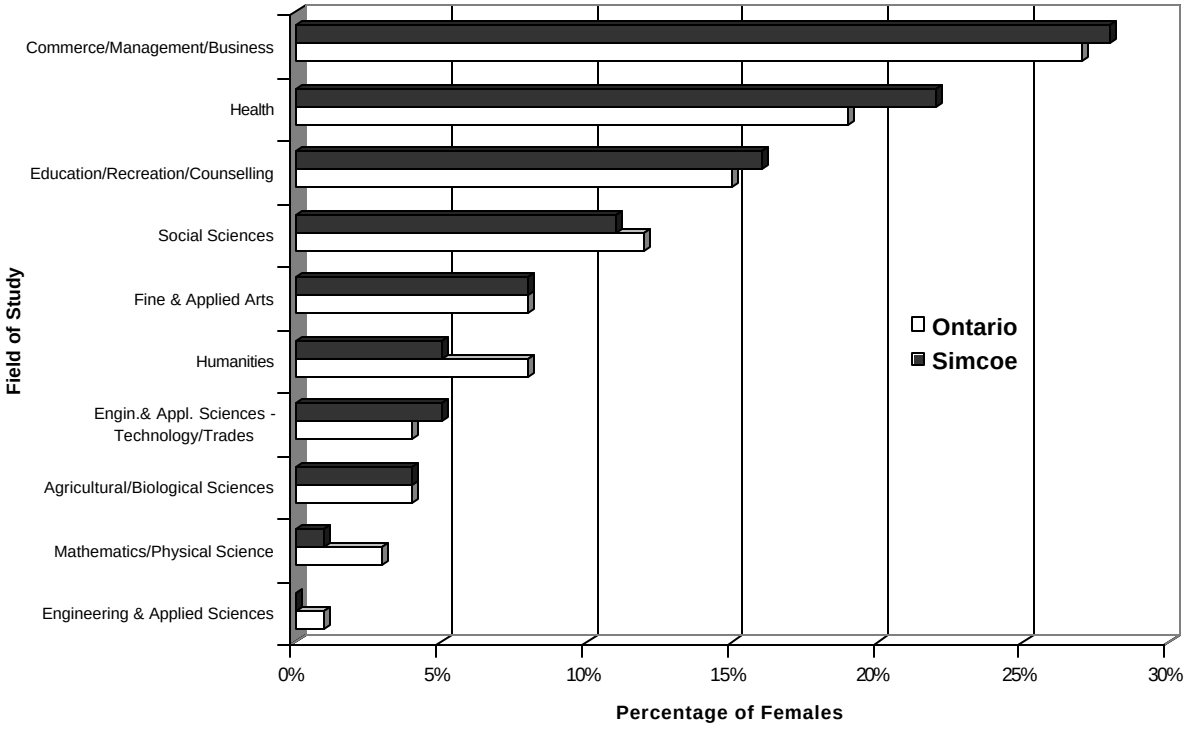
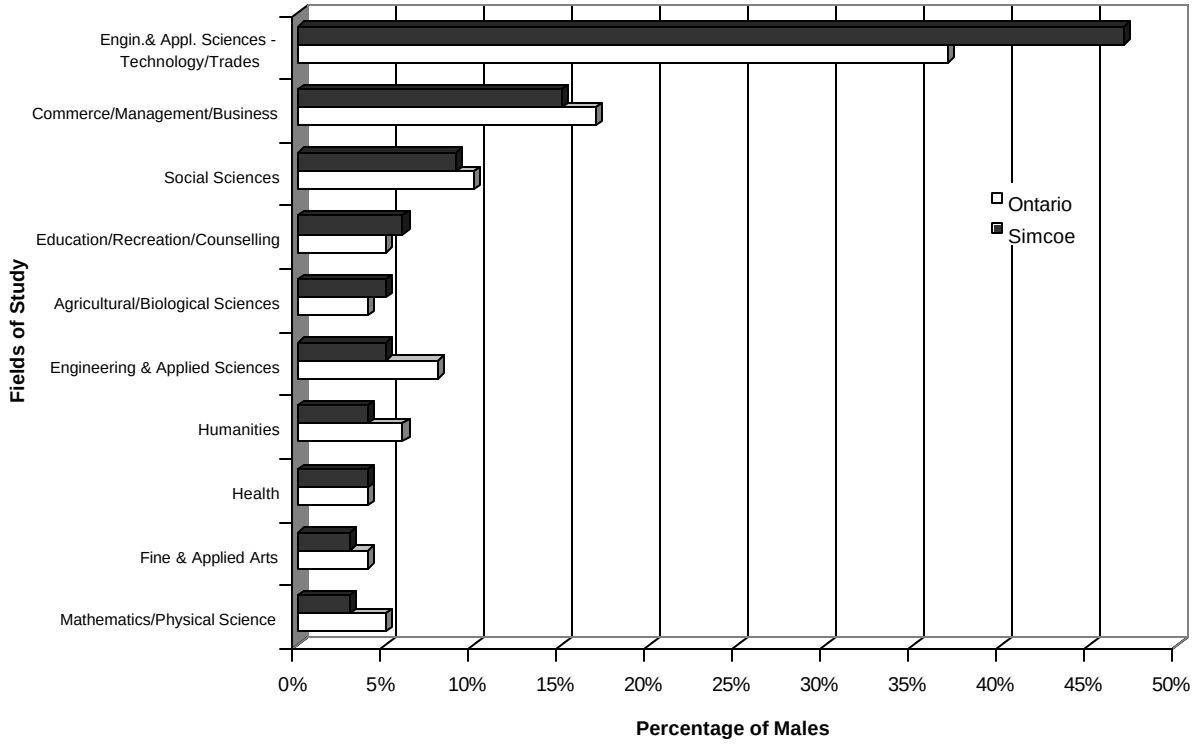


Figure 5.9: Major Fields of Study for Men in Simcoe County, 1996



5.5.1 Changes in Major Field of Study 1986-1996

Between 1986 and 1996, there were only minor changes in fields of study for both men and women in Simcoe County. For women, the only significant changes are for social sciences and engineering - technology/trades, both of which experienced an upward trend in the proportion of women that reported them as their major field of study. At the same time, downward trends are observed for agricultural/biological sciences and for commerce/business, which means that fewer women in 1996 are pursuing these fields of study than in 1986.

For men, there are only minor changes between 1986 and 1996. Slight upward trends are evident in the fields of social science, engineering and applied sciences and education/recreation, while slight downward trends are observed for engineering - technology/trades, health and agricultural/biological sciences.

The downward trend for agricultural sciences as a field of study follows the overall trend reported by Human Resources Development Canada in its *Job Futures* analysis. In 1995, 31% fewer people in Canada graduated with an undergraduate degree in agriculture than did in 1985.

The declining graduation rate in agriculture reflects the decline in the goods-producing agricultural sector, where mechanization and technological advances continue to reduce the number of direct jobs that are needed. However, opportunities exist in other related sectors and key informants indicated that the interest in fields of study related to agriculture, particularly agricultural economics and business, has actually been increasing.

The downward trend in agricultural jobs has been balanced in some cases by off-farm jobs that relate to agriculture. These support sectors are more important, in terms of labour and income, than the on-farm jobs, but they are not captured by the data on fields of study or labour force. The exact size and influence of the support sectors is being assessed in Part II of this study.

5.5.2 Educational Services

There is a wide range of educational services available to residents of Simcoe County.

The **Simcoe County Board of Education**, based in Midhurst, administers numerous elementary and secondary schools throughout the County, as well as four adult learning centres, in Alliston, Barrie, Collingwood and Orillia.

For post-secondary studies, there is one community college (Georgian College) located in Simcoe, with three campuses in Barrie, Orillia and Midland, and business and career service centres in Midland and Collingwood.

Residents of Simcoe also have access to numerous community colleges and universities in the region. For studies in agriculture, there is the Ontario Agricultural College at the University of Guelph in Wellington County, and there are other agricultural colleges linked to the University of Guelph that are located in Alfred and Kemptville. Increasingly, these programs offer course in business management and marketing. The University of Guelph also offers an MBA program in agriculture that students can complete through distance education.

The **Ontario Agricultural Training Institute (OATI)** is a non-profit organization funded by Agriculture and Agri-Food Canada, OMAFRA and other government agencies. OATI offers courses in different counties, focusing mainly on skills development in farm business management, including financial management and production economics. Currently (under a Canadapt Grant) OATI is studying the market demand for continuing training and education among farmers and agri-businesses in Ontario, to determine the needs and resources of agricultural clients and to develop new training programs that will improve the cost-efficiency of agri-businesses.

Over the past five years, the agricultural community in Simcoe requested a variety of OATI courses, including computers (for financial management and the Internet), commodity marketing, chainsaw certification, "horse hoof care", negotiation skills, agricultural animal care, and daily quota management. The most popular courses appear to be the computer courses, reflecting the movement in the agricultural community towards the use of computers for farm management.

Another educational organization that focuses on agriculture is **Ontario Agri-Food Education Inc**. Like OATI, OAFE currently is implementing a three-year Canadapt-funded project to promote the agricultural industry to consumers and educate the public on the importance of the agri-food industry.

At the level of senior management in the agricultural sector, the **George Morris Centre** and the **Office of Open Learning** at the **University of Guelph** are offering a training program designed to increase the competitiveness of the agri-food sector. Participants are senior managers, executives and owners of agri-food companies in Canada. The training program comprises three, 3 1/2-day sessions, to better participants' understanding of the policy and business environment and to provide them with tools to better manage their resources. It is also expected that strategic alliances will form between the participants that will enhance the competitiveness of the agri-food sector.

Another executive level program available to the agricultural community in Simcoe is the **Advanced Agricultural Leadership Program**, whose head office is in Guelph at OMAFRA. This program is designed, as the name implies, as an executive development program to develop leadership skills within the agricultural community. The program is delivered through a series of seminars on such topics as national and international trade, communication and organization skills, and trends in the agri-food industry and society. Simcoe County farmers have shown a relatively high level of interest and participation in this program.

Other educational opportunities offered by OMAFRA include Farm Financial Management training, Estate Planning and Business Transfers, Dairy Herd Management courses, Weeds Management, Leadership Training for Organizations and Farming Basics for Beginners (OMAFRA, personal communication). Example of OMAFRA training programs that are offered annually include Pesticide Certification Training (in partnership with the University of Guelph) and Environmental Farm Planning, which is delivered jointly with the Ontario Soil and Crop Improvement Association.

In addition, numerous farm organizations in the County offer regular, in-service training to their membership in the form of workshops, conferences, etc. These include the Simcoe County Cattlemen, Simcoe County Producers, Simcoe County Milk Committee, Simcoe County Pork Producers, Women's Institute, 4-H Associations, and the North and South Simcoe Soil and Crop Improvement Associations

5.6 Occupations: Male/Female

In 1996, there were major differences between the male and female labour forces in Simcoe County, in terms of occupations. There are also quite different patterns of occupation between men in Simcoe and the province as a whole, as presented in Tables 5.4 and 5.5:

- the highest percentage (28.3%) of the male labour force is in trades, transportation and equipment occupations
- the highest percentage for women (34.8%) is in sales and services, while only 2.2% are in trades, transportation and equipment occupations

- a high percentage (27.4%) of women are in business and finance occupations, compared to only 7.5% of men.

Table 5.5: Percentage of Male Labour Force in Simcoe County in Different Occupational Groups, 1996

Males - Occupation Groups	Ontario	Simcoe
Trades, Transport, Equipment	23.1%	28.3%
Sales & Service	20.8%	22.8%
Manufacturing, Processing	11.4%	11.9%
Management	12.2%	11.5%
Business, Finance	10.9%	7.5%
Natural & Applied Science	7.9%	5.2%
Social Science	5.1%	4.2%
Agriculture (not labourers)	2.8%	3.6%
Health	1.8%	1.6%
Arts, Culture, Sports	2.4%	1.6%
Primary labourers	1.1%	1.5%
Forestry, Mining, Fishing	0.5%	0.2%

For both men and women, the percentage in **agricultural** occupations is relatively small; however, for men the percentage in agriculture is higher than that for health occupations and for women, the percentage is higher than that for natural and applied science.

Table 5.6: Percent of Females in Simcoe County in Different Occupational Groups, 1996

Females - Occupation Groups	Ontario	Simcoe
Sales & Service	31.0%	34.8%
Business, Finance	30.2%	27.4%
Social Science	9.0%	8.8%
Health	8.1%	8.5%
Manufacturing, Processing	6.1%	7.1%
Management	6.8%	6.0%
Arts, Culture, Sports	3.3%	2.5%

Females - Occupation Groups	Ontario	Simcoe
Trades, Transport, Equipment	1.9%	2.2%
Agriculture (not labourers)	1.3%	1.5%
Natural & Applied Science	2.1%	1.0%
Primary labourers	0.2%	0.2%
Forestry, Mining, Fishing	0.0%	0.0%

The pattern of occupation for women in Simcoe County is very similar to that for the province as a whole. The only significant differences are that proportionately more women in Simcoe work in manufacturing and sales/services than the province, while proportionately fewer women in Simcoe are in business/finance and natural & applied science than in Ontario as a whole.

Meanwhile, for men, there are quite a few differences in the breakdown of occupations for Simcoe and for the province, although none of these is major. Within the male labour force in Simcoe, there are proportionately more men in trades/transport, sales/services and agriculture than the province, while there are proportionately fewer men in Simcoe in business/finance, natural & applied science and arts/culture.

When comparing the figures for occupations of men and women in Simcoe County, quite different patterns emerge. The differences are consistent with traditional gender differences in occupation, with men tending to be in management and trades occupations, while women tend to be in administration, sales and human services.

5.6.1 Top Twelve Occupations for Women and Men in Simcoe

Based on an analysis of the 47 individual occupations included in the 1996 Census, the top twelve occupations were determined for men and women in Simcoe (refer to Tables 5.6 and 5.7). Again, this analysis shows very distinct differences between the male and female labour force in the County.

Table 5.7: Twelve Most Frequent Occupations for Men in Simcoe County, 1996

Ontario	Simcoe	Top Twelve Occupations for Men in Simcoe
7.5%	7.8%	Sales & Service
5.0%	6.3%	Transportation Equipment Operators
4.8%	5.0%	Machine Operators (Manufacturing)
4.1%	4.9%	Mechanics

Ontario	Simcoe	Top Twelve Occupations for Men in Simcoe
6.6%	4.7%	Clerical
4.3%	4.4%	Other Managers
2.6%	4.1%	Protective Services
3.7%	4.0%	Wholesale, tech. Insur. W/R grain buyers
3.3%	4.0%	Construction
3.5%	3.7%	Trades helpers, constr./transport.
3.3%	3.6%	Managers- retail trade, food/acc.
2.8%	**3.6%**	**Agriculture**

Table 5.8: Twelve Most Frequent Occupations for Females, Simcoe County, 1996

Ontario	Simcoe	Top Twelve Occupations for Women in Simcoe
17.7%	15.9%	Clerical
8.7%	10.2%	Sales & Service
5.4%	5.8%	Retail Salesperson
5.0%	5.4%	Childcare & Home Support
5.4%	5.1%	Secretaries
5.5%	4.9%	Teachers/Professors
3.6%	4.2%	Cashiers
3.4%	3.3%	Nurse Supervisors & R.N.s
2.6%	3.2%	Managers - retail trade, food/acc.
2.8%	3.1%	Food & Beverage Service
1.7%	2.8%	Assemblers (manufacturing)
1.9%	2.5%	Health assisting occupations

When comparing the figures for men (Table 5.6) and women (Table 5.7), we find the following:

- the only occupation appearing in the top twelve for both men and women is **clerical**
- the proportion of the women in clerical jobs (15.9%) is much higher than that for men (4.7%)

- the most frequent occupations for women tend to be in traditional areas: childcare providers, teachers, secretaries, retail sales, cashiers and nurses
- the only manufacturing occupation in the top twelve list for women is for assembly line work
- the most frequent occupations for men follow a traditional pattern: trades, manufacturing, management, construction and mechanical occupations are 7 of the top 12 occupations

The top twelve occupations for women in Simcoe are consistent with the top twelve occupations for the province as a whole, with only minor differences. Relatively higher percentages of women in Simcoe are sales & service workers, assemblers (manufacturing), health assistants, cashiers and managers of retail trade and food & accommodation. This is reflective of the relative strength of Simcoe in manufacturing and service sectors.

For men, the top twelve occupations in Simcoe are similar to the top twelve for the province as a whole, although there are a few differences. For example, there are relatively fewer men in clerical occupations in Simcoe than for Ontario as a whole, and there are relatively more men in Simcoe who are transportation equipment operators, mechanics, construction workers or protective services officers.

Of particular relevance to this study is the observation that **agriculture** is one of the top twelve occupations for men in Simcoe, and there are relatively more men in Simcoe with this occupation than the province as a whole.

5.7 Work Prospects for Agricultural Occupations in Canada

It is important to note that the majority of jobs supported by agriculture are not on-farm agricultural occupations, as shown in recent studies in Huron County and Eastern Ontario. Despite this fact, we feel it is important to analyze the narrowly defined agricultural jobs here. In Part 2 of this study, we will look at all agricultural related jobs.

Although data were not available on work prospects in Simcoe County, information was obtained from Human Resources Development Canada on work prospects for agricultural occupations in Canada.

For agricultural and horticultural workers, who generally work on the farm, in nurseries or greenhouses, operating farm equipment or caring for livestock, the unemployment rate averaged 11.3% from 1994 to 1996. This is well **above** the average of 6.7% for all occupations. These occupations generally require on-the-job training and experience, and perhaps some college training. Average earnings for full time, full year workers in these occupations in 1995 were $26,200, which is much lower than the average for all occupations and lowest for occupations with the same skill level. Due to the general trend toward fewer and larger farms with higher levels of technology, work prospects for people entering the workforce in these occupations are considered to be poor.

For contractors, operators and supervisors in agriculture, horticulture and aquaculture, the prospects are better than for general agricultural workers. People in these occupations usually

have a college diploma and specialized training, increasingly in areas such as biotechnology and computerized farming systems. In agriculture, this would include farm managers, animal breeders, farm produce marketers, and coordinators/supervisors of agricultural services such as artificial insemination, ploughing and health programs for livestock. Unemployment levels for these occupations averaged 3.4% from 1994 to 1996, which is well below the average for all occupations and below the rates for occupations with similar skill levels. Average earnings were relatively low, but the separation rate for these occupations is low, indicating steady employment. According to HRDC, current labour market conditions for these occupations are fair and will remain so through the year 2001.

The third set of occupations related to agriculture are termed "Other Agriculture" and include those with undergraduate degrees in agriculture who work as contractors or supervisors in agriculture, horticulture or aquaculture, as technologists and technicians or as agricultural representatives, consultants or specialists. For these occupations, the **unemployment rate** from 1994 to 1996 was well **below** the average for the same level of study. Average earnings for these occupations are 12% below the average for similar qualifications. For the future, job prospects in these occupations is considered to be poor, due to the expectation that the increase in job opportunities will be exceeded by the increased supply of people graduating from university programs in these areas.

5.8 An Analysis of the Socio-Economy of Simcoe County based on the "Leading and Lagging" Scale

Recent research in Ontario used factor analysis to provide a better understanding of the social and economic diversity in Ontario and to identify leading and lagging socio-economic areas in the province[3]. "Leading" areas are those geographic areas that are performing relatively well on certain selected socio-economic dimensions, while "lagging" areas are those that are performing relatively poorly compared to other geographic areas. Selection of factors or indicators that were used for the analysis was based on generally accepted values of what constitute desirable and undesirable conditions. For example, some desirable factors would be low unemployment, high average incomes and high educational levels.

An area can fall through the analysis into seven relative levels. Basically, at the top are those where all the factors are present, while at the bottom are those areas where few or none of the factors are present. Based on the analysis completed in the study, the following conclusions can be drawn for Simcoe County as compared to the other counties and regions in Ontario:

Economic Dynamics: This set of indicators includes high income, high employment status, high education levels, high dwelling values, rapid population growth and high in-migration. Based on these factors, Simcoe County is at the **second highest level** on the leading/lagging scale area, although not at the top level, perhaps due to the lower than average levels of income in the County. The top leading areas are the Regions of York, Peel and Halton in the Greater Toronto

[3] The research described here was carried out by Alessandro Alasia, a PhD candidate in the Rural Studies Program at the University of Guelph based on a methodology developed through the New Rural Economy Project.

Area. Simcoe is at the same level as Dufferin, Muskoka, Durham, Haliburton, Ottawa-Carleton and Middlesex Counties/Regions, as well as the City of Toronto.

Socio-Economic Stress: For this factor, leading areas are considered those with low levels of socio-economic stress. This would be indicated by low incidences of rented dwellings or where gross rent exceeds 30% of household income; high incidence of single detached housing; low incidence of low income families; low incidence of lone parent families; and high incidence of females and males working at home. The latter is particularly relevant in rural/farm areas.

Simcoe is considered to be in the **third highest level** on the leading/lagging scale, possibly due to the low incidence of men and women working at home, reflecting the predominance of jobs in manufacturing and service areas, and a relatively low number of people living on farms. The other reason may be the increasing growth of urban areas in Simcoe, where the incidence of rented dwellings would be higher than in a more rural area. The leading areas of Ontario for this factor are York and Haliburton, while the lagging areas are the City of Toronto, Hamilton-Wentworth, Ottawa-Carleton and Hastings.

Labour Force Participation and Age: This set of indicators includes high percentage of young population, low percentage of elderly population, high employment income as percentage of total income, and high labour force participation rates. For this factor, Simcoe was identified as **neither a leading nor a lagging** area, possibly due in part to a higher than average percentage of elderly people, because of the attractiveness of the County as a retirement location. In addition, the level of population of youth 15-24 is relatively low in Simcoe, indicating that youth are out-migrating to find employment or education. The leading Counties for this factor are the Regions of Durham, York and Peel and Cochrane and Kenora Districts, while the lagging areas are Parry Sound, Muskoka and Haliburton.

Unemployment Levels: Leading areas for this factor would have low unemployment rates and a low incidence of families with only one member in the labour force. For this factor, Simcoe received the **second lowest rating** on the leading/lagging scale, reflecting the high level of youth unemployment in the County. The leading areas of the province for this factor include Ottawa-Carleton, Huron and Bruce, while the most lagging areas include Cochrane, Sudbury, Algoma and Haliburton.

Conclusions: Based on this analysis, Simcoe County is

- a '**leading**" area for economic dynamics and low socio-economic stress
- a **"neutral"** area for labour force participation and age, and
- a **"lagging"** area for unemployment, relative to other counties/regions in Ontario.

This is consistent with previous sections of this report that showed that Simcoe County was characterized by rapid growth, lower than average incomes, high youth unemployment, higher than average percentage of elderly, and high rates of in-migration.

6.0 Agriculture and other Industries in Simcoe County

The following sections examine the structure of industry in the County, to provide a better understanding of the County's economic base and the relative importance of agriculture. Data from the 1986, 1991 and 1996 Population Census for Ontario was analyzed to develop profiles of the labour force breakdown among different industries or sectors, and the changes in employment in different sectors over the past ten years. Comparisons were also made to the trends experienced in the province as a whole.

6.1 Industries in Simcoe County

In Simcoe County, as shown in Figure 6.1, the industry with the largest number of employees is **manufacturing**, which had 28,320 employees in 1996. Second to manufacturing is the **retail trade** sector, which employed 21,815 people, followed by **health and social services**, which employed 16,335. The next largest sectors, in order of size, are "other service industries" (12,000), hotel/accommodation and food (11,700), construction (11,415), government services (10, 275), education (9,835), wholesale trade (8,515), business (8,290), and transportation and storage (7,050).

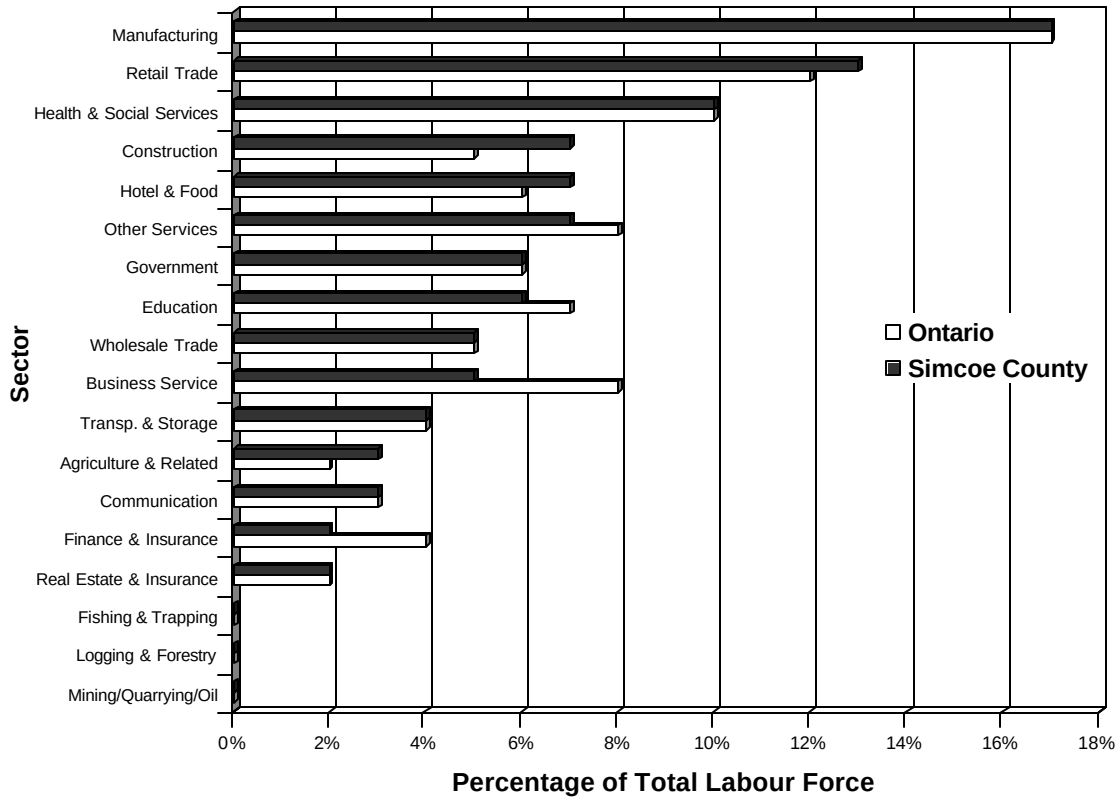
Figure 6.1: Simcoe County Labour Force by Sector, 1996

The **agriculture and related** sector is the **twelfth largest** sector in the County, with an estimated 4,770 employees, which represents 4.1% of the agriculture and related labour force in Ontario. Real estate, finance/insurance and the communication sectors are next, each employing between 3,000 and 4,500 people. The other primary sectors, including mining, fishing and forestry, are the smallest sectors in the County, each employing less than 500 people.

The relative specialization of Simcoe compared to Ontario is shown in Simcoe's greater percentage representation in retail trade, construction, hotel and food, and agriculture and related industrial sectors. The greatest percentage gaps below the province are in finance and insurance, and business services.

6.2 Employment Change 1986 to 1996 by Type of Industry

The following analysis of changes in employment by industry/sector was based on Statistics



Canada classifications, as listed below. It should be noted that this classification presents a different picture on labour and employment than in the previous sections, since several sectors

are aggregated together. However, changes in the Census methodology between the 1986 and 1996 makes it difficult to analyze trends over that period using the more detailed statistics.

It is also important to note that this records employment at place of residence. Therefore, the employment figures for Simcoe do not distinguish between the labour force that works in Simcoe County and those who commute to jobs outside the County.

Industry Classifications:

Primary: agriculture, forestry, fishing/trapping and mining

Manufacturing: food/beverage processing, tobacco products, textiles, primary textiles, clothing, leather, plastics, wood products, metal, electrical, etc.

Construction: developers, contracting industries, trade contracting industries

Transportation, Communications and Other Utilities: transportation, communication, storage, and utilities

Retail and Wholesale Retail Trade

Finance, Insurance and Real Estate: finance, insurance carriers/agents, and realtors

Government: federal, provincial and local government services

Other Services: education, health, business and personal services, membership organizations, entertainment, recreation, food, beverage, and accommodation.

Figure 6.2 provides an illustration of the various changes in sectoral employment in Simcoe, over a ten-year period between 1986 and 1996.

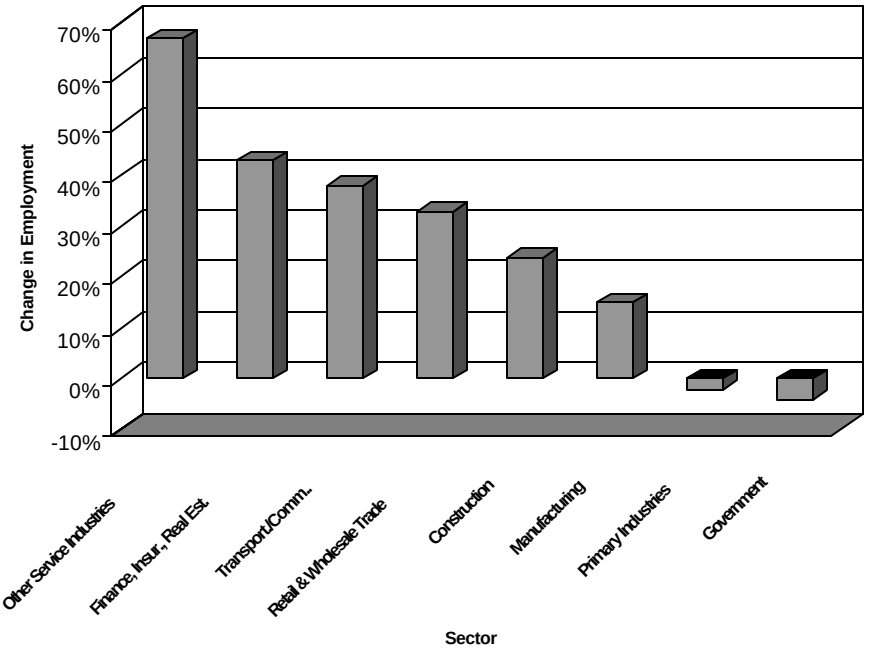
The "other service industries" sector, which includes a mix of services related mainly to human services and tourism, was consistently largest over the period from 1986 to 1996. This sector grew in number from roughly 35,000 employees in 1986 to over 58,000 in 1996, which represents a 66% increase over the ten year period, making it also the **fastest** growing sector in the County. The sector also grew in terms of its proportion of the overall labour force, increasing from 29% to 36% between 1986 and 1996. This is consistent with the rapid population growth in the County and the need to provide personal services to a growing number of people.

The **second** largest sector is **retail and wholesale trade**, which had over 33,000 employees in 1996, representing 19% of the overall labour force. This sector grew in size by 33% from 1986, which, relative to the other sectors, was the **fourth fastest** rate of growth. This sector also maintained a consistent proportion of the overall labour force over the ten years, hovering around 19%.

Based on the classifications of sectors for this analysis, the **manufacturing** sector is the **third largest** sector in the County, with over 28,000 employees in 1996, representing 17% of the overall labour force. Recall that in an earlier analysis in this report, manufacturing was the largest sector, but several other sectors were combined for the present analysis. Despite its large relative size, this sector had the **third slowest** rate of growth of all the sectors between 1986 and 1996 with a 15% rate of growth. Similarly, its relative proportion of the overall labour force declined slightly from 20% in 1986 to 17% in 1996.

Figure 6.2: Change in Employment by Sector, 1986 to 1996, Simcoe County

The **construction**, **transportation & communication** and **government** sectors have similar sizes in 1996, each with between 10,000 and 12,000 employees. In terms of growth, the three sectors experienced different trends, with transportation & communication and construction



growing considerably over the ten years by 38% and 24% respectively, while the government sector **declined** slightly in growth by 4%. Interestingly, the government and construction sectors both increased considerably between 1986 and 1991 but then decreased in size over the next five years, more dramatically in the government sector. In terms of proportion of the overall labour force, transportation/communication has been stable at 7%, while construction has hovered around 8%. Meanwhile, the government sector has declined from 9% to 6% over the ten years, which might be a reflection of the general trend to downsizing government in the province.

The smallest sectors in the County according to the Statistics Canada classification are the **finance/insurance/real estate** sector, with roughly 7,000 employees in 1996 (4% of the overall

labour force) and the **primary** sector, with just under 5,500 employees (3% of the labour force). The primary sector would include agriculture, forestry, mining and fishing and trapping. The big difference between these two smallest sectors is the rate of change between 1986 and 1996, with the finance/insurance sector growing by 41%, the **second fastest** rate of growth, while the primary sector declined by **2%**. At the same time, the finance/insurance sector maintained a 4% share of the labour force between 1986 and 1996, while the primary sector's share of the labour force decreased from 5% in 1986 to 3% in 1996.

Implications: Although the primary sector employs relatively few people and has declined in size in Simcoe County, compared to other sectors, this does not mean that the agricultural sector employs only a small part of the labour force. The "primary" sector includes farm operators and farm or horticultural workers, but does not include all those people working in agriculturally related areas. Workers in construction, manufacturing, trade and other sectors that depend on agriculture are not identified in this socio-economic profile. Similarly, other services such as restaurants and the financial sectors which support agriculture have not been linked to agriculture here.

6.3 The Agriculture and Food Industry

In 1997, an estimated 110,400 people in Ontario were employed in Agriculture and Related Services, representing roughly 2% of the provincial labour force[4]. When compared to the labour force in manufacturing, which is 18.4% of the overall labour force, this figure seems low. However, the 2% figure does not account for people who are employed in industries that are directly linked to the primary agriculture sector. Within Ontario's manufacturing sector, for example, 8.8% of the labour force is employed in food manufacturing, which includes meat and poultry products, fruit and vegetable industries, dairy products, flour and feed industries, and others.

Within the Agriculture and Related Services Industry in Ontario, 99,300 people were employed in Agricultural Industries, while another 11,100 were employed in Agricultural Services. The largest number of people were employed on livestock farms (nearly 40% of the agricultural labour force), while the remainder were employed on field crop farms, combination farms, fruit and vegetable farms or in services incidental to livestock or crops. The breakdown among these different types of industries is shown in Table 6.1.

There were 4770 people in Simcoe County working in the agricultural and related services sector in 1996. As shown in Table 6.2, the township/town with the largest number of people working in this sector was Bradford West Gwillimbury (625), followed by Oro-Medonte (565), Clearview (520), New Tecumseth (445) and Innisfill (445).

However, when we calculate the percentage of the overall labour force that is working in the agriculture and relates services industry, we find that **Clearview** has the highest percentage (8.6%), followed by Adjala-Tosorontio (7.3%), Oro-Medonte (6.6%) and Bradford West

[4] Source: OMAFRA - http://www.gov.on.ca/OMAFRA/english/stats/food/labforce.html - Employed Labour Force by Selected Industries,

Gwillimbury (5.6%). Ten townships in Simcoe had an agricultural labour force that comprised a higher percentage of the overall labour force than the level for Ontario as a whole (2.4%). Only Tay Township had a lower percentage, at 1.8% (Figure 6.3).

It is interesting to note the situation for the Towns of New Tecumseth and Innisfill. Both have a relatively large labour force in agriculture and related services (445 each), when compared to the other townships.

Table 6.1: Labour Force Breakdown in the Agriculture and Related Services Industry, Ontario, 1996

Industry	Employed Labour Force (number)	% of Agricultural & Related Services Industry in Ontario
Agriculture & Related Services	110,400	100%
Livestock Farms	43,800	39.7%
Other Animal Specialty Farms	3,900	3.5%
Field Crop Farms	7,200	6.5%
Field Crop Combination Farms	8,500	7.7%
Fruit and Vegetable Farms	5,000	4.5%
Horticultural Specialties	11,000	10.0%
Other Combination Farms	19,900	18.0%
Services Incidental to Livestock	9,400	8.5%
Services Incidental to Crops	1,700	1.5%

Source: OMAFRA: http://www.gov.on.ca/OMAFRA/english/stats/food.

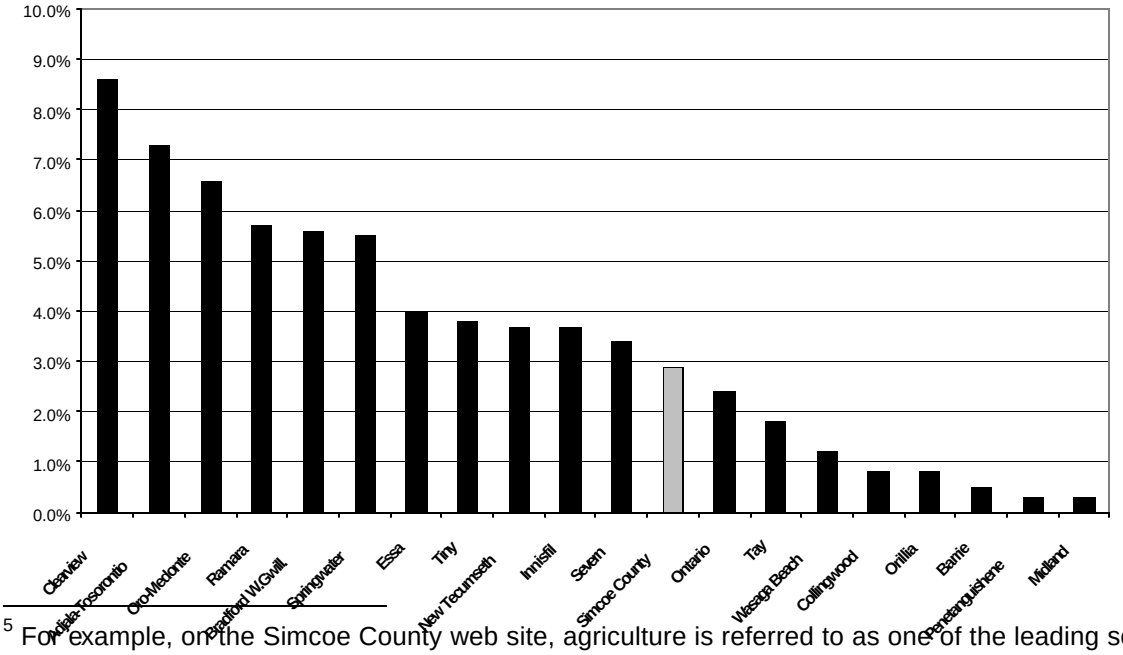
However, the ratio of agricultural labour force to overall labour force is low compared to most of the other townships in Simcoe. This indicates that agriculture plays a less important role *relative* to other industries in the two Towns than it does in the other townships. It reflects the relatively high percentage of the labour force in these towns that live in Simcoe and work in the Greater Toronto Area.

The level for Simcoe County as a whole is slightly higher than the province, indicating the relatively high level of importance that agriculture plays in Simcoe County relative to other industries.

Table 6.2: Labour Force in Agriculture and Agriculture-Related Services, 1996

Geographic Area	Size of Agriculture & Related Labour Force	Agricultural Labour as Percent of Overall Labour Force
Clearview	520	8.6%
Adjala-Tosorontio	370	7.3%
Oro-Medonte	565	6.6%
Ramara	195	5.7%
Bradford W.Gwill.	625	5.6%
Springwater	430	5.5%
Essa	345	4.0%
Tiny	150	3.8%
New Tecumseth	445	3.7%
Innisfil	445	3.7%
Severn	165	3.4%
Simcoe County	4770	2.9%
Ontario	131060	2.4%
Tay	95	1.8%
Wasaga Beach	45	1.2%
Collingwood	55	0.8%
Orillia	95	0.8%
Barrie	205	0.5%
Penetanguishene	10	0.3%
Midland	20	0.3%
Rama First Nation	0	0.0%
Christian Is.	0	0.0%

Figure 6.3: Percentage of Overall Labour Force in Agriculture, Simcoe County Townships/Towns, 1996



6.4 Leading Employers in the County

The previous section outlined the breakdown of the labour force in terms of different sectors. In this section, a more detailed description of the situation in Simcoe County is provided, based on information provided by OMAFRA and other sources.

Automobile manufacturers, industrial research and development companies and many diversified manufacturing companies, carry out the main industrial activities in the County. There are also many seasonal tourism and recreation businesses operating in the County. This is due to the presence of extensive beach areas along the shorelines of Georgian Bay and Lake Simcoe, as well as hilly areas to the north of Barrie on the Oro Moraine. Although actual numbers were not determined for this study, these businesses are growing in number, mainly because of population growth and proximity to the Greater Toronto Area.

Agriculture is also considered to be one of the main sectors[5], although the number of people working on the farm is relatively low. According to key informants contacted for this profile, agri-business is "buoyant" in the County, with numerous agricultural supply companies, including suppliers of equipment, feed, seed and other agricultural inputs.

One indicator of the importance of agriculture is the size of the **food industry** relative to other industries in the County. In a 1998 report by the Economic Developers Council of Ontario, the top manufacturing or service industries in Simcoe County, in order of importance, are:

[5] For example, on the Simcoe County web site, agriculture is referred to as one of the leading sectors in the County.

1) Tool, Die and Mould;
2) Automotive and Aerospace;
3) Tourism;
4) Plastics;
5) Food and Kindred Products and
6) Transportation. (EDCO, 1998).

Although not usually referred to as "agricultural" the Food and Kindred Products industry includes fruit and vegetable industries, meat and poultry products, dairy products and others that have a direct link to agricultural producers in the County. These industries play a major role in the agricultural economy in the County.

The major private sector employers in Simcoe are presented in Table 6.3. This information was provided by the OMAFRA office in Midhurst:

Table 6.3: Leading Private Sector Employers in Simcoe County, 1996

Employer	Number of Employees
Casino Rama	2,480
Honda Canada Inc.	2,000
Blue Mountain Resort	1,040
Techform Products	710
PMCL (Penetang Midland Coach Lines)	700
Hughes Elcan Optical Technologies	650
Reynold Lemmerg Industries	525
LOF Glass of Canada Ltd.	550
Molson Breweries	500
Alloy Wheels International	480
Bell Canada	450
Baxter Corporation	425
Good Year Canada	400
F & P Manufacturing	400

The main Public Sector employers are listed in Table 6.4:

Table 6.4: Leading Public Sector Employers, Simcoe County, 1996

Employer	Number of Employees
Simcoe County Board of Education	5,000
Simcoe County Roman Catholic Separate School Board	2,200
Royal Victoria Hospital, Barrie	1,200
Ministry of the Solicitor General and Correctional Services (O.P.P.)	1,000
Huronia Regional Centre	1,000
Georgian College	905
Soldiers' Memorial Hospital, Orillia	675

7.0 Government Services and Organizations in the County

Residents of Simcoe County have access to a vast array of government services and organizations both within Simcoe County and in the adjacent Greater Toronto Area. Most provincial government head offices are in Southern Ontario, and there are numerous field offices for different federal and provincial ministries in Barrie. In the town of Midhurst, north of Barrie, a provincial government complex houses four ministries: the Ministry of Natural Resources, OMAFRA, the Ministry of Citizenship, Culture and Recreation and the Ministry of Economic Development Trade and Tourism. Also located in Midhurst are the County of Simcoe Administration Centre and the Simcoe County Board of Education. The majority of government departments now provide detailed information through web sites, which can be accessed from some public libraries.

There are 16 Township/Town municipal government offices in the County. These offices are responsible for local services and infrastructure, including water and sewage facilities and local roads.

There are several services and organizations specific to the farming community in Simcoe County. One of the main resources serving farmers is the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), whose head office is located in Guelph in Wellington County. The OMAFRA office in Midhurst provides technical and advisory services in areas such as soils and crops, livestock, and rural economic development. The office also links rural/farm residents to services provided by other OMAFRA field offices in the province.

The OMAFRA office at Midhurst keeps a listing of rural or agriculturally related organizations in the County. Contact information for some of these organizations is posted on the OMAFRA-Midhurst Web Site[6]. These organizations include:

- Simcoe County Federation of Agriculture
- Simcoe County Milk Producers
- North Simcoe Soil & Crop Improvement Association
- South Simcoe Potato Growers Association
- Huronia Goat Club
- North Simcoe 4-H
- South Simcoe 4-H
- Barrie Agricultural Society
- Beeton Agricultural Society, Beeton Fair
- Cookstown Agricultural Society
- Oro Agricultural Society
- Collingwood Horticultural Society
- Gilford & District Horticultural Society
- Thornton District Horticultural Society

[6] The address for the Midhurst web site is http://www.gov.on.ca/OMAFRA/english/offices/midhurst

- Simcoe Area Women's Institute
- Tottenham & District Chamber of Commerce
- Farmer's Markets

7.1 Selected Provincial Government Programs in Simcoe County

The following sections provide descriptions of some of the programs available to Simcoe County residents by OMAFRA.

7.1.1 Rural Job Strategy - OMAFRA

The Rural Job Strategy Fund is a three year, $30 million investment program designed to "encourage partnerships in rural Ontario that will enhance the quality of Ontario products, capitalize on marketing and export opportunities and encourage the adoption of new or upgraded information technology". (OMAFRA web site) The program is targeted for farm and food sector groups, small and medium-sized businesses, rural municipalities and rural economic development organizations.

To date, at least two projects have been funded under the program in Simcoe County:

- $30,850 for Rural Export and Expansion Development (REED), which is joint effort of six Community Futures Development Corporations within the Bruce-Grey-Simcoe area. The purpose of the project is to assist rural industry to determine market opportunities; address expansion or export needs, and establish information technology supports and services.

- $198,935 to the South Simcoe Potato Growers Association in partnership with the Dufferin Potato Growers Association. This project involves hiring students to monitor potato crops for infestations such as potato blight, to reduce pest incidence, improve crop quality and ultimately increase the competitiveness of potato growers in the two counties.

7.1.2 Rural Youth Jobs Strategy - OMAFRA

The Rural Youth Job Strategy (RYJS) is a new four year, $35 million program designed to assist rural youth (15 to 29 years) in Ontario to find full-time employment close to their home. The program includes $13.5 million for **rural internships**, which encourage local businesses to provide entry-level positions for youth, in partnership with another organization, such as a local service club, chamber of commerce or educational institution. The program also provides $10 million for **sector/community-based projects** that address local or regional barriers to youth employment and lead to direct, long term, sustainable job creation. RYJS also provides transportation assistance for co-op students to travel to job placements. Rural Youth Job Fairs, mentorships and technology-based employment opportunities (through the Community Access Program) are other RYJS initiatives.

For the internship component, partnerships can apply for up to $5,200 per position in financial assistance. All approved projects are cost-shared between the applicant(s) and the government.

7.1.3 Business Retention and Expansion Program - OMAFRA

The Business Retention and Expansion Program (BREP) is described as "a community-based, volunteer-driven economic development tool to encourage growth and stability of local businesses" (OMAFRA Web Site). Based on a model developed in the United States, BREP's objectives are to:

- demonstrate and provide community support for local business
- solve immediate individual business concerns
- increase the competitiveness of local businesses
- establish and implement a strategic action plan for local economic development
- assist business development and job creation/retention

The program has three main components:

1. A **leadership team** introduces the program to the community and trains local **"volunteer visitors"** to conduct a survey of local businesses to identify business needs, concerns and development opportunities
2. A local **task force** reviews the survey results and uses their findings to address the immediate needs and concerns of local businesses and to develop a community-based **strategic action plan**
3. The survey results and strategic plan are presented at a public meeting, where implementation teams are formed to put the strategy in action. A **"resource network"** of economic and business professionals is formed to help implement the plan.

New Tecumseth is one of the BREP pilot sites.

7.1.4 Community Food Advisors - OMAFRA and the Ministry of Health

The purpose of the Community Food Advisor Program is to provide reliable information and education that promotes safe and nutritious food selection, preparation and storage. The program receives joint funding from OMAFRA and the Ministry of Health, as well as support from local businesses and organizations. Volunteers are trained through a 17-week course, held one evening per week. Trained volunteers do food demonstrations, cooking sessions and may provide call-in services for their community. Currently there are 16 sites for the program, including one in Barrie, sponsored by the community health centre. The local co-ordinating committee in Barrie includes representatives from a women's institute and OMAFRA, as well as a dietician.

8.0 The Agricultural Economy of Simcoe County

Agriculture is a vital part of the economy of Simcoe County, where a high level of productivity is achieved for a diverse range of agricultural operations, owing to Simcoe's favourable climate, high quality soils and easy access to domestic and international markets. In 1996 close to $265 million worth of agricultural products were sold from Simcoe farms, while over $235 million of goods and services were bought by Simcoe County farm operators to run their farms. Aside from the 5770 men and women who work directly on the farm, the agricultural sector generates employment for many people who work in related industries. These include fertilizer manufacturing, food processing, agricultural equipment and chemical industries, retail and wholesale suppliers, as well as farm credit organizations, veterinary medicine and government services.

8.1 Number and Area of Farms in 1996

In the 1996 Census of Agriculture, a census farm is defined as:

> *"an agricultural operation that produces at least one of the following products intended for sale: crops (field crops, tree fruits or nuts, berries or grapes, vegetables, seed); livestock (cattle, pigs, sheep, horses, exotic animals, etc.); poultry (hens, chickens, turkeys, exotic birds, etc.); animal products (milk or cream, eggs, wool, furs, meat); or other agricultural products (greenhouse or nursery products, Christmas trees, mushrooms, sod, honey, maple syrup products)"*

The 1996 definition of a census farm includes commercial poultry hatcheries and operations that produced only Christmas trees; these were not included in the 1991 definition.

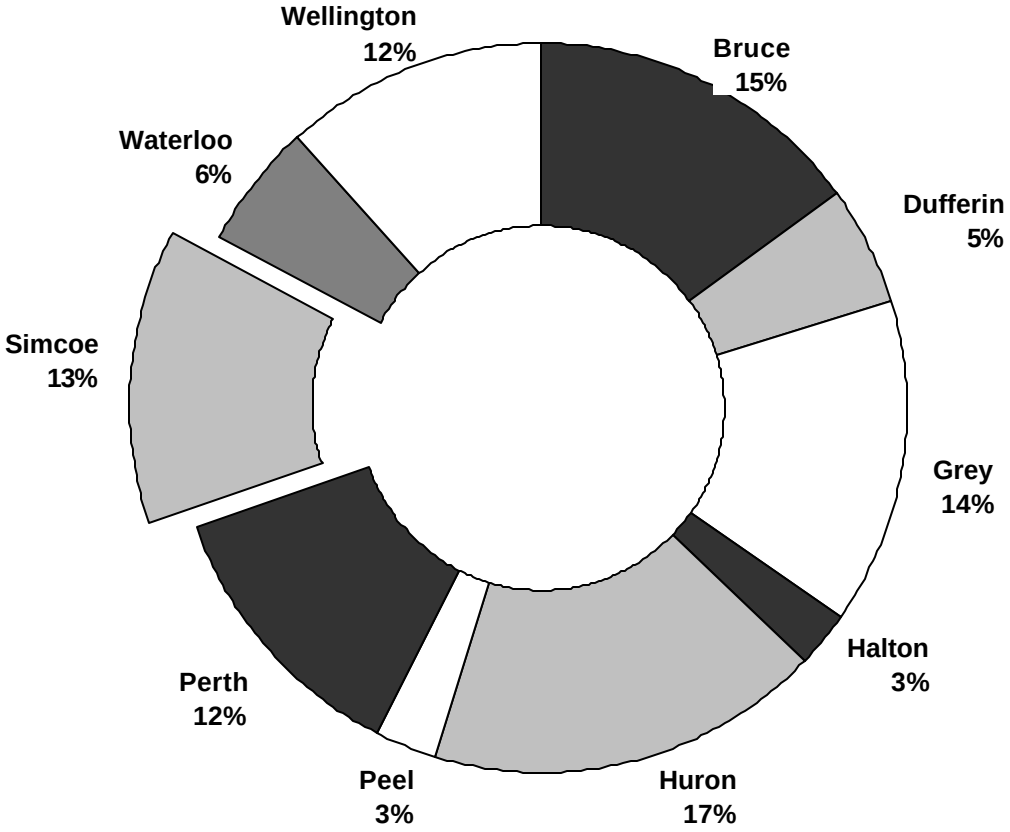
In 1996, Simcoe County had 2773 Census farms, which is the sixth largest number of farms in the whole province of Ontario. Huron County has the largest number of farms, at 3,150, followed closely by Grey, Middlesex, Haldimand-Norfolk, Perth and Wellington. In terms of **area** of farmland, Simcoe was seventh in the province, with 550,393 acres, or approximately 4% of the total farmland in Ontario. Again, Huron County led the other counties, with 733,924 acres of farmland. Within the region of Western Ontario (10 counties and regional municipalities), Simcoe is fourth in terms of both number of farms and total area of farmland. This is shown in Figure 8.1.

As shown in Table 8.1, within Simcoe County itself, the township with the largest number of farms is **Clearview** followed by Oro-Medonte (389) and Springwater (339). In terms of total area of farmland, the same three townships lead, with Clearview having the largest area.

8.2 Change in Number of Farms and Area of Farmland 1986-1996

Like the other counties in Western Ontario, Simcoe County experienced an overall decline in **number of farms** between 1986 and 1996, which is consistent with the overall trend toward

fewer numbers of farms in Ontario as a whole. Between 1986 and 1996, there was an 8% decrease in numbers of farms in Simcoe, which is consistent with a 7% decrease for Ontario and 6% decrease for the Western Ontario region. The largest decreases in numbers of farms in Western Ontario from 1986 to 1996 were in Halton (-20%) and Peel (-16%), in the Greater Toronto Area. The smallest decreases were in Wellington (-1%), Bruce (-2%), Perth (-3%) and



Waterloo Counties (-3%).

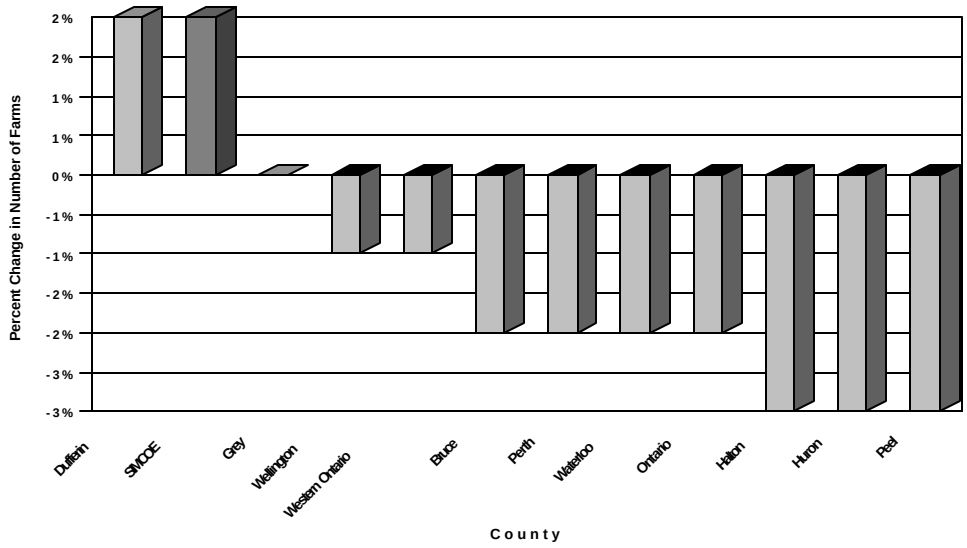
The numbers of farms in Simcoe actually decreased by 10% from 1986 to 1991 and then increased by 2% between 1991 and 1996. Simcoe and Dufferin were the only counties in Western Ontario to have more farms in 1996 than they did in 1991 (Figure 8.2).

Figure 8.1: Percentage of Farm Land in Western Ontario by County, 1996

Table 8.1: Number and Area of Farms, Simcoe County, 1996

Region/County/ Township	# of Farms 1996	% of Total # of Farms in Simcoe County	Total Area of Farms in Acres 1996	% of Total Farm Area in Simcoe County

Region/County/ Township	# of Farms 1996	% of Total # of Farms in Simcoe County	Total Area of Farms in Acres 1996	% of Total Farm Area in Simcoe County
Ontario	67,520	N/A	13,879,565	N/A
Western Ontario	21,305	N/A	4,193,177	N/A
Simcoe County	2,773	100%	550,393	100%
Clearview	430	15.5%	90,244	16.4% (1st)
Oro-Medonte	389	14.0%	61,868	11.2% (3rd)
Springwater	339	12.2%	66,616	12.1% (2nd)
Adjala-Tosorontio	231	8.3%	49,767	9.0% (5th)
Bradford West Gwillimbury	202	7.3%	35,576	6.5% (9th)
Ramara	191	6.9%	53,379	9.6% (4th)
Essa	188	6.8%	39,373	7.2% (8th)
Severn	187	6.7%	31,815	5.8% (10th)
Innisfil	180	6.5%	41,383	7.5% (7th)
New Tecumseth	177	6.4%	44,403	8.1% (6th)



Tiny	167	6.0%	22,696	4.1% (11th)
Tay	92	3.3%	13,273	2.4% (12th)

Figure 8.2: Change in Numbers of Farms, Western Ontario Counties, 1991-1996

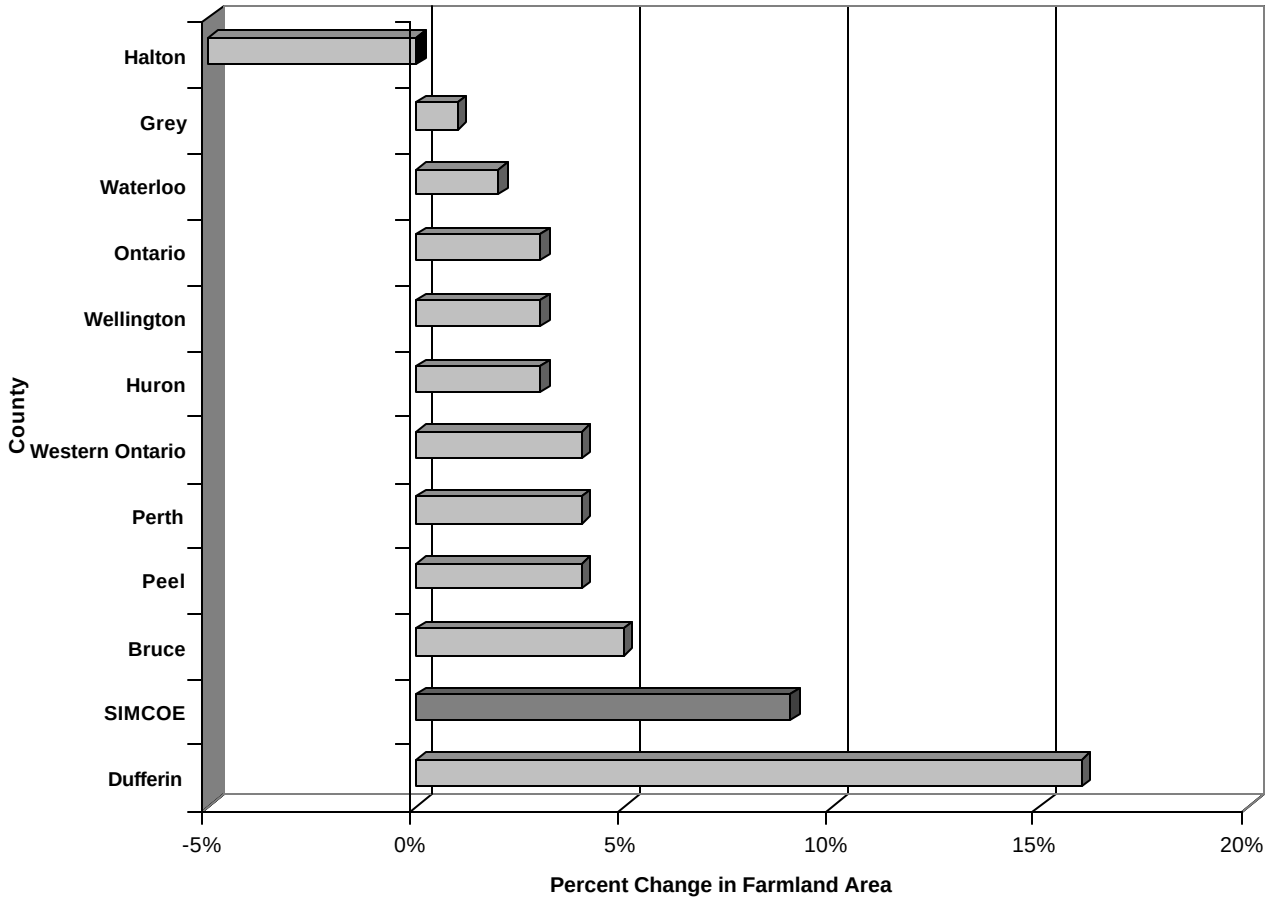
The **area of farmland** in Simcoe County was virtually the same in 1996 as it was in 1986; this, however, masks the fact that there was a *decrease* in area of 9% from 1986 to 1991. This was offset by an *increase* in area of 9% between 1991 and 1996. Ontario as a whole experienced a 1% decrease in area of farmland, while Western Ontario had a 1% increase in area of farmland between 1986 and 1996. The area of farmland in five other counties in Western Ontario increased from 1986 to 1996: Perth (+5%), Dufferin (+4%), Bruce (+3%), Huron (+3%) and Wellington (+3%). The other four counties showed decreases in area, with the biggest decreases being found in Halton (-8%) and Peel (-7%), which reflects the rapid growth and urbanization in the Greater Toronto Area.

Between 1991 and 1996, the area of farmland in Western Ontario increased by 4%, with the biggest increases in area in Dufferin (+16%) and Simcoe (+9%). Among the counties in Western Ontario, only Halton Region experienced a decrease in area of farmland between 1991 and 1996, as illustrated in Figure 8.3. Since the number of farms in Simcoe and Western Ontario has decreased, this would indicate a trend toward expansion of existing farms in Simcoe County and in Western Ontario outside the GTA.

Figure 8.3: Percentage Change in Area of Farmland, Western Ontario, 1991-1996

8.3 Change in Number and Area of Farms in Simcoe County Townships 1991-1996

To measure the change in number and area of farms for the townships/towns in Simcoe, the values for the 17 townships/towns in 1991 were combined according to the geographic amalgamations that occurred between 1991 and 1996. This does not give an accurate



estimate of the changes, since the amalgamations did not always entail the simple joining of two townships, but it should provide a rough sense of the changes (Table 8.2).

Table 8.2: Approximate Change in Number and Area of Farms, Simcoe County Townships/Towns, 1991-1996

	# Farms 1991	# Farms 1996	% Change 1991-1996	Area of Farms 1991	Area of Farms 1996	% Change 1991-1996
Ontario	68,633	67,520	-2%	13,470,653	13,879,565	3%
Western Ontario	21,567	21,305	-1%	4,021,332	4,193,177	4%
Simcoe County	2709	2773	2%	506,424	550,393	9%
Adjala-Tosorontio	232	231	0%	45,204	49,767	10%
Clearview	432	430	0%	84,123	90,244	7%
New Tecumseth	230	177	-23%	48,256	44,403	-8%
Springwater	358	339	-5%	70,224	66,616	-5%
Bradford - W. Gwill.	199	202	2%	30,837	35,576	15%
Severn	155	187	21%	24,375	31,815	31%
Innisfil	193	180	-7%	41,395	41,383	0%
Ramara	160	191	19%	36,423	53,379	47%
Essa	185	188	2%	38,733	39,373	2%
Oro-Medonte	359	389	8%	53,517	61,868	16%
Tiny	134	167	25%	21,943	22,696	3%
Tay	72	92	28%	11,394	13,273	16%

The most significant changes evident from the figures presented are:

- a large **reduction** in number of farms in New Tecumseth (-23%)
- a large **increase** in numbers of farms in the northern townships of Tiny (+25%), Tay (+28%), Severn (+21%) and Ramara (+19%).
- the only decreases in area of farmland occurred in New Tecumseth (-8%) and Springwater (-5%)
- large increases in area of farmland occurred in North Simcoe: Ramara (+47%), Severn (+31%), Oro-Medonte (+16%) and Tay (+16%).

The decreases seen in New Tecumseth may be attributed to the growth in manufacturing (e.g. Honda of Canada) and population in the Alliston area.

8.4 Sizes of Farms in Simcoe County

Table 8.3: Average Size of Farms, Simcoe County, 1996

Region/County/Township	Average Size of Farms in Acres, 1996
Ramara	**279.5**
New Tecumseth	**250.9**
Innisfil	**230.0**
Adjala-Tosorontio	215.4
Clearview	209.9
Essa	209.4
Ontario	205.6
Simcoe County	198.5
Western Ontario	196.8
Springwater	196.5
Bradford West Gwillimbury	176.1
Severn	170.1
Oro-Medonte	159.0
Tay	144.3
Tiny	135.9

Highlights from Table 8.3 are as follows:

- the average size of farms in Simcoe County is 198.5 acres
- average farm size in Simcoe is smaller than the average for the province (206 acres), and only slightly larger than the average for Western Ontario (197 acres)
- the highest average areas of farms are in Ramara (279.5 acres), New Tecumseth (250.9 acres) and Innisfill (230.0 acres)
- the smallest average farm sizes are found in Oro-Medonte, Tay and Tiny Townships.

An estimated 50% of the farms in Simcoe County are between 10 and 129 acres in size (Figure 8.4). This represents a higher percentage of farms of this size than for the province of Ontario (46%) and may reflect the relatively large number of vegetable and fruit farms in the County. At the same time, Simcoe has a slightly lower percentage of farms that are 130 to 759 acres in size than the province. For the largest size of farm (760 acres and over), Simcoe has a higher percentage than the province (Figure 8.5).

From 1991 to 1996, the average farm size increased by 9% in Simcoe, which represents a larger rate of increase than Ontario and Western Ontario, for which the increase was 7%.

During the 1991 to 1996 period, there were significant changes in the relative numbers of different farm sizes in Simcoe. As seen in the Table 8.4 and Figure 8.6 there was a large

increase in number of farms under 10 acres in size (the smallest size, often called "hobby farms"). There was also a large increase for farms 760 acres and over (the largest size).

Figure 8.4: Size of Simcoe County Farms, 1996

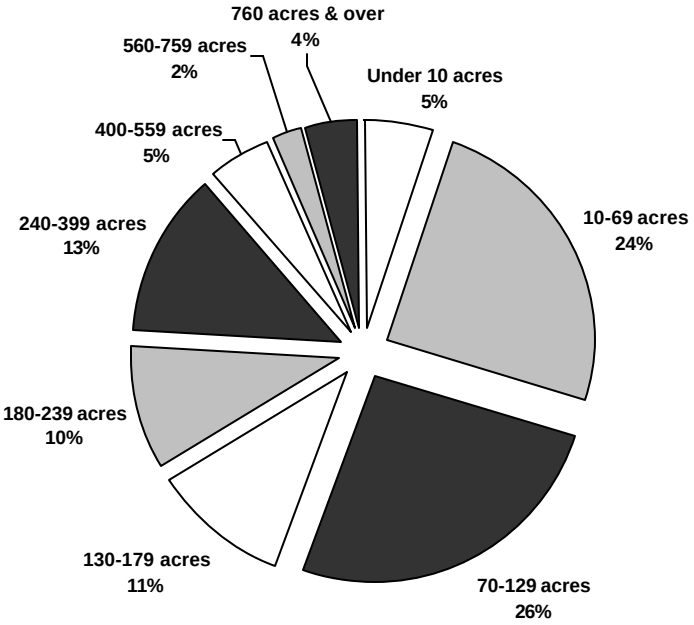


Figure 8.5: Percentage of Different Sizes of Farms, Simcoe County and Ontario, 1996

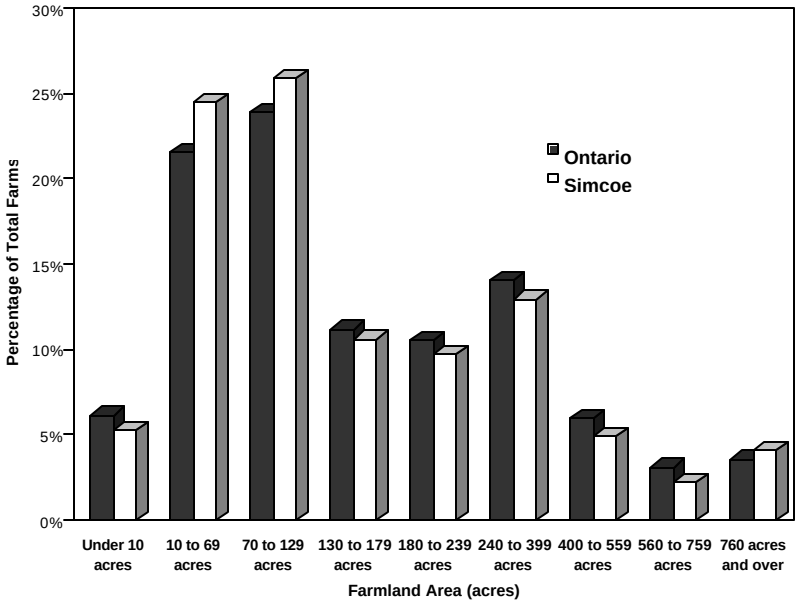
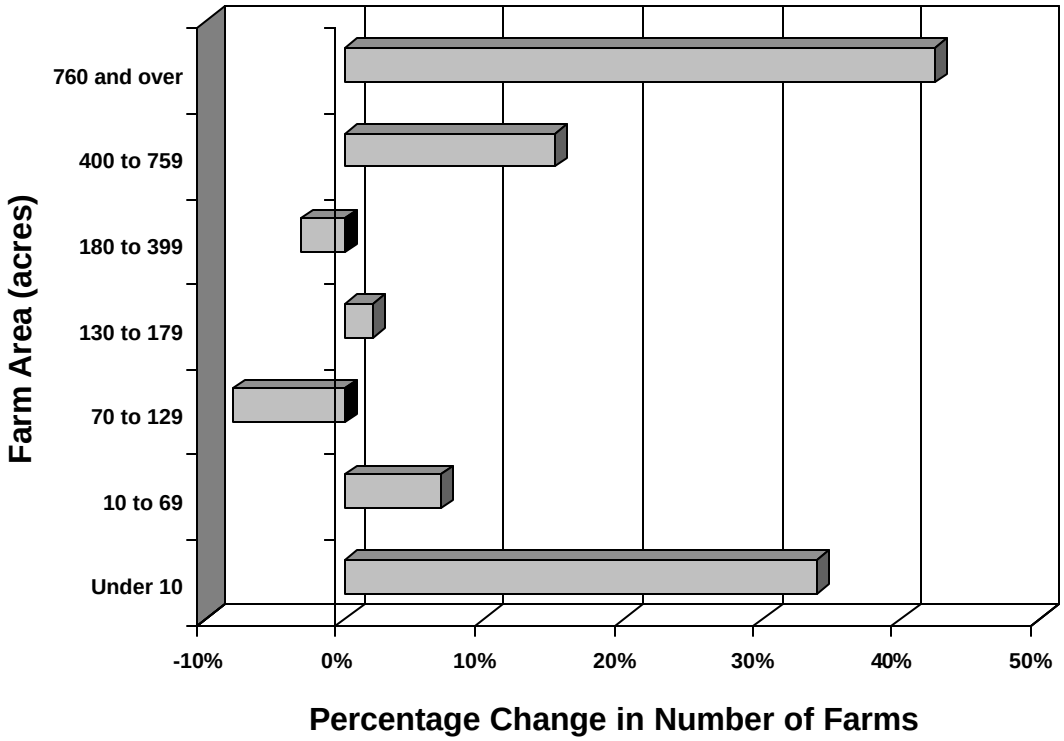


Table 8.4: Change in Numbers of Farms of Different Sizes, Simcoe County 1991-1996

SIZE:	Under 10	10 to 69	70 to 129	130 to 179	180 to 399	400 to 759	760 and over
Percentage Change 1991 – 1996	34%	7%	-8%	2%	-3%	15%	43%

During the same period, there was a general reduction in the relative number of medium sized farms, between 70 and 399 acres in size. This is consistent with a general trend for the province. It is explained by the fact that there is too much work on medium-sized farms to allow full-time off-farm work, but the size of farm is not enough to achieve economies of scale. The trend has therefore been either to larger farms, or to smaller farms that are supplemented by significant off-farm income.

Figure 8.6: Change in Number of Farms of Different Sizes, Simcoe County, 1991-1996



8.5 Area of Land in Crops and other Uses

In 1996, 65% of the land in Simcoe County was in crops. Another 6% was improved pasture, 13% was natural pasture and the remaining 17% was in "other" use (Figure 8.7). Less than 1% of the land was in summerfallow, which reflects the continuous reduction in summerfallow over the past 20 years, from roughly 10% of the land in summerfallow in 1976 to only 2.5% in 1996.

Among the townships and towns of Simcoe County, the percentage of farmland in crops varies from a high of 79% in New Tecumseth, to a low of 38% in Ramara. The percentage tends to be higher in the southern townships and lower in the northern townships where growing crops is more limited than in the south due to cooler temperatures. In the northern townships, there is more emphasis on beef farming and other specialty farming where land is needed for pasture.

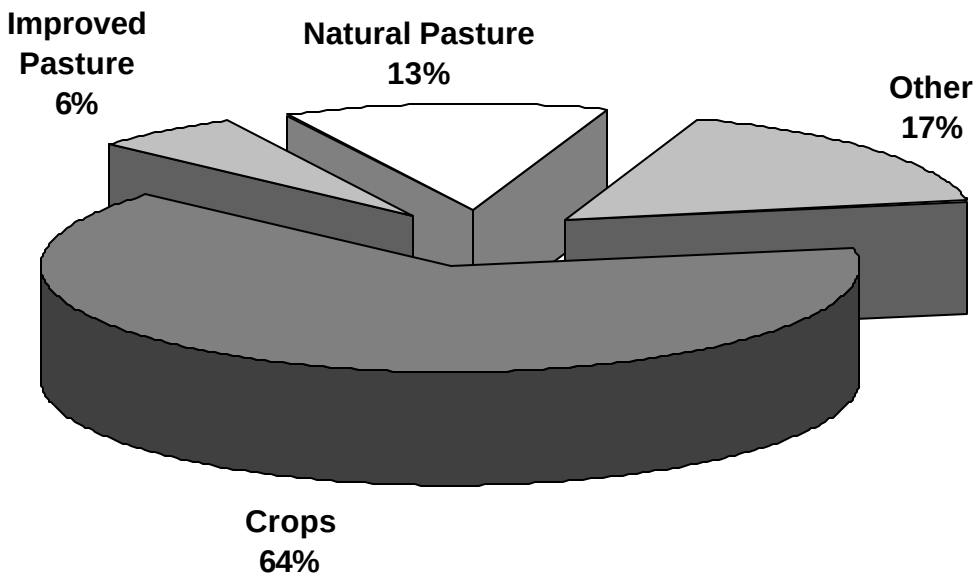


Figure 8.7: Percentage of Farmland by Use, Simcoe County, 1996

Between 1991 and 1996, the percentage of land in crops **increased** in all townships in the County, **except** for New Tecumseth and Springwater, where there was a reduction by 7% and 1% respectively. The highest levels of increase in cropland are evident in Ramara (+35%), Severn (+33%), Oro-Medonte (+15%) and Tay (+15%). The increase in cropland is consistent with the trend for the province, where the area of land in crops increased by 3.9% from 1991 to 1996.

From 1991 to 1996, there was an increase of 7% in the area of crops in Simcoe. As presented in the Table 8.5, most of the increase in cropland was concentrated in the north, especially in Ramara and Severn Townships, but significant increases were also observed for Adjala-Tosorontio, and Bradford West Gwillimbury in the south. The area where there were significant cropland decreases were Tay in the north and New Tecumseth in the south. The decrease in Tay Township may be because there is more livestock production, while the decrease in New Tecumseth can be attributed to the loss of agricultural land to urban development.

Table 8.5: Change in Area in Crops, Simcoe County Townships/Towns, 1991-1996

Geographic Area	Area in crops 1991 (acres)	Area in Crops 1996 (acres)	% change 1991-1996
Ramara	15103	20376	35%
Severn	10862	14452	33%
Oro-Medonte	30296	34815	15%
Tay	5931	6806	15%
Adjala-Tosorontio	27987	31063	11%
Clearview	54634	60818	11%
Bradford - W. Gwill.	25132	27763	10%
Simcoe County	329278	351910	7%
Ontario	8430414	8759707	4%
Innisfil	30290	31327	3%
Springwater	49142	48427	-1%
Essa	28567	28277	-1%
Tiny	13422	12613	-6%
New Tecumseth	37912	35173	-7%

8.6 Farm Type

8.6.1. Percentage of Farms of Different Types by Township/Town

According to the 1996 Census of Agriculture, classification of farms into different "farm types" is done by estimating the potential receipts from the inventories of crops and livestock for each farm. The commodity or group of commodities that account for more than 51% of potential farm receipts determines the farm type. Table 8.6 shows the percentages of different types of farms (i.e. dairy, beef, field crop, etc.) found in individual townships/towns in the County.

As a way to illustrate areas of relative focus for different townships and towns, Table 8.7 indicates, with shading/bolding, where the percentage of a particular type of farm was greater than the percentage for the province as a whole. The table should be read left to right to determine areas of focus for each township or town. It should be noted that the table presents only numbers of farms, which does not reflect farm size or economic impact of the type of farm on the County economy.

From the table, we can see a few highlights for Simcoe County when compared to Ontario. Types of farming for which Simcoe townships and towns appear to have a **greater focus** than the province include:

- **beef farming**, especially in the northern townships of Ramara, Severn, Oro-Medonte, Tiny and Tay (only Bradford West Gwillimbury, Innisfill and New Tecumseth have a lower level of focus in beef farming)
- miscellaneous speciality farms, especially Tiny, Tay and Severn townships
- field crop farming, especially in New Tecumseth, Severn, Ramara and Essa
- vegetable production, particularly in Bradford West Gwillimbury, where 36% of farms are used for vegetables, and Innisfill
- grain/oil seed, particularly in New Tecumseth

The types of farming for which Simcoe appears to have a **smaller focus** than other parts of the province include:

- dairy farming (except in Springwater and Tay, where there is a higher proportion of dairy farms that the province)
- poultry, and
- fruit (except Clearview, where there is a relatively high level of apple production)

8.6.2. Township/Town Percentage of Total Number of Farms in Simcoe County, by Type of Farm

Table 8.8 provides a different picture of the types of farms in Simcoe County than that presented in Table 8.7. For each type of farm, the percentage of total farms in the County was calculated for each township/town. Each column in the table shows the relative share that each township/town has of the County's total number of farms of that particular crop or livestock. As in Table 8.6, this does not reflect farm size, scale of production or level of sales. Figures of 12% or more are shown in bold.

Some highlights from Table 8.8 are:

- 47% of the County's dairy farms are in Springwater, Clearview and Oro-Medonte
- 46% of the beef farms are in Clearview, Ramara and Oro-Medonte
- 60% of the hog farms are in Clearview and Springwater
- 52% of the poultry/egg farms are in Adjala-Tosorontio and Clearview
- 31% of the wheat farms are in Adjala-Tosorontio and another 45% are in New Tecumseth, Bradford West Gwillimbury and Essa combined
- 47% of the grain/oilseed farms are in Clearview, New Tecumseth and Springwater
- 50% of the fruit farms are in Clearview

- 57% of the vegetable farms are in Bradford West Gwillimbury

The number of farms classified as "field crop", "miscellaneous" and "livestock mixed" are evenly distributed among the townships and towns in the County.

Table 8.6: Percentage of Farms of Different Types in Simcoe County Townships/Towns, 1996

	Dairy	Beef	Hog	Poutry / Egg	Wheat	Grain/ Oilseed	Field Crop	Fruit	Misc. Specialty	Livestock Mixed	Vege-table	Other Mixed	Total
	14%	**24%**	**4%**	**3%**	**1%**	**20%**	**8%**	**3%**	**14%**	**3%**	**2%**	**2%**	**100%**
Simcoe County	10%	**32%**	3%	1%	1%	10%	**9%**	2%	**21%**	3%	**5%**	3%	**100%**
Adjala-Tosorontio	7%	**33%**	1%	**4%**	2%	10%	**10%**	0%	**25%**	4%	1%	3%	**100%**
Clearview	9%	**35%**	**6%**	2%	0%	10%	7%	**5%**	**18%**	4%	2%	2%	**100%**
New Tecumseth	6%	21%	1%	1%	1%	**23%**	**14%**	1%	**25%**	3%	3%	2%	**100%**
Springwater	**17%**	**26%**	**5%**	2%	0%	14%	6%	1%	**18%**	4%	1%	**4%**	**100%**
Bradford W. Gwill.	8%	9%	2%	1%	1%	16%	4%	2%	**16%**	4%	**36%**	2%	**100%**
Severn	10%	**41%**	1%	1%	0%	3%	**11%**	0%	**26%**	**5%**	0%	3%	**100%**
Innisfill	8%	22%	2%	1%	0%	18%	7%	2%	**25%**	4%	**10%**	3%	**100%**
Ramara	13%	**55%**	1%	1%	0%	1%	**11%**	0%	14%	1%	1%	4%	**100%**
Essa	12%	**30%**	4%	1%	1%	13%	**11%**	1%	20%	1%	0%	**7%**	**100%**
Oro-Medonte	10%	**39%**	1%	0%	0%	5%	**10%**	2%	24%	2%	4%	2%	**100%**
Tiny	9%	**36%**	2%	1%	0%	6%	**10%**	2%	28%	1%	2%	**5%**	**100%**
Tay	**19%**	**34%**	0%	1%	0%	1%	**9%**	1%	27%	1%	4%	0%	**100%**

Note: This table is to be read left to right

Table 8.7: Townships/Towns by Percentage of Total County Production of Selected Crops and Livestock, 1996

	Dairy	Beef	Hog	Poultry / Egg	Wheat	Grain/ Oilseed	Field Crop	Fruit	Misc.	Live-Stock Mixed	Vege-table	Other Mixed
Adjala-Tosorontio	6%	9%	3%	**26%**	**31%**	8%	9%	0%	10%	11%	2%	9%
Clearview	**13%**	**17%**	**35%**	**26%**	8%	**15%**	**12%**	**50%**	**13%**	**18%**	7%	10%
New Tecumseth	4%	5%	2%	3%	**15%**	**15%**	11%	3%	8%	6%	3%	4%
Springwater	**21%**	10%	**25%**	**16%**	8%	**17%**	9%	8%	10%	**15%**	2%	**19%**
Bradford W. Gwill.	6%	2%	7%	3%	**15%**	**12%**	3%	8%	6%	11%	**57%**	6%
Severn	6%	8%	2%	6%	0%	2%	8%	0%	8%	10%	0%	6%
Innisfill	5%	4%	5%	3%	0%	11%	5%	8%	8%	8%	**12%**	6%
Ramara	8%	**12%**	2%	3%	0%	0%	8%	0%	5%	3%	1%	9%
Essa	8%	7%	10%	6%	**15%**	9%	9%	3%	7%	3%	0%	**16%**
Oro-Medonte	**13%**	**17%**	7%	0%	8%	7%	**16%**	**13%**	**16%**	11%	11%	9%
Tiny	4%	6%	3%	3%	0%	3%	6%	5%	7%	1%	2%	9%
Tay	5%	3%	0%	3%	0%	0%	3%	3%	4%	1%	2%	0%
Total	**100 %**	**100 %**	**100 %**	**100%**	**100%**	**100%**	**100%**	**100%**	**100 %**	**100%**	**100%**	**100%**

Note: This table is to be read **top to bottom** to determine the relative share that each township/town has of the County's total production (as measured by number of farms) in a particular crop or livestock.

8.7 Major Crop and Livestock

The following sections provide a more detailed analysis of the trends in Simcoe County with respect to livestock, crops and fruits and vegetable production. Where possible, the trend in Simcoe is compared to the trend for the province and the industry over the same period.

8.7.1 Livestock Profile for Simcoe County

Table 8.8: Profile of Livestock in Simcoe County, 1986 to 1996[7]

Type	Number in 1986	Number in 1991	Number in 1996	% Change 1986 to 1991	% Change 1991 to 1996
Chicken	738,040	642,664	601,428	-12.9%	-6.4%
Turkeys	122,714	59,930	56,244	-51.2%	-6.2%
Beef Cattle	22,500	20,727	25,736	-7.9%	+24.2%
Dairy Cattle	13,000	12,156	10,785	-6.5%	-11.3%
Swine (Pigs)	83,900	66,297	63,794	-21.0%	-3.8%
Sheep	11,800	16,830	17,150	+42.6%	+1.9%
Horses	N/A	3,369	4,074*	N/A	+20.9%
Goats	1,455	1,473	2,628	+1.2%	+78.4%
Rabbits	N/A	3,413	2,287	N/A	-33.0%
Mink	N/A	46,695	32,509	N/A	-30.4%
Deer & Elk	N/A	N/A	1,429	N/A	N/A
Bees	N/A	3,679 colonies	3,092 colonies	N/A	-16.0%

* Estimates determined through the Ontario Horse Industry Survey 1993-1995 bring this number much higher, to 13,139 horses.

Observations:

As displayed in Table 8.9, compared to livestock numbers in other counties in the province of Ontario, Simcoe is one of the **leading counties** for goats, beef cattle, horses, sheep and deer &

[7] Based on profiles provided by the OMAFRA field office in Midhurst

elk. Areas where information sources suggest there is potential for further growth are sheep, goats and beef cattle, while further reductions are anticipated for the poultry and dairy industries in Simcoe. Further details are provided in the following sections.

Goats: Simcoe County had the second highest number of goats among all counties in Ontario and almost 6% of the total number of goats in Ontario and 14% of those in Western Ontario. Only Wellington County (with 3,845) had more. The Townships with the largest numbers of goats are Springwater and Clearview. There was a large increase in the population of goats in Simcoe between 1991 and 1996. The increase can be attributed to an increase in demand for goat milk, particularly for the goat cheese market, which is growing in both Canada and the U.S. A new processing plant is being built in Orangeville that is within easy access of Simcoe County farms. Milk prices paid to farmers are also either increasing or remaining steady.

The demand for goat meat has been steady in the province. One key informant observed that there has been increasing demand for goat meat in the Toronto area, given the increasing diversity of ethnic groups in the area, including immigrants from the Caribbean and India. Although Simcoe County itself is still largely comprised of people originating from European countries, the Toronto area market is nearby.

Beef Cattle: In 1996, Simcoe County had the fourth highest number of beef cattle of all counties in the province, behind Dufferin, Bruce and Renfrew Counties. An estimated 5.8% of beef cattle in Ontario and 15% of the beef cattle in Western Ontario are located in Simcoe, with the highest cattle population being in Oro-Medonte, Clearview, and Ramara Townships. Between 1991 and 1996, there was an increase of 24%, following an 8% decrease in number over the previous five year period.

For the past two years (1997-1998), however, beef farming in Ontario has been affected by high grain prices, as well as by hay shortages which have made hay expensive to purchase. In this highly competitive sector, this would affect farms with smaller herds, where the cost of inputs could become excessively high relative to the potential return from holding on to the herd. The current trend for the province (in 1998) is characterized by declining numbers of beef cattle.

Dairy Cattle: Compared to the other counties in Ontario, Simcoe has the 14th largest number of dairy cattle, representing 2.7% of the total number in Ontario and 8.1% of the total number in Western Ontario. The largest numbers of dairy cows in Simcoe are found in Springwater, where there are 2,364 head. Meanwhile, in terms of county shipments of milk to milk processing plants, Simcoe was 16th in the province, having shipped 59,517 kiloliters of milk in 1997.

The number of dairy cattle in Simcoe has **decreased** by over 11% from 1991 to 1996, reflecting the general trend in Ontario (-8.6% from 1991 to 1996). This was stimulated, in part, by the movement toward reducing or eliminating subsidies for dairy producers, as reflected in the most recent General Agreement on Tariffs and Trade (GATT). Other factors contributing to the decline in number of dairy farms are the high average age of dairy farmers (therefore more wanting to retire), and high quota values which make it appealing to sell dairy quota. Higher prices for grains and oilseeds have also led some producers to diversify their operations.

Horses: Based on the 1996 Census of Agriculture, Simcoe was third in the province and second in Western Ontario in terms of numbers of horses. An estimated 5.3% of the horses in Ontario are being raised in Simcoe, and 14.2% of those in Western Ontario. Oro-Medonte, Clearview and Adjala-Tosorontio have the highest numbers of horses in the County. An alternative study - the Ontario Horse Industry Survey - was conducted in 1993-1995. The study gave much higher numbers for horses throughout the province. That survey determined that Simcoe was sixth in the province, with 13,139 horses, representing 4.5% of all horses in the province and 12% of those in Western Ontario.

From 1991 to 1996, there was an over 20% increase in numbers of horses in Simcoe, which reflects the strong and increasing demand in the province for sport horses and pleasure & hobby horses. The racing industry has remained steady over the past few years, although some racing facilities have closed. Meanwhile, the horse meat industry has experienced a decline since 1989.

Pigs: Simcoe has the 10th highest number of pigs in the province, or 2.2% of the total number in Ontario. The number of pigs decreased by 21% between 1986 and 1991, but then only decreased slightly between 1991 and 1996. Over the 1986 to 1996 period, prices for hogs fluctuated from as high as $1.88 per kg. (in 1989) to as low as $1.29 (in 1993)[8]. Between January 1996 and August 1997, hog prices climbed steadily, partly due to increasing demand in Asia. However, the recent economic problems experienced in many Asian countries have caused the prices for pork to drop dramatically in 1998. At the time of writing this report, the federal and provincial governments are exploring options for assisting pork producers, some of whom face serious financial circumstances due to the drop in revenue.

There has been a trend in Southern Ontario toward construction of larger facilities for hogs, accommodating 2,000 to 4,000 pigs, for greater economies of scale. The largest areas of pig production are in Innisfill, Clearview and Springwater. Key informants in Simcoe County reported that there were several new large barns in the area, although the exact number is not known. One of the concerns regarding large swine operations in Ontario is the increasing pressure from rural residents to restrict the siting of pig barns, largely due to displeasure over the smell of pig manure. Consequently, some townships in Ontario have enacted bylaws, which restrict the siting of pig barns, and require swine producers to have sufficient land for spreading manure.

Sheep: Numbers of sheep in Simcoe have been increasing since 1986, with the greatest increase between 1986 and 1991. Simcoe County was the third largest sheep-producing county in Ontario, with 7.4% of the total number of sheep. In Western Ontario, which has 46% of the total number of sheep in Ontario, Simcoe has 16% of the total number, behind Grey with 23% and Bruce with 18.5%. The Townships with the highest numbers of sheep are Clearview and Oro-Medonte.

Generally, breeding stock numbers for sheep declined by 8.5% in Ontario between 1991 and 1996, but this represented a smaller decline than most other sheep producing provinces in Canada. The biggest competition in the sheep industry has been from Australia and New

[8] Commodity prices were provided by the Farm Credit Corporation

Zealand. Imports of lamb increased by 19% between 1996 and 1997. At the same time, however, exports of Ontario lamb to the United States and Mexico increased in 1997 by 68%[9]. The potential for increased exports to Mexico would suggest there is good potential for growth in this industry in Simcoe.

Deer and Elk: In 1996, there were approximately 300 deer farmers and 25,000 deer in Ontario. Simcoe County deer farmers raise 9% of the deer and elk in the province, and 30% of those in Western Ontario. With 1,429 deer in 1996, Simcoe was second only to Prescott-Russell County. In Simcoe, there are 15 deer and elk farms, found mainly in Oro-Medonte and Springwater Townships. The Ontario deer industry grew rapidly from 1986 to 1991, but then experienced slower growth due to the general weak economy and uncertainty over proposed changes to the Game and Fish Act. Nevertheless, domestic demand for farmed venison is currently high and sale of breeding stock for export has been good.

Chickens: Simcoe has not been a leader among the counties in terms of numbers of hens and chickens, having only the 18th largest number, well behind the leading regions of Niagara, Haldimand-Norfolk, Hamilton-Wentworth, Halton, Wellington and Peel. Only 1.7% of the chickens in Ontario, and 4.2% of those in Western Ontario, were being raised in Simcoe in 1996. As for production, Simcoe produced 5,007,189 kg. of broilers, roaster and Cornish hens in 1996, representing 1.8% of the total production for the province. The areas in Simcoe with the largest numbers of chickens are Clearview and Adjala-Tosorontio.

Between 1986 and 1996, there was a **decline** in numbers of chickens in Simcoe. This is different from the overall trend for Ontario where numbers of chickens **increased** by 11% from 1986 to 1991 and by 4.5% from 1991 to 1996. Despite the decline, a key informant observed that the poultry industry in Simcoe has been experiencing a slight turn-around over the past two years.

Turkeys: Simcoe is 13th among all Ontario counties, in terms of its turkey population. It has 1.6% of the total number in Ontario and 5.8% of those in Western Ontario. Adjala-Tosorontio had the highest number of turkeys in 1996. Between 1991 and 1996, there was a decrease by 6.4% in the number of turkeys in Simcoe, following a dramatic decline in numbers of over 50% between 1986 and 1991. This is not consistent with the trend in Ontario as a whole, where numbers have increased steadily since 1976.

8.7.2 Profile of Crops in Simcoe County

Table 8.10 presents the areas of different crops in Simcoe County in 1991 and 1996, as well as the change in acreage from 1991 to 1996. It also includes the percentage that the area of a particular type of crop in Simcoe comprises relative to the total area for that crop in Ontario and Western Ontario.

Table 8.9: Profile of Crops in Simcoe County

[9] Anita O'Brien, "State of the Ontario Sheep Industry Report, 1997. OMAFRA Web Site.

Type	Area in 1991 (acres)	Area in 1996 (acres)	% Change 1991 to 1996	% of total area for crop in Western Ontario (1996)	% of total area for crop in Ontario (1996)
Oats	7,733	4,102	**-47.0%**	**18.6%**	4.2%
Barley	30,643	24,713	-19.4%	13.9%	7.4%
Mixed Grain	19,230	12,177	**-36.7%**	6.7%	4.4%
Corn (Grain)	43,286	54,804	+26.6%	9.7%	2.9%
Corn (Silage)	10,234	9,522	-7.0%	7.4%	3.2%
Wheat	28,879	34,850	+20.7%	12.9%	4.5%
Field Beans	6,485	6,071	-6.4%	9.8%	5.6%
Potatoes	10,099	12,304	+21.8%	**61.0%**	**30.8%**
Canola	8,710	7,242	-16.9%	16.2%	13.6%
Soybeans	22,188	43,910	**+97.9%**	9.2%	2.3%
Hay	117,369	121,253	+3.3%	**19.9%**	4.4%

Observations:

Soybeans: Of all the field crops in Simcoe, soybeans experienced the largest increase in area between 1991 and 1996, with an almost 100% increase in acreage. This is consistent with the trend for the province as a whole, where the increase in acreage was 104% from 1986 to 1991 and 36% from 1991 to 1996.

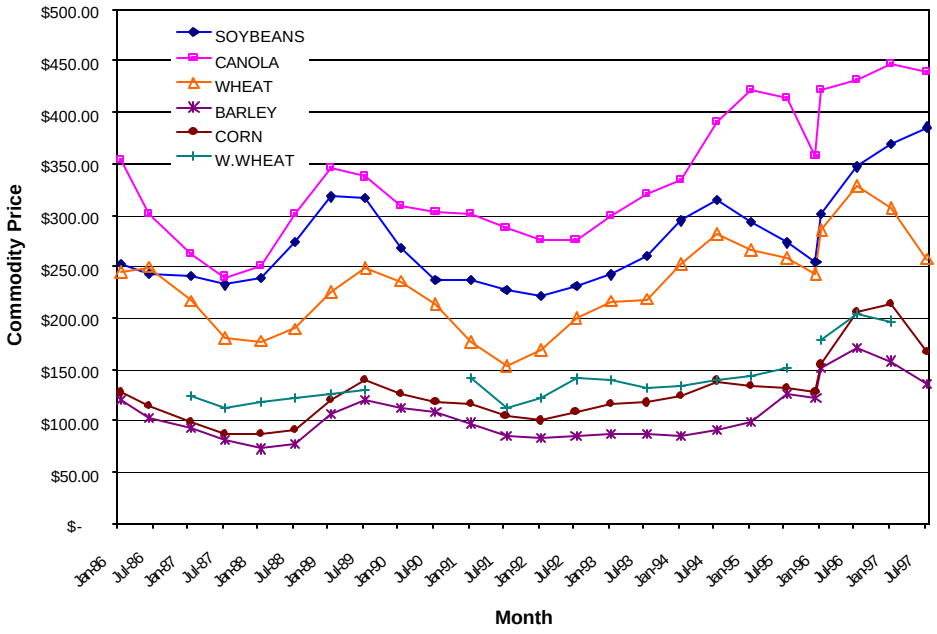
The increase in soybean crops can be attributed to the increasing demand for soybean products with resulting increases in commodity prices for soybeans over the past ten years (Figure 8.8). Equally important is the fact that there is a relatively low cost of inputs for producing soybeans compared to other field crops. Soybeans can be left to dry on the field and so do not require extra drying, like wheat or corn. As well, being legumes, soybeans fix nitrogen and therefore do not require nitrogen fertilizers, as do other field crops.

The largest acreages of soybeans are located in the southern towns of New Tecumseth and Innisfill and the Township of Springwater. The high level of production in South Simcoe is a reflection of a number of factors, including good markets, soil type, soil fertility and drainage. Soybeans have also been grown successfully in North Simcoe. Members of the North Simcoe Soil and Crop Improvement Association have conducted soybean variety trials for over 15 years.

Cereal crops (oats, barley, mixed grain) have declined in production in Simcoe, mainly because it is not as economical to grow them as other crops, like soybeans. Prices for cereals are currently low and the yield per acre is not high enough to offset the low prices. In the province as a whole, acreage in mixed grain **declined** by 30% from 1991 to 1996, while oats declined by 47% and barley declined by 32%.

Production of oats has experienced the greatest decline, which is partly attributed to current preference of oats processing companies for large volumes of uniformly high quality oats, which they import from the United States and Western Canada. Oats in Simcoe are generally grown on smaller farms and the quality of the oats is variable due to the susceptibility of the oats to rust, particularly in the eastern half of the County. Farmers who do grow oats in Simcoe tend to use the oats for feed for horses and other livestock, although this too is declining.

Figure 8.8: Commodity Prices for Crops 1985 to 1997



Source: Farm Credit Corporation, Guelph, Ontario

Potato cultivation is concentrated in the Alliston area in South Simcoe, where the extensive sandy soils are well suited to growing potatoes. Simcoe County is the leading potato producer in the province, with over 30% of total production, and has experienced an increase in acreage under production of 22% between 1991 and 1996. Meanwhile, the trend for the province has been a steady increase in potato production over the past 15 years.

Corn and Wheat (both spring and winter wheat) have both increased in acreage in Simcoe. The 20% increase in wheat production is attributed partly to continuing favourable prices and the fact that farmers can also use their crop for straw. The province as a whole has seen an increase in acreage for wheat of over 74% from 1991 to 1996, mainly for Winter Wheat and Spring Wheat. Over the same period, the acreage in corn increased by 26% in Simcoe, but remained relatively steady for the province.

Canola production decreased in Simcoe between 1991 and 1996, despite continuing high prices for Canola since 1985. One of the reasons for the decline is that farmers are starting to switch to soybean production because of the higher potential revenues from soybean production, partly because of more consistent yields. The trend for Ontario as a whole has been a decline in Canola production, with a 42.5% decrease in acreage from 1986 to 1991 and a 17.2 % decreased from 1991 to 1996.

Canola is a cool season crop, so it is better suited to cooler areas in northern part of Simcoe County. However, the largest areas of production are in Clearview and Springwater Townships, where it is possible to experience a hot and dry season, which can have a negative impact on Canola production.

8.7.3. Profile of Fruits and Vegetable Production in Simcoe County

Table 8.10: Fruits and Vegetables in Simcoe County

Type	Area in 1991	Area in 1996	% Change 1991 to 1996	% of Area for Crop in Western Ontario (1996)	% of Area for Crop in Ontario (1996)
Strawberries	250 acres	271 acres	+12.6%	21.7%	4.9%
Apples	1,149 acres	951 acres	-17.2%	7.7%	2.1%
Sweet Corn	963 acres	1,260 acres	**+30.8%**	12.3%	2.4%
Onions	1,776 acres	1,704 acres	-4.1%	**95.0%**	**28.0%**
Carrots	1,847 acres	2,234 acres	+21.0%	**93.0%**	**28.0%**
Nursery Crops	2,072 acres	2,772 acres	**+33.8%**	**35.0%**	10.6%
Greenhouse Crops	679,090 sq.ft.	1,382,830 sq.ft.	**+103.6%**	20.8%	2.2%
Maple Syrup	45,734 taps	57,043 taps	+24.7%	13.3%	5.1%
Sod	6,564 acres	3,467 acres	**-47.2%**	**59.0%**	14.7%
Christmas Trees	N/A	5,807 acres	N/A	**71.9%**	40.1%

Observations:

As indicated in Table 8.11, Simcoe is one of the **leading** counties in the province for certain types of **vegetable production**, particularly carrots and onions, for which Simcoe has over 28% of the acreage under production in the province. The County is in an excellent location for vegetable/horticultural production for the large Toronto market. Good soils, climate and transportation access make market gardening and other similar activities attractive and successful.

The only counties in Ontario that have larger areas than Simcoe of vegetable production are Kent (13.6% of the total vegetable production in Ontario), Middlesex, Essex, Haldimand-Norfolk, and York.

One of the best areas for growing vegetables is the Holland Marsh, in Bradford West Gwillimbury (BWG), which has almost 50% of the total acreage in vegetables and 57% of the vegetable farms in the County. The Holland Marsh is within a 30-minute drive of Toronto, providing easy access to a huge market. BWG grows 100% of the County acreage in celery, 92% of the lettuce, 89% of the green onions, 69% of the carrots, 63% of the cauliflower and 59% of the dry onions. The other area for carrots and onions is Innisfill, while for sweet corn and squash, the major producer in Simcoe is Oro-Medonte. Clearview Township grows about 68% of the cabbages.

The area of production increased between 1991 and 1996 for most fruits and vegetables in Simcoe, except for apples (-17%), and onions (-4%).

Simcoe had the **ninth** largest area of **greenhouse crops** in the province in 1996, with 2.2% of the total area. In Western Ontario, Simcoe had 21% of the total area. The leading counties are Essex, with 30% of total area of greenhouses in Ontario, and Niagara, with 21%. Among the different crops in Simcoe, greenhouse crops experienced the largest increase in area, with an increase of over 100%.

In terms of sod production, Simcoe had 59% of the total acreage in Western Ontario in 1996, even following a decrease in acreage of almost 50% between 1991 and 1996.

Simcoe also has one of the largest areas for **Christmas trees** in the province. It has 21% of the total acreage in the province for Christmas trees and about 55% of the acreage in Western Ontario. As shown in Table 8.12, the largest areas in Christmas tree production are in Adjala-Tosorontio and Tiny.

Table 8.11: Simcoe County Christmas Tree Production, 1996

Township	Acreage in Xmas Trees 1996
Adjala-Tosorontio	637

Township	Acreage in Xmas Trees 1996
Tiny	628
Essa	365
Oro-Medonte	304
Springwater	123
Clearview	98
Tay	42
Severn	39
Innisfill	33
New Tecumseth	32
BWG	27
Ramara	21

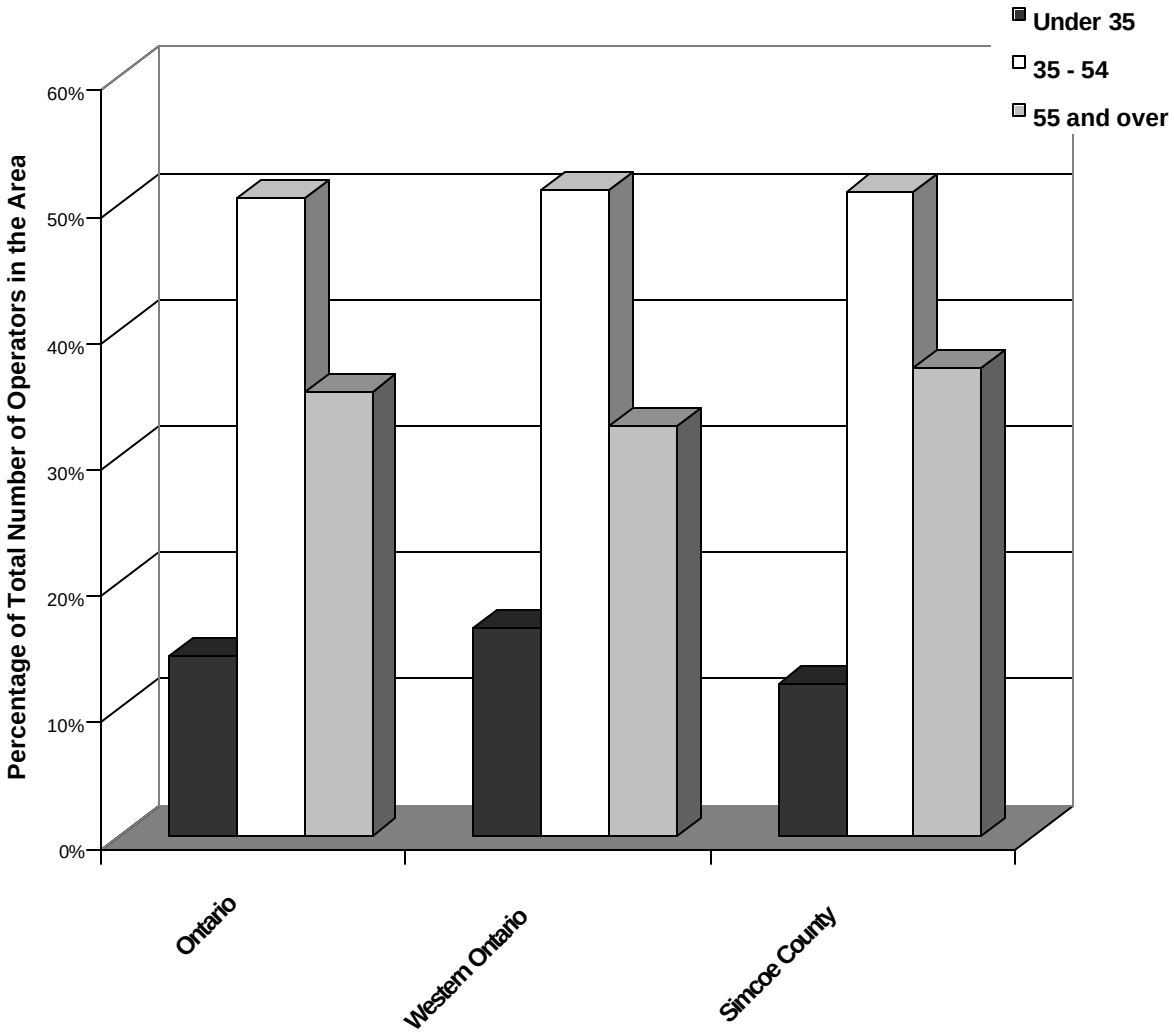
8.8 Characteristics of Farm Operators

Farm operators are defined by the 1996 Census of Agriculture as "those persons responsible for the day-to-day management decisions made in the operation of a census farm of agricultural operation". The following sections provide a profile of the characteristics of farm operators in Simcoe County.

8.8.1 Age and Gender

In 1996, the average age of farm operators in Simcoe County is 50. This is slightly older than the average age for farm operators in Ontario (49) and Western Ontario (48) (refer to Figure 8.9). Of the total number of farm operators in 1996, 26% were female, which is consistent with the level for the province as a whole. Among the townships and towns, the values for average age and percentage of female operators do not vary very much. Average ages ranged from 49 to 51 and the percentage of female operators varied from a high of 31% in Tay Township, to a low of 23% in Springwater. However, there is no evident trend either by geography or farm type.

Figure 8.9: Age of Farm Operators in Simcoe County, Western Ontario and Ontario, 1996



8.8.2 On-Farm Hours

Based on Simcoe farmer's responses to the 1996 Census of Agriculture, we can observe that:

- 29% of Simcoe County farmers worked less than 20 hours per week on their farm operations,
- 25% worked 20-40 hours, and
- 43% worked more than 40 hours per week.

This is consistent with the situation for the province as a whole. The only township where there was a significant variation was Bradford West Gwillimbury, where 61% of farmers reported working more than 40 hours on the farm.

8.8.3 Off-Farm Work

The Census of Agriculture also revealed that, in 1996:

- 6% of Simcoe County had under 20 hours per week of off-farm paid work,
- 14% had 20-40 hours of off-farm paid work, and
- 13% had more than 40 hours of off-farm work.

Table 8.12: Off-Farm Work of Farm Operators in Simcoe County, by Township/Town, 1996

Township/Town	% of farm operators with 20 - 40 hours of off-farm paid work	Township/Town	% with more than 40 hours of off-farm work
Severn	23%	Ramara	20%
Ramara	17%	Severn	17%
Oro-Medonte	17%	Tay	15%
Tiny	17%	Essa	15%
Innisfil	15%	Tiny	13%
Tay	15%	Simcoe	13%
Ontario	14%	Clearview	13%
Simcoe	14%	Oro-Medonte	12%
Adjala-Tosorontio	14%	Adjala-Tosorontio	12%
Springwater	13%	Ontario	11%
Clearview	12%	Springwater	11%
New Tecumseth	12%	New Tecumseth	10%
Essa	11%	Innisfil	8%
Bradford West Gwillimbury	6%	Bradford West Gwillimbury	8%

This is consistent with the provincial figures. Within Simcoe County, it is possible to see a pattern among the townships in terms of off-farm work, as shown in Table 8.13:

- there is a relatively high percentage of farmers with 20 or more hours per week of off-farm work in the northern townships of Severn, Ramara, Tiny and Tay
- there are consistently low percentages of farmers with off-farm work in Bradford West Gwillimbury (where a high percentage of farmers work more than 40 hours per week on the farm), New Tecumseth, and Springwater.

This indicates that farmers in the northern parts of Simcoe work more hours off-farm, while those in the south work relatively fewer off-farm hours. This may be attributed to higher

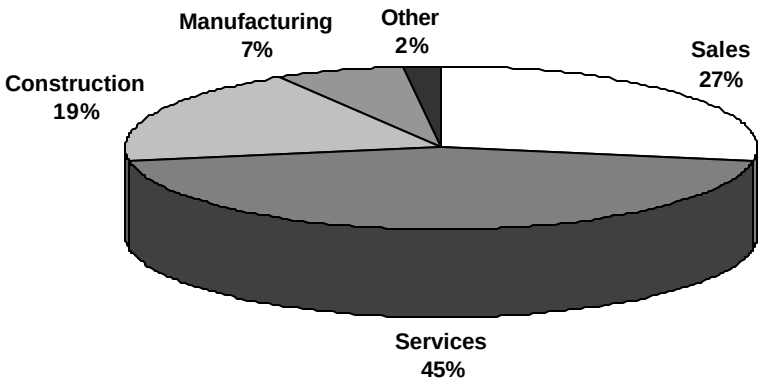
productivity and better relative access to markets in the south, which make farming more profitable than in the north, where farmers may need to work off-farm to supplement farm revenue. As will be seen later in this report, the average farm gate sales in southern Simcoe are higher than in the north.

8.8.4 Non-Farm Businesses

In 1996, 18% of farm operators in Simcoe also operated a business not related to the farm operation. The highest percentages of farmers who did so were in Essa (23%), Tay (23%) and New Tecumseth (22%), while the lowest proportions of farmers with non-farm businesses were in Ramara (11%), Severn (13%), and Springwater (15%).

The main type of non-farm business operated by Simcoe farmers was "services", which comprised 45% of the non-farm businesses. The next most frequent type of business was "sales" (27%), followed by construction (19%), manufacturing (7%) and others (2%) (refer to Figure 8.10).

Figure 8.10: Non-Farm Businesses Operated by Farmers in Simcoe County, 1996



8.9 Financial Indicators

The following sections present several different indicators of the financial status of Simcoe County farms, including farm gate sales, operating expenses and farm capital.

8.9.1 Farm Gate Sales

For farm gate sales (or "gross farm receipts"), Simcoe County ranked 13th among all counties in Ontario in 1996, and 6th in Western Ontario, with approximately **$265 million in sales**. For the province, Huron County led in sales, with $512 million, followed by Haldimand-Norfolk, Middlesex, Kent, Perth, Oxford, Niagara, Wellington, Essex, Lambton, Waterloo and Bruce. The relative positions of counties in Western Ontario are presented in Table 8.14.

Table 8.13: Total Farm Gate Sales and Sales Per Acre, Western Ontario Counties, 1996

County	Total Farm Gate Sales, 1996, in Descending Order	County	Farm Gate Sales Per Acre, in Descending Order
Huron	$511,918,855	Waterloo	$ 1,286
Perth	$430,255,814	Halton	$ 1,184
Wellington	$373,123,953	Perth	$ 843
Waterloo	$301,384,956	Wellington	$ 770
Bruce	$280,182,130	Huron	$ 698
SIMCOE	**$264,884,681**	Peel	$ 642
Grey	$213,375,796	SIMCOE	$ 481
Halton	$129,313,767	Bruce	$ 446
Dufferin	$79,733,210	Dufferin	$ 359
Peel	$77,086,032	Grey	$ 355

In terms of **farm gate sales per acre**, Simcoe slips to 7th place in Western Ontario, behind Waterloo, Halton, Perth, Wellington, Huron and Peel. Halton Region moves from eighth position to second, reflecting the high level of productivity of the farms in that region.

Within the County, we observe the following highlights (Table 8.15 and Figure 8.11):

- the highest total farm gate sales were in Clearview (over $48 million), followed by Springwater ($41 million) and Bradford West Gwillimbury ($36.7 million)
- the top four townships for farm gate sales have 57% of the total sales in the County
- the highest farm gate sales per acre are in Bradford West Gwillimbury, where sales per acre ($1,031) are twice as high as the sales per acre for the County as a whole ($481)

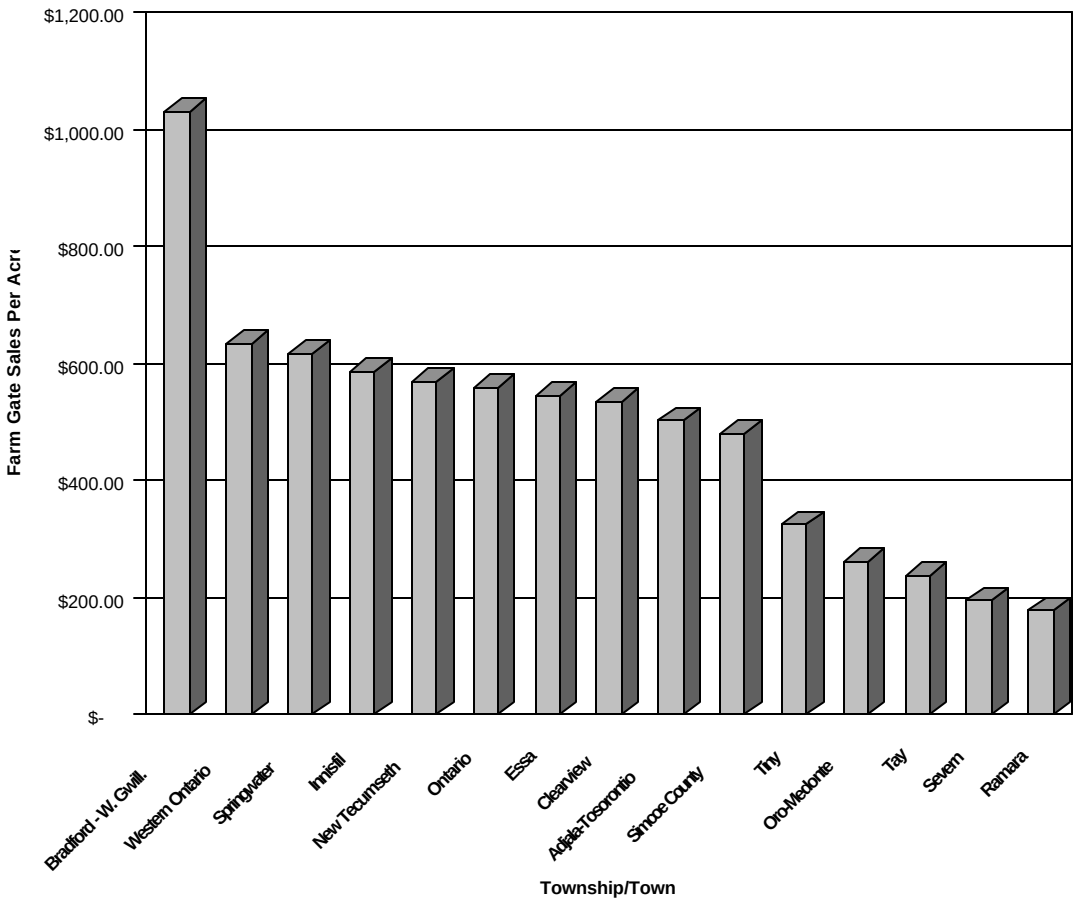
- the lowest total farm gate sales and sales per acre are in the five northernmost townships (Ramara, Severn, Tiny, Tiny, Oro-Medonte)

Table 8.14: Total Farm Gate Sales and Sales Per Acre, Simcoe Townships/Towns, 1996

Region	Farm Gate Sales	Region	Sales Per Acre
Ontario	$7,778,476,483	Bradford - W. Gwill.	$1,031
Western Ontario	$2,661,259,194	Western Ontario	$635
Simcoe County	$264,884,681	Springwater	$618
Clearview	$48,361,104	Innisfil	$587
Springwater	$41,181,282	New Tecumseth	$570
Bradford - W. Gwill.	$36,682,938	Ontario	$560
New Tecumseth	$25,301,530	Essa	$546
Adjala-Tosorontio	$25,062,797	Clearview	$536
Innisfil	$24,277,593	Adjala-Tosorontio	$504
Essa	$21,496,726	Simcoe County	$481
Oro-Medonte	$16,209,817	Tiny	$325
Ramara	$9,565,119	Oro-Medonte	$262
Tiny	$7,384,735	Tay	$238
Severn	$6,204,730	Severn	$195
Tay	$3,156,310	Ramara	$179

The high total sales for Clearview and Springwater reflect the fact that they have among the highest numbers of farms and area in farmland of all the townships. The high sales per acre in the southern towns reflect their high productivity, especially in horticultural and vegetable production, and relatively good access to markets.

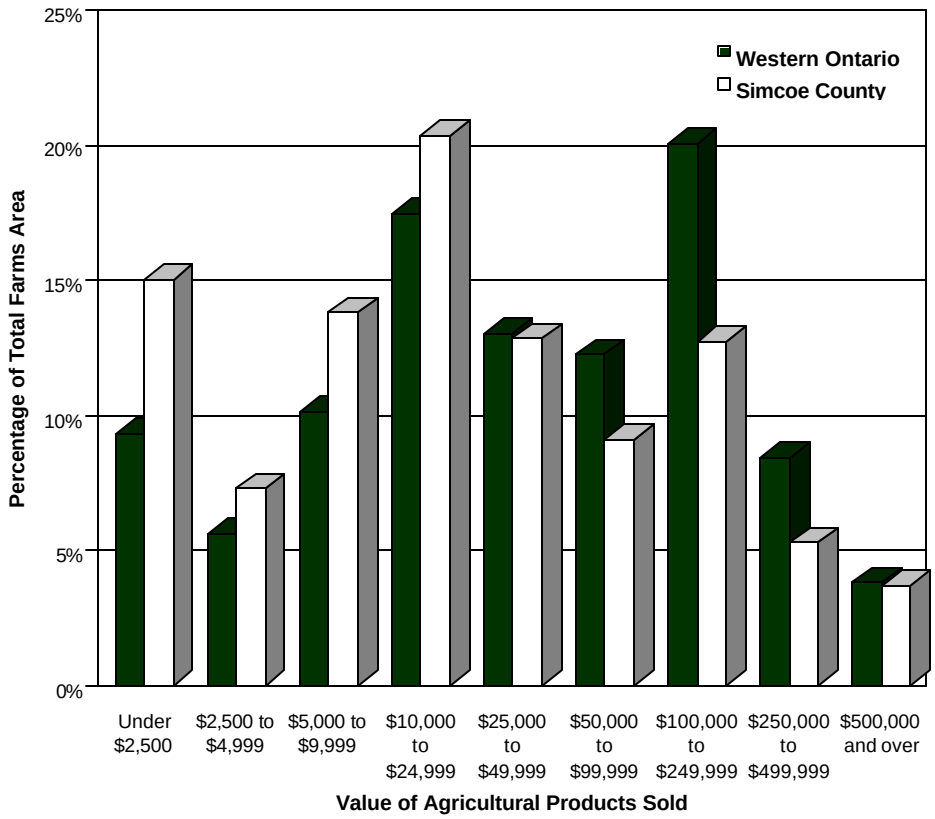
Figure 8.11: Farm Gate Sales Per Acre in Simcoe County, by Township/Town, 1996



Source: Calculated from data in the Statistics Canada Census of Agriculture 1996

As shown in Figure 8.12, Simcoe has a relatively **higher** percentage of farms with sales **under $25,000** compared to the rest of Western Ontario. An estimated 56% of Simcoe County farms

had sales under $25,000, while 42% of farms had sales under $25,000 in Western Ontario as a



whole. Meanwhile, 22% of farms in Simcoe had sales of $100,000 or more, compared to 32% for Western Ontario. This reflects the relatively high number of small farms in Simcoe County, attributed to the higher focus on vegetable production, which tends to be carried out on smaller farms.

Figure 8.12: Percentage of Farms by Total Value of Sales, 1996

Source: Calculated from Statistics Canada Census of Agriculture, 1996

For the County as a whole, total farm gate sales increased by 25% from 1986 to 1991 and by only 4% from 1991 to 1996. Over the period from 1986 to 1996, there was a 29.6% increase in farm gate sales.
To provide an estimate of the changes in farm gate sales for individual townships/towns from 1986 to 1996, the figures for the townships/towns in 1986 were combined according to the geographic amalgamations that occurred between 1986 and 1996. This does not give an accurate estimate of the changes, since the amalgamations did not always entail the simple joining of townships (i.e. in some cases small parcels of land were annexed from other townships). However, it provides a rough picture of the changes.

As presented in Table 8.16, there was a wide variation in changes in farm gate sales from 1986 to 1996 among the townships and towns. These changes ranged from an increase of 75% in Clearview Township to a decrease of 13% in Adjala-Tosorontio.

Table 8.15: Percentage Change in Farm Gate Sales 1986 to 1996, by Township/Town

Township/Town	Total Farm Gate Sales, 1986	Total Farm Gate Sales, 1996	% change 1986-1996
Clearview	$27,693,336	$48,361,104	75%
Severn	$3,572,876	$6,204,730	74%
Tiny	$4,463,656	$7,384,735	65%
Bradford - W. Gwill.	22,302,600	$36,682,938	64%
Innisfil	$14,917,870	$24,277,593	63%
Essa	$15,304,190	$21,496,726	40%
Ramara	$6,907,153	$9,565,119	38%
Simcoe County	$204,396,414	$264,884,681	30%
Springwater	$37,220,470	$41,181,282	11%
New Tecumseth	$23,220,120	$25,301,530	9%
Tay	$3,044,751	$3,156,310	4%
Oro-Medonte	$17,080,472	$16,209,817	-5%

Township/Town	Total Farm Gate Sales, 1986	Total Farm Gate Sales, 1996	% change 1986-1996
Adjala-Tosorontio	$28,668,920	$25,062,797	-13%

8.9.2 Farm Operating Costs

Farm operating costs represent one of the **contributions** farms make to the larger community, through purchase of goods and services. In 1996, the total operating costs for Simcoe County farms were $235.5 million. Between 1986 and 1991, farm expenditures increased dramatically in Simcoe, by 116%, while from 1991 to 1996, the increase was much lower, at 12% (Figure 8.13).

In 1996, the average operating cost per farm in Simcoe was $84,921 (per farm reporting), or $427.88 per acre. This is lower than the cost per acre in Ontario ($472 per acre), and roughly, 20% lower than the cost per acre for farms in Western Ontario ($542 per acre).

The cost per acre was calculated for different operating expenses for Simcoe County, Western Ontario and Ontario as a whole (Table 8.17), by dividing the total operating expenses by the total farm acreage for each area. Based on these calculations, the following observations can be made:

- Simcoe has relatively **high costs per acre** for: farm machinery, crop expenses, packaging materials and telecommunications (compared to both Western Ontario and Ontario)

- Simcoe has relatively **low costs per acre** for: insurance premiums, livestock expenses, custom/contract work, farm interest, electricity, fuel for heat and drying and repair and maintenance of buildings and fences

Figure 8.13: Total Farm Expenditures, Simcoe County, 1986, 1991 and 1996

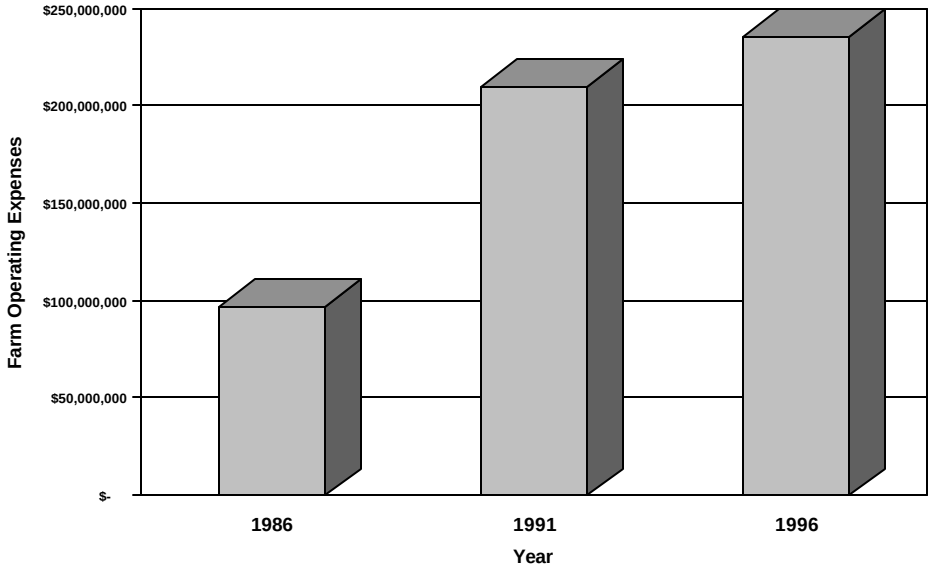


Table 8.16: Operating Costs Per Acre for Simcoe, Western Ontario and Ontario, 1996

Type of Expense	Ontario	Western Ontario	Simcoe County
Rent/Leasing Land/Buildings	$15.43	$15.11	$15.18
Wages/Salaries	$62.71	$49.29	$60.36
Insurance	$15.40	$14.41	$13.91
Machinery (repair/maintenance)	$38.86	$39.49	$41.39
Crop Expenses	$60.38	$53.99	$65.44
Packaging Materials	$7.00	$4.60	$7.52
Livestock Expenses	$142.72	$228.41	$112.34
Custom/Contract Work	$17.78	$18.44	$11.80
Farm Interest	$30.17	$33.80	$25.47
Telecommunications	$3.30	$3.43	$3.66
Electricity	$12.96	$13.65	$11.77
Fuel for Heating/Drying	$6.78	$4.73	$ 4.35
Building/Fence Maintenance	$11.70	$12.69	$10.03
Other Expenses	$46.40	$49.48	$44.64

Source: Calculated from Census of Agriculture data, 1996

The high crop expenses and low livestock expenses reflect the relatively high number of vegetable and potato farms, and associated production costs, in Simcoe County, compared to the rest of the province.

Within Simcoe County, the townships with the highest ***total operating costs*** in 1996 are those with the highest numbers of farms and area of farmland, as well as the highest total farm gate sales: Clearview, Springwater and Bradford West Gwillimbury (Table 8.18). These four townships/towns had 57% of the total expenditures for the County.

In terms of operating costs **per acre**, however, Bradford West Gwillimbury has by far the highest operating costs per acre ($870). The costs per acre appear to be higher in the more southern townships and lower in the northern townships (Table 8.18 and Figure 8.14).

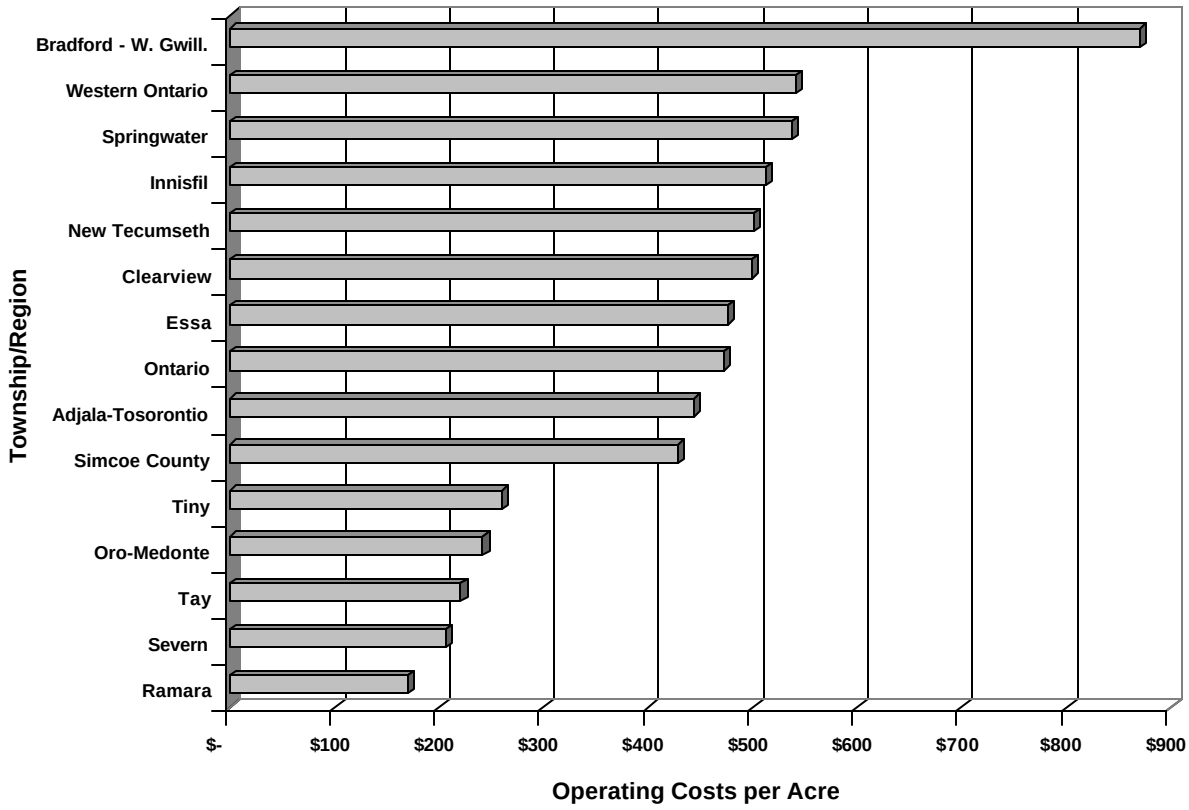
Table 8.17: Total Operating Expenses and Operating Costs Per Acre, Simcoe County, by Township, 1996

Township/Region	Total Operating Expenses	Township/Region	Operating Costs Per Acre
Clearview	$44,988,833	Bradford - W. Gwill.	$870
Springwater	$35,786,947	Springwater	$537
Bradford - W. Gwill.	$30,933,653	Innisfil	$513
New Tecumseth	$22,226,895	New Tecumseth	$501
Adjala-Tosorontio	$22,104,003	Clearview	$499
Innisfil	$21,250,078	Essa	$476
Essa	$18,727,789	Ontario	$472
Oro-Medonte	$14,981,367	Adjala-Tosorontio	$444
Ramara	$9,110,866	Simcoe County	$428
Severn	$6,540,155	Tiny	$260
Tiny	$5,904,709	Oro-Medonte	$242
Tay	$2,931,442	Tay	$221
Simcoe County	$235,486,737	Severn	$206

Ontario	$6,545,516,325	Ramara	$171

Source: Calculated from Census of Agriculture data, 1996

Figure 8.14: Farm Operating Costs Per Acre for Townships in Simcoe County, 1996



For selected expenses, the costs per acre were calculated for each township or town in the County. These figures are presented in Table 8.19. Some of the highlights from the Table are:

- Bradford West Gwillimbury (BWG) has the highest costs per acre for every farm expense except livestock expenses (reflecting the township's specialization in vegetable production)

- BWG spends almost four times as much on wages/salaries ($231.80 per acre) than the average for the County ($60.36) and the province as a whole ($62.71)

- The five southern towns of Adjala-Tosorontio, New Tecumseth, BWG, Innisfill and Essa have relatively high costs per acre for rent/leasing, wages/salaries, farm machinery and crop expenses

- Clearview Township has by far the highest cost per acre ($249) for livestock expenses, followed by Springwater Township ($147)

Table 8.18: Operating Costs Per Acre for Selected Farm Expenses, 1996

Region	Rent, Leasing Land & Buildings	Wages & Salaries	Insurance Premiums	Farm Machinery	Crop Costs	Livestock Expenses	Repairs & Maintenance of Buildings & Fences
Ontario	$15.43	$62.71	$15.40	$38.86	$ 60.38	$142.72	$11.70
Western Ontario	15.11	49.29	14.41	39.49	53.99	228.41	12.69
Simcoe County	15.18	60.36	13.91	41.39	65.44	112.34	10.03
Adjala-Tosorontio	21.55	79.75	14.37	50.43	82.66	66.54	8.77
Clearview	9.31	36.89	13.67	34.98	46.83	249.04	9.01
New Tecumseth	28.26	98.14	13.26	53.75	109.77	65.79	9.87
Springwater	17.44	58.79	14.64	44.47	103.20	147.48	12.79
Bradford - W. Gwill.	38.93	231.80	28.34	91.41	134.60	78.02	17.13
Severn	4.75	18.45	12.08	26.41	14.84	61.92	8.33
Innisfil	18.30	89.52	15.37	46.75	95.76	109.23	11.13
Ramara	7.18	11.62	6.94	17.19	9.87	64.56	4.76
Essa	20.95	67.45	15.66	47.43	90.83	109.21	11.43
Oro-Medonte	5.40	14.90	11.81	29.03	25.32	69.30	9.60
Tiny	5.71	31.17	10.53	33.99	34.33	54.80	9.26
Tay	4.40	15.53	11.80	29.01	19.17	57.19	10.40

8.9.3. Farm Capital

Farm capital includes the value of all farmland, buildings, farm machinery and equipment, as well as livestock and poultry. The values given for farm land, buildings and machinery is based on each farmers' assessment of the value, while the value for livestock and poultry inventories are calculated based on commodity prices.

In 1996 the total farm capital value for Simcoe County was over 1.8 billion dollars, a decrease of 29% from 1991, when it was $2.55 billion, but an overall 54% increase from 1986, when it was $1.17 billion. Between 1986 and 1991, total farm capital value increased by 118%, reflecting the real estate "boom" during that period, when land values increased dramatically. Similarly, the 29% decline in farm capital value between 1991 and 1996 reflects the real estate "bust" during that period, when land values fell.

Relative to other counties in Western Ontario, Simcoe had the third highest **total farm capital** value, behind Huron County and Perth County (Table 8.20). In terms of **farm capital per acre**, Simcoe County had the sixth highest value ($3,283). Peel County had the highest average capital value, at $9,174 per acre, followed by Halton at $7,120 per acre, reflecting high land values in the Greater Toronto Area.

Table 8.19: Total Farm Capital and Farm Capital Per Acre, Western Ontario, 1996

Region	Total Farm Capital	Region	Farm Capital Per Acre
Huron	$2,103,700,000	Peel	$9,174
Perth	$1,924,800,000	Halton	$7,120
Simcoe	$1,806,800,000	Waterloo	$4,754
Wellington	$1,754,100,000	Perth	$3,772
Grey	$1,227,100,000	Wellington	$3,620
Bruce County	$1,177,600,000	Simcoe	$3,283
Waterloo	$1,114,300,000	Huron	$2,866
Peel	$1,101,100,000	Dufferin	$2,826
Halton	$777,400,000	Grey	$2,044
Dufferin	$627,800,000	Bruce County	$1,876

Source: Calculated from data in the 1996 Census of Agriculture

Within the County, the highest level for total farm capital in 1996 was in Clearview Township. This Township had the highest number of farms in the County, as shown in Table 8.21. Clearview had 14% of the total farm capital for the County. The lowest levels of farm capital are found in the northernmost townships of Severn, Ramara, Tay and Tiny, where there are the fewest numbers of farms.

In terms of Farm Capital **per acre**, the highest level is in Bradford West Gwillimbury ($4,929 per acre), followed by the other four towns in South Simcoe: Innisfill, New Tecumseth, Essa and Adjala-Tosorontio. This is a reflection of higher land values in the southern part of the County. Clearview Township, which had the highest total farm capital, has the fourth lowest level of farm capital per acre ($2,752).

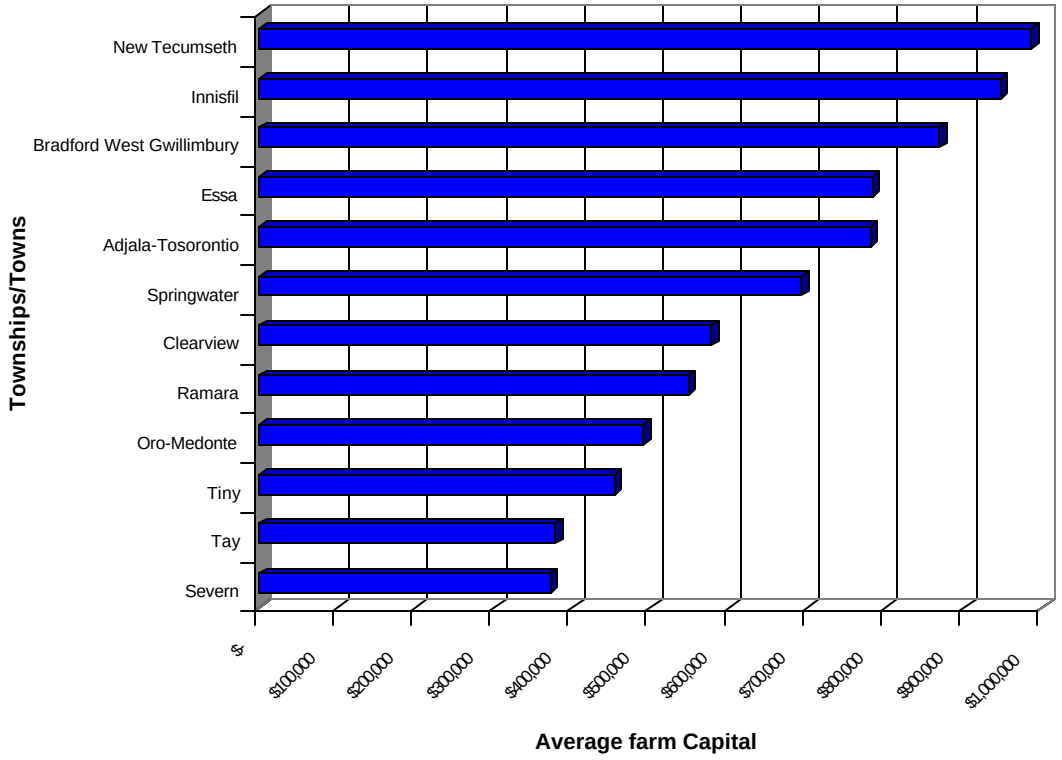
Table 8.20: Farm Capital for Simcoe County Townships/Towns, 1996

Township/Region	Total Farm Capital - Market Value $	Township/Region	Farm Capital Per Acre
Ontario	$40,860,936,035	Bradford West Gwillimbury	$4,929
Western Ontario	$13,614,649,740	Innisfil	$4,117
Simcoe County	$1,806,775,122	New Tecumseth	$3,930
Clearview	$248,366,362	Essa	$3,737
Springwater	$234,821,702	Adjala-Tosorontio	$3,625
Oro-Medonte	$190,983,576	Springwater	$3,525
Adjala-Tosorontio	$180,399,672	Tiny	$3,333
Bradford West Gwillimbury	$175,361,590	Simcoe County	$3,283
New Tecumseth	$174,491,150	Western Ontario	$3,247
Innisfil	$170,363,860	Oro-Medonte	$3,087
Essa	$147,142,102	Ontario	$ 2,944
Ramara	$104,692,154	Clearview	$2,752

Tiny	$75,651,234	Tay	$2,624
Severn	$69,678,575	Severn	$2,190
Tay	$34,823,144	Ramara	$1,961

Source: Calculated from data in the 1996 Census of Agriculture

Figure 8.15: Average Farm Capital for Townships/Towns in Simcoe County, 1996



In terms of **average farm capital**, the leading areas in Simcoe County are the southern towns of New Tecumseth, Innisfill, Bradford West Gwillimbury and Essa. The lowest average farm capital values are found in northern townships of Tiny, Tay, Oro-Medonte and Severn (Figure 8.15). The highest percentage of farms with capital value over $500,000 are also found in the southern towns. In Bradford West Gwillimbury, for example, almost 60% of the farms have a capital value of $500,000 or more, while in Severn Township in the north, less than 20% of the

farms have a capital value of $500,000 or more. By far the largest capital input in Simcoe County is land and buildings, both owned and rented or leased.

Computerization

Compared to the province and Western Ontario, Simcoe County has similar levels of computer use for farm management, at 20% of the total number of farms. Halton Region had the highest percentage of farms with computers (25%), while Grey County had the lowest, at 16%. To a large extent the counties with higher levels of computer use are also those with higher average farm receipts, or higher productivity, as presented in the previous section.

In 1991 331 farms in Simcoe reported using computers for farm management. This number increased to 554 for the 1996 Census, representing an increase of 67% over the five years.

9.0 Issues and Challenges for the Agricultural Economy in Simcoe County

Agriculture is thriving in Simcoe County relative to other counties in Western Ontario and to the province as a whole. Although it has been shown that farmers in South Simcoe have higher levels of sales per acre than those in North Simcoe, farm gate sales for the entire County are generally high, operating costs are moderate and farmers have easy access to a vast market in the Greater Toronto Area and the United States. Unlike the provincial trend, farm numbers and area have increased in Simcoe over the past five years. This may indicate that the sector is growing. Average farm sizes have increased to achieve greater economies of scale. Farm operators are diversifying to meet the challenges of increasing competition and fewer government subsidies and most areas of production are reporting growth. At the same time, the resources available to farm operators have increased. Numerous formal and non-formal education opportunities are available to Simcoe County farmers, and agricultural advisors are conveniently located in Midhurst.

However, certain issues will have an impact on the agricultural sector over the next ten years.

9.1 Agriculture vis-a-vis the community

The main issue affecting the development of the agricultural sector in Simcoe County is the potential conflict for land with other sectors of growth, particularly residential development and the expansion of manufacturing. Prime agricultural lands are protected through policies contained in the Simcoe County Official Plan. However, this may not be enough to curb the annexation of agricultural land to accommodate industrial growth in the Barrie and Alliston areas, as well as residential growth extending north from the GTA. As demand for land increases, the value and cost of buying or leasing land will increase, which will increase the cost of operating a farm in the County.

With competition for land comes competition for water resources for differing needs. In the areas of manufacturing and residential growth, the demand for water will increase, which will

mean less water will be available for irrigated agriculture, unless an effective agreement is reached between rural and urban communities.

Another form of urban-rural conflict that has already arisen in Simcoe is the pressure from settlements in the growth area of South Simcoe to have controls on the siting of swine operations and other livestock intensive operations. The main issue here is the increasing displeasure with the strong smell from manure that emanates from the farms. In some parts of the province, local communities have passed by-laws to prevent the siting or expansion of pig farms to within a certain distance of the community. Contamination of water sources is also a concern. This presents a barrier to expansion for the farm operators.

Another issue that will affect agriculture is the increasing concern for the environment. There will be increasing pressure for farm operators to use nutrient and pest management approaches that are ecologically sound. This will require increased knowledge and training in appropriate methods, such as integrated pest management. Moreover, using more environmentally appropriate methods will increase the costs of production.

9.2 Trends Affecting Agriculture

The key provincial and national trends affecting agriculture in Simcoe County are:

- increasing urbanization, which reduces availability of land for agricultural purposes;
- reduced government subsidies for dairy and poultry, which forces producers to be more efficient and productive;
- increasing competition from American and other producers;
- continuing low pay for agricultural workers and increasing costs of land and farm capital, which discourages young people from entering agriculture; at the same time, there is increasing demand for higher paid workers in bio-technology and agri-business
- the average age of farm operators is increasing, which means there will soon be many farmers wanting to retire; However, there will be a challenge to ensure that retiring farmers receive an appropriate return on their investment while at the same time making entry into farming affordable for younger farmers
- advances in bio-technology, selective feeding and breeding, but farmers need to have easy access to that information in order to compete with other producers domestically and globally
- fluctuating commodity prices, which require farm operators to be alert to market changes and diversify their operations so as not to depend on one commodity;

- with increased competition, there is an increasing need for technological advances and highly skilled workers, as well as marketing skills for farm operators

Although the numbers of people working on the farm has decreased over the past ten years, the off-farm related sectors are more important than ever. For example, international and domestic demand for higher value products has resulted in growth in agri-business and value-added sectors. As the demand for value-added production increases, there will be an increase in need and support for primary production. Part II of this study will explore the area of agriculturally related businesses in Simcoe County, to determine the impact that agriculture has on the overall economy of the County.

Part 2 of this report explores the area of agriculture-related businesses in Simcoe County and provides an estimate of the impact of agriculture on the overall economy.

10.0 Economic Impact Analysis: An Overview

Economic impact analysis studies are aimed at identifying "... changes in a local economy resulting from a stimulus (positive or negative) to a particular segment of the economy" (Davis, 1990, p. 5). These studies are often based on one of the several standard methodologies of regional analysis; economic base analysis and input-output analysis (Faas, 1980, p. 4). Economic impact is generally a measure of the impact of a sector or a project on all sectors of the economy.

10.1 Input-Output Analysis

Input-Output (IO) analysis is used to measure the inter-relationships between economic activities at the sectoral, national and regional levels. Linkages are expressed by estimating the sales (outputs) from a given sector to all other sectors in the economy, and by estimating the inputs from all other sectors to a specific sector. What makes the IO model so useful is the comprehensiveness of the model which disaggregates the economy into individual sectors (Josling, 1966, p. 5). Disaggregation permits analysis at the sectoral level, providing researchers with a close-up view of the economy. This analysis allows the researcher to assess where each sector purchases its inputs and sells its outputs. Such analysis is invaluable in identifying what investment will provide the greatest impact on an economy (Poole et al., 1994, p. 30).
The I-O model estimates the movement of expenditures through the economy. This is traced through four different levels of expenditure: intermediate and primary suppliers, and intermediate and primary purchasers (Bendavid-Val, 1991, p. 88). Suppliers - intermediate and primary - purchase inputs for processing into outputs. Purchasers - intermediate and primary - buy outputs from suppliers and either use them to manufacture a product, or sell them as a final product (Bendavid-Val, 1991, p. 88).
Input-output analysis has two main approaches. One allows the estimation of only the direct and indirect effects of a sector. The other estimates these, as well as the induced effects of a sector. The open model is used to trace the flow of variables between sectors of the economy (i.e., direct and indirect expenditures). The open model does not measure induced spending in the economy; meaning expenditures by employees on food, services and other household expenses (Davis, 1990, p. 59). The closed model is used to measure all aspects of the economy; including the direct, indirect and induced effects. Treating the household sector as a producer that sells labour to other purchasing sectors assesses induced effects (Davis, 1990, p. 59).
There are several problems associated with the I-O model. The first is that it is time-specific. In other words, it takes a snapshot of the economy in time. This model cannot account for changes in product demand or input costs, or for the introduction of new technology into the industrial sector (Davis, 1990, p. 62). Thus, the I-O model does not adjust for the changing nature of the economy. A second problem of the I-O model is the cost and time needed for the construction of the tables associated with this analysis. For this reason, the analysis for this study has been carried out using a survey-based "input-output-like" approach.

10.2 Economic Base Approach

Economic base theory maintains that economic growth is only possible if the economy's exports grow (Bradfield, 1988,p. 38). The theory is based on the belief that as exporting industries expand their sales, there will be an increasing demand for inputs locally which will consequently drive local economic growth (Bradfield, 1988, p.39). In economic base theory, the economy is classified into two sectors of basic and non-basic. The basic sector includes industries that ultimately export their product out of the region. The non-basic sector is the economic activity with final sales remaining inside the region (Davis, 1990, p.10). These are support industries that provide everything from industrial inputs to houses for basic sector employees (Higgins and Savoie, 1995, p. 66). The exporting industries are identified as basic sectors while all other industries are classified as non-basic.

According to economic base theory, exports are the engine of the local economy. It follows, then, that the export of goods supports all other aspects of the economy (Bendavid-Val, p.77). Economic base theory and its supporters carry the separation of basic and non-basic sectors to the point where they attempt to predict the relative impact of the basic sector on the non-basic sector. The prediction of economic impact is assessed through two economic indicators known as the economic base ratio and economic base multiplier. Economic base theory has been refined to the point where it can be questioned: "[W]hat is the overall gain in employment or income in the region associated with each gain in export sales?" (Bendavid-Val, 1991, p.78). This question is answered through the economic base ratio indicator and the base multiplier indicator (Bendavid-Val, 1991, p.78). The economic base ratio calculates jobs that are theoretically created from one additional job in the basic sector. The economic base ratio is the ratio between employment in the basic and non-basic sectors and is supported by the idea of basic employment and non-basic employment combined equaling total employment (Bendavid-Val, p.78). The economic base multiplier is the ratio of total employment to basic employment and indicates how many jobs in total are created for each basic job. Thus, the economic base multiplier is the total sum of the jobs created in both sectors from one job in the basic sector (Bendavid-Val, p.78). The economic base method is used in this study to estimate jobs in the service sector related to agriculture.

10.3 Multipliers

Given the previous discussion of input-output analysis and economic base analysis, the reader may question where the application of the two models leads. One of the best uses is that they allow the analyst to identify the impacts of economic changes or shocks to a system.

Essentially, what these models do is measure the multiplier effects that result from a change in an economic system. In basic terms, multiplier effects are the summation of the direct, indirect and induced impacts of economic activity presented in a single number (Lewis et al., 1979, p. 1). Therefore, an economic multiplier can be used to estimate the impact of change in one variable (for example, the value of agricultural production) on another variable (for example, the value of non-agriculture production). Direct employment and production in the agriculture sector will affect the rest of the economy by supporting employment in related industries as well as in the retail sector. In this way, "...a multiplication of transactions occurs in the economy by people re-spending money" (Van Hoeve, 1995, p. 66).

The multipliers calculated for this research include a sales expenditure multiplier and an employment multiplier.

11.0 Simcoe Agriculture Related Business Survey Methodology

Initial research for the Simcoe Agriculture Related Business survey started in September 1998. The economic impact of agriculture in the county was measured through an accounting of the total sales and employment of agriculture and related businesses in the study area. This work involved a review of the primary data from Statistics Canada's 1996 Population Census of Canada and 1996 Agricultural Census to study the direct economic impacts of agriculture on Simcoe County. A telephone survey based 'input-output-like' approach was used to measure the indirect impacts. The survey group was businesses that sell products to or buy from farm enterprises and have at least 5 percent of their total sales or purchases related to agriculture. For example, a veterinarian practice which specializes in large animals (e.g. cattle, goats and sheep) would be included in the survey sample because the clinic would deal directly with farmers whereas a small animal practice (e.g. dogs, cats and other house pets). Similarly, businesses such as retail stores that purchase produce from a wholesaler would not be included because the business does not deal directly with the farmer. The definition used for agriculture related businesses are those businesses that buy or sell to farm enterprises. Sales to farm families for personal consumption are excluded from the indirect impact but are included later as 'induced' impacts.

The induced economic and employment impacts of the agriculture sector were also studied using primary data derived from 1996 Statistics Canada Census data.

11.1 Direct Impact Methodology

Data was taken from the 1996 Population Census of Canada and the 1996 Agricultural Census and yielded information on the economy of Simcoe County including general labour trends and population data. Where appropriate, data from earlier censuses were incorporated to examine long-term trends in employment and sales in the county.

11.2 Indirect Impact Methodology

The research method used to measure the indirect impacts was a survey-based 'input-output-like' approach. This was completed through a telephone survey conducted from November 1998 to March 1999. The method was originally developed for use in a similar survey in Huron County in 1996 (Cummings et al., 1998) and revised during another survey conducted in Prescott, Russell, Stormont, Dundas and Glengarry counties in Eastern Ontario (Cummings, Deschamps, 1999). The methodology was designed to identify the value of gross sales and the jobs produced by a sample of businesses related to agriculture. From this sample, an estimate was produced for the total population of agriculture-related businesses in Simcoe County. This in turn provided an estimate of the economic impact of these agriculture-related businesses in the area through indirect employment and sales.

11.2.1 Development of the Business Inventory and Survey Sample

The survey was based on a random sample of local businesses. The list of agriculture-related businesses was developed by collecting business names and contact information from a number of sources in the county: Municipal Offices (tax and planning departments), Chambers of Commerce, Business Directories, Economic Development offices, Simcoe Country Federation of Agriculture representatives, OMAFRA and telephone directories. The majority of businesses on the original list were verified through telephone calls to ensure that the business was still operating and was related to agriculture. Of the 573 businesses on the final list, 339 businesses were selected at random for the telephone survey. A sample size of 235 was estimated to be required in order to attain a 95 percent confidence level in the results. A higher number of businesses were surveyed because past experience had shown that some of the sample group would refuse to provide any information and other businesses would not release confidential data.

During the course of the telephone survey, respondents were asked to provide information regarding the total value of sales and employment figures for their business (refer to the questionnaire in Appendix A). They were also asked to estimate the percentage of sales related to agriculture. Of the 339 business surveyed 271 provided data on the value of sales and 336 provided employment data.

11.2.2 Total Gross Sales for Businesses Surveyed

Total gross sales for the businesses surveyed include sales related and unrelated to the agriculture sector. The sample included agriculture-related businesses that sell to and buy products from agriculture, but they may also sell to and/or buy from other sectors of the economy. Of the 246 businesses surveyed, $556 million in gross sales were reported. The average gross sales for individual businesses would be $2.3 million. The total agriculture-related sales for the surveyed businesses were approximately $246 million (Table 11.1), which would represent about 44% of the gross sales ($556 million). This is because the businesses surveyed have sales to a wide customer base including farmers and non-farmers.

11.2.3 Agriculture-related Sales for the Businesses Surveyed

As part of the telephone survey, respondents were asked to estimate the percentage of their sales or actual sales that were related to agriculture, either by providing products and/or services to farm businesses, or by purchasing products of agricultural origin. The businesses were asked to estimate thepercentage of agriculture related sales made within Simcoe County, within Ontario, within Canada and outside of Canada. The results are shown in Table 11.1.

Table 11.1: Total Agriculture Sales of the Businesses Surveyed

Sales for Surveyed Agriculture-Related Businesses (n = 271)	Agriculture-Related Sales	Percentage
Sales in Simcoe County	$167,009,465	43.5%
Sales in Other Ontario Counties	102,183,967	41.6%
Sales Outside Ontario	8,568,200	3.5%
Sales Outside Canada	28,063,940	11.4%
Total	**$245,825,572**	**100%**

11.2.4 Total Gross Sales for all Simcoe County Agriculture-Related Businesses

From the sample, estimates can be made regarding the total gross sales of all agriculture-related businesses in Simcoe County. These include sales both related and unrelated to agriculture. We have already found that there are 573 agriculture-related businesses in the county; a total of 246 of these businesses provided sales data. This sample represents 42.9 percent of the total agriculture-related businesses (246/573 X 100). In order to estimate total sales from the smaller sample sales, a multiple of 2.33 is used (573 total agriculture-related businesses divided by the sample size of 246) to calculate a total gross sales figure (agriculture and non-agriculture sales) of $1,295 million (2.33 X $556 million) **for all agriculture-related businesses in the county.**

It should be noted that sales data from financial institutions, such as banks and credit unions, were collected somewhat differently. Typically, their sales would be based on profits generated from loan interest and service charges paid by farm businesses. However, this information is difficult to obtain. A conservative estimate is that revenue from farm businesses would at least cover the salaries of employees providing services to farmers. Therefore, for the purposes of this study, 'sales' by financial institutions were based on the number of employees at the institution multiplied by an average salary of $40,000. Total sales were then estimated by multiplying the number of employees at the financial institution by the average salary.

11.2.5 Agriculture-Related Sales for all Agriculture-Related Businesses in Simcoe County

Total agricultural sales for Simcoe County can be derived using estimates of the agriculture-related sales generated by the businesses surveyed. Of the 573 businesses, 271 provided agriculture-related sales data. This 47.3 percent sample translates into a 2.11 multiplier. **In total, Simcoe agriculture-related businesses generated an estimated $519 million in agriculture-related sales.** This 2.11 multiplier is then used to provide an estimate of total sales by location of the sale in Table 11.2.

Table 11.2: Total Estimated Agriculture Sales of All Simcoe Agriculture-Related Businesses

Sales for Agriculture-Related Businesses (n = 271)	Agriculture-Related Sales of Survey Sample (A)	Multiplier (B)	Agriculture-Related Sales for All Simcoe Agriculture-Related Businesses (A X B)
Sales in Simcoe County	$167,009,465	2.11	$225,789,971
Sales in Other Ontario Counties	102,183,967	2.11	215,608,170
Sales Outside Ontario	8,568,200	2.11	18,078,903
Sales Outside Canada	28,063,940	2.11	59,214,913
Total	**$245,825,572**		**$518,691,957**

11.2.6 Number of Full-time Equivalent Employees Working at the Businesses Surveyed

The study separated the time spent by employees at the agriculture-related businesses into two categories. The first being that portion of the work which is directly related to agricultural sales and the second was the amount of work not related to agriculture. Data was collected on total full-time, part-time and seasonal employees and hours of work at a agriculture-related business which was then converted into full-time equivalents (FTE).[10]

In total, 250 of the businesses surveyed provided employment and sales data. The estimate for the total number of FTE jobs at the businesses surveyed is 2,644. This total includes all work done by employees at the businesses surveyed, regardless if the work was done on activities related to the agriculture sector. For the businesses surveyed, 977 FTE jobs were related to agriculture.

11.2.7 Number of Full-time Equivalent Employees Working in Agriculture-Related Businesses in Simcoe County

The total number of FTE jobs for all agriculture-related businesses, as well as the total FTE jobs that serve the agriculture sector can be derived from the sample. The number of respondents who provided employment and sales data (250) was divided into the estimate for the total agriculture-related businesses in the county (573), resulting in a multiplier of 2.29. From these values, the total number of FTE jobs for all agriculture-related businesses in Simcoe County can

[10] A full-time equivalent is based on 1,875 hours per year workload (7.5 hours per day X 5 days per week X 50 weeks per year).

be estimated at 6,055. **Of these, the number of FTE jobs serving the agriculture sector can be estimated at 2,237**.

11.3 Comparison to Other Economic Impact Studies

Two other similar agriculture-related business surveys have been conducted in (1) Huron County and (2) Prescott, Russell, Stormont, Dundas and Glengarry Counties. Sales and job figures are not directly comparable because of differences in size and characteristics of the study areas. However, the ratios between (1) farm gate sales and agriculture-related business sales and (2) farm based jobs and agriculture-related business jobs provides some insights into the importance of agriculture-related business compared to farm enterprises. Table 11.3 provides the comparison for sales whereas Table 11.5 does a similar comparison for jobs.

Table 11.3: Farm Gate and Agriculture-Related Business Sales for Three Study Areas

	Farm Gate Sales	Agriculture - Related Business Sales	Ratio
Simcoe	$264,884,681	$518,691,957	1.96
Huron	$511,918,855	$1,489,000,000	2.91
PRSD&G*	$364,496,609	$756,453,565	2.08

*Prescott-Russell and Stormont-Dundas-Glengarry

For Simcoe County, for every $1.00 of farm-gate sales there is a further $1.96 generated in agriculture-related business sales (Table 11.3). This is a similar findings to that of the counties in Eastern Ontario whereas Huron County had an additional $2.91 in agriculture-related business sales for every dollar in farm gate sales.
The ratio of agriculture-related business sales to farm gate sales is close for Simcoe and Eastern Ontario counties though both of them are considerably lower than the ratio for Huron county.

If one looks at how the three study areas compare in terms of the percentage of total sales which are related to agriculture and average agriculture sales per business, a number of observations can be made (Table 11.4). First the portion of sales that are agriculture related are fairly consistent between the three areas. However, the average agriculture sales per business vary greatly and tends to indicate that some of the Huron businesses are considerably larger in terms of sales than those in the other two areas.

Table 11.4: Total Sales, Agriculture-Related Sales and Average Sales for the Three Study Areas

	Total Sales for All Businesses (million)	Agriculture - Related Sales (million)	Percent Ag. Related Sales	Number of Agriculture-Related Businesses	Average Agriculture-Related Sales per Business
Simcoe	$1,307	$519	39.7%	573	$910,000
Huron	$3,700	$1,489	40.2%	775	$1,921,000
PRSD&G*	$1,795	$756	42.1%	1,117	$677,000

*Prescott-Russell and Stormont-Dundas-Glengarry

Table 11.5: Farm Gate and Agriculture-Related Business Jobs for Three Study Areas

	Farm Based Jobs	Agriculture – Related Business Jobs	Ratio
Simcoe	4,770	2,237	0.47
Huron	5,025	14,186	2.82
PRSD&G*	5,955	4,516	0.76

*Prescott-Russell and Stormont-Dundas-Glengarry

A surprisingly low ratio of agriculture-related business jobs compared to farm based jobs was found for Simcoe. Though agriculture-related business sales are somewhat lower for Simcoe than the Eastern Ontario counties, $518,69,957 versus $756,453,565, (refer to Table 11.6), the number of jobs in these Simcoe businesses is half those in the Eastern Ontario counties. These low number of FTE jobs in Simcoe suggest that an agriculture-related employee generates considerable more sales than in Eastern Ontario.

Table 11.6: Location of Agriculture-Related Sales for Three Study Areas

	Agriculture -Related Sales for Agriculture -Related Businesses		
Location	**Simcoe**	**Huron**	**PRSD&G**
Total Sales within County	**$225,789,971**	**$1,488,000,000**	**$692,691,770**
Sales in Other Ontario Counties	215,608,170	1,197,000,000	43,826,872
Sales Outside Ontario	18,078,903	784,000,000	11,122,114
Sales Outside Canada	59,214,913		8,812,809
Total Sales Outside County	**292,901,986**	**1,981,000,000**	**63,761,795**
Total	**$518,691,957**	**$3,469,000,000**	**$756,453,565**

A comparison of agriculture-related sales within each of the study areas versus those sales done outside shows that both Simcoe and Huron sell more outside their individual counties than inside. Simcoe County and Huron County agriculture-related sales to other counties, and outside the province are 56.5 percent and 57.1 percent of total agriculture-related sales respectively. The Eastern Ontario counties 'exports' are considerably lower at 8.4 percent.

11.4 Induced Impact Methodology

An examination of the induced effects of agriculture was conducted. Induced employment refers to service sector jobs supported by agriculture and agriculture-related jobs. 1996 Employment data from agriculture and manufacturing sectors were compared to service sector jobs in education, health and government services to estimate the number of induced jobs and sales for the Simcoe area.

12.0 Results

12.1 Introduction to Simcoe County's Results

This chapter presents the results of the study, including findings concerning the direct, indirect and induced impacts of agriculture and agriculture-related businesses on the economy of Simcoe. This chapter includes findings of an in-depth examination of the backward and forward linkages of agriculture-related businesses.

This research focuses on the economic impact of the agriculture sector and, more specifically, agriculture-related businesses in Simcoe County. Both primary and secondary data collection were undertaken; the primary research collection was an 'input-output-like' survey approach of agriculture-related businesses in the county. Further calculations of the induced and direct impacts were completed, based on the Population Census of Canada data. The analysis of the data indicates that the agriculture sector continues to be important to the economy of Simcoe County.

The purpose of the work was to identify the total economic impact of the agriculture sector in Simcoe County. While published data shows significant farm gate sales for the area, there was no evidence to prove the actual impact of the agriculture sector. Similarly, published data indicates that direct employment in agriculture in the county has continued on a downward trend. In the first part of this report, a profile was done of the county and the role of agriculture within the economy. However, this did not provide the full picture of the economic impact of agriculture to Simcoe County. The 'input-output-like' methodology was used to provide additional information on the indirect economic impact of agriculture.

12.2 Direct, Indirect and Induced Impact Results

12.2.1 Estimated Direct Sales and Jobs

Direct impacts refer to the value of sales and number of jobs created by the agriculture sector in the county. Direct sales are equivalent to the value of farm gate sales. In Simcoe County, the value of farm gate sales was $204.4 million in 1986. This figure increased **30** percent in 1996 to $264.9 million, and represents 3.0 percent of Ontario's total farm gate sales ($7,778.5 million).

In 1986 the agriculture sector contained 4,690 employees. This number includes farm owners, operators and labourers. In 1996, this number increased 2.0 percent to 4,770 employees.

12.2.2 Estimated Indirect Sales and Jobs

The indirect impacts of agriculture refer to the value of sales and number of jobs created by agriculture-related businesses in the county. An agriculture-related business is defined here as any business that sells to, or buys from, the agriculture sector. This study found that the value of indirect impacts created by these businesses is substantial.

12.2.2.1 Location of Agri-related Businesses in the Survey

The number of agriculture-related businesses for each township or town is shown in Table 12.1. Three townships; Bradford-West Gwillimbury, Clearview and New Tecumseth, contain a third of the total county's businesses.

Table 12.1: Number of Agriculture-Related Businesses for Simcoe Townships and Towns

Townships/Town	Number of Agriculture - Related Businesses
Adjala-Tosorontio	7
Barrie	41
Bradford-West Gwillimbury	65
Clearview	63
Collingwood	43
Essa	27
Innisfil	29
Midland	26
New Tecumseth	62
Orillia	32
Oro Medonte	44
Ramara	14
Severn	10
Springwater	51
Tay	28
Tiny	21
Wasaga	10
TOTAL FOR SIMCOE COUNTY	**573**

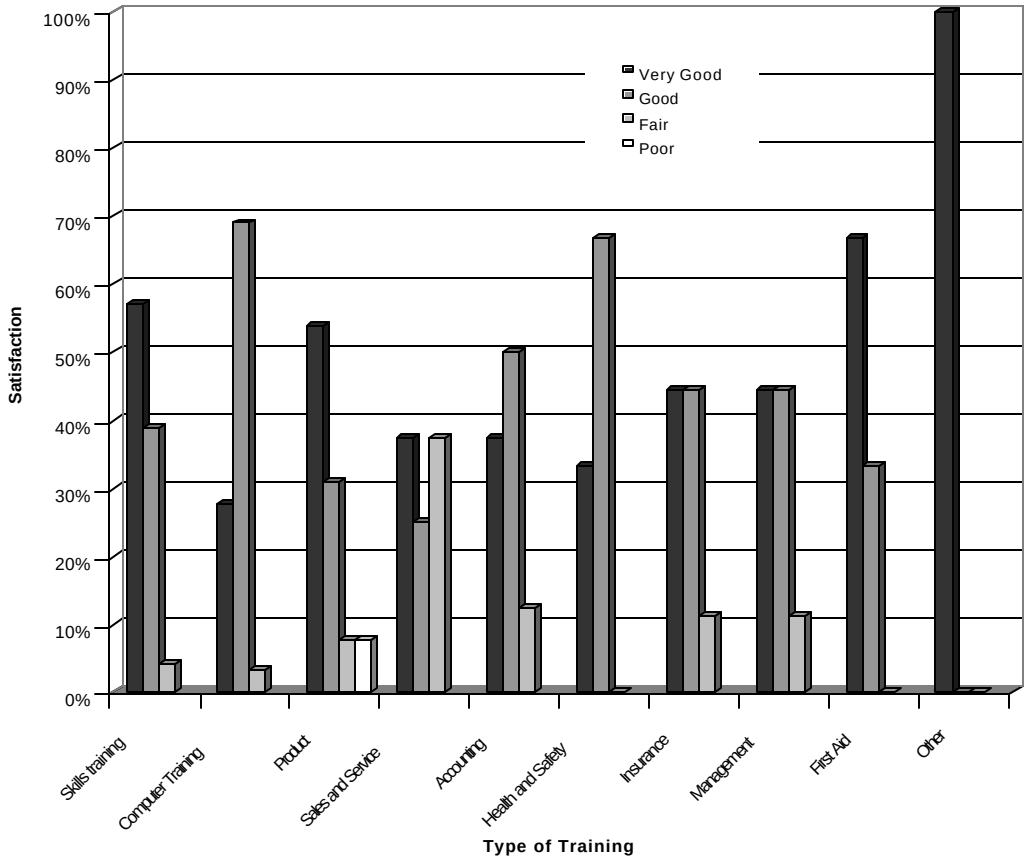
12.2.2.2 Characteristics of all the Businessess Surveyed

The common characteristic of all the businesses is that they have direct dealings with farm enterprises. More specifically, all of the businesses surveyed either sell products or services to, and/or buy products or services from agricultural producers. It is important to note that these agriculture-related businesses may also conduct trade with other sectors of the economy.

For the purposes of this study, the surveyed businesses were categorized according to their primary activity, using the Statistics Canada two digit Standard Industrial Classification (SIC) categories. This system separates Canadian businesses into eighteen divisions or sectors, such as 'Manufacturing', 'Retail Trade' and 'Agriculture and Related Service Industries'.

For the purposes of the agriculture-related business survey, businesses from three sectors, Education, Health and Government Services, were not directly surveyed but their economic impact were considered under induced impacts. Figure 12.1 illustrates the types of businesses in the county involved in agriculture.

Figure 12.1: Type of Businesses in Simcoe County



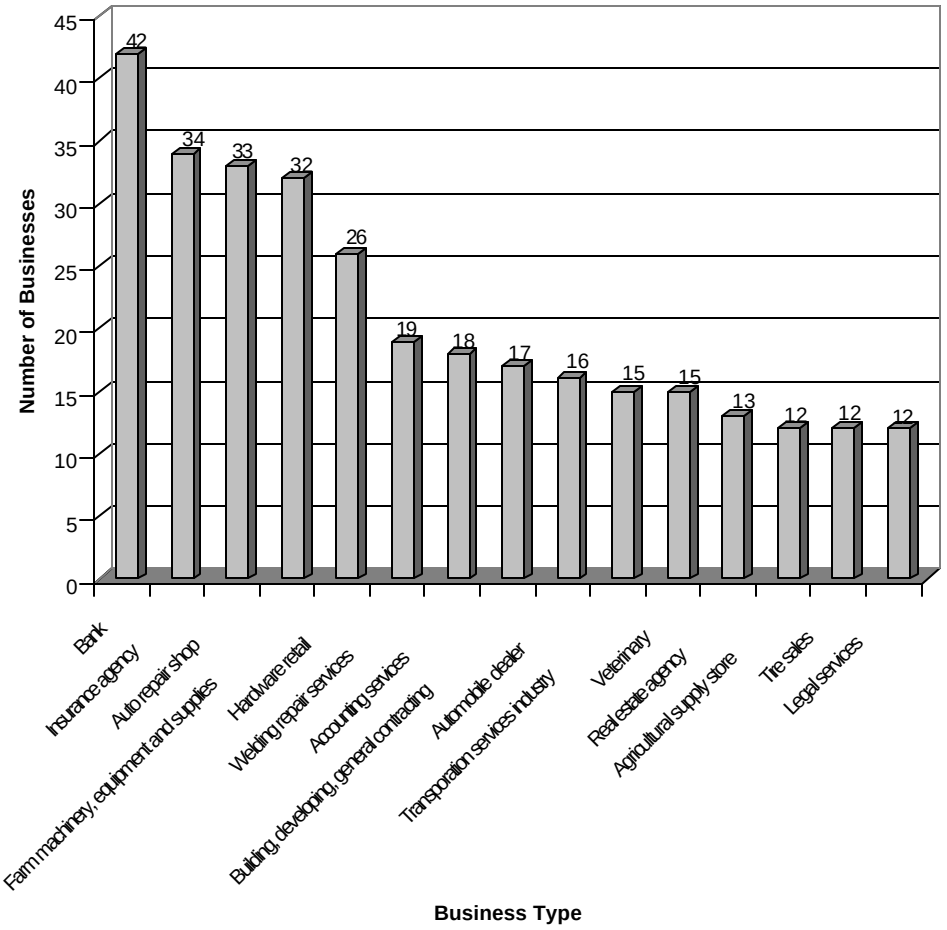
In order to compare the Simcoe County composition of businesses to Huron County and the Eastern Ontario counties (Prescott, Russell, Stormont, Dundas and Glengarry) the number of each type of business was converted into a percentage of the total agriculture related businesses (Table 12.2).

The most common type of business in Simcoe County was the retail trade industries that included automobile sales and service and hardware and building suppliers. A major difference is found in the representation of the wholesale trade industries in Simcoe County. Though the second highest type of business in Simcoe County, this category is better represented in Huron and the eastern counties where they rank as the number one type of agriculture-related business. The wholesale trade industries include farm machinery, equipment and supplies dealerships; agricultural supplies stores; fertilizer and pesticide dealers; seeds and seed processing businesses; and fruit and vegetable wholesalers. **This comparison of wholesale trade industries in the three study areas suggests that Simcoe County is under represented in these agricultural input supply businesses.** Conversations with Simcoe farmers support this conclusion as many indicated that they had to go to other counties to get the best selection of farm equipment. Similarly, the agriculture and related service category in Huron County is better represented (14.5%) than in Simcoe County (6.3%). In Simcoe County these businesses include abattoirs, feed and dairy products industries. Another important sector in terms of agriculture-related jobs and sales (discussed in section 12.2.2.3) is manufacturing. Though higher than the Eastern Counties, Simcoe percentage of manufacturing industries (6.3%) is considerable lower than Huron's (12.3%).

Table 12.2: Percent of Total Agriculture-Related Businesses by Type of Business for the Three Study Areas

Type of Business	Percent of Total Agriculture -Related Businesses by Type of Business		
	Simcoe	Huron	PRSD&G
Retail Trade	21.0%	14.1%	13.2%
Wholesale Trade	17.1%	21.4%	27.4%
Construction	11.8%	16.4%	14.5%
Finance & Insurance	9.7%	0.0%	5.0%
Real Estate & Insurance	8.6%	4.5%	9.6%
Business Service	7.5%	2.3%	8.9%
Manufacturing	6.8%	12.3%	5.6%
Agriculture & Related Services	6.3%	14.5%	8.3%
Other Service Industries	5.0%	2.7%	4.3%
Transportation & Storage	4.5%	7.3%	3.3%
Mining	1.3%	3.6%	0.0%

Communication	0.4%	0.9%	0.0%



Number of Agriculture -Related Businesses	**573**	**775**	**1,117**

A more detailed picture of the composition of businesses in the county is shown in Figure 12.2. The fifteen most common agriculture-related businesses have been plotted along with their frequency. Please note that of the businesses identified in the graph such as insurance agencies and accounting services, only those that deal directly with farm enterprises have been included.

Figure 12.2: Most Common Agriculture-Related Businesses in Simcoe County

12.2.2.3 Importance of the Agri-related Businesses Surveyed

This study measures the importance of a business through its total gross sales per year and through the number of full-time equivalent (FTE) employees at the business. This provides an assessment of all the economic activities of the business, both related and unrelated to agriculture. For example, if a plumbing and heating business serves both residential and farm enterprises, the total gross sales of this business would include both agriculture-related and unrelated sales.

a) Sales for the Agriculture-Related Businesses Surveyed

The criteria used for including businesses on the list of agriculture-related businesses was that at least five percent of their total sales were related to agriculture. When in doubt whether a business fulfilled these criteria during the compilation of the list, the business was telephoned and asked if their agriculture sales or purchases were over five percent of their sales. Over 20 percent of the original businesses on the list were removed through this vetting process.

During the telephone survey, the owner of the business was asked to estimate the total gross sales for their business as well as the percentage of these sales that could be attributed to the agriculture sector. For example, if a business has $500,000 in total gross sales per year, and the owner estimates that 25 percent of these sales are to farm enterprises, then the total agriculture-related sales for that business would be $125,000 ($500,000 X 25%).

The number of FTE jobs at the business also measures the importance of a business. This information was gathered for the business location surveyed, as well as for any other outlets of that business in other locations. An assumption made in the analysis is that the percentage of sales related to agriculture is equivalent to the percentage of employees serving the agriculture sector for their business. For example, if the plumbing and heating business mentioned previously employed 20 people, the assumption would be made that 25% of these 20 FTE jobs, 5 FTE jobs would work on activities that service the agriculture sector.

Seventy-two percent of the businesses provided gross sales and agriculture related sales data (246 of the 339 businesses surveyed). Statistics Canada classifies an industry with less than $5 million in sales as a small business. A medium-size business has sales between $5 million and $25 million per year. Businesses with sales above $25 million are considered large. Using these Statistics Canada categories, 86.6 percent of surveyed businesses were small, 12.2 percent were medium, and 1.2 percent were large.

The average total gross sales for the 246 surveyed businesses that provided sales data is $2,366,082. This number is higher than the average gross sales of $1,605,329 for the 295 businesses in the eastern Ontario counties but lower than the average of $4,240,865 for the 154 businesses surveyed in Huron County in 1996 (Cummings et al., 1998). The top quarter of the Simcoe sample had sales in excess of $2.8 million which is considerably higher than top quarter of businesses in Huron having sales in excess of $1.7 million, and eastern Ontario counties were in excess of $1.5 million.

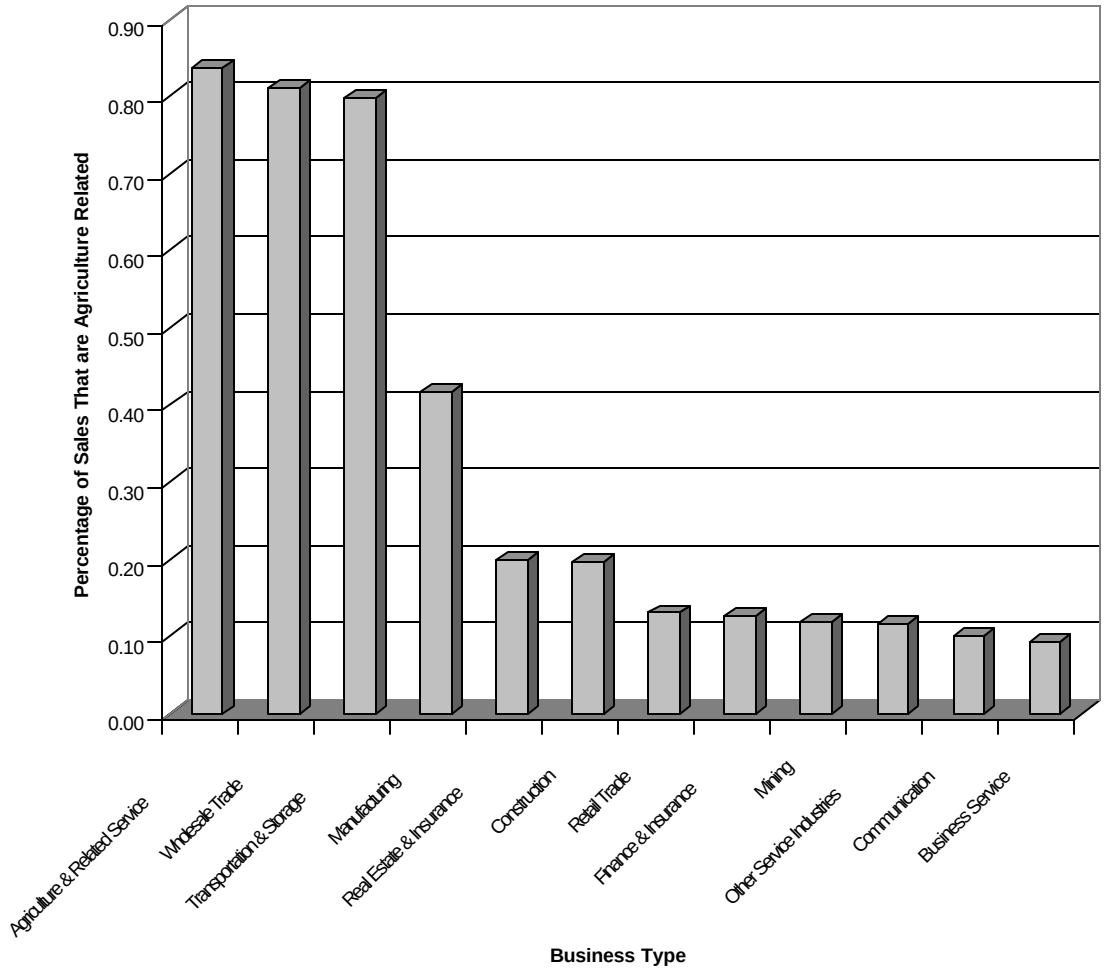
For those surveyed businesses that gave sales data, a breakdown is given in Figure 12.3 of what percentage of gross sales for a particular business type can be attributed to agriculture. Not surprisingly, agriculture and related services industries have a high percentage of its sales, 84 percent, to farm enterprises. The typical businesses in this area are veterinarians, produce packers and soil preparation services. The other two industries where sales to agriculture is above 80% of their gross sales are wholesale trade, 81 percent, and transportation & storage, 80 percent. As discussed previously, Simcoe appears to have fewer numbers of wholesale trade industries compared to the other study areas while the county has a higher dominance of retail outlets. Retail trade businesses have much lower percentage of sales to the agriculture sector, 11 percent, than the wholesale trade businesses which have a higher percentage of 81. All of the other industries have less than 50 percent of their sales going to farm enterprises. Please note that many of the percentages reported in Figure 12.3 are not statistically valid because of the few number of these business types represented in the survey. Mining and communication are examples of two business types that had poor representation in the survey.

b) Employment for Agriculture-Related Businesses Surveyed

The number of employees in a business is another indicator of the importance of that business in the economy. According to Statistics Canada, a small business employs one to fifty people, a medium business employs 51 to 250 people and a large business employs over 250 people.

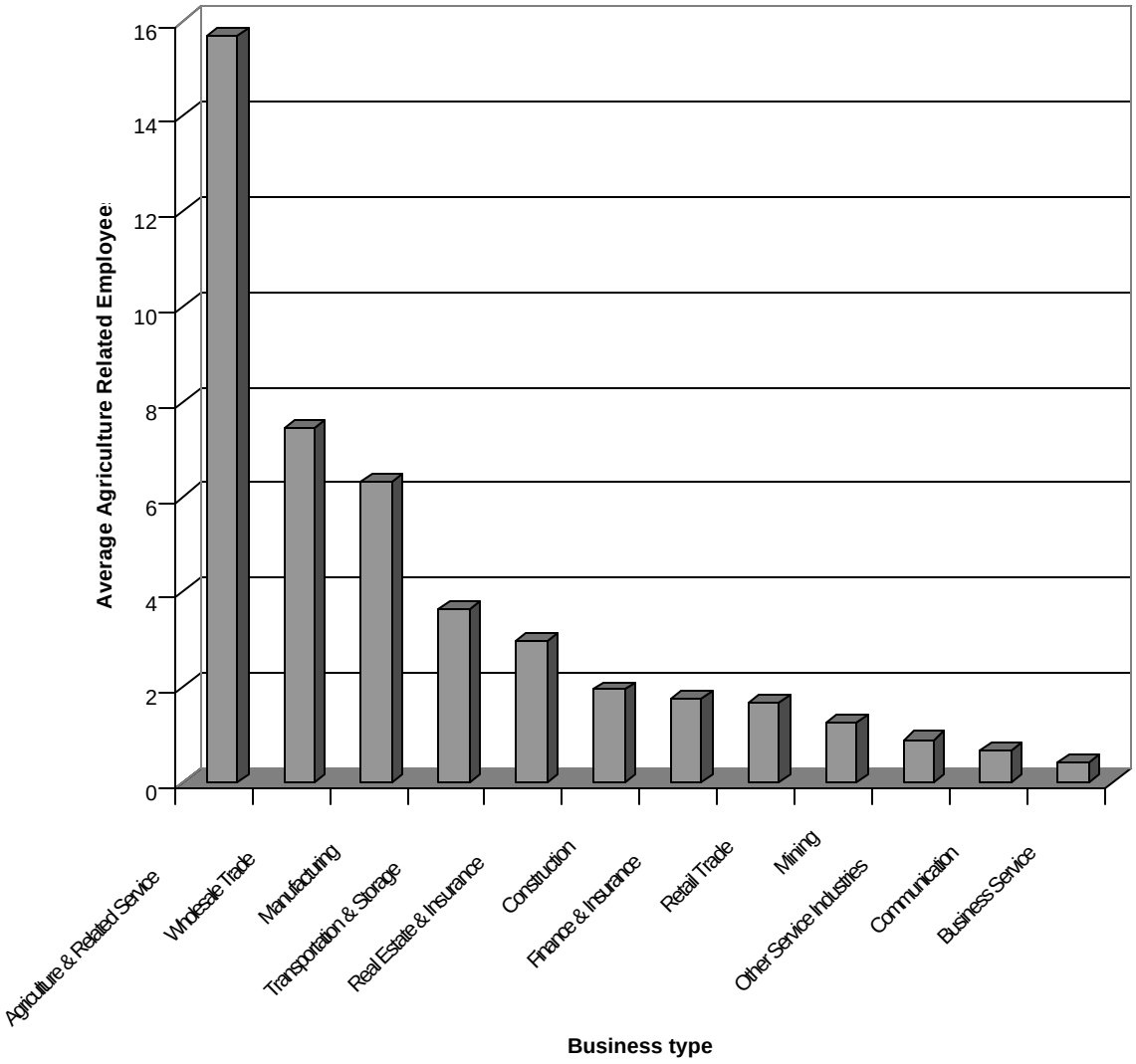
By this standard, 98 percent of the agriculture-related businesses are small (244 of 250 that provided employment data). Incidentally, this is the same percentage of small businesses, defined by employee number, found in the eastern Ontario survey. The average number of employees (as calculated by FTE jobs) for the businesses surveyed is 11 which again is consistent with the findings in the eastern Ontario survey.

Figure 12.3: Percentage of Agriculture-Related Sales per Business Type for Surveyed Businesses



For different business types, Agriculture and Related Services industries has the highest average number of agriculture related employees (15.7) in Figure 12.4. The firms in this category included the vegetable packers in the Holland Marsh area and the potato packers in New Tecumseth. Again the wholesale trade industries are important to agriculture in terms of the high agriculture related employment that they generate. At an average of 7.4 agriculture related jobs per business, the estimated 95 firms in the wholesale trade category would be one of the most significant employers of agriculture related workers. Manufacturing industries have an average of 6.3 agriculture-related positions in Simcoe businesses. The other industry categories had an average number of agriculture-related employees less than 5.

Figure 12.4: Average Number of Agriculture Related Employees by Business Type for Surveyed Businesses



An estimate was done of the total number of agriculture-related employees employed by different industries (Figure 12.5).

As Figure 12.5 shows, wholesale trade, agriculture and related services and manufacturing industries account for a large percent of agriculture related employment (68% in total). The high number of agriculture-related employees for the wholesale trade industries is not unexpected given the estimated 95 businesses in this category; however, both manufacturing and agriculture and related services have relatively fewer firms, 38 and 35 respectively (Figure 12.1). The high agriculture-related employment in these two categories is due to the relatively high number of agriculture positions that manufacturing and agriculture and related services employ.

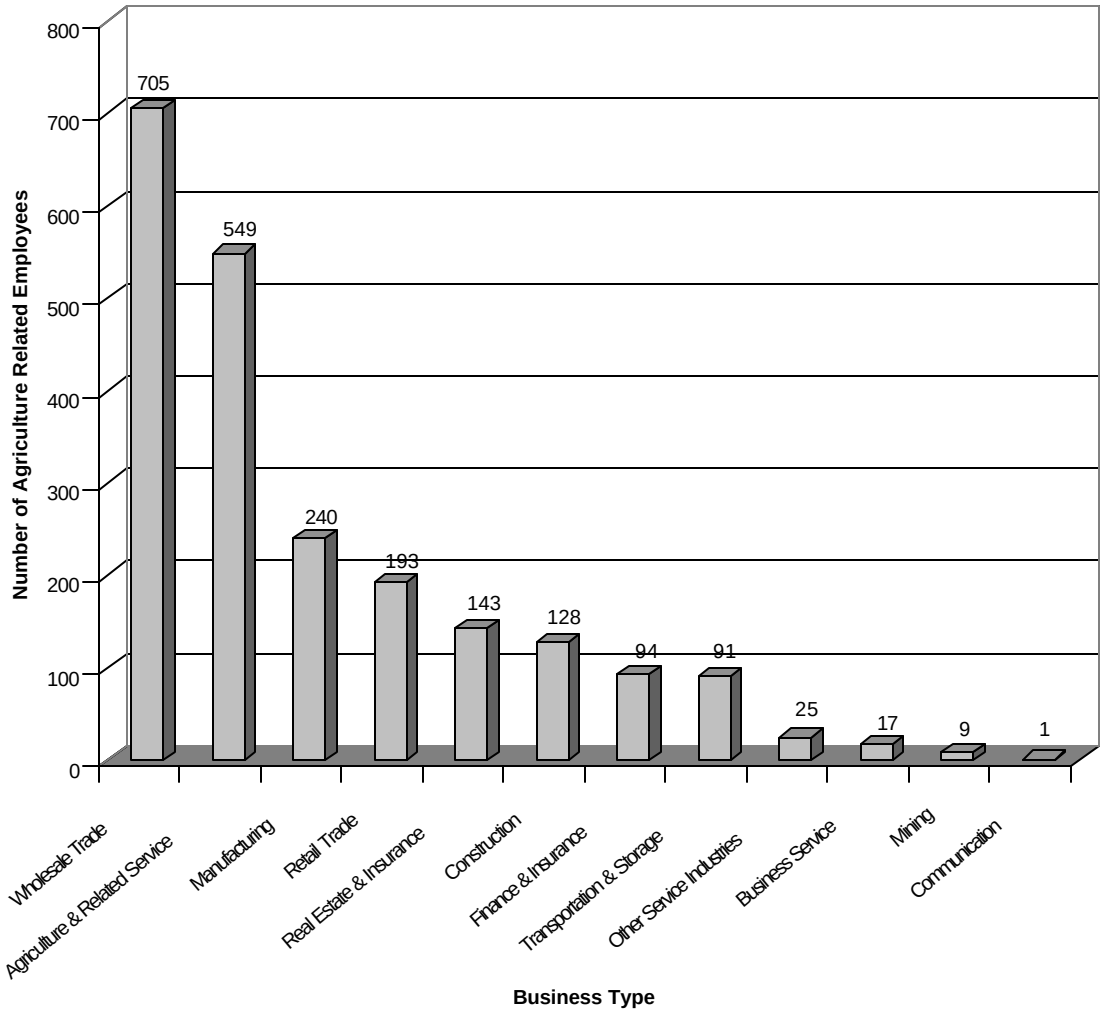


Figure 12.5: Total Agriculture Related Employees by Business Type for Simcoe County

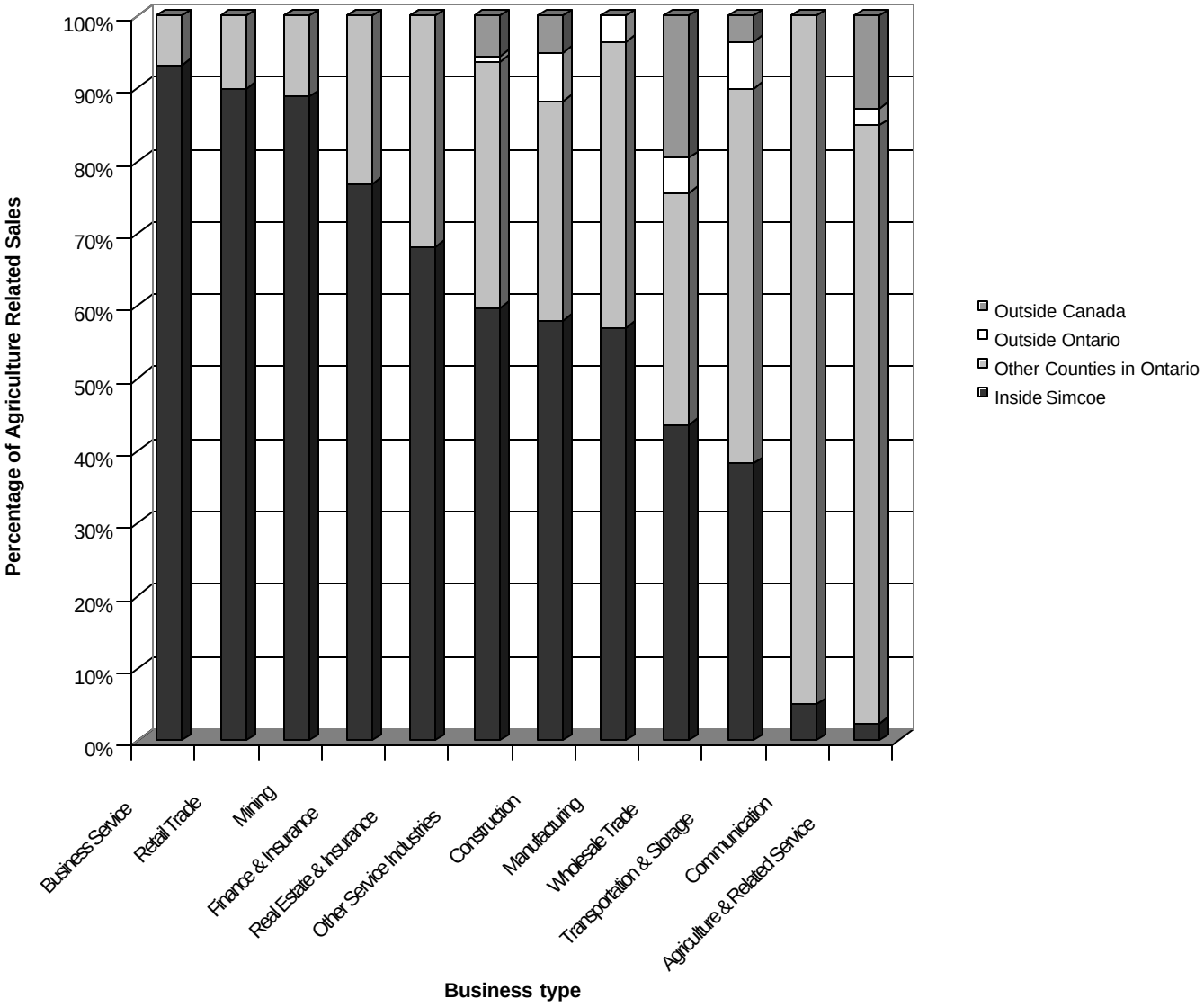
12.2.2.4 Exports of Surveyed Businesses

According to the 271 businesses that provided sales data for the study, 43.5 percent of agriculture-related sales are within Simcoe County, 41.6 percent to other counties in Ontario, 3.5 percent outside Ontario but inside Canada, and the remaining 11.4 percent internationally.

As shown in Figure 12.6, agriculture and related services are the highest exporters to outside of Simcoe County with 97.6 percent of their products leaving the county. This is not surprising,

given the high number of vegetable processing plants in this category. The other two types of businesses with a large contribution to agriculture, wholesale trade and manufacturing industries, are also major exporters. The wholesale trade industries account for the majority of international trade with 19.6 percent of its products leaving Canada.

Figure 12.6: Location of Agriculture-Related Sales by Business Type for Surveyed Businesses



In comparison to the other study areas, Simcoe County has a high number of sales outside of the county. Simcoe County has sales of 56.5 percent outside its border compared to 35.0 percent for Huron County and 8.4 percent for the eastern Ontario counties. This can be attributed to Simcoe County having close access to the Toronto market and shipping facilities combined with the major 400 highway corridor facilitates exports.

12.2.3 Estimated Induced Sales and Jobs

Induced employment refers to employment generated by the wages of workers in an area. We refer to wages spent in the services sector on private or public services. The economy can be divided into goods producing (primary, manufacturing, and construction) and service producing. Service includes public sector (health, education, government) and private sector (wholesale and retail trade, accommodation and restaurant, and finance and insurance). Wages from agriculture and manufacturing are spent on public services, public service employees and agricultural workers purchase goods from retail stores, retail store workers require health services etc. This reflects the chain of multipliers *induced* by the initial wage in the agriculture or manufacturing sector. The methodology we used to estimate the size of this multiplier is outlined below.

Two townships with large employment in agriculture were picked (Adjala-Tosorontio, Clearview). Manufacturing jobs and agriculture jobs were combined and totaled and compared to the total of
jobs in health, government, education (the "public" service sector). Data from the 1996 population census were used. The agriculture and manufacturing jobs were also compared to all of the service sector jobs
including trade, finance, transport, communications and other sectors. For every job in manufacturing and agriculture in these two townships, there were 2.5 to 2.6 jobs in service sectors of which one job is in the public services. For our estimates we have excluded the "private service sectors" from induced employment because some of these jobs were already covered in the agriculture related business survey. We do not want to count the same job twice.

Based on the calculation for Adjala-Tosorontio and Clearview and the studies conducted in Huron County and Eastern Ontario Counties, there is one induced job in the public service sector for every job in agriculture and agriculture related business activities. Thus if there are 7,007 jobs in
agriculture and agriculture related businesses-- in the county-- then another 7,007 jobs would be supported in the public service sectors. This is our estimate of induced employment.

12.2.4 Total Direct, Indirect and induced Impacts

There are 4,770 direct, 2,237 indirect and 7,007 induced jobs created as a result of the agriculture sector in Simcoe County. Thus, farm operations, businesses that buy from and sell to, and services that support farmers and farm businesses are estimated to support approximately 14,014 jobs or 9.2 percent of the county's total jobs of 152,595. In addition, there are $265 million in direct and $519 million in indirect sales associated with agriculture in Simcoe County. Therefore, approximately $784 million in agriculture-related sales are generated in the Simcoe County economy.

12.3 Training with Agriculture-Related Businesses

The agriculture-related business survey asked five training questions of respondents concerning the type of external training they have undertaken over the past year, whether the training was done inside or outside Simcoe County, and their satisfaction with the training. Of the 339

businesses survey, 233 businesses or 69% indicated that they had undertaken training over the past year.

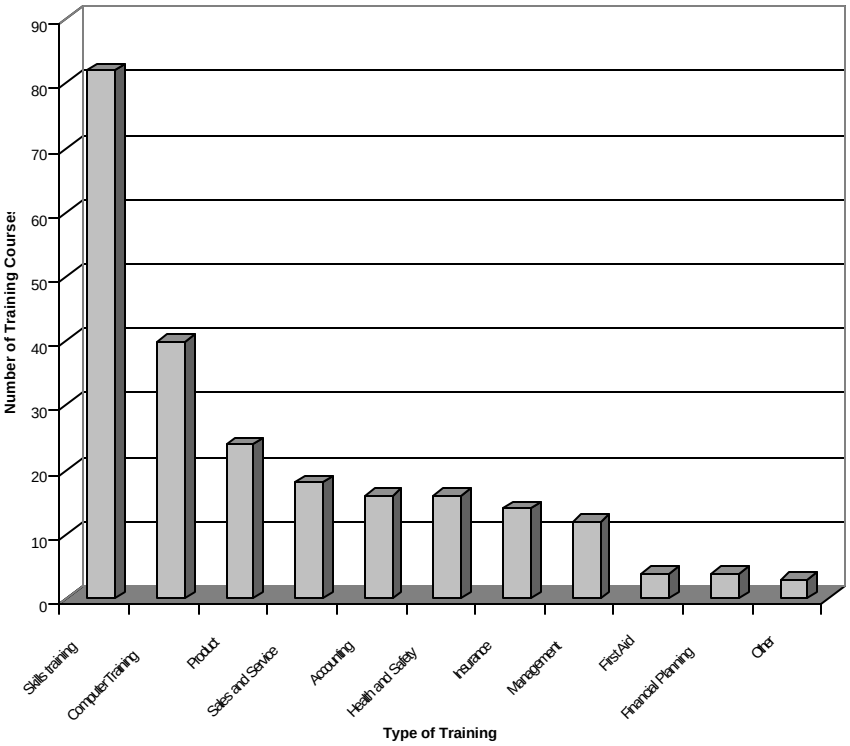
For the purpose of analysis, the type of training was categorized into ten general types plus an other category. As shown in Figure 12.7, the three most common types of training were in skills, computer and product. The skills training category was diverse and included courses in mechanics, agriculture (e.g. drainage, pesticides, veterinarian), machinery operation, and restaurant management (i.e. MacDonald Hamburger College). Of the computer training courses, the three most common courses taken were in operating systems (e.g. Windows 95/98), word processing (e.g. MS Word, WordPerfect) and specialized software (e.g. dealer, real estate software). Other computer training was taken in accounting, database, spreadsheet and the Internet.

For the surveyed businesses that indicated where the training took place, 67% of the courses took place outside of Simcoe County. Only sales and service, accounting and first aid training had more of the training taking place within Simcoe County than outside (Figure 12.8). The three most common types of training, skills, computer and product all had more than 70% of their external training outside of the county. All of management training was done in other counties.

The area of training that received the poorest satisfaction rating (Figure 12.9) was sales and service with 38% of the courses being rated as "fair". Only product training received a "poor" rating for a couple of the courses. Though most computer and health and safety training was rated as very good or good, they did not receive as high scores as for skills and product training.

Figure 12.7: Type of Training Courses Undertaken by Agriculture-Related Businesses

Figure 12.8: Location of Training Undertaken by Agriculture-Related Businesses



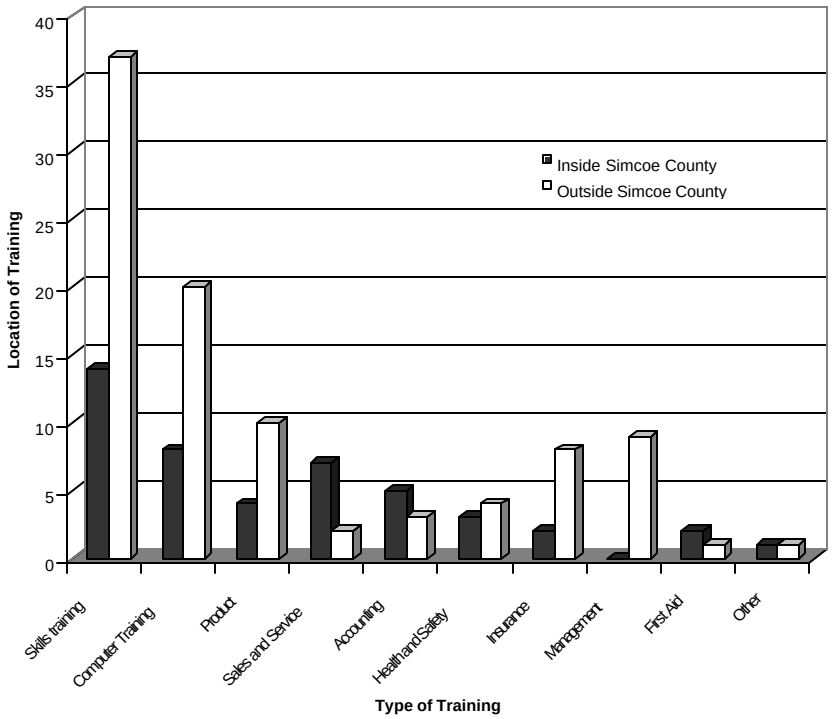
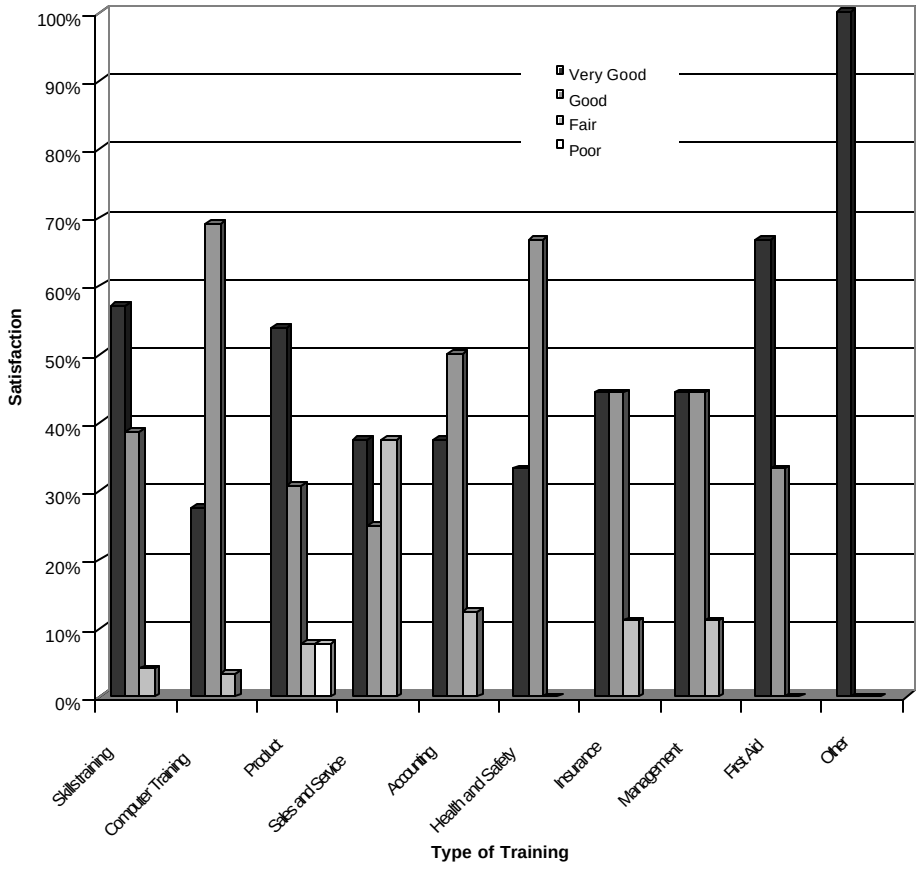


Figure 12.9 Satisfaction with Training Undertaken by Agriculture-Related Businesses



When one looks at all three training graphs (Figures 12.7 to 12.9) some observations can be made. The first being that computer training is the second most popular type of training, most computer courses take place outside of the county and satisfaction is not as high as in most other types of training. Considerable potential exists for businesses or institutions servicing this area within the county. Though the skills and product training are within the three most common types of training and offered mostly outside of the county, the diverse and specialized nature of this training makes it difficult for local firms to provide these types of courses.

13.0 Results and Conclusions

With approximately 9 percent of employment in Simcoe County and $784 million in sales, agriculture is an important player in the county's economy. The sector touches 573 businesses selling or buying from farm enterprises as well as the vital public service health, government and education sectors.

Estimated sales of $784 million are generated by agriculture producers and agriculture-related businesses in the county. This is the estimated flow of sales and expenditures generated by farm operations as well as sales related to the agriculture sector. While the 1996 Statistic Canada Census indicated that 4,770 jobs exist at the farm level, a further 2,237 jobs were tied indirectly to the agriculture sector in Simcoe County through expenditures by agriculture-related businesses, and a further 7,007 jobs were supported by agriculture in education, health and government service. Clearly this has a significant impact on the economy of Simcoe County where the total estimated number of jobs tied to agriculture in 1996 is 14,014. Multipliers associated with employment data suggest about 2 jobs off the farm for every 1 on the farm. Similarly, for every dollar in farm gate sales another $1.95 is generated in agriculture-related business sales.

Although these numbers are significant, the overview of the agriculture sector suggests future opportunities. The trend in Simcoe and across the province of fewer farms, higher levels of sales and specialization over the past decade suggests that this pattern will continue in the near future. However, with declining prices of basic agricultural commodities, further specialization will increase the risk in agriculture. A recent example of this risk is the dramatic drop in pork prices and the resulting serious impact on hog farms.

A comparison was made between this Simcoe County study and the other two studies completed in Huron County and the eastern Ontario counties of Prescott, Russell, Stormont, Dundas and Glengarry. We found that the ratio of farm gate sales to agriculture-related business sales were very similar to that of the eastern Ontario counties, 1.96 and 2.08 respectively. However, these ratios were low compared to the 2.91 ratio for Huron County (refer to Table 11.3). **Looking at the jobs generated within agriculture-related businesses compared to on-farm jobs we find that Simcoe has a very low ratio of jobs in these businesses.** For Simcoe County for each on-farm there was half a job associated with agriculture in businesses compared to about three jobs in Huron County for each on-farm job. The agriculture-related businesses in Simcoe County, like Huron County, sell more than 50 percent of their agriculture products outside of their county. In the comparison of the different types of businesses found in each of the three study areas, Simcoe County appears to be underrepresented in wholesale trade industries, which are typically large providers of agriculture-related jobs. These relatively few wholesale industries might be part of the explanation for the lower number of agriculture-related jobs compared to the other study areas.

The proximity to the Toronto market and other large urban markets in the area provides considerable opportunities to Simcoe County which do not exist in more remote counties such

as Huron County. This closeness to high population centres combined with beaches and cottage areas suggests further opportunities for agriculture in tourism. Ecotourism is growing worldwide and on-farm tours and holidays could be a potential revenue earner for farm enterprises.

The needs of agriculture-related businesses for computer training are not being fulfilled with the county at the present time and appears to be a potential market for local training firms and institutions.

14.0 Recommendations

The Ontario Ministry of Agriculture and Rural Affairs (OMAFRA) has initiated a Business Retention and Expansion program (BR&E) of which New Tecumseth is one of the initial pilot areas. A survey was completed of businesses in New Tecumseth but limited analysis of been done of the survey results. A next step would be to look at the BR&E survey results for these types of businesses important to agriculture (i.e. wholesale, manufacturing and agriculture and related services) to see whether these businesses have been expanding or leaving Simcoe County and the reasons behind these actions.

One of the strengths of Simcoe County for the location of agriculture-related businesses is the close proximity to the largest Canadian urban market, Toronto, and access to an infrastructure (i.e. roads, airports and harbour) for exporting agricultural goods. A market research study of the potential for further expansion into local and international markets for Simcoe County agricultural products would be a basis for determining the potential for attracting new agriculture-related businesses or the basis for expansion of existing businesses.

One possible opportunity not addressed in detail during the agriculture-related business survey was ecotourism. Many of the same advantages of Simcoe County for exporting goods are applicable to ecotourism including being close to Toronto's population and its airport. A study is recommended on the market and potential returns to Simcoe farms in ecotourism.

References

Abraham, Cally. Agriculture and Rural Employment, 1997. Canadian Journal of Agricultural Economics 44: 497-505.

Agriculture and Agri-Food Canada. 1996. Farm Financial Survey.

Alasia, Alessandro. January 1998. Leading and Lagging Areas in Ontario: Huron County in the Provincial Context: Research Report. Rural Studies PhD Program, University of Guelph.

Bendavid-Val, Avrom. 1991. Regional and Local Analysis for Practitioners, 4th ed. Westport, Connecticut: Praeger.

Bollman, Ray, Leslie Whitener and Fu Lai Tung, 1995 Special Issue. Trends and Patterns of Agricultural Structural Change: A Canada - U.S. Comparison. Canadian Journal of Agricultural Economics. Pages 15-27.

Bradfield, Michael. 1988. Regional Economics: An Analysis and Policies in Canada. Toronto: McGraw-Hill Ryerson Limited.

Butterfield, David and Atif A. Kubursi. 1993. "Regional Economic Effects of Recycling in Ontario". Canadian Journal of Regional Science. Vol. 16, (3) pp. 413-431.

Canadian Adaption Council. Canadapt Program. Web Site: http://www.adaptcouncil.org

County of Simcoe. September 3, 1998. Planning Services Committee Report PL98062.

County of Simcoe. May 1998. The County of Simcoe Official Plan.

County of Simcoe. Web Site: http://www.county.simcoe.on.ca

Cloutier, Sylvain. 1996. "Employment in Agriculture and Closely Related Industries in Rural Areas: Structure and Changes, 1981-1991." Paper presented at the International Symposium: Perspectives on Rural Employment held October 11 to 14, 1995, in Coaticook, Quebec.

Cummings, Harry and Vince Deschamps. 1999. Economic Impact of Agriculture on the Economy of Prescoot, Russell, Stormont, Dundas and Glengarry Counties. University School of Rural Planning and Development ,unpublished report. University of Guelph. Guelph, Ontario.

Cummings, Harry, Karen Morris and Dan McLennan. 1998. Economic Impact of Agriculture on the Economy of Huron County. University School of Rural Planning and Development ,unpublished report. University of Guelph. Guelph, Ontario.

Davis, H. Craig. 1990. Regional Economic Impact Analysis and Project Evaluation. Vancouver: University of British Columbia Press.

Dahms, Fred. 1982. "The Changing Functions of Rural Settlements in Huron and Southern Bruce Counties: Historical Background and Major Trends 1951-1981." University School of Rural Planning and Development Publication 110. University of Guelph. Guelph, Ontario.

Damus, Sylvester. 1993. "On Input-Output Analysis with Incomplete Data." Canadian Journal of Regional Science. Vol. 16 (1), 115-122.

Drugge, Sten E. 1988. "A Theoretical Critique of Shift Share Analysis: A General Equilibrium Approach". Canadian Journal of Regional Science. Vol. 11 (2), 303-311.

Economic Developers Council of Ontario Inc., 1998. Annual Report, Volume 5. Cited in Simcoe County Profile provided by OMAFRA, Midhurst.

Faas, Ronald C. 1980. "Coping with Growth: What Does the Impact Statement Say About Economic Impacts." Corvallis, Oregon: Western Rural Development Centre.

Farm Credit Corporation, 1997-1998. Annual Report.

Farm Credit Corporation. Spring 1998. Farmland Values.

Freshwater, David and Bill Reimer, 1995 Special Issue. Socio-Economic Policies as Causal Forces in the Structure of Agriculture. Canadian Journal of Agricultural Economics. Page 209-221

Fulton, Murray, David Harrington and Robert Reinsel, 1995 Special Issue. Trade, Transportation, Commodity and Marketing Policies: Canada - US Comparison. Canadian Journal of Agricultural Economics. Pages 195-208.

Harrington, David and Robert Reinsel, 1995 Special Issue. A Synthesis of Forces Driving Structural Change. Canadian Journal of Agricultural Economics. Pages 3-14.

Higgins, Benjamin and Donald J. Savoie. 1995. Regional Development Theories and Their Application. New Brunswick, New Jersey: Transaction Publishers.

Human Resources Development Canada. Job Futures. Web Site: http://hrdc-drhc.gc.ca/JobFutures

Huron County Planning and Development Department. 1991. Huron County Study - The Background Report. Goderich, Ontario.

Josling, L.T. 1996. An Empirical Study of the Interdependence Among Agriculture and Other Sectors of the Canadian Economy - An Input-Output Model. Agriculture Economics Research Council of Canada.

Kulshreshtha, Surendra N. 1988. "Estimation of Contributions of a Resource Sector to Provincial Economy: The Case of Saskatchewan Potash." Canadian Journal of Regional Science. Vol. 11 (3), pp. 431-444.

Lee, Chinook. 1991. "Recent Developments in Construction of Input-Output Tables with Use and Make Matrices: An Application to U.S. Agriculture." Canadian Joural of Agriculture Economics. Vol. 39, 795-803.

Lewis, Eugene, Russell Youmans, George Goldman and Garnet Premer. 1979. Economic Multipliers: Can a Rural Community Use Them? Corvallis, Oregon: Western Rural Development Centre.

Ministry of Municipal Affairs and Housing, February 1997. Provincial Policy Statement.

Ontario Ministry of Agriculture Food and Rural Affairs. 1995. Publication 20. 1994 Agriculture Statistics for Ontario. Statistical Services Unit, Policy Analysis Branch. Queen's Park. Toronto, Ontario.

Ontario Ministry of Agriculture Food and Rural Affairs. 1991 Agricultural Inventory (Simcoe County). Alliston and Elmvale Office.

Ontario Ministry of Agriculture Food and Rural Affairs, October 1989. An Overview of Agriculture in Simcoe County. Elmvale and Alliston Office. Fascimile

Ontario Ministry of Agriculture Food and Rural Affairs, 19996. 1996 Agricultural Inventory (Simcoe County). Midhurst Field Office.

Ontario Ministry of Agriculture Food and Rural Affairs. Farmland Property Tax Program. Web Site: http://www.gov.on.ca/OMAFRA/english/infores/ftaxfaq

Ontario Ministry of Agriculture Food and Rural Affairs. Ontario Government Business Plans 1998-1998. Web Site: http:www.gov.on.ca/OMAFRA

Ontario Ministry of Agriculture Food and Rural Affairs. Web Site: http://www.gov.on.ca/OMAFRA

Ontario Ministry of Agriculture Food and Rural Affairs. Rural Youth Job Strategy. Web Site: http://www.gov.on.ca/omafra/english/infores/ryjs

Ontario Ministry of Education and Training, April 1996. Restructuring in Ontario's Economy and Labour Market.

Otto, C.M. and T.G. Johnson. 1993. Microcomputer-Based Input-Output Modelling: Applications to Economic Development. Boulder, Colorado: Westview Press.

Perry, Janet, Norah Keating, Anne Effland and Francis Shaver, 1996 Special Issue. Gender and Generation on Family Farms. Canadian Journal of Agricultural Economics. Pages 115-130.

Poole, Erik, Ronald Rioux and Claude Simard. 1994. "The Input-Output Model and Economic Policy". Policy Options. Vol. 15 (10), 28-31.

Rioux, J.J.M. and J.A. Schofield. 1990. "Economic Impact of a Military Base on its Surrounding Economy: The Case of CFB Esquimalt, Victoria, British Columbia". Canadian Journal of Regional Science. Vol. 13 (1), 47-61.

The Rural Voice, August 1996. "The Bang of the Bucks."

Semple, Hugh and R.G. Ironside. 1992. "The Impacts of New Resource Industry on Recipient and Adjacent Municipalities". Canadian Journal of Regional Science. Vol. 15 (1), 59-80.

Schaffer, William A. 1979. "Testing Regional Input Analysis in Nova Scotia". Canadian Journal of Regional Science. Vol. 2 (1), 1-10.

Schaffer, William A. 1978. "Constructing the Nova Scotia Input-Output System". Canadian Journal of Regional Science. Vol. 1 (1), 1-12.

Simcoe County Board of Education. Web Site: http://www.scbe.on.ca

Simcoe County Training Board. Web Site: http://www.sctb.on.ca

Stabler, Jack C. 1988. "Saskatchewan Steel: A Regional Industrial Impact Analysis". Canadian Journal of Regional Science. Vol. 11 (1), 133-145.

Statistics Canada. 1986. Census Profile for Ontario, Supply Services. Ottawa, Ontario.

Statistics Canada. 1986a. Population Profile of Canada - Part A. Supply Services. Ottawa, Ontario.

Statistics Canada. 1986b. Population Profile of Canada - Part B. Supply Services. Ottawa, Ontario.

Statistics Canada. 1991. Census Profile for Ontario, Supply Services. Ottawa, Ontario.

Statistics Canada. 1991a. Population Profile of Canada - Part A. Supply Services. Ottawa, Ontario.

Statistics Canada. 1991b. Population Profile of Canada - Part B. Supply Services. Ottawa, Ontario.

Statistics Canada. 1996. Census of Agriculture (CD-ROM), Supply Services. Ottawa, Ontario.

Statistics Canada. 1996a. Population Profile of Canada - Part A. Supply Services. Ottawa, Ontario.

Statistics Canada. 1996b. Population Profile of Canada - Part B. Supply Services. Ottawa, Ontario.

Statistics Canada. 1997. Historical Overview of Canadian Agriculture, Supply Services. Ottawa, Ontario.

Troughton, Michael. 1992. "The Restructuring of Agriculture: The Canadian Example." Bowler, I.R., C.R. Bryant and M.D. Nellis (Eds.). Contemporary Rural Systems in Transition: Volume 1, Agriculture and Environment. Wallingford, UK: CAB International, pp. 29-42.

University School of Rural Planning and Development. Fall 1993. A Socio-Economic Profile of the North Perth Planning Area.

Wright, Bob. Economic Impact of the Horse Industry in Ontario. Results of the Ontario Horse Industry Survey 1993-1995. OMAFRA: Agriculture and Rural Division. Fax copy received September 1998.

Appendix A

Agriculture Business Questionnaire for Simcoe County

1. Can I confirm that you are in the _____ business?

2. Do you sell products and services to farm businesses?

   Yes ___ No ___

3. Do you buy products from farm businesses?

   Yes ___ No ___

4. Is your business located within Simcoe County?

   Yes ___ No ___

5. In which municipality is your business located?

   _____

6. Please provide the 6-digit postal code.

   _____

7. Is there more than one branch of this business? (If no, proceed to question 8.)

   Yes ___ No ___

8. Is the head office inside Simcoe County? _____

9. Where are the branches located?

   Number of branches in total (including this branch) ____
   Are there branches outside Simcoe, but inside Ontario? (yes or no) ____
   Are there branches outside Ontario, but inside Canada? (yes or no) ____
   Are there branches outside Canada? (yes or no) ____

10. Please estimate the total gross sales of your business between January 1, 1997 and December 31, 1997. Just to clarify, we are not asking for your business profits. We just need to measure the size of the industry in the county.

    $ _____

11. What percentage of your total gross sales relates to sales to farm businesses?

    % _____

12. Where are these sales being made?

What percentage of the sales is derived inside Simcoe County? %___

What percentage is outside Simcoe County, but inside Ontario? %___
What percentage is outside Ontario, but inside Canada? %___
What percentage is outside Canada? %___

13. The next question deals with the products and services your businesses sold to the agriculture sector in 1997. This means products and services sold to farmers. Please list the five most important products/services in order of importance.

Products/Services Sold	In Simcoe	Outside Simcoe

14. Please list in order of importance the products and services that your agriculture-related business bought from farmers in 1997. Also indicate if these products/services were bought from farmers in or outside Simcoe County.

Products/Services Bought	In Simcoe	Outside Simcoe

15. What percentage of your total business supplies were purchased from farm businesses?

% _____

16. This question relates to the number of employees in the business in 1997. Please include yourself, other owners and family members in this question. Be sure to include the owner of the business as a full-time employee. This includes anyone working for the business, whether waged or unwaged.

	# of Employees per Week	# of Weeks per Year	# of Hours
Full-time			
Part-time			
Seasonal			

Training:

17. Does your business use any external training programs?

    Yes ___ No ___

18. If yes, what type of training did staff participate in?

19. Can you describe these training programs?

20. For each type of training, was the training done inside Simcoe County?

21. For each type of training, did you find the training (1) very good (2) good (3) fair (4) poor?

Thank you for your time.