



**STRATEGIC  
NETWORKS  
GROUP**

## **Awareness and Usage of IT and Broadband in Elgin County**

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Prepared for: Province of Ontario's Management Board Secretariat (MBS)  
Elginconnects and Elgin Community Futures Development  
Corporation (ECFDC)

Prepared by: Strategic Networks Group

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## Executive Summary

Elginconnects, part of the Elgin Community Futures Development Corporation (ECFDC), and the Province of Ontario's Management Board Secretariat engaged Strategic Networks Group in February 2004 to prepare a study on the current state of Information Technology (IT) awareness and usage in Elgin County, Ontario, Canada. The aim was to determine the IT needs and awareness of businesses and organizations in the county and provide a basis for preparing future economic growth and development plans.

In May 2003, the Province of Ontario announced that it was to invest \$900,000, as part of its \$55 million Connect Ontario: Broadband Regional Access (COBRA) program, to assist development of a community web portal and the establishment of high-speed Internet access in Elgin County. In conjunction with its partners, Elginconnects expects to match these funds to provide a total investment of \$1.8 million.

Elginconnects engaged Strategic Networks Group (SNG) to determine the current state of IT usage and awareness in the county as the first phase in a three phase strategic planning process.<sup>1</sup> The goal of this phase was to:

- better understand the IT and broadband needs of businesses and organizations in Elgin County;
- assist decision makers in strategic planning; and,
- provide a baseline against which impacts from IT and broadband could be measured and socio-economic progress could be assessed.

Findings from this study will be used in conjunction with the findings from SNG's Economic Gap Analysis of Elgin County, to prepare an "Economic Development Plan for Elgin County using IT and Broadband". This strategic planning tool will help target sectors and business clusters where investments in IT and broadband offer the most value. This will be accomplished by identifying where IT and broadband investments can enhance existing business linkages, build new relationships with vendors and customers, and generate business efficiencies (e.g. cost savings, new revenues).

This ground-level of analysis is becoming increasingly important as difficult choices need to be made with limited infrastructure budgets. It will help reduce the risk of poor investments and focus on business sectors where returns on IT and broadband investments can be maximized. The goal is to help build a stronger local economy.

Elginconnects, under the guidance of SNG, surveyed businesses and organizations throughout the county. Elginconnects provided the contact information for businesses and organizations which were to be surveyed. SNG provided the survey tools and methodology to identify the state of IT usage and awareness in different industry sectors and for different sized organizations.

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<sup>1</sup> Due to the more advanced state of its IT infrastructure, and the presence of its own economic development office, it was agreed that the City of St. Thomas would be excluded from this study.

In February and March 2004, businesses and organizations in Elgin County were surveyed about their Internet usage. A total of 1,733 surveys were faxed or mailed and follow-up phone calls made. In total 816 responses were received, a response rate of 47%.

## **Findings**

Statistics Canada collects data on IT usage by businesses in its 'Survey of Electronic Commerce & Technology', but excludes the agricultural sector.<sup>2</sup> In order to keep comparisons as close as possible, the survey analysis in this study has been divided into two categories: 'Business sectors' (i.e. all industry sectors except agriculture) and 'Agricultural sector'.

*A note on comparisons with national average: the national average necessarily includes urban, semi-rural and rural areas. Rural and semi-rural areas, as found in Elgin County, traditionally have a lower level of connectivity and thus are not expected to equal the national average in terms of IT usage. However, comparisons to that average allow one to assess the relative strengths and weaknesses of different industry sectors with regards to connectivity and provide a baseline for future performance measurement.*

## **Business Sectors**

Of the 438 organizations who responded to the survey:

- 53% of respondents indicated business use of the Internet compared to the Canadian average of 76%.
- 14% of respondents reported maintaining a business website compared to the Canadian average of 31%.

Of the 232 respondents who noted Internet use:

- 36% indicated a broadband connection compared to the Canadian average of 58%
- 64% indicated a dial-up connection compared to the Canadian average of 37%

Sectors with a high percentage of respondents reporting Internet usage:

- Real Estate 93% (Canadian Average 65%)
- Finance & Insurance 90% (Canadian Average 79%)
- Manufacturing 79% (Canadian Average 88%)

Sectors with a low percentage of respondents reporting Internet usage or a wide discrepancy between Elgin County and national percentages:

- Wholesale Trade 57% (Canadian Average 86%)
- Retail Trade 51% (Canadian Average 72%)
- Professional & Technical Services 45% (Canadian Average 92%)
- Accommodation & Food Services 17% (Canadian Average 58%)

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<sup>2</sup> As part of its 2001 Agricultural Census, Statistics Canada did ask some questions about computer usage but, being a census, all farm businesses, including sole-proprietorships were included. This study focussed only on businesses with employees. As such, the two populations are not comparable and the study population has a higher rate of connectivity than the census population.

## Broadband Usage:

- Transportation & Warehousing is the only sector which has a percentage of broadband use higher than the national average.
- Finance & Insurance, Accommodation & Food Services, Construction & Retail Trade are 15% - 20% below the national average.
- Professional & Technical Services, Wholesale Trade and Real Estate are more than 30% below the national average.

## **Agricultural Sector**

Of the 378 organizations who responded to the survey:

- 59% of respondents indicated business use of the Internet
- 4% indicated maintaining a business website

Of the 222 Internet users:

- 12% indicated having a broadband connection

## **Characteristics of Internet usage**

- 28% of respondents indicated that they conduct business with suppliers over the Internet
- 26% indicated they conduct business with clients / customers / partners over the Internet
- 10% indicated they provide their employees with email addresses

Perceived benefits from the use of the Internet:

- 66% of Internet users indicated that use of the Internet has made day-to-day operations easier
- 48% indicated it has improved service to clients / customers
- 47% indicated it has developed relationships with suppliers / partners
- 42% indicated it has reduced their costs
- 34% indicated it has increased sales & revenues

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## **1 OBJECTIVE**

### **1.1 INTRODUCTION**

Elginconnects, part of the Elgin Community Futures Development Corporation (ECFDC), and the Province of Ontario's Management Board Secretariat engaged Strategic Networks Group (SNG) in February 2004 to prepare a study on the current state of Information Technology (IT) awareness and usage in Elgin County, Ontario. The aim was to determine the IT needs and awareness of businesses and organizations<sup>3</sup> in the county and provide a basis for preparing future economic growth and development plans. Due to the more advanced state of its IT infrastructure, and the presence of its own economic development office, it was agreed that the City of St. Thomas would be excluded from this study.

### **1.2 RESEARCH OBJECTIVES AND DESIGN**

In May 2003, the Province of Ontario announced that it was to invest \$900,000, as part of its \$55 million Connect Ontario: Broadband Regional Access (COBRA) program, to assist development of a community web portal and the establishment of high-speed Internet access in Elgin County. In conjunction with its partners, Elginconnects expects to match these funds to provide a total investment of \$1.8 million.

Elginconnects engaged Strategic Networks Group (SNG) to determine the current state of IT usage and awareness in the county as the first phase in a three phase strategic planning process. The goal of this phase was to:

- better understand the IT and broadband needs of businesses and organizations in Elgin County;
- assist decision makers in strategic planning; and,
- provide a baseline against which impacts from IT and broadband could be measured and socio-economic progress could be assessed.

Findings from this study will be used in conjunction with the findings from SNG's Economic Gap Analysis of Elgin County, to prepare an "Economic Development Plan for Elgin County using IT and Broadband". This strategic planning tool will help target sectors and business clusters where investments in IT and broadband offer the most value. That is by generating business efficiencies (e.g. cost savings, new revenues) and identifying where IT and broadband investments can enhance existing business linkages, as well as build new relationships with vendors and customers.

This ground-level of analysis is becoming increasingly important as difficult choices need to be made with limited infrastructure budgets. It will help reduce the risk of poor investments and focus on business sectors where returns on IT and broadband investments can be maximized. The goal is to help build a stronger local economy.

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<sup>3</sup> Throughout this study the terms business, organization and enterprise are used interchangeably.

## 2 BACKGROUND

The County of Elgin is in South Western Ontario, just south of London and approximately 200km south-west of Toronto. The county is comprised of seven municipalities, in addition to the City of St. Thomas, and has a population of approximately 81,000 (see Table 1 for the 2001 census populations).

**TABLE 1: CENSUS POPULATION AND PROJECTED POPULATION BY AREA MUNICIPALITY**

Municipality	Census Population 1996	Census Population 2001	Percent Change
St. Thomas (city)	<b>31,407</b>	<b>33,236</b>	<b>5.8%</b>
Aylmer (town)	<b>7,022</b>	<b>7,126</b>	<b>1.5%</b>
Central Elgin	<b>12,156</b>	<b>12,360</b>	<b>1.7%</b>
- Belmont	1632	1819	11.5%
- Port Stanley	2499	2385	-4.6%
- Yarmouth	7148	7024	-1.7%
Malahide	<b>8,891</b>	<b>8,809</b>	<b>-0.9%</b>
- Springfield	741	708	-4.5%
- South Dorchester	1899	1816	-4.4%
- Former Malahide	6255	6290	0.6%
Bayham	<b>6,234</b>	<b>6,375</b>	<b>2.3%</b>
- Vienna	490	566	15.5%
- Port Burwell	1023	864	-15.5%
- Former Bayham	4721	4945	4.7%
West Elgin	<b>5,573</b>	<b>5,464</b>	<b>-2.0%</b>
- West Lorne	1531	1419	-7.3%
- Aldborough	4042	4045	0.1%
Southwold	<b>4,273</b>	<b>4,487</b>	<b>5.0%</b>
Dutton - Dunwich	<b>3,603</b>	<b>3,696</b>	<b>2.6%</b>
- Dutton	1315	1374	4.5%
- Dunwich	2288	2322	1.5%
<b>Elgin County</b>	<b>79,159</b>	<b>81,553</b>	<b>3.0%</b>

Source: Statistics Canada, 2001 Census.

The largest industry sectors in Elgin County and St. Thomas are manufacturing and construction, followed by wholesale and retail trade, health and education and the service industry (see Table 2 for 2001 Census Industry Breakdown). However, a recent report suggests that the agricultural sector plays a larger role in the economy of the county than the number of employees might suggest with over 7,750 jobs in or directly related to agriculture (Cummings, 2000).

**TABLE 2: 2001 CENSUS LABOUR FORCE BY INDUSTRY SECTOR**

<b>Total - Experienced labour force</b>	<b>41,410</b>	<b>100.0%</b>
Agriculture and other resource-based industries	3,955	9.6%
Manufacturing and construction industries	12,575	30.4%
Wholesale and retail trade	5,840	14.1%
Finance and real estate	1,450	3.5%
Health and education	5,790	14.0%
Business services	5,990	14.5%
Other services	5,810	14.0%

Source: Statistics Canada, 2001 Census.

A 2000 study of the IT situation in the area concluded that **“there is a need for a coordinated effort of managing the information for our community residents and businesses.”** (Lunn, 2000) The IT infrastructure in the county varies tremendously. Portions of the City of St. Thomas have access to ASDL, ISDN or Fibre Optic connections. Other parts of the county remain on party lines or are faced with infrastructure which will not support modem technology.

This situation brought about the creation of Elginconnects which aims to assist in the creation of a county-wide network infrastructure to allow Municipal offices, libraries, fire departments, etc. to connect to one another, and to facilitate Internet access to the public in un-serviced or under-serviced areas.

As part of the development of Elginconnects, an application was submitted to the Province of Ontario’s Connect Ontario: Broadband Regional Access (COBRA) program. As a result of that application, on May 22, 2003, the Ontario Ministry of Enterprise, Opportunity, and Innovation announced that it would invest \$900,000 to develop a comprehensive telecommunication infrastructure to support Elgin County's web portal and provide broadband access for the township’s libraries, school and colleges, and business and economic groups.



### **3 METHODOLOGY**

#### **3.1 SCOPE OF WORK**

The goal of this study was to document the current state of IT awareness and usage in Elgin County. It was agreed that, due to the existence in the City of St. Thomas of its own economic development office and the more advanced state of its IT infrastructure, businesses and organizations within the City of St. Thomas municipal boundaries would be excluded from the survey. That being said, those with an R.R. address, given the more rural nature of their situation, were included.

The scope of work for SNG (with assistance from Elginconnects) was to:

- develop survey criteria
- formulate a survey instrument
- collect data from the local businesses and organizations within the community
- identify and assess the state of IT awareness and usage of those businesses and organizations
- analyze collected data, in particular by type of industry and size of organization
- create a baseline against which to measure any changes to IT awareness and usage in the future

#### **3.2 METHODOLOGY**

To carry out this study, SNG developed a survey instrument to collect data on IT awareness and usage of businesses and organizations in Elgin County. The survey instrument was designed to collect data using key metrics that could be readily collected and verified. The data collected by SNG included:

- Type of business or organization (based on North American Industrial Classification codes)
- Current and planned uses of the Internet
- Type of Internet connection
- Number of employees
- Impacts of Internet use on the business or organization

Lists of enterprises were collected by Elginconnects from a number of different sources, including chambers of commerce and previous studies, and combined to create a 'Master' list of businesses and organizations within Elgin County. In an effort to streamline the process as much as possible, and yet remain true to the goal of establishing a baseline for economic impacts, it was decided to eliminate from the list organizations without employees, i.e. volunteer organizations. The list is the most comprehensive collection available to the public. Each business or organization on the list was sent, via fax or mail, a survey. In total 1,733 surveys were deployed.

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## 4 STUDY RESULTS

### 4.1 DATA COLLECTION ACTIVITIES

Once the 'Master List' was created, an effort was made to determine which organizations had fax numbers. Those with fax numbers were faxed the survey and those without were sent the survey via mail. One week after issuing the survey, organizations who had not replied were contacted via telephone by staff at Elginconnects. These organizations were encouraged to respond and were given the option of completing the survey over the telephone. In the end, a total of 974 organizations [56% of the 1,733 initially targeted with surveys] responded or verbally stated they were not interested in completing any portion of the survey. A total of 816 completed surveys were received, a response rate of 47%.

### 4.2 SURVEY RESULTS – OVERVIEW

Surveys were distributed to all businesses in the county for whom an address or fax number could be determined (i.e. 1,733). During follow-up phone calls to organizations who had not initially responded, the option to complete the survey over the telephone was presented. This helped to increase the number of responses to a total of 816, a response rate of 47%.

A response rate of 47% is considered high for this type of survey. This high response rate was attributed to a number of factors: a cover letter included by the Elginconnects stressing the importance of the exercise; follow-up telephone calls by staff at Elginconnects; and, design of the survey for ease of completion – the survey was two pages long and required 10 to 15 minutes to complete.

Of the 816 respondents, 454 (56%) noted that they had some form of Internet access, which they used for business purposes. This rate of use may not be representative of the business community as a whole and may over-represent the number of businesses that use the Internet. In the process of following up with businesses that had not initially responded to the survey, a number of people suggested that they had not returned the survey because they did not use the Internet for business purposes. This suggests that that the percentage of businesses that use the Internet may be lower among those who did not respond than among those who responded.

### 4.3 FINDINGS

Statistics Canada collects data on IT usage by businesses in its 'Survey of Electronic Commerce & Technology', but excludes the agricultural sector.<sup>4</sup> In order to keep comparisons as close as possible, the survey analysis in this study has been divided into two categories: 'Business sectors' (i.e. all industry sectors except agriculture) and 'Agricultural sector'.

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<sup>4</sup> As part of its 2001 Agricultural Census, Statistics Canada did ask some questions about computer usage but, being a census, all farm businesses, including sole-proprietorships were included. This study focussed only on businesses with employees. As such, the two populations are not comparable and the study population has a higher rate of connectivity than the census population.

**4.3.1 Business Sectors - Overview**

Before reviewing the findings of how enterprises are using IT in Elgin County, it is first necessary to look at whether it is being used at all. 53% of respondents indicated that they used the Internet for business purposes and had an Internet connection at their disposal. This is a good base, although it is a lower percentage than the national average. In addition, the 19% that indicated a broadband connection is significantly lower than the national average, as is the 14% who reported maintaining a business website. Overall, the findings suggest that businesses and organizations in Elgin County are not yet taking full advantage of IT and broadband.<sup>5</sup>

**Figure 1**

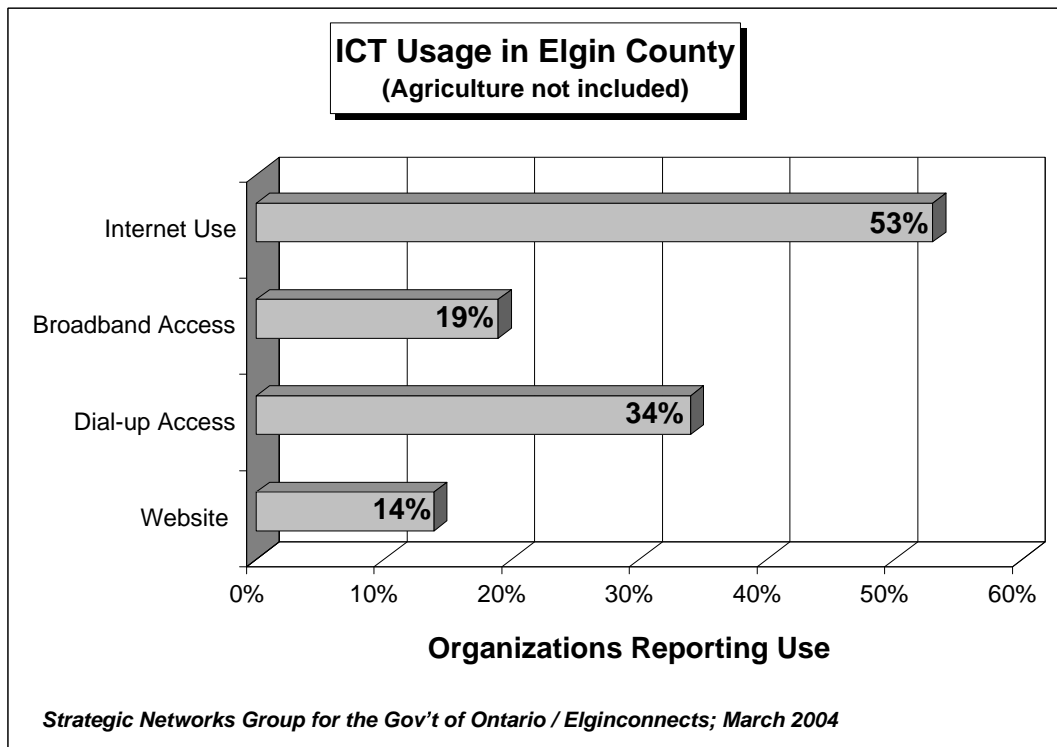
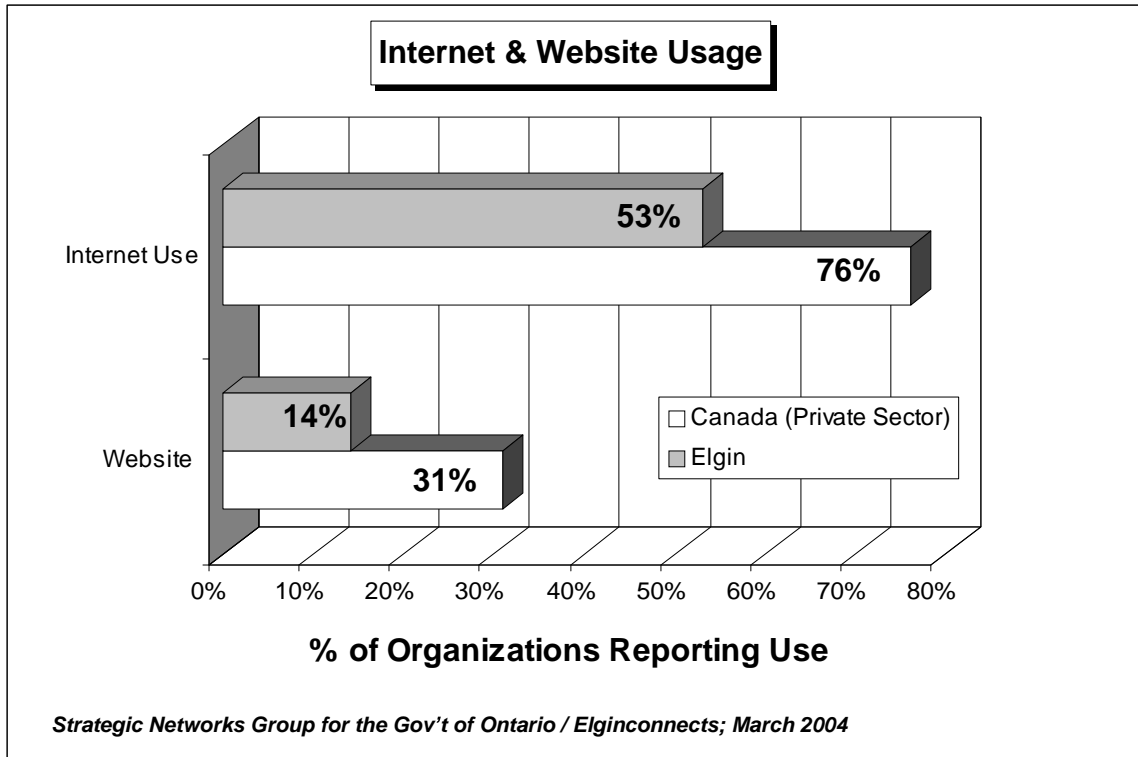


Figure 1 indicates the percentage of respondents who use the Internet for business purposes, the type of access and whether they maintain a website for business purposes. Of the 438 respondents, 232 [53%] indicated that they used the Internet, 83 [19%] have broadband connection, 149 [34%] have a dial-up connection and 61 [14%] provided a business website address. As indicated in Figures 2 and 3, these represent numbers below the Canadian average.

<sup>5</sup> For the purposes of this study, broadband is defined as a cable, ISDN/ASDL, wireless, satellite or fibre optic connection. A broadband connection is generally considered to be one with a minimum 1MB download speed.

Figure 2 compares the survey results from Elgin County with the national average (as collected by Statistics Canada in 2002).<sup>6</sup> As over 95% of the respondents were in the private sector, this average has been used for comparison (see below for a more detailed breakdown of results by industry sector). This figure shows that Elgin County is almost 20% below the national average for Internet use and 16% below for website usage.<sup>7</sup>

Figure 2

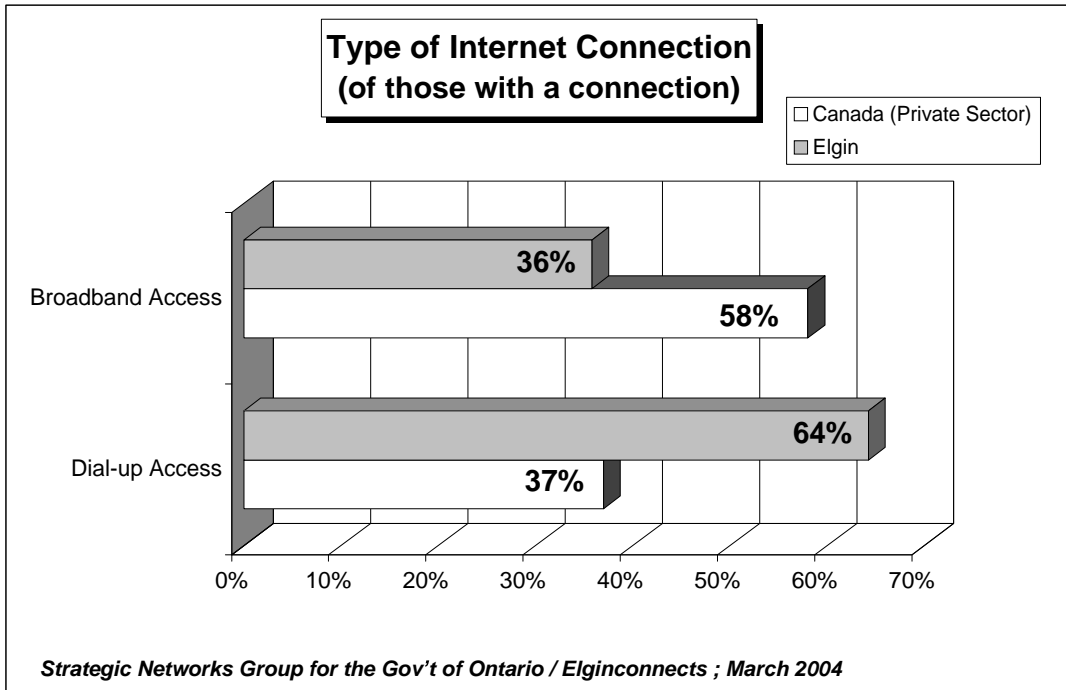


<sup>6</sup> Source: Statistics Canada – Survey of Electronic Commerce & Technology, 2002.

<sup>7</sup> A note on comparisons with national average: the national average necessarily includes urban, semi-rural and rural areas. Rural and semi-rural areas, as found in Elgin County, traditionally have a lower level of connectivity and thus are not expected to equal the national average in terms of IT usage. However, comparisons to that average allow one to assess the relative strengths and weaknesses of different industry sectors with regards to connectivity and provide a baseline for future performance measurement.

The types of Internet connections of organizations who use the Internet are presented in Figure 3. There were 232 organizations in Elgin County who reported using the Internet, of which 83 [36%] reported a broadband connection and 149 [64%] reported a dial-up connection. These numbers show that organizations in Elgin County are more heavily reliant on dial-up connections than the Canadian average.

Figure 3

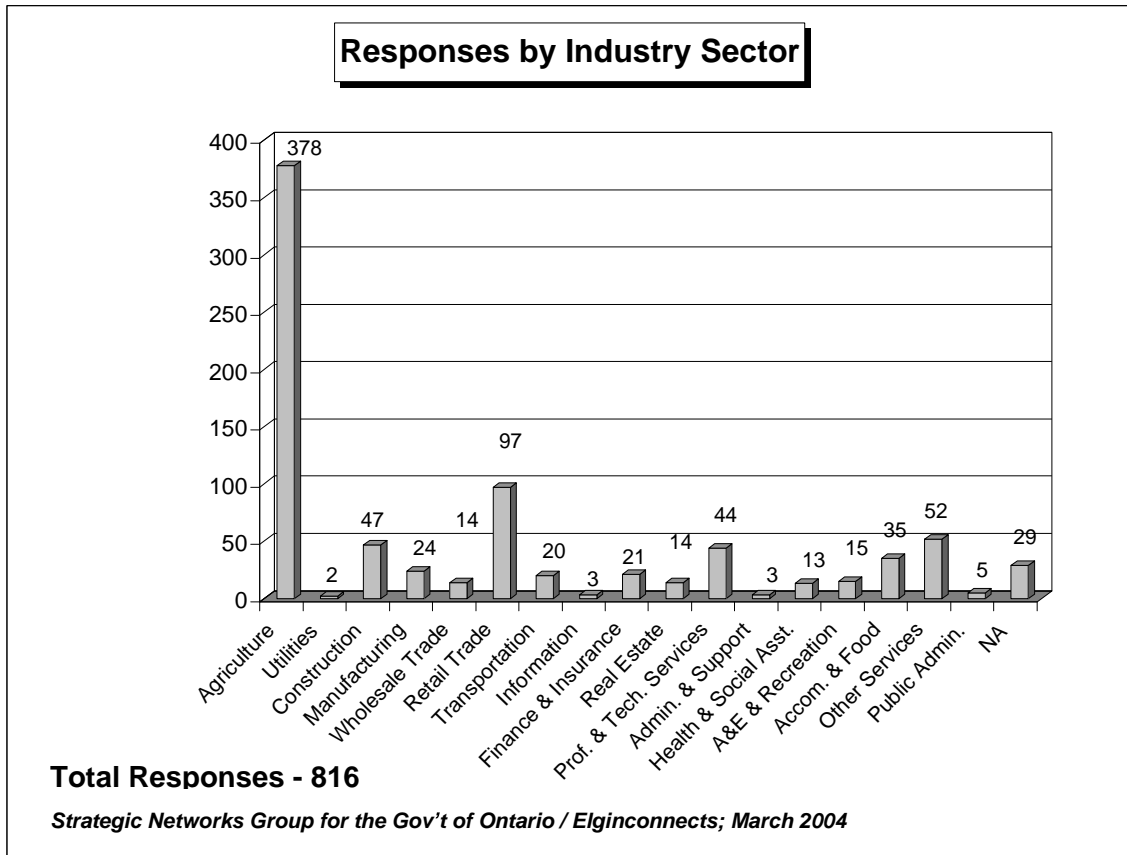


A smaller percentage of organizations are utilizing the Internet or websites to conduct business than compared to the Canadian average. Even those enterprises using the Internet tend to rely more on dial-up access than the Canadian average. This may be due in part to a lack of awareness as to the benefits of using IT, but is definitely affected by a lack of infrastructure in the region. Thirty-three respondents indicated that they would be eager to use a broadband connection should the possibility exist in their area.

**4.3.2 Breakdown by Industry Sector**

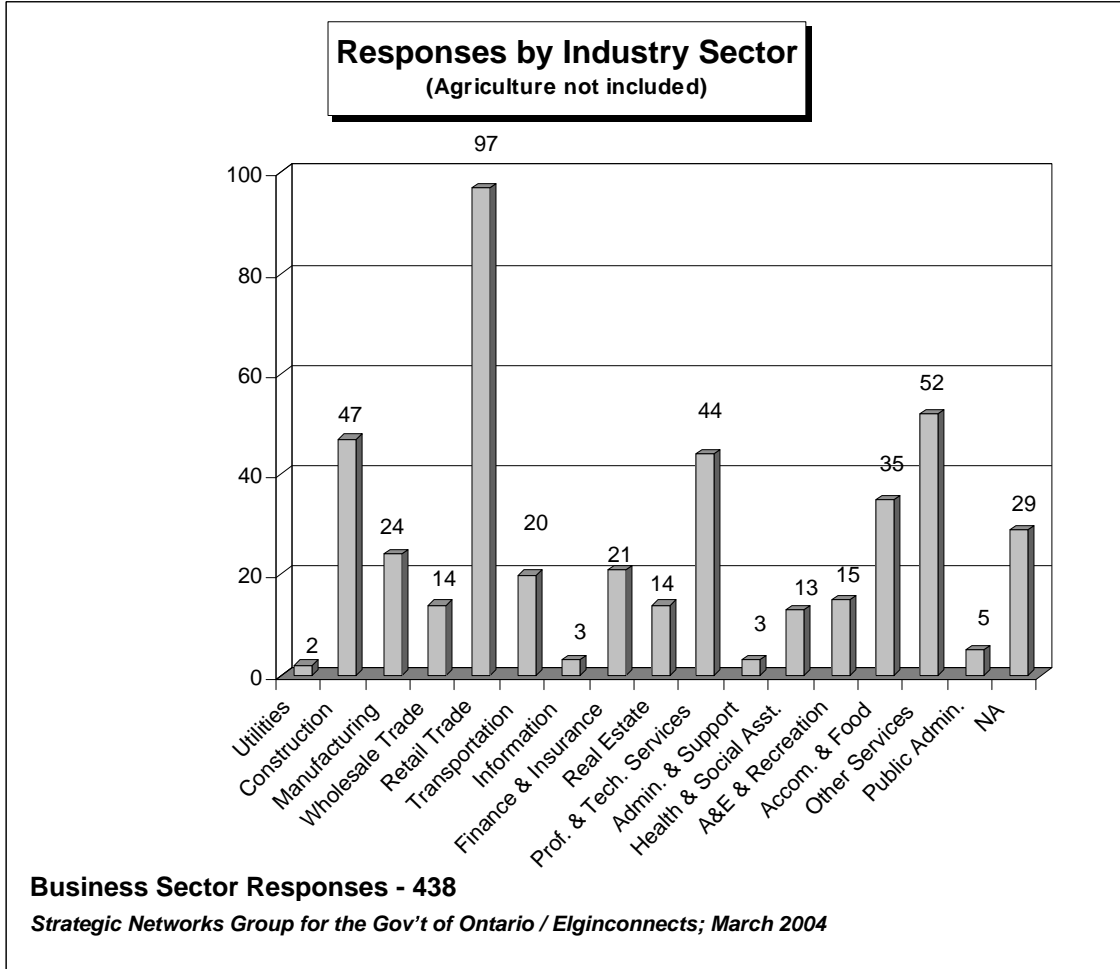
Internet usage by businesses obviously varies according to industry sector. Figure 4 shows the breakdown of survey respondents by industry sector. As can be expected, given the rural nature of the local economy and the size of the agricultural sector in the community, by far the highest number of responses were received from businesses in the agricultural sector (378 of 816 or 46.3% - see section 4.3.3 for an analysis of the agricultural sector).

**Figure 4**



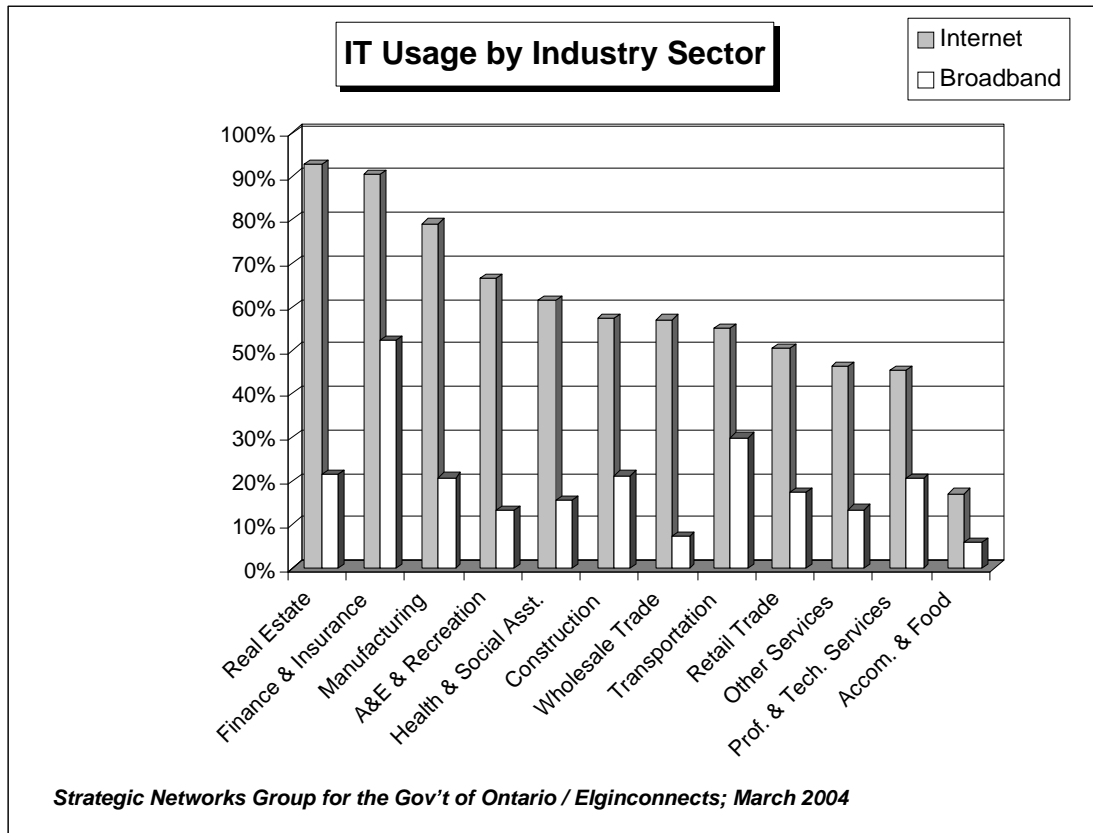
When the agricultural sector is removed (see Figure 5), the highest number of respondents comes from the Retail Trade sector (97 or 22%) followed by Other Services (52 or 12%), Construction (47 or 11%) and Professional & Technical Services (44 or 10%).

Figure 5



The following chart (Figure 6) compares the Internet usage and access to broadband percentages of each industry sector. It illustrates a high percentage of Internet usage for Real Estate [93%], Finance & Insurance [90%] and Manufacturing [79%], but a much lower percentage for Retail Trade [51%], Professional & Technical Services [45%] and Accommodation & Food Services [17%].

Figure 6\*



Even in sectors as ‘connected’ as Real Estate or Manufacturing, there is still a significant percentage of organizations which do not use broadband technology. Efforts to promote such technology might best be focussed on these kinds of sectors, where organizations already recognize the value and benefits of the use of IT, but who have not yet made the move – for whatever reason – to higher speed connections.

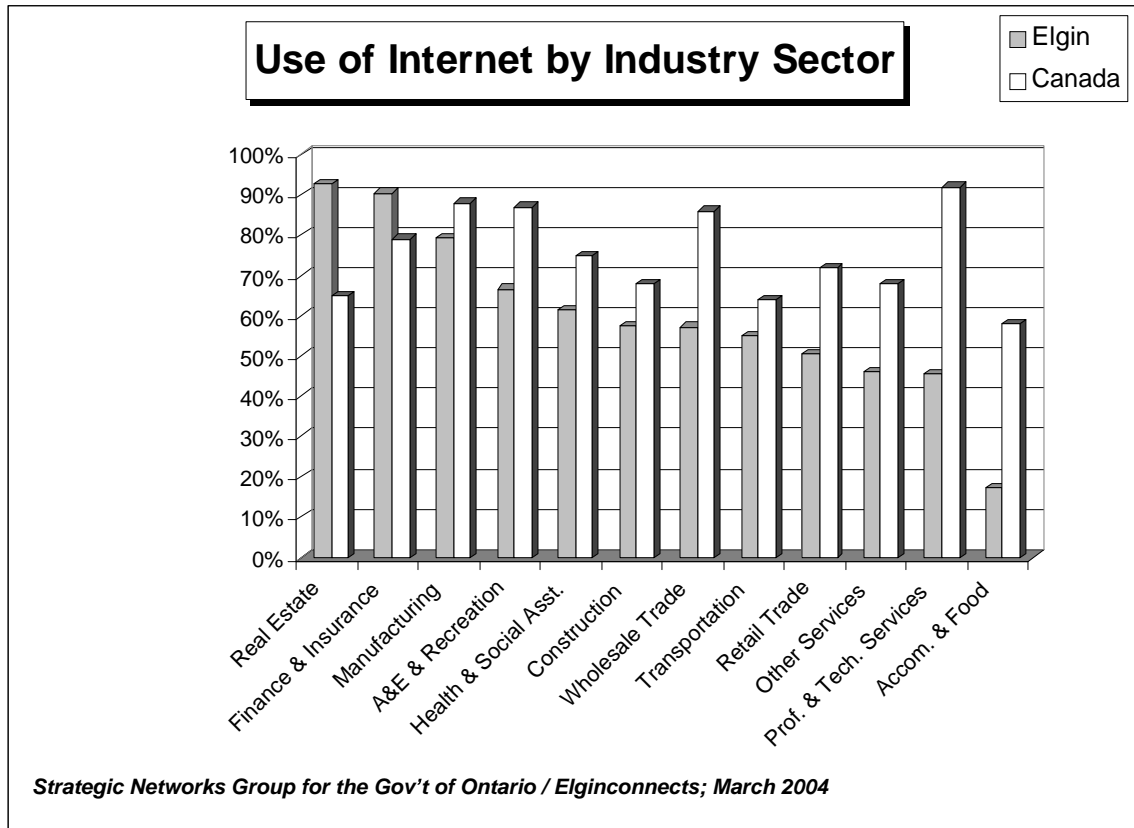
Different industry sectors use IT and Internet connectivity in different ways and not all sectors require these tools to the same extent. One would not expect all sectors to have the same percentage use of either the Internet in general or of broadband in particular. To get a better picture of where Elgin County stands in terms of its IT usage, it is necessary to compare it to the rest of the country.

\* Note: Sectors with 10 or fewer respondents (Utilities, Information, Administration & Support Services, and Public Administration) have been removed as such small sample sizes cannot be said to be representative of those sectors.



Although Elgin County as a whole shows less use of IT than the Canadian average, the story changes somewhat when the figures are broken down by industry sector. Figure 7 shows the percentage of Internet users in each industry sector who have a broadband connection. It shows that certain sectors, particularly Real Estate and Finance & Insurance, compare favourably to the national average, while others, such as Retail Trade, Accommodation & Food Services and Professional & Technical Services, are significantly under-represented.

Figure 7\*



The Real Estate [93%] and Finance & Insurance [90%] sectors in Elgin County are 28% and 11% higher respectively than the national average in those sectors. On the other hand, Accommodation & Food Services [17%], Professional & Technical Services [45%], and Wholesale Trade [57%] are significantly, 41%, 47%, and 29% respectively, below the national average.

When deciding on where to focus efforts to promote overall levels of use of the Internet with businesses and organizations in Elgin County, one strategy is to concentrate on areas where usage is low. When comparing to national averages, the Real Estate and Finance & Insurance sectors are comparable to the Canadian national averages. Efforts

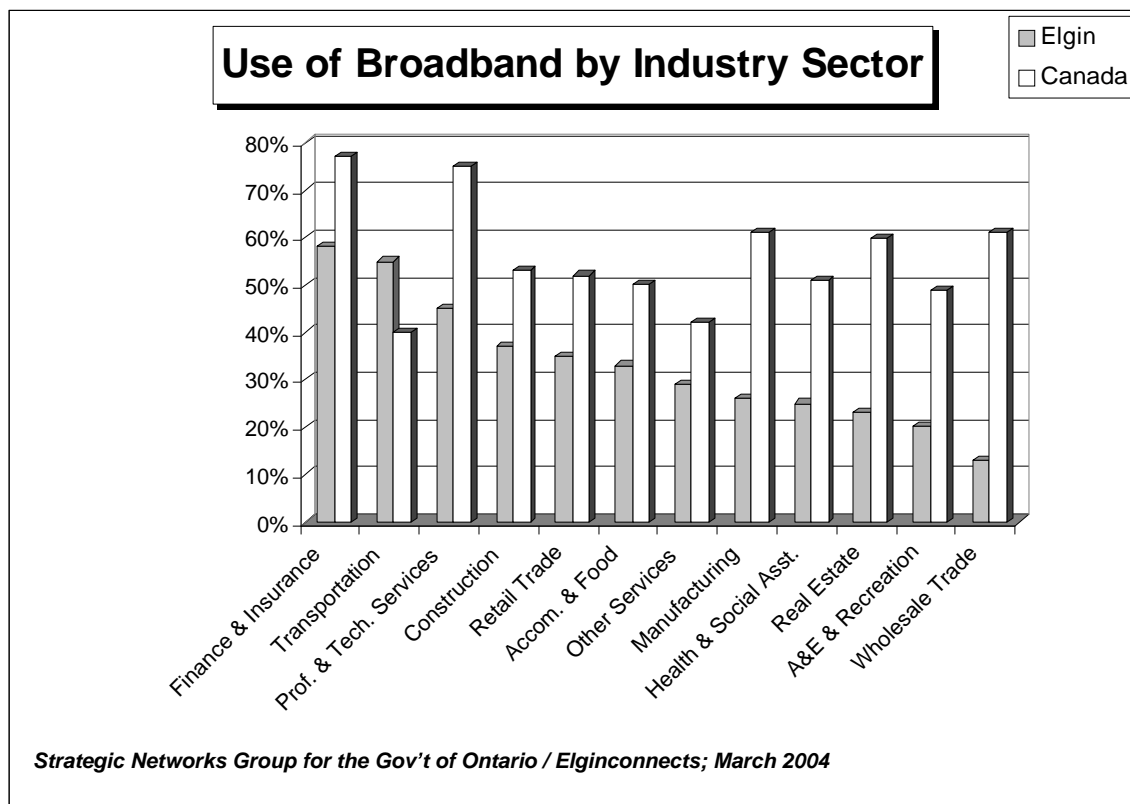
\* Note: Sectors with 10 or fewer respondents (Utilities, Information, Administration & Support Services, and Public Administration) have been removed as such small sample sizes cannot be said to be representative of those sectors.

in Elgin County aimed at the lower usage sectors (e.g. Wholesale Trade and Accommodation & Food Services) would have the biggest impact on usage levels and return on investment.

Statistics Canada data notes that, of those industries in the private sector that use the Internet, 58% have broadband access. In Elgin County, the figure is 24% (see Figure 3). Figure 8 provides a breakdown of these numbers by industry sector. It shows, for example, that of all the survey respondents from the Transportation & Warehousing sector who have Internet access, 55% have broadband access. This compares favourably to the national average of 40%

However, Transportation & Warehousing is the only sector which has a percentage of broadband use higher than the national average. Finance & Insurance, Accommodation & Food Services, Construction and Retail Trade are 15% - 20% below the national average while Professional & Technical Services, Wholesale Trade and Real Estate are more than 30% below.

Figure 8\*



\* Note: Sectors with 10 or fewer respondents (Utilities, Information, Administration & Support Services, and Public Administration) have been removed as such small sample sizes cannot be said to be representative of those sectors.

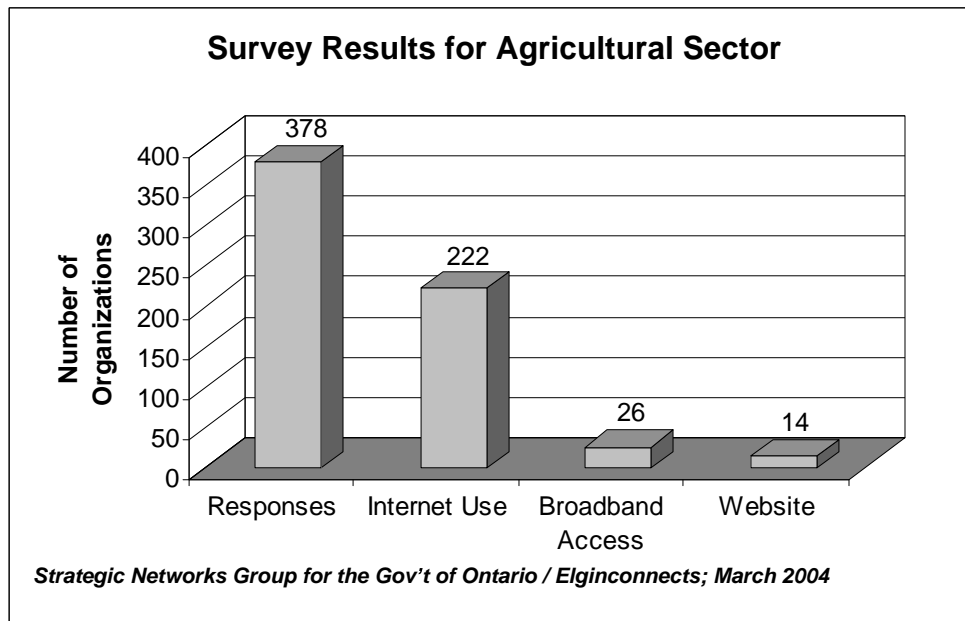
These two charts (Figures 7 & 8) take into account the variances associated with industry sector and demonstrate a need to increase the usage of the Internet in some sectors and a need to promote the use of broadband in almost every sector.

**4.3.3 Agricultural Sector**

The agricultural sector in Elgin County is very important to the economy of the region. Despite employing only 10% of the population in the county, a recent study indicated that its significance is greater than its employment figures suggest (Cumming, 2000). Given that the urban centre of St. Thomas was largely excluded from this study, the importance of the agricultural sector, in percentage terms, can be considered even greater.

Figure 9 illustrates the number of respondents, the number of organizations using the Internet, broadband or a company website for the agricultural sector in Elgin County. The 59% of enterprises in the agricultural sector using the Internet (222 of 378) is higher than that of the ‘business sectors’ in Elgin County. However, the 4% with a corporate website (14 of 378) and 12% of Internet users with a broadband connection (26 of 222) are percentages lower than the ‘business sectors’ in the county (see Figures 2 and 3).

**Figure 9**



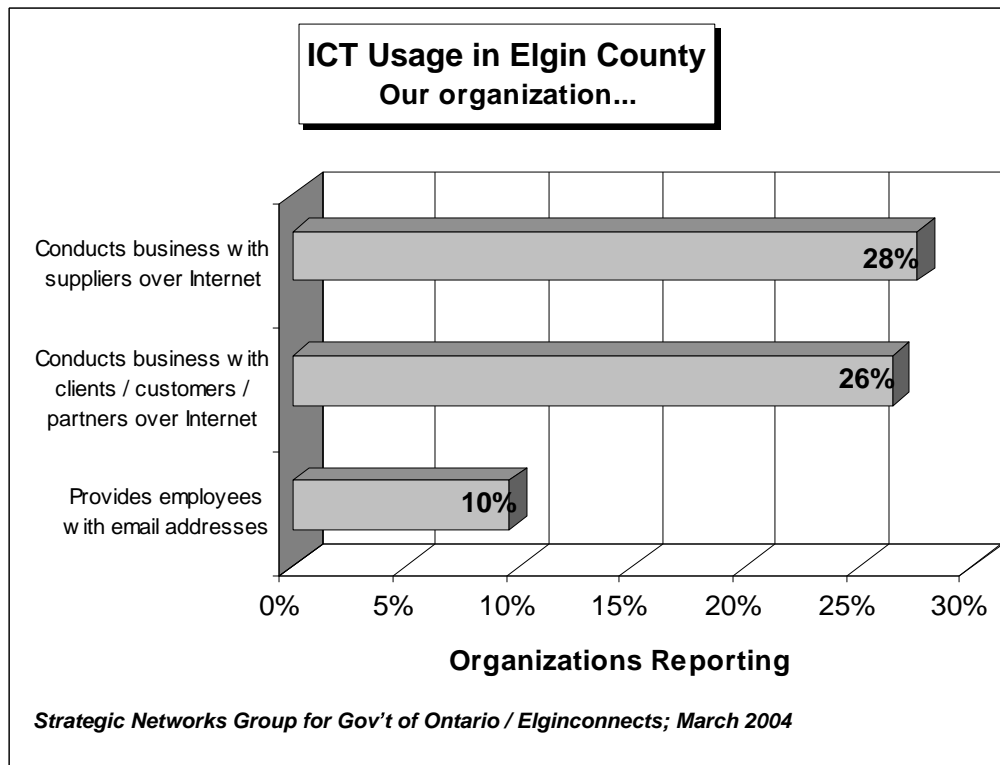
In terms of North American Industrial Codes (NAIC), agriculture is grouped with forestry, fishing, and hunting. As mentioned earlier, Statistics Canada does not collect data on IT usage for organizations in this category (with the exception of enterprises engaged in forestry) as part of its Survey of Electronic Commerce & Technology. As part of its Agricultural Census in 2001, farmers were asked about their computer usage. However, as the present study was designed to look at businesses with employees and not as a census, the survey populations are not comparable.<sup>8</sup>

**4.3.4 Uses of the Internet by Organizations in Elgin County**

Surveys distributed to organizations in Elgin County contained a number of questions regarding their use of the Internet. The answers to these questions give an idea as to how the Internet is being used in the county and provides a baseline against which to measure progress.

Figure 10 illustrates the characteristics of Internet use by organizations in the county. Over 25% of organizations communicate with clients, customers, suppliers and partners via the Internet. Only 10% however, provide email addresses to their employees.

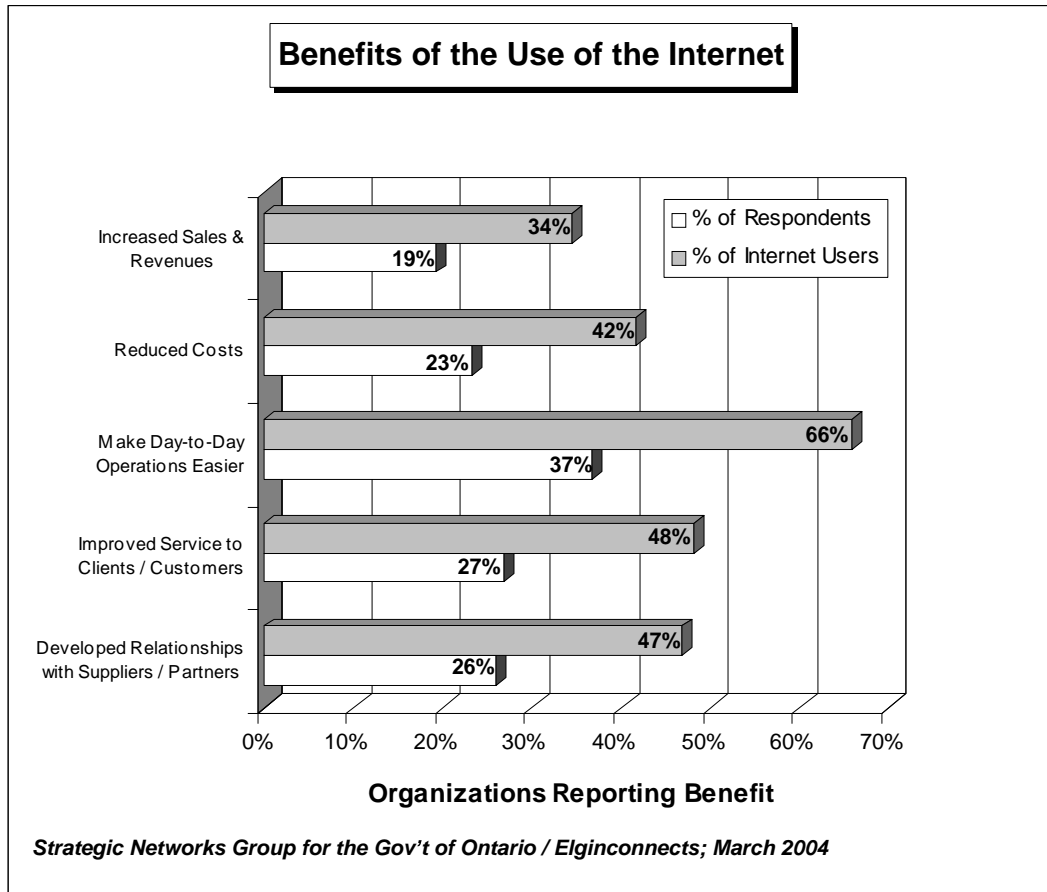
**Figure 10**



<sup>8</sup> Farms with employees are by their very nature larger than sole-proprietorships. Larger enterprises traditionally make more use of IT and thus it is not surprising that the survey population had a greater connectivity than the national average. The differing nature of the populations however makes it impossible to draw any meaningful comparisons.

An additional set of questions examined what benefits organizations feel they are receiving from their use of the Internet. Figure 11 shows the percentage of total respondents and the percentage of Internet users who feel they are benefiting from their use of the Internet and in what ways.

Figure 11



As can be seen in Figure 11, the prime benefit of the use of the Internet, as felt by organizations in Elgin County, is that it generates efficiencies in business processes. 66% of organizations who use the Internet feel that their day-to-day operations are made easier by the Internet and 42% have had their costs reduced due to Internet usage. Almost one half of Internet users believe that it has allowed them to both improve relationships with their clients / customers and with their suppliers / partners.

## 5 CONCLUSION

Findings from this survey provide a thorough picture of the state of IT usage and awareness in Elgin County. The findings are based on a significant sample of businesses and organizations in Elgin County – a very high response rate was achieved with 816 responses from the 1,733 businesses and organizations surveyed. A response rate of 47% is considered very high for this type of survey and to a large extent can be attributed to the efforts of the Elginconnects team who conducted follow-up phone calls to collect survey responses. The high response rate and broad representation of enterprises provide a solid basis for analyzing the state of IT usage by businesses in the region.

When comparing the findings to Canadian national averages, there are some significant gaps in IT usage in Elgin County. It should be noted however that the national average figure is exactly that and thus contains information from urban centres as well as rural and semi-rural areas. One would not expect that a region such as Elgin County, with rural and semi-rural areas, would have a level of connectivity as high as the national average. Nonetheless, the relative gaps between levels of connectivity in Elgin County in certain sectors, compared with the corresponding sectors on the national level, helps provide guidance as to where to focus efforts for IT development and provides a baseline against which to measure future development.

While some sectors (e.g. Real Estate, Finance & Insurance, and Manufacturing) are making good use of the Internet, many (e.g. Accommodation & Food Services, Transportation & Warehousing and Retail Trade) show a percentage of use well below national averages. If efforts are made in Elgin County to promote the use of the Internet and broadband, these findings suggest that efforts made to raise awareness and improve Internet infrastructure will have the biggest impacts on usage levels if they are focused on under-served sectors such as Retail Trade and Accommodation & Food Services. As a next step, it will be important to identify those under-served sectors where the return on investment will be net positive.

In terms of high-speed broadband Internet usage, even sectors as 'connected' as Real Estate and Manufacturing showed a level of broadband access significantly lower than the national average. Only the Transportation & Warehousing sector was on par with the national average. These findings suggest that there is an obvious need to promote the use of broadband in Elgin County. Comments received during the survey process suggest a lack of infrastructure as one reason for the low rate of broadband usage.

## Bibliography

Cummings and Associates. Elgin County Agricultural Sector Assessment Study. HCA Report. Guelph, Ontario, 2000.

Lunn, Donna. Elgin / Middlesex Information Technology Project. Elgin Community Futures Development Corporation, St. Thomas, Ontario, 2000.

Statistics Canada, "*Canadian Farm Operations in the 21<sup>st</sup> Century*" and "*Provincial/regional trends*", The Daily, Ottawa, Ontario, May 15, 2002.

Statistics Canada. Survey of Electronic Commerce & Technology. Ottawa, Ontario, 2002.