Skills For Tomorrow Report

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[Date]

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1.0 Introduction

1.1 Local Employment Planning Council Project Overview

Local labour market information provides the basis for informed decision making and responses to the challenges that confront local economies. In response to a growing need for local labour market information (LMI), the Ontario *Ministry of Advanced Education and Skill Development (*MAESD) invested in eight Local Employment Planning Council (LEPC) pilot sites in the summer of 2015. The Durham LEPC pilot is one of eight pilot sites selected. The purpose of the (LEPC) pilot was to facilitate the development of a skilled and adaptive labour force through improved availability of LMI. In the Region of Durham, this pilot was led by the Durham Workforce Authority (DWA) in collaboration with the Region of Durham, Social Services Department, and Durham College's Office of Research Services Innovation and Entrepreneurship (ORSIE). This multi-faceted approach to improving the availability of LMI was comprised of a variety of diverse initiatives, one of which, the employer survey, is the focus of this report.

1.2 Project Goals

The "*What Employers Need: Skills For Tomorrow*" employer survey was designed to provide insights that would enable stakeholders to better understand employers' skills needs and improve local services in an effort to support economic prosperity. Additionally, the survey would provide information that could inform postsecondary programming, satisfy the need for local LMI, and provide employers with meaningful information about their sector.

The DWA LEPC project was guided by overall project goals, and sub-goals specific to different facets of the project. Overall project goals of primary importance to the employer survey included the development of a shared understanding of issues affecting the local labour market, and to improve the availability of local LMI. Sub-goals specific to the employer survey included: the collection of comprehensive information about the local labour market; reliable sector response information by ensuring a minimum threshold is met and inclusion of specific questions related to federal government essential skill levels required by employers. Some specific targets for achieving these sub-goals include 200 completed surveys and 25 surveys returned for each identified priority sector.

1.3 The Conceptual Approach

In an effort to acquire relevant LMI at the local level, the employer survey was developed in such a fashion to ensure that it was applicable to the wide spectrum of employers while maintaining due relevance. This unique approach would allow the survey to be conducted across the Region of Durham, or to specifically focus on the lakeshore municipalities. The comprehensive nature of the survey allowed all sectors of the local economy to be assessed and included specific questions for individuals who identified as self-employed. Given the existence of a region-wide survey conducted by the Region of Durham annually, see Business Count, it was essential that the employer survey provide valuable information in areas outside the scope of this existing tool in an effort to avoid duplication of results. Some specific areas of importance not covered by the Region's existing survey include essential skills, attraction and retention issues, and availability of training opportunities. Additionally, this study was unique in its approach to large organizations. By posing questions to employers based on individual locations in the Region, this study was able to examine multiple locations for a variety of respondents. In order to complement the survey, a variety of focus groups and key informant interviews were also conducted. The information gathered through these approaches ultimately provided the foundation for this report.

1.4 Structure of the Report

This report details the employer survey element of the DWA LEPC project and will provide the reader with an enhanced understanding of the labour market in the southern portion of Durham Region. Specifically, this report focuses on the five municipalities that line the lakeshore: Ajax, Clarington, Oshawa, Pickering, and Whitby, hereafter referred to as lakeshore municipalities. This report will begin with an examination of Durham Region based on existing data, which provided the basis for priority sector designation. Next, the report will detail the methods and data collection strategies employed and report on the overall results of the study. Results will include assessment of both employers with employees, and the self-employed. The report will then specifically address each priority sector and collectively address the other sectors that comprise the local economy. Finally, the report will detail the results from each of the individual lakeshore municipalities in the Durham Region and provide recommendations for future inquiries.

1.5 Project Rationale: Labour Market Information

There is a pronounced need to access detailed LMI related to employer needs in order to facilitate the development of a highly skilled and adaptive labour force with skills relevant to employers' requirements. Currently there is limited information available through provincial and national sources related to employers' skill needs, attraction and retention related issues, and training opportunities. Additionally, there is limited information about community service gaps, current hiring experiences, and future hiring plans. Although there have been a variety of individual sector level studies, there is limited research that addresses priority sectors. The employer survey was developed in response to these challenges.

1.6 Definition of Key Terms

The following is a list of key terms used throughout this report:

- Employees: Refers to full-time, part-time and contract employees.
- Lakeshore municipalities: Refers to the five municipalities in the Durham Region which lie along the shores of Lake Ontario. These municipalities include Ajax, Clarington, Oshawa, Pickering, and Whitby.
- LEPC: Local Employment Planning Council, comprised of community representatives, employers, industry associations, and Chambers of Commerce.
- DWA LEPC the LEPC pilot project led by the Durham Workforce Authority (DWA) in collaboration with the Region of Durham, Social Services Department, and Durham College's Office of Research Services Innovation and Entrepreneurship (ORSIE)
- NAICS: North American Industry Classification System that divides the economy into sectors, subsectors, industry groups, and industries.
- NOC: The National Occupational Classification system that describes the work performed by Canadians by assigning a numerical code to them.
- Organization: Refers to any business, private or public corporation, and not-for profit organization.
- Sector: Refers to the 2-digit NAICS code, selected by employers, to describe their organization.
- Self-employed: Refers to any individual who operates a business, incorporated or not, where the sole employee is themselves.
- Skills: Refers to the nine federally identified essential skills, which include, Reading, Writing, Document Use, Numeracy, Computer Skills, Thinking, Oral Communication, Continuous Learning.
- Region: The Regional Municipality of Durham.

1.7 Project Scope and Limitations

Given the unique attributes of north Durham a separate and distinct survey was developed and administered to employers from this area by the DWA. The What Employers Need Skills For Tomorrow survey focuses solely on the employers in the lakeshore municipal areas in south Durham. The results presented in this study are intended to complement the results from the survey of employers in north Durham and the results of this study apply only to those lakeshore municipalities located in south Durham and not the entire Region of Durham.

One challenge came as a result from the differing composition of the economy in each of the Region's lakeshore municipalities. As different priority sectors exist in each municipality, preserving the unique features of each municipality in the overall results proved to be a difficult but not impossible task. The unique nature of each municipality was also evident in the way key sectors and their definition varied. Most municipalities identified their priority sectors by names that often differed and overlapped. For example, Manufacturing and Advanced Manufacturing, although different in name, these two sectors often intersect and overlap. The approach of using NAICS codes to divide the economy limited this potential for overlap; however, may result in some minor differences in sectoral makeup for each municipality.

Tantamount to the success of this project was the achievement of certain sectoral response targets. The assignment of specific sectoral response targets was a challenging feature of this study as the targets selected did not account for the total number of employers in each sector of the local economy. As a result, it became challenging to ensure that the data collected were representative of the economy in each individual municipality, and across all of the lakeshore municipalities.

The composition of the economy in the Region posed an additional challenge in terms of access to employers. Given the significant lack of data, the survey instrument developed was extensive. The extensive nature of the survey presented a challenge to adequately capturing the input of large (500+ employees) organizations for whom this survey proved to be quite long.

The DWA LEPC project began at a challenging time in terms of access to current data. The DWA LEPC pilot required local LMI in a relatively short timeframe, near the end of a census period. This challenge proved significant in that local data from this census period would not be available until after the completion of the project. While some LMI was available through the annual Region of Durham Business Count, this data did not address many areas of importance to the DWA LEPC project. Further, the annual business count and other sector and industry specific surveys conducted regularly contributed to survey fatigue among employers posing a challenge to achieving meaningful response rates. The short duration of the project also proved to be a challenge given the need to re-design, develop, and test the employer survey. This resulted in a relatively short timeframe for data collection, approximately three months.

Based on consultation with the DWA, it was determined that the sector of Accommodation and Food Services was not an area of particular interest to this study. As a result, the original outreach to this sector was minimal, resulting in a low response rate. Following a reconsideration based on the understanding that some segments of this sector require an enhanced level of skill and training, a specific database was compiled with additional contacts from this sector that were known to fit this description and some outreach began. For example, restaurants that only hire cooks who have completed an apprenticeship or a high level of skill were of interest and many such organizations were contacted.

2.0 South Durham Region: Estimating Employers - Overall and Sectors

2.1 Data Sources and Employer Information Collection

In order to understand the local labour market, the North American Industry Classification System (NAICS) was used to divide the local economy into sectors. NAICS utilizes a five-digit code to divide the economy into sectors (two-digit), subsectors (three-digit), industry groups (four-digit) and industries (five-digit). At the two-digit level, the NAICS divides the local economy into 20 distinct sectors. These sectors ultimately provided the basis for the sector level analysis that was conducted and was used for the purpose of determining key sectors of significant importance to the local labour market.

Prior to beginning data analysis of existing secondary sources, a content analysis of the various municipal websites was initiated. This effort was undertaken to develop a better understanding of the sectors of the economy known to be of particular importance in each municipality, and across the Region. The results of this analysis are depicted in Table 1.

Region of Durham	Clarington	Oshawa	Whitby	Ajax	Pickering
Advanced Manufacturing	Manufacturing	Advanced Manufacturing	Advanced Manufacturing	Technology Based Manufacturing	Advanced Manufacturing
Agri-business					Agri-Food
Digital Technology		Information Technology	Information & Communication Technology	Business & IT Services	Information & Communicatio n Technology
Film					
Small Business					
Smart Energy	Utilities	Energy Generation	Clean Technology	Sustainable Energy	Energy
Tourism			Government Services	Tourism	
	Transportation & Warehousing	Multimodal Transportation and Logistics	Logistics & Distribution	Wholesale Logistics	
		Health and Bio-Sciences	Health & Medicine	Healthcare	
	Retail Trade		Professional and Technical Services		Environment and Engineering
	Construction				

Table 1

There is limited information on how the key sectors were determined by the various municipalities. Reference made on several websites to the labour force location quotient (LQ) as one way that key sectors were determined enabled this strategy to be employed as part of the investigation that would determine key sectors. As seen in Table 1, each municipality classified their key sectors somewhat differently making it difficult to align each sector with a corresponding NAICS code at the 2-digit level. For example, Information Technology, and Information and Communication Technology, although similar may be comprised of slightly different businesses. Notable sectors across the various municipalities include Advanced Manufacturing, Information and Communication Technology, and Energy. Some sectoral differences should be expected as a result of applying the NAICS framework to the Skills For Tomorrow employer survey; however, this also eliminates the possibility of overlapping sectoral

names. For example, Tourism (a relatively broad category) could also include businesses from the Accommodation and Food Services sector, Retail Trade and other sectors. Employing the consistency of the NAICS framework alleviates some of this potential for overlap.

With a preliminary understanding of the key sectors identified by the various municipalities, the process of collecting data from a variety of secondary sources began. It was of primary importance to understand the characteristics of the local labour market in order to effectively design a survey that could capture the full spectrum of different businesses and sectors of employment that make up the local labour market. Secondary sources used for the purpose of this exploration include the Region of Durham's Business Count (BC) (2015), Statistics Canada's Canadian Business Patterns (CBP) (2015), Statistics Canada's National Household Survey (NHS) (2011) and Industry Canada's Canadian Company Capabilities (CCC) (2015). Table 2 provides a brief description of some of the variables available through these datasets. How these sources were used will be further detailed in the following paragraphs.

Variable	BC	CBP	NHS	CCC
NAICS	X	X	X	X
NOC		X	X	
Municipality	X	X		X
Size (range/number)	X	X		X
Business Name	X			X

Table 2

The first secondary data source analyzed was the Region of Durham's 2015 Business Count, hereafter referred to as BC data. This information is collected on an annual basis (from May to September). The BC data were obtained by the DWA and shared with Durham College at the beginning of the project in June 2016.
The BC data were used to understand the total number of businesses and employees in the Region. This understanding was achieved in two distinct ways. First, the data was analyzed to determine the total number of businesses in the Region, and in each municipality. Next, the corresponding sectors to which these businesses belong were also examined to provide a working understanding of important sectors across the Region and in each municipality.

The second use of the BC data was to determine the sectors of the economy that contained the greatest number of businesses. This was determined by assessing the total number of businesses in each sector. Isolating the results by municipality provided a count of businesses in each sector both across the Region and in each municipality. Additionally, the total number of employees was examined to determine which sectors of the economy were of particular significance in terms of total employment. This assessment was then compared to the total number of businesses to provide an understanding of both of number of locations and total employment for a more complete picture of the individual sectors in the Durham Region.

The final use of the BC data was to calculate the labour force LQ. The LQ is a measure used to determine the concentration of a business in a local area relative to a larger geographic area, for example, Oshawa relative to Ontario. A LQ higher than one suggests a high local concentration of activity that exceeds normal local demand. BC data were used to calculate a LQ for each municipality based on the total regional employment. An assessment of the LQ supported the identification of three highly concentrated sectors across the Region of Durham. These highly concentrated sectors are displayed in Table 3.

Sector	Utilities	Retail Trade	Accommodation & Food Service
Location Quotient	7.26	1.85	1.37

Table 3

The next source of data analyzed was Statistics Canada's Canadian Business Patterns, hereafter referred to as CBP data. This data was used to further explore the issue of employment concentration and to support the determination of key sectors. The goal in examining this data was to develop a benchmark against which the BC data could be compared to develop a more robust understanding of the number of businesses in each sector, and the number of individuals employed in these sectors.

When comparing the total number of businesses to the BC data, the CBP data yielded slightly different findings in terms of the total number of businesses in each sector. One possible reason for this variation could be attributed to the different methods used to classify NAICS. The CBP data were used to provide a rough LQ number against which the BC LQ could be compared. Whereas the BC data provides for employment size with a whole number, the CBP data provides for employment size by range. To address this difference, the median of the ranges was compared total employment by sector between the BC and CBP data. This method ultimately contributed to some of the variance observed.

Next, the National Household Survey (NHS) data from the 2011 period was examined. NHS data is collected every five years and provides comprehensive information about demographics, age, income and geography. This data provided the information on the average income by sector, and provided a specific number of total employees by sector across the Region and the Province

Finally, Industry Canada's Canadian Companies Capabilities (CCC) data were used for comparative purposes to determine the accuracy of NAICS information contained in both sets of business counts data. The CCC database is a voluntary database updated by individual organizations who determine their own NAICS classification. When comparing the CCC data to the BC data it was discovered that some of the NAICS codes differed from those in the CCC database. As a result, some variation was expected between datasets related to NAICS identification. In response to the understanding that there was some variation as a result of improperly identified NAICS, the decision was made to provide sector definitions to survey respondents and to allow them to self-identify their sector based on the focus of the operations at their location.

2.2 Employer Attributes

The following section will explore demographic characteristics of employers, such as the size of businesses that account for the greatest total number of businesses and total employment. This information was considered both at the regional and municipal level with some of the findings presented below. Using the CBP and BC data, it was possible to determine the total number of businesses in each municipality and the size of these businesses in terms of their number of employees. The BC data showed that among the lakeshore municipalities, small businesses represented the greatest number of business locations for a total of 4,208 business locations. small businesses were also significant in terms of total employment, representing 74,140 individuals employed. These findings differed slightly from the CBP data which suggested that micro enterprises slightly outpaced small enterprises representing some 86,286 business locations; however, small businesses still represented the greatest number of employees according to the CBP data (14,522 employees). Findings were consistent in every municipality and are depicted in Table 4.

BC and CBP Size of Businesses Compared				
Durham Region Business Count (BC)				
Durham Total Businesses with Employees	Micro (1-4)	Small (5-99)	Medium (100-499)	Large (500+)
(N) 7,905	3,437	4,208	234	27
Percentage %	43.8%	53.2%	2.9%	.3%
Durham Total Number of Employees	Micro (1-4)	Small (5-99)	Medium (100-499)	Large (500+)
(N) 15,397	8,151	74,170	41,192	32,884
Percentage %	5.2%	47.4%	26.3%	21.0%
Statistics Canada Canadian Business Patterns (CBP)				
Durham Total Businesses with Employees	Micro (1-4)	Small (5-99)	Medium (100-499)	Large (500+)
(N) 12,456	7,584	4,692	216	27
Percentage %	60.8%	37.6%	1.7%	0.2%
Durham Total Number of Employees	Micro (1-4)	Small (5-99)	Medium (100-499)	Large (500+)
(N) 170,445	18,960	86,286	33,473	31,725
Percentage %	11.1%	50.6%	19.6%	18.6%

Table 4

In terms of geographic distribution, the greatest concentration of both businesses and employees appeared in the municipalities of Oshawa and Whitby. Ajax and Pickering represented the next largest share of total employment, followed by Clarington. These numbers were consistent across both the CBP and BC data sets. From the information gathered, it was expected that for the LEPC employer survey, the greatest number of responses would be from Oshawa and Whitby. Additionally, the research gathered from this preliminary analysis suggested the majority of respondents would come from micro and small businesses.

2.2.2 Sector Distribution in the Region

Based on the preliminary data analysis, the BC data revealed that the greatest number of employees were concentrated in Retail Trade (44-45); Healthcare and Social Assistance (62), and Accommodation and Food Services (72) representing a total of 75,258 employees and 52% of total regional employment. Similarly, the greatest number of businesses were concentrated in these three sectors, representing a total of 5,505 unique locations and 60% of the unique business locations. These results are presented in Table 5. The similarity between sectors of high total employment and high number of businesses established the initial understanding that these sectors were of significant importance to the local economy. The findings are challenged by the traditional understanding which suggests that areas of high employment often do not have many unique business locations. For example, large businesses that have a high number of employees often concentrate these employees in one or two large business sites.

BC Sector Comparison Number of Employees & Number of Businesses					
Total Number of Employees (BC)			Total Number of Businesses (BC)		
Sector	Employees	%	Sector	Businesses	%
Retail Trade (44-45)	36,164	25%	Retail Trade (44-45)	2,523	27%
Healthcare & Social Assistance (62)	23,313	16%	Healthcare & Social Assistance (62)	1,714	19%
Accommodation & Food Services (72)	15,781	11%	Accommodation & Food Services (72)	1,268	14%
Total (N)	75,258	52%	Total (N)	5,505	60%

Table 5

Statistics Canada's CBP data was also used to further validate the total number of employees and the total number of businesses within each sector of the economy. This information could then be compared to the same information taken from the Durham BC data for both comparative and data validation purposes. From the Statistics Canada CBP, the top three sectors in terms of total number of employees were Retail Trade (44-45); Healthcare and Social Assistance (62) and Manufacturing (31-33). Combined, these sectors account for 97,320 employees and 41% of total employment in the Region. The total number of businesses was then examined by sector. The three sectors with the greatest total number of businesses were Real Estate and Rental and Leasing (53); Professional, Scientific and Technical Services (54) and Construction (23). These industries represented a combined 18,966 unique locations and 51% of the unique business locations across the Region. These results are depicted in Table 6.

Total Employees Comparison CBP & BC					
Total Number of Employees (CBP)			Total Number of Businesses (CBP)		
Sector	Employees	%	Sector	Businesses	%
Retail Trade (44-45)	36,060	15%	Real Estate & Rental & Leasing (53)	6,770	18%
Healthcare & Social Assistance (62)	32,605	14%	Professional, Scientific & Technical Services (54)	6,375	17%
Manufacturing (31-33)	28,655	12%	Construction (23)	5,821	16%
Total (N)	97,320	41%	Total (N)	18,966	51%

Table 6

Although there was a great deal of variation observed among the sectors with a high total number of businesses compared to those with a high number of employees, the expectation was that sectors with the greatest total number of employees would differ from sectors with the greatest number of businesses, unlike what was observed in the BC analysis. Often, greater concentration of employees in a sector can be a result of both a high number of business locations and high numbers of employees within larger organizations. As an example, manufacturing companies often employ many employees but will likely have few locations. This would explain the appearance of manufacturing as a significant contributor to total employment and not to the total number of business locations in the Region.

As the two data sources were collected using different methods during different times of the year it was expected that the results would differ slightly. Accordingly, the top three sectors in terms of total number of employees were incredibly similar with the only difference being

Manufacturing (CBP) and Accommodation and Food Services (BC) both of which appeared at the third rank for total employment. This information is recorded in Table 7.

Location Quotient Compared for BC & CBP			
Durham Region Business Count		Statistics Canada Business Patterns	
Sector	Employees	Sector	Employees
Retail Trade (44-45)	36,164	Retail Trade (44-45)	36,060
Healthcare & Social Assistance (62)	23,313	Healthcare & Social Assistance (62)	32,605
Accommodation & Food Services (72)	15,781	Manufacturing (31-33)	28,655
Total (N)	75,258	Total (N)	97,320

Table 7

The similarity between total number of employees for both sets of data suggests that the data is relatively similar. Second, the similarity also supported the developing understanding of these sectors as being of significant importance to the local economy. It is important to note that each of the sectors displayed in Table 7 were also included on the various municipal websites as areas of key importance, with the exception of Accommodation and Food Services. This understanding further supported the emerging understanding of these areas as key sectors to the local economy.

The total number of businesses in the sectors captured in BC data were then compared to those captured in the CBP data. The sectors with the greatest number of businesses varied greatly in this area with no overlap between the two data sources. One possible reason for this could be due to sample size. The BC data only contained information of 5,505 unique locations while the CBP data captured 18,966. This dramatic difference in the total number of businesses captured could be responsible for the variance observed.

Total Number of Businesses CBP & BC Compared					
Durham Region Business Count (BC)			Statistics Canada Business Patterns (CBP)		
Sector	Businesses	%	Sector	Businesses	%
Retail Trade (44-45)	2,523	27%	Real Estate & Rental & Leasing (53)	6,770	18%
Healthcare & Social Assistance (62)	1,714	19%	Professional, Scientific & Technical Services (54)	6,375	17%
Accommodation & Food Services (72)	1,268	14%	Construction (23)	5,821	16%
Total (N)	5,505	60%	Total (N)	18,966	51%

Table 8

It is important to note that the only sectors from Table 8 that appeared on any of the municipalities' websites were Construction and Retail Trade, both of which appeared as key sectors in the municipality of Clarington. This finding was not surprising given the understanding that often sectors of greater employment have fewer unique locations. Two exceptions to this rule would be Retail Trade and Accommodation and Food Services. These sectors are known to be of high total employment and high in terms of unique business locations as well.

2.2.3 Sector Concentrations

The LQ was calculated and compared twice to provide an understanding of the importance of a particular sector relative to both the Region, and the Province. The LQ was used specifically to identify key sectors. The Region wide LQ suggested four sectors with a high degree of concentration within the Region. These results are depicted in Table 9. It is important to note that given the data limitations, the NHS LQ was considered to be more persuasive than the LQ generated by the BC data.

Location Quotient NHS & CBP Compared			
National Household (2011)		Durham Region Business Counts (2015)	
Sector	LQ	Sector	LQ
Utilities (22)	3.24	Utilities (22)	7.26
Arts, Entertainment & Recreation (71)	1.26	Retail Trade (44-45)	1.85
Finance & Insurance (52)	1.23	Accommodation & food services (72)	1.37
Information & Cultural Industries (51)	1.22	Educational Services (61)	1.27

Table 9

LQ's were also calculated for each individual municipality using the BC data. When examining the LQ in each municipality the same sectors appeared consistently across municipalities as being highly concentrated with little variation. This finding further reinforces the identification of these sectors of the economy as key in terms of level of concentration. This understanding would be taken in concert with total employment, municipal designation and consultation with the DWA in order to establish key sectors.

2.2.4 Durham Region Key Sectors

The determination of key sectors for the purpose of the present study was informed by a combination of the data analysis examined above, and input from the DWA. In early project meetings, the DWA proposed several sectors for consideration which were believed to be of significant importance to the local economy based on their previous experience. These sectors included Utilities, Information and Communication Technology, Finance, Agriculture, Healthcare, Advanced Manufacturing, and Transportation & Logistics. As was the case with the content analysis of the various municipal websites, many of the sectors identified did not fit neatly within the sectoral division provided by NAICS. As a result, an attempt was made to align the proposed areas with a sector which was represented as being of importance according to the data examined. Based on this effort, the four priority sectors were identified as Utilities, Health & Bioscience, Information and Communication Technology and Advanced Manufacturing. These sectors corresponded with the following NAICS, Utilities (22), Manufacturing (31-33), Healthcare and Social Assistance (62), and Information and Cultural Services (51). Table 10 displays this alignment.

Proposed Key Sectors	Corresponding NAICS Sector
Health & Bioscience	Healthcare & Social Assistance (62)
Advanced Manufacturing	Manufacturing (44-45)
Information and Communication Technology	Information & Cultural Industries (51)
Utilities	Utilities (22)

Table 10

3.0 Methodology

3.1 Data Collection

This study employed both qualitative and quantitative methods to gather the LMI necessary to achieve the project goals. Quantitative methods employed include the development of a survey for all organizations with employees, and the development of a unique survey for organizations without employees (self-employed). Qualitative methods employed include key informant interviews and focus groups. As the project required a region-wide sample from across the lakeshore municipalities, a contacts database of available employer contact information was created to enable employer outreach. The section to follow will further detail these elements of the project beginning with the quantitative methods employed.

3.2 Survey Questionnaire: "What Employers Need: Skills for Tomorrow"

The What Employers Need: Skills For Tomorrow employer survey is a comprehensive tool designed to collect LMI from Durham Region employers. This survey exists in two parts, one for organizations with employees, one for the self-employed. Respondents were provided with a corresponding set of questions depending on how they responded to a question that asked whether their organization had additional employees, or whether they were self-employed.

3.2.1 Organizations with Employees Survey

Prior to the development of the Skills For Tomorrow employer survey, a literature review provided information about existing employer surveys both in the Region and across the Province. Taking into consideration the strengths and limitations of these tools, the Skills For Tomorrow employer survey was developed to address the limitations to the best extent possible. In consultation with the DWA, the Skills For Tomorrow employer survey was developed to examine six key areas: employer demographics, enhanced employer information/skills, hiring experience, future needs, vocational/professional training, and business support climate. Additionally, the survey's structure allowed for the examination of self-employed organizations in the areas of demographics, training and future needs. This structure is displayed in Figure 1. The specific details of these sections will follow.

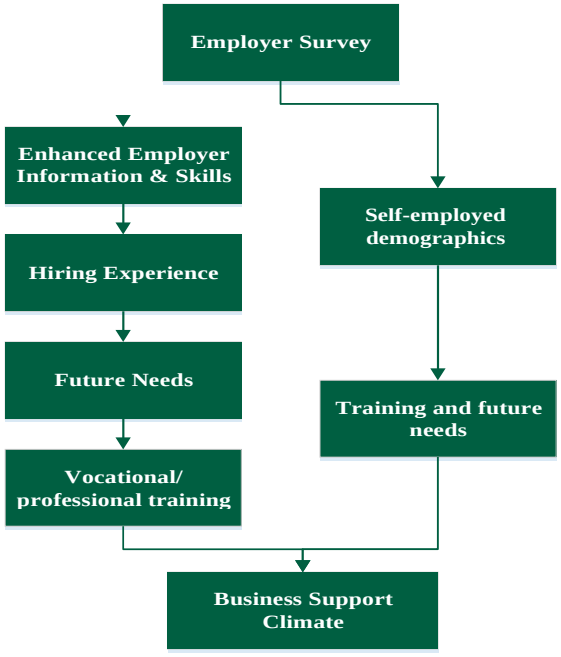

Figure 1

❖ Employer Demographics

The employer demographics section provided basic information about the individual organizations that responded to the survey. This section began by collecting information such as names of organizations, number of locations within the Region, and number of employees. The location within the Durham Region was approached in two ways. Respondents were asked to provide the name of the municipality in which their organization was located, and then they were asked to provide the first three digits of their postal codes. It is important to note that because this survey was designed to be administered to only employers in the lakeshore municipalities, north Durham municipalities were not included in the list of options. If a respondent indicated that their organization had other locations within the Durham Region, they were prompted for the municipality where these other sites were located. The municipalities in north Durham were included as options here to enable an understanding of whether businesses from the lakeshore municipalities also had operations in north Durham. It is important to note that although this survey was primarily concerned with respondents from the lakeshore municipalities, a link to the North Durham Survey was provided on the common landing page to encourage potential respondents form north Durham to complete this assessment.

Additionally, in this section respondents were asked to indicate the sector in which their organization operates by selecting from a list of 20 NAICS codes. This selection sequence was organized such that respondents could only select the most relevant sector to their organization. At the two-digit level, the list of NAICS consists of 20 sectors. The respondents were then asked to narrow their selection to a corresponding three-digit NAICS code to identify their subsector. At the three-digit level there are 102 NAICS codes; however, having already selected a two-digit code, this dropdown list was narrowed to only allow for the selection of a three-digit code which corresponds to the previously selected two-digit code. There was an average of five options for respondents to choose from when determining a subsector. It is important to note that the employer demographics questions were common for both the self-employed and organizations with employees. The next question allowed the respondent to select the option, “I am self – employed, without employees”, or “this organization has other employees”. If the respondent identified as self-employed, they would be directed to a corresponding set of questions for self-employed individuals. If the respondent indicated that the organization they were employed by had additional employees, they were prompted to indicate the number of employees, and the number of employees that were full-time, allowing for an understanding of non-full-time positions which exist in the organizations surveyed.

❖ Enhanced Employer Information

The second section of the survey (enhanced employer information/skills) more closely examined the skill requirements of an organization within the framework of individual occupations. In order to accomplish this, respondents were asked to identify the occupations employed within their organization by using NOC codes, allowing for an understanding of the types of occupations that exist within the individual organizations and sectors. Definitions and examples from Industry Canada were built in using a hover feature to reduce the likelihood of input errors resulting from definitional confusion. The second important reason for employing the framework of NOC was to understand employers’ essential skill requirements. While previous surveys have asked employers about the importance of certain essential skills, none have comprehensively addressed the understanding that different occupations require different levels of skill. For example, while an engineer and a shop worker both require reading skills, the level of reading skill required by each will differ according to the requirements of their occupation. The NOC structure allows this critical information to be captured through the integration of four skill levels into the numerical structure associated with individual occupations. By allowing employers to input the type of

occupations that they employ using the NOC structure, and to select any skill areas of significant importance, this study is better able to differentiate between the skill levels required by employers across the various occupational categories they employ. This proved to be a significant advantage over previous attempts to collect LMI which largely focused on answering the question of employer skill needs from an organization wide perspective. Finally, the respondents were asked to identify any gaps that exist between the skills possessed by employees and the skills that they required.
In addition to skills, another critical component that the study captured was the requirement of specific credentials by employers. Some occupations require a compulsory credential for entry level positions (e.g. nursing) while other positions simply require a credential preferred by the employer, e.g. employers who prefer to hire engineers. Through the integration of this question the LMI collected is able to discern between important skills, compulsory credentials, and preferred credentials.

- Hiring Experience

Hiring experience was examined in the third section of the survey with an emphasis placed on recent (past 12-18 months) hiring. If a respondent indicated that they had hired recently, the survey provided them with additional questions based upon this hiring experience. Questions provided examined how many employees were hired and which occupational categories they were hired into. The occupation classifications in this case were drawn from the previously identified occupations within the company (NOC).

The next series of questions focused on whether respondents experienced any challenges attracting applicants to available jobs. If the respondent indicated that they had experienced challenges, they were prompted to answer a question on the perceived reasons for the challenges. These reasons were grouped into two categories: one for general hiring challenges, and one for organization specific hiring challenges. One example of a general hiring challenge is "lack of skilled applicants" one example of an organization specific hiring challenge is "unable to offer competitive salary." Respondents were then asked to reflect upon the hiring practices employed by their organization. In addition to indicating the hiring channels utilized, respondents were asked to indicate whether these channels successfully generated candidates.

Future needs of employers were assessed by asking respondents whether their organization is planning to hire in the next 12-18 months. If respondents answered yes, they were asked to indicate the particular occupational categories in which they intended to hire. The respondent could indicate plans to hire occupations from the set of NOC's that were currently employed by the organization, in addition to other NOC's not currently employed depending on the plans of the individual respondent. This approach to LMI collection would enable an understanding of organizations increasing their capacity and expanding operations into new areas. For example, if a company was planning to expand their manufacturing operations to include a logistics component, they would hire truck drivers, receivers and other occupations not currently employed by the organization. Capturing these NOC codes would enable an understanding of the growth that occurs when companies' operations expand to the point that they are venture into new areas. This section also explored whether employers expected retirements to significantly affect their organization over the course of the next three to five years. Where respondents indicated yes, they were asked to estimate the number of retirements they expected to experience. All respondents were then asked about whether they had undertaken any actions as part of their organization's succession planning to address the gaps left by retirements.

- Training

The fifth part of the Skills For Tomorrow employer survey addressed the availability of vocational/professional training to employees. If an organization indicated that they provide training to their employees, they were prompted to indicate the type of occupations provided with training, topics of training, and the training provider. For employers who do not provide training to their employees, additional questions were asked about the barriers to the provision of training

- Business Support Climate

The final area explored by the survey was the business support climate. Here, respondents were asked to share their opinions about the availability of services in Durham Region, and the type of business supports that were critical to the success of their organization over the long term. Each of these sections was designed to better understand the challenges facing individual organizations with employees. The section to follow will further explain the unique self-employed survey that was embedded within the Skills For Tomorrow employer survey.

3.2.2 Self-employed Survey

The data collected on individuals who identified as self-employed began with the same employer demographics questions developed for organizations with employees. After identifying the sector and subsector to which their organization belongs, the respondents were asked to indicate whether their organization employs others or whether they are self-employed, without employees. Where the respondent indicated being self-employed, the survey would re-direct them to the unique questions for self-employed individuals.

The self-employed survey explored three key areas, self-employed demographics, training and future needs and business support climate. In total, respondents who identified as self-employed would respond to questions in four different sections, two sections in common with organizations with employees, and two sections unique to the self-employed.

The first set of questions unique to individuals who identified as self-employed considered employer demographics by asking whether the business operate had been incorporated, the age and level of education of the owner/operator, and whether any credential they possess is related to their self-employment. Next, this section examined the respondent's employment activities prior to becoming self-employed, reasons for choosing self-employment, and challenges to sustaining self-employment.

The training and future needs section began by asking whether the respondent had plans to hire additional employees over the next 12-18 months. If the respondent indicated yes, they were asked for the number of hires they anticipated; if no, they were asked to indicate the reason they plan to continue without employees. Questions to follow asked about whether respondents had completed additional professional training, and to indicate the advantages of receiving additional training. This section drew to a close by asking the respondent's plans for the business when they retire. At this point the survey branched back to join the survey designed for organizations with employees allowing respondents to complete the questions on the business support climate.

A process map demonstrating the logical progression of the survey including all of the points at which the survey branches off, and where the survey re-joins and ultimately draws to conclusion is available in Appendix 1.

3.3 Respondent Profiles

The employer survey was designed as an online tool with the understanding that it could also be completed via telephone interview with a member of the project team. In order to accommodate this structure, a common landing page was developed with instructions and information about completing the employer survey. In an effort to drive traffic to this landing page, a variety of different strategies were employed. This section will further examine the dissemination strategy, number of respondents, and the participation rate for the employer survey.

As a primarily online tool, the most effective way to guide employers to the survey was to send potential respondents an e-mail message with a link to the survey in the body of the text. In order to facilitate the necessary e-mails, a database was developed with email addresses for outreach. By combining several existing databases, a combined contacts database was created from which to send and track messages. After cleaning this database and eliminating duplicate or incomplete entries, the project began with a total of 11,451 contacts. These contacts are further detailed in Table 11.

Total Contacts	Email	Phone Number
11,451	4,895	6,556

Table 11

As the combined contacts list was created prior to the programming of the survey, contacts were added to the database through telephone calls and internet searches. When new information was obtained, the database was updated to include these contacts. In order to facilitate the delivery of e-mail to these contacts, a new e-mail account was created, which was branded with the survey name (skillsfortomorrow@durhamcollege.ca). From this account the project team began contacting potential respondents.

A communications plan was developed to monitor invites sent, participation rates, and reminder messages to various employers. Approximately 1,000 messages were sent each day of the first week of outreach in addition to follow up messages later in the project period. Complete with e-mail template messages, and telephone interview script, the communications plan permitted a targeted approach to achieving the desired response rate while ensuring consistent messaging. The first in the series of e-mail messages was sent during the last week of September with messages beginning on the first day of the week and continuing until the messages had been sent to each contact. Following this initial contact several follow-up messages were sent throughout the project period, ending in December.

Employer participation was assessed on a weekly basis to ensure that the reminders were not sent to contacts who had completed the survey. As a result of individuals leaving companies or changing positions, the contact information for some companies changed, and as a result, the project team was required to continually eliminate incorrect contact information and update the database with correct information as it was received. In an effort to track the progress of the survey, a new database was developed where colour coding was applied to differentiate between contacts who had moved from the Region, changed their information or closed their business. Table 12 highlights the results of database updating. From the initial database, 990 of the messages sent were not successfully delivered, reducing the total number of viable contacts from 4,895 to 3,905.

Total Contacts	Email Invalid	Declined to Participate	Closed/Moved Business	Contacts Added ICT/Utilities	Total Revised Contacts
11,451	990	5	10	110	10,556

Table 12

Despite significant efforts to achieve sectoral targets for each of the key sectors, early in the survey period it was discovered that while targets were easily reached for manufacturing and healthcare, the number of responses in Information and Cultural Industries and Utilities were lagging behind expectations. Specific databases were created for the Information and Cultural Industries and Utilities sectors to closely track participation and reach out to employers in these sectors.

In addition to e-mail outreach, awareness about the survey was raised through phone calls and in-person outreach which included attendance at a variety of community events. The community events involved everything from hosting booths at local business and energy summits, to attending events with boards of trade and chambers of commerce. In each instance, the Skills For Tomorrow employer survey was promoted and contact information from potential respondents was collected. The above strategies resulted in the sending of over 12,000 e-mail messages, several hundred telephone calls, and an overall response of 388 completed surveys. This response yielded an overall response rate of 9.6% for those e-mailed a survey link.

3.4 Focus Groups

As the data collection period was nearing completion, a series of questions based on preliminary data analysis was developed for further examination. Many of these questions were either not addressed as part of the employer survey, or required further examination to be understood. From these questions, a series of focus group questions were designed to gather further insights to the data gathered by the employer survey. As part of the wrap up to the employer survey, participants were asked if they would like to be contacted for the opportunity to participate in a focus group. From the participants in the employer survey, 80 (20%) participants identified a willingness to participate in a focus group. Given the level of interest, multiple focus groups were assembled that mirrored the key sectors. One additional focus group was held for self-employed respondents. These focus groups were organized for late November and early December and five focus groups were held. Focus groups included respondents from a variety of different sectors that were grouped under the following categories Healthcare and Social Assistance, Manufacturing, Accommodation and Food Service/Entertainment, Finance and ICT, and included one specific focus group for the Self-employed. Following the creation of these groups the project team was able to modify some questions based on the responses of that sector to the employer survey. For example, in Manufacturing where retirements were indicated to have a significant impact, the researchers were able to more specifically inquire about these areas. In total, five focus groups were conducted in three locations and two different municipalities.

3.5 Interviews

To complement the data gathered by both the employer survey and the focus groups, additional interviews were held. There were two main reasons for conducting interviews. First, large employers often expressed a need for assistance when completing the survey. As a result, phone interviews were conducted during which the survey was completed and complementary notes were taken. The second reason for interviews was as a result of an inability to attend the focus groups organized. Despite this inability, a number of employers indicated a desire to arrange for an interview. The result of this was an additional six interviews completed with informants in Manufacturing, Utilities, and Government Administration. Additionally, one of the individuals interviewed was self-employed.

3.6 Sectoral Considerations

Despite significant efforts to achieve sectoral targets for each of the key sectors, early in the research period it was discovered that while targets were easily reached for manufacturing and healthcare, the number of responses in Information and Cultural Industries and Utilities were lagging behind expectations. Following a closer look examination of the data, it was discovered that in several cases companies that would have otherwise been known as belonging to these sectors were identifying their primary sector in areas that were perceived to be closer to the nature of their operations. As an example, many organizations identified their primary sector to be Professional, Scientific and Other Services despite their work primarily being in the area of either Information and Cultural Industries or Utilities. This additional layer of data for companies in these two sectors allowed for organizations whose primary business was concentrated in a particular sector to be examined, without compromising the results. For example, many employers identified themselves by selecting the NAICS, Professional Scientific and Technical Services. As many of these respondents performed work in the Information and Cultural Industries and Utilities sectors, a secondary NAICS code was attributed to them.

4.0 South Durham Region – Overall Results

The Skills For Tomorrow employer survey achieved a high response rate that included representation from every sector of the economy. The section to follow will present the findings of the employer survey for organizations with employees from the lakeshore municipalities as a whole and will be followed by a section detailing the findings related to the self-employed. In total there were 388 surveys completed by organizations with employees representing nearly 15,000 full-time employees and many more part-time employees. All of the key sector targets were achieved with Healthcare, Manufacturing, Information and Cultural Industries, and Utilities representing a total of 150 responses. This information is further detailed in Table 13.

Sectors	Total # of respondents	Businesses with employees	Self-employed business
Accommodation and food services	11	9	2
Administrative and support, waste management and remediation services	9	8	1
Agriculture, forestry, fishing and hunting	2	2	0
Arts, entertainment and recreation	11	10	1
Construction	22	22	0
Educational services	20	17	3
Finance and insurance	30	24	6
Healthcare and social assistance	47	45	2
Information and cultural industries (reclassified)[1] *	30	19	11
Management of companies and enterprises	2	1	1
Manufacturing	45	41	4
Mining, quarrying, and oil and gas extraction	1	1	0
Other services (except public administration)	42	37	5
Professional, scientific and technical services	42	31	11
Public administration	5	4	1
Real estate and rental and leasing	5	5	0
Retail trade	31	29	2
Transportation and warehousing	12	12	0
Utilities (reclassified)[2] *	28	26	2
Wholesale trade	15	15	0

Table 13

[1,2] Note: the total number of respondents totals 410, not 388. The difference of 22 is a function of the re-classification of sector for 22 respondents whose businesses were included as a function both of their original classification and their sectoral re-classification. All of these re-classified businesses belong to the Utilities and Information and Cultural Industries sectors (*).

In the Skills For Tomorrow employer survey, 72 respondents indicated that their organization had other locations within the Region. Many respondents expressed the existence of more than one additional location. In total, there were 141 additional businesses located within the Region of Durham that were affiliated with the respondents to the Skills For Tomorrow employer survey. Most of these additional locations were indicated to be in the lakeshore municipalities, with the greatest number located in Oshawa, Whitby and Pickering. These results are depicted in Figure 2.

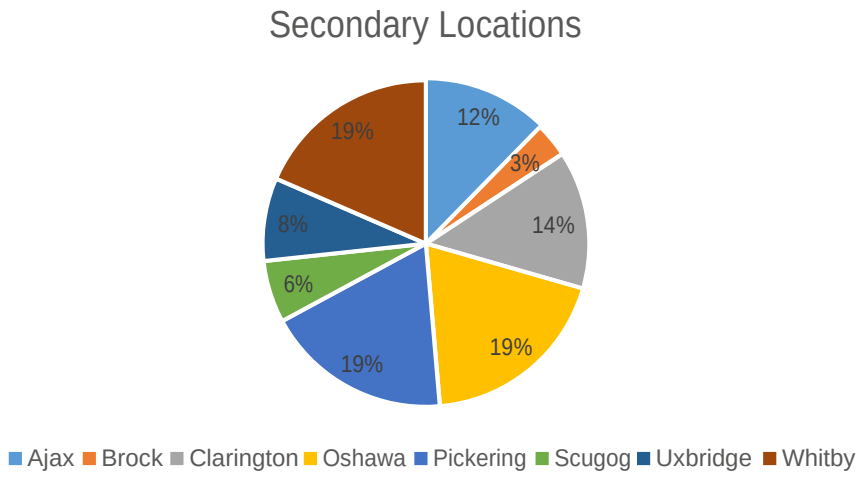

Figure 2

The majority of the respondents who indicated that their organization had other locations in the Durham Region belonged to the Healthcare and Social Services sector and the Finance and Insurance sector. These results are further depicted in Figure 3. These results demonstrate the interconnected nature of these sectors within the Durham Region.

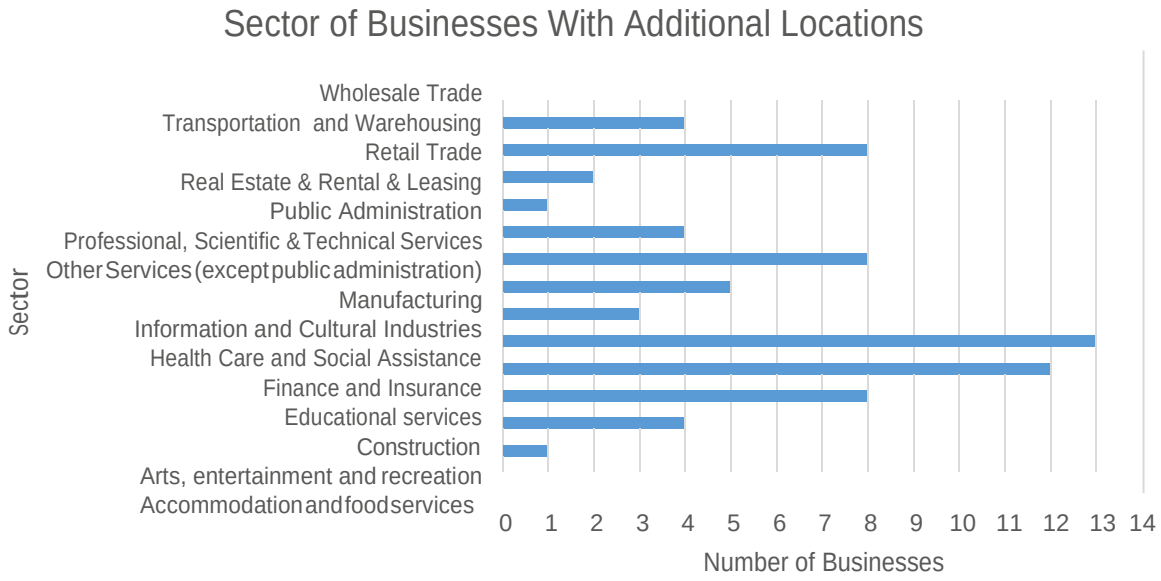

Figure 3

Postal code information suggested that the majority of respondents were clustered in the southern areas of the municipalities that line the lakeshore. A total of 280 of the respondents selected postal codes within the southern portion of their municipality, supporting the understanding that the southernmost part of the Region is an area highly concentrated with businesses.

The self-identified job title of respondents demonstrated significant variance depending on the size of the organization. Respondents from most micro and small organizations self-identified primarily as owner, president, or CEO. Conversely, respondents from medium and large organizations most often identified as director or manager. These respondent profiles are consistent with the expectation that the most appropriate individual to complete the survey would depend upon the size of the organization. Further, this finding of appropriate variation in respondent title supports the understanding that the findings are valid. Having presented the overall respondent profiles, the following section will further detail the attributes of respondents with employees.

4.1 Organizations with Employees

Informed by the overall employment demographics, this section will present information on employer demographics, sector and occupations, skill requirements and gaps, hiring practices, future requirements, training, and the business support climate for respondents with employees. This section first presents demographic information from respondents with employees.

4.1.1 Demographics

Businesses with employees accounted for 338 total responses, or 87% of respondents. From these businesses, the most common business size was small businesses (5-99 employees) representing 226 of the returned surveys or roughly 67% of respondents. These findings are detailed in Table 14. The finding that small businesses are the most prevalent is consistent with the understanding that small businesses represent a large share of both total employment and total number of businesses across the Region of Durham and within the individual municipalities.

Organizations With Employees (N=338)		
Employment Size	# of survey responses	Total # of employees
Micro (1-4)	84	238
Small (5-99)	226	4,362
Medium (100-499)	24	3,646
Large (500+)	4	6,704

Table 14

Similar to the overall results, businesses with employees were highly concentrated in the southern parts of the lakeshore municipalities. An analysis of postal code data supported this finding. Contrary to the review of secondary data which suggested small employers comprised the greatest total number of employees, this study found large employers (500+ employees) by far employed the greatest number of full-time employees (6,704) followed by small businesses. One possible reason for this discrepancy could be attributed to the small sample size. It is possible that a larger sample would produce different results. Another possible explanation for this finding could lie in the method of data collection. As the survey asked for the total number of full-time employees, it is conceivable that small organizations employ many more part-time and contract staff, contributing to a greater share of total employment. For example, analysis of the data for medium sized employers revealed that many organizations that identified as medium (100-499 employees) reported relatively low numbers of full-time employees.

4.1.2 Sector and Occupational Categories

Select sector level data for organizations with employees from the Skills For Tomorrow employer survey are displayed in Table 14. An analysis of these findings demonstrated that each of the priority sectors are dominated by businesses with employees, with the exception of Information and Cultural Industries, which had a significant number of self-employed respondents. Beyond the key sectors, other areas of high employment included Other Services, and Professional, Scientific and Technical Services. However, it became clear through careful analysis of the results that many businesses classified in these sectors could also be classified in other sectors.

Similarly, when analyzing the overall results, it became clear that many of the businesses that responded to the Skills For Tomorrow survey could be classified seamlessly into other sectors of the economy as well. While this may be considered a limitation with using NAICS codes to divide the economy, NAICS is the most widely accepted and practiced LMI classification used across North America.

As there are limitations with addressing the labour market solely through the lens of a sector level understanding, occupational level analysis was also undertaken to better understand some of the most common occupations within the local labour market and across the individual sectors. This understanding is possible using the NOC code which at the single digit level, provides information on the skill type of various occupations. At the single digit level, the most common skill type was sales and service occupations, followed closely by business, finance and administration occupations and management occupations. These findings were supported by a high concentration of employees in these areas and are depicted in Figure 4.

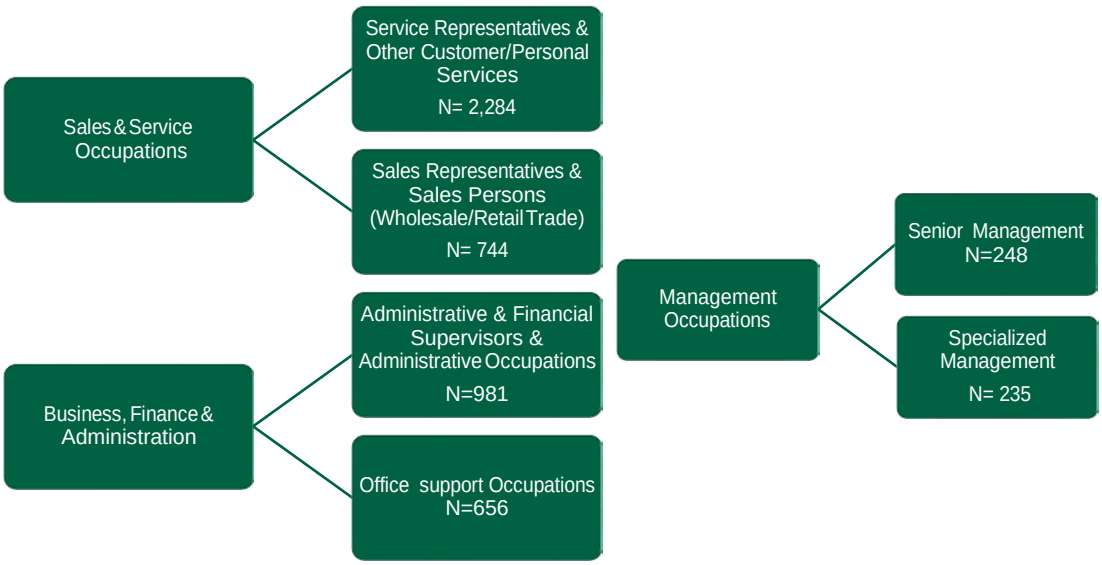

Figure 4

The finding that sales and service occupations were the most common skill type was unexpected. A closer examination of the specific occupations which comprise this skill type provided further insight. Most of the occupations contained within this skill type represent the front-line occupations which exist across a variety of different sectors and employers. Common occupations that align with this skill type include retail sales persons, and customer service representatives, ultimately contributing to its high concentration of employees.

Similarly, the second most common skill type, business, finance and administration, contains a variety of different occupations which exist across various sectors and employers. Examples of occupations which align with this skill type include administrative and regulatory occupations and general office workers. These kind of occupations were anticipated to comprise a significant component of the total employment across sectors because of their common existence in many different organizations.

The final skill type with high levels of employment was management occupations. While there were significantly fewer management occupations than the other two skill types, this finding also indicates that the most prevalent skill types would be those which exist across a variety of different sectors and organizations. While management occupations do exist across nearly every organization, it would follow that they would exist in smaller numbers than other more common positions such as front line sales/service or administrative occupations.

Following the analysis of skill type (first-digit NOC) skill level was examined by making use of the second-digit from the NOC codes identified by respondents. The section to follow will further detail the relevant skill level of employees within the respondent organizations.

4.1.3 Occupational Skill Requirements

The following section details employer skill requirements by making use of the four skill levels embedded within the NOC structure which correspond to various levels of education or training. These skill levels are further explained in Table 15.

Skill Level (Alpha)	Skill Level (digit)	Equivalent Level of Education/Training
A	0 or 1	University degree (bachelor, master's, doctorate)
B	2 or 3	2-3 years of post-secondary education at a community college OR 2-5 years of apprenticeship Training OR 3-4 years of secondary school and more than 2 years of on the job training
C	4 of 5	Some secondary school education, with up to two years of on the job training, training courses, or specific work experience
D	6 or 7	Short work or demonstration or on the job training OR No formal educational requirements

Table 15

Overall results for organizations with employees indicated that the skill level where employers reported the greatest number of current employees was skill level B, followed closely by skill level C. For the occupations categorized under skill level B, the most commonly selected occupational category was NOC 12, administrative and financial supervisors and administrative occupations. Similar to the findings of section 4.2.2, this was an expected result, given that the occupations that fall within this category exist across a variety of sectors and organizations. The results of the second digit NOC examination are further detailed in Table 16.

Skill Level	NOC-2 digit	# of Organizations	# of Employees
B	NOC12-Administrative & financial supervisors & administrative occupations	95	981
C	NOC 14- Office support occupations	70	189
A	NOC00-Senior management	68	401

Table 16

Beyond clarifying the skill level of employees, this study also sought to understand whether employers required a certain minimum credential in order to be employed in any of the occupational categories at their organization. This understanding would provide more meaningful insight into the question of skill

level by allowing the LMI users to understand both skill level and compulsory credential, two features which when combined, provide for a powerful understanding of employers' skill requirements.

Overall, the most common credential required by employers was a college certificate or diploma with over 448 occupations requiring this as the minimum credential. This was followed closely by the high school or equivalent which was required as the minimum credential for 420 occupations. These results are depicted in Table 17.

Minimum Credential	# of Occupations NOC 3-digit
Less than High School	57
High School or Equivalent	420
Apprenticeship	85
College Certificate/Diploma	448
College Post-Graduate or Advanced Diploma	83
Undergraduate Degree	205
Graduate Degree	30
Professional Degree	42

Table 17

Using the NOC framework, this study was also able to determine which specific occupations required employees to possess these credentials as a minimum requirement for employment. While there were many different occupations which required a minimum credential, the most common occupations for which organizations required credentials were NOC 122 administrative and regulatory occupations which required a college certificate or diploma, NOC 124 office administrative assistants, general, legal, medical which required a college certificate or diploma and 001 legislators and senior management which required a university degree. In total, 152 different organizations required minimum credentials for these occupations. The level of credential required varied however, as administrative occupations and administrative assistants most commonly required either high school or a college diploma while legislators and senior management most frequently required a university degree as the minimum credential.

Beyond these compulsory credentials, survey respondents were also afforded the opportunity, via text box, to name any additional credentials which they required their employees to possess. Common certifications which employers required included a variety of industry licenses, e.g. broker's license, P. Eng., and for skilled trades the most common additional qualification was the Certificate of Qualification (C of Q). Many respondents also used this text box to specify the type of credential which they sought. Common credentials that were consistently referenced included business degrees and accounting degrees. In addition to the discipline specific requirements, this study also explored essential skills required for different NOCs within the responding organizations.

4.1.4 Essential Skills and Gaps

In an effort to understand the essential skill requirements of employers, employers were asked to identify the essential skills which were critical for employees to effectively perform their role. By employing the framework offered by NOC, it was possible to identify the level of essential skill required and the specific occupational categories in which these skills were the most necessary. For each of the nine essential skills, respondents identified the same occupational categories where these skills were critical to effectively perform the role. This section will further detail these findings for each of the nine federal essential skills by providing examples of each skill at the corresponding level at which employers identified it to be important.

Reading, thinking and working with others were the top three skills emphasized by employers as being of importance for successful performance of an employees' role. All three of these skills were primarily emphasized as being of important at skill level B followed by skill level C and then skill level A. Table 18 provides examples of the top three essential skills identified by employers as being critical for certain occupations and their corresponding skill level. Additionally, there are examples of each essential skill that correspond to the level sought by respondents.

Skill Level	NOC	Reading	Thinking	Working with others
B	NOC12 Administrative & financial supervisors & administrative occupations	Make low-level inferences from multiple sources	Re-sequences some tasks based on a need for re-scheduling	Work as a member of a team through combined effort
C	NOC 14 Office support occupations	Read simpler texts to locate multiple pieces of information	Return to work following disruptions without new planning	Worker co-operates with one worker at a time
A	NOC00 Senior management	Interpret dense and complex texts	Revises work plans on an ongoing basis re-prioritizing as needed	Monitor the work performance of others

Table 18

The three skills that followed reading, thinking, and working with others in terms of employer ranking were writing, oral communication and document use. All three of these skills were primarily emphasized as being of importance at skill level B followed by skill level C and then skill level A. Table 19 provides examples of each essential skill at the various levels of importance identified by respondents. Additionally, there are examples of each essential skill that correspond to the level sought by respondents.

Skill Level	NOC	Oral Communication	Writing	Document Use
B	NOC12 Administrative & financial supervisors and administrative occupations	Make presentations to small groups	The content of the writing may be extensive, but it is readily available from established sources	Read schematic drawings when repairing, assembling or maintaining machines
C	NOC 14 Office support occupations	Speak with customers to follow up on overdue accounts	Routine memo advising superior of the budgeted purchase of new equipment	Read work schedules and assignment sheets to determine work locations, times and duties
A	NOC00 Senior management	Mediate to resolve conflict and produce agreements between individuals, groups, organizations	Write background documents for company policy	Analyze and synthesize information on numerous variables obtained from many document types

Table 19

The remaining essential skills, computer skills, numeracy, and continuous learning were the skills least emphasized by respondents. This does not however mean these skills were viewed as unimportant. Many employers commented on the importance of each of these essential skills to employees in their organization. Computer skills were ranked highest by employers compared to the other remaining skills. Numeracy followed computer skills in terms of overall ranking followed by continuous learning. While continuous learning was the least emphasized by employers, many of the comments suggested that continuous learning was expected in a variety of different occupations. Table 20 provides examples of each essential skill at the corresponding level identified as important by employers. Additionally, there are examples of each essential skill that correspond to the level sought by respondents.

Skill Level	NOC	Computer Skills	Numeracy	Continuous Learning
B	NOC12 Administrative & financial supervisors and administrative occupations	Create and modify spreadsheets for data entry	In consultations with department managers, estimate staffing requirements	Learning through reading and self-study
C	NOC 14 Office support occupations	Use word processor to produce letters and memos in pre-set formats	Estimate available time needed to perform different tasks	Learning from co-workers
A	NOC00 Senior management	Evaluate and select hardware and software appropriate to the application	Respond to a unique request to provide an estimate based on a variety of trends	Learning through off-site training

Table 20

By utilizing the NOC framework for the questions on essential skills, it was possible to understand which occupational categories were most emphasized by employers relative to the essential skills of importance. The categories most emphasized by employers corresponded with high areas of total employment. The most common occupational category emphasized by employers was at skill level B in administrative and financial supervisors and administrative occupations. Examples of specific occupations that fall within this category would include administrative service supervisors and office administrative assistants. Occupations in this category exist across sectors would be most prevalent, and would as a result be emphasized in employer responses.

Another important area to consider is the emphasis placed by employers on each of the essential skills at the senior management level. Senior management occupations were not ranked as highly by employers in terms of essential skill requirements; however, one possible reason for this could be the comparatively small number of occupations which fall into this occupational category. Upon closer examination, despite relatively small numbers of total employees belonging to this category, senior managers were emphasized in each of the essential skill areas as being of tremendous importance by respondents to the survey.

The question posed to employers around skill gaps was asked in the form of a text box and generated a variety of responses. Respondents were asked to "identify any specific gaps between current and desired skill sets that employees in your organization possess". Some respondents indicated no gaps existed between the skills that their current work force possessed and the skills which they required. Others indicated that a variety of gaps existed across the organization, while others indicated only a few specific positions existed where there were skills gaps. The area that was most frequently mentioned as having a gap was continuous learning, followed by critical thinking. There were a number of skill gaps identified by employers across various occupational categories. In total 126 gaps were identified related to essential

skills with continuous learning and thinking appearing most frequently. It is important to note that the gaps identified exist within the organization and to identify a gap in the larger labour market additional data would be required. Additional comments from the respondents suggested the importance of these skills particularly to business finance and administrative occupations, and senior management occupations. These results are displayed in Table 21.

9 Essential Skills	# of Skill Gaps Identified by Employers
Reading	13
Writing	16
Document use	10
Numeracy	7
Computer skills	16
Thinking	19
Oral communication	12
Working with others	13
Continuous learning	20

Table 21

4.1.5 Hiring Practices, Challenges and Avenues

The examination of hiring practices began by asking employers whether they had hired new employees in the past 12-18 months. Overall, 272 employers indicated having hired over 2,276 employees in the last 12-18 months. The most common occupations hired included NOC 662 other sales and support occupations, NOC 122 administrative and regulatory occupations, NOC 141general office workers. In total, these occupations were hired by 65 of the employers who recently hired employees.

Employers were then asked whether they experienced any difficulty attracting applicants for available jobs. From the 272 employers who expressed having hired recently, 49 employers expressed difficulty hiring employees in a variety of occupational categories. Occupational categories where employers experienced the greatest difficulty were NOC 662 other sales support and related occupation and NOC 761 trades helpers and labourers. Sales and support staff was also mentioned by participants in the focus groups as being an area where it has been difficult to find candidates. When asked further about perceived reasons for this difficulty, many indicated that the pay structure for sales positions (primarily commission) made attracting candidates a challenge.

Next, the Skills For Tomorrow employer survey asked employers who expressed difficulty in hiring to indicate which issues affected their ability to attract qualified to available positions. Most employers stated the inability to offer competitive pay, and other attraction related issues. Upon further examination of the other attraction related issues, the nature of work (contract, seasonal, part-time) and location of the business were also emphasized as issues employers' believed impacted their ability to attract qualified candidates. Table 22 reflects the issues employers expressed as affecting their ability to hire.

Organization-Specific Attraction Issues	#
Unable to offer competitive pay	54
Limited opportunities for advancement	29
Lack of competitive benefits	22
Unable to provide work life balance	17
Lack of professional development opportunities	15
Other attraction Issues, please specify	76

Table 22

As a follow up to the question about organizational characteristics which impact hiring, employers were also asked to reflect on general challenges related to hiring. When asked about these general challenges, employers identified lack of skilled applicants and lack of qualified individuals as two key areas of importance which were impacting their ability to hire generally. Other areas mentioned by employers in the comments section included poor fit, and poor work ethic of potential employees. These and the other challenges expressed by employers are presented in Table 23. Both work ethic and organizational fit were mentioned as part of the focus group comments. A number of employers expressed a preference to avoid hiring where they could not find a person who was the right "fit" for their organization. Similarly, many employers referenced poor work ethic particularly in reference to younger or new employees. When asked to explain what was meant by work ethic, employers provided examples such as working hard, willingness to learn new tasks, showing up to work on time and not calling in sick as examples of attributes which these workers lacked.

General Hiring Challenges	#
Lack of skilled applicants	159
Lack of qualified individuals	157
Lack of experienced candidates	155
Candidates do not have the right workplace skills	117
Competition from other employers	77
Candidates are overqualified	22
Other, please specify	62

Table 23

In addition, this study also seeks to better understand employers' hiring practices and patterns. In order to develop this understanding, employers were asked to reflect on the hiring patterns at their organization, indicating any strategies used and the time of year when they engaged in hiring. The vast majority of respondents indicated that they made use of internal criteria to screen candidates. Similarly, most employers chose to hire on an as needed basis with a small minority keeping an open pool of candidates for future hiring needs. These findings are displayed in Table 24.

Hiring Practice	#
Use an external organization to screen candidates	77
Use internal criteria to screen candidates	308
Employ software to screen resumes	28
Other (please specify)	21
Total	434

Hiring Time	#
Hire at specific times during the year	53
Hire on an as needed basis	311
Keep an open pool of candidates for future hire	119
Total	483

Table 24

Hiring practices were further examined in light of specific channels employed by respondents. The most frequently used strategies are word of mouth, followed by e-postings and employee referrals. The strategies which generate the most candidates are word of mouth, followed by e-postings then employee referrals. These findings are further depicted in Figure 5. It is important to note when interpreting these findings that regardless of whether respondents used the services, they still commented on whether or not the various strategies generated candidates. The specific findings are further detailed in Appendix 2.

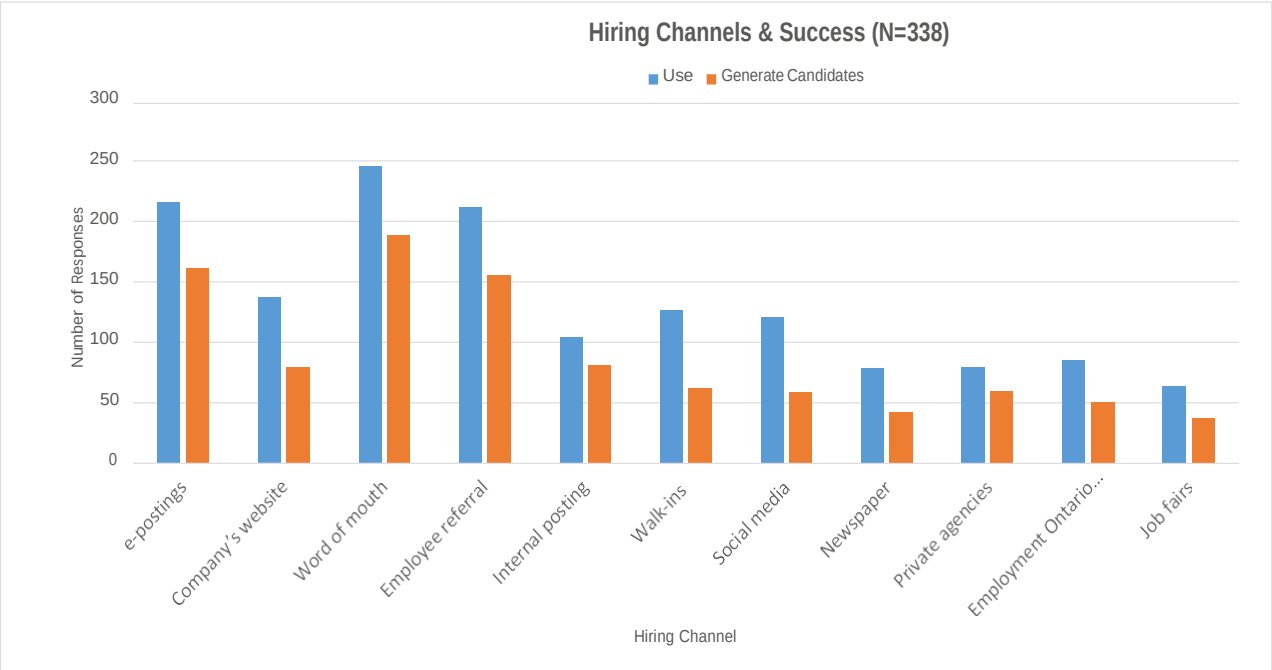

Figure 5

4.1.6 Workforce Skill Requirements: Current and Future

The Skills For Tomorrow employer survey then asked employers whether they planned to hire additional employees over the next 12-18 months in areas where they already employ. In total, 218 organizations indicated plans to hire new employees over the next 12-18 months amounting to a total of 1,200 hires. The most commonly reported areas of expected hiring are displayed in Table 25. The majority of respondents indicated that their anticipated hiring plan would keep workforce levels steady. Although this question does not specifically address the issue of retirement, the findings seem to indicate that there will be a significant number of retirements expected in the next 12-18 months as these employers indicated that their hiring plan would keep workforce levels steady.

NOC	# of candidates	Skill Level
401 University professors & assistants	150	A
729 Other construction trades	87	B
762 Public works and other labourers	70	C
662 Other sales support and related occupations	69	C
953 Other assembly and related occupations	63	C

Table 25

Employers were asked whether they anticipated their organization hiring in occupational categories where they had not previously employed. This understanding would allow LMI users to better understand whether organizations planned to expand their operations to include new areas. In total, the majority (213) indicated that they did not plan to expand their hiring to new areas not previously employed. Of the organizations that planned to expand their operations into new areas, the two occupations that were most anticipated to grow were NOC 341, assisting occupations in support of health services and NOC 441, home care providers and educational support occupations. Together, these occupations represented 176 new positions out of the 551 total new positions anticipated by employers.

An area of significant importance to explore was retirement. Respondents were asked whether there were individuals in their organization who were expected to retire over the next 3-5 years. Results were mixed

with 150 organizations expecting retirements compared to 172 organizations who were not expecting retirements. In total, respondents expected 435 retirements in a variety of different positions. These results are displayed in Table 26.

NOC	# Retirements
071 Managers in construction, facility operation & maintenance	30
961 Labourers in processing manufacturing & utilities	28
122 Administrative & regulatory occupations	22
001 Legislators & senior management	22

Table 26

Respondents were also asked whether their organization was currently undertaking, or planning to undertake actions to address organization-specific knowledge or skill gaps resulting from retirement. Most respondents indicated that creating a knowledge transfer plan was a strategy they employed while a large number of respondents indicated not having any plan. These results are further detailed in Table 27.

Actions to Fill the Skill Gaps Resulting from Retirement	# of Organizations
Transferring knowledge to successors	176
Creating a succession plan for key roles	157
We don't currently have a plan	103
Identifying new talents pools to access specialized capabilities	99
Building internal vocational/professional training programs to strengthen the pipeline for key roles	92
Identifying the roles and capabilities occupied by retirement eligible employees	68
Building external vocational/professional training programs to strengthen the pipeline for key roles	28

Table 27

4.1.7 Vocational/Professional Training

The next section of the Skills For Tomorrow survey examined respondents' vocational/professional training by first asking whether the organization provided training to its employees. Results were mixed, with 178 organizations indicating that they provided training to their employees while 150 organizations indicated they did not. In total, training was provided to over 430 employees in a variety of different occupational categories. The most popular occupational categories where employers indicated providing training, and the topics of this training are displayed in Table 28.

NOC	# of Employers	Topics of Training
122 Administrative & regulatory occupations	26	*-Software* *-Customer Service* *-Job-specific*
001 Legislators & senior management	18	*-Marketing/Technical Product* *-Business Planning* *-People Management* *-General Management*
662 Other sales support & related occupations	18	*-New Product Implementation* *- Dealer Specific/Product Specific* *-Digital Marketing*

Table 28

Respondents who indicated that they provided training to their employees were then asked to identify the provider of the training. The most popular source of training was internal, followed by training offered by a consultant. These results are further displayed in Table 29. It should be noted that for this question employers were able to select multiple training providers if their organization made use of more than one training provider.

Internal Provider	Consultant	College	Private College	Union	University
209	95	54	3	3	14

Table 29

Employers who did not indicate that they provided training for their employees were then asked to identify reasons that prevented them from offering training. Options were presented in such a way as to allow employers to select multiple barriers to the provision of training. Additionally, there was a text box to allow employers to further express any additional barriers to offering training. These results are presented in Table 30.

Barriers Preventing Organization from Training	Significant Concern	Somewhat Concerned	Not a Concern
I am worried about the cost, regardless of the benefits	29	35	72
It is too difficult to schedule training or it is too disruptive to our ongoing work	27	47	63
I am worried about losing productivity during training time	25	36	76
I am not sure that I can find a trainer to deliver the training that I need	22	30	86
My current training needs are not offered locally	20	26	90
I am worried about the staff's preference and motivation of learning	11	36	87
Training will not make a significant difference to my organization's bottom line	10	36	91
I am not convinced that training would improve the skills of my workers	10	27	97
I am worried if I provide training my staff will be lured away	7	32	103

Table 30

The top reasons that prevent employers from offering training to their employees include cost of training, scheduling conflicts, and loss of productivity. Other reasons for not offering training identified by employers through a comments box included limited funds to offer training and a lack of qualified individuals to participate in training.

4.1.8 Business Support Climate

Respondents were asked to evaluate a number of the services provided in the Region of Durham. In addition to this evaluation, respondents identified the most critical services for developing their businesses. The full list of services is displayed below.

Durham Region Business Support Climate

- Healthcare services
- Hydro/Electric power
- Other utilities (e.g. water, gas, sewage)
- Access to public roads
- Public transportation
- Business sites and land use
- Telecommunication services
- Technology services
- Accounting/Payroll
- Recruitment services
- Business promotion services
- Sales
- Legal services

In order to evaluate the services provided in the Region, respondents were asked to choose one of the following levels to describe the service. For the purpose of scoring these responses, the values in Table 31 were assigned to each response:

Response	Score
Excellent	3
Above Average	2
Below Average	1
Poor	0

Table 31

Once the responses were coded, the results were presented in Figure 6. Findings demonstrated that organizations with employees ranked access to public roads as the best service in the Region with public transportation and business sites and land use as the lowest. It should be noted, however, that although these were ranked low compared to other services, most respondents generally perceived the services in the Region as being of high quality.

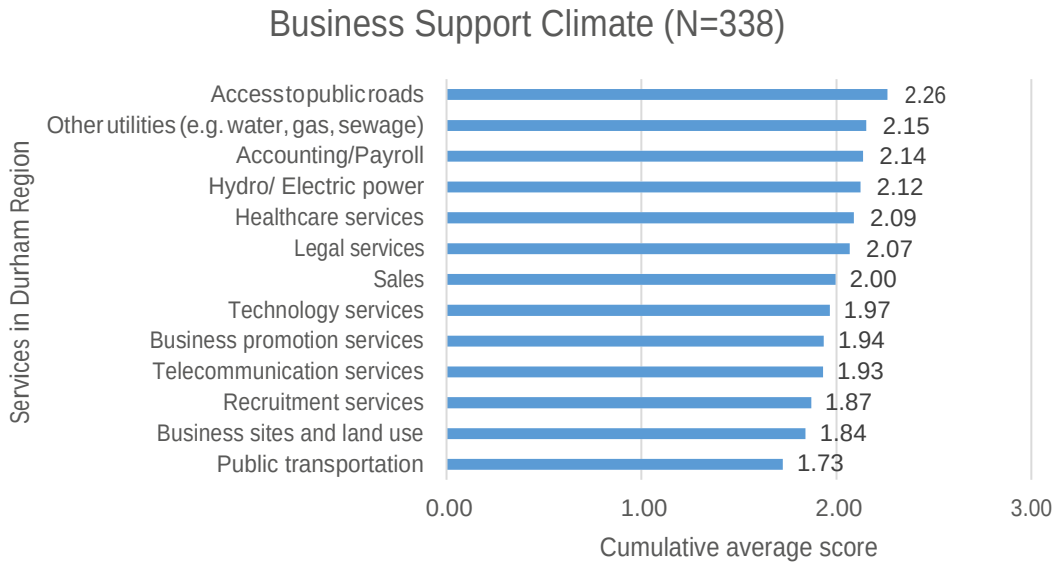

Figure 6

Finally, respondents were asked to identify the three business supports most critical to the long-term success of their organization. Telecommunications services, hydro/electric power, and sales were the top three services identified by respondents as critical to their long-term success. Other areas identified as critical via comments were high-speed internet.

4.2 Self-employed Businesses

The self-employed are an incredibly significant and diverse group in the local labour market. Self-employment covers various occupations, sectors and industries, and continues to be an important source of jobs in Canada. Based on the 2011 National Household Survey, 9% of workers in Durham Region were self-employed and 32% of those self-employed respondents were between 45 and 54 years old.

To better understand self-employed businesses in south Durham, the employer survey examined five aspects of self-employment including demographics, prior experience, future needs and vocational training, retirement plans, as well as business support climate. The section to follow will detail the overall results from the Skills For Tomorrow self-employed survey.

4.2.1 Demographics

There were 50 self-employed respondents who participated in the Skills For Tomorrow employer survey, which equated to 13% of all survey respondents. Among the 50 self-employed businesses, 12% were from Ajax, 10% were from Clarington, 30% were from Oshawa, 22% were from Pickering, and 26% were from Whitby.

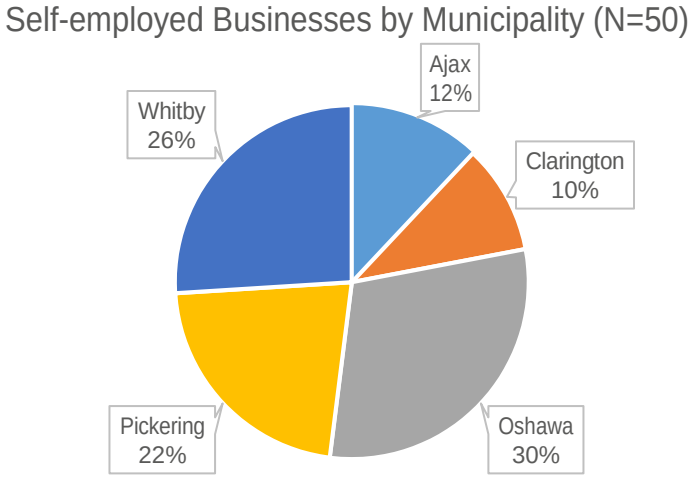

Figure 7

The top three sectors that self-employed respondents belonged to were Information and Cultural Industries, Professional, Scientific and Technical Services, and Finance and Insurance. The high concentration of self-employed businesses in these sectors may indicate that they are more conducive to supporting self-employment than other sectors of the economy. Indeed, this understanding would apply to the Information and Cultural Industries and was supported by comments from the focus groups.

The most common age group identified by the self-employed respondents in south Durham was between 45-59 years, old with the single most popular age range being from 50-54. One possible explanation for this elevated age group among the self-employed can be found in the experience of respondents prior to becoming self-employed. This information will be

examined in further detail later; however, results seem to indicate the majority of self-employed respondents required experience in the sector prior to undertaking self-employment. Full results for the self-identified age of self-employed respondents are displayed in Figure 8.

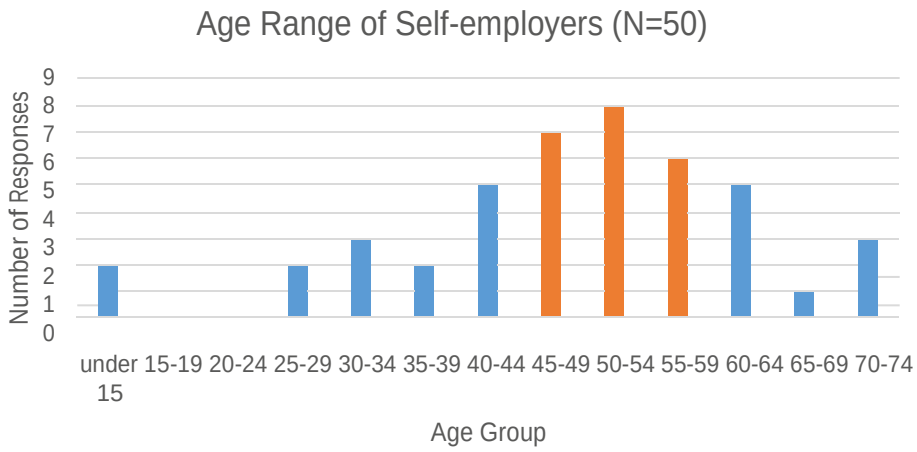

Figure 8

Many of the self-employed respondents indicated that they possessed an educational credential. The highest level of credential that self-employed respondents identified completing prior to undertaking self-employment was a college diploma or certificate with 39% of respondents identifying as holding this credential. The next most popular credential was the undergraduate degree or a graduate degree (Masters or PhD). When combined, these two credentials accounted for 33% of respondents. These results are further displayed in Figure 9.

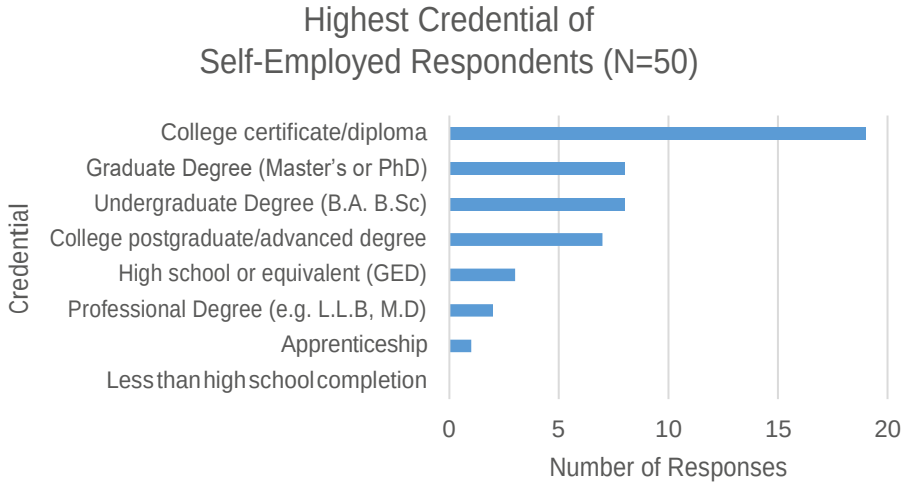

Figure 9

E-commerce plays an increasingly important role to today's businesses. Similarly, businesses that conduct e-commerce differ in their needs when compared with other businesses. In an

effort to understand the role of e-commerce among self-employed respondents, the survey asked whether self-employed respondents conduct e-commerce in their daily business. The results demonstrated that e-commerce was not widely popular among self-employed respondents, with only 28% of the respondents indicating that they conducted e-commerce. This may be an area of potential opportunity to support self-employed business in Durham Region.

4.2.2 Prior Experience

The self-employed respondents to the Skills For Tomorrow employer survey included those who had incorporated their businesses and those who had not. Of the 50 self-employed respondents, 4% did not identify their corporate structure, 42% were incorporated, and the remaining 54% were unincorporated. When examining the time of self-employment, it became clear that the majority of respondents have been self-employed for more than 6 years. It was suspected that businesses which had been incorporated would likely represent the businesses which had been active for the longest period of time. This assumption was tested by comparing the findings to the overall number of years that respondents have been self-employed, against the number of incorporated businesses. The results demonstrated that in total 66% of incorporated businesses had been established form more than six years, while only 33% of incorporated businesses had been established for less than five years. This result is further depicted in Figure 10.

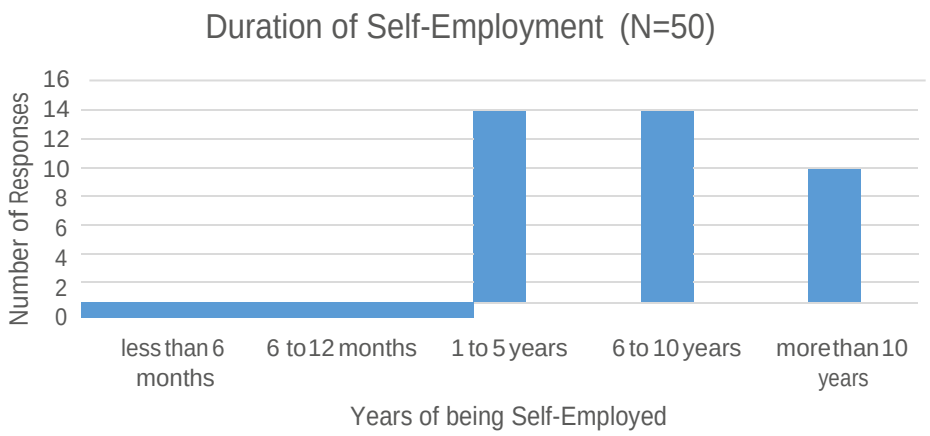

Figure 10

In terms of the relationship between the credential and business they currently operate, 58% of the self-employed respondents indicated that their credentials were related to the work they performed. This finding may infer the importance of previous experience in the sector prior to undertaking self-employment.

The main activities of respondents prior to undertaking self-employment were of interest to explore as they might influence the success of the business. Respondents were asked to identify which activity best described their situation prior to undertaking self-employment. Among the 50 survey respondents, more than half (68%) of the self-employed indicated that they worked for an employer before starting their own business, which means they had accumulated a certain amount of work experience prior to undertaking self-employment. The survey results also revealed that nearly 50% of the self-employed had more than six years of experience being self-employed. These activities are further depicted in Figure 11.

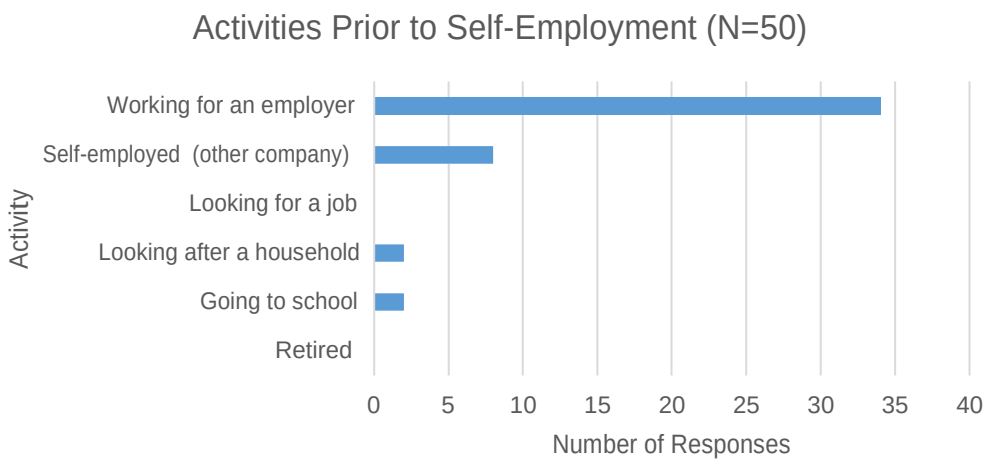

Figure 11

Many reasons exist to explain why people would like to be self-employed, for example, flexible hours and working locations, continuation of a family business, or entrepreneurial drive. The top reason for choosing self-employment, according to the Skills For Tomorrow employer survey was the ability to make your own decisions. Other important reasons influencing the decision to undertake self-employment included the ability to perform meaningful work and flexible work hours. These results are further depicted in Figure 12.

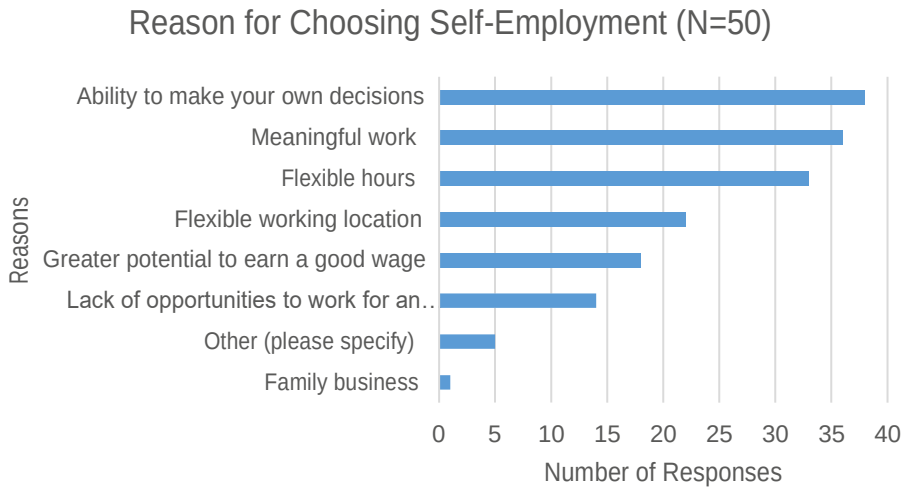

Figure 12

4.2.3 Future Needs and Vocational Training

While there are advantages to being self-employed, in many ways being self-employed is challenge because the requirement to perform many diverse tasks. The Skills For Tomorrow employer survey attempted to understand the challenges related to self-employment by asking respondents to identify the greatest challenge to sustaining self-employment for the long term. Based on the results, half of the self-employed respondents identified the low cash flow as the greatest challenge when sustaining their businesses. Other challenges included risk, poor work-life balance, and challenges with promotion. Some respondents who selected

"Other" specified all of the areas as being significant challenges, while others commented on changing business dynamics, and overregulation from the government as being significant challenges for the long term. These findings are further detailed in Figure 13.

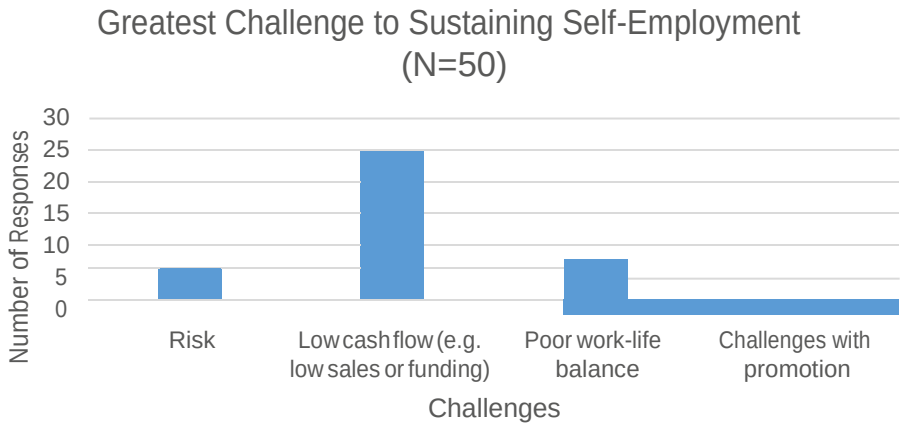

Figure 13

Respondents were asked if they had plans to hire additional employees over the next 12 to 18 months. The respondents indicated that 48% of the self-employed business owners had plans to recruit employees, representing 41 anticipated new hires. This represents a significant increase as 50% of self-employed businesses plan to expand their operations.

Not all respondents planned to expand their operations and hire new employees 50% of self-employed respondents indicated that they would continue to operate their businesses without employees. When asked to identify the reason for continuing without employees, respondents identified not enough work for more than one person as the main reason. These results are further displayed in Figure 14. Some self-employed respondents also specified a lack of funds as being an important reason of not hiring employees. Additional comments on this question also included hiring a subcontractor rather than an employee as being more effective, as well as working from home resulting in a lack of office space for a new employee.

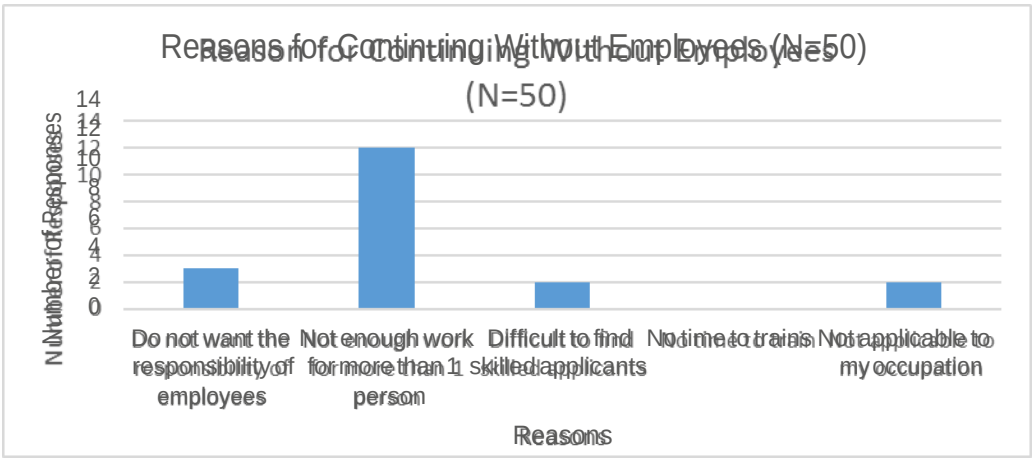

Figure 14

Training provides self-employed individuals with key skills and expertise that are essential to their professional success. In order to examine this area the Skills For Tomorrow employer survey asked questions on whether training helps business become competitive and whether the self-employed respondents took additional formal training related to their business. Additionally, questions were asked about the type of training taken, the advantages of taking professional training, and the reasons for not undertaking professional training.

Based on the survey results, 76% of the self-employed respondents believe that training did help the business become more competitive. Additionally, 74% of the respondents indicated that they completed formal professional training related to their business in addition to the credentials that they hold.

Based on the survey results, workshops, courses from professional associations, and seminars were the top three training sources that self-employed respondents utilized. These results are further displayed in Figure 15. Over 50% of the self-employed respondents indicated that workshops and courses from professional associations were the training they normally adopted. It should be noted when interpreting these findings that respondents were able to select more than one form of training. This programming may explain the reason that all forms of training were prevalent.

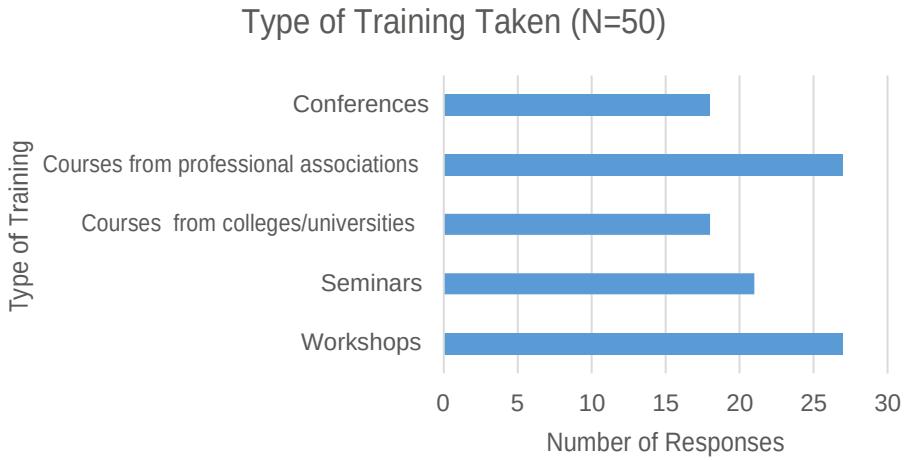

Figure 15

Taking professional training provides the self-employed with the opportunity to develop their skills, reenergize new ideas, remain familiar with their industry and engage in networking. With these advantages in mind, respondents were asked to identify the advantages of professional training from their perspective. These results are further detailed by Figure 16. The top three advantages of taking professional training ranked by the self-employed are knowledge of current trends and developments in the field of practice, opportunity to meet or network with others in my field, and becoming knowledgeable on subject matter.

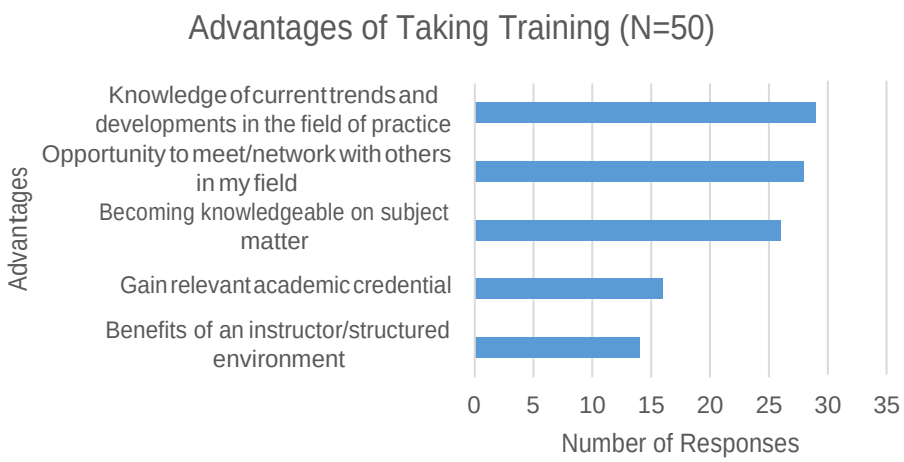

Figure 16

In addition to the question asking about vocational/professional training, the Skills For Tomorrow employer survey asked those who did not engage in professional training to identify the reasons stop them from engaging in training. Lack of time, cannot afford training and lack of information on available training were the main reason identified as barriers to accessing professional training. Only 10 of the fifty respondents did not engage in training, these results have not been displayed.

4.2.4 Retirement Plan

This study also seeks to better understand the retirement plans to ensure that this relevant LMI is also available for the self-employed. This was believed to be critical in order to understand how self-employed businesses will change in the future and whether or not these businesses will cease to exist after the operator retires. When asked about their retirement plans, 38% of self-employed respondents were not sure about what would become of their business after they retired. Among the respondents, 24% indicated that they would sell the business to a third party. An additional 20% of respondents would transfer the business to a family member and the remaining 16% indicated that they would close the business. This finding demonstrates that while there is still a high degree of uncertainty about the future of self-employment in the Region. Of the businesses with clear retirement plans, it is clear that the majority (44%) would continue to operate either by a third party or family member while 18% will cease operation.

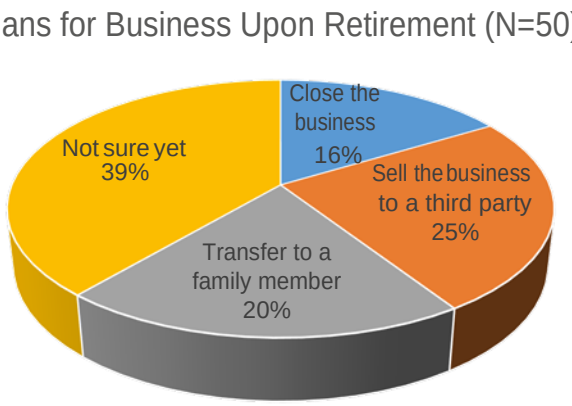

Figure 17

4.2.5 Business Support Climate

The Region has a mandate to promote the Region on a global scale and to work with municipalities to provide effective and innovative business support services to attract, maintain and increase employment. Business support climate questions were developed in this survey to ask employers for their thoughts on the services provided by the Region. Respondents were asked to evaluate a number of the services that the Region of Durham provided. In addition to this evaluation, respondents identified the most critical services for developing their businesses. The full list of services is displayed below.

Durham Region Business Support Climate

- Healthcare services
- Hydro/Electric power
- Other utilities (e.g. water, gas, sewage)
- Access to public roads
- Public transportation
- Business sites and land use
- Telecommunication services
- Technology services
- Accounting/Payroll
- Recruitment Services
- Business Promotion Services
- Sales
- Legal Services

In order to evaluate the services provided by the Region, respondents were asked to choose one of the following levels to describe the service. For the purpose of scoring these responses, the following values in Table 32 were assigned to each response:

Response	Score
Excellent	3
Above Average	2
Below Average	1
Poor	0

Table 32

These values were totalled and divided by the total number of responses to provide an understanding of how respondents evaluated the services in the region. Figure 18 illustrates

the comparative cumulative scores from all self-employed respondents. The results demonstrated that the evaluation of each service was positive. Access to public roads had the highest score, indicating that respondents were most satisfied with this service. Healthcare services and telecommunication services also scored quite high indicating a high level of satisfaction overall for these services.

Among all the regional services, the scores on business promotion services and business sites and land use were relatively low, indicating that self-employed respondents perceived opportunities to improve these services.

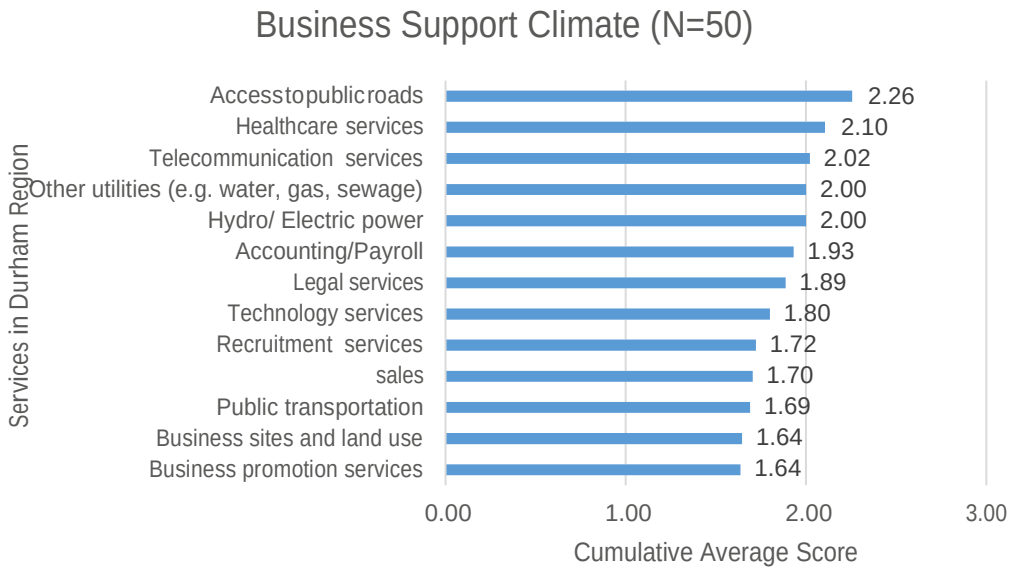

Figure 18

5.0 South Durham Region – Sector Results

5.1 Healthcare and Social Assistance

5.1.1 Organizations with Employees

As a key sector in Durham Region, the employer needs in the sector of Healthcare and Social Assistance were explored in detail. This section will present information on demographics, occupations, skill requirements and gaps, hiring practices, future requirements, as well as professional training particularly beginning with the organizations that have employees.

❖ Employer Demographics

In the sector of Healthcare and Social Assistance, 45 organizations with employees participated in the Skills For Tomorrow employer survey, which was 96% of the total respondents in this sector. From these businesses, the most common business size was small (5-99 employees), representing 35 of the returned surveys or roughly 78% of respondents. The number of survey respondents by employment size was well matched with BC data. The detailed survey responses are presented in Table 33.

Healthcare and Social Assistance Organizations with Employees (N=45)		
Employment Size	# of survey responses	Total # of employees
Micro (1-4)	9	11
Small (5-99)	35	452
Medium (100-499)	1	300
Large (500+)	0	0

Table 33

The majority of respondents in the sector of Healthcare and Social Assistance were located in Oshawa and Whitby. 27% of these respondents indicated that they have at least one secondary location in the Region.

❖ Occupational Categories

By analyzing NOCs at the single digit level, the top three occupational categories for organizations with employees in the sector of Healthcare and Social Assistance were health occupations, business, finance and administration, as well as management occupations.
The region is home to a variety of healthcare facilities such as hospitals, clinics, urgent care centers, skilled nursing facilities, and mental healthcare facilities. Accordingly, health occupations including professional nursing and professional not nursing such as physicians, dentists, pharmacists, and nutritionists are very common positions that are heavily represented in the sector of Healthcare and Social Assistance.
Meanwhile, the support workers in business finance and administration and the management occupations exist across various sectors and organizations in the labour market and are represented accordingly.

❖ Occupational Skill Requirement

Occupational skill requirements for the sector of Healthcare and Social Assistance were also examined by making use of four skill levels[3] embedded within the NOC structure that correspond to various levels of education or training. This allowed for assessment of the level of skill required by employers in this sector relative to the overall results.

[3] Please refer Table 15 for the skill level structure

The skill level that employers reported the greatest number of current employees concentrated in were skill level A and skill level B. For the occupations that fall within skill level A, the most commonly selected occupational category was NOC 30: professional nursing and NOC 31: professional not nursing. Similarly, the most commonly selected occupation in skill level B was NOC 42: paraprofessional occupations in legal, social, community & educational services. The results of the second digit NOC examination are further detailed in Table 34.

Skill Level	NOC 2 digit	# of Organizations	# of Employees
A	NOC30-Professional nursing	4	243
A	NOC31-Professional not nursing	21	124
B	NOC42-Paraprofessional occupations in legal, social, community & educational services	4	98

Table 34

In addition to knowing the skill level of employees in common occupations, the study also explored whether the employers in the sector of Healthcare and Social Assistance required a certain minimum credential for employees at their organizations. The question provided a supplementary understanding of employer's skill requirements. By incorporating the NOC structure into this question it also became possible to understand the specific occupations that employers required each credential for.

Overall, the most common credential required by employers in the sector of Healthcare and Social Assistance was a college certificate or diploma. In total, 72 occupations in this sector required this as the minimum credential. This and other credentials required by employers are depicted in Table 35.

Minimum Credential (N=45)	# of Occupations NOC 3 digit
Less than High School	1
High School or Equivalent	12
Apprenticeship	0
College Certificate/Diploma	72
College Post-Graduate or Advanced Diploma	6
Undergraduate Degree	25
Graduate Degree	11
Professional Degree	11

Table 35

In order to identify which specific occupations required employees to possess a minimum credential, this study examined each NOC at the 3-digit level. The most common occupations that organizations required credentials for were NOC 341 assisting occupation, which required a college certificate or diploma and NOC 312 optometrists, which required a graduate degree (Master or PhD).

To add to the explanatory power of the results, the Skills For Tomorrow employer survey also provided employers with the opportunity to specify any additional credentials or certifications that they required their employees to possess. The most common certifications mentioned by employers in this sector were Canadian Diabetes Association (CDA) and Registered Dietitian-Nutritionist (RD). Some employers also indicated several specific degree

that they required including Master of Social Work (MSW) and Master of Arts in Psychology.

The following section provides a better understanding of employers' skill requirements related to the nine federal essential skills.

❖ Essential Skills and Gap

In terms of the essential skills in different occupational categories, the survey developed questions to ask employers to identify which essential skills were critical for employees to effectively perform their roles. The section to follow will further detail these findings for each of the nine federal essential skills by providing examples of each skill at the corresponding level at which employers identified it to be important.
Employers in the Healthcare and Social Assistance sector primarily emphasized all of the essential skills at skill level A followed by skill level C and then skill level B. The skill that was most emphasized by employers in this sector was thinking, followed by oral communication. Examples of these essential skills identified by employers in the sector of Healthcare and Social Assistance are shown in Table 36 which presents the rank, essential skill, level sought, and the most common occupations emphasized at each skill level. The employer rank was determined by the number of times respondents indicated a particular essential skill to be critical. As employers specified which occupations essential skills were critical to, the skill level was drawn from the occupation identified. Skill level should be read from left to right in terms of how many times an employer emphasized each essential skill at the corresponding level. Finally, the most common occupational categories which employers emphasized this skill for are displayed in the final column.

Essential Skills	Skill Level				Occupational Categories
Thinking	A	C	B	D	Skill Level A: NOC 31 Professional not nursing Skill Level C: NOC 34 Assisting occupations in support of health services Skill Level B: NOC 32 Technical occupations in health
Oral Communication					
Working With Others					
Computer skills	A	C	B	D	
Writing					
Reading					
Document Use	A	C	B	D	
Computer Skill					
Continuous Learning					

Table 36

❖ Skill Gaps

The question about specific skill gaps was presented as a text box and generated a variety of responses. Respondents were asked to "identify any specific gaps between current and desired skill sets that employees in your organization possess". Based on the survey results, the skill gaps that were most frequently mentioned by employers in the Healthcare sector were time management, computer skills as well as English proficiency which could also be understood to mean a combination of oral communication, reading, and writing. Additionally, several employers claimed that employee commitment was an area the skills possessed by employees did not align with the needs of their organization. In order to understand whether

these gaps exist beyond the organizations mentioned, further data collection would be required.

❖ Hiring Practices, Challenges and Avenues

Employers in the of Healthcare and Social Assistance sector were also asked whether they had hired new employees in the past 12 to 18 months. In total, 35 employers indicated having hired over 163 employees during this time. The most common occupation hired was assisting occupations in support of health services. About 22% of the employers in the Healthcare and Social Assistance sector had hired people in this occupation.
In terms of the hiring challenge experienced by organizations, over half of the employers indicated that they did not face any challenges in attracting applicants. For those who did, the survey further asked them to identify the issues that affected their ability to attract qualified candidates. Respondents indicated an inability to offer competitive pay was the top reason for employers in the Healthcare and Social Assistance sector to attract qualified candidates. Some employers also pointed out in their comments that the business location is also a factor that made it difficult to meet their hiring needs. Figure 19 reflects the issues employers expressed as affecting their ability to hire.

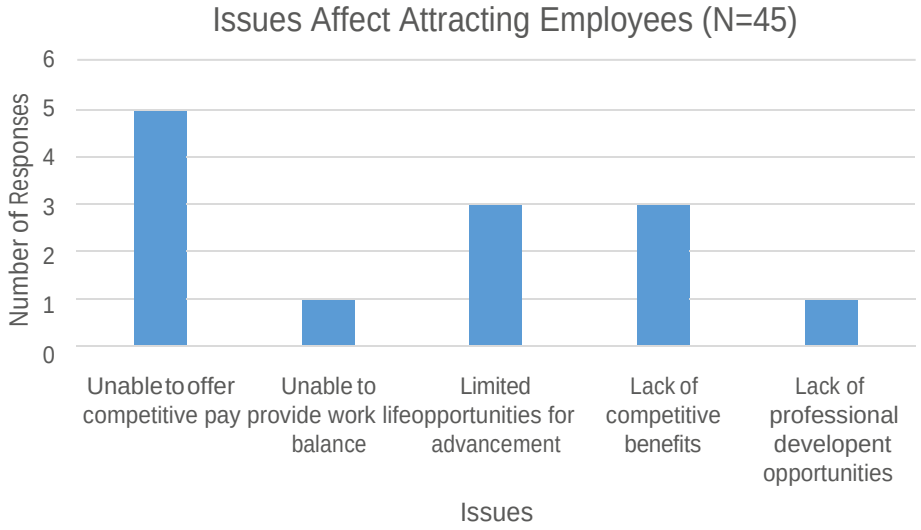

Figure 19

Of the challenges that employers in the sector of Healthcare and Social Assistance sector experienced when hiring employees, lack of experienced individuals was emphasized as the greatest challenge. Other challenges include a lack of skilled applicants and lack of qualified individuals. Some employers identified additional challenges through a text box following the question. A lack of candidates who were polished and desired to work hard, candidates had poor work ethic and no willingness to learn were among the other challenges identified.

Figure 20

In addition to the hiring challenges, employers' hiring practices and hiring channels were examined. Based on the results, the majority of respondents rely on the use of internal criteria to screen candidates with comparatively few respondents employing either an external organization, or screening software. In terms of time of hiring, 95% of the employers in the sector indicated that they hired employees on an as needed basis with a small minority keeping an open pool, or hiring at a specific time of year.

In terms of hiring channels, the survey raised questions on where the recruiters looked for candidates and which channels successfully delivered candidates. The most frequently used hiring methods were, e-postings, followed by word of mouth and employee referral. For the channels that generated the most qualified candidates, e-postings and word of mouth were equally identified as the channels that generated the greatest number of candidates in the Healthcare and Social Assistance sector. These findings are generally reflective of the findings from the overall results and are further depicted in Figure 21.

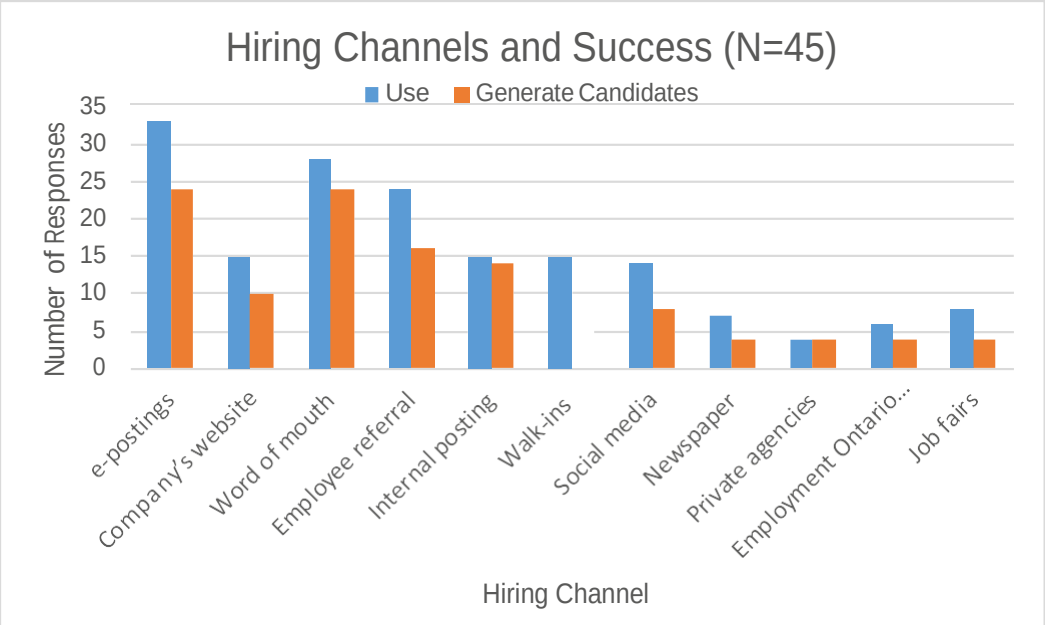

Figure 21

❖ Workforce requirements: current and future

Employers plans for future hiring were examined by asking whether the organization planned to hire additional employees in areas where they already employed over the next 12 to 18 months. In the sector of Healthcare and Social Assistance, only 47% of respondents indicated that they had the plans to hire new employees. An examination of the NOC codes suggested that most of the new employees hired would be concentrated in NOC 441 home care providers and educational support occupations, NOC 341 assisting occupations in support of health services and NOC 301 professional occupations in nursing. The most commonly reported areas of expected hiring are shown in Table 37. When asked, the majority of respondents indicated that their anticipated hiring plan would keep workforce levels steady.

NOC	# of Candidates	Skill Level
441 Home care providers and educational support occupations	18	C
341 Assisting occupations in support of health services	15	C
301 Professional occupations in nursing	14	A

Table 37

The survey also asked employers whether they anticipated hiring in occupational categories where they had not previously employed. In the sector of Healthcare and Social Assistance, 82% of employers indicated that they had no plan to hire employees in other occupational categories. Only 11% of employers in the sector mentioned that they would expand their businesses into new areas. Among those new occupational categories, NOC 341 assisting occupations in support of health services and NOC 441 home care providers and educational support occupations were the two occupations that would hire largest number of employees. In total, respondents expected to hire 176 employees in these two occupational categories. When many key employees begin closing in on retirement, the replacement of highly skilled and experienced workers becomes important. In the sector of Healthcare and Social

Assistance, 67% of the respondents in this sector expected to experience retirements in their organization over the next three to five years. Most of the retirements are expected to be concentrated in NOC 301 professional occupations in nursing. When asked, whether they had taken any actions to fill the skill gaps as a result of retirement, 42% of employers in this sector revealed that they did not currently have a strategy in place for employee retirements. Additionally, 40% indicated that they would employ the strategy of transferring knowledge to successors while 36% would create a succession plan for key roles in their organizations. Figure 22 details the other actions planned by respondents to address retirements.

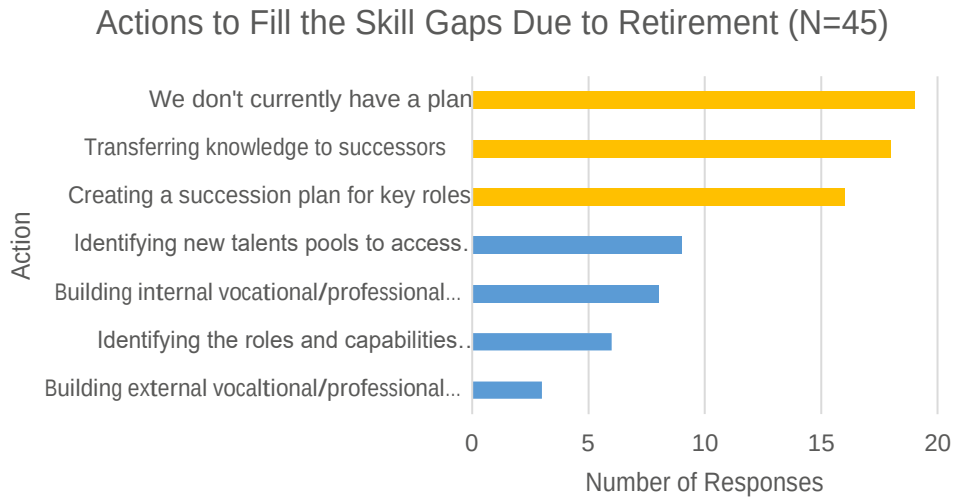

Figure 22

❖ Vocational/Professional Training

Vocational or professional is commonly defined as a training that is specific to a particular occupation, and is intended to equip employees with the defined competencies and specific skills to advance in their current profession. In the Healthcare and Social Assistance sector, the survey results indicated that 56% of the employers did not provide their employees with training. Compared to the overall, the employers in the sector of Health and Social Assistance provide employees with fewer opportunities to get job specific training. The occupations that employers commonly provided training in include, NOC 341 assisting occupations in support of health services and NOC 421 paraprofessional occupations in legal, social, community and education services. The most popular occupational categories that employers indicated providing training and the topics of the training for are shown in Table 38.

NOC	# of Employers	Topics of Training
NOC 341 Assisting occupations in support of health services	5	- *Soft skills* - *All skills related to the occupation*
NOC 421 Paraprofessional occupations in legal, social, community and education services	4	- *Food handler* - *Fire training* - *First Aid*
NOC 314 Therapy and assessment professionals	3	- *Reflexology* - *Crisis intervention training* - *All skills related to the occupation*

Table 38

Respondents who indicated that they provided training to their employees were also asked to identify the provider of training. Based on the survey results, internal provider was identified as the most popular source of training. Colleges and consultants were also identified as commonly used providers for training. These results are further displayed in Table 39.

Training Providers	# of Occupations
Internal Provider	11
Consultant	5
College	7
Private College	0
Union	0
University	2

Table 39

Employers in the Healthcare and Social Assistance sector who did not provide their employees with training were asked about the reasons that prevented them from offering training. Many different barriers to the provision of training were suggested and these findings are presented in Table 40.

Barriers Preventing Organizations from Training	Significant Concern	Somewhat Concerned	Not a Concern
It is too difficult to schedule training or it is too disruptive to our ongoing work	6	6	11
I am worried about the cost, regardless of the benefits	4	8	11
I am worried about losing productivity during training time	4	6	14
I am worried the staff's preference and motivation of learning	3	4	16
I am not sure that I can find a trainer to deliver the training that I need	2	6	15
I am not convinced that training would improve the skills of my workers	2	6	14
Training will not make a significant difference to my organization's bottom line	2	5	15
My current training needs are not offered locally	2	3	17
I am worried if I provide training my staff will be lured away	0	4	20

Table 40

5.1.2 Self-employed Businesses

Based on the Skills For Tomorrow employer survey results, there is not sufficient data for self-employed businesses in the sector of Healthcare and Social Assistance in south Durham. This finding is not surprising given the understanding that many of the known organizations in Healthcare and Social Assistance are organizations with employees. Self-employment is likely to be less common in this sector.

5.2 Advanced Manufacturing

5.2.1 Organizations with Employees

As a key sector in Durham Region, employer needs in the Manufacturing sector were specifically explored to build a sophisticated understanding of the sector. This section presents information on demographics, occupations, skill requirements and gaps, hiring practices, future requirements and training for organizations with employees in the Manufacturing sector.

❖ Demographics

In the Manufacturing sector, 41 business with employees participated in the Skills For Tomorrow employer survey. In total, these businesses employed 2,286 individuals and represent 91% of the total respondents in this sector. From these respondents, the most common business size was small businesses (5-99 employees), representing 35 of the returned surveys or approximate 78% of the sector respondents. The number of survey respondents by employment size was representative and well matched with Region of Durham business counts data. The demographic details of survey responses from this sector are presented in Table 41.

Advanced Manufacturing Business with Employees (N=41)		
Employment Size	# of survey responses	Total # of employees
Micro (1-4)	6	19
Small (5-99)	28	715
Medium (100-499)	6	951
Large (500+)	1	601

Table 41

An analysis of postal code data revealed that most of businesses in the Manufacturing sector who participated in the survey were located in Oshawa and Clarington. Only five respondents expressed the existence of an additional location in the Region with two of the five respondents indicating additional locations that were located in Pickering.

❖ Occupational Categories

The top three occupational categories for businesses with employees in the Manufacturing sector were identified by using NOC codes at the single digit level. The most common occupations were occupations in manufacturing and utilities, business, finance and administrative occupations, and management occupations. While these findings differed slightly from the overall findings, they are consistent with the expectation that the Manufacturing sector would be dominated by Manufacturing occupations and that management and administrative occupations would exist in smaller numbers.

❖ Occupational Skill Requirement

Employer skills requirements varied slightly in the Manufacturing sector compared to the overall results. By making use of four skill levels[4] embedded within the NOC structure

[4] Please refer Table 15 for the skill level structure

that correspond to various levels of education or training, the study is able to identify that the requisite skill level in this sector was slightly lower than the overall results.

The skill level that employers reported the greatest number of employees currently working in corresponded with Skill level C followed by Skill level B. Common occupations that fall within Skill level C, the most commonly selected occupational category included NOC 95: assemblers, NOC 96: labourers and NOC 94 processing operators. In total, these occupations accounted for 1,167 or 51% of the employees in the Manufacturing sector. The most common occupation in Skill level B was NOC 12: administrative and financial supervisors and administrative occupations. The most common occupations by second digit NOC are further detailed in Table 42. You will notice that the most common occupations are from skill level C and D. Although skill level B outpaced skill level D overall, NOC 96 reported more employees than any individual occupation at skill level B and as a result was included in Table 42.

Skill Level	NOC 2 digit	# of Organizations	# of Employees
C	NOC 95-Assemblers in manufacturing	15	673
D	NOC 96-Labourers in processing, manufacturing & utilities	12	261
C	NOC 94-Processing & manufacturing machine operators and related production workers	13	233

Table 42

In addition to knowing the skill level of current employees, the requirement of a minimum credential by employers was also examined. Overall, the most common credential required by employers in the Manufacturing sector was high school or equivalent, followed by college certificate/diploma. These results are depicted in Table 43.

Minimum Credential	# of Occupations NOC 3 Digit
Less than High School	14
High School or Equivalent	109
Apprenticeship	36
College Certificate/Diploma	86
College Post-Graduate or Advanced Diploma	17
Undergraduate Degree	46
Graduate Degree	0
Professional Degree	4

Table 43

The most common occupations in the Manufacturing sector that required a minimum credential for were NOC 961 labourers, for whom most employers required high school or an equivalent and NOC 001 legislators and senior management for whom most employers required an undergraduate degree.

Beyond the minimum credentials required, the survey also provided employers with the opportunity to specify any additional credentials or certifications that they required their employees to possess. The most common certifications mentioned by employers in this sector were Business degrees, and for apprentices the Certificate of Qualification (C of Q).

❖ Essential Skills and Gap

In addition to understanding the level of skill required by employers specific essential skills identified as critical for employees to effectively perform their roles were also examined. The section to follow will further detail these findings for each of the nine federal essential skills by providing examples of each skill at the corresponding level at which employers identified it to be important.

Reading, Thinking and Working with others were the top three skills identified by employers in the Manufacturing sector. These skills were emphasized as being most important at skill level B, followed by level A, then level C. This was slightly lower than the overall results. The three skills which followed Reading, Thinking, and Working with others in terms of employer ranking were Writing, Numeracy and Oral Communication. All three of these skills were emphasized equally at skill level B and Skill level A, followed by level C. The remaining essential skills, computer skills, numeracy, and continuous learning were least emphasized by the respondents. This does not mean however, that these skills were viewed as unimportant, only less emphasized as being critical to employees. Table 44 provides examples of each essential skill at the various levels of importance identified by respondents.

<table>
<tr><th>Essential Skills</th><th colspan="4">Skill Level</th><th>Occupational Categories</th></tr>
<tr><td>Reading</td><td rowspan="3">B</td><td rowspan="3">A</td><td rowspan="3">C</td><td rowspan="3">D</td><td rowspan="8">Skill Level A:
NOC 12- Administrative & financial supervisors and administrative occupations

Skill Level B:
NOC 00- Senior management

Skill Level C:
NOC 14- Office support occupations

Skill Level D:
NOC 96-Labourers</td></tr>
<tr><td>Thinking</td></tr>
<tr><td>Working With Others</td></tr>
<tr><td>Writing</td><td rowspan="3" colspan="2">B, A</td><td rowspan="3" colspan="2">C</td><td rowspan="3">D</td></tr>
<tr><td>Numeracy</td></tr>
<tr><td>Oral Communication</td></tr>
<tr><td>Document Use</td><td>B</td><td>A</td><td>C</td><td>D</td></tr>
<tr><td>Computer Skill</td><td colspan="2">B,A</td><td colspan="2">C</td><td>D</td></tr>
<tr><td>Continuous Learning</td><td>B</td><td>A</td><td>C</td><td>D</td></tr>
</table>

Table 44

In the comments, many employers emphasized the importance of each of these essential skills to employees in their organization. Additionally, employers consistently emphasized a lack of skilled trades workers and in particular, machine operators. While these are not gaps related to essential skills, this response was also emphasized in the focus groups where participants consistently emphasized a lack of skilled trades workers and general labourers. In order to establish this as a gap in the local economy however, additional research is required. Beyond the simple understanding conveyed by respondents that there is a lack of skilled trades workers available to fill jobs in the Manufacturing sector, this finding also demonstrates some confusion around the meaning

of “skill” related to skill gaps. Further study is necessary to determine whether there is in fact a shortage of skilled trade workers. The comments of respondents emphasizing the importance of skilled trades attribute a different meaning to “skill” than would normally be associated with essential skills.
In addition to commenting on skill gaps, some employers chose to name specific occupations where they observe this gap. The most common occupations emphasized were Labourers in Processing, Manufacturing and Utilities, and Other Assembly and Related occupations.

❖ Hiring Practices, Challenges and Avenues

In the Manufacturing sector, there was little indication from employers that hiring was a challenge. Of the over 258 different occupations hired recently, employers expressed difficulty in hiring 67 (26%) of these occupations. Common occupations that employers expressed difficulty hiring include, NOC 952: mechanical, electrical and electronics assemblers, NOC 921: supervisors, processing and manufacturing occupations and NOC 941: machine operators in mineral and metal products processing and manufacturing. When asked to identify the reasons why they experienced difficulty attracting candidates for available jobs, the results for Manufacturing mirrored what was observed in the overall results with competitive pay and opportunities for advancement being the biggest challenges after “other”. These results are displayed in Table 45.

Organization-Specific Attraction Issues	# of Responses
Unable to offer competitive pay	6
Limited opportunities for advancement	4
Lack of competitive benefits	3
Unable to provide work life balance	1
Lack of professional development opportunities	1
Other attraction Issues, please specify	12

Table 45

The most commonly expressed issue in the employer comments was the lack of suitable/qualified candidates. Additional issues include limited related experience, and specific skillsets required to operate machinery that were absent.

To complement this information, employers were also asked to indicate any general challenges experienced when hiring employees. These results differed from the overall results in regard to workplace skills which appeared as the biggest challenge when hiring employees. This high premium placed on workplace skills is an expected difference in the Manufacturing sector which places a high premium on skills specific to the type of work required. These results are displayed in Table 46.

General Hiring Challenges	#
Candidates do not have the right workplace skills	19
Lack of skilled applicants	18
Lack of qualified individuals	16
Lack of experienced candidates	15
Competition from other employers	7
Candidates are overqualified	3
Other, please specify	9

Table 46

In the additional comments, employers also emphasized the importance of additional specialized skills such as CNC (Computer Numerical Control) programming and NDT (Non Destructive Testing). In an individual key informant interview with one representative from the Manufacturing sector, these job-specific skills were also emphasized. When asked to elaborate further, she indicated that her manufacturing operations were becoming increasingly sophisticated and as a result they were consistently looking to hire candidates with experience specific to their area of Manufacturing.

Respondents in the Manufacturing sector were significantly more likely to use an external organization to screen candidates compared to the overall results. The use of external screening organizations only accounted for 37% of the hiring practices used by employers in this area. This finding was consistent with the overall results where the use of internal criteria to screen candidates remained the most common. These results are displayed in Table 47.

Hiring Practice	#
Use an external organization to screen candidates	21
Use internal criteria to screen candidates	33
Employ software to screen resumes	3

Table 47

When asked to elaborate on the specific hiring channels that they used, respondents in the Manufacturing sector differed slightly from the overall results. While e-postings, word of mouth, and employee referrals were still significant, respondents from the Manufacturing sector were significantly more likely to utilize private agencies, Employment Ontario service providers, and walk-ins in order to meet their hiring needs. Additionally, companies in this sector were significantly less likely to make use of the company's website as a way to meet their hiring needs compared to the overall results. These findings are displayed in Figure 23. Perhaps one reason for the increased use of alternative channels can be found in an examination of the sources that generate candidates. Compared to the overall results, the company's website generated relatively few candidates compared to other strategies. E-postings generated the most candidates; however, fell behind word of mouth which was the most frequently used practice.

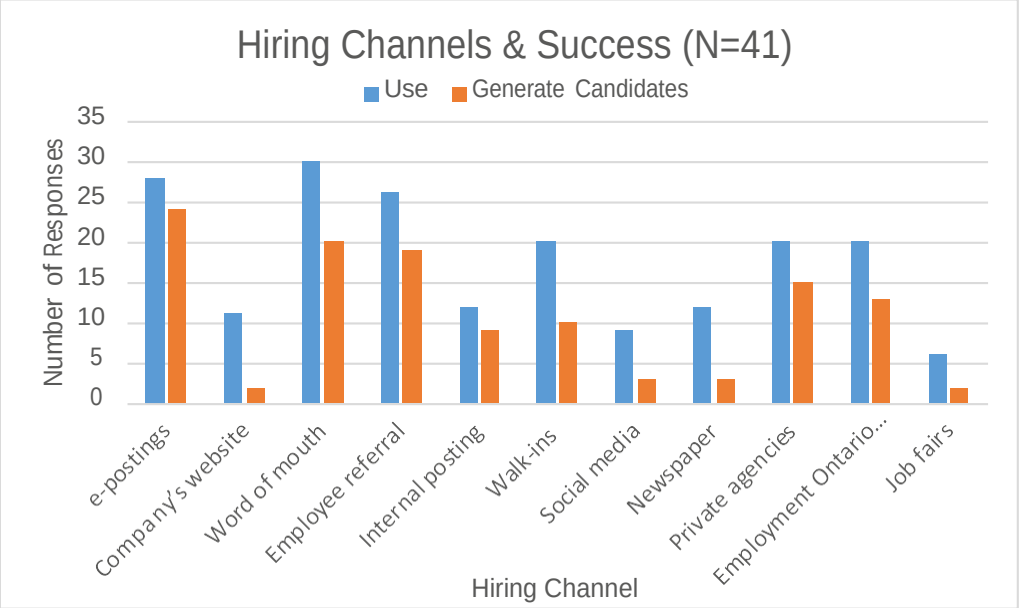

Figure 23

❖ Workforce Skill Requirements: Current and Future

Respondents in the Manufacturing sector were asked whether they planned to hire additional employees in existing occupations over the next 12-18 months. The vast majority of respondents indicated that they were planning to hire additional employees during this time with 32 organizations (78%) expressing plans to hire additional employees. In total, these organizations indicated plans to hire over 200 candidates. The two occupations that employers identified would be hired in the greatest number were NOC 953: other assembly and related occupations and NOC 961: labourers in processing, manufacturing and utilities. In total, these two occupations represented 109 hires or 54% of the additional hires that employers anticipated over the next 12-18 months.
When asked about whether their organization had plans to hire in additional areas, not currently employed by the organization, only one third of respondents expressed this intent. In total, these employers indicated plans to hire an additional 79 employees primarily in NOC 961: labourers in processing, manufacturing and utilities and NOC 952: mechanical, electrical and electronics assemblers which accounted for 40% of these expected hires.

Compared to the overall results, the Manufacturing sector would experience a significant challenge in the area of retirement with 75% of organizations reporting the expectation of retirements in the next 3-5 years. One significant difference; however, could be found in the understanding that the majority of respondents did not expect retirements to affect any single area greatly, but rather to affect a variety of different occupations throughout the sector. Table 48 reports the two most common occupations that employers expected to be affected by retirement.

NOC	# of Retirements
NOC 961: Labourers in processing, manufacturing & utilities	7
NOC 941: Machine operators in mineral & metal products processing and manufacturing	6
Total Number of Retirements	58

Table 48

Respondents were also asked to indicate any actions the organization was currently undertaking or planning to address the knowledge or skill gaps that would result from retirement. Compared to the overall results it was significantly less likely for respondents in the Manufacturing sector to have no plan. The majority of respondents indicated being early in their retirement planning efforts with a combined 44 organizations currently identifying retirement eligible employees, and creating a succession plan for key roles. These results are further displayed in Table 49.

Actions to Fill the Skill Gaps Resulting from Retirement	# of Organizations
Creating a succession plan for key roles	27
Transferring knowledge to successors	26
Identifying the roles and capabilities occupied by retirement eligible employees	17
Building internal vocational/professional training programs to strengthen the pipeline for key roles	10
Identifying new talents pools to access specialized capabilities	9
We don't currently have a plan	9
Building external vocational/professional training programs to strengthen the pipeline for key roles	3

Table 49

❖ Vocational/professional Training

When asked to whether or not training was offered to employees, respondents in the Manufacturing sector were slightly less likely to offer training. In total, 19 (46%) of employers offered training to their employees in 74 occupations. Popular topics of training included health and safety, management, equipment and skill/job specific training.

When asked about the provider used to offer training to employees, the most common training providers were college, consultant, and internal provider which when combined accounted for 90% of the training provided.

As a slight majority of employers indicated that they did not offer training, these employers were asked to identify any barriers that prevented them from offering training. The most significant concern related to making training available to employees was the loss of productivity, followed by the disruption of ongoing work. Some concern was also expressed that staff could be lured away if training was provided. These results are depicted in Table 50.

Barriers Preventing Organizations from Training	Significant Concern	Somewhat Concerned	Not a Concern
I am worried about losing productivity during training time	6	6	7
It is too difficult to schedule training or it is too disruptive to our ongoing work	5	6	8
My current training needs are not offered locally	5	3	12
I am not sure that I can find a trainer to deliver the training that I need	4	6	10
I am worried about the cost, regardless of the benefits	4	5	11
I am not convinced that training would improve the skills of my workers	1	6	13
I am worried the staff's preference and motivation of learning	1	6	12
Training will not make a significant difference to my organization's bottom line	1	4	15
I am worried if I provide training my staff will be lured away	0	9	12

Table 50

Additional reasons for not offering training included, little senior management support for training and that the organization only offers training when hiring new employees.

- Business Support Climate

The overall ranking of services in the Durham Region by respondents from the Manufacturing sector very closely resembled the overall results. One significant difference emerged; however, when respondents were asked to identify the top three services that are critical to the long-term success of their organization. Hydro/Electric Power was the first and second critical service, followed by access to public roads which was the third most commonly emphasized service as being critical to the long term success of manufacturers in the Durham Region. This significant emphasis on the importance of hydro/electric power demonstrates the importance of this service above any other service to respondents in the Manufacturing sector.

5.2.2 Self-employed Businesses

Based on the Skills For Tomorrow survey results, there is not sufficient data for self-employed businesses in the Manufacturing sector. This finding was not surprising given the understanding that many Manufacturing operations require more than a single person to operate.

5.3 Information and Cultural Industries

5.3.1 Organizations with Employees

As a key sector in Durham Region, employer needs in the Information and Cultural Industries sector were specifically explored to develop a better understanding of this unique sector. This section will present information on demographics, occupations, skill requirements and gaps, hiring practices, future requirements and training for organizations with employees in the Information and Cultural Industries sector.

❖ Demographics

In the Information and Cultural Industries sector, 19 businesses with employees participated in the Skills For Tomorrow employer survey. In total, these businesses employed 566 individuals and represent 63% of the total respondents in this sector. One unique feature of the Information and Cultural Industries sector is the high number of self-employed organizations that belong to this sector.

Among survey respondents with employees, the most common business size was small businesses (5-99 employees), representing 12 of the returned surveys or roughly 63% of respondents with employees in this sector. The total number of respondents with employees, the size of business, and total number of employees for respondents with employees are displayed in Table 51.

Information and Cultural Industries Businesses with Employees (N=19)		
Employment Size	# of survey responses	Total # of employees
Micro (1-4)	5	11
Small (5-99)	12	227
Medium (100-499)	2	328
Large (500+)	0	0

Table 51

The data revealed that most of businesses in the Information and Cultural Industries sector who participated in the survey were located in Oshawa and Whitby. Only three respondents expressed the existence of an additional business location in the Region with two of the respondents indicating that their additional locations that were located in Clarington with one additional location in Pickering.

❖ Occupational Categories

The top three occupational categories for businesses with employees in the Information and Cultural Industries sector were identified by using NOC codes at the single digit level. The most common occupational skill types were NOC 6 sales and service occupations, NOC 1 business, finance and administrative occupations, and NOC 0 management occupations. These findings mirrored the overall findings establishing sales as an important occupational skill type not previously identified. In order to examine this finding further, the study moved to examine the occupational skill types by employing an analysis of NOCs at the two-digit level. The three most common occupational categories are displayed in Table 52. In total, these occupations accounted for 42% of the total employees in this sector.

NOC	# of Occupations
NOC 64: Sales representatives & sales persons	50
NOC 11: Professional occupations	49
NOC 15: Distribution, tracking, scheduling co-ordination occupations	35
Total Number of occupations	319

Table 52

❖ Occupational Skill Requirement

Employer skills requirements varied slightly in the Information and Cultural Industries sector compared to the overall results. By making use of four skill levels[5] embedded within the NOC structure that correspond to various levels of education or training, it was discovered that the requisite skill level in this sector was slightly higher than the overall results.

The skill level that employers reported the greatest number of employees possessing corresponded with skill level A followed by skill level B. Common occupations that fall within skill level A include NOC 00 senior management and NOC11 professional occupations. In total, these occupations accounted for 71 employees across nine organizations representing 12% of the employees in the Information and Cultural Industries sector. The most common occupations across the various Skill levels, identified by second digit NOC are further detailed in table 53.

Skill Level	NOC 2-digit	# of Organizations	# of Employees
A	NOC 11-Professional occupations	3	49
B	NOC 12-Administrative & financial supervisors & administrative occupations	7	23
C	NOC 64-Sales representatives & sales persons	5	50

Table 53

In addition to knowing the skill level of employees, the requirement of a minimum credential by employers was also examined. Overall, the most common credential required by employers in the Information and Cultural Industries sector was college certificate/diploma. These results are depicted in Table 54.

Minimum Credential	# of Occupations NOC 3 Digit
Less than High School	3
High School or Equivalent	6
Apprenticeship	1
College Certificate/Diploma	31
College Post-Graduate or Advanced Diploma	6
Undergraduate Degree	9
Graduate Degree	3
Professional Degree	1

Table 54

The most common occupation in the Information and Cultural Industries sector that required a college diploma as the minimum credential was NOC 124: office administrative assistants, general, legal and medical. This credential was also required for a number of other occupations. Similarly, the most common occupation that required an undergraduate degree was NOC 112: human resource and business service professionals. It should be noted that in this sector, there was a significant amount of

[5] Please refer Table 15 for the skill level structure

variation in the minimum credentials required. For example, NOC 662: was the occupation for which the greatest number of organizations required a credential; however, the credential required could be either high school, college, or university, depending on the specific organization. These results are consistent with the finding that the level of skill demanded by this sector is high.

Beyond the minimum credentials required, the survey also provided employers with the opportunity to specify any additional credentials or certifications that they required their employees to possess. The most common certifications mentioned by employers in this sector were business degrees.

❖ Essential Skills and Gap

In addition to understanding the level of skill required by employers from their employees, specific essential skills identified as critical for employees to effectively perform their roles were also examined. The section to follow will further detail these findings for each of the nine federal essential skills by providing examples of each skill at the corresponding level at which employers identified it to be important.

Oral communication, computer skills and working with others were the top three skills identified by employers in the Information and Cultural Industries sector. These skills were emphasized as being most important at skill level A, which is a higher level than was observed in the overall results. The three skills that followed oral communication, computer skills and working with others in terms of employer ranking were writing, document use and reading. All three of these skills were emphasized primarily at skill level A. The remaining essential skills, thinking, continuous learning and numeracy were least emphasized by the respondents. This does not; however, mean these skills were viewed as unimportant, only as less critical than other essential skills.
Table 55 displays the rank, essential skill, level sought, and the most common occupations emphasized at each skill level. The employer rank was determined by the number of times respondents indicated a particular essential skill to be critical. As employers specified which occupations essential skills were critical to, the skill level was drawn from the occupation identified. Skill level should be read from left to right with the mot emphasized skill level appearing on the left. Finally, the most common occupational categories which employers emphasized this skill for are displayed in the final column. For example, computer skills, were the most 2nd most emphasized essential skill in this sector. Computer skills were most consistently emphasized at skill Level A. An example of an occupation that falls within skill level A would include senior management occupations.

Rank	Essential Skills	Skill Level			Occupational Categories
1	Oral Communication	A,B		C	Skill Level A: NOC 00- Senior management Skill Level B: NOC 12- Administrative and regulatory occupations Skill Level C: NOC 14- Office support occupations
2	Computer Skills	A	B	C	
3	Working With Others	A,B		C	
4	Writing	A	B	C	
5	Document Use	A	B	C	
6	Reading	A	B	C	
7	Thinking	A	B	C	
8	Continuous Learning	A	B	C	
9	Numeracy	A	C	B	

Table 55

In the comments, the majority of respondents emphasized the importance of each of these essential skills to employees in their organization. Many of the employers commented that these essential skills were of primary importance to smaller teams. Additionally, one employer expressed the importance of sales staff at their organization possessing post-secondary education as a way to ensure the requisite essential skills were developed prior to their hire.

- Hiring Practices, Challenges and Avenues

In the Information and Cultural Industries sector there was little indication from employers that hiring was a challenge. Eleven different organizations indicated that they had hired recently, hiring a total of 54 employees in a variety of different occupations. The majority of respondents suggested that they did not experience any difficulty with hiring in any of the occupations recently hired. Two exceptions were for NOC 228: technical occupations in computer and information systems and NOC 641: sales and account representatives. Two organizations expressed difficulty hiring in these two occupations.

When asked to identify the reasons why they experienced difficulty attracting qualified candidates for available jobs, the results for the Information and Cultural Industries sector mirrored what was observed in the overall results with competitive pay and opportunities for advancement being the biggest challenges. These findings were also emphasized in the focus groups where a number of employers suggested the ability to offer competitive pay limited their ability to attract qualified candidates. When asked to elaborate, these employers suggested proximity to the city of Toronto where wages are higher and the high number of government employers in the Region who were able to offer more competitive pay were the biggest challenges they faced when attempting to attract qualified employees. The results from the Skills For Tomorrow employer survey are displayed in Table 56.

Organization-Specific Attraction Issues	# of Responses
Unable to offer competitive pay	2
Limited opportunities for advancement	2
Lack of professional development opportunities	2
Unable to provide work life balance	0
Lack of competitive benefits	0
Other attraction Issues, please specify	2

Table 56

To complement this information, employers were also asked to indicate any general challenges experienced when hiring employees. These results differed from the overall results particularly with regard to the lack of skilled applicants which appeared as the biggest challenge related hiring employees in the Information and Cultural Industries sector. These results are displayed in Table 57.

General Hiring Challenges	#
Lack of skilled applicants	9
Lack of qualified individuals	8
Lack of experienced candidates	8
Candidates do not have the right workplace skills	8
Competition from other employers	3
Candidates are overqualified	2
Other, please specify	2

Table 57

In the additional comments, employers also emphasized a high number of recent graduates all applying for entry-level jobs, this finding again emphasizes the importance of skills acquired through work experience. Employers in the focus group similarly emphasized this high number of new graduates applying for entry level jobs. When asked to elaborate on why this was perceived to be a challenge, the participants emphasized that many new graduates lacked experience and ultimately had unrealistic salary expectations for their limited experience.

The Information and Cultural Industries sector mirrored the overall results in terms of their hiring processes with the vast majority of respondents only making use of internal criteria during the hiring process, rather than employing screening software or using external organizations.

When asked to elaborate on the specific hiring channels that they used, respondents in the Information and Cultural Industries sector differed slightly from the overall results. The top hiring channel in this sector was employee referrals followed by word of mouth. Similarly, the respondents from this sector were significantly less likely to utilize walk ins, Employment Ontario service providers, or job fairs as channels for recruiting compared to the overall results. These findings are displayed in Figure 24

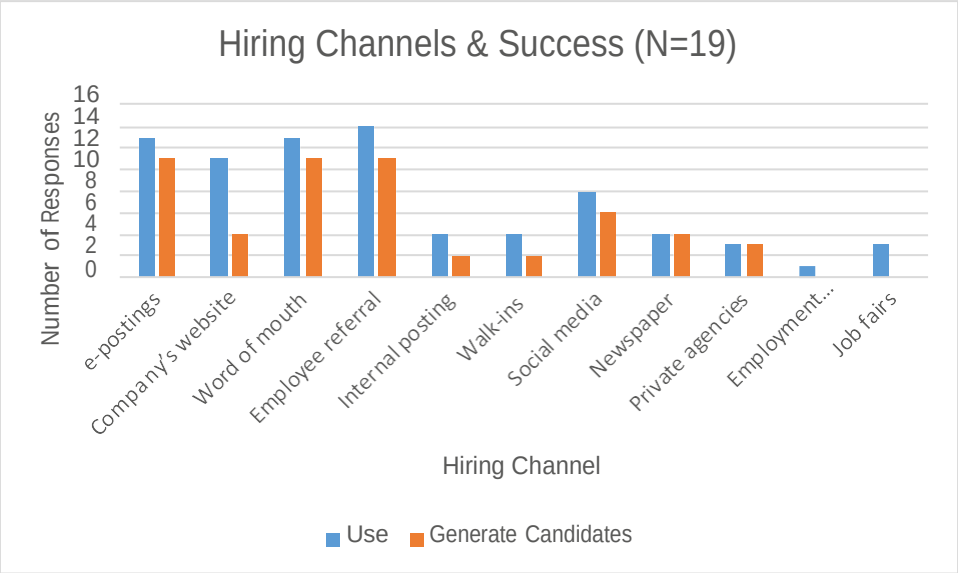

Figure 24

Some additional insights around hiring in this sector were shared by participants in the focus groups who indicated that their preferred method for hiring was through association with schools who had co-op programs. Participants here emphasized the utility of these programs for generating candidates suitable for entry-level positions.

Conversely, employers emphasized that the majority of their management and supervisory positions they sought to fill with persons who came from other organizations within the sector.

❖ Workforce Skill Requirements: Current and Future

Respondents in the Information and Cultural Industries sector were asked whether they planned to hire additional employees over the next 12-18 months in occupations that their organization currently employs. The majority of respondents indicated that they were planning to hire additional employees during this time with 12 organizations or 66% of respondents expressing plans to hire additional employees. In total, these organizations plan to hire 18 employees in a variety of occupations. The two occupations that employers identified would be hired in the greatest number were NOC 634: specialized occupations in personal and customer service and NOC 631: service supervisors. In total, these two occupations represented 6 hires or 33% of the additional hires that employers anticipated over the next 12-18 months. It is of interest to note that 11 of the 18 hires fell within the occupational areas of sales and service occupations which was also reported as a significant occupational categories employed in this industry.

When asked about whether their organization had plans to hire in additional areas, not currently employed by the organization, slightly over one third of respondents expressed this to be their intent. In total, these employers indicated plans to hire an additional 15 employees primarily in NOC 217: computer and information systems professionals NOC 021: managers in engineering, architecture, science and information systems and NOC 662: other sales support and related occupations which accounted for 66% of these expected hires.

Compared to the overall results, the information and cultural industries sector would not experience a significant challenge in the area of retirement with only 42% of organizations reporting the expectation of retirements in the next 3-5 years. Table 58. reports the most common occupations that employers expected to be affected by retirement.

NOC	# of Retirements
NOC 001: Legislators and senior management	4
NOC 224: Technical occupations in electronics and electrical engineering	3
Total Number of Retirements Expected	17

Table 58

Respondents were also asked to indicate any actions the organization was currently undertaking or planning to address the knowledge or skill gaps that would result from retirement. Compared to the overall results it was significantly less likely for respondents in this sector to have no plan. The majority of respondents indicated being early in their retirement planning efforts with a total by 18 organizations currently identifying retirement eligible employees, and creating a succession plan for key roles. These results are further displayed in Table 59.

Actions to Fill the Skill Gaps Resulting from Retirement	# of Organizations
Creating a succession plan for key roles	10
Transferring knowledge to successors	8
Identifying new talents pools to access specialized capabilities	7
Building internal vocational/professional training programs to strengthen the pipeline for key roles	5
Identifying the roles and capabilities occupied by retirement eligible employees	5
We don't currently have a plan	5
Building external vocational/professional training programs to strengthen the pipeline for key roles	3

Table 59

- Vocational/Professional Training

When asked whether training was offered to employees, respondents in the Information and Cultural Industries sector were less likely to offer training compared to the overall results. In total, eight or 42% of employers offered training to their employees in 18 occupations. Popular topics of training included soft skills and customer service training, new product training and other job-specific skills. When asked about the provider used to offer training to employees, the most common source of training by far was “internal providers” which when accounted for 61% of the training provided.

57% of employers indicated that they did not offer training, these employers were asked to identify any barriers that prevented them from offering training to their employees. The most significant concern related to making training available to employees was the cost, regardless of the benefits. These results are depicted in Table 60.

Barriers Preventing Organizations from Training	Significant Concern	Somewhat Concerned	Not a Concern
I am worried about the cost, regardless of the benefits	3	2	5
I am not sure that I can find a trainer to deliver the training that I need	2	2	6
Training will not make a significant difference to my organization's bottom line	2	0	8
I am not convinced that training would improve the skills of my workers	2	0	8
It is too difficult to schedule training or it is too disruptive to our ongoing work	1	3	6
I am worried about losing productivity during training time	0	5	5
I am worried the staff's preference and motivation of learning	0	2	8
My current training needs are not offered locally	0	2	8
I am worried if I provide training my staff will be lured away	0	1	9

Table 60

When offered the opportunity to elaborate, employers expressed that the highly specialized nature of training required to challenge. This theme was also emphasized in the focus groups where employers suggested that any training opportunities offered were better done in a self-directed fashion rather than through a traditional training provider.

5.3.2 Self-employed Businesses

In the sector of Information and Cultural Industries, the greatest number of respondents identified themselves as "self-employed". As a sector with a relatively high quantity of self-employed businesses, the section to follow will further detail the self-employed businesses in this sector.

- Demographics

There were 11 self-employed businesses from the Information and Cultural Industries that participated in the Skills For Tomorrow employer survey. Among these respondents, 46% were from Oshawa. The remainder were from Pickering, Ajax and Clarington respectively. These results are depicted in Figure 25.

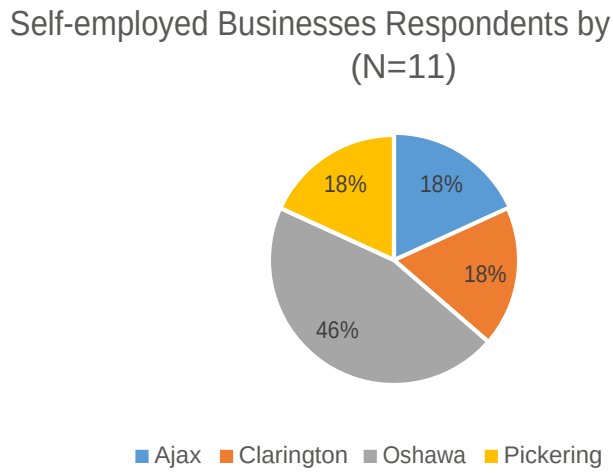

Figure 25

Based on the data analysis, the most common age of self-employed individuals in the Information and Cultural Industries was between 40 and 59 years old (These results are displayed in Figure 26. The finding that self-employed individuals were likely to fall within this age range closely resembled the overall findings for self-employed businesses.

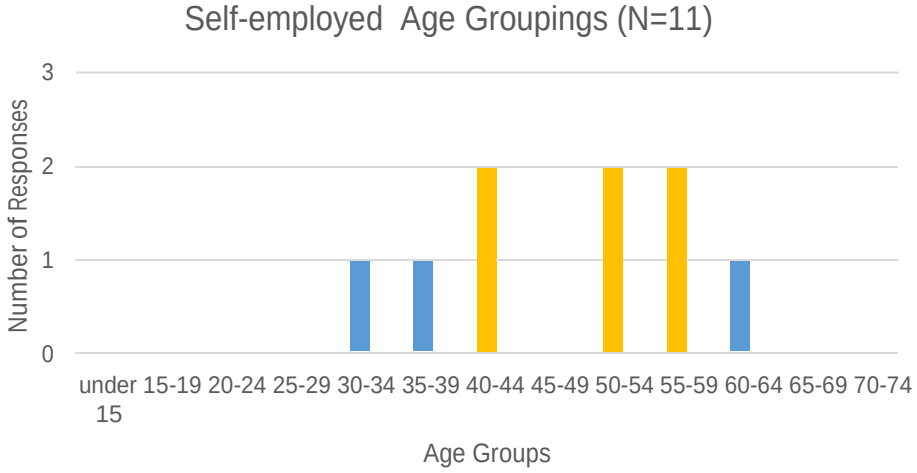

Figure 26

In terms of the highest credential completed before undertaking self-employment, 73% of respondents possessed a college certificate/diploma or higher. Nearly 50% of self-employed respondents in the Information and Cultural Industries indicated that they conducted e-commerce in their businesses. Based on the results, compared to other sectors, it seems that the self-employed individuals in this sector were significantly more likely to conduct e-commerce.

❖ Prior Experience

Of the 11 self-employed respondents, 36% of them indicated that they had incorporated their business while 64% indicated that they were unincorporated businesses. Based on

the survey results, nearly 80% of the self-employed respondents from this had more than 6 years' experience being self-employed.

In terms of the relationship between the credential and business that the self-employed respondents operated, 64% of them indicated that the credential the completed were related to the work they currently performed. In the sector of Information and Cultural Industries, working for an employer ranked as the number one when it comes to the activity before being self-employed. 82% of self-employed respondents in the Information and Cultural Industries identified this option.

There are multiple reasons for people choose to be self-employed. In the sector of Information and Cultural Industries, flexible hours, flexible working location, ability to make your own decision, and meaningful work were identified as the top reasons of being self-employed.

Figure 27

❖ Future Needs and Vocational Training

In terms of the greatest challenge to sustaining self-employed businesses, the respondents in the Information and Cultural Industries identified low cash flow as the top challenge, with over a half of the respondents selecting this option. Poor work-life balance, risk and challenges with promotion were also mentioned by respondents as issues posing a challenge to sustaining self-employment.

For the future hiring plan, 55% of the self-employed respondents in the Information and Cultural Industries indicated that they would hire employees in the next 12 to 18 months. The remaining 45% who expressed a desire to continue to conduct their business without employees, identified not wanting to take on the responsibility of employees and not enough work for more than one person as the top two reasons for continuing to conduct business without employees.

As an effective way to access to resources and acquire skills, professional or vocational training plays essential role in helping the self-employed to conduct their own businesses. For the Information and Cultural Industries, the survey results revealed that 73% of respondents thought training helped their businesses to remain competitive. Additionally,

73% of the self-employed respondents in this sector took additional training related to the work they currently performed. In terms of the training type, workshops and course from professional associations were the top two training sources identified by self-employed respondents in the Information and Cultural Industries sector.

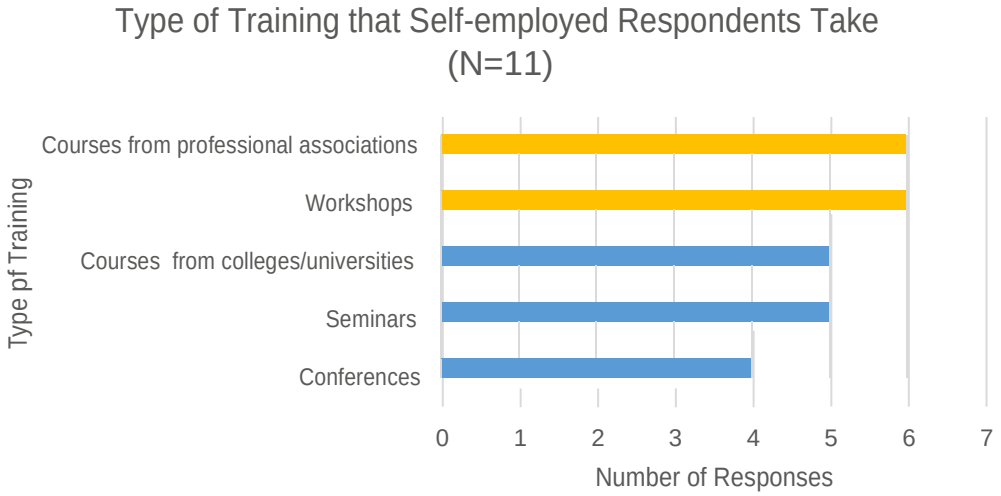

Figure 28

The self-employed respondents in the Information and Cultural Industries identified four advantages of taking professional training: benefits of an instructors/structure, becoming knowledgeable on subject matter, knowledge of current trends and developments in the field of practice, as well as opportunity to meet/network with others in my field. These are the factors that largely influence a self-employed respondents' decision to undertake training.

There were multiple reasons might influence people who do not want to undertake professional training. Based on the data analysis, time and funding were two main reasons that most self-employed respondents expressed as a concern. Self-employed business owners identified a lack of time and lack of funding as the main reasons that they could not take professional training related to their field.

❖ Retirement Plan

When asked about their plans for retirement, self-employed respondents from the Information and Cultural Industries plans varied. Among the 11 respondents, 37 were not sure about the retirement plan, 27% would close the business after retirement, 27% would transfer the business to a family member, and the remaining 9% would sell the business to a third party.

❖ Business Support Climate

The sector of Information and Cultural Industries is an important part of the economy in Durham Region. The sector makes the Region as a more productive and innovative community. Regional services play a significant role in helping the sector to grow and be competitive. Business support climate questions were developed in this survey to ask self-employed respondents in the Information and Cultural Industries for their thoughts on the services provided by the Region.

The survey results displayed that each service provided by Region of Durham was thought to be positive. Healthcare services and access to public roads were identified as the most satisfied services by the self-employed respondents in the Information and Cultural Industries. The evaluation on hydro/electric power followed as the third, all of these three services were thought as above average level.

Compared to other services, the score of sales and business promotion services were relatively low. It means that self-employed respondents in the Information and Cultural Industries had the perception to improve these two services in the Region. Product dissemination and commercial awareness are extremely important for the self-employed respondents operate their businesses in the sector. How to efficiently access to customers and do better job in marketing have direct impact on their business performance.

The survey asked the self-employed respondents to indicate three critical services that the region provided to assist them to better develop their businesses. In the sector of Information and Cultural Industries, telecommunication services, technology services, and hydro/electric power were identified as the top three to help them to grow the businesses.

5.4 Utilities

5.4.1 Organizations with Employees

As a key sector in Durham Region, employer needs in the Utilities sector were specifically explored to better understand this sector. This section will present information on demographics, occupations, skill requirements and gaps, hiring practices, future requirements and training for organizations with employees in the Utilities sector.

- Demographics

In the Utilities sector, 26 business with employees participated in the Skills For Tomorrow employer survey. In total, these businesses employed 6,454 individuals and represent 99% of the total respondents from this sector. From these businesses, the most common business size was small businesses (5-99 employees), representing 16 of the returned surveys or roughly 62% of respondents in the sector. The number of survey respondents by employment size was representative and well matched with Region of Durham business counts data. These details of the demographics in this sector are presented in Table 61.

Utilities Businesses with Employees (N=26)		
Employment Size	# of Survey Responses	Total # of Employees
Micro (1-4)	3	8
Small (5-99)	16	479
Medium (100-499)	5	665
Large (500+)	2	5302

Table 61

The data revealed that most of businesses in the Utilities sector who participated in the survey were located in Oshawa and Pickering, followed by Clarington and Whitby. Only two respondents expressed the existence of an additional location in the Region with both respondents indicating that they had additional locations in Pickering.

❖ Occupational Categories

The top three occupational categories for businesses with employees in the Utilities sector were identified by using NOC codes at the single digit level. The most common occupations included business, finance & administrative occupations, management occupations and trades, transportation and equipment. While these findings differed from the overall findings, they are consistent with the expectation that the Utilities sector would have a significant contingent of trades workers compared to other sectors.

❖ Occupational Skill Requirement

Employer skills requirements varied slightly in the Utilities sector compared to the overall results. By making use of four skill levels[6] embedded within the NOC structure that correspond to various levels of education or training, it was discovered that the requisite skill level in this sector was slightly higher than the overall results. The skill level where employers reported the greatest number of current employees corresponded with skill level A followed by skill level B. Common occupations that fall within skill level A included NOC 01-05: specialized management and NOC 21: professional occupations in natural and applied science. Common occupations in skill level B include NOC 12: administrative and financial supervisors and administrative occupations and NOC 13: finance, insurance and related business administrative occupations. Common occupations by second digit NOC are further detailed in Table 62.

Skill Level	NOC 2 digit	# of Organizations	# of Employees
A	NOC 01-05-Specialized management	15	121
A	NOC 21-Professional occupations in natural and applied science	3	100
B	NOC 12-Administration & financial supervisors and administrative occupations	11	637

Table 62

In addition to knowing the skill level of employees, the requirement of a minimum credential was also examined. Overall, the most common credential required by employers in the Utilities sector was a College Certificate or Diploma followed closely by the Undergraduate Degree. These results are depicted in Table 63.

Minimum Credential	# of Occupations NOC 3-Digit
Less than High School	1
High School or Equivalent	41
Apprenticeship	19
College Certificate/Diploma	58
College Post-Graduate or Advanced Diploma	17
Undergraduate Degree	54
Graduate Degree	4
Professional Degree	4

Table 63

[6] Please refer Table 15 for the skill level structure

The most common occupations in the utilities sector that required a minimum credential were NOC 141 general office workers, for whom most employers required high school or an equivalent and NOC 112 human resources and business service professionals for whom most employers required an undergraduate degree.

Beyond the minimum credentials required, the survey also provided employers with the opportunity to specify any additional credentials or certifications that they required their employees to possess. The most common certifications mentioned by employers in this sector were the professional engineer designation, and for apprentices a variety of different credentials provided by various unions were emphasized.

❖ Essential Skills and Gap

In addition to understanding the level of skill required by employers, specific essential skills identified as critical for employees to effectively perform their roles were also examined. The section to follow will further detail these findings for each of the nine federal essential skills by providing examples of each skill at the corresponding level at which employers identified it to be important.

Reading, thinking and working with others were the top three skills identified by employers in the Utilities sector. These skills were emphasized as being most important at skill level B, followed by level A, then level C. This was slightly lower than the overall results. The three skills which followed reading, thinking, and working with others in terms of employer ranking were writing, numeracy and oral communication. All three of these skills were emphasized equally at skill level B and skill level A, followed by level C. The remaining essential skills, computer skills, numeracy, and continuous learning were least emphasized by the respondents. This does not; however, mean these skills were viewed as unimportant. Table 64 provides examples of each essential skill at the various levels of importance identified by respondents.

Essential Skills Ranked	Skill Level			Most Common Occupational Categories
Thinking	B	C,A		Skill Level A: NOC 12- Administrative & financial supervisors and administrative occupations Skill Level B: NOC 14- Office support occupations Skill Level C: NOC 00- Senior management
Computer Skills	B	A	C	
Working With Others	A,B,C			
Reading	B	A,C		
Numeracy	B	A	C	
Document Use	A	B	C	
Writing	B	A	C	
Oral Communication	C	A	B	
Continuous Learning	A	B	C	

Table 64

Upon reviewing the results of table, several things stand out. First, the most common level where employers emphasized essential skills clearly corresponds with skill Level B. An exception to this; however, can be found in the skill of continuous learning which was primarily emphasized by employers as being of importance at skill Level A. Compared to the overall results, respondents expressed varying levels of importance for each essential skill.

Many employers in the comments emphasized the importance of each of these essential skills to employees in their organization. Additionally, employers consistently emphasized a lack of skilled trades workers and skills specific to these occupations as an

important area where a gap exists. While these are not gaps related to essential skills, this response was also emphasized in the focus groups where participants consistently emphasized a lack of skilled trades workers and general labourers who had the required work ethic to be trained to possess the skills required to be successful. It is important to note that although these "gaps" were identified by employers further research is required to substantiate these as gaps in the overall labour market.

In an additional interview, one employer from this sector expressed a lack of basic numeracy skills being a significant challenge related to his organization's ability to hire. When asked to elaborate, this individual indicated that his company had developed a basic math test to test the skills of applicants, which every applicant failed. As a result, this employer shared that the company was required to develop additional training to address this gap.

❖ Hiring Practices

In the Utilities sector 96% of respondents indicated that they had hired employees recently. Of these respondents who recently hired, the occupation hired by the greatest number of organizations was NOC 122 administrative and regulatory occupations. Many employers also specified other occupations including technical staff, technicians and trades as areas where they had hired recently. There was little indication from employers in this sector that hiring was a challenge. Of the over 169 occupations hired recently by these respondents, employers expressed difficulty in hiring for only 43 of these occupations, or 25%.

Occupations Hired	# of Organizations
NOC 131: Finance, insurance and related business administrative occupations	2
NOC 442: Legal and public protection support occupations	2
NOC 952: Mechanical, electrical and electronics assemblers	2
NOC 953: Other assembly and related occupations	2
NOC 924: Utilities equipment operators and controllers	2
NOC 761: Trades helpers and labourers	2

Table 65

The number of different occupations where employers expressed difficulty in hiring is quite diverse. When analyzing these results more closely, it was discovered that particularly the large organizations hired so many different employees that often the occupations where they experienced hiring challenges were not specifically related to the Utilities sector.

When asked to identify the reasons why they experienced difficulty attracting candidates for available jobs, the results for respondents from the Utilities sector primarily chose "other". The main reasons expressed by respondents included challenges competing with other large employers for talent, the need to primarily hire contractors, and a shortage of skilled trades workers generally.

To complement this information, employers were also asked to indicate any general challenges experienced when hiring employees. These results differed from the overall results namely in regard to the skill of applicants and the lack of experienced candidates which appeared as the biggest challenge when hiring employees. These results are displayed in Table 66.

General Hiring Challenges	#
Lack of skilled applicants	14
Lack of experienced candidates	14
Competition from other employers	13
Lack of qualified individuals	12
Candidates do not have the right workplace skills	9
Candidates are overqualified	3
Other, please specify	5

Table 66

Respondents in the Utilities sector were slightly more likely to use an external organization to screen candidates compared to the overall results. External screening organizations accounted for 28% of the hiring practices used by employers in this sector. These results are displayed in Table 67.

Hiring Practices	# of Organizations
Use an external organization	7
Use internal criteria to screen candidates	22
Employ software to screen resumes	3

Table 67

Some employers chose to elaborate on their time of year hiring practices by specifying the use of headhunters to fill senior management roles only as they see needs arising, while one other employer expressed a need to hire specifically during spring and fall based on workflow. Compared to the overall results, respondents in the Utilities sector generally chose to hire on an as needed basis. These results are displayed in Table 68.

Time of Hiring	# of Organizations
Hire at specific times of the year	4
Hire on an as needed basis	24
Keep an open pool of candidates for future hire	14

Table 68

When asked to elaborate on the specific hiring channels that they used, respondents in the Utilities sector followed similar hiring practices to the overall results. While e postings, word of mouth, and employee referrals were still significant, respondents in the Utilities sector were significantly more likely to utilize private agencies to meet their hiring needs. These findings are displayed in Figure 29.

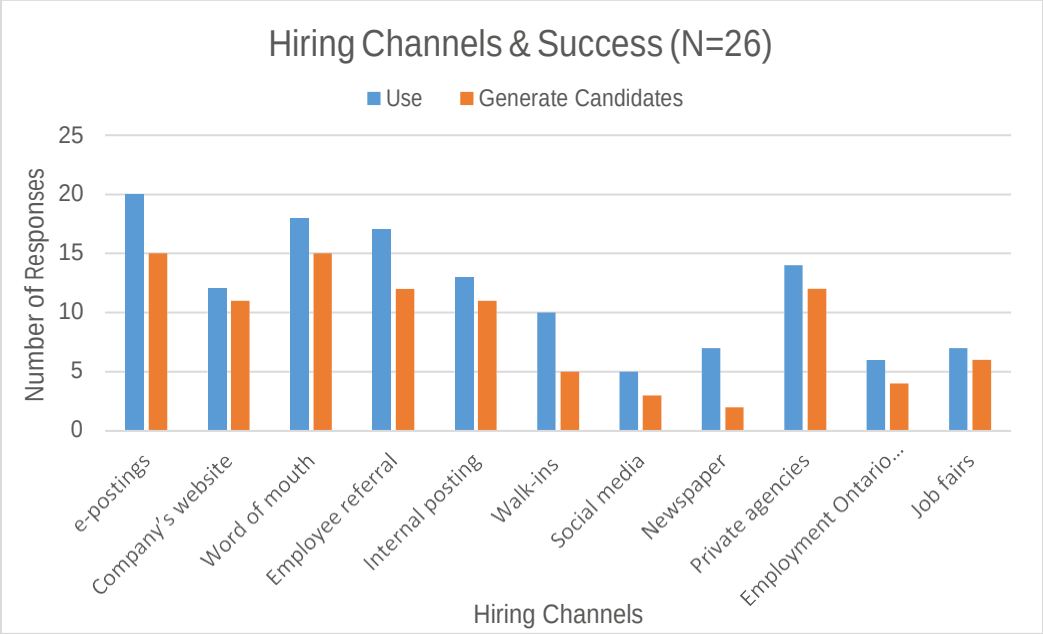

Figure 29

❖ Workforce Skill Requirements: Current and Future

Respondents in the utilities sector were asked whether they planned to hire additional employees in existing occupations over the next 12-18 months. The vast majority of respondents indicated that they were planning to hire additional employees during this time with 20 organizations or 77% of respondents expressing plans to hire additional employees. In total, these organizations indicated plans to hire an additional 198 candidates. The three occupations that employers identified would be hired in the greatest number were NOC 762: public works, NOC 761: trades helpers and NOC 727: carpenters. In total, these two occupations represented 109 hires or 54% of the additional hires that employers anticipated over the next 12-18 months.

When asked about whether their organization had plans to hire in additional areas, not currently employed by the organization, 42% of respondents in the Utilities sector expressed this intent. In total, these employers indicated plans to hire an additional 54 employees primarily in NOC 223: technical occupations in civil, mechanical and industrial engineering and NOC 214: other engineers. When combined, these occupations accounted for 24% of expected hires.
Compared to the overall results, the Utilities sector would experience a significant challenge in the area of retirement with 57% of organizations reporting the expectation of retirements in the next 3-5 years. In total, respondents identified 117 employees that they expected to retire during this time. Table 69 reports the two most common occupations that employers expected to be affected by retirement. In total, these occupations account for 54% of the expected retirements.

NOC	# of Retirements
NOC 071: Labourers in processing, manufacturing & utilities	25
NOC 761: Trades helpers	18
NOC 729: Other trades	10
NOC 727: Carpenters	10

Table 69

Respondents were also asked to indicate any actions the organization was currently undertaking or planning to address the knowledge or skill gaps that would result from retirement. Compared to the overall results, it was significantly less likely for respondents in this sector to have no plan. More than any other sector, the respondents from the Utilities sector suggested they were in the process of currently transferring knowledge. This result could be expected to logically follow in a sector where such a high number of retirements were expected. These results are further displayed in Table 70.

Actions to Fill the Skill Gaps Resulting from Retirement	# of Organizations
Creating a succession plan for key roles	15
Transferring knowledge to successors	15
Building internal vocational/professional training programs to strengthen the pipeline for key roles	9
Identifying the roles and capabilities occupied by retirement eligible employees	9
Identifying new talents pools to access specialized capabilities	6
We don't currently have a plan	5
Building external vocational/professional training programs to strengthen the pipeline for key roles	3

Table 70

- Vocational/Professional Training

When asked whether or not training was offered to employees, respondents in the Utilities sector were significantly more likely to offer training to their employees than the overall results. In total, 18 or 69% of employers offered training to 79 employees in 43 different occupations. Popular topics of training were, management, equipment and technical or energy training.

When asked about the provider used to offer training to employees, the most common sources of training were consultant, and internal provider which when combined accounted for 88% of the training provided.

The eight respondents who indicated that they did not offer training, were asked to identify any barriers that prevented them from offering training. The most significant concern related to making training available to employees was the loss of productivity, followed by the disruption of ongoing work. Some concern was also expressed that staff could be lured away if training was provided. These results are depicted in Table 71.

Barriers Preventing Organizations from Training	Significant Concern	Somewhat Concerned	Not a Concern
I am worried if I provide training my staff will be lured away	1	2	5
I am not sure that I can find a trainer to deliver the training that I need	1	0	6
My current training needs are not offered locally	1	0	6
It is too difficult to schedule training or it is too disruptive to our ongoing work	0	2	5
I am worried the staff's preference and motivation of learning	0	2	5
I am not convinced that training would improve the skills of my workers	0	1	6
I am worried about the cost, regardless of the benefits	0	1	5
Training will not make a significant difference to my organization's bottom line	0	0	7
I am worried about losing productivity during training time	0	0	7

Table 71

5.4.2 Self-employed Businesses

Based on the Skills For Tomorrow employer survey results, there is not sufficient data for an examination self-employed businesses in the Utilities sector.

5.5 Other Sectors in the South Durham Region

5.5.1 Retail Trade-Organizations with Employees

Although Retail Trade was not one of the key sectors identified in the Durham Region, some analysis was conducted for this sector as it was known to be one of the highest employers within the Region. This section will present information on demographics, occupations, skill requirements and gaps, hiring practices, future requirements, professional training for organizations with employees in the Retail Trade sector.

- Demographics

In the Retail Trade sector, there were 29 businesses with employees who participated in the Skills For Tomorrow employer survey. These businesses employed a total of 1,120 individuals and represent 94% of the total respondents in this sector. From these businesses, the most common business size was small businesses (5-99 employees), representing 16 of the returned surveys or roughly 55% of respondents in the sector. The number of survey respondents by employment size was representative and well matched with BC data. The details are presented in Table 72.

Retail Trade Businesses with Employees (N=29)		
Employment Size	# of Survey Responses	Total # of Employees
Micro (1-4)	9	14
Small (5-99)	16	399
Medium (100-499)	4	734
Large (500+)	0	0

Table 72

Based on the survey results, most of businesses in the Retail Trade sector who participated in the survey were located in Pickering and Whitby. Eight respondents expressed the existence of an additional affiliated location in the Region. These affiliated locations represented 19 additional locations from across the Region. This finding demonstrates the interconnected nature and region-wide reach of this sector.

❖ Occupational Categories

Based on the survey results, at the single digit level, the top occupational category for businesses with employees in the Retail Trade sector was sales and service occupations. In total, this accounted for 46% of the occupations in this sector. While these findings differed from the overall findings, they are consistent with the expectation that the Retail Trade sector would be dominated by sales occupations which are an integral part of this sector.

❖ Occupational Skill Requirement

The following section will elaborate employer skills requirements in the Retail Trade sector by making use of four skill levels[7] embedded within the NOC structure that correspond to various levels of education or training. The overall results for businesses with employees in this sector indicated that the skill level that employers reported the greatest number of employees in were skill level C and skill level D. For the occupations that fall within skill level C, the most commonly selected occupational categories were NOC 64: sales representatives and sales persons and NOC 65: transport and heavy equipment operation and related maintenance occupations. The most common occupation in skill level D was NOC 66 sales and support occupations. The results of the second digit NOC examination are further detailed in Table 73.

Skill Level	NOC 2 digit	# of Organizations	# of Employees
C	NOC64- Sales representatives & sales persons	12	319
C	NOC65- Service representatives & other customer & personal services occupations	8	94
D	NOC66- Sales & support occupations	7	377

Table 73

In addition to examining the skill level of current employees, the requirement of a certain minimum credential was also examined. Overall, the most common credential required by employers in the Retail Trade sector was high school or equivalent, followed by College Certificate/Diploma. These results are depicted in Table 74.

[7] Please refer Table 15 for the skill level structure

Minimum Credential	# of Occupations NOC 3-Digit
Less than High School	18
High School or Equivalent	72
Apprenticeship	8
College Certificate/Diploma	27
College Post-Graduate or Advanced Diploma	1
Undergraduate Degree	4
Graduate Degree	0
Professional Degree	0

Table 74

The most common occupations in the Retail Trade sector that required a minimum credential for were NOC 642 retail salespersons and NOC 621 retail sales supervisors. Both of these occupations generally required High School or an equivalent level of education.

- Essential Skills and Gap

The survey asked employers to identify which essential skills were critical for employees to effectively perform their roles. The section to follow will further detail these findings for each of the nine federal essential skills by providing examples of each skill at the corresponding level at which employers identified it to be important.

Reading, thinking and working with others were the top three skills identified by employers in the Retail Trade sector. Most employers in this sector identified these three essential skills the greatest number of times as being significant for employees effectively perform in their roles. The three skills which followed in terms of employer ranking were writing, numeracy and oral communication. The remaining essential skills, computer skills, numeracy, and continuous learning were the skills least emphasized by respondents. The only major difference found in this sector compared to the overall results was the very low ranking for computer skills and continuous learning.

- Hiring practices

In the Retail Trade sector, employers were more likely to indicate that hiring was a challenge compared to the overall results. Twenty different organizations indicated that they had hired recently, hiring a total of 198 employees in a 28 different occupations. Of the 198 hires, employers indicated challenges hiring in 27 occupations. The occupations most frequently identified by organizations who expressed hiring challenges were NOC 642: sales representatives and salespersons, NOC 621: retail sales supervisors and NOC 655: customer and information services representatives. Thirteen organizations expressed some challenges hiring employees in these areas.

When asked to identify the reasons why they experienced difficulty attracting qualified candidates for available jobs, the results for the Retail Trade sector mirrored what was observed in the overall results with competitive pay and other being the biggest challenges. When asked to elaborate, the employers who selected “other” suggested limited hors/seasonal work to be the most common challenge. These results from the Skills For Tomorrow employer survey are displayed in Table 75.

Organization-Specific Attraction Issues	#
Unable to offer competitive pay	7
Limited opportunities for advancement	4
Lack of competitive benefits	3
Unable to provide work life balance	2
Lack of professional development opportunities	2
Other attraction Issues, please specify	6

Table 75

To complement this information, employers were also asked to indicate any general challenges experienced when hiring employees. These results differed from the overall results particularly with regard to the lack of skilled applicants which appeared as the biggest challenge related hiring employees in the Retail Trade sector. These results are displayed in Table 76.

General Hiring Challenges	#
Lack of qualified individuals	15
Lack of skilled applicants	14
Lack of experienced candidates	10
Candidates do not have the right workplace skills	8
Competition from other employers	7
Candidates are overqualified	2
Other, please specify	3

Table 76

In the additional comments, employers also the lack of available workers, and challenges with reliability/showing up for shifts.

The Retail Trade sector mirrored the overall results in terms of their hiring processes with the vast majority of respondents only making use of internal criteria during the hiring process, rather than employing screening software or using external organizations. Only two respondents in this sector reported the use of screening software, while six indicated that they used an external organization to screen candidates.

When asked to elaborate on the specific hiring channels that they used, respondents in the Retail Trade sector differed slightly from the overall results. The top hiring channel in this sector was word of mouth followed by employee referrals. Similarly, the respondents from this sector were significantly less likely than the overall results to make use of e-postings or the company's website when hiring. These findings are displayed in Figure 30.

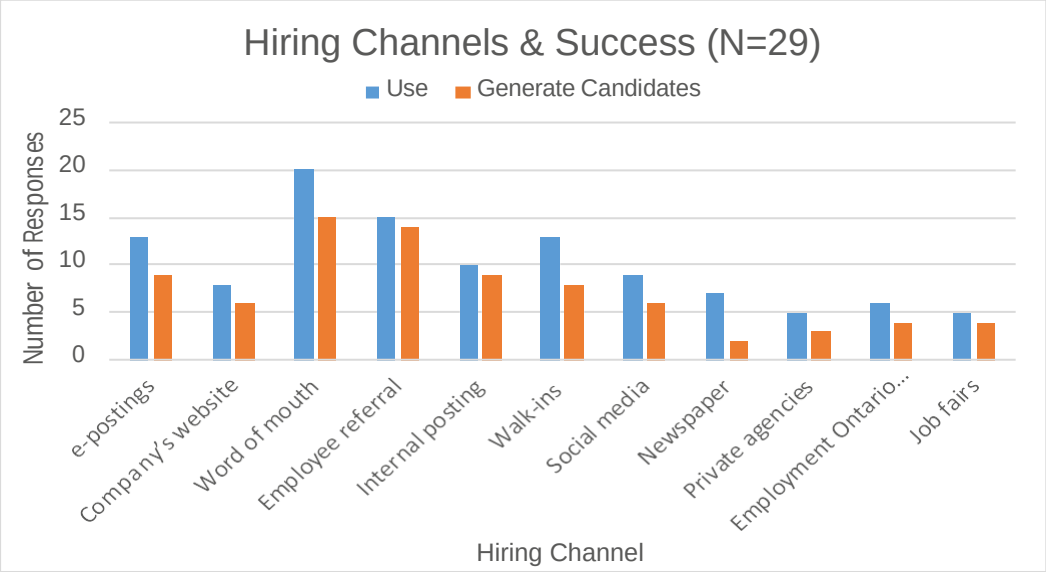

Figure 30

Some additional insights around hiring in this sector were shared by participants in the focus groups. One participant in particular emphasized the rising number of university students coming to her organization seeking entry-level positions. While there was no problem with this, she noted that these positions would typically draw college or trades students, not university students. This insight would seem to demonstrate that the Retail Trade sector is experiencing some increase in the number of "overqualified" candidates applying for available positions.

❖ Workforce Skill Requirements: Current and Future

Respondents in the Retail Trade sector were asked whether they planned to hire additional employees over the next 12-18 months in occupations that their organization currently employs. In total, 18 respondents indicated that they were planning to hire an additional 148 employees during this time. The most common occupations that employers identified would be hired in the greatest number were NOC 642: retail salespersons, NOC 662: other sales support and related occupations and NOC 651: occupations in food and beverage service. In total, these three occupations represented 105 hires or 71% of the additional hires that employers anticipated over the next 12-18 months.

When asked about whether their organization had plans to hire in additional areas, not currently employed by the organization, eight respondents expressed this to be their intent. In total, these employers indicated plans to hire an additional 29 employees primarily in NOC 662: other sales support and related occupations and NOC 661: managers in engineering, architecture, science and information systems and NOC 662: cashiers, which accounted for 41% of these expected hires.

Compared to the overall results, the Retail Trade sector would experience only a slightly higher rate of retirement. In total, 14 organizations expected roughly 29 retirements in the next 3-5 years. Table 77 reports the most common occupations that employers expected to be affected by retirement.

NOC	# of Retirements
NOC 662: Other sales support & related occupations	8
NOC 642: Retail salespersons	9
Total Number of Retirements Expected	29

Table 77

Respondents were also asked to indicate any actions the organization was currently undertaking or planning to address the knowledge or skill gaps that would result from retirement. Compared to the overall results it was significantly less likely for respondents in this sector to have no plan. The majority of respondents indicated being engaged in transferring knowledge to successors. These results are further displayed in Table 78.

Actions to Fill the Skill Gaps Resulting from Retirement	# of Organizations
Transferring knowledge to successors	13
We don't currently have a plan	11
Creating a succession plan for key roles	9
Identifying new talents pools to access specialized capabilities	7
Building internal vocational/professional training programs to strengthen the pipeline for key roles	6
Identifying the roles and capabilities occupied by retirement eligible employees	2
Building external vocational/professional training programs to strengthen the pipeline for key roles	1

Table 78

Similar to the overall results, there were a large number of organizations in this sector that did not currently have a plan to address the retirements expected. This finding in particular becomes challenging when you consider that almost half of the respondents expected to experience retirements in the coming years.

❖ Vocational/Professional Training

When asked to whether or not training was offered to employees, respondents in the Retail Trade sector were slightly less likely to offer training compared to the overall results. In total, 13 or 45% of employers offered training to their employees in 19 occupations. The most common occupations that employers reported offering training to were NOC 642: retail salespersons and NOC 621: retail sales supervisors. Popular topics of training were primarily related to specific products. When asked about the provider used to offer training to employees, the most common source of training by far was “internal providers” which when accounted for 75% of the training provided. As a slight majority of employers indicated that they did not offer training, these employers were asked to identify any barriers that prevented them from offering training to their employees. The most significant concern related to making training available to employees was the cost, regardless of the benefits. These results are depicted in Table 79.

Barriers Preventing Organizations from Training	Significant Concern	Somewhat Concerned	Not a Concern
I am worried about the cost, regardless of the benefits	4	3	4
It is too difficult to schedule training or it is too disruptive to our ongoing work	2	6	3
My current training needs are not offered locally	2	4	6
I am not sure that I can find a trainer to deliver the training that I need	2	4	5
Training will not make a significant difference to my organization's bottom line	0	6	5
I am worried about losing productivity during training time	0	6	5
I am worried the staff's preference and motivation of learning	0	6	4
I am worried if I provide training my staff will be lured away	0	2	10
I am not convinced that training would improve the skills of my workers	0	2	8

Table 79

When offered the opportunity to elaborate on additional barriers to the provision of training, one employer emphasized the frequent turnover of employees being a significant concern. This concern was also emphasized in the focus groups where employers emphasized the requirement that employees remain employed by the organization for at least two years for the organization to realize the investment they have placed in training.

5.5.2 Retail Trade-Self-employed Businesses

Based on the Skills For Tomorrow survey results, there is no sufficient data for self-employed businesses in the sector of Retail Trade in south Durham.

Summary of Key Sector Findings

Key Sector Finding Aspects	Healthcare and Social Assistance	Advanced Manufacturing	Information and Cultural Industry	Utilities	Retail Trade
NOC with most employees	NOC 30 NOC 31 NOC 42	NOC 95 NOC 96 NOC 94	NOC 11 NOC 12 NOC 64	NOC 01-05 NOC 21 NOC 12	NOC 64 NOC 65 NOC 66
Minimum credential	College Diploma	College Diploma	College Diploma	College Diploma	High school or equivalent
Top 3 essential skills	Thinking; Oral communication; Working with others	Reading; Thinking; Working with others	Oral communications; Computer skills; Working with others	Thinking; Computer skills; Working with others	Reading; Thinking; Working with others
Greatest hiring issue and challenge	Unable to offer competitive pay; Lack of experienced applicants	Unable to offer competitive pay; Candidates do not have the right workplace skills	Unable to offer competitive pay; Lack of skilled applicants	Competing with other large employers; Lack of skilled candidates	Unable to offer competitive pay; Lack of qualified individuals
Top hiring practice and time of hiring	Use internal criteria to screen candidates; Hire on an as needed basis	Use internal criteria to screen candidates; Hire on an as needed basis	Use internal criteria to screen candidates; Hire on an as needed basis	Use internal criteria to screen candidates; Hire on an as needed basis	Use internal criteria to screen candidates; Hire on an as needed basis
Top hiring channels	E-posting; Word of mouth; Employee referral	Word of mouth; E-posting; Employee referral	Employee referral; Word of mouth; E-posting	E-posting; Word of mouth; Employee referral	Word of mouth; Employee referral
NOC with most retirements	NOC 301	NOC 961 NOC 941	NOC 001 NOC 224	NOC 071 NOC 761 NOC 729	NOC 662 NOC 642
Top action to address on retirement	Don't currently have a plan	Creating a succession plan for key roles	Creating a succession plan for key roles	Creating a succession plan for key roles	Transferring knowledge to successors
Common training providers	Internal provider; College	College; Consultant; Internal provider	Internal provider; Consultant; College	Consultant; Internal provider	Internal providers

Table 80

6.0 South Durham Region: Lakeshore Municipalities

6.1 City of Pickering

6.1.1 Organizations with Employees

This section will present information on employer demographics, sector and occupations, skill requirements and gaps, hiring practices, future requirements, training, and the business support climate for respondents with employees from the municipality of Pickering. This section will begin by first presenting demographic information from respondents with employees from the results of the Skills For Tomorrow employer survey.

- Demographics

Businesses with employees from the municipality of Pickering accounted for 62 of the 338 total businesses with employees that responded to the employer survey. In total, these businesses represented 18% of the total businesses with employees and employed 2,051 individuals. From these businesses, the most common business size was small businesses (5-99 employees) representing 29 of the returned surveys or roughly 70% of respondents from Pickering. These findings are detailed in Table 81. The finding that small businesses are the most prevalent is consistent with the' understanding that small businesses represent a large share of both total employment and total number of businesses across the Region and within the municipality of Pickering.

City of Pickering Business with Employees (N=62)		
Employment Size	# of Survey responses	Total # of Employees
Micro (1-4)	16	51
Small (5-99)	42	675
Medium (100-499)	4	486
Large (500+)	0	0

Table 81

In Pickering, small organizations (5-99 employees) by far employed the greatest number of employees with 675 full-time employees, followed by medium sized businesses. These results should be understood in concert with the sample size. Large employers overall represented a significant share of total employment and were not represented in these results.

- Sector and Occupational Categories

Manufacturing and Professional, Scientific and Technical Services were the two sectors that the majority of respondents from the municipality of Pickering identified belonging to. These sectors were closely followed by Retail Trade in terms of employer response. There are a number of sectors with no representation. This finding should not be understood to mean that these sectors do not exist in Pickering; however, only that no representatives from these sectors completed the Skills For Tomorrow Employer Survey. These findings are depicted in Table 82.

Sectors	With Employees	Self-Employed
Accommodation and food services	2	0
Administrative and support, waste management and remediation services	3	0
Agriculture, forestry, fishing and hunting	0	0
Arts, entertainment and recreation	2	0
Construction	2	0
Educational services	3	0
Finance and insurance	3	0
Healthcare and social assistance	4	1
Information and cultural industries	3	2
Management of companies and enterprises	0	0
Manufacturing	8	2
Mining, quarrying, and oil and gas extraction	1	0
Other services (except public administration)	4	3
Professional, scientific and technical services	8	2
Public administration	0	0
Real estate and rental and leasing	0	0
Retail trade	6	1
Transportation and warehousing	5	0
Utilities (reclassified)	3	0
Wholesale trade	5	0

Table 82

Next, commonly reported occupational categories were examined by making use of the first digit represented in NOCs identified by employers. These findings demonstrated a high degree of similarity to the overall results with one key difference. The most commonly emphasized occupational category for the municipality of Pickering was sales and service occupations, followed by business, finance and administration. These two categories were also the identified as the most important in the overall results with sales and service occupations following business finance and administration in the overall results. These findings are depicted in Figure 31.

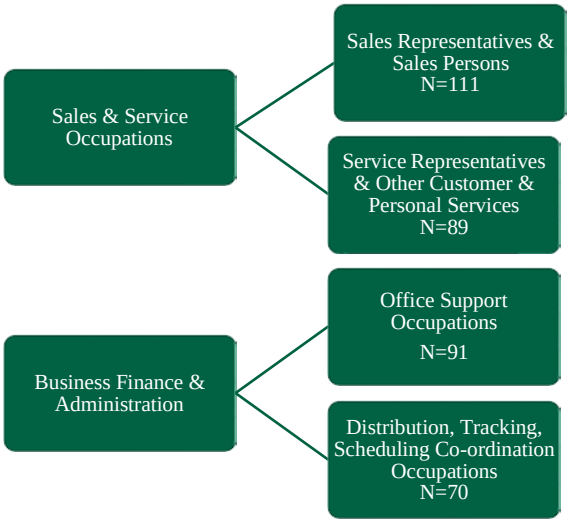

Figure 31

The finding that sales and service occupations were the most common skill type was similar to the findings in the overall results. Common occupations that align with this skill type include retail sales persons, and customer service representatives. Similarly, the second most common skill type business, finance and administrative occupations, contains a variety of different occupations which exist across various sectors and organizations. Examples of occupations which align with this skill type include senior and specialized management which would exist in most organizations.

- Occupational Skill Requirements

The following section will detail employer skill requirements by making use of the four skill levels embedded within the NOC structure which correspond to various levels of education or training.

Overall results for organizations with employees in Pickering did not differ significantly on the important essential skills when compared to the overall results. The occupations that employers most often emphasized the importance for various essential skills for fall within skill level C, the most commonly selected occupational category was NOC 12, administrative and financial supervisors and administrative assistants. The results of the second digit NOC examination are further detailed in Table 83.

Skill Level	NOC-2 digit	# of Organizations	# of Employees
B	NOC 12- Administrative & financial supervisors & administrative assistants	19	53
C	NOC 14- Office support occupations	16	91
A	NOC00-Senior management	14	39

Table 83

Beyond simply clarifying the skill level of employees required by the respondents, the researchers also sought to understand whether or not employers required a certain minimum credential in order to be employed in any of the occupational categories at organizations from Pickering. This understanding would provide more meaningful

insight into the question of skill level by allowing an understanding of both skill level and compulsory credential, two features which when combined provide for a powerful understanding of employers' skill requirements.

Overall, the most common credential required by employers was by far the college certificate or diploma with 67 occupations requiring this as the minimum credential. This was followed closely by the high school or equivalent which was required as the minimum credential for 93 occupations. These findings almost identically mirror what was observed in the overall results. These results are depicted in Table 84.

Minimum Credential	# of Occupations NOC 3 Digit
Less than High School	12
High School or Equivalent	93
Apprenticeship	9
College Certificate/Diploma	67
College Post-Graduate or Advanced Diploma	27
Undergraduate Degree	30
Graduate Degree	3
Professional Degree	8

Table 84

As the NOC framework was employed here, the researchers were also able to determine which occupations required employees to possess these credentials as a minimum requirement for employment. While there were many different occupations that required a minimum credential, the most common occupations that organizations required credentials for were NOC 121 other sales, which required high school or equivalent as the most common credential, NOC 141 general office workers, which required a high school or equivalent and NOC 001 senior management, which commonly required an undergraduate degree.

- Hiring Practices, Challenges and Avenues

The examination of the hiring practices for respondents in Pickering began by asking whether or not they had hired new employees in the past 12-18 months. Overall, 45 employers from Pickering expressed having hired 220 employees during this time. The most common occupations hired included NOC 662 other sales and support related occupations, NOC 131 finance, insurance and related occupations and NOC 655 customer and information services representatives. In total, these occupations were hired by 14 (23%) of the employers who recently hired employees.

Employers were then asked whether or not they experienced any difficulty attracting applicants for available jobs. From the 36 employers who expressed having hired recently, respondents expressed difficulty hiring employees in 35 occupational categories. Overall; however, the majority reported no challenges hiring employees. Occupational categories where employers experienced difficulty varied. Only two organizations expressed hiring challenges for any single occupation. This finding supports an understanding that respondents experienced more general attraction challenges related to the suitable candidates rather than related to a specific occupation.

The Skills For Tomorrow employer survey asked respondents who expressed difficulty in hiring to indicate which issues affected their ability to attract qualified candidates to available positions. Most employers chose the inability to offer competitive pay, and other attraction related issues. These findings mirror the overall results. Upon further examination of the "other" attraction related issues identified by respondent comments, a general lack of skilled candidates, and the short duration of work (contract, seasonal, part-time) were emphasized as issues employers' believed impacted their ability to attract qualified candidates. Table 85 reflects the issues employers expressed as affecting their ability to hire.

Organization-Specific Attraction Issues	#
Other attraction issues, please specify	7
Unable to offer competitive pay	5
Limited opportunities for advancement	4
Lack of competitive benefits	4
Lack of professional development opportunities	4
Unable to provide work life balance	2

Table 85

As a follow up to the question about organizational characteristics that impact hiring, employers were also asked to reflect on general challenges related to hiring. When asked about these general challenges, employers in Pickering identified a lack of experienced candidates and a lack of skilled applicants as two key areas of importance that were impacting their ability to hire generally. Other areas mentioned by employers in the comments section included poor fit, and a general unwillingness to work independently. The challenges expressed by employers are displayed in Table 86. A number of employers expressed a preference to avoid hiring where they could not find a person who was the right "fit" for their organization. Many expressed that they had previously hired individuals who were not the right "fit" and found this to be more costly than simply waiting to fill the role with the "right" person.

General Hiring Challenges	#
Lack of qualified individuals	31
Lack of experienced candidates	31
Lack of skilled applicants	25
Candidates do not have the right workplace skills	23
Competition from other employers	16
Candidates are overqualified	7
Other, please specify	12

Table 86

With an understanding of general hiring challenges faced by employers in Pickering, the researchers sought to better understand employers' hiring practices and patterns. In order to develop this understanding, employers were asked to reflect on the hiring patterns at their organization indicating any strategies used and the time of year when they engaged in hiring. The vast majority of respondents indicated that they made use of internal criteria to screen candidates with a slightly higher than overall use of external

organizations in Pickering. Similarly, most employers chose to hire on an as needed basis with a small minority keeping an open pool of candidates for future hiring needs. These findings are displayed in Table 87.

Hiring Practice	#
Use an external organization to screen candidates	17
Use internal criteria to screen candidates	55
Employ software to screen resumes	7
Other (please specify)	2
Total	81

Hiring Time	#
Hire at specific times during the year	12
Hire on an as needed basis	53
Keep an open pool of candidates for future hire	25
Total	90

Table 87

Hiring practices were further examined in light of specific channels employed by respondents. The most frequently used strategies were word of mouth, followed by employee referral and e-postings. The strategies which generated the most candidates were employee referrals, followed by word of mouth. These findings are further depicted in Figure 32. It is important to note when interpreting these findings that regardless of whether or not respondents used the services, they still commented on whether or not the various strategies generated candidates. The specific findings are further detailed in table form and included as part of Appendix 3.

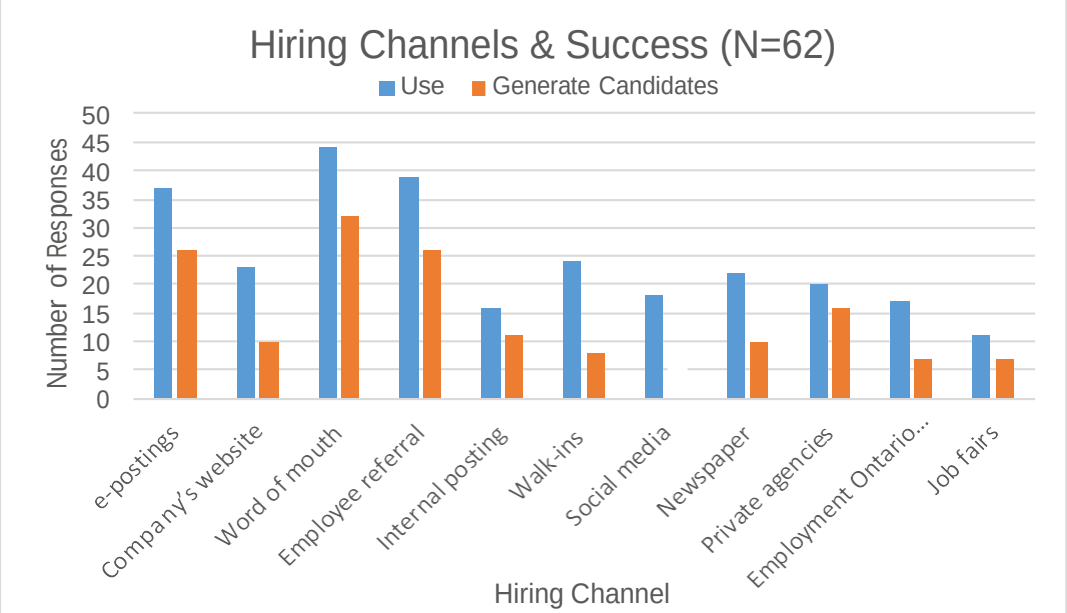

Figure 32

- Workforce Requirements: Current and Future

The Skills For Tomorrow employer survey then asked employers whether or not they planned to hire additional employees in areas where they already employ over the next 12-18 months. In total, 40 organizations indicated having plans to hire new employees in 37 different occupations over the next 12-18 months. These anticipated hires amount to a total of 106 hires. The most commonly reported areas of expected hiring are displayed in

Table 88. When asked, the majority of respondents indicated that their anticipated hiring plan would keep workforce levels steady. Although this question does not specifically address the issue of retirement, the findings seem to indicate that there will be a significant number of retirements expected in the next 12-18 months requiring an increase of hiring to maintain current workforce levels.

NOC	# of Organizations	Skill Level
662 Other sales support & related occupations	6	D
651 Occupations in food & beverage services	9	C
723 Machining, metal forming, shaping & erecting trades	5	B
728 Masonry & plastering trades	5	B
729 Other construction trades	5	B
761 Trades helpers & labourers	5	D
152 Supply chain logistics, tracking & scheduling co-ordination occupations	5	C

Table 88

Employers were then asked whether they anticipated their organization hiring in occupational categories where they had not previously employed. This understanding would enable a better understanding of whether or not organizations planned to expand their operations to include new areas. In total, 30 employers indicated that they did not plan to expand their hiring to new areas not previously employed. Twenty-five of the organizations planned to expand their operations into new areas which is slightly higher than the overall results. The two occupations that were most anticipated to grow were NOC 341 assisting occupations in support of health services and NOC 441 home care providers and educational support occupations. Together, these occupations represented 175 new positions out of the 293 total new positions anticipated by employers.

The next area of significant importance was retirement. Respondents were asked whether there were individuals in their organization who were expected to retire over the next 3-5 years. Results were mixed with 26 organizations, slightly less than half, expecting retirements compared to 31 organizations who were not expecting retirements. In total, respondents expected 80 retirements in 33 different positions. The occupations in which the most retirements are expected are displayed in Table 89.

NOC	# Retirements
961 Other sales support & related occupations	20
922 Sales & account representatives – wholesale trade	10
122 Administrative & regulatory occupations	4

Table 89

Respondents were also asked whether their organization was currently, or planning to undertake actions to address organization-specific knowledge or skill gaps resulting from retirement. Most respondents indicated that transferring knowledge to successors and creating a succession plan for key roles were their primary efforts to address skill gaps related to retirement. Additionally, there were a large number of respondents who indicated not having any plan. These results are further detailed in Table 90.

Actions to Fill the Skill Gaps Resulting from Retirement	# of Organizations
Transferring knowledge to successors	32
Creating a succession plan for key roles	31
Building internal vocational/professional training programs to strengthen the pipeline for key roles	19
We don't currently have a plan	17
Identifying new talents pools to access specialized capabilities	16
Identifying the roles and capabilities occupied by retirement eligible employees	15
Building external vocational/professional training programs to strengthen the pipeline for key roles	8

Table 90

- Vocational/Professional Training

The next section of the Skills For Tomorrow survey examined vocational/professional training offered to employees. This section began by asking whether the organization provided training to its employees. Results were mixed but a slightly lower share of employers in Pickering provided training to their employees than the overall results. In total, 29 organizations indicated that they provided training to their employees while 30 organizations indicated they did not. In total, training was provided to employees in 44 different occupational categories. The most popular occupational categories that employers indicated providing training to and the topics of this training for are displayed in Table 91.

NOC	# of Organizations	Topics of Training
122 Administrative & regulatory occupations	4	*-Not Specified*
124 Office administration, general, medical, legal	3	*-Privacy Legislation -AODA*
662 Other sales support & related occupations	3	*- Technical Product Training*
655 Customer & information services representatives	3	*- AODA*

Table 91

Respondents who indicated that they provided training to their employees were then asked to identify the provider of the training. The most popular source of training was internal, followed by training offered by a consultant. These results are further displayed in Table 92. It should be noted that for this question, employers were able to select multiple options. This would allow employers to select multiple training providers if their organization made use of more than one training provider.

Internal Provider	Consultant	College	Private College	Union	University
31	6	3	2	0	4

Table 92

Employers who did not indicate that they provided training for their employees were then asked to identify barriers that prevented them from offering training. Options were

presented in such a way as to allow employers to select multiple barriers to the provision of training. Additionally, there was a text box to allow employers to further express any additional barriers to offering training. These results are presented in Table 93.

Barriers Preventing Organization from Training	Significant Concern	Somewhat Concerned	Not a Concern
I am worried about the cost, regardless of the benefits	6	3	17
I am not sure that I can find a trainer to deliver the training that I need	5	4	17
My current training needs are not offered locally	4	5	16
Training will not make a significant difference to my organization's bottom line	4	3	19
It is too difficult to schedule training or it is too disruptive to our ongoing work	3	10	12
I am worried about losing productivity during training time	3	5	17
I am not convinced that training would improve the skills of my workers	2	5	19
I am worried if I provide training my staff will be lured away	1	7	20
I am worried the staff's preference and motivation of learning	0	8	16

Table 93

The top significant concern for not offering training was the cost of training, regardless of the benefits. The top "somewhat" of a concern was difficulty scheduling training. When offered the opportunity to clarify concerns via text box, employers emphasized the lack of specialized training required, and the disruptive nature of training to the workforce.

- Business Support Climate

Respondents from the municipality of Pickering were asked to evaluate a number of the services that the Region of Durham provided. In addition to this evaluation, respondents identified the most critical services for developing their businesses. The full list of services is displayed below.

Durham Region Business Support Climate

- Healthcare services
- Hydro/Electric power
- Other utilities (e.g. water, gas, sewage)
- Access to public roads
- Public transportation
- Business sites and land use
- Telecommunication services
- Technology services
- Accounting/Payroll
- Recruitment services
- Business promotion services
- Sales
- Legal Services

In order to evaluate the services provided by the Region, respondents were asked to choose one of the following levels to describe the service. For the purpose of scoring these responses, the values in Table 94 were assigned to each response:

Response	Score
Excellent	3
Above Average	2
Below Average	1
Poor	0

Table 94

Once the responses were coded, the results were presented in Figure 33. Findings demonstrated that organizations with employees ranked Healthcare Services as the best service in Durham Region with recruitment services as the lowest. It should be noted; however, that although these were ranked low compared to other services, most respondents generally perceived the services in Durham Region as being of high quality.

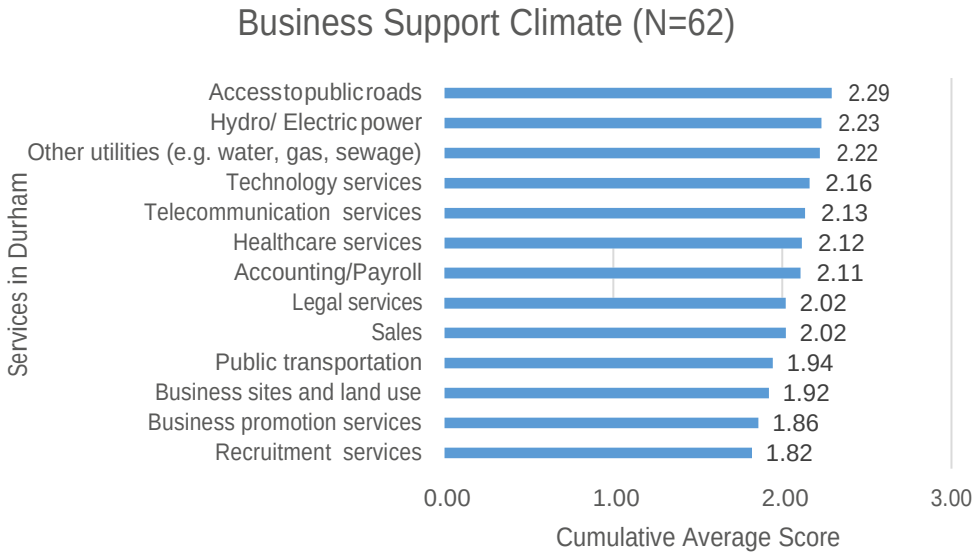

Figure 33

Finally, respondents were asked to identify the three business supports most critical to the long-term success of their organization. Hydro/electric power, business promotion services and telecommunications were the top three services identified by respondents from Pickering as critical to their long-term success. It is important to note that hydro/electric power was equally emphasized as both the first, and second most critical business support, demonstrating the significant importance of this to the long-term success of businesses.

6.1.2 Self-employed Businesses

In municipality of Pickering, there were 11 self-employed respondents who participated in the Skills For Tomorrow employer survey. In total, these respondents accounted for 22% of self-employed respondents in south Durham. These 11 self-employed participants in Pickering conduct businesses in a variety of sectors. The following sections present the

survey results addressed on questions about demographics, prior experience and future needs of self-employed respondents in Pickering.

- Self-employed Demographics

Among the 11 self-employed respondents from city of Pickering who participated in the employer survey, 27% of them were from Other Services (except public administration), followed were the employers from Information and Cultural Industries and Professional, Scientific and Technical Services, both represented 18% of employers in Pickering. Figure 34 shows number of self-employed respondents by sector.

Figure 34

Based on the survey results, the age of self-employed respondents in Pickering were primarily between 45 and 64 years old.

In terms of the highest credential that respondents completed before becoming self-employed, 45% of respondents possessed a college certificate or diploma. Additional credentials held by the self-employed respondents were college postgraduate advanced degree and undergraduate degree.

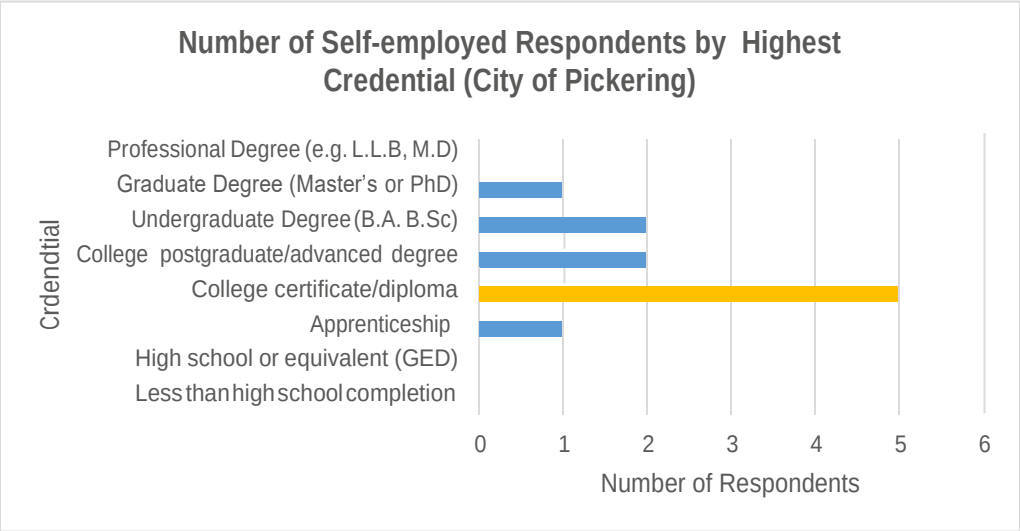

Figure 35

When asking whether their credentials are related to the businesses they operate, 73% of the self-employed respondents in Pickering indicated that the work they performed were somewhat related to their credential. In terms of the e-commerce, the survey raised a question to explore how many self-employed businesses conduct e-commerce and promote their products online. Based on the results, 91% of self-employed businesses in Pickering did not use e-commerce.

- Prior Experience

The self-employed respondents to this survey included incorporated business and unincorporated businesses. Of the 11 self-employed respondents in municipality of Pickering, 64% of them revealed that they were incorporated and 27% indicated that they were unincorporated businesses. In response to being asked about the number of years of being self-employed, most self-employed respondents in Pickering had more than six years of experience being self-employed, which was roughly 81% of total respondents. Figure 36 presents the detailed information below. This finding demonstrates that the majority of self-employed respondents have been self-employed for a significant time.

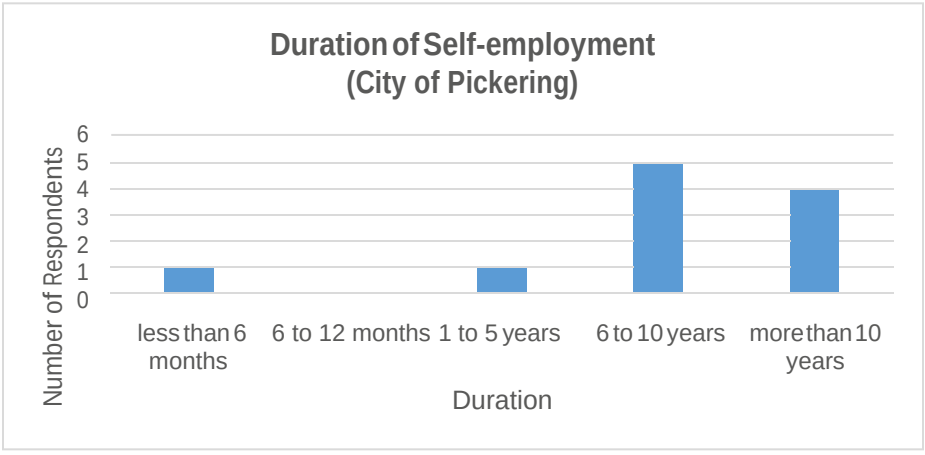

Figure 36

In the municipality of Pickering self-employed respondents identified being engaged in a number of different activities prior to undertaking self-employment. In total, 45% of respondents indicated that they worked for an employer prior to undertaking self-employment. This was an expected finding which can be understood to demonstrate the importance of prior work experiences to self-employed respondents. Considering this question, being self-employed in other businesses, going to school, looking for a job, and looking after a household were also identified by other respondents. The detailed responses to this question are depicted in Figure 37.

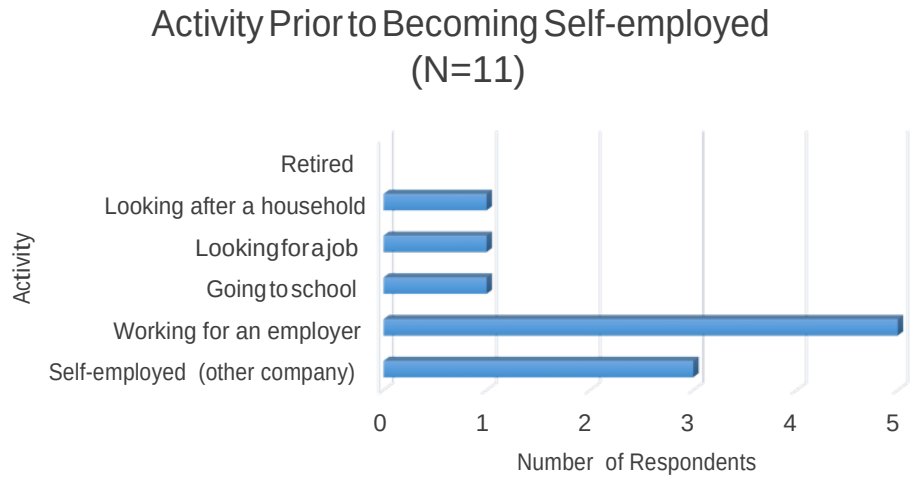

Figure 37

A number of reasons exist that inform an individual self-employed. At the municipal level, these results indicated that the ability to make your own decision, flexible working hours, and meaningful work were identified as the top three reasons of being self-employed.

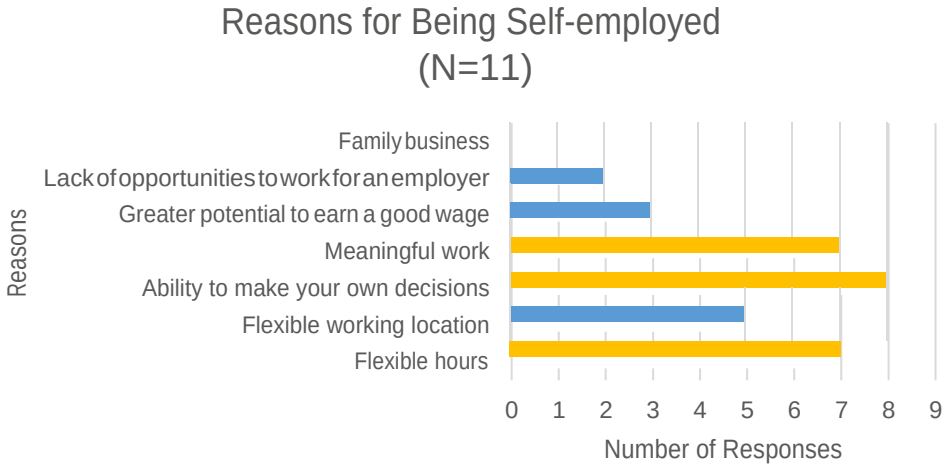

Figure 38

- Future Needs and Vocational Training

In terms of the greatest challenge to sustaining self-employment, the respondents from the city of Pickering identified low cash flow as the top challenge. In total, 82% of the self-employed respondents reported this as the greatest challenge. One survey respondent indicated that challenges with promotion was the top challenge and another one specified that inconsistent client base was a big concern that might affect the performance of that business.

When self-employed respondents were asked about future hiring plans, 55% of the self-employed respondents in Pickering indicated that they had plans to hire employees in the next 12 to 18 months. The 45% who expressed that they would continue to conduct their business without employees identified not enough work for more than one person as the top reason for their choice. One respondent mentioned that he or she would like to hire employees but it was difficult to find skilled applicants.

Vocational or professional training was further examined with the understanding that this training could provide self-employed respondents with benefits related to their self-employment. When asking self-employed respondents about their thoughts on training, the results indicated that 82% of respondents in the municipality of Pickering agreed that training could assist their businesses to become more competitive. Moreover, 73% of these respondents revealed having taken additional training related to the work they currently perform. In terms of the training type, workshops, seminars, and courses from professional associations were the three most common training types identified by self-employed respondents in Pickering.

The self-employed respondents in municipality of Pickering identified becoming knowledgeable on subject matter and knowledge of current trends and developments in the field of practice as the top advantages of undertaking professional training. These findings reveal that developing knowledge in the field was significant to self-employed respondents.

There were multiple reasons given by respondents for choosing not to undertake professional training. Based on the data, two main reasons were lack of time and lack of information on available training. Self-employed businesses occupy a large amount of time of person’s life and sometimes, it is hard to find information and sources about the available training on particular business field.

- Retirement Plan

When asking self-employed respondents about their plans for retirement, 45% of the self-employed respondents in Pickering were not sure about their retirement plan. Additionally, 27% indicated that they would sell the business to a third party and terminate self-employment upon retirement. The remaining respondents expressed that they would choose to transfer the business to a family member or close the business upon retirement.

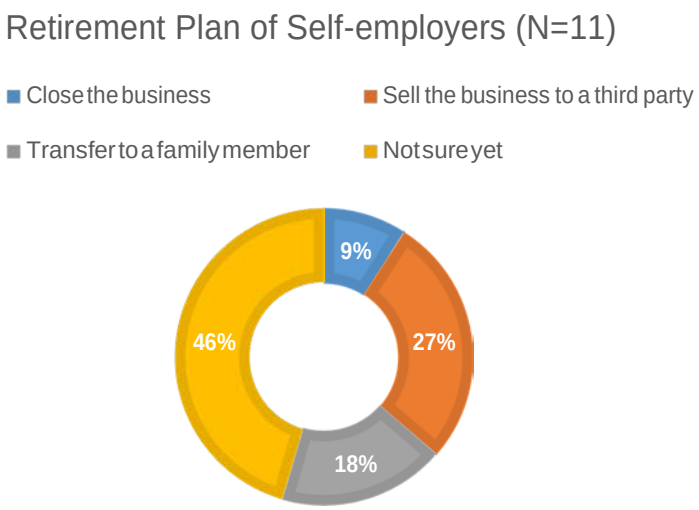

Figure 39

6.2 Municipality of Ajax

6.2.1 Organizations with Employees

This section will present information on employer demographics, sector and occupations, skill requirements and gaps, hiring practices, future requirements, training, and the business support climate for respondents with employees from the municipality of Ajax. This section will begin by first presenting demographic information from respondents with employees from the results of the Skills For Tomorrow employer survey.

- Demographics

Businesses with employees from the municipality of Ajax accounted for 42 of the 338 total businesses with employees. In total, these businesses represented 12.5% of the total businesses with employees and employed 2,051 individuals. From these businesses, the most common business size was small businesses (5-99 employees) representing 29 of the returned surveys or roughly 70% of respondents. These findings are detailed in Table 95. The finding that small businesses are the most prevalent is consistent with the understanding that small businesses represent a large share of both total employment and total number of businesses across the Region and within the municipality of Ajax.

Municipality of Ajax Businesses with Employees (N=42)		
Employment Size	# of Survey Responses	Total # of Employees
Micro (1-4)	7	23
Small (5-99)	29	642
Medium (100-499)	5	785
Large (500+)	1	601

Table 95

Contrary to the overall results, medium employers (100-499 employees) by far employed the greatest number of employees with 785 full-time employees, followed by small businesses. These results should be understood in concert with the sample size. For this

municipality, there was only one large employer that made up a significant amount of total employment and as a result may influence the results.

- Sector and Occupational Categories

Educational services was the sector that the majority of respondents from the municipality of Ajax identified belonging to. This sector was closely followed by Professional, Scientific and Technical Services and Healthcare and Social Assistance in terms of employer response. There are a number of sectors with no representation. This finding should not be understood to mean that these sectors do not exist in Ajax; rather, only that no representatives from these sectors completed the Skills For Tomorrow Employer Survey. These findings are depicted in Table 96.

Sectors	With Employees	Self-Employed
Accommodation and food services	2	0
Administrative and support, waste management and remediation services	1	0
Agriculture, forestry, fishing and hunting	0	0
Arts, entertainment and recreation	2	0
Construction	2	0
Educational services	5	0
Finance and insurance	3	0
Healthcare and social assistance	4	0
Information and cultural industries	0	2
Management of companies and enterprises	0	1
Manufacturing	3	0
Mining, quarrying, and oil and gas extraction	0	0
Other services (except public administration)	3	2
Professional, scientific and technical services	4	1
Public administration	1	0
Real estate and rental and leasing	0	0
Retail trade	3	0
Transportation and warehousing	3	0
Utilities (reclassified)	1	0
Wholesale trade	1	0

Table 96

Figure 40

The finding that sales and service occupations were the most common skill type was slightly surprising. A closer examination of the specific occupations which comprise this skill type provided further insight. Most of the occupations contained within this skill type represent the front-line occupations which exist across a variety of different sectors and organizations. Common occupations that align with this skill type include retail sales persons, and customer service representatives. Similarly, the second most common skill type management occupations, contains a variety of different occupations which exist across various sectors and organizations. Examples of occupations which align with this skill type include senior and specialized management which would exist in most organizations.

- Occupational Skill Requirements

The following section will detail employer skill requirements by making use of the four skill levels embedded within the NOC structure which correspond to various levels of education or training.

Overall results for organizations with employees in Ajax did not differ significantly on the important essential skills when compared to the overall results. The occupations that employers most often emphasized the importance for various essential skills for fall within skill level C, the most commonly selected occupational category was NOC 14, Office Support occupations. The results of the second digit NOC examination are further detailed in Table 97.

Skill Level	NOC-2 digit	# of Organizations	# of Employees
C	NOC 14- Office support occupations	7	51
B	NOC 12- Administrative & financial supervisors & administrative assistants	10	33
A	NOC00-Senior management	11	39

Table 97

Beyond simply clarifying the skill level of employees, understanding whether or not employers required a certain minimum credential in order to be employed in any of the occupational categories at their organization was of interest. This understanding would provide more meaningful insight into the question of skill level by allowing for an understanding both skill level and compulsory credential, two features which when combined provide for a powerful understanding of employers' skill requirements.

Overall, the most common credential required by employers was by far the college certificate or diploma with 67 occupations requiring this as the minimum credential. This was followed closely by the high school or equivalent which was required as the minimum credential for 55 occupations. These findings almost identically mirror what was observed in the overall results. These results are depicted in Table 98.

Minimum Credential	# of Occupations NOC 3 Digit
Less than High School	1
High School or Equivalent	55
Apprenticeship	12
College Certificate/Diploma	67
College Post-Graduate or Advanced Diploma	10
Undergraduate Degree	31
Graduate Degree	1
Professional Degree	4

Table 98

As the NOC framework was employed here, the researchers were also able to determine which occupations required employees to possess these credentials as a minimum requirement for employment. While there were many different occupations which required a minimum credential, the most common occupations which organizations required credentials for were NOC 122 administrative and regulatory occupations which required a college certificate or diploma, NOC 001 senior management, which required an undergraduate degree and NOC 662 other sales which commonly required either high school or a college certificate/diploma.

- Hiring Practices, Challenges and Avenues

The examination the hiring practices began by asking employers whether or not they had hired new employees in the past 12-18 months. Overall, 36 employers from Ajax expressed having hired 313 employees during this time. The most common occupations hired included NOC 662 other sales and support occupations and NOC 761 trades helpers and labourers. In total, these occupations were hired by 10 (27%) of the employers who recently hired employees.

Employers were then asked whether or not they experienced any difficulty attracting applicants for available jobs. From the 36 employers who expressed having hired recently, respondents expressed difficulty hiring employees in 35 occupational categories. Overall however, the majority reported no challenges hiring employees. Occupational categories where employers experienced difficulty, varied. Only two organizations expressed hiring challenges for any single occupation. This finding supports an understanding that respondents experienced more general attraction challenges related to the suitable candidates rather than related to a specific occupation.

The Skills For Tomorrow employer survey asked respondents who expressed difficulty in hiring to indicate which issues affected their ability to attract qualified candidates to available positions. Most employers chose the inability to offer competitive pay, and other attraction related issues. These findings mirror the overall results. Upon further examination of the “other” attraction related issues identified by respondent comments, a

general lack of skilled candidates, the location East of Toronto and the short duration of work (contract, seasonal, part-time) were emphasized as issues employers' believed impacted their ability to attract qualified candidates. Table 99 reflects the issues employers expressed as affecting their ability to hire.

Organization-Specific Attraction Issues	#
Unable to offer competitive pay	8
Limited opportunities for advancement	3
Lack of professional development opportunities	3
Unable to provide work life balance	1
Lack of competitive benefits	1
Other attraction issues, please specify	11

Table 99

As a follow up to the question about organizational characteristics which impact hiring, employers were also asked to reflect on general challenges related to hiring. When asked about these general challenges, employers in Ajax identified a lack of experienced candidates and a lack of skilled applicants as two key areas of importance which were impacting their ability to hire generally. Other areas mentioned by employers include poor fit and a general unwillingness to begin working at entry level positions. These and the other challenges expressed by employers are displayed in Table 100. One additional challenge mentioned was the demand of clients that staff be local. This issue was also explored in the focus group where employers indicated that clients in Durham and in Toronto both wanted workers to be local. Organizational fit was mentioned as part of the focus group comments. A number of employers expressed a preference to avoid hiring where they could not find a person who was the right "fit" for their organization. Many expressed that they had previously hired individuals who were not the right "fit" and found this to be more costly than simply waiting to fill the role with the "right" person.

General Hiring Challenges	#
Lack of experienced candidates	25
Lack of skilled applicants	22
Lack of qualified individuals	21
Candidates do not have the right workplace skills	14
Competition from other employers	11
Candidates are overqualified	3
Other, please specify	10

Table 100

With an understanding of general hiring challenges, a better understanding was sought of employers' hiring practices and patterns. In order to develop this understanding, employers were asked to reflect on the hiring patterns at their organization indicating any strategies used and the time of year when they engaged in hiring. The vast majority of respondents indicated that they made use of internal criteria to screen candidates with a slightly higher than overall use of external organizations in Ajax. Similarly, most employers chose to hire on an as needed basis with a small minority keeping an open pool of candidates for future hiring needs. These findings are displayed in Table 101.

Hiring Practice	#
Use an external organization to screen candidates	9
Use internal criteria to screen candidates	37
Employ software to screen resumes	6
Other (please specify)	2
Total	54

Hiring Time	#
Hire at specific times during the year	10
Hire on an as needed basis	41
Keep an open pool of candidates for future hire	12
Total	63

Table 101

Hiring practices were further examined in light of specific channels employed by respondents. The most frequently used strategies were word of mouth, followed by e-postings and employee referrals. The strategies which generated the most candidates were employee referrals, followed by word of mouth. These findings are further depicted in Figure 41. It is important to note when interpreting these findings that regardless of whether or not respondents used the services, they still commented on whether or not the various strategies generated candidates. The specific findings are further detailed in table form and included as part of Appendix 3.

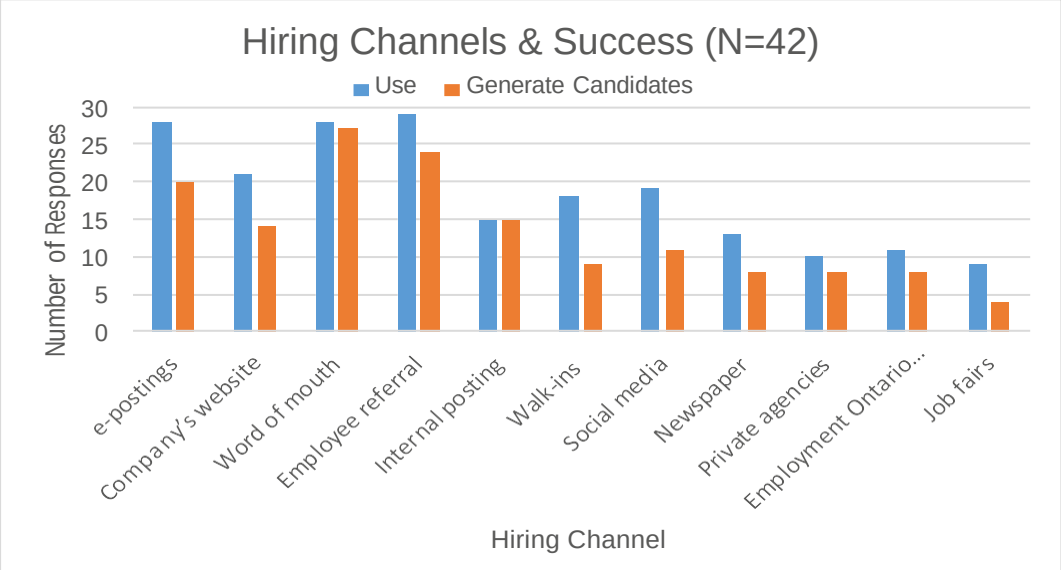

Figure 41

- Workforce Requirements: Current and Future

The Skills For Tomorrow employer survey then asked employers whether or not they planned to hire additional employees in areas where they already employ over the next 12-18 months. In total, 29 (70%) organizations indicated having plans to hire new employees in 23 different occupations over the next 12-18 months. These anticipated hires amount to a total of 214 hires. The most commonly reported areas of expected hiring are displayed in Table 102. The majority of respondents indicated that their anticipated hiring plan would keep workforce levels steady. Although this question does

not specifically address the issue of retirement, the findings seem to indicate that there will be a significant number of retirements expected in the next 12-18 months.

NOC	# of Candidates	Skill Level
NOC 953 Other assembly related occupations	50	C
662 Other sales support & related occupations	32	C
651Occupations in food & beverage services	20	C
720 Contractors & supervisors, industrial, electrical & construction trades	20	B
729 Other construction trades	20	B

Table 102

Employers were then asked whether they anticipated their organization hiring in occupational categories where they had not previously employed. This would allow for a better understanding of whether or not organizations planned to expand their operations to include new areas. In total, the vast majority (35) indicated that they did not plan to expand their hiring to new areas not previously employed. Of the six organizations that planned to expand their operations into new areas, the two occupations that were most anticipated to grow were NOC 661 cashiers and NOC 662 other sales support and related occupations. Together, these occupations represented 10 new positions out of the 29 total new positions anticipated by employers.

The next area of significant importance was retirement. Respondents were asked whether there were individuals in their organization who were expected to retire over the next 3-5 years. Results were mixed with 22 organizations expecting retirements compared to 17 organizations who were not expecting retirements. In total, respondents expected 45 retirements in a variety of different positions. These results are displayed in Table 103.

NOC	# of Retirements
662 Other sales support & related occupations	6
641 Sales & account representatives – wholesale trade	5
720 Contractors & supervisors, industrial, electrical & construction trades	5
729 Other construction trades	5

Table 103

Respondents were also asked whether their organization was currently, or planning to undertake actions to address organization-specific knowledge or skill gaps resulting from retirement. Most respondents indicated that transferring knowledge to successors was their primary effort while a large number of respondents indicated not having any plan. These results are further detailed in Table 104.

Actions to Fill the Skill Gaps Resulting from Retirement	# of Organizations
Transferring knowledge to successors	21
Creating a succession plan for key roles	17
We don't currently have a plan	17
Identifying new talents pools to access specialized capabilities	14
Building internal vocational/professional training programs to strengthen the pipeline for key roles	13
Identifying the roles and capabilities occupied by retirement eligible employees	11
Building external vocational/professional training programs to strengthen the pipeline for key roles	2

Table 104

- Vocational/Professional Training

The next section of the Skills For Tomorrow survey examined the vocational/professional training offered to employees. This section began by asking whether the organization provided training to its employees. Results were mixed but slightly higher than the overall results with 29 organizations indicating that they provided training to their employees while 12 organizations indicated they did not. In total, training was provided to employees in 56 different occupational categories. The most popular occupational categories that employers indicated providing training, and the topics of this training for are displayed in Table 105.

NOC	# of Employers	Topics of Training
122 Administrative & regulatory occupations	5	*-Time Management* *-Dealer/Product Specific*
001 Legislators & senior management	4	*-Marketing* *-Strategic Thinking* *-General Management*
141 General office workers	4	*- Customer Service* *-Communication/Time Management* *- Dealer Specific/Product Specific*
655 Customer & information services representatives	4	*- Digital marketing*

Table 105

Respondents who indicated that they provided training to their employees were then asked to identify the provider of the training. The most popular source of training was internal, followed by training offered by a consultant. These results are further displayed in Table 106. It should be noted that for this question employers were able to select multiple options. With this programming employers would be able to select multiple training providers if their organization made use of more than one training provider.

Internal Provider	Consultant	College	Private College	Union	University
44	23	15	0	0	5

Table 106

Employers who did not indicate that they provided training for their employees were then asked to identify barriers that prevented them from offering training. Options were presented in such a way as to allow employers to select multiple barriers to the provision of training. Additionally, there was a text box to allow employers to further express any additional barriers to offering training. These results are presented in Table 107.

Barriers Preventing Organizations from Training	Significant Concern	Somewhat Concerned	Not a Concern
I am worried about losing productivity during training time	3	2	6
I am worried about the cost, regardless of the benefits	2	5	4
It is too difficult to schedule training or it is too disruptive to our ongoing work	2	4	5
I am worried if I provide training my staff will be lured away	2	3	7
Training will not make a significant difference to my organization's bottom line	2	3	7
I am worried the staff's preference and motivation of learning	2	2	7
I am not sure that I can find a trainer to deliver the training that I need1	1	4	6
My current training needs are not offered locally	1	1	9
I am not convinced that training would improve the skills of my workers	0	2	8

Table 107

Other reasons for not offering training included, limited funds to offer training and a lack of qualified individuals to participate in training.

- Business Support Climate

Respondents were asked to evaluate a number of the services that the Region of Durham provided. In addition to this evaluation, respondents identified the most critical services for developing their businesses. The full list of services is displayed below.

Durham Region Business Support Climate

- Healthcare services
- Hydro/Electric power
- Other utilities (e.g. water, gas, sewage)
- Access to public roads
- Public transportation
- Business sites and land use
- Telecommunication services
- Technology services
- Accounting/Payroll
- Recruitment services
- Business promotion services
- Sales
- Legal services

In order to evaluate the services provided by the region, respondents were asked to choose one of the following levels to describe the service. For the purpose of scoring these responses, the values in Table 108 were assigned to each response:

Response	Score
Excellent	3
Above Average	2
Below Average	1
Poor	0

Table 108

Once the responses were coded, the results were presented in Figure 42. Findings demonstrated that organizations with employees ranked Healthcare Services as the best service in the Region with recruitment services as the lowest. It should be noted; however, that although these were ranked low compared to other services, most respondents generally perceived the services in the Region as being of high quality.

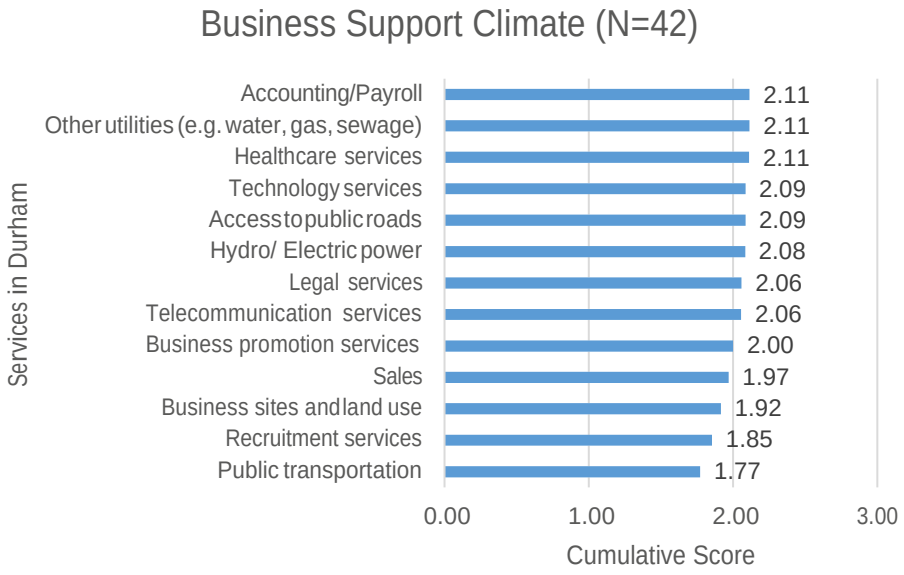

Figure 42

Finally, respondents were asked to identify the three business supports most critical to the long-term success of their organization. Hydro/electric power, telecommunications services, and sales/access to public roads were the top three services identified by respondents as critical to their long-term success. It is important to note that hydro/electric power was equally emphasized as both the first, and second most critical business support, demonstrating the significant importance of this to the long-term success of businesses.

6.2.2 Self-employed Businesses

In Ajax, six self-employed respondents completed the employer survey, which was roughly 12% of total self-employed respondents in south Durham. These six self-

employed participants in Ajax conduct businesses in four different sectors. The following sections present the survey results addressed on self-employed respondents in municipality of Ajax in terms of demographics, prior experience, future needs and professional training.

- Self-employed Demographics

Among the six self-employed respondents from municipality of Ajax who participated in the employer survey, two out of six were from Information and Cultural Industries, two out of 6 were from Other Services (except public administration). One respondent was from the sector of Management of Companies and Enterprises, and the remaining one was from Professional, Scientific, and Technical Services. Figure 43 the shows number of self-employed respondents and the corresponding sectors to which they belong.

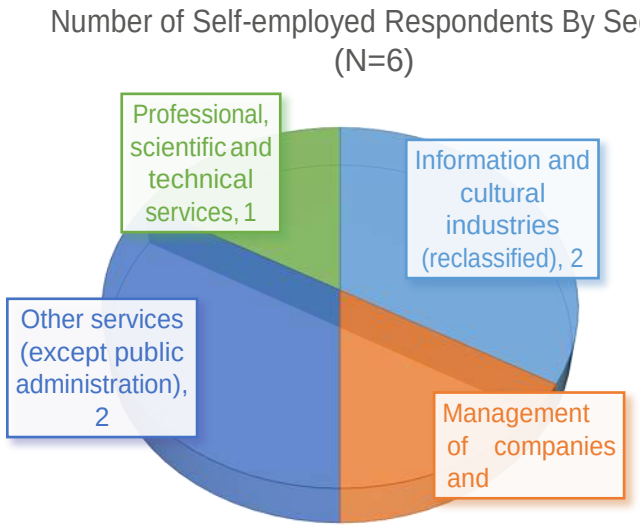

Figure 43

Based on the survey results, the age of self-employed respondents in Ajax were concentrated between 35 and 59 years old.

In terms of the highest credential that they completed before being self-employed, 83% of the self-employed respondents in Ajax had college certificate/diploma or higher educational level. However, only 33% indicated that their credentials were related to the businesses they operated. In terms of using e-commerce when conducting their own businesses, over half of the self-employed respondents indicated that e-commerce was utilized in their business operations. This finding was significantly higher than the overall results indicating e-commerce to be significantly important to self-employed respondents in Ajax.

- Prior Experience

The self-employed respondents to the Skills For Tomorrow employer survey included incorporated business and unincorporated business. Of the all self-employed respondents in municipality of Ajax, incorporated businesses and unincorporated business were split half-and-half. In terms of duration of self-employment, three self-employed respondents indicated that they had one to five years of experience being self-employed. Two out of

six respondents revealed that the duration of their self-employment was between six to ten years, and where asked one respondent identified being self-employed for more than 10 years.

When asked, self-employed respondents from Ajax indicated that their activities prior to becoming self-employed primarily consisted of working for an employer prior to undertaking self-employment. One self-employed respondent expressed going to school as the primary activity they were engaged in prior to undertaking self-employment. Generally, however, this finding was unique.

There were multiple reasons identified by respondents for becoming self-employed. The survey results indicated that in Ajax, the ability to make your own decisions, flexible hours, and meaningful work were identified as the top three reasons for choosing to become self-employed.

- Future Needs and Vocational Training

In terms of the greatest challenge when sustaining self-employed businesses, the respondents in Ajax identified the low cash flow as the top challenge. The other respondents also revealed that risk and poor work-life balance were big challenges for them.

In regards to future hiring plans, four out of six self-employed respondents in Ajax indicated that they had plan to hire employees in the next 12 to 18 months. For the rest of self-employed respondents who still would like to conduct business without employees, both of them thought it was not applicable to their occupation and they needed some time to think about it.

In terms of vocational/professional training, five out of six respondents in Ajax agreed that training could assist their businesses to become competitive and these five respondents all indicated that the training they took was related to the work they currently performed. In terms of the training type, courses from professional associations and workshops were the two main types of training undertaken by self-employed respondents to acquire knowledge and skills.

Regarding the advantages of undertaking professional training, the opportunity to meet or network was identified as being of primary importance by the respondents from Ajax. Also, knowledge of current trends and developments in the field of practice were seen as advantages of undertaking professional training.

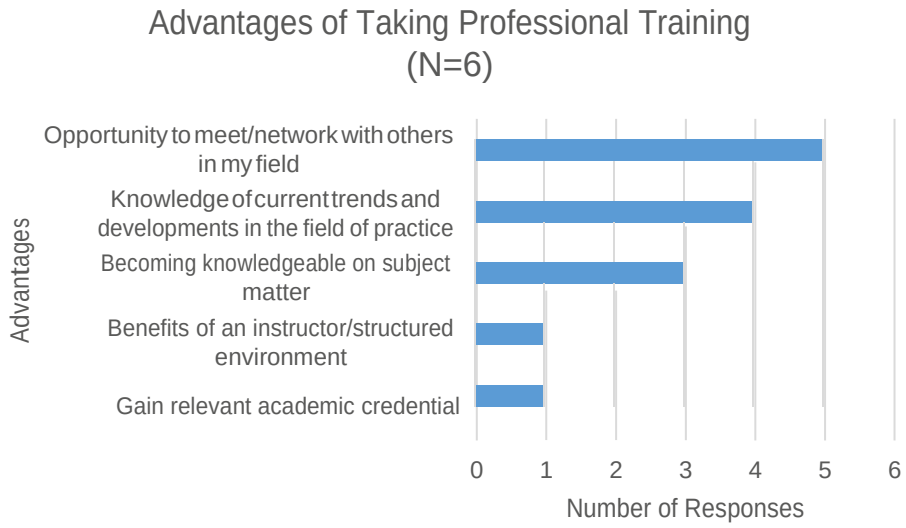

Figure 44

There were number of reasons expressed by self-employed respondents for choosing not undertake professional training. The survey data indicated that in Ajax, funding and time were two main factors that influenced self-employed respondents' decisions on whether or not to undertake training.

- Retirement Plan

When asked about their retirement plans, four out of six self-employed respondents in Ajax indicated that they would transfer the business to a family member and the remaining two were unsure about their retirement plan.

6.3 Municipality of Whitby

6.3.1 Organizations with Employees

This section will elaborate on employer demographics, sector and occupations, skill requirements and gaps, hiring practices, future requirements, training, and the business support climate for respondents with employees from the municipality of Whitby. This section will begin by first presenting demographic information from respondents with employees from the results of the Skills For Tomorrow employer survey.

- Demographics

Businesses with employees from the municipality of Whitby accounted for 87 (26%) of the 338 total businesses with employees and employed 7,020 individuals. Among the respondents, small businesses (5-99 employees) representing 53 of the returned surveys or roughly 61% of respondents. These findings are detailed in Table 109. The finding that small businesses are the most prevalent is consistent with the understanding that small businesses represent a large share of total number of businesses across the Region of Durham and within the municipality of Whitby. Large businesses represented a significant share of total employment in Whitby specifically as a result of multiple very large organizations responding to the employer survey.

Municipality of Whitby Businesses with Employees (N=87)		
Employment Size	# of Survey Responses	Total # of Employees
Micro (1-4)	25	43
Small (5-99)	53	1,157
Medium (100-499)	7	1,020
Large (500+)	2	4,800

Table 109

- Sector and Occupational Categories

Healthcare and Social Assistance was the sector that the majority of respondents from Whitby identified belonging to. This sector was followed by the sector of Other Services (except public administration) and Retail Trade in terms of employer response. These findings are depicted in Table 110.

Sectors	Organizations with Employees
Accommodation and food services	2
Administrative and support, waste management and remediation services	0
Agriculture, forestry, fishing and hunting	0
Arts, entertainment and recreation	1
Construction	5
Educational services	4
Finance and insurance	6
Healthcare and social assistance	19
Information and cultural industries	6
Management of companies and enterprises	0
Manufacturing	8
Mining, quarrying, and oil and gas extraction	0
Other services (except public administration)	12
Professional, scientific and technical services	7
Public administration	2
Real estate and rental and leasing	0
Retail trade	12
Transportation and warehousing	0
Utilities (reclassified)	3
Wholesale trade	0

Table 110

At the single digit level of occupational category, sales and services occupations were the top occupational category in Whitby where employers hired candidates. This was followed by business, finance and administration. These two categories represented 23% and 21% of the total employer responses in Whitby respectively. In order to explore the employment share of these occupational categories, the survey specified the question to

the second digit level. The results indicated that NOC 12 administrative and financial supervisors and administrative occupations and NOC 30 professional nursing had the largest number of employees. Meanwhile, NOC 34 assisting occupations in support of health services and NOC 14 office support occupations were also highly ranked as areas which hired many employees.

- Occupational Skill Requirements

The following section will elaborate employer skills requirement in Whitby making use of four skill levels embedded within the NOC structure that correspond to various levels of education or training.

The overall results for organizations with employees in Whitby indicated that skill level where employers reported the greatest number of employees was skill level C, followed closely by skill level B. From the occupations which fall within skill level C, the most commonly selected occupational category was NOC 14, office support occupations. The results of the second digit NOC examination are further detailed in Table 111.

Skill Level	NOC-2 digit	# of Organizations	# of Employees
C	NOC 14-Office support occupations	13	353
B	NOC 12-Administrative and financial supervisors and administrative occupations	24	701
A	NOC00-Senior management	15	100

Table 111

Beyond simply clarifying the skill level of employees, the study also explored whether employers required a certain minimum credential in order to be employed in any of the occupational categories at their organization. In Whitby, the most common credential required by employers was a college certificate or diploma. This was followed closely by the high school or equivalent credential. These results are depicted in Table 112.

Minimum Credential	# of Occupations NOC 3 Digit
Less than High School	21
High School or Equivalent	102
Apprenticeship	16
College Certificate/Diploma	132
College Post-Graduate or Advanced Diploma	16
Undergraduate Degree	53
Graduate Degree	11
Professional Degree	12

Table 112

Additionally, this study specified the NOC to 3-digit level to explore which occupations commonly required employees to possess a minimum credential. Based on the results, the most common occupations which organizations required credentials for were NOC 122 administrative and regulatory occupations and NOC 121 administrative services

supervisors that mostly required a college certificate or diploma. To better understand and specifically know the additional credentials or certifications that they required their employees to possess, the survey provided employers with text box. Based on these results, Business Administration Degrees and the Chartered Professional Accountant (CPA) designation were commonly identified by respondents from Whitby.

- Hiring Practices, Challenges and Avenues

When asked about whether they had hired new employees in the past 12-18 months, 68 employers in the municipality of Whitby indicated they had hired over 875 employees in the last 12-18 months. The most common occupations hired included NOC 341 assisting occupations in support of health services, NOC 642 retail salespersons, NOC 314 therapy and assessment professionals.

Employers in Whitby were then asked whether or not they experienced any difficulty attracting applicants for available jobs. From the employers who expressed having hired recently, 30% expressed difficulty hiring employees in a variety of occupational categories.

In terms of the issues that affected their ability to attract qualified candidates to available positions, most employers in Whitby indicated that an inability to offer competitive pay and limitation of opportunities for advancement were two issues that might influence attracting candidates. Upon further examination of the other attraction related issues, the location of the business, and time of shifts were also emphasized as issues employers' believed impacted their ability to attract qualified candidates. Figure 47 reflects the issues employers expressed as affecting their ability to hire.

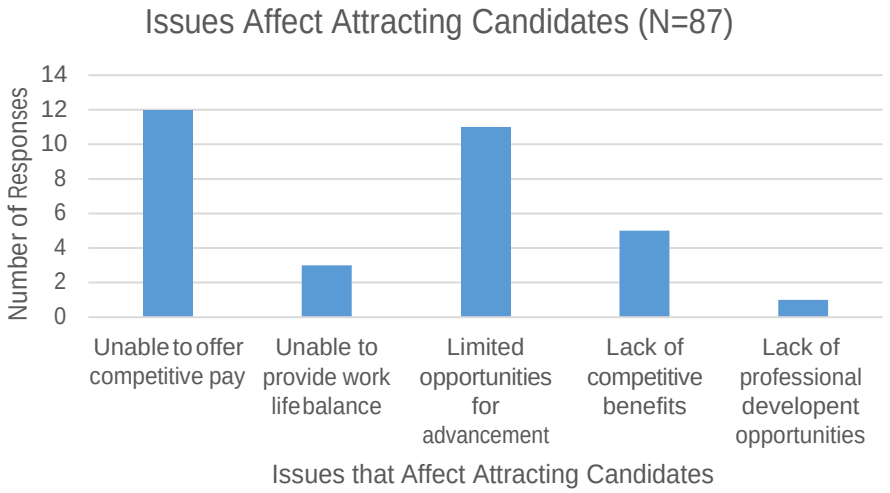

Figure 45

Employers were also asked to reflect on general challenges related to hiring. When it comes to the general challenges, employers in Whitby identified lack of skilled applicants and lack of qualified candidates as two equally great challenges which were impacting their ability to hire. Some employers specified that the low quality of candidates (lack of motivation and poor working habits) as attributes that made hiring difficult.

Hiring practices and patterns are considered by many people who are looking for jobs in the labour market. To better understand employers' hiring strategies and the time at which organizations hire, respondents were asked to indicate any criteria they used. Table 113 below reveals the detailed information regarding this question. Based on the results, the majority of respondents in Whitby indicated that they made use of internal criteria to screen candidates. Similarly, most employers chose to hire on an as needed basis with a small minority keeping an open pool of candidates for future hiring needs.

Hiring Practice	#
Use an external organization to screen candidates	14
Use internal criteria to screen candidates	79
Employ software to screen resumes	5
Other (please specify)	7
Total	105

Hiring Time	#
Hire at specific times during the year	9
Hire on an as needed basis	80
Keep an open pool of candidates for future hire	25
Total	114

Table 113

Next, specific hiring channels were examined in an effort to further explore employers' hiring practices. The most frequently used hiring channels by employers in Whitby were, word of mouth, followed by e-postings and employee referrals. The channels which generated the most candidates were word of mouth, followed by e-postings then employee referrals. These findings are further depicted in Figure 46.

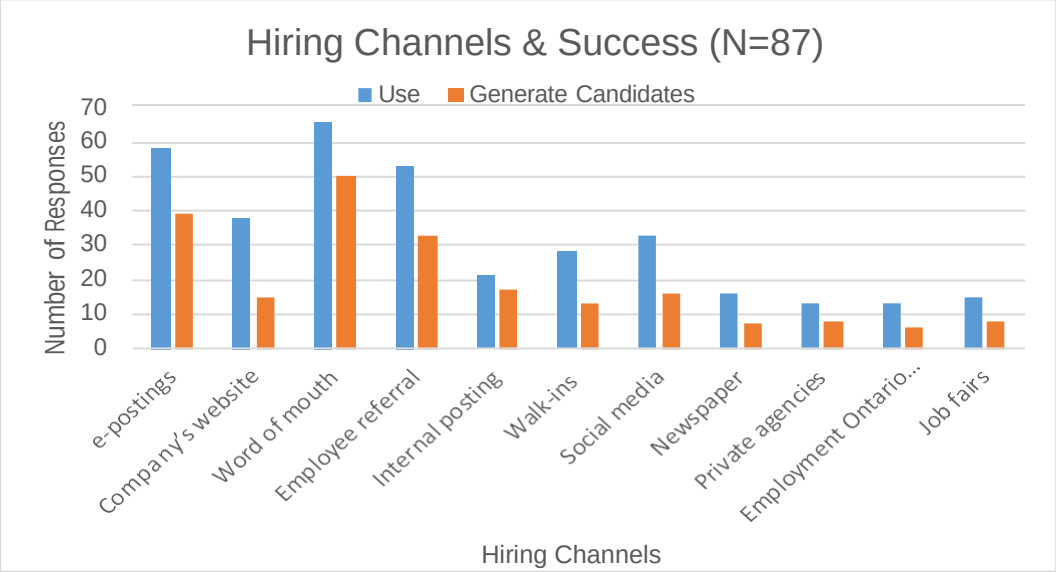

Figure 46

- Workforce Requirements: Current and Future

The Skills For Tomorrow employer survey then raised questions to ask employers whether they planned to hire additional employees in areas where they already employ over the next 12-18 months. In response, 54 organizations in Whitby expressed plans to hire new employees. The most commonly reported areas of expected hiring are displayed

in Table 114. The majority of respondents in Whitby indicated that their anticipated hiring plan would keep workforce levels steady.

NOC	# of Candidates	Skill Level
301 Professional occupations in nursing	14	A
642 Retail salespersons	14	C
341 Assisting occupations in support of health services	12	C
661 Cashiers	12	D
662 Other sales support and related occupations	12	D

Table 114

To better understand whether the organizations in Whitby planned to expand their businesses, employers were asked whether they anticipated their organization hiring in occupational categories where they had not previously employed. Based on the survey results, only 26 employers in Whitby indicated that they had plans to expand their hiring to new areas not previously employed. However, the total number of candidates that they planned to hire was quite small.

The next area of significant importance was retirement. Respondents were asked whether there were individuals in their organization who were expected to retire over the next 3-5 years. In Whitby, 44% of employers indicated that they expected to experience 109 retirements in a variety of different positions. Based on the survey results, many expected retirements in Whitby are from the Public Administration sector. The occupations expected to have a large number of retirements are displayed in Table 115.

NOC	# of Retirements
416 Policy and program researchers, consultants and officers	15
415 Social and community service professionals	15
001 Legislator and senior management	8
642 Retail salespersons	8

Table 115

Respondents from Whitby were also asked whether their organization was currently, or planning to undertake actions to address organization-specific knowledge or skill gaps resulting from retirement. Most respondents indicated that transferring knowledge to successors creating a succession plan for key roles were the two top strategies employers planned to adopt in response to retirement. These results are further detailed in Figure 47.

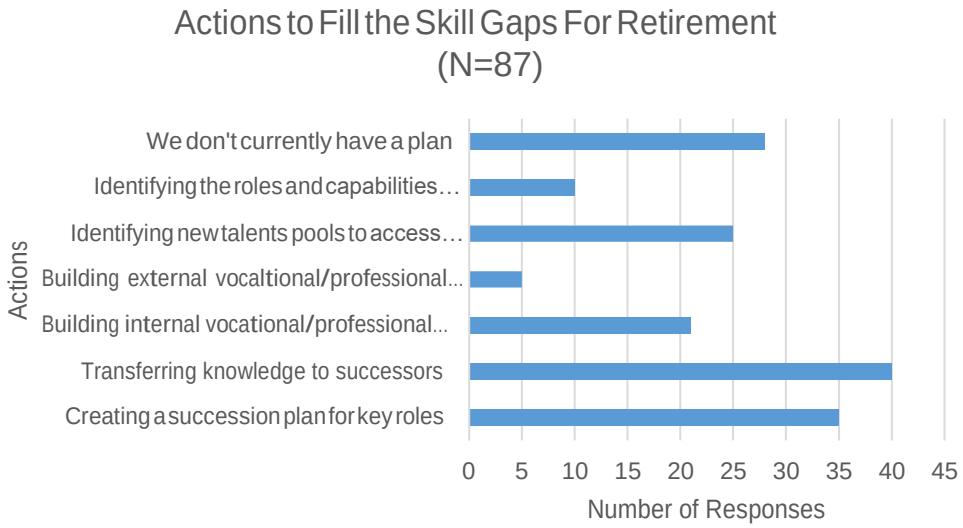

Figure 47

- Vocational/Professional Training

The next section on vocational/professional training began by first asking whether the organization provided training to its employees. Results were mixed with 39 (45%) organizations in Whitby indicating that they provided training to their employees while 43 (50%) organizations indicated they did not. In total, training was provided to over 95 different occupations . The most popular occupational categories that employers indicated providing training, and the topics of this training for are displayed in Table 116.

NOC	# of Employers	Topics of Training
122 Administrative & regulatory occupations	6	*-Software* *-Customer service* *-Job-specific*
341 Assisting occupations in support health services	5	*-Customer service* *-Soft skills*
314 Therapy and assessment professionals	5	*-Areas of expertise* *-Customer service/building practice* *-Reflexology*

Table 116

Respondents in Whitby who indicated that they provided training to their employees were then asked to identify the provider of the training. The most popular source of training was internal, followed by training offered by a consultant. These results are further displayed in Table 117. It should be noted that for this question employers were able to select multiple options. As a result, employers were able to select multiple training providers if their organization made use of more than one training provider.

Internal Provider	Consultant	College	Private College	Union	University
43	21	12	1	0	2

Table 117

For those employers who had no plan to provide training to their employees in Whitby, the survey raised questions designed to identify reasons that prevented organizations from offering training. Options were presented in such a way as to allow employers to select multiple barriers to the provision of training. These results are presented in Table 118.

Barriers Preventing Organization from Training	Significant Concern	Somewhat Concerned	Not a Concern
It is too difficult to schedule training or it is too disruptive to our ongoing work	7	11	23
I am worried about the cost, regardless of the benefits	7	11	21
I am worried about losing productivity during training time	5	13	23
I am not sure that I can find a trainer to deliver the training that I need	5	9	26
My current training needs are not offered locally	4	8	29
Training will not make a significant difference to my organization's bottom line	2	12	26
I am worried the staff's preference and motivation of learning	2	9	29
I am worried if I provide training my staff will be lured away	2	8	31
I am not convinced that training would improve the skills of my workers	1	10	28

Table 118

- Business Support Climate

Employers in the municipality of Whitby were also asked to evaluate a number of the services that the Region of Durham provided. In addition to this evaluation, respondents identified the most critical services for developing their businesses. The full list of services is displayed below.

Durham Region Business Support Climate

- Healthcare services
- Hydro/Electric power
- Other utilities (e.g. water, gas, sewage)
- Access to public roads
- Public transportation
- Business sites and land use
- Telecommunication services
- Technology services
- Accounting/Payroll
- Recruitment services
- Business promotion services
- Sales
- Legal services

In order to evaluate the services provided by the Region, respondents were asked to choose one of the following levels to describe the service. For the purpose of scoring these responses, the values in Table 119 were assigned to each response:

Response	Score
Excellent	3
Above Average	2
Below Average	1
Poor	0

Table 119

Once the responses were coded, the results were presented in Figure 48. Findings demonstrated that the organizations with employees in Whitby ranked access to public roads as the best service in the Region. However, public transportation was ranked as the lowest, which means the employers in Whitby had a strong hope to strengthen the public transportation services in Durham Region.

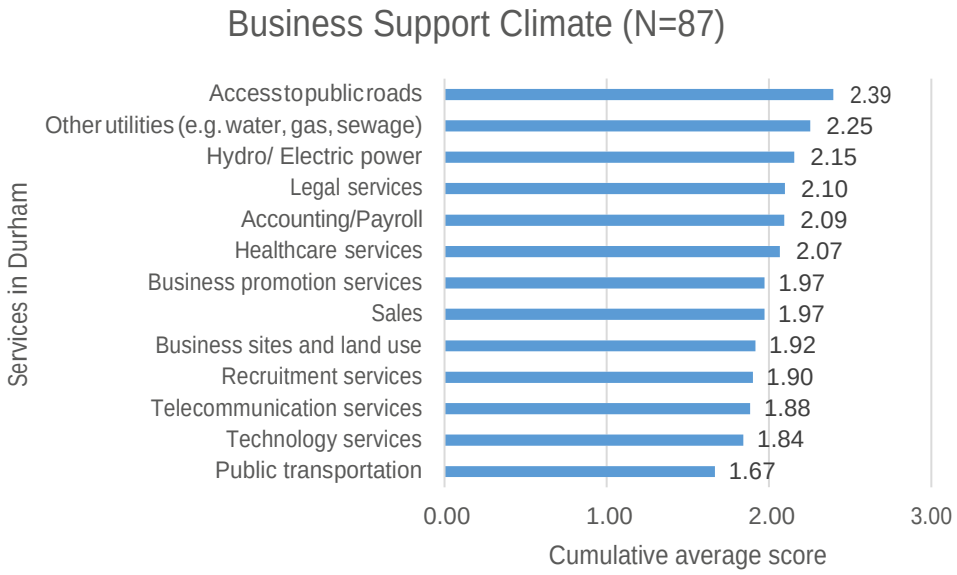

Figure 48

Finally, respondents in Whitby were asked to identify the three business supports most critical to the long-term success of their organizations. Telecommunication services, hydro/electric power, and technology services were the top three services identified by respondents in the municipality of Whitby as critical to their long-term success.

6.3.2 Self-employed Businesses

There were 13 self-employed respondents who participated in the employer survey in Whitby, which represented 26% of total self-employed respondents in south Durham. The following sections present the survey results for self-employed businesses in the Municipality of Whitby beginning with demographics, prior experience, future needs and vocational or professional training.

Self-employer Demographics

Among the 13 self-employed respondents from the municipality of Whitby who participated in the employer survey, many of the respondents were from different sectors. Figure 49 below shows the number of self-employed respondents in Whitby by sector in further detail.

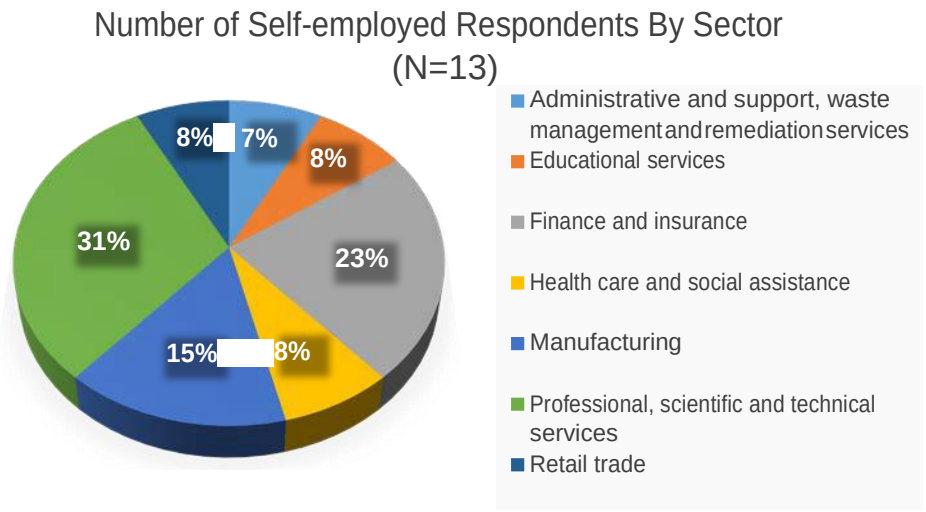

Figure 49

Based on the survey results, the age of self-employed respondents from the municipality of Whitby were concentrated between 45 and 59 years old. In terms of the highest credential that they completed before becoming self-employed, 38% of the respondents possessed a college certificate or diploma. Additionally, a high number of respondents (15%) expressed possession of a post graduate/advanced degree while another 15% of self-employed respondents in Whitby held an undergraduate degree. The remaining 23% held a graduate degree (Master's or PhD).

When asked whether their credentials were related to their businesses, 54% of respondents indicated that the work they performed were related to the credential they held. In terms of the e-commerce, the survey raised a question to explore how many self-employed businesses conduct e-commerce and promote their products online. Self-employed respondents in Whitby did not commonly use e-commerce with only 23% identifying the use of e-commerce.

- Prior Experience

The self-employed respondents included both incorporated business and unincorporated businesses. Of the 13 self-employed respondents in the municipality of Whitby, 54% indicated that they had incorporated their businesses, and the remaining 46% were unincorporated.

In terms of the duration of self-employment, 46% of self-employed respondents in Whitby had 1 to 5 years of experience being self-employed. In total, 38% of the self-employed respondents who expressed having spent a significant number of years being self-employed (more than 10 years).

In Whitby, when self-employed respondents were asked about their activities prior to becoming self-employed, 69% indicated that they previously worked for an employer before undertaking self-employment. An additional 23% had experienced being self-employed with another business. Moreover, the remaining 18% indicated that they were looking for a job before starting their own businesses.

In today's labour market, there are a variety of reasons for choosing self-employment. For example, people can work from home, gain tax advantages, and have greater flexibility. When asking self-employed respondents in Whitby why they would choose to become self-employed, the respondents provided multiple reasons. Among all the options, ability to make your own decisions and meaningful work were identified as the top two reasons. Meanwhile, having the intention to change career paths was specified as a new reason by the self-employed respondents. Figure 50 further details the reasons why respondents chose self-employment.

Figure 50

- Future Needs and Vocational Training

In terms of the greatest challenge to sustaining self-employment, most respondents from Whitby identified low cash flow as the top challenge to sustaining self-employment. This finding was the same result as the overall responses for self-employed respondents. Some other challenges including risk, red tape and poor work-life balance were identified as concerns to sustaining self-employment.

In terms of the future hiring plan, only 38% of the self-employed respondents in Whitby indicated that they had plans to hire employees in the next 12 to 18 months. For the remaining 62% who did not plan to hire employees, most indicated that they did not have enough work for more than one person. Additionally, lack of time and not enough funds were cited as reasons to continue without employees.

When asked about their thoughts about the professional training they took, 62% of the respondents in Whitby indicated that training could assist their businesses to become more competitive. Moreover, 77% of revealed that they took additional training related to the work they currently perform. In terms of the training type, courses from colleges or

universities and courses from professional associations were the top two training types identified by self-employed respondents in Whitby.

When asked about the advantages of taking professional training, every option was selected by a certain number of self-employed respondents in Whitby. Based on the survey results, becoming knowledgeable on subject matter, knowing knowledge of current trends and developments in the field of practice, as well as building more networks are the top three advantages of undertaking professional training.

There were multiple reasons expressed by respondents who chose not to take professional training. Based on the data, time, funding and the access to the training information expressed as challenges to taking additional training. This result is quite similar with the finding from overall data analysis.

- Retirement Plan

When asked about their plans businesses after they retire, 54% of the self-employed respondents in the Municipality of Whitby were not sure about their retirement plan. An additional 23% indicated that they would sell the business to a third party, while 15% that they would close the business and only 8% would transfer the business to a family member. Figure 51 further details this information.

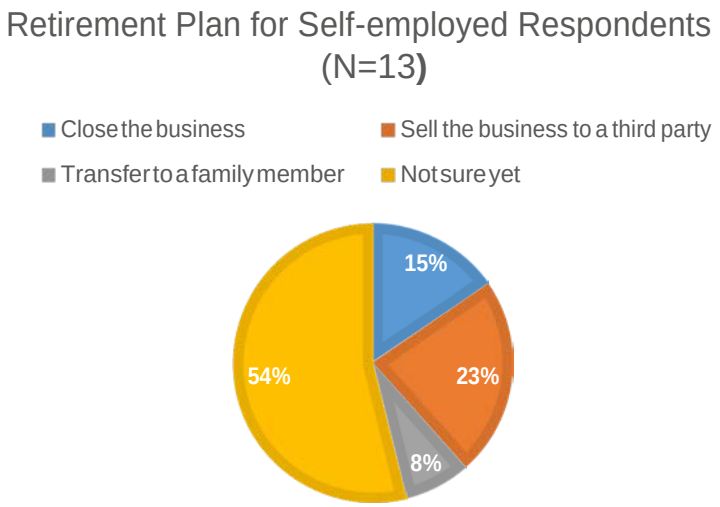

Figure 51

6.4 City of Oshawa

6.4.1 Organizations with Employees

This section will elaborate on employer demographics, sector and occupations, skill requirements and gaps, hiring practices, future requirements, training, and the business support climate for respondents with employees from the municipality of Oshawa. This section will begin by first presenting demographic information from respondents with employees from the results of the Skills For Tomorrow employer survey.

- Demographics

Businesses with employees from the municipality of Oshawa accounted for 101 of the 338 total businesses with employees. These businesses represented 30% of the total

businesses with employees and employed 3,452 individuals. Among the respondents, small businesses (5-99 employees) were the most prevalent representing 68 of the returned surveys or roughly 67% of respondents. These findings are detailed in Table 120. The finding that small businesses are the most prevalent is consistent with the understanding that small businesses represent a large share of both total employment and total number of businesses across the Region and within the municipality of Oshawa.

City of Oshawa Businesses with Employees (N=101)		
Employment Size	# of Survey Responses	Total # of Employees
Micro (1-4)	26	49
Small (5-99)	68	1,098
Medium (100-499)	6	1,005
Large (500+)	1	1,300

Table 120

- Sector and Occupational Categories

  Healthcare and Social Assistance was the sector that the majority of respondents from the municipality of Oshawa identified belonging to. This sector was closely followed by Manufacturing in terms of employer response. These findings are depicted in Table 121.

Sectors	Organizations with Employees
Accommodation and food services	1
Administrative and support, waste management and remediation services	2
Agriculture, forestry, fishing and hunting	1
Arts, entertainment and recreation	5
Construction	6
Educational services	5
Finance and insurance	10
Healthcare and social assistance	14
Information and cultural industries	6
Management of companies and enterprises	1
Manufacturing	12
Other services (except public administration)	11
Professional, scientific and technical services	9
Public administration	1
Real estate and rental and leasing	5
Retail trade	4
Transportation and warehousing	2
Utilities (reclassified)	2
Wholesale trade	4

Table 121

Based on the survey results, at the single digit level of occupational category, Business, Finance and Administration was the top occupational category in Oshawa, followed by Sales and Services occupations. These results match well the overall results.

In order to understand the specific occupational areas employed by respondents from Oshawa, the survey specified the question to the second digit NOC. The results indicated that NOC 12 administrative and financial supervisors and administrative occupations and NOC 14 office support occupations had the largest number of employees. Among the sales and service occupations, NOC 66 sales and support occupations and NOC 64 sales representatives and salespersons were the top two categories that employed the most employees. These findings were supported by a high concentration of employees in these two areas and are depicted in the Figure 52.

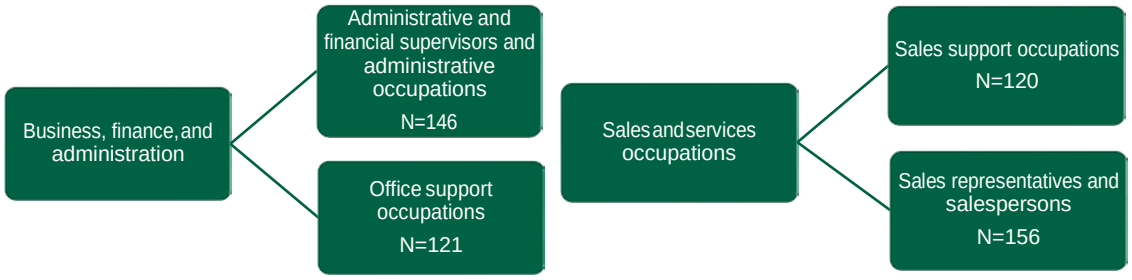

Figure 52

- Occupational Skill Requirements

The following section will elaborate on employer skill requirement in the municipality of Oshawa by making use of the four skill levels embedded within the NOC structure that corresponds to various levels of education or training.

The overall results for organizations with employees in the municipality of Oshawa indicated that the skill level which employers reported the greatest number of employees in was skill level B, followed closely by skill level C. From the occupations which fall within skill level B, the most commonly selected occupational category was NOC 12, administrative and financial supervisors, and administrative occupations. The results of the second digit NOC examination are further detailed in Table 122.

Skill Level	NOC-2 digit	# of Organizations	# of Employees
B	NOC12-Administrative & financial supervisors & administrative occupations	29	146
C	NOC 14- Office support occupations	23	121
A	NOC00-Senior management	20	45

Table 122

Beyond simply clarifying the skill level of employees, the study also explored whether employers required a certain minimum credential in order to be employed in any of the occupational categories at their organization. In the municipality of Oshawa, the most common credential required by employers was a college certificate or diploma. This was followed closely by the high school or equivalent. These results are depicted in Table 123.

Minimum Credential	# of Occupations NOC 3 Digit
Less than High School	14
High School or Equivalent	107
Apprenticeship	27
College Certificate/Diploma	122
College Post-Graduate or Advanced Diploma	14
Undergraduate Degree	47
Graduate Degree	12
Professional Degree	11

Table 123

Additionally, this study utilized the NOC at the 3-digit level to explore which occupations commonly required employees to possess a minimum credential. Based on the results, the most common occupations which organizations required credentials for were NOC 122 administrative and regulatory occupations and NOC 124 office administrative assistant that mostly required a college certificate or diploma. To better understand and specifically know the additional credentials or certifications that employers required their employees to possess, the survey provided employers with a text box for this question. Accounting degrees, business and commerce degrees as well as the Chartered Professional Accountant (CPA) designation were identified by many employers in the municipality of Oshawa as specific credentials they required.

- Hiring Practices and Challenges

When asked whether they had hired new employees in the past 12-18 months, 81 employers in Oshawa indicated they had hired over 480 employees in the last 12-18 months. The most common occupations hired included NOC 662 other sales and support occupations, NOC 122 administrative and regulatory occupations, NOC 141 general office workers.

Employers in Oshawa were then asked whether they experienced any difficulty attracting applicants for available jobs. From the employers who expressed having hired recently, 29% expressed difficulty hiring employees in a variety of occupational categories. The remainder indicated that they experienced no challenges attracting candidates.

In terms of the issues affected their ability to attract qualified candidates to available positions, most employers in Oshawa chose the inability to offer competitive pay, and other attraction related issues. Upon further examination other attraction related issues such as the location of the business, proximity to the City of Toronto and heavy workload were also emphasized as issues employers' believed impacted their ability to attract qualified candidates. Figure 53 reflects the issues employers expressed as affecting their ability to hire.

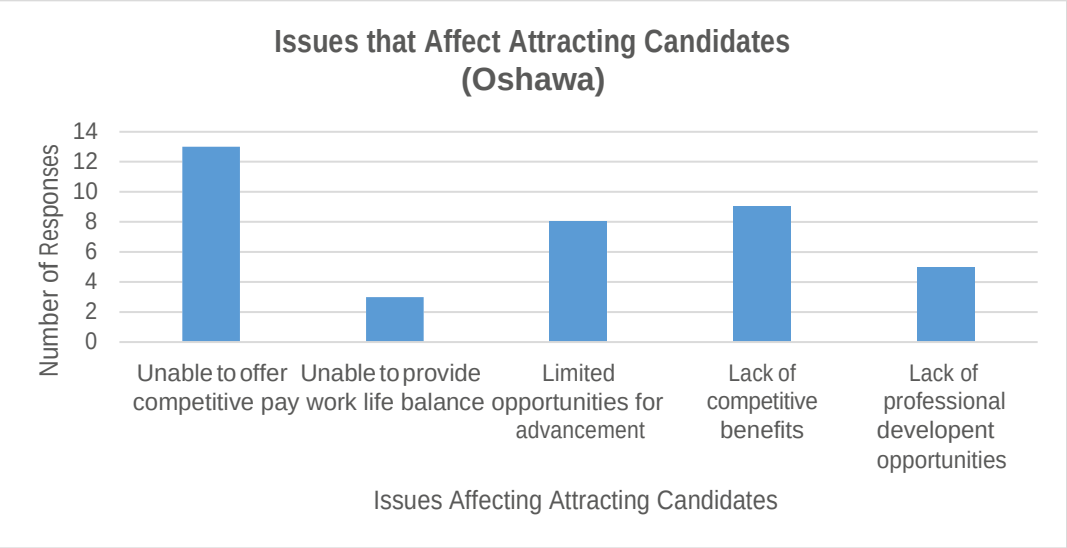

Figure 53

Employers were also asked to reflect on general challenges they experienced related to hiring. When it comes to the general challenges experienced by employers, respondents in Oshawa identified a lack of skilled applicants and lack of experienced candidates as the two greatest challenges impacting their ability to hire. Some employers specified that poor work ethic, poor language skills and lack of some inherent work qualities (reliable, hard-working) also made the hiring become difficult.

Hiring practices and patterns are of interest many people searching for jobs in the labour market. To better understand employers' hiring strategies and hiring time respondents were asked to reflect on these attributes. Table 124 reveals the details of these practices identified by respondents. Based on the results, the majority of respondents in Oshawa indicated that they made use of internal criteria to screen candidates. Similarly, most employers chose to hire on an as needed basis with a small minority keeping an open pool of candidates for future hiring needs.

Hiring Practice	#
Use an external organization to screen candidates	27
Use internal criteria to screen candidates	93
Employ software to screen resumes	9
Other (please specify)	7
Total	136

Hiring Time	#
Hire at specific times during the year	15
Hire on an as needed basis	94
Keep an open pool of candidates for future hire	40
Total	149

Table 124

Specific hiring channels were then examined to further explore employers' hiring practices. The most frequently used hiring channels by employers in Oshawa were, word of mouth, followed by e-postings and employee referrals. The channels which generated the most candidates were word of mouth, followed by e-postings then employee referrals. These findings are further depicted in Figure 54.

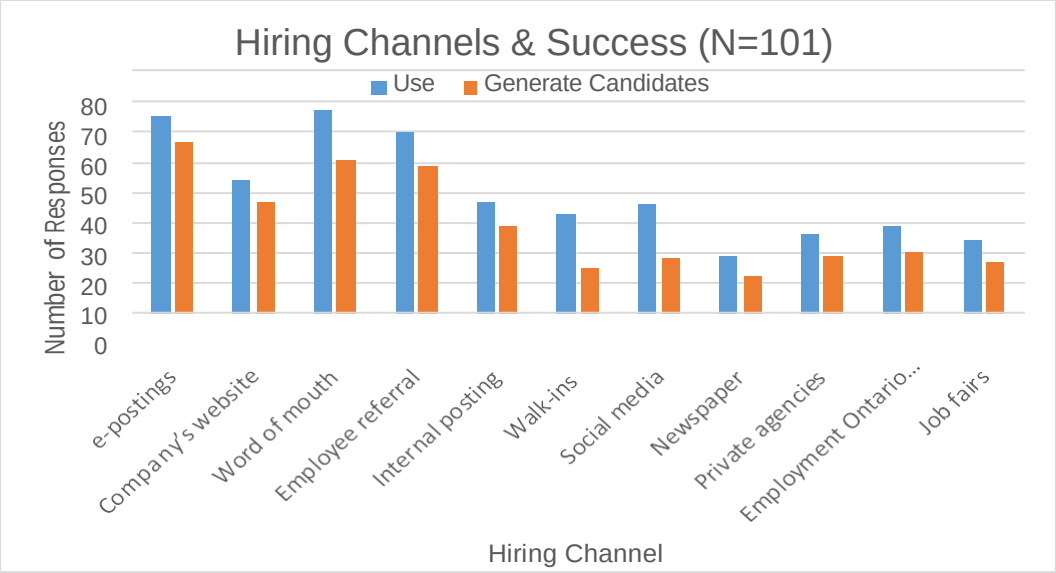

Figure 54

- Workforce Requirements: Current and Future

The Skills For Tomorrow employer survey then raised questions to understand whether respondents planned to hire additional employees in areas where they already employ over the next 12-18 months. In total, 64 organizations in Oshawa indicated they had plans to hire new employees during this time. The most commonly reported areas of expected hiring are displayed in Table 125. The majority of respondents in the municipality of Oshawa indicated that their anticipated hiring plan would keep current workforce levels steady.

NOC	# of Candidates	Skill Level
401 University professors & assistants	150	A
762 Public works and other labourers	70	D
729 Other construction trades	52	B
751 Motor vehicle and transit drivers	30	C
961 Labourers in processing, manufacturing & utilities	21	D

Table 125

To better understand whether the organizations in Oshawa planned to expand their businesses into new areas, employers were asked whether they anticipated their organization hiring in occupations where they had not previously employed. Based on the survey results, only 33 employers in Oshawa indicated that they had plans to expand their hiring to new areas not previously employed within their organization. Among these new

expected occupations, the two occupations that were most anticipated were NOC 415, social and community services professionals and NOC 961, labourers in processing, manufacturing and utilities. Together, these occupations represented 52 new positions out of the 153 total new positions anticipated by employers.

The next area of significant importance was retirement. Respondents were asked whether there were individuals in their organization who were expected to retire over the next 3-5 years. In Oshawa, 44% of employers indicated that they expected to experience 126 retirements in a variety of different positions during this time. The occupations where the greatest number of retirements are expected are displayed in Table 126.

NOC	# of Retirements
071 Managers in construction, facility operation & maintenance	27
751 Motor vehicle and transit drivers	11
131 Finance, insurance and related business administrative occupations	10

Table 126

Respondents from Oshawa were also asked whether their organization was currently, or planning to undertake actions to address organization-specific knowledge or skill gaps resulting from retirement. Most respondents indicated that creating a knowledge transfer plan and creating a succession for key roles were two top strategies they would adopt. These results are further detailed in Figure 55.

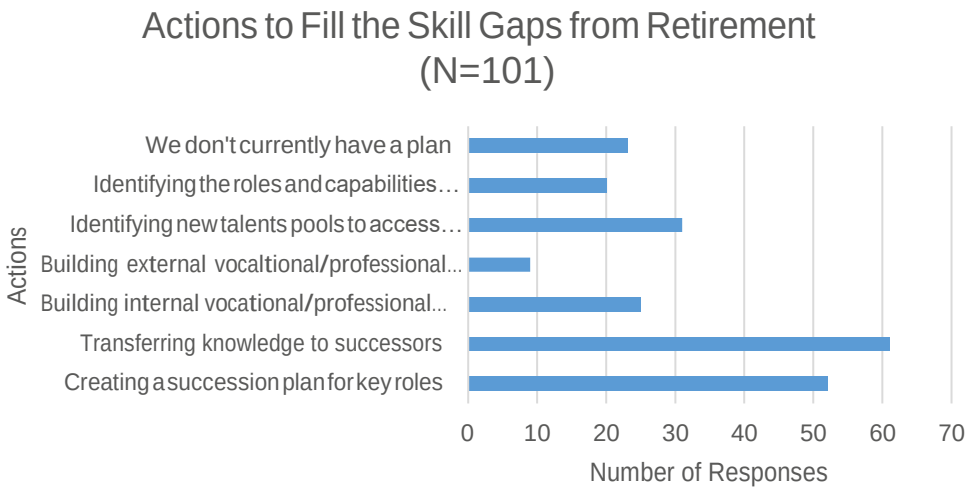

Figure 55

- Vocational/Professional Training

The next section is vocational/professional training by first asking whether the organization provided training to its employees. Results were mixed with 55 organizations in Oshawa indicating that they provided training to their employees while 45 organizations indicated they did not. In total, training was provided to over 126 different occupational categories. The most popular occupational categories that employers indicated providing training, and the topics of this training for are displayed in Table 127.

NOC	# of Organizations	Topics of Training
122 Administrative & regulatory occupations	9	*-Software* *-Customer Service* *-Job-specific*
662 Other sales support & related occupations	7	*-New Product Implementation* *-Dealer Specific/Product Specific* *-Digital Marketing*
141 General office workers	6	*-Operations*

Table 127

Respondents in Oshawa who indicated that they provided training to their employees were then asked to identify the provider of the training. The most popular source of training was internal, followed by training offered by a consultant. These results are further displayed in Table 128. It should be noted that for this question employers were able to select multiple options.

Internal Provider	Consultant	College	Private College	Union	University
67	27	10	0	0	2

Table 128

The employers who did not provide training for their employees were also asked to identify reasons that prevented them from offering training. Options were presented in such a way as to allow employers to select multiple barriers to the provision of training. Additionally, there was a text box to allow employers to further express any additional barriers to offering training. These results are presented in Table 129.

Barriers Preventing Organizations from Training	Significant Concern	Somewhat Concerned	Not a Concern
I am worried about the cost, regardless of the benefits	11	7	24
It is too difficult to schedule training or it is too disruptive to our ongoing work	10	14	19
I am worried about losing productivity during training time	10	8	25
I am not sure that I can find a trainer to deliver the training that I need	7	7	29
My current training needs are not offered locally	7	6	29
I am not convinced that training would improve the skills of my workers	7	5	30
I am worried the staff's preference and motivation of learning	5	11	26
Training will not make a significant difference to my organization's bottom line	3	10	30
I am worried if I provide training my staff will be lured away	1	10	32

Table 129

In terms of identifying other reasons for not offering training, limited funds and a lack of qualified individuals were indicated by employers to be additional barriers.

- Business Support Climate

Respondents from Oshawa were asked to evaluate a number of the services that the Region of Durham provided. In addition to this evaluation, respondents identified the most critical services for developing their businesses. The full list of services is displayed below.

Durham Region Business Support Climate

- Healthcare services
- Hydro/Electric power
- Other utilities (e.g. water, gas, sewage)
- Access to public roads
- Public transportation
- Business sites and land use
- Telecommunication services
- Technology services
- Accounting/Payroll
- Recruitment services
- Business promotion services
- Sales
- Legal services

In order to evaluate the services provided by the Region, respondents were asked to choose one of the following levels to describe the service. For the purpose of scoring these responses, the values in Table 130 were assigned to each response:

Response	Score
Excellent	3
Above Average	2
Below Average	1
Poor	0

Table 130

Once the responses were coded, the results were presented in Figure 56. Findings demonstrated that the organizations with employees in Oshawa ranked access to public roads as the best service in the Region with public transportation and business sites and land use as the lowest. It should be noted; however, that although these were ranked low compared to other services, most respondents generally perceived the services in Durham Region as being of high quality.

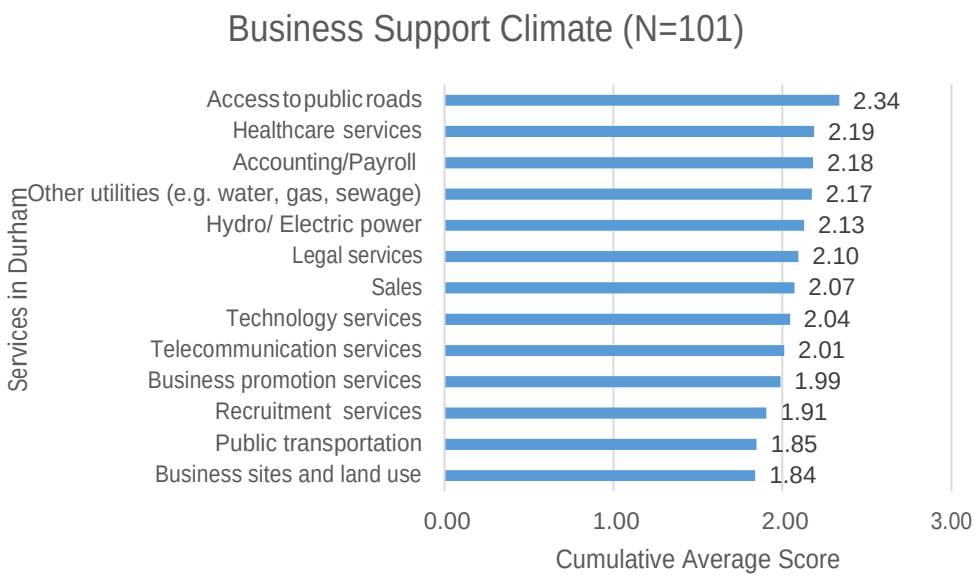

Figure 56

Finally, respondents in Oshawa were asked to identify the three business supports most critical to the long-term success of their organizations. Hydro/electric power, telecommunication services and sales were the top three services identified by respondents in the municipality of Oshawa as critical to their long-term success.

6.4.2 Self-employed Businesses

There were 15 self-employed respondents who participated in the employer survey from the City of Oshawa. In total, these respondents represent 30% of total self-employed respondents.

- Self-employed Demographics

Among the 15 self-employed respondents from Oshawa who participated in the Skills For Tomorrow employer survey, various sectors were represented. Figure 57 depicts the number of self-employed respondents in Oshawa by sector in further detail.

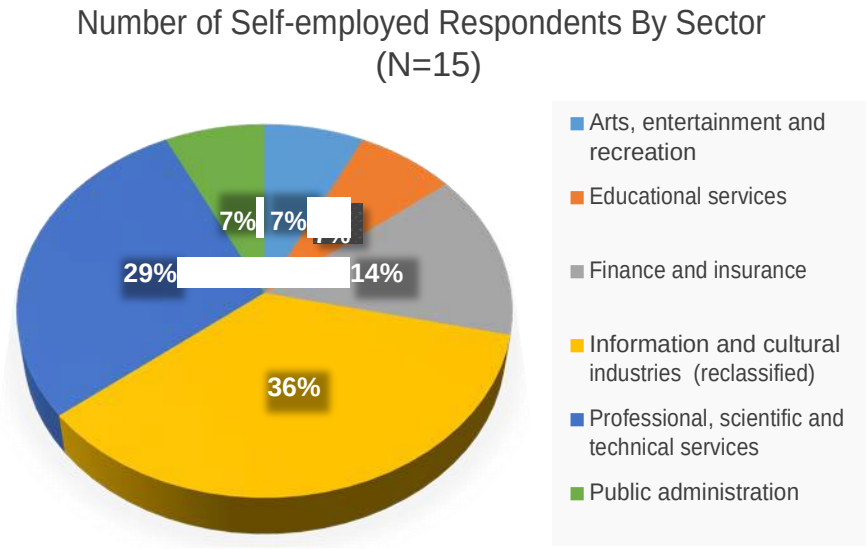

Figure 57

Based on the survey results, the age of self-employed respondents in the City of Oshawa were concentrated between 40 and 64 years old.

In terms of the highest credential that they completed before becoming self-employed, 40% possessed a college certificate or diploma. Only 7% of the self-employed respondents held a high school or equivalent credential. The remainder held college postgraduate degree or higher. Figure 58 a detailed breakdown in relation to credential possessed by the self-employed respondents from Oshawa.

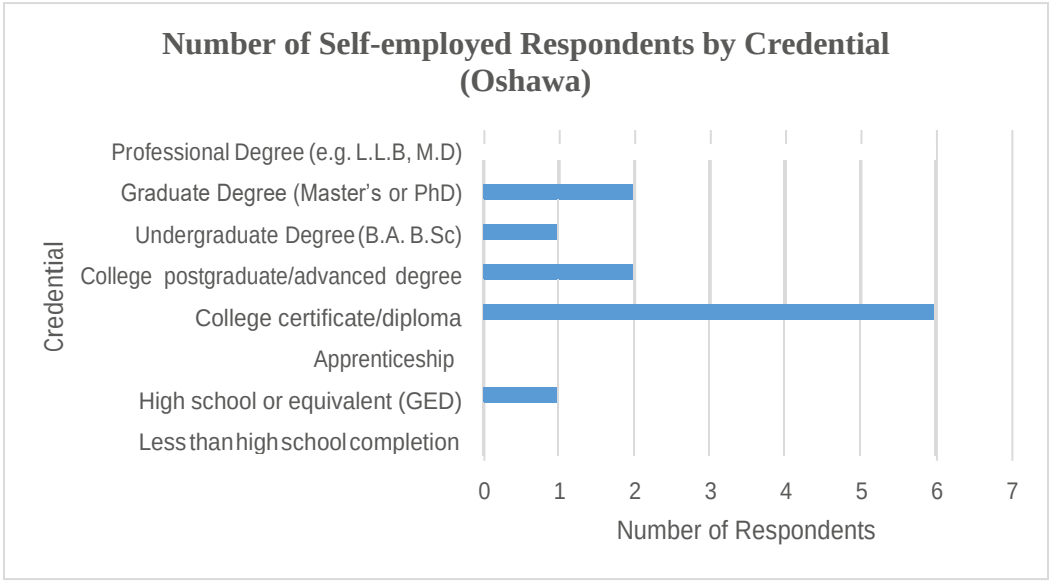

Figure 58

When asking whether their credentials relate to the businesses they operate, 60% of the self-employed respondents in Oshawa indicated that the work they performed was

associated with the credential they held. Only 20% of self-employed respondents made use of e-commerce in their businesses, in line with the overall results.

- Prior experience

The self-employed respondents from Oshawa included incorporated business and unincorporated businesses. Of the 15 self-employed respondents in city of Oshawa, 54% indicated that they had incorporated businesses, and the remainder were unincorporated.

In terms of number of years of being self-employed, based on the survey results, 33% of self-employed respondents in Oshawa had more than 10 years of experience being self-employed. Slightly fewer (27%) had been self-employed for 6 to 10 years. The remaining respondents had 1 to 5 years of experience. Generally, the duration self-employment in Oshawa was a little bit longer than that in other municipalities.

When asked about their activities prior to becoming self-employed, 67% of respondents indicated that they previously worked for an employer. Only 13% indicated that they had experience conducting another self-employed businesses. Moreover, respondents also selected the option of looking for jobs and looking after a household. The detailed information is displayed in the Figure 59.

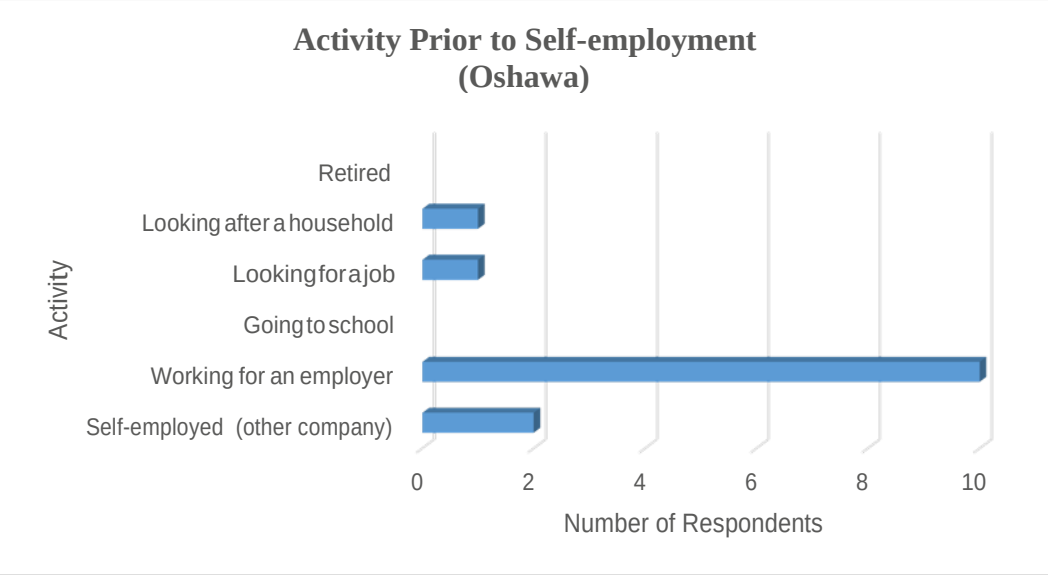

Figure 59

When asked, about the reasons they chose to be self-employed, ability to make your own decisions, flexible hours and meaningful work were identified. Figure 60 further depicts these findings.

Figure 60

- Future Needs and Vocational Training

In terms of the challenges to sustaining self-employment, poor work-life balance was identified as the greatest challenge by the self-employed respondents in Oshawa, followed by low cash flow.

In terms of the future hiring plan, 60% of the self-employed respondents in Oshawa indicated that they had plans to hire employees over the next 12 to 18 months. Employers who did not have plans to hire employees expressed insufficient work for more than one person, do not want the responsibility of employees and difficult to find skilled applicants as the reasons for continuing without employees. Additionally, lack of time and not enough funds were also expressed as factors contributing to the decision to continue without employees.

When it comes to the self-employed respondents thoughts about professional training, 87% of the self-employed respondents in Oshawa indicated that training helped their businesses remain competitive. Among those who undertook professional training, 67% revealed that the training was related to the work they currently performed. In terms of what kind of training they utilize, workshop was ranked at the top place among all training types. In terms of the advantages of undertaking professional training, knowledge of current trends and developments in the field of practice and the opportunity to meet with other in the field were selected by the majority of self-employed respondents from Oshawa as the primary reasons for taking training.

Self-employed respondents who do not take professional training expressed a variety of reasons for this decision. These reasons did not deviate significantly from the overall results. Time and funding were two most common challenges expressed by self-employed respondents in Oshawa.

- Retirement Plan

When it comes to the retirement plan, 40% of the self-employed respondents in Oshawa indicated that they would sell the businesses to a third party. The respondents who would choose to close the business or transfer the business to a third party were 22% and 21%

respectively. Different from other municipalities, only 14% of the self-employed respondents indicated that they were not sure about their retirement plans.

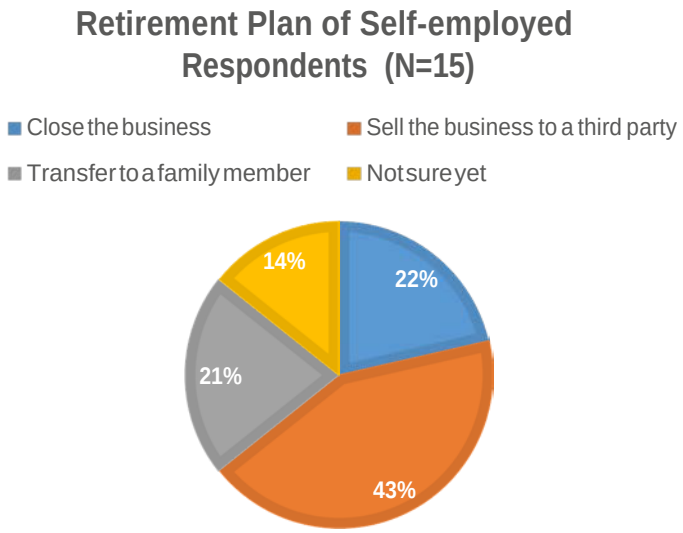

Figure 61

6.5 The Municipality of Clarington

6.5.1 Organizations with Employees

This section will present information on employer demographics, sector and occupations, skill requirements and gaps, hiring practices, future requirements, training, and the business support climate for respondents with employees from the municipality of Clarington. This section will begin by first presenting demographic information from respondents with employees from the results of the Skills For Tomorrow employer survey.

- Demographics

Businesses with employees from the municipality of Clarington accounted for 46 of the 338 total businesses with employees. In total, these businesses represented 13.5% of the total businesses with employees and employed 1,105 individuals. Of these businesses, the most common business size was small businesses (5-99 employees) representing 34 of the returned surveys or roughly 74% of respondents. These findings are detailed in Table 131. The finding that small businesses are the most prevalent is consistent with the understanding that small businesses represent a large share of both total employment and total number of businesses across the Region of Durham and within the municipality of Clarington.

Municipality of Clarington Business with Employees (N=46)		
Employment Size	# of Survey Responses	Total # of Employees
Micro (1-4)	10	26
Small (5-99)	34	750
Medium (100-499)	2	329
Large (500+)	0	0

Table 131

Of the respondents from Clarington who completed the Skills For Tomorrow employer survey, small organizations (5-99 employees) by far employed the greatest number of employees with 675 full-time employees. These results should be understood in concert with the sample size. For this municipality, there were no large employers who completed the survey.

- Sector and Occupational Categories

Manufacturing and Professional, Scientific and Technical Services were the two sectors that the majority of respondents from the municipality of Clarington identified belonging to. These sectors were closely followed by Retail Trade in terms of employer response. There are a number of sectors with no representation. This finding should not be understood to mean that these sectors do not exist in Clarington; however, only that no representatives from these sectors completed the Skills For Tomorrow Employer Survey. These findings are depicted in Table 132.

Sectors	With Employees	Self-Employed
Accommodation and food services	2	0
Administrative and support, waste management and remediation services	2	0
Agriculture, forestry, fishing and hunting	1	0
Arts, entertainment and recreation	0	0
Construction	7	0
Educational services	0	0
Finance and insurance	2	0
Healthcare and social assistance	4	1
Information and cultural industries	0	2
Management of companies and enterprises	0	0
Manufacturing	10	2
Mining, quarrying, and oil and gas extraction	0	0
Other services (except public administration)	7	3
Professional, scientific and technical services	3	2
Public administration	0	0
Real estate and rental and leasing	0	0
Retail trade	4	1
Transportation and warehousing	2	0
Utilities	1	0
Wholesale trade	1	0

Table 132

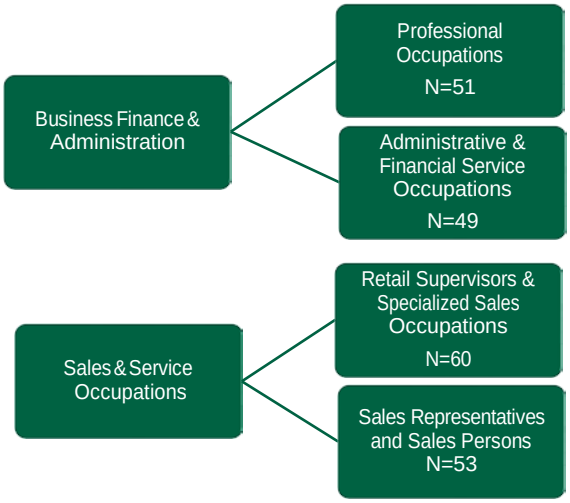

Figure 62

The finding that business finance and administrative occupations were the skill type that existed in the greatest number of organizations was similar to the findings in the overall results. Common occupations that align with this skill type include Professional occupations in accounting and general office administration. Similarly, the second most common skill type sales and service occupations, contains a variety of different occupations which exist across various sectors and organizations. Examples of occupations which align with this skill type include retail sales persons, and customer service representatives.

- Occupational Skill Requirements

The following section will detail employer skill requirements by making use of the four skill levels embedded within the NOC structure which correspond to various levels of education or training.

Overall results for organizations with employees in Clarington did not differ significantly on the important essential skills when compared to the overall results. The occupations that employers most often emphasized the importance for various essential skills for fall within skill level B, the most commonly selected occupational category for where these skills were critical was NOC 12, administrative and financial supervisors and administrative assistants. The results of the second digit NOC examination are further detailed in Table 133.

Skill Level	NOC-2 digit	# of organizations	# of employees
D	72 Industrial, electrical & construction trades	7	195
C	95 Assemblers in manufacturing	4	158
D	96 Labourers in processing, manufacturing & utilities	4	145
B	NOC 12- Administrative & financial supervisors & administrative assistants	15	49

Table 133

Beyond simply clarifying the skill level of employees required by respondents from Clarington, the researchers also sought to understand whether or not employers required a certain minimum credential in order to be employed in any of the occupational categories at organizations from this municipality. This understanding would provide more meaningful insight into the question of skill level by allowing the researchers to understand both skill level and compulsory credential, two features which when combined provide for a powerful understanding of employers' skill requirements.

Overall, the most common credential required by employers was high school or equivalent followed closely by the college certificate or diploma. In total, these credentials were the minimum requirement for 120 occupations. These results are depicted in Table 134.

Minimum Credential	# of Occupations NOC 3 Digit
Less than High School	9
High School or Equivalent	62
Apprenticeship	21
College Certificate/Diploma	60
College Post-Graduate or Advanced Diploma	16
Undergraduate Degree	44
Graduate Degree	3
Professional Degree	7

Table 134

As the NOC framework was employed here, a determination of which occupations required employees to possess these credentials as a minimum requirement for employment was possible. While there were many different occupations that required a minimum credential, the most common occupations that organizations required credentials for were NOC 122 administrative and regulatory occupations, which required a college certificate/diploma, NOC 141 general office workers, which required a high school or equivalent and NOC 001 senior management which commonly required an undergraduate degree.

- Hiring Practices and Challenges

The examination of the hiring practices for respondents in Clarington began by asking whether or not they had hired new employees in the past 12-18 months. Overall, 42 employers from Clarington expressed having hired 385 employees during this time. These results demonstrate a greater employment growth in Clarington through hiring compared to the overall results. The most common occupations hired across multiple organizations include NOC 124 office administrative assistants, general, medical, legal, NOC 961 labourers in processing manufacturing and utilities, NOC 662 other sales support and related occupations and NOC 761 trades helpers and labourers. In total, these occupations were hired by 16 of the employers who had recently hired employees.

Employers were then asked whether or not they experienced any difficulty attracting applicants for available jobs. From the 42 employers who expressed having hired recently, respondents expressed difficulty hiring employees in 34 occupational categories. Overall however, the majority reported no challenges hiring employees. Occupational categories where employers experienced difficulty were, varied. Occupations where the greatest number of organizations experienced hiring challenges

include NOC 921 supervisors, processing and manufacturing occupations and NOC 662 other sales support and related occupations.

The Skills For Tomorrow employer survey asked respondents who expressed difficulty in hiring to indicate which issues affected their ability to attract qualified candidates to available positions. Most employers chose the inability to offer competitive pay, and other attraction related issues. These findings mirror the overall results. Upon further examination of the "other" attraction related issues identified by respondent comments, a general lack of skilled candidates, and the short duration of work (contract, seasonal, part-time) were emphasized as issues employers' believed impacted their ability to attract qualified candidates. Table 135 reflects the issues employers expressed as affecting their ability to hire.

Organization-Specific Attraction Issues	#
Unable to offer competitive pay	11
Unable to provide work life balance	3
Limited opportunities for advancement	3
Lack of competitive benefits	3
Lack of professional development opportunities	2
Other attraction issues, please specify	12

Table 135

As a follow up to the question about organizational characteristics which impact hiring, employers were also asked to reflect on general challenges related to hiring. When asked about these general challenges, employers in Clarington identified a lack of qualified individuals and a lack of skilled applicants as two key areas of importance which were impacting their ability to hire generally. Other areas mentioned by employers in the comments section included poor work ethic, unreliability of employees, and candidates requiring too much supervision. These and the other challenges expressed by employers are displayed in Table 136.

General Hiring Challenges	#
Lack of qualified individuals	26
Lack of skilled applicants	24
Lack of experienced candidates	23
Candidates do not have the right workplace skills	20
Competition from other employers	11
Candidates are overqualified	1
Other, please specify	6

Table 136

With an understanding of general hiring challenges faced by employers in Clarington, a better understanding was sought of employers' hiring practices and patterns. In order to develop this understanding, employers were asked to reflect on the hiring patterns at their organization indicating any strategies used and the time of year when they engaged in hiring. The vast majority of respondents indicated that they made use of internal criteria to screen candidates with a slightly higher than overall use of external organizations in Clarington. Similarly, most employers chose to hire on an as needed basis with a small

minority keeping an open pool of candidates for future hiring needs. These findings are displayed in Table 137.

Hiring Practice	#
Use an external organization to screen candidates	10
Use internal criteria to screen candidates	44
Employ software to screen resumes	1
Other (please specify)	3
Total	58

Hiring Time	#
Hire at specific times during the year	7
Hire on an as needed basis	43
Keep an open pool of candidates for future hire	17
Total	67

Table 137

Hiring practices were further examined in light of specific channels employed by respondents. The most frequently used strategies were, word of mouth, followed by employee referral and e-postings. The channels which generated the most candidates were word of mouth, followed by employee referrals. These findings are further depicted in Figure 63. One notable difference from the findings in Clarington compared to other municipalities was a slightly higher likelihood to make use of walk-ins as a means to hire candidates. It is important to note when interpreting these findings that regardless of whether or not respondents used the services, they still commented on whether or not the various strategies generated candidates. The specific findings are further detailed in table form and included as part of Appendix 3.

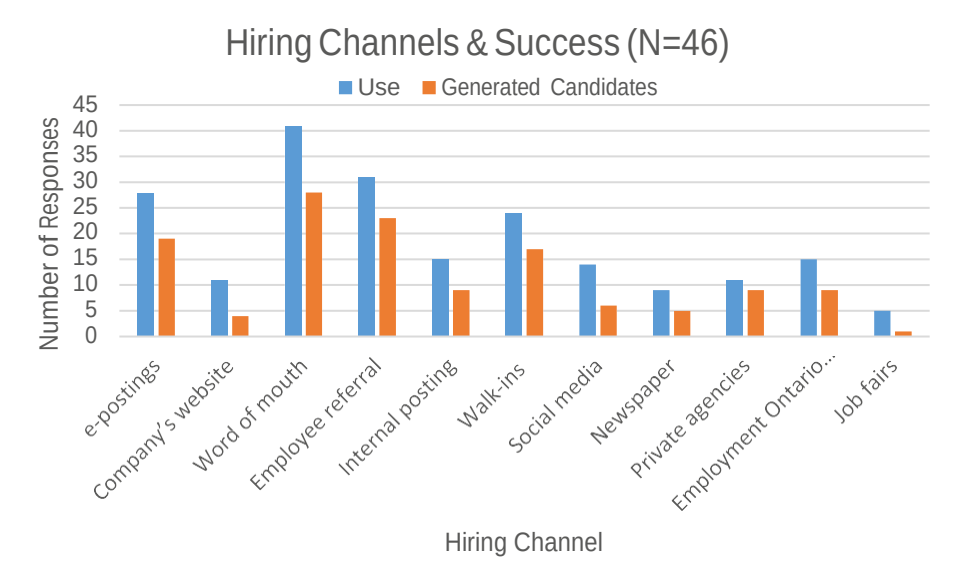

Figure 63

- Workforce Requirements: Current and Future

The Skills For Tomorrow employer survey then asked employers whether or not they planned to hire additional employees in areas where they already employ over the next 12-18 months. In total, 31 organizations indicated having plans to hire new employees in 32 different occupations over the next 12-18 months. These anticipated hires amount to a total of 142 hires. The most commonly reported areas of expected hiring are displayed in

Table 138. When asked, the majority of respondents indicated that their anticipated hiring plan would keep workforce levels steady. Although this question does not specifically address the issue of retirement, the findings seem to indicate that there will be a significant number of retirements expected in the next 12-18 months.

NOC	# of Candidates	Skill Level
761 Trades helpers & labourers	25	D
961 Labourers in processing, manufacturing & utilities	24	D
727 Carpenters & cabinetmakers	20	B
729 Other construction trades	10	B
642 Retail salespersons	8	C

Table 138

Next, employers were asked whether they anticipated their organization hiring in occupational categories where they had not previously employed. This understanding would allow for a better understanding of whether or not organizations planned to expand their operations to include new areas. In total, 29 employers indicated that they did not plan to expand their hiring to new areas not previously employed. Sixteen organizations planned to expand their operations into new areas, slightly higher than the overall results. The two occupations that were most anticipated to grow were NOC 723, machining, metal forming, shaping and erecting trades and NOC 112, human resources and business services professionals. Together, these occupations represented 12 new positions out of the 32 total new positions anticipated by employers.

The next area of significant importance was retirement. Respondents were asked whether there were individuals in their organization who were expected to retire over the next 3-5 years. Results were mixed with 20 organizations, slightly less than half, expecting retirements compared to 26 organizations who were not expecting retirements. In total, respondents expected 75 retirements in 22 different positions. The occupations in which the most retirements are expected are displayed in Table 139.

NOC	# of Retirements
761 Trades helpers & labourers	15
727 Carpenters & cabinetmakers	10
729 Other construction trades	10

Table 139

Respondents were also asked whether their organization was currently, or planning to undertake actions to address organization-specific knowledge or skill gaps resulting from retirement. Most respondents indicated that transferring knowledge to successors and creating a succession plan for key roles were their primary efforts to address skill gaps related to retirement. Additionally, there were a large number of respondents who indicated not having any plan. These results are further detailed in Table 140. An analysis of the retirement related strategies in Clarington support three prominent approaches to retirement. Organizations that do not have a plan for retirement, organizations in the early stages of planning, and organizations engaged in responding.

Actions to Fill the Skill Gaps Resulting from Retirement	# of Organizations
Creating a succession plan for key roles	22
Transferring knowledge to successors	22
We don't currently have a plan	18
Building internal vocational/professional training programs to strengthen the pipeline for key roles	14
Identifying new talents pools to access specialized capabilities	13
Identifying the roles and capabilities occupied by retirement eligible employees	12
Building external vocational/professional training programs to strengthen the pipeline for key roles	4

Table 140

- Vocational/Professional Training

The next section of the Skills For Tomorrow survey examined vocational/professional training offered to employees. This section began by asking whether the organization provided training to its employees. Results were mixed but a slightly higher share of employers in Clarington provided training to their employees than the overall results. In total, 26 organizations indicated that they provided training to their employees while 20 organizations indicated they did not. In total, training was provided to employees in 35 different occupational categories. The most popular occupational categories that employers indicated providing training to and the topics of this training for are displayed in Table 141.

NOC	# of Organizations	Topics of Training
141 General office workers	3	*-IT/Cloud* *-Job Specific/Advancement*
001 Senior management	3	*-Health & Safety/People Management* *-General Management Training*
761 Trades helpers & labourers	3	*- Supervisory*
961 Labourers in processing, manufacturing & utilities	3	*- Health & Safety* *- Skill Specific*

Table 141

Respondents who indicated that they provided training to their employees were then asked to identify the provider of the training. The most popular source of training was internal, followed by training offered by a consultant. These results are further displayed in Table 142. It should be noted that for this question employers were able to select multiple options. With this programming employers would be able to select multiple training providers if their organization made use of more than one training provider.

Internal Provider	Consultant	College	Private College	Union	University
24	18	14	0	3	1

Table 142

Employers who did not indicate that they provided training for their employees were then asked to identify barriers that prevented them from offering training. Options were presented in such a way as to allow employers to select multiple barriers to the provision of training. Additionally, there was a text box to allow employers to further express any additional barriers to offering training. These results are presented in Table 143.

Barriers Preventing Organizations from Training	Significant Concern	Somewhat Concerned	Not a Concern
It is too difficult to schedule training or it is too disruptive to our ongoing work	5	8	4
I am worried about losing productivity during training time	4	8	5
I am not sure that I can find a trainer to deliver the training that I need	4	6	8
My current training needs are not offered locally	4	6	7
I am worried about the cost, regardless of the benefits	3	9	6
I am worried the staff's preference and motivation of learning	2	6	9
I am worried if I provide training my staff will be lured away	1	4	13
Training will not make a significant difference to my organization's bottom line	0	8	9
I am not convinced that training would improve the skills of my workers	0	5	12

Table 143

The top significant concern for not offering training was uncertainty about finding an appropriate provider. The top "somewhat" of a concern was difficulty scheduling training. When offered the opportunity to clarify concerns via text box, employers emphasized the lack of specialized training required, and the disruptive nature of training to the workforce.

- Business Support Climate

Respondents from the municipality of Clarington were asked to evaluate a number of the services that the Region of Durham provided. In addition to this evaluation, respondents identified the most critical services for developing their businesses. The full list of services is shown below.

Durham Region Business Support Climate

- Healthcare services
- Hydro/Electric power
- Other utilities (e.g. water, gas, sewage)
- Access to public roads
- Public transportation
- Business sites and land use
- Telecommunication services
- Technology services
- Accounting/Payroll
- Recruitment services
- Business promotion services
- Sales
- Legal services

In order to evaluate the services provided by the Region, respondents were asked to choose one of the following levels to describe the service. For the purpose of scoring these responses, the values in Table 144 were assigned to each response:

Response	Score
Excellent	3
Above Average	2
Below Average	1
Poor	0

Table 144

Once the responses were coded, the results were presented in Figure 64. Findings demonstrated that organizations with employees ranked Healthcare Services as the best service in the Region with recruitment services as the lowest. It should be noted; however, that although these were ranked low compared to other services, most respondents generally perceived the services in the Region as being of high quality.

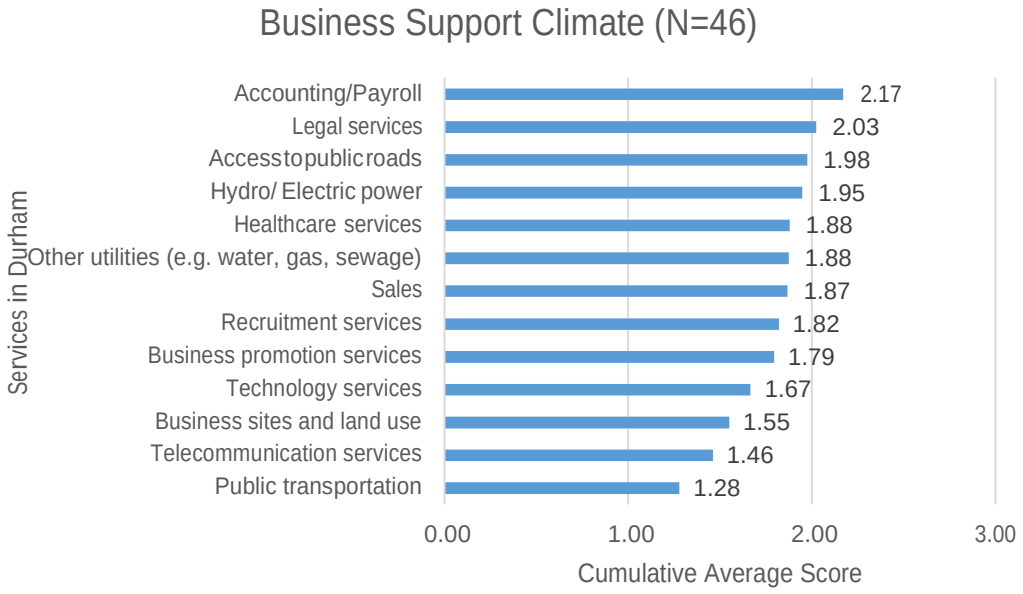

Figure 64

Finally, respondents were asked to identify the three business supports most critical to the long-term success of their organization. Hydro/Electric Power, Business Promotion Services and Telecommunications were the top three services identified by respondents from Clarington as critical to their long-term success. It is important to note that hydro/electric power was equally emphasized as both the first, and second most critical business support, demonstrating the significant importance of this to the long-term success of businesses.

6.5.2 Self-employed Business

Based on the Skills For Tomorrow employer survey, there is not sufficient data to assess self-employed businesses in the municipality of Clarington.

7.0 Recommendations and Conclusions

The Skills For Tomorrow employer survey made inroads into new areas of the local labour market never previously examined. As a result of this innovative and targeted approach there are a number of recommendations for next steps proposed:

1. The examination of additional affiliated locations was a tremendous strength of the Skills For Tomorrow employer survey design. Building on these findings by identifying the corresponding sectors to which these organizations belong will enhance understanding of the connections between businesses in the Region.

2. The LMI collected by the DWA LEPC pilot is comprehensive, touching every sector of the local economy. By choosing to continue with the collection of LMI, enhanced understanding of the local labour market could be achieved by incorporating supply and demand side data to ongoing data collection.

    a. Ongoing collection of LMI will enable the monitoring of trends and patterns while supporting informed decision-making.
    b. Integration of supply side data will enable a more accurate and detailed assessment of the local labour market including gaps.

3. The use of NAICS to divide the local economy was a key feature of the LEPC project that demonstrated a commitment to integrating best practices into LMI connection. Continued promotion of consistent definition of sectors that meaningfully represents the local labour market through the use of NAICS is an important feature for future inquiry.

    a. For comparative purposes it is essential that LMI be collected and maintained in a consistent fashion. The framework of NAICS offers such a platform. To be used consistently, this requires employers to be informed about the classification system.
    b. Where clusters are developed and employers are grouped, the rationale for these groupings should be consistent and clearly identifiable.
    c. Allow for the selection of multiple NAICS to enable a fulsome understanding of the diverse functions performed by organizations including how these organizations are connected to multiple sectors.
    d. Emphasize NAICS in all reports about the local labour market to limit the possibility of employers not being aware of what sector of the economy their organization belongs to.

4. The Skills For Tomorrow employer survey was successful at achieving proposed targets. While the imposition of sector response targets is a helpful way to ensure representation of sectors with known importance to the local economy, these targets may also lead to data that are not representative of the local labour market. Sector targets should only be set at a level believed to correspond to their representation in the local economy.

5. The information collected on total number of full-time employees in the Skills For Tomorrow employer survey provided unique insights into employment in the Region. This should be expanded to further detail a variety of different employment arrangements.

    a. Seasonal positions, contract positions and part-time positions examined in additional detail would provide for a more fulsome understanding of Regional and sector-level employment.

6. The Skills For Tomorrow survey provided meaningful insights into employers' essential skills. Many gaps were identified related to both essential and job-specific skills required by employers. Through this project, the meaning of "skills" was discovered to be misunderstood by a variety of respondents. By employing consistent terminology related to skills gaps, mismatches or other challenges that face local economies this confusion can be mitigated.

7. The intensive review of secondary data as part of the development of the Skills For Tomorrow employer survey enabled the development of this powerful tool for LMI collection. Continued promotion of data sharing programs and knowledge about local labour markets will enable consistently excellent LMI collection.

    a. Sharing quantitative data through open data initiatives.
    b. Building understanding of qualitative insights through strong local partnerships and ongoing opportunities to engage in dialogue.
    c. Limit the burden placed on employers through constant demands to respond to information collection initiatives.
    d. Educating LMI users about the difference between essential skills and essential employability skills.

8. Promote the understanding that Durham Region employers require a trained and highly skilled workforce to satisfy their employment needs.

    a. Encourage the pursuit of education that is commensurate with that which is commonly required to satisfy the employment requirements.
    b. Continue to make training available to all segments of the labour force.

9. By extensively examining current hiring and future hiring plans, the Skills For Tomorrow employer survey enables LMI users to understand both current and future employer needs. These should be understood in concert with and not apart from each other.

    a. Understanding that although a majority of businesses anticipate hiring to keep workforce levels steady provides powerful, intertwining insight into needs of local employer. Further investigation to determine the reasons underpinning this trend is a must.
    b. Examining specific hiring challenges enabled a more detailed understanding of the multiple issues that impact hiring.
    c. Questions about general hiring challenges demonstrate the mutual challenges shared by respondents in all sectors of the economy. Examining these challenges can provide for a meaningful starting point for responses to come from.

10. Retirements are a known area of importance that can affect a local economy. The issue of retirement was thoroughly examined both at the organization and occupational level. This understanding should be used to inform strategies among organization and partners to create a pipeline that will fill the skill and knowledge gaps that result from retirement.

    a. Organizations should examine the occupations most reported to be affected by retirement and develop strategic responses that target these areas.

11. Develop a unique survey to facilitate greater participation from large employers.

a. The level of detail provided by the Skills For Tomorrow survey is ideal; however, this level of detail may prove to be a barrier for large employers who would have to dedicate a significant amount of time to meaningfully respond to the survey.

12. Training was identified by respondents as having many benefits for their respective organizations. The results indicated that training was still underutilized by a variety of organizations in a number of different sectors. Efforts should be undertaken to ensure that training is made accessible and responsive to the changing needs of employers.

13. E-commerce was identified by many self-employed respondents from the Information and Cultural Industries sector as a means through which they conduct business. This method, however, was not commonly utilized in other areas of self-employment. This provides a unique opportunity for organizations that support small business to deliver support in this area.

14. The use of the four skill levels embedded within the NOC framework provides LMI users with a unique opportunity to measure the level of skill commonly required for a variety of occupations and to compare this with the credentials that employers also require employees to possess.

a. This understanding can be used by individuals seeking a new occupation to self-assess the skills and credentials they possess relative to those required by organizations for similar positions.
b. Employers in common sectors can use this information to compare their minimum requirements to those that exist in other organizations

Conclusions

The information collected through the What Employers Need: Skills For Tomorrow employer survey provides a strong foundation for informed decision making in response to challenges facing the local labour market. The unique insights highlighted by this report demonstrate the value that these projects can add to local economic planning and development. The unique features of the economy in south Durham Region captured as part of this LMI collection present a number of opportunities in the near term. Through planning, and the engagement of multiple stakeholders, the proper alignment of workforce skill and employer demand can be achieved creating a strong local economy that is inclusive for all.

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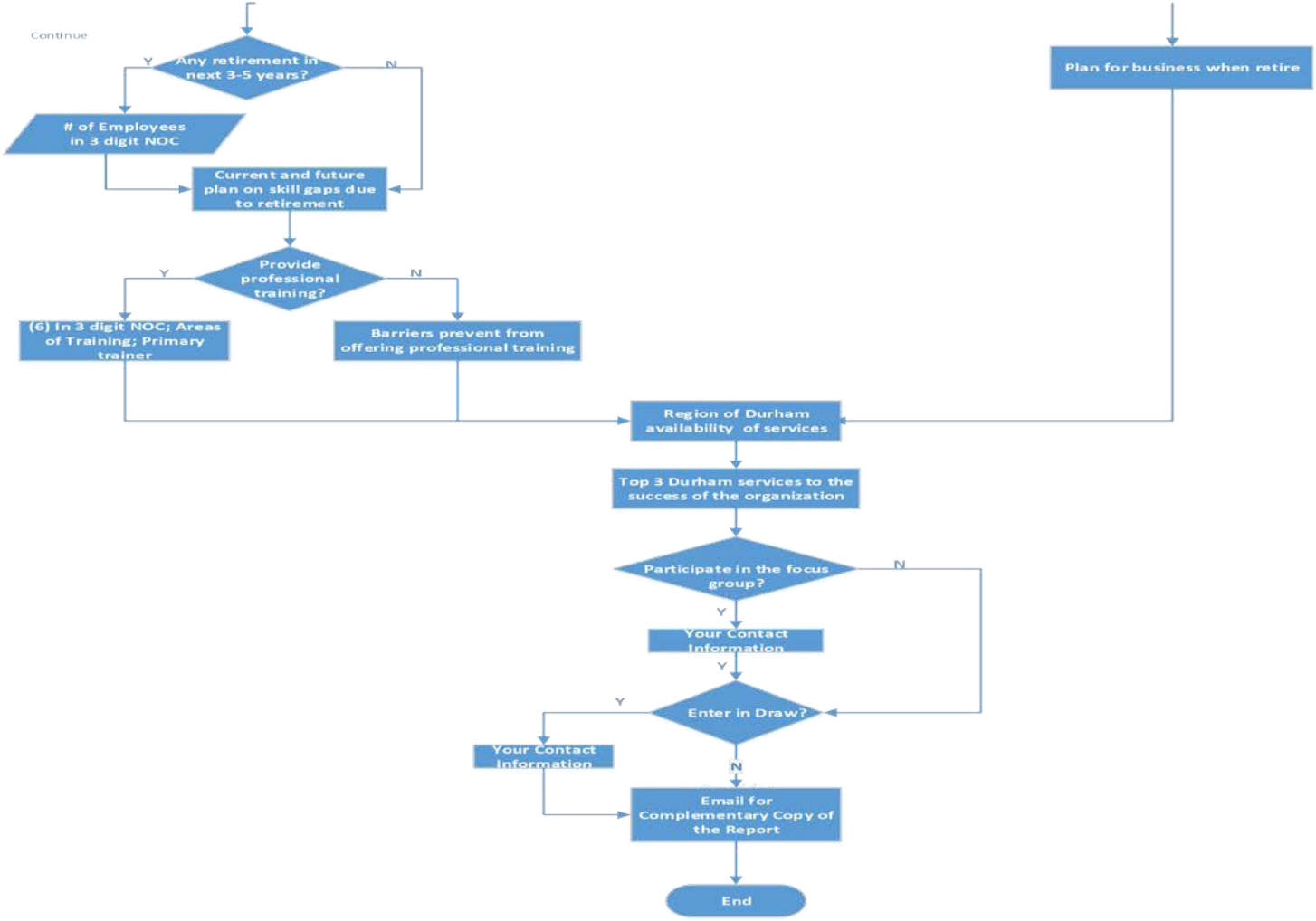
9.0 Appendices

Appendix 1



Explanation:

(1) Minimum Credential: For the occupational categories employed, please indicate the minimum credential required for an entry level job in each occupational category.

(2) Certification: For the occupational categories employed, please indicate any requisite certification or accreditation for an entry level job in each occupational category.

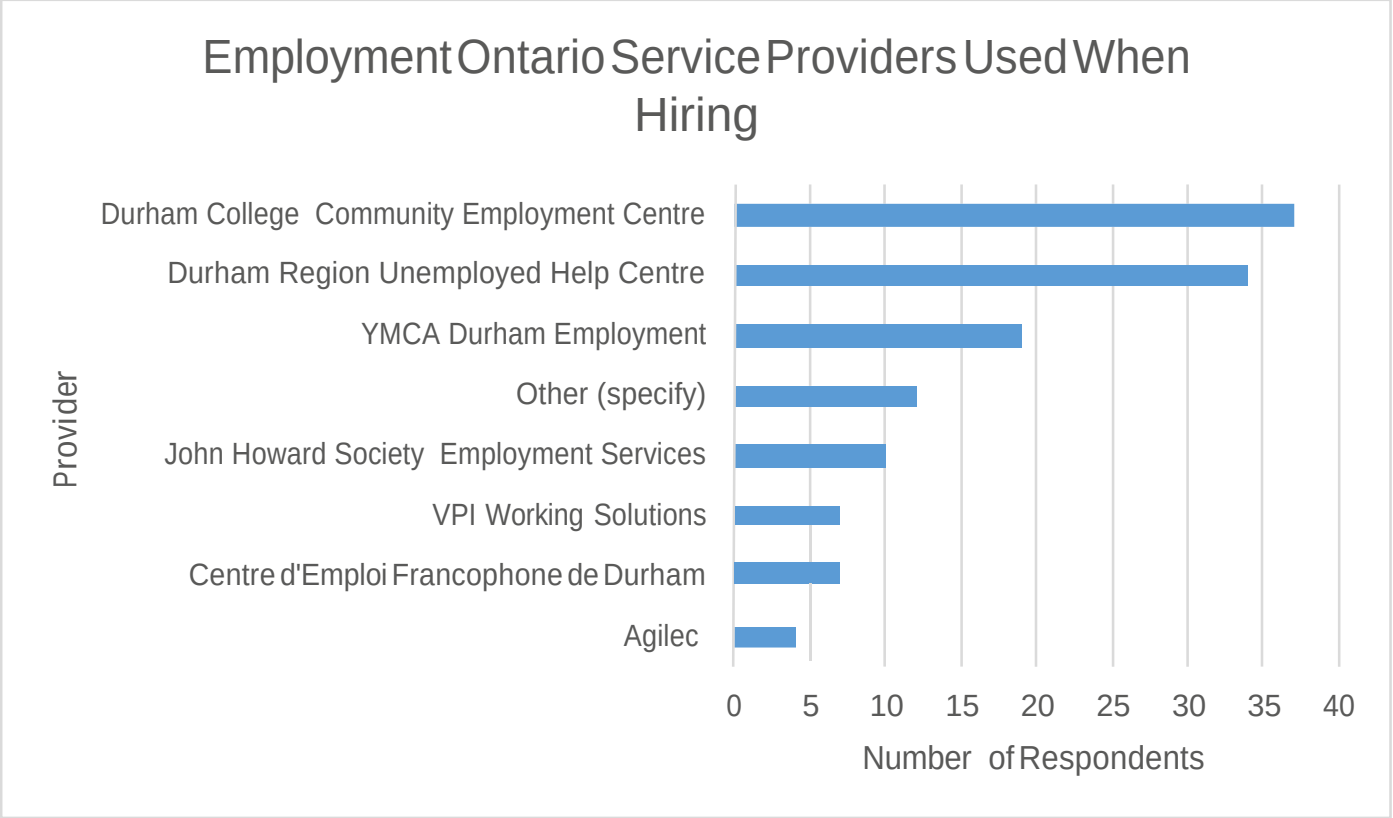
(3) Essential Skills: Please indicate which essential skills are critical for employees to effectively perform their role in each occupational category.

(4) Age (optional): This is an optional question for asking self-employer's age.

(5) Highest Credential: Indicate the highest level of credential that self-employer completed prior to undertaking self-employment.

(6) In 3 digit NOC; Areas of Training; Primary trainer: Please indicate in which occupational category that your organization provides training; what areas about the training (text-box); who is the primary trainer for this training (options: university, college, consultant; union; internal trainer)

Appendix 2



Appendix 3

Respondents who indicated they used an Employment Ontario Service provider as part of their hiring practices who identified "other" provider specified the other providers they utilized as part of their search for employees.

Other Provider Specified	Number of Respondents
Ontario Job Bank	3
Service Canada	2
Unsure of name	1
Email through DREN to all E.O service providers	1
Income and Employment Supports	1