

Manufacturing and Construction Sector Partnership

Labour Market Strategy

Bruce County, Grey County and Huron County

Four County Labour Market Planning Board

November 27, 2017



Acknowledgments

The Manufacturing & Construction Sector Partnership Labour Market Strategy is the result of the collaboration between many individuals, companies and organizations. The contributions made by all are greatly appreciated.

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Many additional stakeholders contributed to this study, including several employers, Employment Service providers, and other community stakeholders. We thank all participants for their contributions to this project.

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Executive Summary

Objective

The aim of the Manufacturing and Construction Sector Partnership Labour Market Strategy was to identify broad and specific labour market challenges affecting both Sectors in Bruce, Grey and Huron counties, and make recommendations to address identified challenges. The following report was developed using a wide range of secondary and primary data sources. Local large employers, Employment Service providers, College representatives and the Manufacturing and Construction Advisory Committee were all consulted.

Labour Market Analysis

An analysis of secondary data revealed four key labour market trends impacting the Manufacturing and Construction Sectors in Bruce, Grey and Huron counties. The key trends are:

1. **Rapidly Shrinking Labour Force:** Since 2004, the Stratford-Bruce Economic Region labour force has declined by 18,700 people, an 11% drop. The primary cause of labour force decline has been population aging. The impact of aging within Manufacturing and Construction is not evenly spread across occupations. Welders, Carpenters, Plumbers, Construction Managers, Transport Truck Drivers and Labourers in Metal Fabrication all show signs of relatively high and substantial workforce retirement in the near future.
2. **Constricted Labour Market:** Regional unemployment rates are low across age cohorts. Similarly, regional participation rates across age cohorts are above or comparable to provincial rates.
3. **Substantial Labour Market Churn:** Excluding seasonal hires, an estimated 21,389 people were hired within the Stratford-Bruce Economic Region in 2016. At the same time, permanent layoff rates for youth, aged 15 to 24 years, were more than double the regional average layoff rate. Permanent layoffs within Construction, which excludes seasonal layoffs, were three times higher than the regional average rate.
4. **Lower Skill Gap:** Manufacturing and Construction job vacancies are highest within lower skill or entry type occupations. At the same time, Sector unemployment rates are highest within the same low skill occupations, indicating the presence of significant barriers to employment for job seekers within these occupations.

Stakeholder Consultations

Discussions with Sector employers confirmed secondary data trends, particularly the experience of labour shortages. A recent employer survey indicated that 66% of Construction respondents and 59% of Manufacturing respondents had difficulty filling positions in the past 12 months. Both Sector employers and regional Employment Service providers suggested a number of obstacles were impeding employer workforce attraction and retention efforts, and also impeding job seekers efforts to secure employment. A lack of affordable housing and weak soft skills within the workforce were identified as the two most important obstacles for both employers and job seekers.

Recommendations and Actions

The context of labour scarcity requires a prioritization of workforce planning resources in Bruce, Grey and Huron counties. The recommendations below focus on actions that address key labour market gaps and obstacles. While efforts to remove obstacles cannot reverse the impacts of population aging, they can support and strengthen local employers' success in meeting labour force needs, while at the same time improving employment prospects for the local workforce. Importantly, effective responses to

identified gaps and obstacles can also be expected to support initiatives aimed at attracting labour from outside the region, and in some cases will be required in order for any attraction efforts to be effective.

Action: Identifying High Demand Occupations

While secondary data indicates that the most pressing Sector labour needs fall within low skill or entry occupations, analysis also revealed a local shortage of Welders, a skilled occupation. Importantly, data limitations precluded identification of additional skilled shortages. Of note, future skilled labour demands resulting from Bruce Power's expansion and impending retirements in many skilled occupations are likely to create additional skilled labour shortages in the near future.

The purpose of this action is to provide clarity around these future shortages and inform areas of prioritization for local workforce planning resources. Soon-to-be-released 2016 Census data will provide a unique opportunity to obtain a comprehensive and detailed analysis of Sector occupations that are in high demand. The identification of high demand occupations can then be used to inform and focus Sector engagement strategies.

Action: Engagement Strategies for Filling High Demand Occupations

Once high demand occupations have been identified, explicit activities can be pursued that focus on developing a funnel of relevantly skilled workers. It is recommended that the following activities be considered:

- Establish a foundation for a strong and successful high demand occupation support program
- Promote skilled trades to youth and their parents
- Enhance local training opportunities
- Develop pathways messaging and career development

Action: Address Shortage of Welders

Current data was able to identify a regional labour shortage in Manufacturing Welder occupations. The regional job vacancy for Welders is well above the average regional vacancy rate and above the provincial rate for the same occupation. 2011 National Household Survey data suggests the local labour shortage of Welders will worsen due to impending retirements. Importantly, a shortage of Welders also exists within the rest of Ontario. This means that attraction and retention of Welders will be difficult, as employment options for Welders are plentiful across the province.

Satisfying the demand for Welders within Bruce, Grey and Huron will require two approaches:

- The promotion of welding as an attractive career to young people
- A significant increase in the number of local employers that take on welding apprentices

Action: Implementation of a Sector Focused Soft Skill Program

Manufacturing and Construction Sector labour markets are defined by a lower skill gap. Sector labour shortages are most acute within lower waged, entry type occupations. At the same time, unemployment levels were shown to be highest for these same skill groups. The presence of a lower skill gap indicates obstacles to employment within the labour market. High permanent layoff rates for local youth and within the Construction Sector indicate additional obstacles to employment retention within the same lower skill and entry type occupations.

A Sector focused soft skills training program is recommended to address the Sector lower skill gap. Sector employers and regional Employment Service providers indicated that weak soft skills, particularly for lower skilled workers, were a significant obstacle to obtaining and maintaining employment within the Sector. Research has indicated that soft skill training programs that take into consideration the individual capabilities and characteristics of participants, and participants' broader economic and industry environment, can result in improved employment outcomes for both employers and workers. A full assessment of local soft skill needs and delivery capacity from both Sector employers and Employment Service providers is recommended to inform an appropriate training program.

Action: Build a Comprehensive Regional Affordable Housing Strategy

Improving local employee residents' access to affordable housing within Bruce, Grey and Huron counties should become a regional priority. Sector employers have indicated that a lack of affordable housing has become a significant obstacle to workforce attraction and retention. Migration data indicates that all three counties are losing residents with lower incomes. At the same time, Sector job vacancy and job posting data indicate that labour shortages are particularly acute for lower waged, entry type positions. Thus, the region is losing segments of the local workforce that are most in demand by Sector employers.

A full assessment of regional housing needs, including the needs of unemployed individuals, those employed with low to moderate incomes and seniors would inform regional housing priorities and build wider community support for a housing strategy. A comprehensive approach to housing affordability that highlights affordability as an issue facing many community members and having broad economic impacts can help draw together community stakeholders, including employers, non-profit organizations and municipal representatives around a regional housing strategy.

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Introduction

The Manufacturing and Construction Sectors within Bruce, Grey and Huron counties employ a significant number of people within the local economy. The majority of these jobs are full-time and well paying. Despite this, Manufacturing and Construction employers report great difficulty attracting and retaining employees of all skill types.

It is expected that hiring and retaining workers will only get worse with Bruce Power estimating that a 20 year retrofit of six reactors at the Bruce Power station will require an additional 5,000 employees annually. Given Bruce Power's capacity to offer high wages and out-compete local employers for available labour, particularly smaller Manufacturing and Construction firms, a plan to address labour market shortages is required.

The objective of this project is to provide a labour market strategy that identifies broad and specific labour market challenges, offers practical recommendations and actionable steps that help employers and employees fulfill their workforce needs.

The document is organized as follows:

Part 1: Labour Market Analysis - Including regional and Sector specific data.

Part 2: Consultations - Summary of insights from Sector employers and regional Employment Service providers

Part 3: Recommendations and Actions

Research Approach

The research approach is designed to identify overall and Sector specific labour market challenges and issues. This is accomplished using secondary data and through stakeholder consultations.

Much of the secondary statistics for this report are drawn directly from Statistics Canada or are derived from Statistics Canada data. The Labour Force Survey is used to assess the general labour market conditions of the Stratford-Bruce Economic Region. Data from the Jobs Vacancy and Wage Survey is used to identify occupations where job vacancies exist within Bruce, Grey and Huron counties. Information from the National Household Survey is used to identify the employment structure, including detailed occupations, within the Manufacturing and Construction Sectors. A Statistics Canada custom tabulation also provides insight into labour market churn, including statistics on job hiring and job loss rates, and job losers versus job leavers.

Another secondary data source is TalentNeuron (a web crawler), which is used to identify local job postings by occupation and skill. The research also drew on several surveys conducted by the Four County Labour Market Planning Board. These surveys include: Employer One, Skills Inventory – Employer Survey and the Skills Needs Survey.

It should be noted that this research uses the most current data available; however, depending on the variable examined, the year varies. In some cases, the most current data available is 2011, while in other instances data from 2017 is the most current available.

Analysis of the secondary data is used to help shape and focus consultations. Focus groups with the Manufacturing and Construction Sectors' largest employers, Employment Service providers and College representatives were also conducted. The purpose of the focus groups is to identify labour market obstacles and discuss practical strategies and actions that can be used to alleviate constraints.

Geographic Area Defined

All efforts were made to examine data for the catchment area of this study, which includes Bruce County, Grey County and Huron County. In some instances, data could only be obtained for the Stratford-Bruce Economic Region, which includes the Census Divisions of Bruce, Grey, Huron and Perth.

Manufacturing and Construction Business Composition

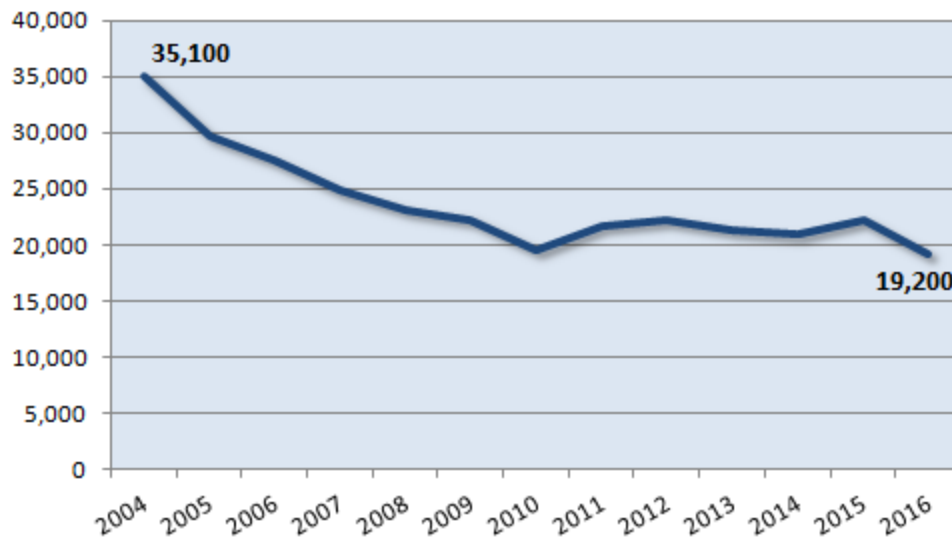
Manufacturing Sector Composition and Trends

Business Characteristics & Employment Trends

Manufacturing continues to play a leading role in the regional economy. In 2016, the Manufacturing Sector employed 19,200 people in the Stratford-Bruce Economic Region, accounting for 13.2% of total regional employment. Measured by employment, Manufacturing was the second largest Sector in the region. Further, since declining from a high of 35,100 employed in 2004, employment in Manufacturing has stabilized over the past six years (see Figure 1).

Recent secondary data and upcoming infrastructure projects suggest growth potential for the Sector. Bruce Power estimates that a 20 year retrofit of six reactors at the Bruce Power station will require 5,000 jobs annually, including jobs created by local Manufacturing suppliers. Even though total Manufacturing employment dropped in 2016 (see Figure 1), since December 2014, the number of Manufacturing firms in the region has increased by 4.4% (see Table 1). Within the Sector, micro and medium sized firms, and those without employees have all experienced growth over the past two and a half years. The leading industry specializations in the region include fabricated metal, wood, food, machinery and furniture Manufacturing (see Appendix, Table A1 for complete list of NAICS 3 digit industry groups in the Sector).

Figure 1: Manufacturing Employment in Stratford-Bruce Economic Region, 2004 -2016



Source: Statistics Canada, Labour Force Survey. CANSIM Table 282-0125

Table 1: Manufacturing Firm Structure & Growth; Grey, Bruce & Huron Counties, June 2017

	Number of Firms	Percent of Total Firms in Sector	Growth Rate Since December 2014	Percent of Firms in All Industries
Total	759		4.4%	2.8%
Without employees	420	55.3%	7.4%	2.1%
Micro (1 -4 employees)	134	17.7%	3.9%	3.4%
Small (5 - 99 employees)	186	24.5%	-2.1%	5.7%
Medium (100 - 499 employees)	18	2.4%	12.5%	15.9%
Large (500 plus employees)	1	0.1%	0.0%	14.3%

Source: Statistics Canada, Canadian Business Counts. Custom Table

Occupation & Employment Structure

Sector occupation and employment structures inform employment opportunities as well as education and training demands. Employment opportunities in Manufacturing are predominantly for full time positions. A recent employer survey indicated that almost 95% of employment positions within Manufacturing were full time.¹ Regional opportunities within Manufacturing are concentrated in occupations that require technical skills or college diplomas (B skill type) and high school plus job specific training (C skill type).² Over 70% of Manufacturing related occupations in the region are classified as B or C skill types (see Table 2). That said, the Sector includes positions across a wide range skills and occupations. There are 133 distinct Manufacturing related occupations for which ten or more people are employed regionally. Table 3 provides a list of the top ten occupations by employment.³

The labour force age structure within Manufacturing closely parallels the regional labour force structure (see Appendix Table A2). It is worth noting that D skill type occupations within Manufacturing contain a high number of younger aged workers, 15 to 24 years. While 13.6% of the total Manufacturing labour force is aged 15 to 24 years, 30.9% of the labour force for D skill type occupations are aged 15 to 24 years.

Table 2: Manufacturing Employment by Occupational Skill Type; Bruce, Grey & Huron Counties, NHS 2011

Skill Type	Percent of Total Sector Employment
0 - Management	10.1%
A - Usually requires university degree	2.2%
B - Technical/Trade skills or college diploma	30.2%
C - High school and/or job specific training	41.5%
D - Job specific training	16.0%

Source: NHS 2011

¹ EmployerOne 2017 survey.

² See Appendix Table A4 for descriptions of all Statistics Canada skill types.

³ Occupations are grouped using detailed NOC 4 digit system.

Table 3: Top Ten Manufacturing Related Occupations by Employment Size; Bruce, Grey & Huron Counties, NHS 2011

NOC 4 Digit Occupation	Skill Type	Percent of Total Sector Employment
9617 Labourers in food, beverage and associated products processing	D	6.0%
0911 Manufacturing managers	O	4.6%
9522 Motor vehicle assemblers, inspectors and testers	C	4.1%
9461 Process control and machine operators, food, beverage and associated products processing	C	3.7%
7237 Welders and related machine operators	B	3.4%
7452 Material handlers	C	3.3%
7311 Construction millwrights and industrial mechanics	B	3.1%
9619 Other labourers in processing, manufacturing and utilities	D	3.0%
7511 Transport truck drivers	C	2.9%
9612 Labourers in metal fabrication	D	2.1%

Source: NHS 2011

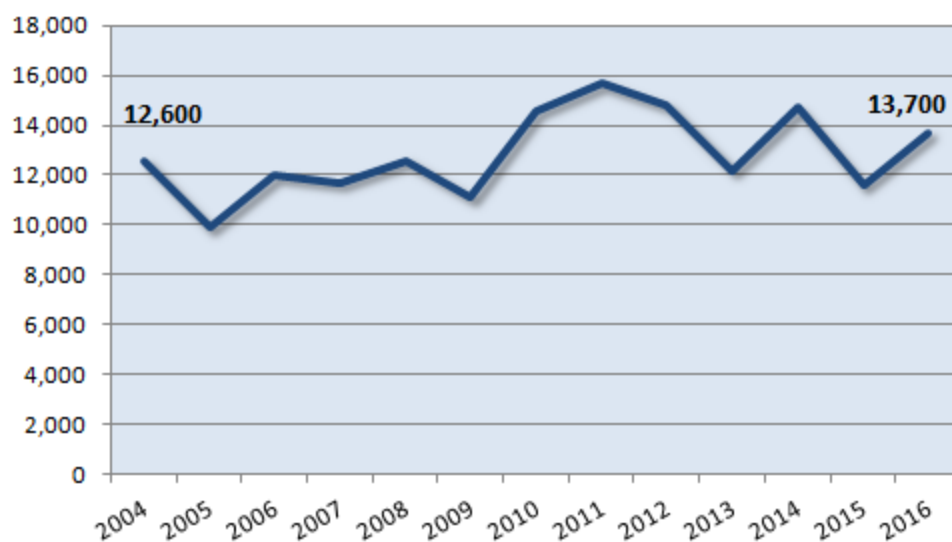
Construction Sector Composition and Trends

Business Characteristics & Employment Trends

In 2016, the Construction Sector employed 13,700 people in the Stratford-Bruce Economic Region and accounted for 9.4% of total regional employment. Measured by employment, Construction was the fourth largest Sector in the region. Employment within the Sector has shown steady increases over the past decade and a half, accompanied by some year to year fluctuations. Since 2004, employment in the Construction Sector has increased by 1,100 jobs, an 8.7% increase (see Figure 2). Since December 2014, the number of Construction firms in the region has increased by 4.3% (see Table 4). Small, medium and firms without employees have all experienced growth in the Construction Sector over this time period.

As with Manufacturing, employment in Construction will benefit from opportunities associated with infrastructure investments over the next 20 years at Bruce Power. The Sector contains a relatively high concentration of micro (1 to 4 employees) and small (4 to 99 employees) sized firms. For example, though Construction related firms accounted for 9.5% of all firms within the region, 15.1% of the region's micro-sized firms were Construction firms.

Figure 2: Construction Employment in Stratford-Bruce Economic Region, 2004 -2016



Source: Statistics Canada, Labour Force Survey. CANSIM Table 282-0125

Table 4: Construction Sector Firm Structure & Growth; Grey, Bruce and Huron Counties, June 2017

	Number of Firms	Percent of Total Firms in Sector	Growth Rate Since December 2014	Percent of Firms in All Industries
Total	2,613		4.3%	9.5%
Without employees	1,587	60.7%	6.2%	7.9%
Micro (1 -4 employees)	603	23.1%	-4.1%	15.1%
Small (5 - 99 employees)	418	16.0%	10.9%	12.7%
Medium (100 - 499 employees)	5	0.2%	25.0%	4.4%
Large (500 plus employees)	0	0.0%	0.0%	0.0%

Source: Statistics Canada, Canadian Business Counts. Custom Table

Occupation & Employment Structure

The Construction Sector is characterized by a unique occupational and employment structure. Employer surveys of the region indicate that almost 70% of employees in Construction are employed on a full time basis and 26% are employed seasonally⁴. Occupations that require trade skills and/or college diplomas (B skill type) dominate the Sector, accounting for 61% of total employment (see Table 5)⁵. Table 6 lists by employment the top ten Construction related occupations in Bruce, Grey & Huron counties. Of note, 59 Construction related occupations employed ten or more people in the region. Finally, as with Manufacturing, D skill type occupations (only requiring on-the-job training) were disproportionately represented by youth, aged 15 to 24 years (see Appendix Table A3). 32.2% of the D skill type labour force in Construction was aged 15 to 24, compared to only 12.1% of the labour force for the entire Sector.

Table 5: Construction Employment by Skill Type; Bruce, Grey & Huron Counties, NHS 2011

Skill Type	Percent of Total Sector Employment
0 - Management	9.2%
A - Usually require university degree	0.9%
B - Technical/Trade skills or college diploma	60.9%
C - High school and/or job specific training	17.9%
D - Job specific training	11.1%

Source: National Household Survey, NHS 2011

Table 6: Top Ten Construction Related Occupations by Employment; Bruce, Grey & Huron Counties, NHS 2011

NOC 4 Digit Occupation	Skill Type	Percent of Total Sector Employment
7271 Carpenters	B	9.1%
7611 Construction trades helpers and labourers	D	8.5%
7521 Heavy equipment operators (except crane)	C	5.7%
7241 Electricians (except industrial and power system)	B	5.4%
7251 Plumbers	B	5.4%
0711 Construction managers	0	3.5%
7511 Transport truck drivers	C	3.0%
1311 Accounting technicians and bookkeepers	B	2.9%
1241 Administrative assistants	B	2.7%
7294 Painters and decorators (except interior decorators)	B	2.7%

Source: National Household Survey, NHS 2011

⁴ 2017 EmployerOne survey results for Bruce, Grey and Huron counties.

⁵ Occupational structure is based on NHS 2011 data.

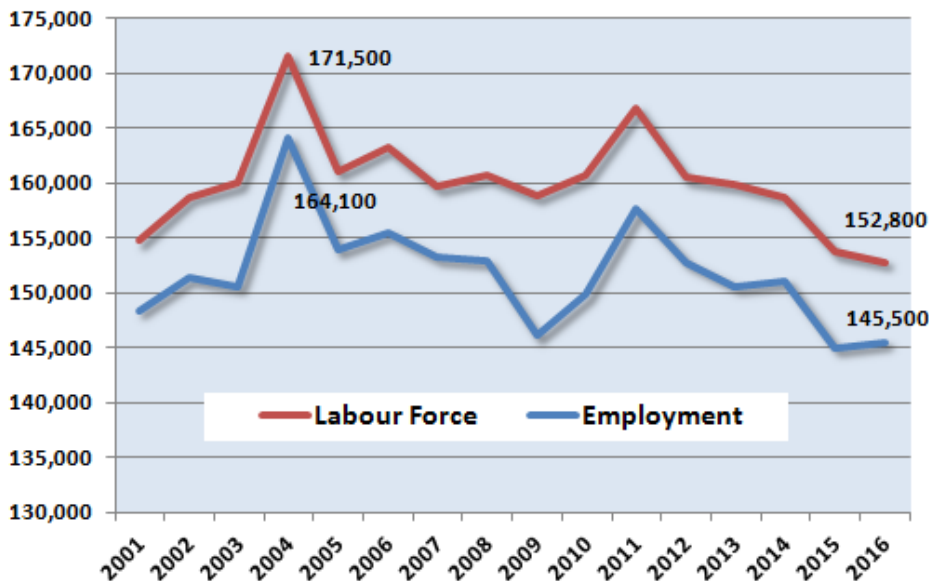
Part 1: Labour Market Analysis

Labour Market Overview

Labour Force & Employment Trends

The most notable labour market trend in the Stratford-Bruce Economic Region has been the steady decline in both the labour force and employment numbers from peak levels in 2004 (see Figure 3).⁶ The region is experiencing a substantial shrinking of its available workforce. In 2016, the total labour force for the region was 152,800, which had dropped by 11% or 18,700 people from 2004. Similarly, the total number of people employed in the region has also declined by 11% over the same period, dropping in 2016 to 145,500.

Figure 3: 15 Years Plus Labour Force & Employment Estimates; Stratford-Bruce Economic Region, 2001 - 2016



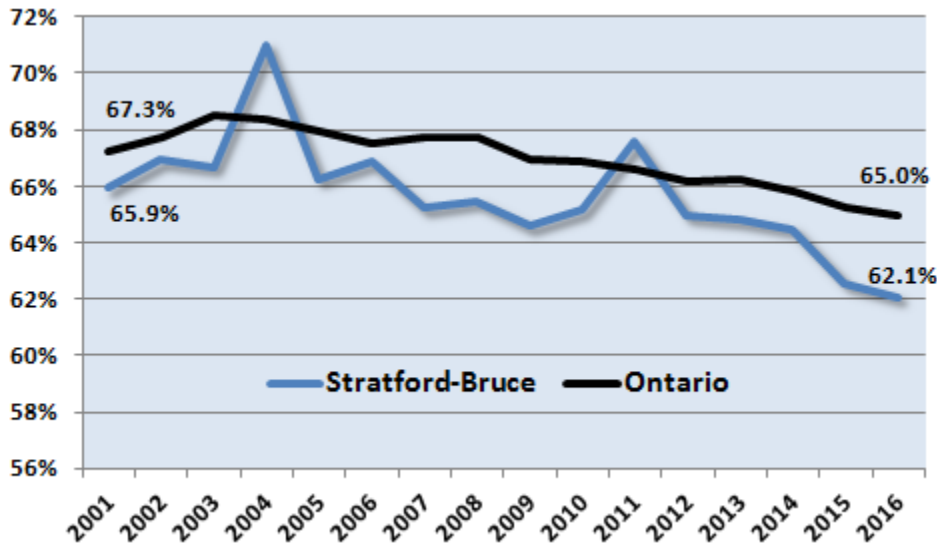
Source: Statistics Canada, Labour Force Survey. Custom Table

Participation and Employment Rates

Over the same period that labour force and employment numbers were dropping, regional participation and employment rates also declined. In other words, the available regional labour force has been declining both in aggregate numbers and relative to population size. In 2016, the regional participation rate, 62.1% (see Figure 4), and the employment rate, 59.1% (see Appendix Figure A1) were at their lowest levels going back to 2001. Further, the 2016 regional rates for participation and employment were well below provincial rates.

⁶ Unless otherwise stated, labour market statistics in this section were generated using Statistics Canada Labour Force Survey data which is available for the Stratford-Bruce Economic Region, including the counties of Bruce, Grey, Huron and Perth. While this area exceeds the project boundary by including Perth, it is assumed the general conditions observed will equally apply to the region, less Perth County.

Figure 4: Participation Rate - 15 Years Plus; Stratford-Bruce Economic Region & Ontario, 2001 - 2016

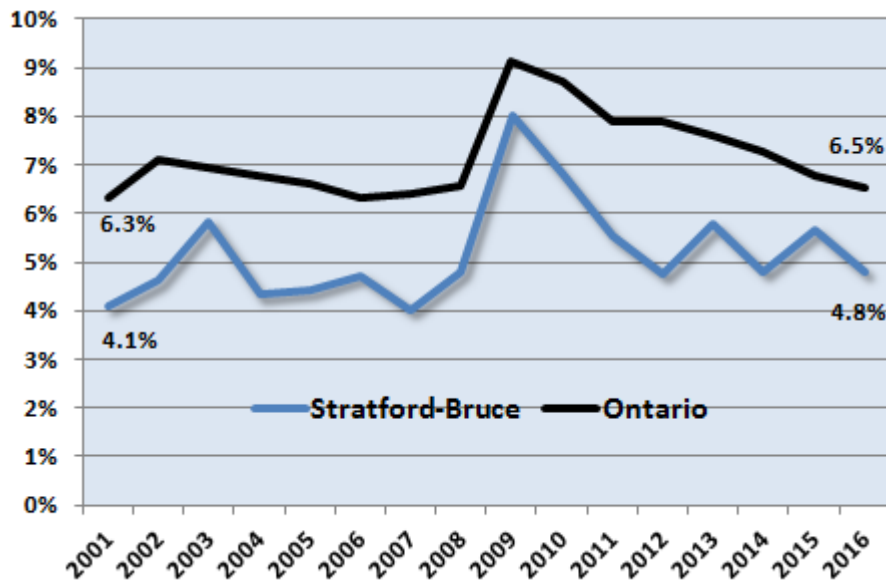


Source: Statistics Canada, Labour Force Survey. Custom Table

Unemployment Rates

Importantly, declines in the total number of people employed and the regional employment rate have not been accompanied by rising levels of unemployment. In 2016, the unemployment rate, 4.8%, for Stratford-Bruce had returned to pre-2009 recession levels and was well below the provincial rate of 6.5% (see Figure 5). In Stratford-Bruce, most people looking for work are able to find it. The single exception to this observation can be seen in the relatively higher rates of unemployment for youth aged 15 to 24 years (see Table 7), an issue that will be explored further below. Even for youth, regional unemployment is well below the province’s rate.

Figure 5: Unemployment Rate - 15 Years Plus; Stratford-Bruce Economic Region & Ontario, 2001 - 2016



Source: Statistics Canada, Labour Force Survey. Custom Table

Table 7: Unemployment Rates by Age Cohort, Stratford-Bruce & Ontario, 2016

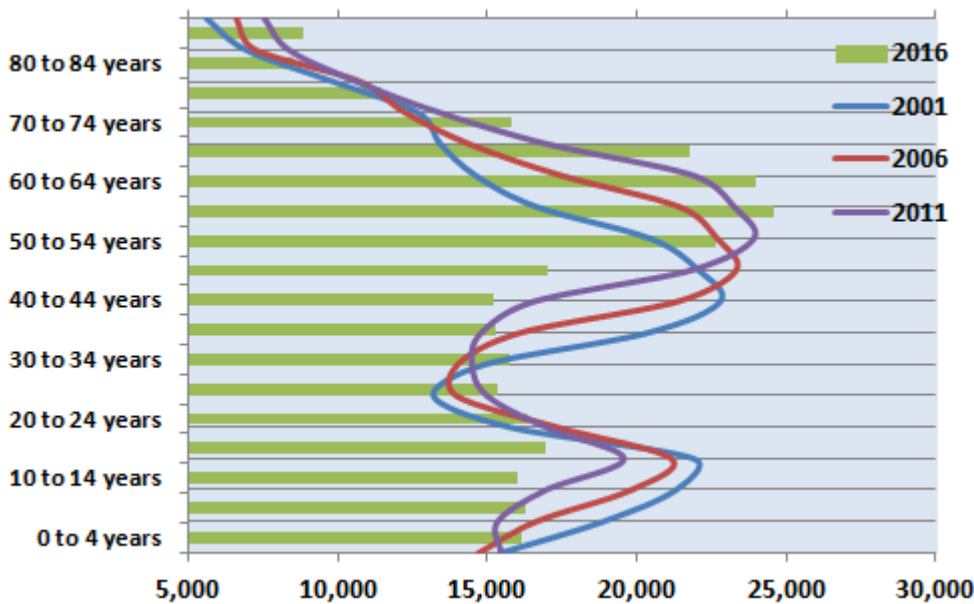
	Stratford-Bruce	Ontario
15 years and over	4.8%	6.5%
15-24 years	9.5%	14.0%
25-44 years	4.0%	5.7%
45-54 years	2.9%	4.9%
55-64 years	3.4%	5.3%
65 years and over	4.0%	3.3%

Source: Statistics Canada, Labour Force Survey. Custom Table

Aging Population

The cause of declining employment and participation statistics within the region is the result of aging within the population. As Figure 6 depicts, the past decade and a half has seen the 'Baby Boomer' generation shift from age cohorts with traditionally high participation rates (Baby Boomer cohort peaks at ages 40 to 44 years in 2001) towards retirement age cohorts with much lower participation rates (cohort peaks at ages 55 to 59 in 2016). This population shift into age cohorts with lower participation and employment rates is causing overall rates to decline. Importantly, in the absence of offsetting migration, the region can expect continued reductions in its labour force as the Baby Boomer cohort enters full retirement.

Figure 6: Stratford-Bruce Economic Region Age Profile, 2001 - 2016



Source: Statistics Canada, Census Profiles: 2001, 2006, 2011, 2016

Table 8 compares the impact that population aging and participation rate changes have had upon regional labour force numbers between 2007 and 2016. The impact of population aging can be estimated by holding participation rates constant at 2007 levels. As shown in the column 'Amount Due to Population Change', population reduction alone between 2007 and 2016 would have reduced the total labour force by 10,300 people (see Table 8). The impact of changes to age-specific participation

rates can be estimated by holding population constant at 2016 levels. Using this method, it can be shown that participation rate changes within age cohorts actual produced a net increase in labour force numbers. As shown in the column 'Amount Due to Participation Rate Change', participation rate changes partially offset the impact of population declines, adding 3,400 people to the total labour force.

Table 8: Source of Labour Force Change; Stratford-Bruce Economic Region, 2007 - 2016

	Change in Labour Force from 2007 to 2016	Amount Due to Population Change	Amount Due to Participation Rate Change
Stratford-Bruce			
15 Years Plus	-6,900	-10,300	3,400
15 – 24 Years	1,800	2,700	-900
25 – 44 Years	-8,300	-8,200	-100
45 – 54 Years	-9,100	-8,900	-200
55 – 64 Years	3,700	2,800	900
65 Years Plus	5,000	1,200	3,800

Source: Statistics Canada, Labour Force Survey. Custom Table

A more detailed description of the impact that population aging is having upon regional labour force can be found in the Appendix (see 'Detailed Analysis of Population Aging and Labour Force', Tables A5 to A8).

Attraction and Retention Characteristics

In and Out Migration

The tendency of a region to attract or lose residents has important consequences for regional labour markets. While most clearly a region's capacity to attract or lose residents will directly impact total labour force statistics, the specific characteristics of movers, such as age, gender and skill types, can also have an important influence upon labour market conditions.

Available migration data suggests that Bruce, Grey and Huron counties have a capacity to attract and lose residents at comparable rates to provincial averages. Between 2010 and 2014 counties across Ontario experienced an annual average in-migration rate of 4.2% (see Table 9).⁷ Over the same time period, annual in-migration for Grey and Bruce was comparable at 4.2% and 3.8% respectively. In-migration within Huron County (3.1%) was slightly below the provincial average.

Out-migration rates followed a pattern similar to in-migration. All three counties had annual out-migration rates (Grey 4.0%, Bruce 3.7%, Huron 3.8%) that were only slightly above the provincial average of 3.5%. As can be seen from total migration numbers in Table 9, movement in and out of all three counties was significant. For example, between 2010 and 2014 on average 4,009 people moved in and 3,756 people moved out of Grey County every year.

Overall, annual net-migration within Grey County (0.3%) and Bruce County (0.1%) was slightly below the provincial average net-migration rate of 0.6%. Huron County averaged an annual net-migration loss of 0.7%.

Table 9: In and Out Migration in Bruce, Grey & Huron Counties, 2010 - 2014

	In-Migration	Out-Migration	Net-Migration
Ontario Average	4.2%	3.5%	0.6%
Huron	3.1%	3.8%	-0.7%
Bruce	3.8%	3.7%	0.1%
Grey	4.2%	4.0%	0.3%
Total Numbers			
Huron	1,857	2,288	-431
Bruce	2,582	2,540	42
Grey	4,009	3,756	252

Source: Statistics Canada. Custom Table

While overall migration patterns for Grey, Bruce and Huron were comparable to provincial averages, county migration patterns for specific age cohorts exhibited important differences (see Table 10). All three counties showed net migration loss for the age cohorts 18 to 24 years and 25 to 44 years. In contrast, the province showed average net-migration gains for these age cohorts. Regional migration loss is particularly high for the 18 to 24 age cohort.

Population loss in the 18 to 24 and 25 to 44 years age cohorts has important implications for regional labour markets. With regional labour force statistics already declining due to population aging, migration loss within key working age cohorts (18 to 24 and 25 to 44 years) will intensify market

⁷ In-migration rate equals in-migrants as a percent of population.

pressures from labour force reductions. On the other hand, all three counties - particularly Grey and Bruce - exhibited a capacity to attract people within the 45 to 65 age cohort. As it is unclear whether people within this age cohort are moving into the region to retire, the labour market impact of net migration gain is also unclear.

Table 10: Net Migration by Age Cohort; Bruce, Grey & Huron Counties, 2010 - 2014

	0-17 Years	18-24 Years	25-44 Years	45-64 Years	65+ Years	Total
Ontario	0.7%	0.7%	1.2%	0.2%	0.2%	0.6%
Huron	0.0%	-4.0%	-1.7%	0.3%	-0.5%	-0.7%
Bruce	0.9%	-2.9%	-0.2%	0.9%	-0.5%	0.1%
Grey	0.7%	-1.7%	-0.1%	1.0%	0.0%	0.3%
Average Number per Year						
Huron	-5.6	-212	-211	57	-59	-431
Bruce	118	-167	-24	184	-70	42
Grey	123	-140	-23	289	3	252

Source: Statistics Canada. Custom Table

Movers by Employment Income

Migration within Grey, Bruce and Huron counties also exhibits a distinct socio-economic pattern (see Tables 11 to 13). Specifically, aggregate in and out-migration is higher for people with incomes below \$30,000 in the year after they migrate. Further, all three counties exhibit their highest net-migration loss for the same income class. Lower income residents are leaving the region.

On the other hand, Grey and Bruce had net migration gains for people with annual incomes above \$60,000 the year after moving. Further, net migration loss in Huron County was lowest for the \$60,000 plus income class. Overall, migration data suggests the region is attracting higher income earners and losing lower income earners.

Table 11: Migration by Employment Income; Bruce County, 2009 - 2013

Income Group	In-Migration	Out-Migration	Net Loss/Gain
Less than \$30,000	2,750	2,990	-240
\$30,000 to \$59,999	1,310	1,350	-40
\$60,000 or more	1,290	870	420
Total	5,350	5,210	140

Source: Statistics Canada. Custom Table

Table 12: Migration by Employment Income; Grey County, 2009 - 2013

Income Group	In-Migration	Out-Migration	Net Loss/Gain
Less than \$30,000	4,240	4,660	-420
\$30,000 to \$59,999	2,000	2,230	-230
\$60,000 or more	1,340	1,250	90
Total	7,580	8,140	-560

Source: Statistics Canada. Custom Table

Table 13: Migration by Employment Income; Huron County, 2009 - 2013

Income Group	In-Migration	Out-Migration	Net Loss/Gain
Less than \$30,000	2,400	2,630	-230
\$30,000 to \$59,999	1,300	1,390	-90
\$60,000 or more	680	720	-40
Total	4,380	4,740	-360

Source: Statistics Canada. Custom Table

Labour Market Churn

Labour market churn describes the amount and specific characteristics of workforce turnover within a labour market, including hires, layoffs, quits, dismissals and retirements. An analysis of labour market churn can identify important labour market trends and patterns that are unobservable using aggregate or net statistics such as total employment or total number in the labour force. For example, a region may record zero net employment growth and yet experience considerable upheaval in the form of job gains (hires) and job losses (including job leavers and losers).

Stratford-Bruce labour markets exhibit considerable churn.⁸ Between 2007 and 2016 average annual new hires within the region equaled 14.7% of the existing job base (see Table 14).⁹ In 2016 alone, an estimated 21,389 new hires took place in the region. Importantly, new hires do not include employer-employee combinations that existed the previous year and thus excluding planned year-to-year seasonal hires.

Of note, average hiring rates within the Construction Sector, 16.6%, were higher than the regional average, 14.7%, and considerably higher than within the Manufacturing Sector, 10.8%. Whether hiring rates within Construction reflect overall employment growth for the Sector is unclear. As discussed below, hiring rates in Construction may be compensating for relatively high permanent layoff rates within the Sector.

Permanent layoff rates within the Construction Sector were considerably higher than the regional average and within Manufacturing (see Table 14).¹⁰ A permanent layoff excludes layoffs in which the employee is rehired the following year, and thus removes seasonal layoffs. Over 2007 to 2016 average annual permanent layoffs within Construction were 13.2% of the existing job base. Over the same period, permanent layoffs within Manufacturing were only 4.1%, which was close to the regional average of 4.3%.

Table 14: Hiring & Permanent Layoff Rates; Stratford-Bruce Economic Region, 2007 - 2016

	All Industries	Construction	Manufacturing
Hires			
Average Hiring Rate ; 2007 - 2016	14.7%	16.6%	10.8%
Total Estimated Hires ; 2016	21,389	2,274	2,074
Permanent Layoffs			
Average Layoff Rate ; 2007 - 2016	4.3%	13.2%	4.1%
Total Estimated Layoffs ; 2016	6,289	1,814	791

Source: Statistics Canada. Custom Table

⁸ Labour churn data was only available for Stratford-Bruce economic region, which includes Grey, Bruce, Huron and Perth counties.

⁹ New hires equal the number of jobs (defined by an employer-employee pairing) observed in a firm in years t and t+1 but not in t-1. Thus, planned seasonal rehires would be excluded. The hiring rate equals the number of hires divided by the number of jobs observed at some point in year t.

¹⁰ Layoffs equal the number of jobs ended by a permanent layoff in year t (and not found in the same firm in year t+1). The layoff rate equals the number of permanent layoffs divided by the number of jobs observed at some point in year t.

Using Labour Force Survey data, age-related characteristics can be observed in regional layoff statistics (see Table 15). It is important to note that, unlike the custom data used above (see Table 14) the Labour Force Survey definition of permanent layoffs includes seasonal layoffs. Thus, age-specific layoff rates in Table 14 cannot be compared to Sector layoff rates. That said, age-specific data can still be usefully compared between age cohorts.

Table 15 shows that layoff rates are substantially higher for workers aged 15 to 24 years (9.5% layoff rate) compared to all ages (4.5% layoff rate for ages 15 years plus).¹¹ Of note, regional age-specific layoff rates are comparable to provincial rates. Provincial layoff rates for ages 15 to 24 years were also significantly higher than ages 15 years plus layoff rates.

Table 15: Permanent Layoffs as Percent of Population, 2016*

	15 – 24 Years	25 -54 Years	15 Plus Years
Ontario	9.9%	3.4%	4.4%
Stratford-Bruce	9.5%	3.3%	4.5%

Source: Statistics Canada. Labour Force Survey. Custom Table

Note: Permanent layoff means no plan to rehire by employer and includes seasonal layoffs if there is no fixed commitment to rehire.

Finally, labour market churn data shows that retirement rates in Stratford-Bruce are higher than provincial retirement rates (see Table 16). 10.3% of employed people in the region aged 55 to 64 years retired in 2016, compared to only 6.1% in Ontario. For the 65 years plus cohort, the regional retirement rate of 3.5% was still higher but much closer to the provincial rate of 2.4%. High retirement rates clearly have important implications for labour force participation, particularly within the earlier discussed context of population aging. As the labour force ages, more people than seen provincially are approaching retirement age and a higher percentage of those people are choosing retirement.

Table 16: Retirements as Percent of Population, 2016

	Ontario	Stratford- Bruce
55 - 64 Years	6.1%	10.3%
65 Years Plus	2.4%	3.5%

Source: Statistics Canada. Labour Force Survey. Custom Table

¹¹ The layoff rate was calculated using LFS data and equals permanent layoffs divided by the total employment for each age cohort.

Sector Specific Labour Market Characteristics

Job Vacancy Data

Since 2015, Statistics Canada has collected job vacancy and wage data through the 'Job Vacancy and Wage Survey' (JVWS) of employers. The JVWS defines vacancies as a job position that is vacant, that an employer is actively seeking to fill, and has associated tasks that require being completed no less than a month from the time of the survey. Job vacancies can be interpreted as an indication of potential labour supply shortage relative to demand within a labour market. By including occupation classifications, the JVWS allows for the identification of specific occupations in which shortages exist. The job vacancy rate adjusts for employment prevalence by dividing the number of vacancies by the number of total employees plus vacant positions. The vacancy rate allows for labour shortage comparisons across occupations and geographic regions. Importantly, while JVWS vacancy data can indicate the presence of labour shortages, it does not provide insight into the causes of shortages, which could include amongst other factors; skill gaps, inefficiencies in recruitment methods, barriers to employment such as transportation access or simply a lack of available labour.

Manufacturing Job Vacancies

Table 17 provides Manufacturing related occupational job vacancies, vacancy rate and average wage statistics for Stratford-Bruce Economic Region and Ontario¹². Occupation groups were selected if they fell within the top ten occupations of the Manufacturing industry in Grey, Bruce and Huron counties (see Appendix, Table A9 for the top ten list).

Table 17: Manufacturing Vacancy Rates for Stratford-Bruce Economic Region and Ontario, 2016

2 Digit NOC Occupation Groups	Skill Type	Stratford-Bruce		Ontario	
		Average Vacancies per 3 Months	Vacancy Rate	Average Wage	Vacancy Rate
All Occupations			2.5%	\$24.15	2.6%
Transport and heavy equipment operation and related maintenance occupations [75]	C	223	5.8%	\$19.65	4.2%
Assemblers in manufacturing [95]	C	105	3.8%	\$17.60	1.9%
Maintenance and equipment operation trades [73]	B	87	2.1%	\$24.50	1.6%
Processing and manufacturing machine operators and related production workers [94]	C	90	2.1%	\$20.85	2.3%
Other installers, repairers and servicers and material handlers [74]	C	23	1.8%	\$17.65	2.9%
Middle management occupations in trades, transportation, production and utilities [07-09]	O	18	1.5%	\$30.50	2.3%
Processing, manufacturing and utilities supervisors and central control operators [92]	B	8	1.3%	\$27.85	1.2%
Industrial, electrical and construction trades [72]	B	20	0.5%	\$24.90	3.4%
Labourers in processing, manufacturing and utilities [96]	D	106		\$18.50	2.7%
4 Digit NOC Occupation Groups					
Labourers in food and beverage processing [9617]	D	45	15.0%	\$18.40	6.7%
Transport truck drivers [7511]	C	128	5.7%	\$19.75	6.2%
Welders and related machine operators [7237]	B	15	3.9%	\$20.85	2.7%

Source: Statistics Canada. Job Vacancy and Wage Survey. Custom Table

¹² Occupation specific data at a regional level was limited by issues of data suppression and reliability.

Three key observations can be made from Table 17. First, Stratford-Bruce's vacancy rate for all occupations, 2.5%, is comparable to the province, 2.6%. This suggests that aggregate regional labour shortages for employers are not greater than those for the province. Given regional reductions in the labour force due to aging, this is a positive and somewhat surprising finding.

Second, Manufacturing related vacancies and vacancy rates are highest for occupations that require high school (C skill type) and/or job specific training (D skill type). Only two Manufacturing related NOC 2 digit occupation groups have vacancy rates above the regional rate of 2.5%; 'Transport and heavy equipment operation and related maintenance occupations [75]' (5.8% vacancy rate) and 'Assemblers in Manufacturing [95]' (3.8%). The regional vacancy rate for both occupations was above the provincial counterpart rates. At the more detailed NOC 4 digit level, 'Labourers in food and beverage processing [9617]' (D skill type) had a vacancy rate of 15%, more than double the provincial rate of 6.7%, and six times higher than the regional vacancy rate.¹³ It is worth noting that these high vacancy groups also have average wages that are below the regional average of \$24.15.

In contrast to lower skill occupations, regional Manufacturing NOC 2 digit occupations in management or occupations that require technical skill certificates or diplomas all had vacancy rates below the regional rate. In addition, these occupation groups also had rates that were below or comparable to those of the province in the same occupations. Overall, this suggests that while Manufacturing employers in the region are facing a relatively greater difficulty in filling occupations which require high school and/or job specific training, they are having a relatively less difficulty in filling occupations with other skill requirements.

Finally, while regional Manufacturing job vacancies and vacancy rates are highest for occupations which require high school and/or job specific training, relative labour shortages can also be observed within specific NOC 4 digit occupations requiring additional training (B skill type). For example, though at the NOC 2 digit occupation level 'Industrial, electrical and Construction trades [72]' has a relatively low vacancy rate of 0.5%, within this occupation group 'Welders and related machine operators [7237]' had a vacancy rate of 3.9% - which was higher than the provincial rate. Unfortunately, due to data suppression and reliability issues it is not possible to verify the presence of labour shortages in other similarly skilled occupation groups.

¹³ The NOC 2 digit aggregate occupation for labourers in Manufacturing (NOC group '96) had the second highest number of vacancies recorded, 106.

Construction Job Vacancies

Table 18 provides Construction related occupational job vacancies, vacancy rate and average wage statistics for Stratford-Bruce Economic Region and Ontario¹⁴. As with Manufacturing, occupation groups in Construction were selected if they fell within the top ten occupations of the Construction industry in Grey, Bruce and Huron counties (see Appendix Table A10 for the top ten).

Table 18: Construction Vacancy Rates for Stratford-Bruce Economic Region and Ontario, 2016

2 Digit NOC Occupation Groups	Skill Type	Stratford-Bruce		Ontario	
		Average Vacancies per 3 Months	Vacancy Rate	Average Wage	Vacancy Rate
All Occupations			2.5%	\$24.15	2.6%
Transport and heavy equipment operation and related maintenance occupations [75]	C	223	5.8%	\$19.65	4.2%
Technical occupations related to natural and applied sciences [22]	B	68	2.2%	\$26.70	2.0%
Maintenance and equipment operation trades [73]	B	87	2.1%	\$24.50	1.6%
Middle management occupations in trades, transportation, production and utilities [07-09]	O	18	1.5%	\$30.50	2.3%
Industrial, electrical and construction trades [72]	B	20	0.5%	\$24.90	3.4%
Administrative and financial supervisors and administrative occupations [12]	B	25	0.3%	\$23.20	1.0%
4 Digit NOC Occupation Groups					
Transport truck drivers [7511]	C	128	5.7%	\$19.75	6.2%
General office support workers [1411]	C	50			

Source: Statistics Canada. Job Vacancy and Wage Survey. Custom Table

Similar to Manufacturing occupations, Construction related occupations in management or that require trade skills or college diplomas show vacancy rates that are below the regional average vacancy rate for Stratford-Bruce. Vacancy rates for these skill groups are also below or comparable to provincial vacancy rates. Of note, average wages for management and skilled occupations tend to be at or above the regional average wage.

Importantly, as discussed above (see section on Occupational Structure), employment in the Construction Sector is dominated by occupations requiring skilled trades and/or college diplomas. Thus, vacancy rates within skilled occupations will have a strong influence upon labour market trends in the Sector. For example, the NOC 2 digit occupation group 'Industrial, electrical and Construction trades [72]', which accounts for over 40% of regional Construction related employment, had a vacancy rate, 0.5%, substantially below both the regional 'All Occupation' rate, 2.5%, and the provincial rate, 3.4%, for the same occupation group (see Table 18).

It is worth noting that the vacancy rate for the largest D skill type occupation in Construction (NOC 2 digit - '[76] Trades helpers, Construction labourers and related occupations' and the sub-group NOC 4 digit - '7611 Construction trades helpers and labourers') was not observable due to data suppression rules. As shown above for Manufacturing, the highest vacancy rates were for lower skill groups. Whether this is also true for Construction is not verifiable. The one area of overlap with Manufacturing can be seen the high vacancy rate for transport drivers (NOC 2 digit 75 and NOC 4 digit 7511).

¹⁴ Occupation specific data at a regional level was limited by issues of data suppression and reliability.

Job Posting Data

Manufacturing Related Occupations

Advertisements for job openings can provide a useful indication of labour demand within a region. Job openings or labour demand can be driven by a range of causes, including employer expansion and growth or workforce turnover due to seasonal fluctuations, quits, retirements, layoffs and dismissals. Table 19 summarizes Manufacturing related job posting data from CEB TalentNeuron for the Stratford-Bruce Economic Region. TalentNeuron collects job posting data from on-line job advertisements¹⁵. Table 19 occupations were selected if they fell within the top ten occupation groups for the Manufacturing industry within Grey, Bruce and Huron counties (see Appendix, Table A9). Occupations were then placed in descending order by the total number of postings¹⁶. Table 19 includes the total number of job postings by occupation between January 1, 2016 and August 31, 2017, the percentage share of total job postings by occupation and the percentage share of total regional employment by occupation. Employment share was included for comparative purposes. If an occupation's share of job postings was substantially higher than that occupation's employment share this may indicate relatively high demand for that occupation within the labour market¹⁷. Table 20 provides job posting counts for more detailed NOC 4 occupation groups related to Manufacturing. Regional employment statistics were unavailable for comparison at the NOC 4 digit level¹⁸.

Trades related occupations (NOC 2 digit: 75, 72, 73 & 74) account for four of the top five Manufacturing related occupations in Table 19. Only two occupation groups, '75 Transport and heavy equipment operation and related maintenance occupations' and '15 Distribution, tracking and scheduling co-ordination occupations' had job posting shares that were above their share of regional employment, indicating relatively high demand for these occupations. Exclusively Manufacturing occupations (NOC 2 digit: 96, 95, 94 & 92) all had job posting shares that were equal to or below their employment shares.

Overall, Manufacturing related job posting data indicates that the number of postings, and thus job demand, across occupations is consistent with their employment prevalence within the region. As with vacancy data, job posting data indicates high demand for transport truck positions (NOC 2 digit 75, NOC 4 digit 7511).

¹⁵ TalentNeuron data exclude job advertised using other methods, including word of mouth. 2017 EmployerOne survey results indicated that only 46% of Construction and 38% of Manufacturing respondents used on-line job postings.

¹⁶ While occupations are Manufacturing related, actual posting data is specific to the occupation and not the industry. Thus, job postings will include openings for a specific occupation across all industries, not just Manufacturing.

¹⁷ As noted above, high demand may reflect many factors within the labour market; growth, turnover etc.

¹⁸ Occupations in Table 20 were selected by pulling available posting data from Manufacturing related occupations identified using NHS 2011 data.

Table 19: Manufacturing Related NOC 2 Digit Occupations by Number of On-line Job Postings

NOC 2 Digit Occupation Group	Number of Postings	Percent of Total Postings	Occupation Employment as Percent of Total Employment
75 Transport and heavy equipment operation and related maintenance occupations	706	6.5%	3.6%
72 Industrial, electrical and construction trades	606	5.5%	6.7%
73 Maintenance and equipment operation trades	428	3.9%	5.1%
15 Distribution, tracking and scheduling co-ordination occupations	387	3.5%	1.6%
74 Other installers, repairers and servicers and material handlers	267	2.4%	1.4%
96 Labourers in processing, manufacturing and utilities	136	1.2%	1.2%
95 Assemblers in manufacturing	120	1.1%	1.4%
92 Processing, manufacturing and utilities supervisors and central control operators	120	1.1%	2.5%
94 Processing and manufacturing machine operators and related production workers	100	0.9%	3.0%
07-09 Middle management occupations in trades, transportation, production and utilities	91	0.8%	6.3%

Source: TalentNeuron. Custom data: January 1, 2016 to August 31 2017

Table 20: Manufacturing Related NOC 4 Digit Occupation Job Postings

NOC 4 Digit Occupation Group	Number of Postings
7511 Transport truck drivers	371
6552 Other customer and information services representatives	363
6411 Sales and account representatives - wholesale trade (non-technical)	165
9619 Other labourers in processing, manufacturing and utilities	130
7452 Material handlers	103
7237 Welders and related machine operators	54
7311 Construction millwrights and industrial mechanics	45
1521 Shippers and receivers	18
9461 Process control and machine operators, food, beverage and associated products processing	17
7231 Machinists and machining and tooling inspectors	12

Source: TalentNeuron. Custom data: January 1, 2016 to August 31 2017

Construction Related Occupations

Table 21 summarizes Construction related job posting data from CEB TalentNeuron for the Stratford-Bruce Economic Region. As with Manufacturing, occupations were selected if they fell within the top ten occupation groups for the Construction industry within Grey, Bruce and Huron counties (See Appendix, Table A10). Occupations were then placed in descending order by the total number of postings¹⁹. Table 22 provides job posting counts for more detailed NOC 4 occupation groups related to Construction. Similar to the Manufacturing Sector, regional employment statistics were unavailable for comparison at the NOC 4 digit occupation level.

Three occupation groups had job posting shares that were substantially above their shares of regional employment; '75 Transport and heavy equipment operation and related maintenance occupations', '22 Technical occupations related to natural and applied sciences' and '76 Trades helpers, Construction labourers and related occupations'. These occupations represent a range of skill types, including job specific training, high school equivalent and trade certificates or college diplomas.

High demand and job vacancies for transport truck drivers has already been observed and discussed for Manufacturing. NOC 22 'Technical occupations' includes a wide range of technical occupations, including landscaping, computer network and electrical technicians, some of which may not be Construction related.²⁰

Of note are the relatively high number of postings for '76 Trades helpers, Construction labourers and related occupations', and the NOC 4 digit sub-group '7611 Construction trades helpers and labourers'. Earlier discussed vacancy data in Manufacturing indicated higher vacancy rates for D skill occupations but data was not available for Construction. It was also shown that permanent layoff rates for Construction are higher than the regional average. Thus, the high number of postings for NOC 76 and NOC 7611 occupation groups may indicate higher churn and/or difficulty filling vacant positions for these occupations.

¹⁹ While occupations are Construction related, actual posting data is specific to the occupation and not the industry. Thus, job postings will include openings for a specific occupation across all industries, not just Construction.

²⁰ NOC 22 makes up only 4.5% of employment within Construction.

Table 21: Construction Related NOC 2 Digit Occupations by Number of On-line Job Postings

NOC 2 Digit Occupation Group	Number of Postings	Percent of Total Postings	Occupation Employment as Percent of Total Employment
75 Transport and heavy equipment operation and related maintenance occupations	706	6.5%	3.6%
72 Industrial, electrical and construction trades	606	5.5%	6.7%
73 Maintenance and equipment operation trades	428	3.9%	5.1%
22 Technical occupations related to natural and applied sciences	401	3.7%	2.4%
12 Administrative and financial supervisors and administrative occupations	291	2.7%	2.4%
76 Trades helpers, construction labourers and related occupations	214	2.0%	1.0%
14 Office support occupations	150	1.4%	2.7%
07-09 Middle management occupations in trades, transportation, production and utilities	91	0.8%	6.3%
13 Finance, insurance and related business administrative occupations	71	0.6%	1.1%
00 Senior management occupations	8	0.1%	0.2%

Source: TalentNeuron. Custom data: January 1, 2016 to August 31 2017

Table 22: Construction Related NOC 4 Digit Occupation Job Postings

NOC 4 Digit Occupation Group	Number of Postings
7511 Transport truck drivers	371
7611 Construction trades helpers and labourers	208
7271 Carpenters	154
1411 General office support workers	105
7521 Heavy equipment operators (except crane)	76
1241 Administrative assistants	57
1311 Accounting technicians and bookkeepers	49
7291 Roofers and shinglers	40
7251 Plumbers	35
7241 Electricians (except industrial and power system)	31

Source: TalentNeuron. Custom data: January 1, 2016 to August 31 2017

Unemployment by Skill Level

Tables 23 and 24 provide participation and employment rates for Sector related occupations by skill level for Bruce and Grey counties (2011 National Household Survey). It is important to note that participation and employment rates may have changed since 2011 and once available, updated data from the 2016 Census should be analysed.

Taking the difference between the participation and employment rates provides a measurement of unemployment within Sector specific skill types. The unemployment measure (percentage point difference) shows an identical pattern for Manufacturing and Construction. Unemployment rises as the skill type drops. In both Sectors unemployment is highest for D skill occupations (that require only on-the-job training). A similar pattern of unemployment can be observed for both Sectors across the province.

In an efficiently functioning labour market, job seekers should be able to connect with existing job openings for positions that match their skills. There appears to be barriers to this connection for lower skilled occupations in Manufacturing and Construction. In both Sectors lower skill occupations exhibit the highest unemployment, yet these same occupations have the highest vacancy rates and high relative demand (indicated by job posting data).

Table 23: Manufacturing Participation and Employment Rates by Skill Level; Bruce, Grey & Huron Counties, NHS 2011

Skill Type	Participation Rate	Employment Rate	Percentage Point Difference	Percentage Point Difference for Ontario
O - Management	96.0%	95.2%	0.8%	2.59%
A - Usually require university degree	93.3%	89.5%	3.7%	3.20%
B - Technical/Trade skills or college diploma	93.6%	88.8%	4.8%	5.58%
C - High school and/or job specific training	92.3%	86.3%	6.0%	6.65%
D - Job specific training	87.6%	79.8%	7.7%	10.05%

Source: National Household Survey, NHS 2011

Table 24: Construction Participation and Employment Rates by Skill Level; Bruce, Grey & Huron Counties, NHS 2011

Skill Type	Participation Rate	Employment Rate	Percentage Point Difference	Percentage Point Difference for Ontario
O - Management	96.1%	95.4%	0.7%	2.47%
A - Usually require university degree	91.0%	87.0%	4.0%	3.10%
B - Technical/Trade skills or college diploma	92.9%	87.3%	5.5%	6.12%
C - High school and/or job specific training	92.3%	86.2%	6.1%	6.02%
D - Job specific training	91.0%	80.1%	10.9%	11.84%

Source: National Household Survey, NHS 2011

Impending Retirements within Sector Occupations

As discussed above, labour force aging is causing a region wide decline in the available labour force. Importantly, the impacts of aging are not evenly spread across occupations within Bruce, Grey and Huron counties. Understanding the age structure of specific occupations within Manufacturing and Construction will assist in predicting future skill and labour needs.²¹

Table 25 provides the percentage of the labour force aged 55 plus years within the top ten Manufacturing related occupations within Bruce, Grey and Huron and for Ontario. Occupations with a higher percentage of workers aged 55 plus years are likely to face significant labour force reductions due to retirement over the next 10 years. Overall, a higher percentage of the Manufacturing labour force in Bruce, Grey and Huron (24.6%) is aged 55 plus years compared to Ontario (19%). Specific occupations within Manufacturing have an even higher share of older workers. For example, 41.9% of 'Manufacturing Managers' (NOC 0911) are aged 55 plus years compared to 24% in Ontario. Other occupations with substantially higher percentages of older workers include;

- Welders and related machine operators
- Transport truck drivers
- Labourers in metal fabrication

Table 25: Percentage of Manufacturing Labour Force Aged 55 Years Plus; Bruce, Grey & Huron Counties, NHS 2011

	Bruce, Grey & Huron	Ontario
All Sectors	24.8%	18.3%
All Manufacturing Related Occupations	24.6%	19.0%
9617 Labourers in food, beverage and associated products processing	11.6%	18.0%
0911 Manufacturing managers	41.9%	24.0%
9522 Motor vehicle assemblers, inspectors and testers	12.7%	14.2%
9461 Process control and machine operators, food, beverage and associated products processing	17.7%	19.5%
7237 Welders and related machine operators	28.1%	19.4%
7452 Material handlers	15.8%	14.7%
7311 Construction millwrights and industrial mechanics	12.8%	24.9%
9619 Other labourers in processing, manufacturing and utilities	11.5%	17.0%
7511 Transport truck drivers	36.1%	26.9%
9612 Labourers in metal fabrication	26.1%	17.9%

Source: National Household Survey, NHS 2011

Table 26 provides the percentage of the labour force aged 55 plus years within the top ten Construction related occupations within Bruce, Grey and Huron and for Ontario. Occupations with substantially higher percentages of older workers include;

²¹ It is important to note that an older age structure within an occupation may reflect the nature of the occupation and not a future shortage. For example, discussions with Sector employers revealed that a number of skilled trades people working at Bruce Power station have retired and then continued with part time or contract skilled work. In this case, an older occupational age structure may reflect this unique regional characteristic of trade occupations and not necessarily an impending shortage.

- Carpenters
- Plumbers
- Construction managers
- Transport truck drivers
- Accounting technicians and bookkeepers
- Administrative assistants

**Table 26: Percentage of Construction Labour Force Aged 55 Years Plus;
Bruce, Grey & Huron Counties, NHS 2011**

	Bruce, Grey & Huron	Ontario
All Sectors	24.8%	18.3%
All Construction Related Occupations	24.9%	19.4%
7271 Carpenters	26.0%	18.8%
7611 Construction trades helpers and labourers	10.3%	11.4%
7521 Heavy equipment operators (except crane)	22.1%	23.5%
7241 Electricians (except industrial and power system)	23.0%	19.1%
7251 Plumbers	41.9%	17.3%
0711 Construction managers	36.5%	21.9%
7511 Transport truck drivers	36.1%	26.9%
1311 Accounting technicians and bookkeepers	41.5%	32.3%
1241 Administrative assistants	38.5%	27.2%
7294 Painters and decorators (except interior decorators)	23.4%	20.9%

Source: National Household Survey, NHS 2011

Key Labour Market Findings

Four key findings can be drawn from secondary labour market data and are described below.

Rapidly Shrinking Labour Force

Labour force contraction due to population aging is the primary and overarching factor shaping regional labour markets. A declining labour force presents a serious challenge to employers' capacity to meet workforce requirements associated with both retention and economic expansion. Specific occupations within Manufacturing and Construction are particularly vulnerable to the impact of labour force aging.

- Since 2004, the aggregate regional labour force has dropped by 11% or 18,700 people.
- Population aging is the primary cause of labour force contraction. The key working age cohorts 25 to 44 and 45 to 54 have seen dramatic declines over the past decade.
- Labour force contraction due to population aging can be expected to continue for the next 10 to 20 years.
- Migration characteristics are likely intensifying labour force contraction. Though migration losses are small relative to the impact of population aging, Grey, Bruce and Huron counties tend to lose residents from the 18 to 24 and 25 to 44 age cohorts.
- High regional retirement rates for residents aged 55 to 64 and 65 plus are intensifying labour force contraction.
- Manufacturing and Construction related occupations particularly vulnerable to labour force aging include; managers, welders, transport truck drivers, carpenters, plumbers, labourers in metal fabrication, accounting technicians and administrative assistants.

Constricted Labour Market

Secondary labour market data suggests a general constriction of regional labour markets. Participation rates across age cohorts are relatively high and unemployment rates relatively low compared to the province. That said, both participation and unemployment rates for young workers aged 15 to 24 show signs of regional slack and thus an area of potential focus.

- Regional age specific participation rates are high and above or comparable to provincial rates.
- Regional participation rate for workers aged 15 to 24 declined by two percentage points over the past decade.
- Regional unemployment rates are well below provincial rates across age cohorts.
- Regional unemployment is highest for people aged 15 to 24 and within the lower skill group labour force.

Labour Market Churn

An absence of population and labour force growth may suggest a regional workforce planning strategy that focuses on internal labour force improvement. Labour force churn, particularly permanent layoff rates, indicates areas of labour force gaps in matching employer needs, thus potential for internal improvement.

- Youth, 15 to 24 years, permanent layoff rate is almost three times higher than the layoff rate for workers aged 25 to 54.

- Permanent layoff rate within the Construction Sector is substantially above the regional rate.

Lower Skill Gap

A significant number of lower skill level jobs remain unfilled despite evidence that regional unemployment is highest for workers with skills that match available vacancies. Migration data suggests that more lower compensated workers are leaving the region than are arriving. As noted above (see Labour Market Churn), population aging and labour force decline suggest one area of emphasis might be towards internal labour force improvements. Addressing the lower skill gap would be one such area for improvement.

- Job vacancies and vacancy rates are highest for lower skilled Sector occupations.
- Unemployment statistics are highest for lower skilled Sector occupations.
- Migration data shows a net loss of workers earning less than \$30,000.

Part 2: Employer and Employment Service Provider Insights

Labour market key findings were presented to large employers within Manufacturing and Construction Sectors and regional employment service providers. Labour market trends and Sector specific findings were confirmed and supported. Through discussion, both employers and employment service providers contributed important additional context and understanding of labour market challenges. Employer and employment service provider insights are described below.

Employer Insights

Not surprisingly, employers confirmed a general struggle and concern with filling job openings. A recent employer survey of the region revealed that over half of Manufacturing and Construction survey respondents had difficulty filling a job position in the previous 12 months (see Table 27). During discussions, employers indicated difficulty in filling skilled positions, including occupations in information technology and technical skills, and also general labourer positions. Many employers expressed concern regarding the emergence of future labour market pressures associated with the Bruce Power station's retrofit. Employers believed that Bruce Power had the capacity to offer higher wages and out-compete local employers for available labour.

Table 27: Hard to Fill Positions; 2017 EmployerOne Survey Results

	Percent of Respondents With Hard to Fill Positions ²²
Construction	65.8%
Manufacturing	58.5%
Other	54.1%

Note: Equals number of respondents reporting hard to fill positions divided by number of respondents that either hired or reported a hard to fill position.

Employer's immediate concerns focused on retention and the labour force quality of the existing local labour force. Many of the retention issues raised by employers reflected the general difficulty employers face operating within tight labour markets. For example, some employers indicated they were experiencing high workforce churn and attributed this to an inability to offer competitive wages compared to those offered in bigger cities or by Bruce Power. Workforce churn appeared to be particularly acute within low wage occupations. Similarly, other employers believed the presence of multiple employment options for youth was driving high employment churn in this age cohort and weakening employee loyalty.

Table 28 provides a summary of employer survey responses regarding their perceived reason a job position was hard to fill. For both Manufacturing and Construction, what are often labeled as soft skills - worker attitude, motivation and interpersonal abilities - were the most common reason identified for hard to fill positions (60% of Construction respondents and 54% of Manufacturing). Though this reason was a common response for all industries within the region, it was particularly high for Manufacturing

²² Percent equals number of respondents whom reported have hard to fill positions in the last 12 months divided by the number whom reported hiring or having hard to fill positions in the past 12 months.

and Construction. A general lack of applicants and technical skills were the second and third most common reasons for both Sectors.

Table 28: Reasons for Hard to Fill Positions; 2017 EmployerOne Survey Results

Reason Position Was Hard to Fill	Construction	Manufacturing	Other
Number of Employers Having Hard to Fill Positions	24	25	165
Lack of motivation, attitude, or interpersonal abilities	60.0%	54.2%	45.5%
Not enough applicants	44.0%	45.8%	59.4%
Lack of technical skills	40.0%	45.8%	22.4%
Lack of qualifications (education level/credentials)	32.0%	37.5%	48.5%
Lack of work experience	28.0%	29.2%	27.9%
No applicants at all	16.0%	4.2%	15.2%
Inability to compete with other employers	8.0%	12.5%	7.9%
Other	8.0%	16.7%	17.6%
Lack of language requirements	0.0%	0.0%	1.2%
Inability to assess a foreign educational qualification	0.0%	0.0%	0.0%

All employers agreed that the region's high cost of living was a barrier to both workforce retention and attraction. In particular, high housing costs were believed to be undermining the economic cost-benefit rationale for lower waged worker participation in the regional labour force. For example, one employer stated that 'people are trying to purchase a home in the community but may not have wages that allow them to do this. Businesses can offer what you can offer, but where do you draw the line?'

Finally, employers express doubt over whether local workers, particularly youth, were aware of current opportunities in either Sector. Employers suggested looking at programming for high school students to increase awareness of local opportunities and careers in Sector skilled occupations. The reduction in the number of high schools offering introductory courses in trades was identified as an issue of concern. Finally, considerable uncertainty was raised regarding where locally educated youth were moving, why they were moving out of the region and how many were coming back in.

Employment Service Provider Insights

Regional employment service providers were also presented with secondary data observations of regional and Sector labour market trends. As with employers, employment service providers both confirmed research findings and contributed additional insights.

Specifically, employment service providers were able to provide valuable insights into obstacles that job seekers experience when seeking employment within Bruce and Grey counties. It is worth noting that, while the regional overall unemployment rate of 4.8% is low, a large number of people within the region continue to struggle to find adequate employment. In 2016, 7,300 were unemployed in Stratford-Bruce and looking for work.²³

Some of the obstacles to employment identified by service providers were identical to obstacles emphasized by employers. Employment providers confirmed that access to affordable housing and

²³ Statistics Canada, LFS

transportation to employment locations were significant barriers to job seekers. Access to affordable housing and transportation were perceived to be particularly difficult for job seekers whom were only able to find part time employment. Some job seekers are responding to this reality by augmenting income with multiple part time jobs, which was increasing their difficulties in arranging adequate transportation. Employment service providers indicated that many entry positions within the region were limited to part time hours.

Service providers also highlighted personal challenges that job seekers were experiencing in the region. Health issues, including addiction, were identified as an obstacle to employment for many. 582 people self-identified with a disability used Employment Ontario services in the region. More generally, coping skills associated with employment stress, were also emphasized by service providers. One service provider noted that "It's easier to quit a job if you have a disagreement rather than having that conversation with an employer, especially if you lack some of these soft skills around conflict resolution, etc." Employment service providers expressed difficulty in convincing employers to take a chance with job seekers with higher needs, particularly smaller employers who were perceived to have less capacity to do so.

Part 3: Manufacturing and Construction Sector Recommendations

Bruce, Grey and Huron counties are losing workers. Secondary data research revealed that the predominant factor shaping the regional labour market is the dynamic of population aging and consequent labour force decline. Though all three counties exhibit net migration losses within key working age cohorts, labour force reductions due to migration are small compared to reductions from population aging. In the absence of a dramatic reversal in migration patterns, regional labour force decline can be expected to continue for next 10 to 20 years.

Economic recovery from the 2009 recession has intensified demands upon an increasingly scarce regional resource, labour. Overall unemployment is low and participation rates across age groups are well above or comparable to provincial rates. Most people in the region who want work have found it. Confronted with labour scarcity, employers' capacity to access needed skills to both replenish workforce exits and expand production has become very difficult.

Secondary and primary data confirmed that labour shortages are impacting the Manufacturing and Construction Sector. The majority of employers in both Manufacturing and Construction indicated having difficulty filling positions in the past 12 months. Labour shortages are particularly acute within low skill or entry type positions. Job vacancy rates in Manufacturing were highest for assembly, general labour and transport truck driving positions. In Construction, the number of job postings is disproportionately high for general labourer positions.

That said, evidence of skilled labour shortages was also found. The regional vacancy rate for Welders in 2016 was well above the provincial Welder vacancy rate and above the overall regional average rate. Further, the age structure of many skilled occupations suggests that future shortages are likely in a number of positions, including; Welders, Carpenters, Plumbers and Construction Managers.

The context of labour scarcity requires a prioritization of workforce planning resources in Bruce, Grey and Huron counties. Secondary data and insights from Sector employers and Employment Service providers have highlighted a number of key gaps and obstacles within the Manufacturing and Construction Sectors' labour market. The recommendations below focus on actions that address these key gaps and obstacles. While efforts to remove obstacles cannot reverse the impacts of population aging, they can support and strengthen local employers' success in meeting labour force needs, while at the same time improving employment prospects for the local workforce. Importantly, effective responses to identified gaps and obstacles can also be expected to support initiatives aimed at attracting labour from outside the region, and in some cases will be required in order for any attraction efforts to be effective.

Action: Identifying High Demand Occupations

As argued above, the reality of continuing labour force scarcity requires a prioritization of workforce planning resources in Bruce, Grey and Huron counties. While secondary data indicates that the most pressing Sector labour needs fall within low skill or entry occupations, analysis also revealed a local shortage of Welders, a skilled occupation. Unfortunately, data limitations precluded identification of additional skilled shortages. Of note, future skilled labour demands resulting from Bruce

Power's expansion and impending retirements in many skilled occupations are likely to create additional skilled labour shortages in the near future.

The purpose of this action is to provide clarity around these future shortages and inform areas of prioritization for local workforce planning resources. Specifically, the goal is to determine which specific 4-digit occupations are in high demand or will become high demand occupations in the next five years.

Using custom data from the soon-to-be-released 2016 Census, high demand occupations may be identified through three lines of inquiry:

1. First is an examination of the participation rate and employment rate. The participation rate measures the proportion of those within the occupation both working and looking for work; the employment rate measures the proportion of those in the occupation working. When the rates are identical, everyone in the occupation is employed. The smaller the difference between these two values, the less available labour in that occupation. So, an analysis of all Manufacturing and Construction occupations will reveal those where there is a small change.
2. High demand occupations can also be identified by comparing occupation employment rates of Bruce, Grey and Huron with those of Ontario. Occupations where the local Region's employment rate is considerably higher than Ontario's suggest a greater demand for specific skills locally.
3. The effect of impending (within five years) retirements per occupation will also be factored into the identification of high demand occupations.

The identification of high demand occupations alone does not result in employer demand being met (particularly since many of the occupations identified will likely be in high demand throughout the country). However, identifying these occupations will focus engagement strategies appropriately (see next Action).

Action: Engagement Strategies for Filling High Demand Occupations

Once high demand occupations have been identified, explicit activities must ensue that focus on developing a funnel of relevantly skilled workers. Recommended activities include (though aren't limited to):

- 1) Establish the foundation for a strong and successful high demand occupation support program
 - Incent employer support and active involvement
 - Support for new equipment & labs
 - Transportation infrastructure
 - Financial support and sponsorship
 - Establish scholarships for high demand occupations
- 2) Promote skilled trades to youth and their parents
 - Incorporate employer workplace tasks into curriculum
 - Increase co-op and apprenticeship opportunities for high school students
 - Engage Gr. 7 & 8 in STEAM activity
 - Parent night
- 3) Enhance local training opportunities
 - Expand access to apprenticeships locally

- Work with local colleges and trainers to develop specific programs for high demand occupations
 - Provide online training program access
- 4) Develop pathways messaging and career development
- Promotion of an occupation as a viable career consideration
 - Clearly articulate the career path opportunities and income progression over time

Action: Address Shortage of Welders

Welders was one specific occupation identified by Manufacturing employers locally where a shortage exists. Statistics Canada Job Vacancy and Wage Survey also showed significant job vacancies for welders within Bruce, Grey and Huron. A similar shortage also exists within the rest of Ontario, although the shortage is more pronounced in the local counties. This means that attraction and retention of welders will be difficult, as employment options for welders are plentiful across the province.

If unaddressed, the shortage of welders within the region is predicted to worsen due to impending workforce retirements. Based on 2011 Household Survey data, we know that 28.1% of local welders were 55 years of age or older. In comparison, only 19.4% of provincial welders were 55 years or older in 2011.

Satisfying the demand for welders within Bruce, Grey and Huron will require two approaches: first, the promotion of welding as an attractive career to young people; and second, a significant increase in the number of local employers that take on welding apprentices.

The promotion of welding as a career should focus on the actual work and the work environment. Information on compensation, work-life balance and the range of employment opportunities should also be emphasized. The development of a comprehensive marketing program to promote the occupation – targeted to elementary through secondary school children – should be undertaken.

Local employers need to be convinced to invest in more apprenticeships. In the most recent 2017 EmployerOne survey, few Manufacturing respondents indicated providing apprenticeships. Only 5 from a total of 56 Manufacturing respondents indicated that they had provided a skilled trade apprenticeship in the past 12 months. Further, of the 25 Manufacturing respondents with 10 or less employees, only one reported providing an apprenticeship.

The responsibility for apprenticeship provision may need to fall on larger employers. Larger companies tend to have well-developed roles and more means to support an apprentice. Conversely, small companies feel that they are often training grounds for larger firms that can pay more and offer more benefits, so for this reason are less inclined to take on an apprentice.

Business composition by employee size does present a dilemma when it comes to supporting apprenticeships. Of the 339 manufactures that have pay roll employees, 134 have 1 to 4 employees and only 19 firms have 100 or more employees.

Given the employee size characteristics of local manufacturers, an exploration of shared apprenticeship models is recommended. Collaboration among small firms may be the most feasible way to address skill trade shortages.

An examination of shared apprenticeship models would help focus the structure of the model (union versus non-union) the partners and the responsibilities of a shared apprenticeship model (that would meet local needs).

Note: In the Fall Economic Statement, released by the Ontario government (November 14, 2017), changes to the apprenticeship system were announced. The changes include replacing the Apprenticeship Training Tax Credit with a new Graduated Apprenticeship Grant for Employers (GAGE). “The GAGE is a grant that has been designed to better align the goal of improving completion rates, and improving participation rates of traditionally underrepresented groups, and create clearer, better pathways for apprentices.”

The GAGE program has several key design features; one that is particularly relevant to this action is a group sponsor arrangement, with special consideration given to small business employers. Given “the ministry is committed to engaging with employers and group sponsors to gain feedback on the system interface and stakeholders’ preferences for the system design” the potential for local employers should be investigated.

Action: Implementation of a Sector Focused Soft Skill Program

Sector unemployment and layoff trends suggest the presence of significant obstacles to both securing and retaining employment for lower skilled workers in the region. Secondary data analysis revealed that Sector labour shortages are most acute within lower waged, entry type occupations. These occupations tend to require high school and/or job specific training. At the same time, Sector unemployment levels were shown to be highest for these same skill groups. Youth unemployment, which often aligns with lower skilled or entry type positions, was also shown to be higher than for any other age groups.

In addition to higher unemployment, secondary data for Construction suggests that workforce churn may be higher for lower skilled occupations. The permanent layoff rate within Construction is three times the regional layoff rate. At the same time, job postings for lower skilled occupations in Construction are much higher than would be predicted based on the total number of jobs for those occupations. Disproportionately high job postings for lower skilled occupations suggest that layoff rates may be particularly acute in these occupations.

Sector employers and regional employment service providers indicated that weak soft skills were an important obstacle for obtaining and maintaining employment within the Sector. A survey of Sector employers identified lack of motivation, poor attitude and interpersonal abilities as the most common reason for having difficulty filling job vacancies. An earlier study of wood manufacturers in the region revealed a similar emphasis on work ethic.²⁴ Employment service providers indicated that weak employee coping skills often leads to employees quitting employment rather than working through difficulties.

²⁴ See November 2012. Wood Manufacturing: Skills Development Assessment. Four County Labour Market Planning Board and Bluewater Alliance.

The issue of soft skill deficits and their impact upon worker productivity and capacity to secure and maintain employment has become a nation-wide concern.²⁵ Literature reviews evaluating the effectiveness of training programs to address soft skill deficits have identified a number of factors for consideration and are summarized below.²⁶ Implementation of a Sector-focused soft skills training program is recommended for Bruce, Grey and Huron counties. An initial comprehensive assessment of Sector employer, Employment Service provider and worker interest and specific needs for soft skill training should be considered to inform a training program.²⁷

Target Audience: Soft skill programming should reflect the needs of the audience targeted for participation. Some key audience characteristics to be considered include;

- Whether participants are unemployed or employed
- Whether participants are switching into new industries or occupations
- Participant age and gender
- Participant family commitments
- Participant access to basic support structures such as housing

Participant Buy-In: Job seekers and workers may not recognize their need for soft skill training. Job seekers may be eager to gain employment immediately and thus be unwilling to postpone for the sake of training. On the other hand, employed workers may not recognize personal deficiencies in soft skills and with employment may not have an incentive to engage in further training. Given these constraints, structuring soft skill training in ways that foster participant buy-in is believed to increase effectiveness. For example, one soft skill program tied soft skill training with the hard skill training that was more valued by job seekers. For employed workers, incentives such as career advancement, pay increases or bonuses may need to be considered.

Individual Skills: Research has indicated that literacy levels and other foundational skills such as 'document use' of individuals participating in soft skill programs has a positive impact upon training outcomes.²⁸ Thus, if the target audience is known to have weak literacy skills, soft skill programming may need to incorporate pre-program literacy training.

Broader Economic Context: Willingness to participate in soft skill training has been shown to be counter-cyclical. During times of stable economic growth and relatively abundant job opportunities, workers may not feel a need to improve their skills. Participant buy-in becomes particularly important in this context.

Sector Training Environment and Capacity: Employer surveys indicate that Manufacturing employers tend to provide to training internally, whereas Construction employers obtain training externally. Small employers may have less capacity to support employee training programs, even if the cost is limited to

²⁵ For example, two-thirds of respondents in a 2013 survey of 500 employers across Canada reported that it was very or somewhat difficult to find employees with soft skills.

²⁶ See Palameta, B., Myers, K., Gyarmati, D., Voyer, J. 2011. Understanding training program effectiveness: A comprehensive framework. Learning and Active Employment Programs Project. Millier Dickinson Blais - In association with LeBlanc, S. March 2014. Simcoe Muskoka Workforce Development Board: Employability Skills Framework.

²⁷ The Simcoe Muskoka Workforce Development Board recently developed a soft skill program that may be worth examining for applicability within Bruce, Grey and Huron counties.

²⁸ Document use is an essential skill that relates to the ability to understand documents that combine text with graphs, symbols, numbers, colors and shapes. See Palameta, B., Myers, K., Gyarmati, D., Voyer, J. 2011. Understanding training program effectiveness: A comprehensive framework. Learning and Active Employment Programs Project.

lost labour power during training. Sector capacity to fund, support and engage with training programs should be factored into program delivery.

Action: Build a Comprehensive Regional Affordable Housing Strategy

Discussions with Sector employers indicated that access to affordable housing has become a significant obstacle to workforce attraction and retention in Bruce, Grey and Huron. Secondary data supports making affordable housing a high regional priority. Migration data indicates that all three counties are losing residents with lower incomes in the year after moving. Lack of affordable housing is one possible explanatory factor behind this observed out-migration. At the same time, Sector job vacancy and posting data indicate that labour shortages are particularly acute for lower waged, entry type positions. 80% of job vacancies in Manufacturing related occupations have average wages below the regional average wage.²⁹ Thus, the region is losing segments of the local workforce that are most in demand by Sector employers.³⁰

Bruce, Grey and Huron counties are desired destinations for tourists, retirees and people looking for a second home (cottages). While the attractiveness of the region is an economic asset, it is also placing pressure on the existing housing stock and weakening local residents' access adequate and affordable housing options. Further, while all three counties are actively involved in improving access to affordable housing, current initiatives are focused on poverty reduction and homelessness.

A full assessment of regional housing needs, including the needs of unemployed individuals, those employed with low to moderate incomes and seniors would inform regional housing priorities and build wider community support for a housing strategy. There is growing recognition, particularly in rural or smaller communities, that affordable housing is a workforce planning and economic development issue.³¹ Affordable housing shortages can have widespread economic impacts, including limiting employers' access to labour and thus their capacity to grow, and also reduced local resident consumer spending.³² A comprehensive approach to housing affordability that highlights affordability as an issue facing many community members and having broad economic impacts can also help to reduce negative public perceptions towards housing strategies and draw together community stakeholders, including employers, non-profit organizations and municipal representatives.

Small communities face unique housing affordability challenges and effective responses are also particular to community size. A survey of both private and public affordable housing stakeholders from small and rural communities in British Columbia showed that access to funding and high development costs were the highest perceived barrier to local response to affordable housing challenges.³³ This is not surprising. Small communities are challenged in their capacity to generate scale economies for housing

²⁹ See Table 17.

³⁰ Regional Hospitality and Tourism Sector employers have also indicated that lack of affordable housing is the most significant obstacle to Sector workforce attraction and retention initiatives.

³¹ See Centre for Sustainability Whistler. October 16, 2017. Building Knowledge & Capacity for Affordable Housing in BC Small Communities. Colorado Municipal League & Housing Colorado. July 2014. Affordable Housing in Small Communities: Deciphering the Problem and Finding Solutions.

³² See Maxfield Research Inc., GVA Marquette Advisors. September 2001. Workforce Housing: The Key to Ongoing Regional Prosperity - A Study of Housing's Economic Impact on the Twin Cities.

³³ See Centre for Sustainability Whistler., Heartwood Consulting. September 8, 2017. Building Capacity for Affordable Housing in BC Small Communities - What We Heard: Summary of Survey and Interview Responses.

initiatives. That said, reviews of affordable housing initiatives within small communities have identified a number of possible options. Some key findings and initiatives are listed below.

Inclusionary Zoning: Permits for new residential development is made conditional on the development of a specified percent or amount of affordable residential units. Some regions will allow developers to make cash payments in-lieu of building affordable units. Inclusionary zoning has been effectively used in regions where there is strong demand for residential development and where the development market can absorb added costs to residential development.

Covenant and Eligibility Tools: Covenant and eligibility tools are criteria used to direct affordable housing access towards targeted populations. Covenant tools are registered directly onto land titles. Income thresholds, local employment criteria (only local employee can apply), length of local residency and resale conditions such as housing price caps are all examples of Covenant and eligibility tools.

Development Incentives: Development incentives are used to influence development decisions through financial incentives. Examples include; streamlining development approval processes, tax reductions (used in the United States) and direct subsidies for development. An example of a direct subsidy is the Accessory Suite program in Canmore, B.C. where the municipal government provides up to \$10,000 to assist a home owner in building an apartment within his or her home.

Housing Demand Supports: Some regions have supported housing access by providing direct financial support to potential home buyers (Bruce, Grey and Huron counties currently participate in the provincial rent supplement program). Examples of housing demand supports include the shared equity model (where a municipal authority or housing developer provides home buyers with assistance on their down payment. This assistance acts as an equity investment for the lender, whom will then benefit from any asset appreciation that may occur later on). Another example is the municipal provision of interest free loans to help employees buy and live locally.

Partnerships and Multi-stakeholder Collaboration: Given the greater economies of scale challenges facing smaller communities, facilitating and coordinating collaboration between different levels of government, the private sector and the non-profit sector has been identified as a key factor in successful affordable housing initiatives.³⁴

³⁴ See Canada Mortgage and Housing Corporation. Project Profile - 145 High Street, Collingwood, Ontario.

Appendix

Table A1: Manufacturing Industry Sub-Groups, NAICS 3 Digit; Bruce, Grey & Huron Counties, June 2017

NAICS 3 Digit Industry Group	Number of Firms	Growth Rate (From Dec 2014)
Total	759	4.4%
332 - Fabricated metal product manufacturing	124	11.7%
321 - Wood product manufacturing	99	
311 - Food manufacturing	83	6.4%
333 - Machinery manufacturing	82	7.9%
337 - Furniture and related product manufacturing	75	-15.7%
339 - Miscellaneous manufacturing	63	-3.1%
323 - Printing and related support activities	48	0.0%
336 - Transportation equipment manufacturing	33	17.9%
312 - Beverage and tobacco product manufacturing	24	20.0%
327 - Non-metallic mineral product manufacturing	22	0.0%
335 - Electrical equipment, appliance and component manufacturing	22	22.2%
326 - Plastics and rubber products manufacturing	18	-5.3%
325 - Chemical manufacturing	13	-7.1%
315 - Clothing manufacturing	12	0.0%
334 - Computer and electronic product manufacturing	10	-23.1%
314 - Textile product mills	9	28.6%
316 - Leather and allied product manufacturing	8	33.3%
331 - Primary metal manufacturing	8	100.0%
313 - Textile mills	4	100.0%
322 - Paper manufacturing	2	-33.3%
324 - Petroleum and coal product manufacturing	0	-100.0%

Source: Statistics Canada, Canadian Business Counts. Custom Table

Table A2: Manufacturing Employment Age Structure; Bruce, Grey & Huron Counties, NHS 2011

Age Cohort	Manufacturing	Manufacturing - D Skill Type	All Industries	Ontario - Manufacturing
15 to 24 Years	13.6%	30.9%	15.9%	13.9%
25 to 44 Years	35.1%	27.0%	33.5%	42.1%
45 to 54 Years	26.7%	24.4%	25.9%	25.5%
55 to 64 Years	18.9%	16.1%	19.1%	15.0%
65 Years Plus	5.7%	1.6%	5.8%	3.5%

Source: Statistics Canada, NHS 2011

Table A3: Construction Labour Force by Age Cohort; Bruce, Grey & Huron Counties, NHS 2011

Age Cohort	Construction	Construction - D Skill Type	All Industries	Ontario - Construction
15 to 24 Years	12.1%	32.2%	15.9%	10.7%

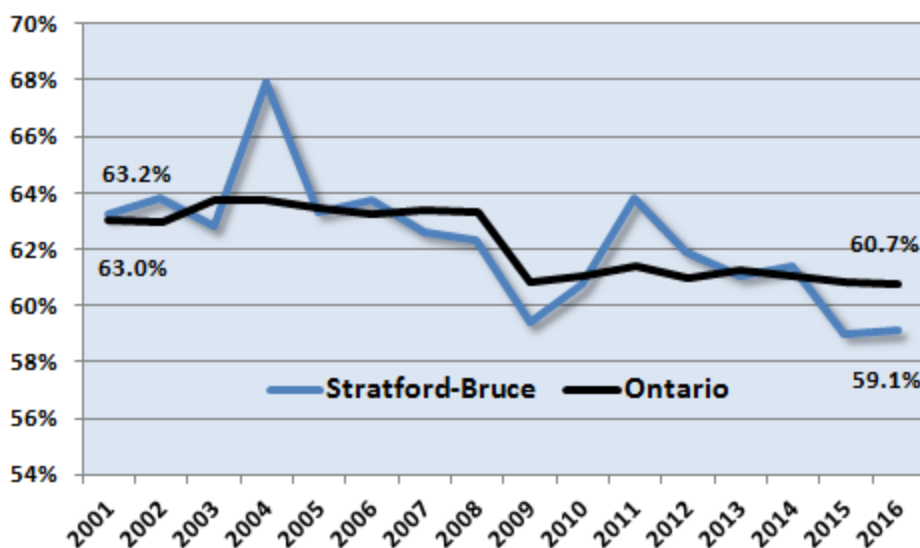
25 to 44 Years	36.6%	31.5%	33.5%	41.9%
45 to 54 Years	26.4%	23.6%	25.9%	27.9%
55 to 64 Years	18.7%	11.5%	19.1%	16.0%
65 Years Plus	6.3%	1.3%	5.8%	3.5%

Source: Statistics Canada, NHS 2011

Table A4: Statistics Canada, NOC, Occupation Skill Levels

Skill Level	Definition
0	Management Positions
A	Professional jobs that usually call for a degree from a university
B	Technical jobs and skilled trades that usually call for a college diploma or training as an apprentice
C	Intermediate jobs that usually call for high school and/or job-specific training
D	Labour jobs that usually give on-the-job training

Figure A1: Employment Rate - 15 Years Plus; Stratford-Bruce Economic Region & Ontario, 2001 - 2016



Source: Statistics Canada, Labour Force Survey. Custom Table

Detailed Analysis of Population Aging and Labour Force

Tables A5 to A8 provide a more detailed analysis of the impact that population aging is having upon regional labour force participation and employment.³⁵ Table A5 shows percent changes in the total labour force by age cohort between 2007 and 2016 for Stratford-Bruce and Ontario. While, Stratford-Bruce saw a decline of 4.3% in the total labour force (15 years and over), this decline was fully accounted for by reductions within the 25 to 44 and 45 to 54 year age cohorts. All other age cohorts experienced labour force growth for this period. As Table A6 shows, age specific labour force reductions were mimicked by parallel declines in population for these same age cohorts.³⁶

³⁵ Though the following discussion is focused on labour force participation, a similar pattern can be observed for employment rates.

³⁶ A similar yet less exaggerated process can be observed for labour force and population change in Ontario.

Further, labour force declines within the 25 to 44 and 45 to 54 age cohorts were the primary cause of reductions in the overall participation rate in Stratford-Bruce between 2007 and 2016, and the primary cause of the region's lower rate relative to Ontario. Table A7 shows that while Stratford-Bruce's overall, 15 years and over, participation rate had declined by 3.1% between 2007 and 2016 this decline was not observed within any of the disaggregated age cohorts. The participation rate for the largest cohorts (years 25 to 44 and 45 to 54) saw only slight declines and for years 55 to 64 and 66 plus the participation rate actually increased.³⁷ Similarly, while the region's overall participation rate in 2016 was 2.9 percentage points below the provinces, regional rates were above the province for ages 15 to 24, 25 to 44 and 65 plus. Further, the regional rate was only 0.3 percentage points below the province for ages 45 to 54 (see Table A8).

Table A5: Labour Force by Age Cohort; Stratford-Bruce & Ontario, 2016

	2016 Labour Force (x 1,000)	Percent Change from 2007	Percent Change from 2007
	Stratford-Bruce		Ontario
15 years and over	152.8	-4.3%	7.1%
15 to 24 years	30.4	6.3%	-4.8%
25 to 44 years	55.1	-13.1%	-0.5%
45 to 54 years	30.9	-22.8%	2.9%
55 to 64 years	26.4	16.3%	40.2%
65 years and over	9.9	102.0%	110.9%

Source: Statistics Canada, Labour Force Survey. Custom Table

Table A6: Population by Age Cohort; Stratford-Bruce & Ontario, 2016

	2016 Population (x 1,000)	Percent Change from 2007	Percent Change from 2007
	Stratford-Bruce		Ontario
15 years and over	246.2	0.6%	11.6%
15 to 24 years	42.3	9.3%	2.8%
25 to 44 years	62.1	-12.9%	1.1%
45 to 54 years	36.6	-22.1%	3.3%
55 to 64 years	41.1	12.3%	31.7%
65 years and over	64.1	25.4%	37.7%

Source: Statistics Canada, Labour Force Survey. Custom Table

Table A7: Stratford-Bruce Economic Region Participation Rates by Age Cohort, 2007 & 2016

	2007 Participation Rate	2016 Participation Rate	Percentage Point Difference
15 years and over	65.2%	62.1%	-3.1%
15 to 24 years	73.9%	71.9%	-2.0%
25 to 44 years	88.9%	88.7%	-0.2%

³⁷ Even the largest decline in participation, within the 15 to 24 years group, was below the overall decline.

45 to 54 years	85.1%	84.4%	-0.7%
55 to 64 years	62.0%	64.2%	2.2%
65 years and over	9.6%	15.4%	5.8%

Source: Statistics Canada, Labour Force Survey. Custom Table

Table A8: Participation Rate by Age Cohort; Stratford-Bruce Economic Region & Ontario, 2016

	Stratford-Bruce	Ontario	Percentage Point Difference
15 years and over	62.1%	65.0%	-2.9%
15 to 24 years	71.9%	60.3%	11.5%
25 to 44 years	88.7%	85.9%	2.8%
45 to 54 years	84.4%	84.8%	-0.3%
55 to 64 years	64.2%	66.5%	-2.3%
65 years and over	15.4%	14.4%	1.1%

Source: Statistics Canada, Labour Force Survey. Custom Table

Table A9: Manufacturing Employment by NOC 2 Digit Occupation Group; Bruce, Grey & Huron Counties, NHS 2011

NOC 2 Digit Occupation	Skill Type	Percent of Total Sector Employment
94 Processing and manufacturing machine operators and related production workers	C	13.6%
96 Labourers in processing, manufacturing and utilities	D	13.0%
95 Assemblers in manufacturing	C	11.2%
72 Industrial, electrical and construction trades	B	10.2%
73 Maintenance and equipment operation trades	B	7.1%
07-09 Middle management occupations in trades, transportation, production and utilities	O	5.6%
92 Processing, manufacturing and utilities supervisors and central control operators	B	5.3%
74 Other installers, repairers and servicers and material handlers	C	3.7%
75 Transport and heavy equipment operation and related maintenance occupations	C	3.6%
15 Distribution, tracking and scheduling co-ordination occupations	C	3.3%

Source: Statistics Canada, NHS 2011

Table A10: Construction Employment by NOC 2 Digit Occupation Group; Bruce, Grey & Huron Counties, NHS 2011

NOC 2 Digit Occupation	Skill Type	Percent of Total Sector Employment
72 Industrial, electrical and construction trades	B	40.2%
75 Transport and heavy equipment operation and related maintenance	C	9.7%

occupations		
76 Trades helpers, construction labourers and related occupations	D	9.5%
73 Maintenance and equipment operation trades	B	6.8%
12 Administrative and financial supervisors and administrative occupations	B	6.1%
07-09 Middle management occupations in trades, transportation, production and utilities	O	6.0%
22 Technical occupations related to natural and applied sciences	B	4.5%
14 Office support occupations	C	3.7%
13 Finance, insurance and related business administrative occupations	B	2.8%
00 Senior management occupations	O	1.7%

Source: Statistics Canada, NHS 2011