millierdickinsonblais

Yukon Labour Market Supply and Migration Study

Prepared by Millier Dickinson Blais for the Yukon Skills Table

Final Report

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Contents

Executive Summary

Meeting employment needs in Yukon is expected to be a critical challenge for the future of the territory's economy. Yukon, as part of northern Canada, is positioned to be at the forefront of an anticipated global increase in demand for natural resources in the next ten years. The demand from the resource sector, coupled with other sectors, is amplifying the challenge for Yukon and other natural resource producing regions, to ensure that there will be enough appropriately skilled people available to support anticipated demand.

In order to understand and prepare for resource related demand as well as other economic challenges impacting the territory's labour force, the *Yukon Labour Market Supply and Migration Study* investigates the dynamics of the labour supply in Yukon. The perspectives of current and future workers and inter-provincial/territorial migration patterns are highlighted in the research – offering direct insight for all stakeholders engaged in the labour market on how to ensure employment needs of workers and employers can best be met.

The report findings are encouraging; employment demand is anticipated to be strong in the medium and long term, with the need for 3,683 additional employees by 2021, when retirements and other factors are included, the projection increases to 6,308 positions. For more details on this projection, see *Employment by Detailed Occupation*, beginning on page 19. While certainly a positive outlook, the figure does cause concern because demand will far outstrip the availability and capacity of the local labour force. In order to maximize economic growth, it will be essential to ensure that all members of the labour force are well positioned to be fully engaged and informed of the employment opportunities that exist.

The strategies proposed in this report to address the labour gap target both increased labour force participation as well as a pro-migration agenda, designed to ensure that supply and demand are best aligned to strengthen the potential for economic growth and prosperity in Yukon.

Methodology

The report opens with a chapter, *Current Context* which summarizes economic conditions in Yukon. This chapter reviews economic trends and projections that are expected to most significantly affect the labour force, including natural resource development and tourism.

In chapter two, *Labour Force Supply,* Yukon's labour force is analyzed in depth, revealing historic trends and projections for key labour market indicators including top occupations, industry statistics and demographic change.

Labour Force Migration is the focus of the third chapter, outlining recent migration patterns to and from Yukon and the impact of migration on Yukon's economy.

The fourth chapter of the report presents an *Economic Impact Analysis,* informing worker productivity in key industries, and the contribution of the labour force to the economic prosperity of Yukon.

Community Engagement findings in the fifth chapter share the results of an extensive consultation process that included eight focus groups with a total of 49 participants, a labour force survey with 115 responses, capturing the perspectives of Yukon workers and other stakeholders regarding challenges, opportunities and solutions to barriers to advancement.

Finally, key *Recommendations* arising from the analysis are outlined, based on a thorough assessment of strengths, weaknesses, opportunities and threats.

Recommendations

This report and its recommendations are presented to the Yukon Skills Table for consideration. The key themes of the Yukon Labour Market Supply and Migration Study emerged from the research, including consideration of quantitative projections and qualitative community engagement findings. Details of recommendations arising from the research are presented beginning on page 49.

The key themes of the Yukon Labour Market Supply and Migration Study emerged from the research, including consideration of both quantitative projections and qualitative community engagement findings. For more detail on the recommendations arising from the research, see *Recommendations*, beginning on page 50.

Inform: Increase the efficiency of the labour force by supplying accurate labour market information to the local labour force as well as those that might relocate to Yukon.

Recommended strategies include:

- Empower evidence-based decision making through reliable, current and relevant information
- Centralize access to labour market information, career planning and employment services

Attract and Retain: Ensure a targeted and strategic approach to attract talent that aligns with labour market demand, while establishing a strong commitment to retain existing talent; Regional and local assets and quality of life strengthen capacity to attract and retain talent.

Recommended strategies include:

- Promote Yukon as a welcoming employment destination
- Retain workers in Yukon and convert short term workers to residents through community engagement, incentives and housing

Collaborate: Increase collaboration between and among key stakeholder groups including employers, educators, government, economic development, and not-for-profit and voluntary sectors to strengthen opportunities to align supply and demand

Recommended strategies include:

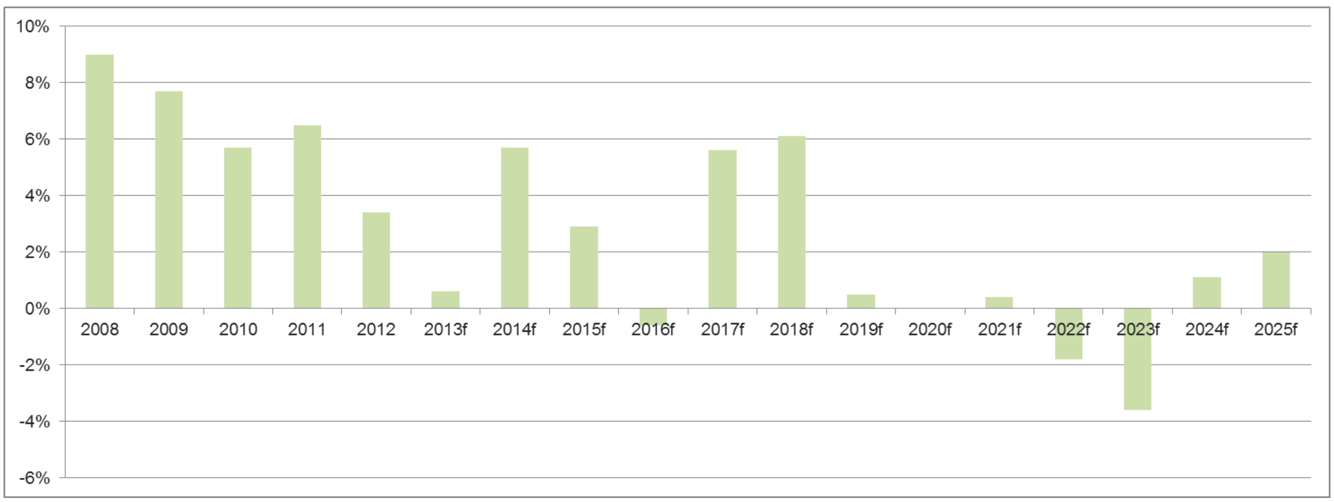
- Ensure the skills of the labour force are aligned with labour market needs by working with community partners
- Maintain collaboration between stakeholder groups and communities to strengthen opportunities and impact

1 Current Context

The relationship between the natural resource sector and the territory's GDP is strong, and although every business sector contributes to the success of Yukon, the mining industry has a significant overall impact on many areas of the economy. However, growth in the tourism sector is providing some balance to this dynamic with tourism expected to generate new employment opportunities. Both sectors are profiled to identify recent trends and their impact on the labour force.

Yukon's economy performed well from 2010 to 2012, maintained by high commodity prices and mining activity. Since then, softening metal and precious metal prices in 2012 and 2013 have affected mining activity and real GDP growth has declined in response. In Figure 1, this decline culminates in a forecast of 0.6% growth in 2013 by the Conference Board of Canada.

FIGURE 1: YUKON GDP GROWTH RATE



f = forecast

Source: Conference Board of Canada Territorial Outlook Economic Forecast, 2013

The construction industry, often impacted by non-residential development in the mining sector, experienced significant declines in 2012, related to non-residential construction trends, as GDP growth decreased by 24.3%. The Conference Board anticipates that mining and exploration activity will rise from 2014 – 2016, resulting in increased output from the construction sector. Increased mining activity in the future is expected to have a positive impact on transportation and warehousing which, after declining 3.2% in 2012, is expected to increase to 15.6% in 2013 and 8.3% in 2014.

Yukon's tourism industry has been performing well and, along with increasing wages in other sectors, is assisting in boosting Yukon's retail sector. No gains are expected in the public sector including health care, education, public administration and social services.

Mining and Exploration

Forest, energy, minerals and metals directly accounts for $227 billion or 13.3% of Canada's economy. These sectors directly employ 950,000 people. Indirectly, the sector employs an additional 850,000 and contributes another 5% of national GDP. In Yukon, these sectors generate an estimated 2,236 jobs and contribute 23% of territorial GDP.[1] Some expect that investment in the natural resources sector could amount to $500 billion nationally in the next ten years[2]. While this is positive news for the economy, the industry will struggle to find workers. The Mining Industry Human Resources Council anticipates that the Canadian mining sector will generate between 112,020 and 141,540 new jobs generated by 2021.[3]

With such positive forecasts it seem surprising that in 2013 two out of the three active mines in Yukon cut production and reduced their total number of employees. Bellekeno mine, for example, began a temporary shutdown in 2013 .The Conference Board of Canada anticipates this slow-down will be temporary with mining activity and overall GDP picking up again in 2014 and 2015, by 5.7% and 2.9% respectively.

The Conference Board further indicates that in 2014 two new mines are expected to be under construction by Victoria Gold and Copper North which will require a combined capital investment of $600 million. These and other projects will increase the demand for mining industry jobs by 2.5 times more than the number of people currently employed in the industry. It is important to recognize that commodity pricing and the challenge of raising necessary capital could have a negative influence on the progression of these projects.

The Mining Industry Human Resources Council has forecasted that under a baseline scenario 2,900 jobs will be created over the next 10 years while only 280 new workers in the mining sector will enter the labour pool during the same time period[4]. In these calculations, jobs will be generated from retiring workers as well as new job creation from increased activity.

The gap between the number of jobs available and number of workers entering the workforce is so significant that labour shortages may lead to lost economic opportunities for the territory.

According to Bloomberg[5], the skills shortage in the natural resources sector is global with other resource-based countries such as Australia and Chile also in the market for

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1 Energy and Mines Ministers' Conference, 2013. Labour Market Challenges in the Natural Resources Sector: Federal, provincial and territorial perspectives and best practices

2 Defining the Opportunity: Assessing the Economic Impact of the Natural Resources Sector, Natural Resources Canada, September 2012

3 Ibid

4 Mining Industry Human Resources Council, 2013. Yukon Hiring Requirements and Available Talent Forecasts: Mineral Exploration, Mining, and Support Services.

5 Mining Companies in Global Talent War, Bloomberg Businessweek, April 25, 2012 [Online March 2014: http://www.bloomberg.com/news/2012-04-25/mining-companies-in-global-talent-war.html]

skilled workers[6]. Federal, provincial and territorial leaders agree the labour market challenges in the natural resources sector will only be met through a coordinated effort to[7]:

- Increase the participation rate of under-represented groups including Aboriginal people
- Recruit and retain workers through work experience, professional skills upgrading and recognition of foreign credentials
- Develop occupational standards that are accepted across Canada and develop the skills of existing workers to enhance productivity
- Remove barriers to the mobility of workers between provinces and territories
- Provide up to date and useful labour market information.

Tourism

The Canadian Tourism Human Resource Council estimates that increased economic activity and tourism visitation will increase national employment in the tourism sector from1.2 million jobs in 2010 to 2.1 million jobs by 2030.[8] While the international recession in 2008 and 2009 generated a surplus of labour, it is anticipated this surplus was exhausted in Canada by 2013 as the overall demand for labour in the tourism sector outpaced increases in the labour supply.

International border crossings, excluding trains and commercial trucks, illustrate the corresponding improvements in the performance of Yukon's tourism sector. The dip in 2009 border crossings in Figure 2 reveals that the recession had an impact on visitors to the territory, decreasing border crossings by 10% in 2008 and 7% in 2009[9]. However from 2010 to 2013, the number of visitors began to increase steadily.

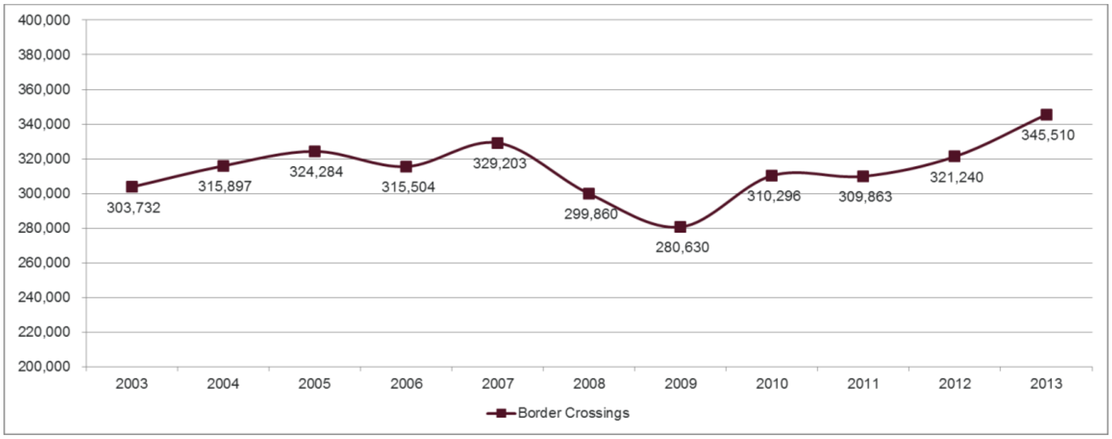
6 Federal, Provincial and Territorial ADM Working Group, 2013. Labour Market Challenges in the Natural Resources Sector; Federal, Provincial and Territorial Perspectives and best Practices.

7 Ibid.

8 The Canadian Tourism Human Resources Council, 2012. The future of Canada's tourism sector: Shortages to resurface as labour markets tighten

9 International border crossings refer to only international travellers. If Canadians and international travellers are included in this figure, then total land crossings at the five border crossings on Yukon-Alaska highways in 2013 was 432,171.

FIGURE 2: YUKON BORDER CROSSINGS



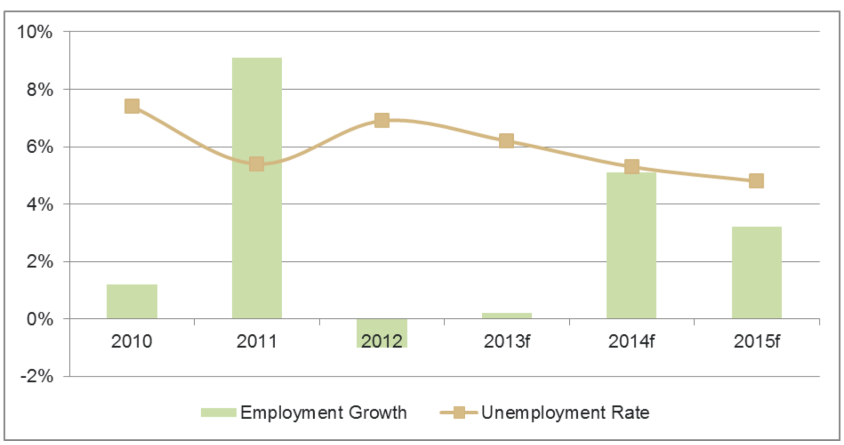
Source: Yukon Government, Department of Tourism and Culture. Yukon Visitor Statistics Year-End Report 2012 and Yukon Tourism Indicators December 2013

The highest number of border crossings in 10 years was reported in 2013, at 345,510 visitors as of December 2013. The growth in the number of visitors over the past four years bodes well for Yukon's tourism sector, and will likely increase the demand for workers. The tourism sector in the territory could experience similar labour shortage problems as those forecasted for the country if Yukon's tourism labour force is not carefully managed.

Short Term Labour Market Outlook

The relative weakness of the Yukon economy in 2013 led to lower employment levels, but the unemployment rate declined at the same time, reflecting a reduction in the size of the labour force, as depicted in Figure 3. A relatively low unemployment rate indicates the labour force declined more rapidly than the number of people employed.

FIGURE 3: YUKON EMPLOYMENT GROWTH RATE AND UNEMPLOYMENT RATE



Source: Conference Board of Canada Territorial Outlook Economic Forecast, 2013 (f = forecast)

A declining labour force indicates fewer people looking for work, influenced perhaps by retirements, a change in migration patterns, personal choice, or people simply leaving the labour market by choice due to unsuccessful job search.

In 2012, Yukon was one of only five provinces/territories to report a lower unemployment rate than the Canadian average of 7.2%, despite having the second highest participation rate in the country[10].

As indicated in the previous section, increasing mining activity will likely drive increased employment in the short to medium term. The Conference Board of Canada estimates that between 2012 and 2018[11]:

- Mining and exploration will generate 600 jobs
- Construction will generate 800 jobs

In addition to job growth, wages and salaries are expected to grow at an average rate of 4.5% from 2012 to 2025. This generally also has a positive effect on the retail sector as residents spend disposable income on consumer goods.

10 Yukon Bureau of Statistics, 2012. Yukon Employment Annual Review 2012

11 The Conference Board of Canada, 2013. Territorial Outlook Economic Forecast

2 Labour Force Supply

While the previous chapter summarized short term trends in the economy, including the most recent recession in 2008 and 2009 and the recent decline in commodity prices, this section offers a longer term view. This chapter reviews past trends in population, labour force and employment growth in Yukon and provides projections for each of these indicators to 2021. Labour force and employment statistics are projected by age and gender, by industry and by detailed occupation.

Based on anticipated future economic performance, Yukon's labour force is expected to increase, along with its total population. These changes will create negative pressure on the local labour force as participation rates and in-migration increases, resulting in more people active in the labour force and available for work. Employers will find this scenario positive as there is more supply to meet demand.

The projections were developed using an integrated economic and demographic projection system that relates future population trends to an area's future labour requirements. This model has been developed by SPI, a national spatial projections firm that specializes in assessing historical trends and in modeling the economic and demographic future of countries, provinces, states, metropolitan areas and individual communities. Future worker requirements are determined by expected growth in economic base jobs in the area of study by industry.

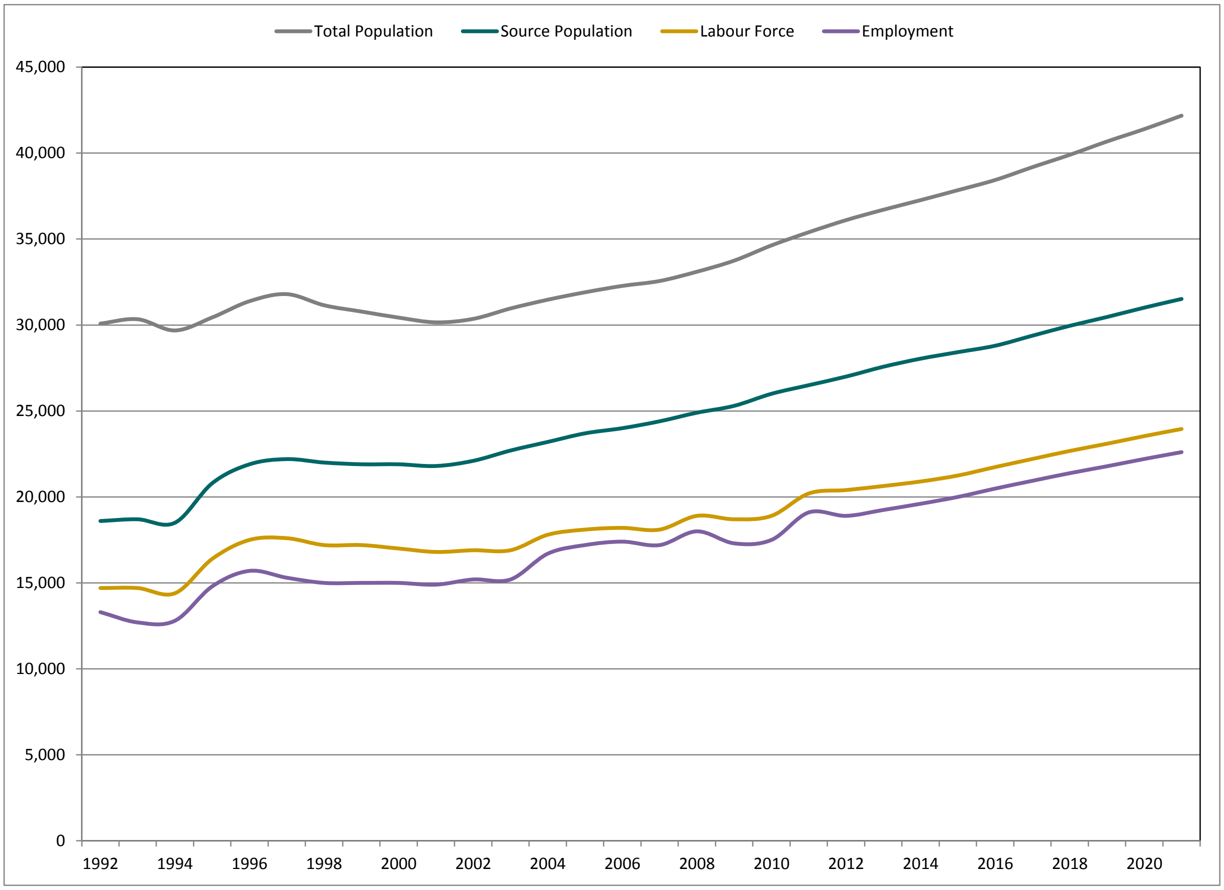
Future trends in population are calculated based on the age and gender profile of the population in the base year and on future expectations for fertility and mortality rates by age and gender. It is assumed that migration into the area would increase in response to a shortage of workers to meet an area's labour requirements. In such a case the total population would likely grow. Migration out of the area is assumed to occur if the number of workers available locally exceeds local requirements. In such a case the total population would decline.

For more information about the SPI economic forecasting model, please see the Appendix, beginning on page 58.

2.1 Historical and Projected Population, Labour Force and Employment

Figure 4 shows the growth paths of the following populations in Yukon: total population, the 'source' population (non-institutionalized persons 15 and over), the labour force, and total employment for Yukon. The data for 1992 to 2012 are as published by Statistics Canada while the figures projected for 2013 to 2021 have been prepared by SPI.

FIGURE 4: YUKON POPULATION, LABOUR FORCE AND EMPLOYMENT 1992 TO 2021

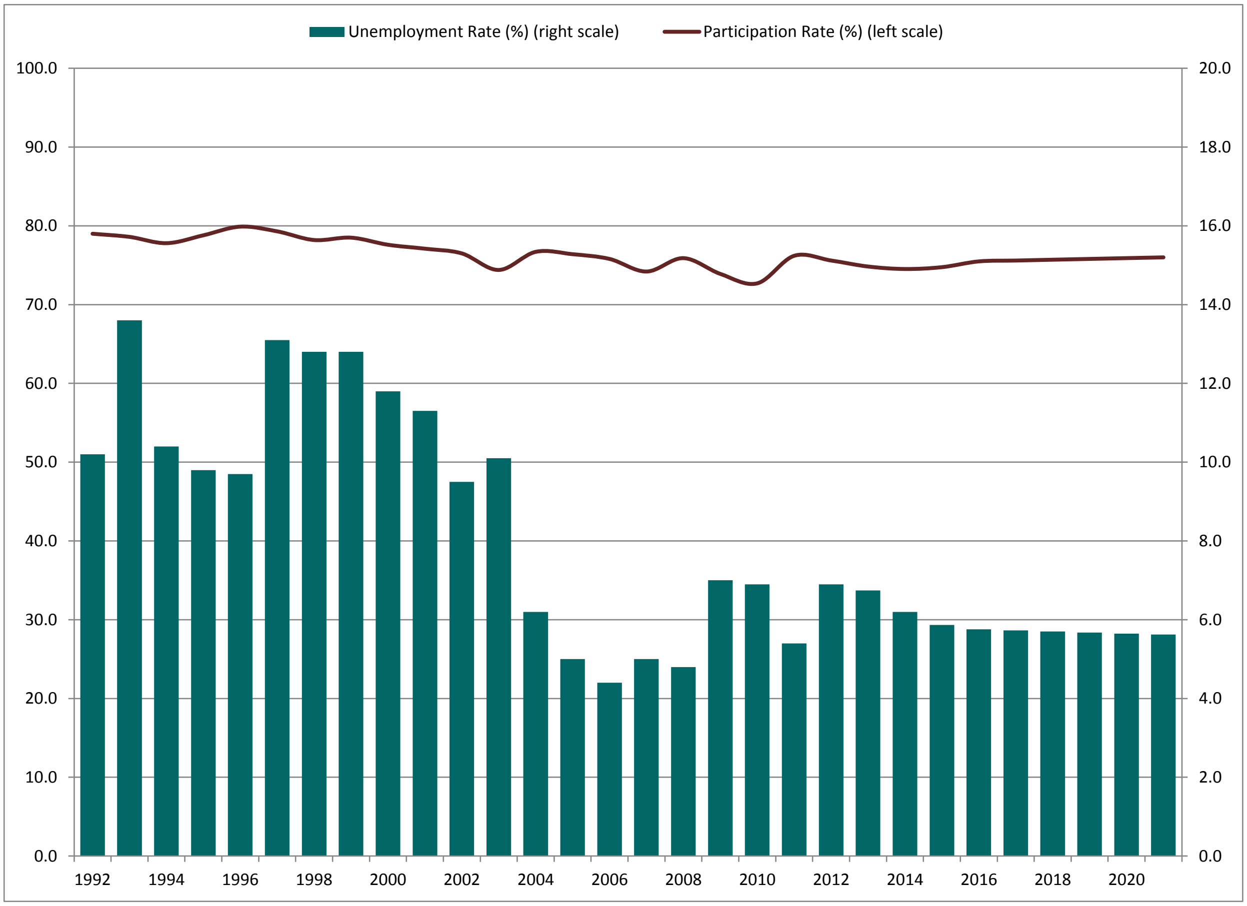


Source: Past data provided by Statistics Canada. Projections provided by SPI

Yukon's population growth was relatively slow from 1992 to 2002, with total employment experiencing sluggish growth. However, employment has since been growing steadily in the medium term. As of 2012 employment had reached 18,900 compared to 15,200 in 2002 and 2003. The 3,700 increase in jobs in turn supported a population gain of more than 5,000 people.

Figure 5 illustrates the past and projected future rates for labour force participation (the labour force expressed as a percentage of the source population where the latter includes all non-institutionalized people aged 15 year and older) and unemployment (unemployment expressed as a percentage of the labour force).

FIGURE 5: YUKON LABOUR FORCE PARTICIPATION RATE AND UNEMPLOYMENT RATE 1992 TO 2021



Source: Past data provided by Statistics Canada. Projections provided by SPI

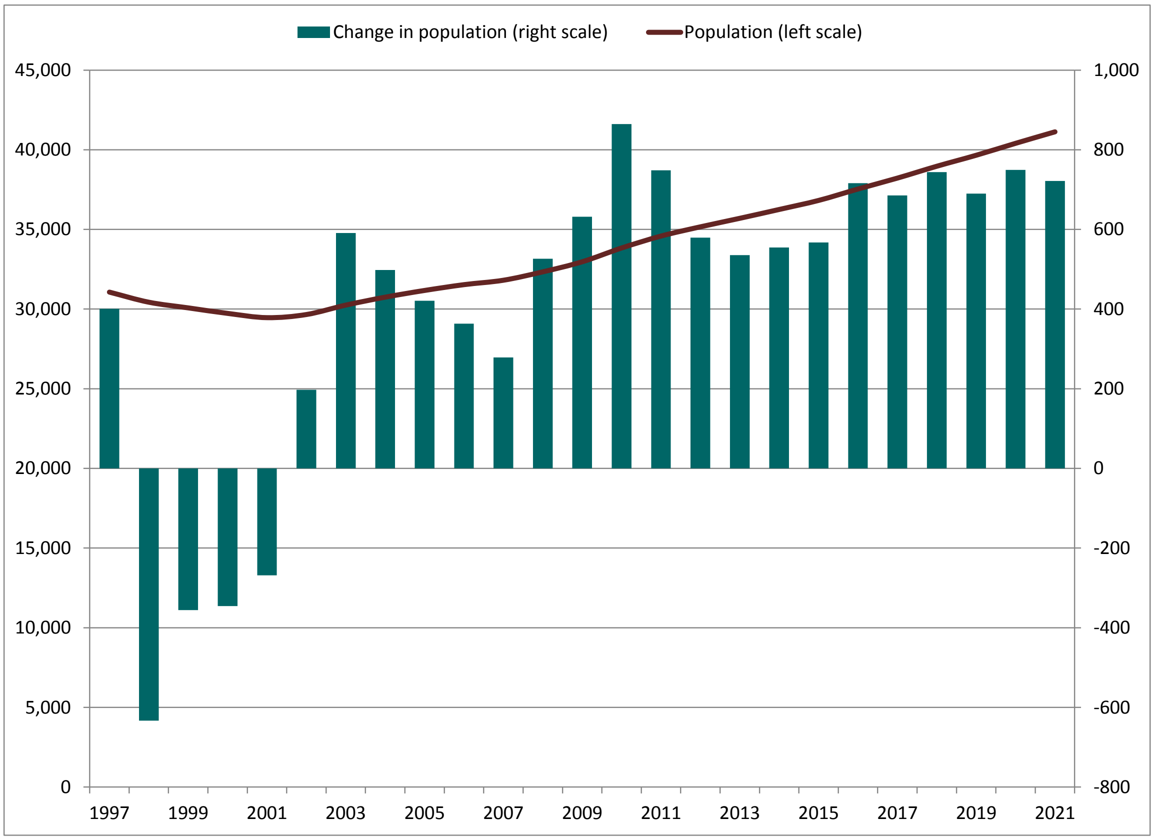
Yukon's unemployment rate exceeded 10 percent from 1992 to 2002 while the labour force participation rate gradually declined, which could be due to the discouraged worker phenomenon. The discouraged worker phenomenon is when, in the absence of job growth, workers tend to withdraw from the labour market altogether rather than continue to seek work. Since 2002, however, with employment growing steadily, the unemployment rate has fallen. These new jobs were initially filled with local unemployed residents and then later by hiring migrants to the area as local labour supplies dwindled.

SPI projects Yukon's employment base will continue to grow from now through to 2021, that the labour force participation rate will increase slightly, the unemployment rate will decline slightly, and that positive net in-migration will occur to help fill the jobs that will be created.

2.1.1 Sources of Population Growth

Figure 6 shows the population of Yukon from 1997 to 2012 based on the Statistics Canada Census and related population estimates, and SPI projections for the total population from 2013 to 2031. The population trend is depicted in the figure by a burgundy line, referring to the left scale. The annual change in population over that period is also shown with green bars, referring to the right scale. When the unemployment rate in Yukon increased in the late 1990s, the territory's population fell as workers moved out. However, when employment growth resumed reducing the unemployment rate from 2003 onwards, Yukon's population grew.

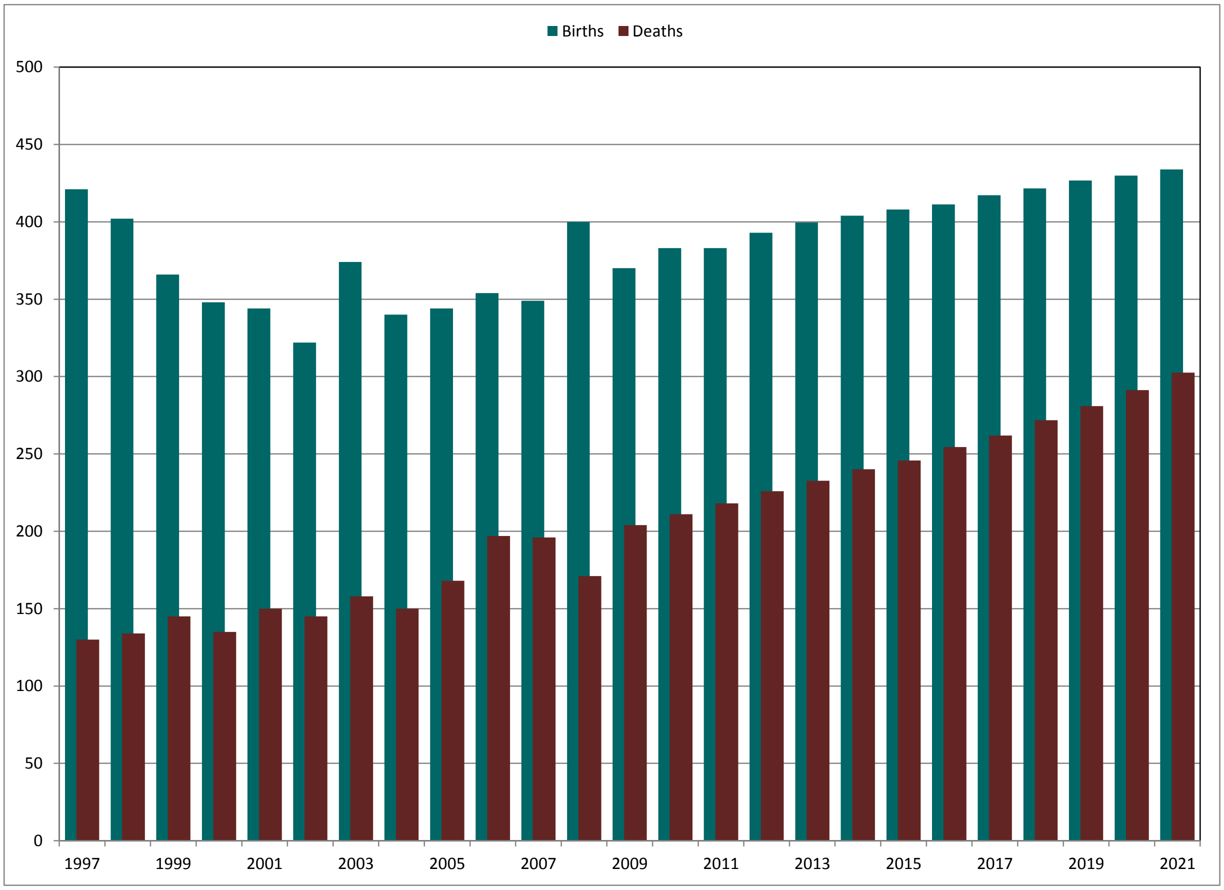
FIGURE 6: YUKON POPULATION AND POPULATION GROWTH 1997 TO 2021



Source: Past data provided by Statistics Canada. Projections provided by SPI

Part of population growth can be credited to natural increases. Figure 7shows that births have exceeded deaths in Yukon from 1992 to 2012 and that they are expected to continue to do so through to 2021. In other words, net natural population growth has been, and is expected to continue to be positive in the future.

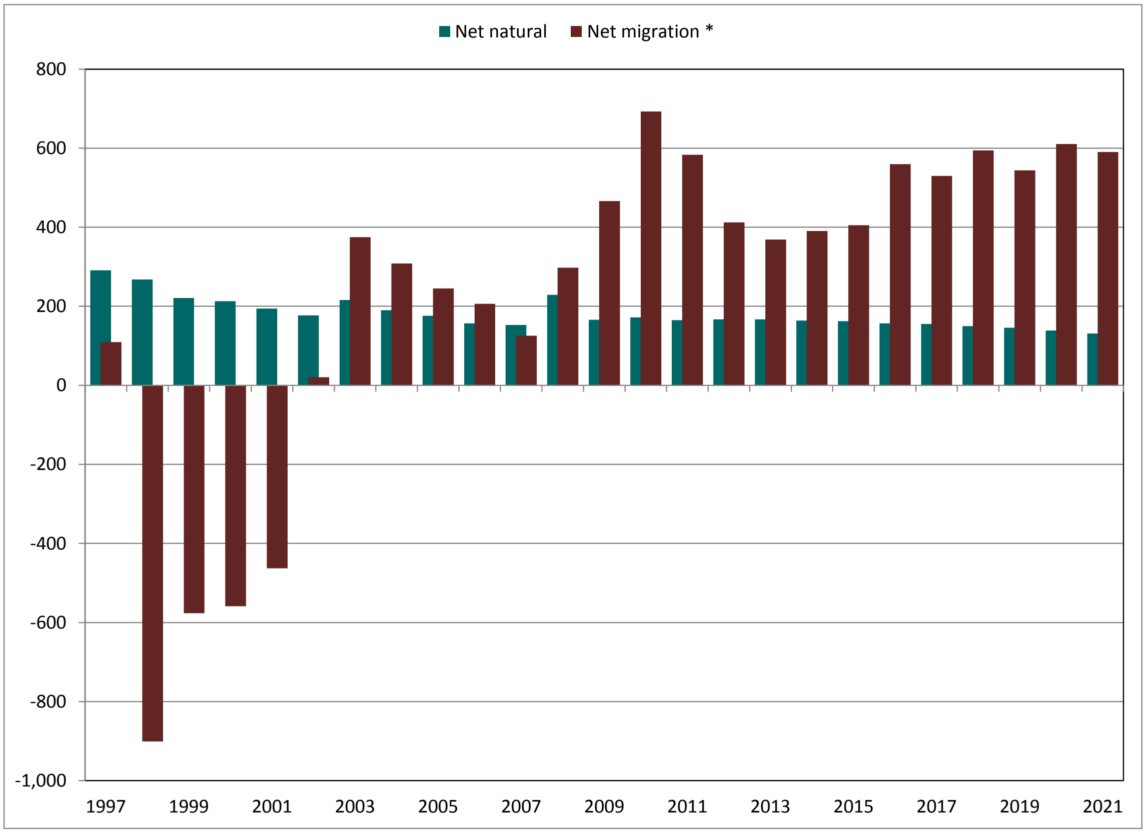
FIGURE 7: YUKON BIRTHS AND DEATHS 1997 TO 2021



Source: Past data provided by Statistics Canada. Projections provided by SPI

Although natural population growth in Yukon is positive, migration plays an important role in meeting the territory's employment needs. Figure 8 compares net natural population growth from 1997 to 2021 to net migration over the same time span.

FIGURE 8: YUKON NET NATURAL POPULATION GROWTH AND NET MIGRATION 1997 TO 2021



Source: Past data provided by Statistics Canada. Projections provided by SPI

This exhibit clearly shows that the declines in population in the late 1990s stemmed from net out-migration and that the steady growth in Yukon's population since 2003 can be traced to strong net in-migration.

2.1.2 Migration Trends

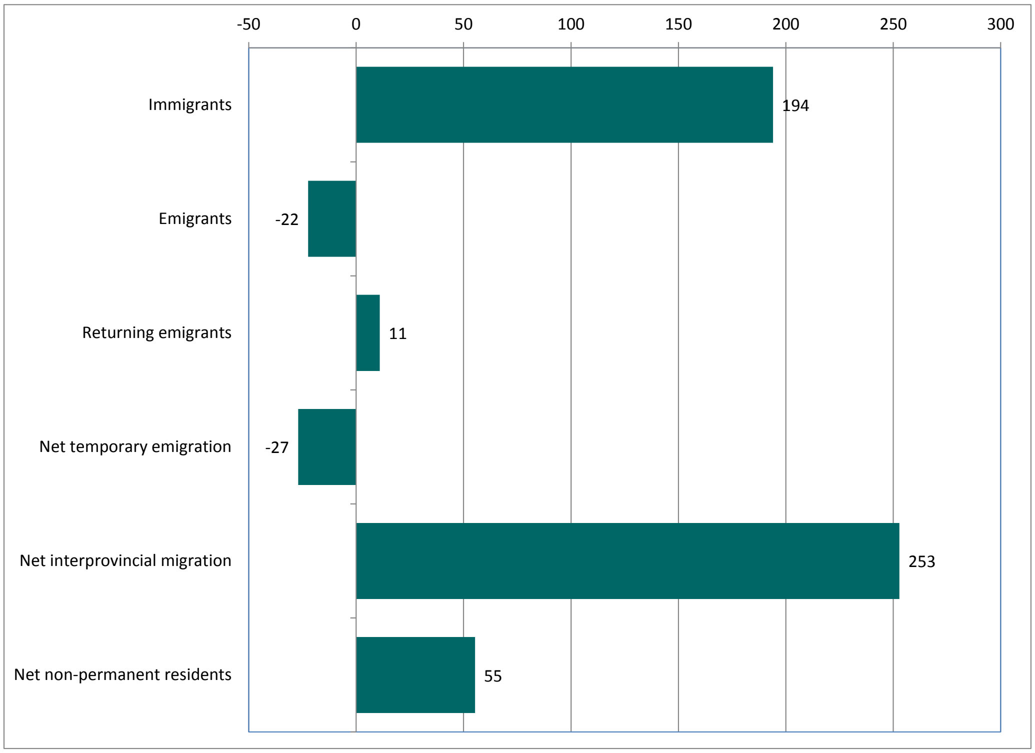
Over the last six years the population of Yukon has grown at an average rate of 638 persons per year. Births averaged 373 per year, and deaths 200, making the net natural gain in population an average of 173 people per year. Net migration accounted for the remaining gain of 465 residents per year. Figure 9 breaks down the contribution of the following components of migration to Yukon's annual population growth:

- Immigration – the number of people moving to Yukon from another country – added to Yukon's population by an average of 194 per year.
- Emigration – the number of people moving from Yukon to another country – reduced its population by an average of 22 per year.

International flows of migrants therefore added a net average of 172 per year to Yukon's population.

- Returning emigrants – added to Yukon's population by an average of 11 per year while net temporary emigrants reduced it by an average of 27 per year.
- Interprovincial migration – movers to and from the rest of Canada – added net 253 per year.
- Net non-permanent residents (those on temporary work visas, etc.) added net 55 per year.

FIGURE 9: YUKON AVERAGE ANNUAL NET MIGRATION BY SOURCE 2006 TO 2012



Source: Statistics Canada Community Profiles and National Household Survey adapted by SPI

Chapter 3 offers insight in to the countries and provinces/territories contributing most to Yukon's population gains.

2.1.3 Yukon's Economic Base

Economic activities occurring in Yukon, or any geographic area, are either export-based or community-based. Export-based industries produce goods that are shipped to markets outside the economic region, such as natural resources, agriculture, forestry, fishing and manufacturing; offer amenities to visitors and seasonal residents of the economic region, such as hotels, restaurants, recreation attractors, specialized hospitals, colleges and universities; or provide services to businesses outside the economic region such as specialized financial, professional, scientific and technical services. In contrast, community-based industries produce services that primarily meet the needs of the economic region's residents, such as retail, medical, education, and personal services.

Growth in an economic region will typically only occur if its export base is expanding. Expansion of the export-based industries drives the growth of the economic region at large. Without growth in an economic region's export-based industries, growth in its community-based activities is less likely to occur. Although government spending is an important part of economies in northern Canada, exports are still the driving force for overall growth. The export-based industries in a region are often referred to as its economic base. The terms "export-based industries" and "economic-base industries" are therefore used interchangeably.

Jobs by industry in Yukon have been divided by economic base; in some cases this requires comparing the economic activity of each sector to national averages. The analysis identifies areas of economic activity in Yukon that are export-oriented and will drive growth in the economy.

- Primary employment excluding mining and manufacturing are more dominant in the Yukon economy than in other areas of the country; these industries are assumed to be export based as they primarily produce goods that are consumed outside of the area of production.
- Yukon's tourism industry is export oriented. An export orientation in the tourism sector is identified by an excess of jobs in retail; information and culture; arts, entertainment and recreation; and food and accommodation industries as compared to national per-capita rates.
- Yukon also supplies construction activities beyond the territory's local needs, and a portion of Yukon's construction industry could be considered export-based.

Government jobs per capita in Yukon significantly exceed national levels and the presence of government workers in Yukon generate considerable construction activity and business tourism, leading to significant impacts on the economy of the territory. However, these economic impacts are related to the unique governance model that administers Canada's Territories and the government is not included in the report's definition of economic base.

Yukon's economy is made up of many jobs, each of which play an important role in expanding and maintaining the economy of the territory. However, only some of these jobs are part of the economic base and play a primary role in driving the economy. According to SPI calculations, Yukon's economic base is primarily accounted for by 385 jobs in mining, 225 jobs in manufacturing and 110 jobs in agriculture, forestry, fishing and hunting.

The *Yukon Hiring Requirements and Available Talent Forecasts: Mineral Exploration, Mining and Support Services* report from the Mining Industry Human Resources Council predicts mining employment in Yukon will show significant gains between 2011 and 2021[12], the 2011 National Household Survey, produced by Statistics Canada, indicates a more conservative figure of 705 employed in mining in Yukon on a place-of-residence basis and 385 on a place-of-work basis. The following projections by SPI, based on Statistics Canada data, assume a doubling of mining related output, which the model indicates will lead to a 50 percent increase in mining and mining related jobs from 2011-2021.

Mining output gains could be even greater than the gains assumed in SPI projections, according to the MiHR report[13]. Despite these positive projections, the mining sector is known for its volatility. As is the case with any projection, the figures discussed here should be considered a likely scenario, and one among many possible future outcomes for Yukon.

2.1.4 Employment by Industry

The employment impact of the anticipated expansion of Yukon's economy will not be satisfied solely through the local labour market. As a result in-migration will be required if Yukon is to meet its economic potential. On average each worker migrating to Yukon brings one other person, increasing population faster than the economic base.

As the population grows so does the need for community based services and associated employment. When the local labour market can no longer provide enough workers to meet total employment demand, further in-migration of workers and dependents occurs. In other words a growing economic base has multiple effects, and all of these dynamics are taken into account in these projections.

Figure 10 identifies the gains in employment by industry that can be expected in Yukon between 2011 and 2021. This table includes employment by industry estimates for 2011 and SPI projections for 2021 that include both the economic base and community base components of each industry.

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[12] As outlined in the In MiHR's forecasts, the overall employment in mining in the start year, 2012, is estimated at 2,675: 960 in mining extraction and 1715 in exploration and support services. Of the overall estimate, 1200 (or 45 per cent) are Yukon residents.

[13] Yukon Hiring Requirements and Available Talent Forecasts: Mineral Exploration, Mining and Support Services, Mining Industry Human Resources Council, 2013

FIGURE 10: YUKON EMPLOYMENT BY INDUSTRY 2011 AND 2021

	2011	2021	Change
Total All Industries	16,920	20,603	3,683
Agriculture, forestry, fishing and hunting	110	133	23
Mining and oil and gas extraction	385	596	211
Utilities	135	153	18
Construction	795	999	204
Manufacturing	225	328	103
Wholesale trade	210	247	37
Retail trade	2,085	2,427	342
Transportation and warehousing	575	680	105
Information and cultural industries	570	656	86
Finance and insurance	275	330	55
Real estate and rental and leasing	145	174	29
Professional, scientific and technical services	900	1,117	217
Other business services	400	540	140
Educational services	1,120	1,383	263
Health care and social assistance	1,275	1,752	477
Arts, entertainment and recreation	360	481	121
Accommodation and food services	1,220	1,495	275
Other services (except public administration)	890	1,063	173
Public administration	5,245	6,050	805

Source: Past data provided by Statistics Canada. Projections provided by SPI

Note that employment refers to employment by place-of-work and represents jobs offered by employers in Yukon. Employment is projected to grow from a total of 16,920 in 2011 to 20,603 in 2021, or by 3,683 positions and 22%.

The major employers in Yukon, by industry, in 2011 were public administration (5,245), retail trade (2,085), health care and social assistance (1,275), accommodation and food services (1,220), and educational services (1,120). These five industries collectively account for 10,945 jobs or for 65 percent of all the jobs in Yukon on a place-of-work basis.

The data also reveal that the largest gains in employment from 2011 to 2021 are projected to occur in these same five industries although in a slightly different order. The gains are projected as follows: public administration (805), health care and social assistance (477), retail trade (342), accommodation and food services (275), and educational services (263). These five are collectively projected to grow by 2,162 and account for 58 percent of the total gain in employment in Yukon during this time.

2.1.5 Employment by Detailed Occupation

Using data from the National Household Survey (NHS) for 2011 regarding employment by industry by detailed occupation, the projections for employment by industry can be translated into projections for employment by detailed occupation. These measures of employment by occupation indicate the extent to which recruitment may be necessary.

The occupation shares by industry in 2011 are held constant to 2021. While the shares are likely to change somewhat due to technological, managerial and educational factors, a constant relationship nevertheless provides a reasonable assessment of individual occupations likely to be in greatest demand throughout the decade.

The projections indicate how the number of people required for each occupation will increase or decrease between 2011 and 2021 due to economic growth and changes in the workforce. Using data from the National Household Survey (job holders by occupation by age) estimates of the number of likely retirees between 2011 and 2021 are included for each occupation. Anyone aged 55 or over in 2011, working in a given occupation that year, represented a likely retiree by 2021 as they would be 65 years of age or older by that time.

Figure 11 identifies the growth in total demand by major occupational group that will occur due to economic growth (3,683) and retirements (2,625) in Yukon between 2011 and 2021. Total employment demand (6,308) is therefore equal to 37 percent of the total number of employed persons in Yukon in 2011. By major occupation group the greatest demands are for:

- Administrative and financial supervisors and administrative occupations (522)
- Middle management occupations in retail and wholesale trade and customer services (516)
- Professional occupations in law and social, community and government services (424)
- Paraprofessional occupations in legal, social, community and education services (387)
- Transport and heavy equipment operation and related maintenance occupations (362)

These five major groups collectively account for 2,211 of the total demand for workers in Yukon between 2011 and 2021, or for 35 percent of total employment.

FIGURE 11: YUKON EMPLOYMENT BY MAJOR OCCUPATION GROUP 2011 TO 2021

Major Occupation Groups	2011	2016	2021	Change 11-21	55-64	65+	Retirees	Total Demand Number	Rank	%	Rank
Total all occupations	16,920	18,672	20,603	3,683	2,315	310	2,625	6,308		37	
Senior management occupations	341	373	408	67	85	0	85	152	17	45	9
Specialized middle management occupations	993	1,077	1,178	186	155	0	155	341	6	34	16
Middle management occupations in retail and wholesale trade and customer services	1,107	1,216	1,333	226	210	80	290	516	2	47	7
Professional occupations in business and finance	512	555	608	96	80	15	95	191	13	37	14
Administrative and financial supervisors and administrative occupations	1,523	1,663	1,824	302	220	0	220	522	1	34	17
Finance, insurance and related business administrative	242	267	296	54	100	10	110	164	16	68	2
Office support occupations	682	739	812	130	130	0	130	260	9	38	12
Distribution, tracking and scheduling co-ordination	254	272	297	44	0	0	0	44	29	17	33
Professional occupations in natural and applied sciences	528	583	643	116	35	0	35	151	18	29	24
Technical occupations related to natural and applied	716	770	841	125	65	0	65	190	14	27	26
Professional occupations in nursing	340	389	447	108	65	0	65	173	15	51	5
Professional occupations in health (except nursing)	70	79	91	21	0	0	0	21	32	30	21
Technical occupations in health	224	249	280	56	0	0	0	56	27	25	28
Assisting occupations in support of health services	196	223	255	59	0	0	0	59	26	30	22
Professional occupations in education services	827	937	1,018	191	120	25	145	336	8	41	10
Professional occupations in law and social, community and government services	1,117	1,213	1,337	219	205	0	205	424	3	38	13
Paraprofessional occupations in legal, social, community and education services	743	843	960	217	105	65	170	387	4	52	4
Occupations in front-line public protection services	110	116	127	17	0	0	0	17	33	16	37
Care providers and educational, legal and public protection support occupations	309	340	372	63	40	0	40	103	24	33	18
Professional occupations in art and culture	169	185	202	33	10	10	20	53	28	31	20
Technical occupations in art, culture, recreation and sport	381	425	476	95	10	0	10	105	23	28	25
Retail sales supervisors and specialized sales occupations	148	161	176	28	0	0	0	28	30	19	32
Service supervisors and specialized service occupations	594	659	718	124	15	0	15	139	20	23	29
Sales representatives and salespersons - wholesale and	655	706	765	110	105	0	105	215	11	33	19
Service representatives and other customer and personal services occupations	717	795	878	161	45	0	45	206	12	29	23
Sales support occupations	526	566	614	88	25	0	25	113	22	22	30
Service support and other service occupations, n.e.c.	875	969	1,078	204	115	20	135	339	7	39	11
Industrial, electrical and construction trades	551	615	687	136	115	0	115	251	10	46	8
Maintenance and equipment operation trades	401	447	486	85	60	0	60	145	19	36	15
Other installers, repairers and servicers and material	23	25	27	4	0	0	0	4	36	17	34
Transport and heavy equipment operation and related maintenance occupations	481	548	613	132	145	85	230	362	5	75	1
Trades helpers, construction labourers and related	228	261	296	69	45	0	45	114	21	50	6
Supervisors and technical occupations in natural resources, agriculture and related production	177	230	270	93	0	0	0	93	25	53	3
Workers in natural resources, agriculture and related	26	29	31	5	0	0	0	5	35	21	31
Harvesting, landscaping and natural resources labourers	17	18	20	3	0	0	0	3	37	16	36
Processing, manufacturing and utilities supervisors and central control operators	85	91	96	11	10	0	10	21	31	25	27
Processing and manufacturing machine operators and related production workers	0	0	0	0	0	0	0	0	38	0	38
Assemblers in manufacturing	35	37	40	6	0	0	0	6	34	17	35
Labourers in processing, manufacturing and utilities	0	0	0	0	0	0	0	0	38	0	38

Source: Past data provided by Statistics Canada. Projections provided by SPI

FIGURE 12: THE TOP 50 OCCUPATIONS IN YUKON 2011 TO 2021 RANKED BY TOTAL DEMAND

Rank	NOC #		2011	2016	2021	Change 11-21	55-64	65+	Retirees	Total Demand
		Total All Occupations	16,920	18,672	20,603	3,683	2,315	310	2,625	6,308
		Total Top 100 Occupations								5,671
1	621	Retail and wholesale trade managers	565	607	660	95	90	65	155	250
2	6421	Retail salespersons	629	677	735	106	105	0	105	211
3	1221	Administrative officers	516	566	620	105	100	0	100	205
4	1241	Administrative assistants	541	590	647	107	95	0	95	202
5	6733	Janitors, caretakers and building superintendents	347	388	436	89	75	20	95	184
6	4212	Social and community service workers	356	395	445	90	60	25	85	175
7	3012	Registered nurses and registered psychiatric nurses	340	389	447	108	65	0	65	173
8	4214	Early childhood educators and assistants	328	381	443	115	25	30	55	170
9	1311	Accounting technicians and bookkeepers	242	267	296	54	100	10	110	164
10	7521	Heavy equipment operators (except crane)	202	234	265	63	80	20	100	163
11	4032	Elementary school and kindergarten teachers	381	433	470	89	70	0	70	159
12	7511	Transport truck drivers	171	196	221	50	40	55	95	145
13	1411	General office support workers	195	211	233	38	85	0	85	123
14	7271	Carpenters	202	225	251	49	60	0	60	109
15	4112	Lawyers and Quebec notaries	269	297	329	60	45	0	45	105
16	4021	College and other vocational instructors	240	271	294	54	35	15	50	104
17	6711	Food counter attendants, kitchen helpers and related support occupations	295	325	360	65	20	0	20	85
18	1414	Receptionists	212	235	262	50	30	0	30	80
19	2121	Biologists and related scientists	190	208	229	39	35	0	35	74
20	4031	Secondary school teachers	205	233	253	48	15	10	25	73
21	7611	Construction trades helpers and labourers	111	131	150	39	30	0	30	69
22	632	Accommodation service managers	116	129	143	27	25	15	40	67
23	4152	Social workers	135	146	161	26	40	0	40	66
24	4413	Elementary and secondary school teacher assistants	173	194	211	37	25	0	25	62
25	6731	Light duty cleaners	180	200	222	42	20	0	20	62
26	1121	Human resources professionals	98	104	113	15	45	0	45	60
27	6322	Cooks	191	212	236	44	15	0	15	59
28	711	Construction managers	94	105	118	24	35	0	35	59
29	7321	Automotive service technicians, truck and bus mechanics and	218	241	259	41	15	0	15	56
30	3413	Nurse aides, orderlies and patient service associates	173	198	228	55	0	0	0	55
31	6611	Cashiers	265	286	310	45	10	0	10	55
32	8231	Underground production and development miners	97	128	151	54	0	0	0	54
33	5244	Artisans and craftspersons	153	172	195	43	10	0	10	53
34	14	Senior managers - health, education, social and community services and membership organizations	84	95	102	17	35	0	35	52
35	6541	Security guards and related security service occupations	100	112	127	27	25	0	25	52
36	6622	Store shelf stockers, clerks and order fillers	214	230	250	36	15	0	15	51
37	513	Recreation, sports and fitness program and service directors	75	87	101	26	25	0	25	51
38	423	Managers in social, community and correctional services	128	144	159	30	20	0	20	50
39	12	Senior government managers and officials	156	165	180	24	25	0	25	49
40	112	Human resources managers	104	110	120	16	30	0	30	46
41	6513	Food and beverage servers	199	221	245	46	0	0	0	46
42	7621	Public works and maintenance labourers	117	130	147	30	15	0	15	45
43	4161	Natural and applied science policy researchers, consultants and	127	135	147	20	25	0	25	45
44	1111	Financial auditors and accountants	147	161	177	30	0	15	15	45
45	1431	Accounting and related clerks	182	195	211	28	15	0	15	43
46	7312	Heavy-duty equipment mechanics	75	87	99	23	20	0	20	43
47	4216	Other instructors	60	67	73	13	20	10	30	43
48	111	Financial managers	75	80	87	12	30	0	30	42
49	4164	Social policy researchers, consultants and program officers	98	104	113	15	25	0	25	40
50	631	Restaurant and food service managers	122	135	150	28	10	0	10	38

Source: Past data provided by Statistics Canada. Projections provided by SPI

The individual occupations facing the greatest recruitment challenges for Yukon over this span include:

- Retail and wholesale trade managers (250)
- Retail salespersons (211)
- Administrative officers (205)
- Administrative assistants (202)
- Janitors, caretakers and building superintendents (184)
- Social and community service workers (175)
- Registered nurses and registered psychiatric nurses (173)
- Early childhood educators and assistants (170)
- Accounting technicians and bookkeepers (164)
- Heavy equipment operators (except crane) (163)

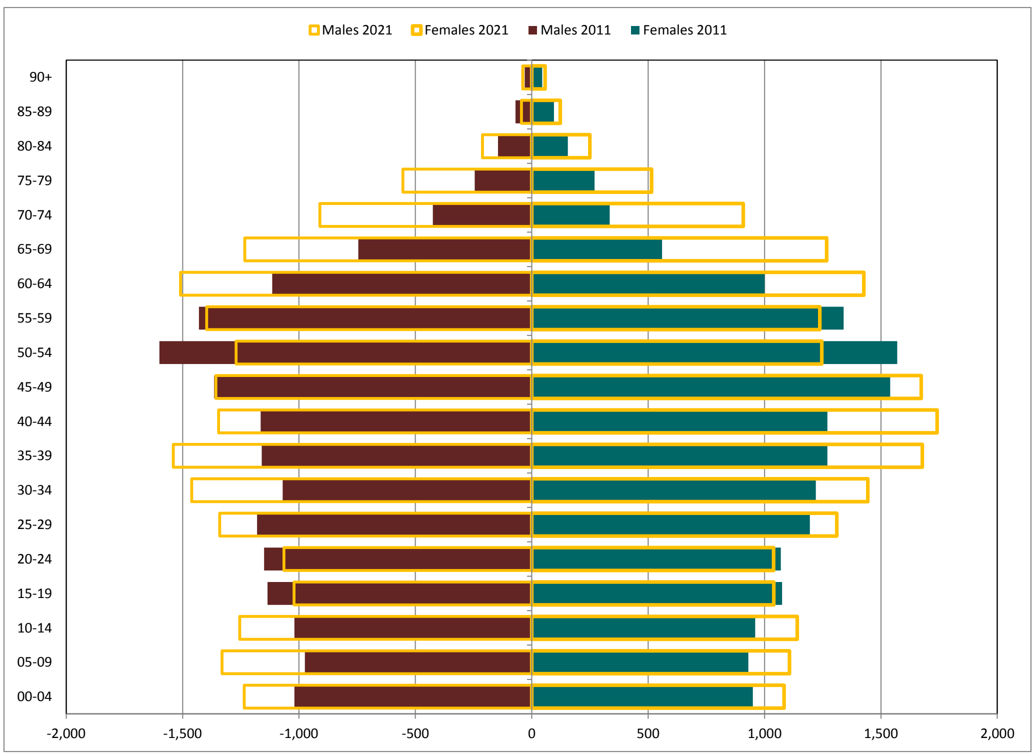
These ten occupations account for 1,897 of the total demand of 6,308 (or for 30 percent of the total demand). The top fifty occupations collectively account for 4,509 of the total demand (or for 71 percent of the total).

2.1.6 Labour Force by Age and Gender

Workforce projections link labour market requirements to migration levels, to ensure labour market needs are met. Age distribution is an important factor for the projected labour force and the migrant labour force, but they do not always align well. Therefore the projections for population and labour force growth in Yukon are analyzed by age and gender to identify any mismatches that could arise between 2011 and 2021.

Figure 13 compares Yukon's population in 2011, divided by five-year age groups, to projections of population by age in 2021. Over this time period the total population is projected to increase by 6,510. By five year age group the largest gains occur among persons aged 65 to 69 (1,095), 70 to 74 (1,079) and 60 to 64 (821). These three age groups account for 46 percent of the total population gain projected for Yukon between 2011 and 2021. The gains in these three age categories reflect the aging-in-place of those who were 55 to 59, 60 to 64 and 50 to 54 years of age in 2011, three of the most populated five-year age groups in 2011.

FIGURE 13: YUKON POPULATION BY FIVE-YEAR AGE AND GENDER GROUP 2011 AND 2021



Source: Past data provided by Statistics Canada. Projections provided by SPI

The population aged 25 through 49 is either growing or holding steady, an important outcome as labour force participation rates are highest across these age groups. The gains in population in these age categories reflect our expectation that net in-migration – required due to labour shortages locally – will be the key factor explaining Yukon's population growth. Migrants of all types – international, interprovincial and intra-provincial – tend to be young, typically between the ages of 18 and 38. This age group is in their family formation years and often have young children. Hence the projected gains in Yukon's population aged 0 to 14.

Figure 14 tabulates the labour force source population (the non-institutionalized population aged 15 and over) as it was in 2011 and as it is projected to be in 2021. Also provided are the labour force participation rates and unemployment rates by age and gender in 2011. These figures show what the labour force by age and gender and employment by age and gender would look like in 2021 if participation rates and unemployment rates in 2011 were to remain constant through to 2021.

FIGURE 14: YUKON LABOUR FORCE BY FIVE-YEAR AGE AND GENDER GROUP 2011 AND 2021

	Source Population			Part.	Labour Force			Unemp.	Employment		
	2011	2021	Change	Rate	2011	2021	Change	Rate	2011	2021	Change
Total	27,510	32,481	4,971		21,250	24,005	2,755		19,165	21,747	2,582
Females 15-19	1,085	1,049	-36	49.8	540	522	-18	13.9	465	450	-15
Females 20-24	985	957	-28	77.7	765	743	-22	17.0	635	617	-18
Females 25-29	1,180	1,294	114	85.2	1,005	1,102	97	8.5	920	1,009	89
Females 30-34	1,215	1,438	223	87.2	1,060	1,254	194	15.1	900	1,065	165
Females 35-44	2,565	3,453	888	89.1	2,285	3,076	791	4.2	2,190	2,948	758
Females 45-54	2,995	2,811	-184	89.3	2,675	2,511	-164	7.9	2,465	2,314	-151
Females 55-64	2,450	2,789	339	73.7	1,805	2,055	250	9.1	1,640	1,867	227
Females 65-74	850	2,066	1,216	27.6	235	571	336	8.5	215	523	308
Females 75+	415	693	278	15.7	65	109	44	7.7	60	100	40
Males 15-19	1,145	1,030	-115	55.5	635	571	-64	15.7	535	481	-54
Males 20-24	1,205	1,116	-89	85.9	1,035	958	-77	26.6	760	704	-56
Males 25-29	1,160	1,318	158	94.4	1,095	1,244	149	12.3	960	1,091	131
Males 30-34	1,030	1,406	376	90.3	930	1,270	340	5.9	875	1,195	320
Males 35-44	2,220	2,755	535	95.3	2,115	2,625	510	7.8	1,950	2,420	470
Males 45-54	3,010	2,667	-343	89.2	2,685	2,379	-306	8.2	2,465	2,184	-281
Males 55-64	2,380	2,717	337	74.6	1,775	2,027	252	9.3	1,610	1,838	228
Males 65-74	1,155	2,116	961	38.1	440	806	366	5.7	415	760	345
Males 75+	465	805	340	22.6	105	182	77	0.0	105	182	77

Source: Past data provided by Statistics Canada. Projections provided by SPI

The highlights of the analysis include the following:

- Projections indicate an increase in Yukon's labour force of 2,755 between 2011 and 2021 and an increase in its employed labour force of 2,582, all assuming that 2011's participation rates and unemployment rates remain constant.
- Major gains in employment would occur among females aged 35 to 44 (758), males 35 to 44 (470), males 65 to 74 (345), males 30 to 34 (320), females 65 to 74 (308), males 55 to 64 (228), females 55 to 64 (227), females 30 to 34 (165), males 25 to 29 (131) and females 25 to 29 (89).
- Declines in employment would be experienced among males aged 45 to 54 (-281) and among females aged 45 to 54 (-151) due to population declines in those age groups.

- Employment among both males and females under 25 will be lower in 2021 than in 2011 due to population declines in those age groups.

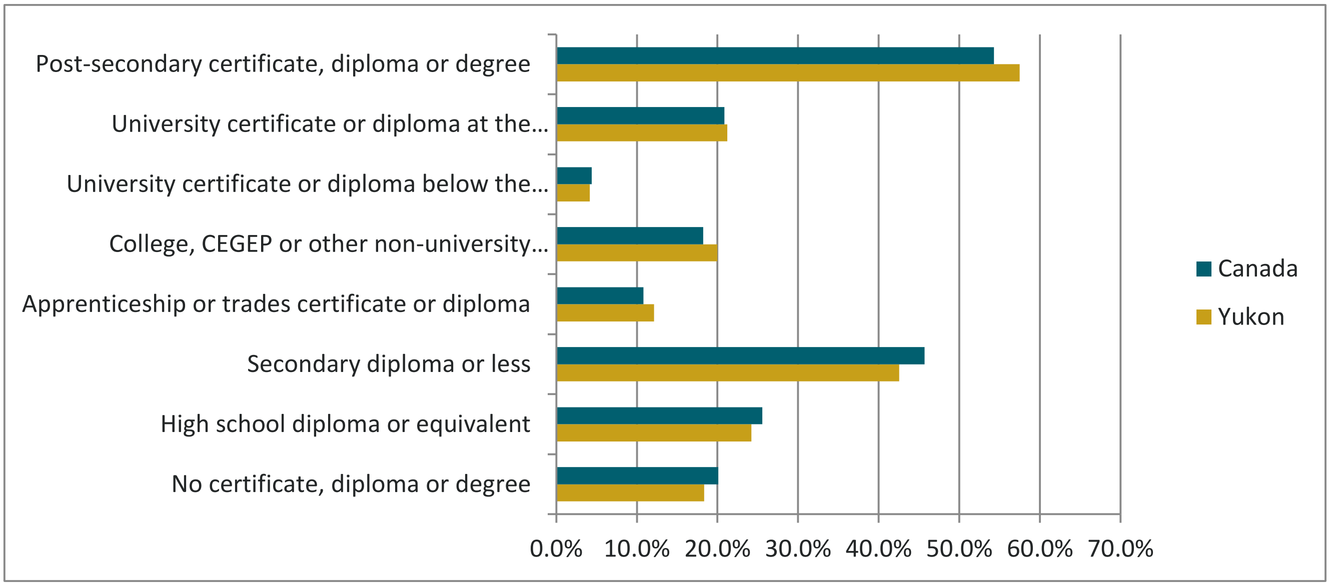
The gain of 2,582 workers implied by this supply side analysis falls short of the 3,683 gain in jobs projected to be created by Yukon's expanding economy by 1,101 people. However the supply side assessment assumes 2011 participation rates and unemployment rates by age and gender will prevail in 2021. The demand side analysis, by contrast, projects the total participation rate increasing from 77.3 percent in 2011 to 77.6 percent in 2021, an increase that would add another 98 people to the labour force. It also projects the total unemployment rate falling from 9.8 percent in 2011 to 7.9 percent in 2021, a decline that would add another 481 to the level of employment. These changes narrow the demand vs. supply gap from 1,101 to 522. Retirement impacts have been considered in both datasets.

This apparent shortage can be mitigated within the projection framework in one of three ways. For example, if Yukon's unemployment rate were to fall to 5.8 percent in 2021 instead of to 7.9 percent there would be no gap between demand and supply. Alternatively, the gap could be closed with slightly higher participation rates and less of an improvement in the unemployment rate. Finally, the gap could also be closed if more net in-migration occurred over that span. Any of these results, or a combination, is well within the bounds of what might reasonably happen in Yukon's labour market between now and 2021. The demand-supply model identifies the size of the potential gap but does not automatically close it.

2.2 Skills Transferability Matrix

From an educational attainment standpoint, Yukon residents are well positioned to fill a variety of occupations. A high percentage of Yukon residents have completed some form of post-secondary education. Yukon residents outperform the Canadian average in those holding a bachelor's degree or higher, college diploma or apprenticeship certificate. The result is that, on average, Yukon residents are in a relatively strong position to work in Skill Level A or Skill Level B occupations.

FIGURE 15: EDUCATIONAL ATTAINMENT YUKON RESIDENTS 15 YEAR OR OLDER, 2011



Source: National Household Survey, 2011 adapted by Millier Dickinson Blais

Figure 12 in section 3.1.6 presents those occupations anticipated to experience the highest demand to 2021. These occupations span half of the Major Groups described in Employment and Social Development Canada (ESDC), formally Human Resource and Skills Development Canada's (HRSDC)) Occupational Structure by Skill Type. EDSC also categorizes occupations by the following four skill levels:

- Skill Level A are those occupations requiring a university degree
- Skill Level B are those occupations requiring some level of post-secondary education including college, apprenticeship training or specific occupation related training
- Skill Level C are those occupations requiring completion of secondary school
- Skill Level D are those occupations having no formal educational requirements

In Figure 16, the top 16 in demand occupations are identified, and 11 are Skill Level A or B, meaning many of the job openings expected in Yukon will require some level of post-secondary education. While Yukon is currently in a strong position with respect to educational attainment, maintaining these high levels of education and providing residents with the opportunity to meet these education requirements will be important to maintain labour force participation.

The remaining in demand occupations fall into Skill Level C or D. These positions require lower levels of training and skill and should be attainable for residents that hold a high school diploma or no certificate.

FIGURE 16: SKILL LEVELS AND EDUCATIONAL REQUIREMENT OF YUKON'S IN DEMAND OCCUPATIONS

NOC 2006	Occupation	Skill Level	Skill Level
6211	Retail trade supervisors	A	Usually requires a university degree
6421	Retail salespersons	C	Usually requires high school completion
1221	Administrative officers	B	Usually requiring some level of post-secondary education including college, apprenticeship training or specific occupation related training
1241	Administrative assistants	B	Usually requiring some level of post-secondary education including college, apprenticeship training or specific occupation related training
6663	Janitors, caretakers and building superintendents	D	No formal educaiton requirements
4212	Social and community service workers	B	Usually requiring some level of post-secondary education including college, apprenticeship training or specific occupation related training
3152	Registered nurses and registered psychiatric nurses	A	Usually requires a university degree
4214	Early childhood educators and assistants	B	Usually requiring some level of post-secondary education including college, apprenticeship training or specific occupation related training
1231	Accounting technicians and bookkeepers	B	Usually requiring some level of post-secondary education including college, apprenticeship training or specific occupation related training
7421	Heavy equipment operators (except crane)	C	Usually requires high school completion
4142	Elementary school and kindergarten teachers	A	Usually requires a university degree
7411	Transport truck drivers	C	Usually requires high school completion
1411	General office support workers	C	Usually requires high school completion
7271	Carpenters	B	Usually requiring some level of post-secondary education including college, apprenticeship training or specific occupation related training
4112	Lawyers and Quebec notaries	A	Usually requires a university degree
4131	College and other vocational instructors	A	Usually requires a university degree

Source: HRSDC/ESDC National Occupation Matrix, 2011 extracted from http://www5.hrsdc.gc.ca/noc/english/noc/2011/pdf/Matrix.pdf

ESDC also defines the essential skills required for detailed occupations. Essential skills include reading, document use, writing, numeracy, oral communication, thinking, digital technology, working with others and continuous learning. Each essential skill is graded from 1 (basic understanding) to 5 (advanced understanding). Details of the essential skills can be found on the *Working in Canada* website[14].

[14] Working In Canada [Online: http://www.workingincanada.gc.ca/report_skillknowledge-eng.do?action=search_form]

Beyond educational requirements, an understanding of the essential skills required for an occupation can assist Yukon in designing and delivering continuing and adult education programs that will help residents secure jobs in the territory's high-demand occupations.

FIGURE 17: ESSENTIAL SKILLS REQUIREMENTS FOR YUKON'S IN DEMAND OCCUPATIONS (NOC 2006)

Highest Demand Occupations		Highest Level of Essential Skill Required (1=basic, 5= advanced)								
NOC 2006	Occupation	Reading	Document Use	Writing	Numeracy	Oral Communication	Thinking	Digital Technology	Working with Others	Conintuous Learning
6211	Retail trade supervisors	4	3	4	3	4	3	3		
6421	Retail salespersons	3	3	2	2	3	3	2		
1221	Administrative officers	No essential skills information available								
1241	Administrative assistants	3	2	3	3	3	3	4	2	2
6663	Janitors, caretakers and building superintendents	3	2	3	2	2	3			
4212	Social and community service workers	4	2	4	3	3	3	3		
3152	Registered nurses and registered psychiatric nurses	5	4	4	3	4	4	2	3	3
4214	Early childhood educators and assistants	3	3	2	1	2	3	2		
1231	Accounting technicians and bookkeepers	3	3	3	4	3	3	4	2	3
7421	Heavy equipment operators (except crane)	3	3	2	3	2	3	2		
4142	Elementary school and kindergarten teachers	5	3	3	3	4	3	3	3	4
7411	Transport truck drivers	4	3	3	2	2	3	3		
1411	General office support workers	4	4	3	3	2	3	3		
7271	Carpenters	4	4	2	4	3	3	2		
4112	Lawyers and Quebec notaries	No essential skills information available								
4131	College and other vocational instructors	5	3	4	4	4	4	3		

Source: Explore Careers by Skills & Knowledge, Canada Job Bank[15]

With an average score of 3.8 and no scores below 3, it is clear that a high level of skill in reading is required to attain careers in Yukon's future high demand occupations. The remaining skill areas score close together, led by thinking skills (3.1), document use (3.0), writing (3.0) and continuous learning (3.0).

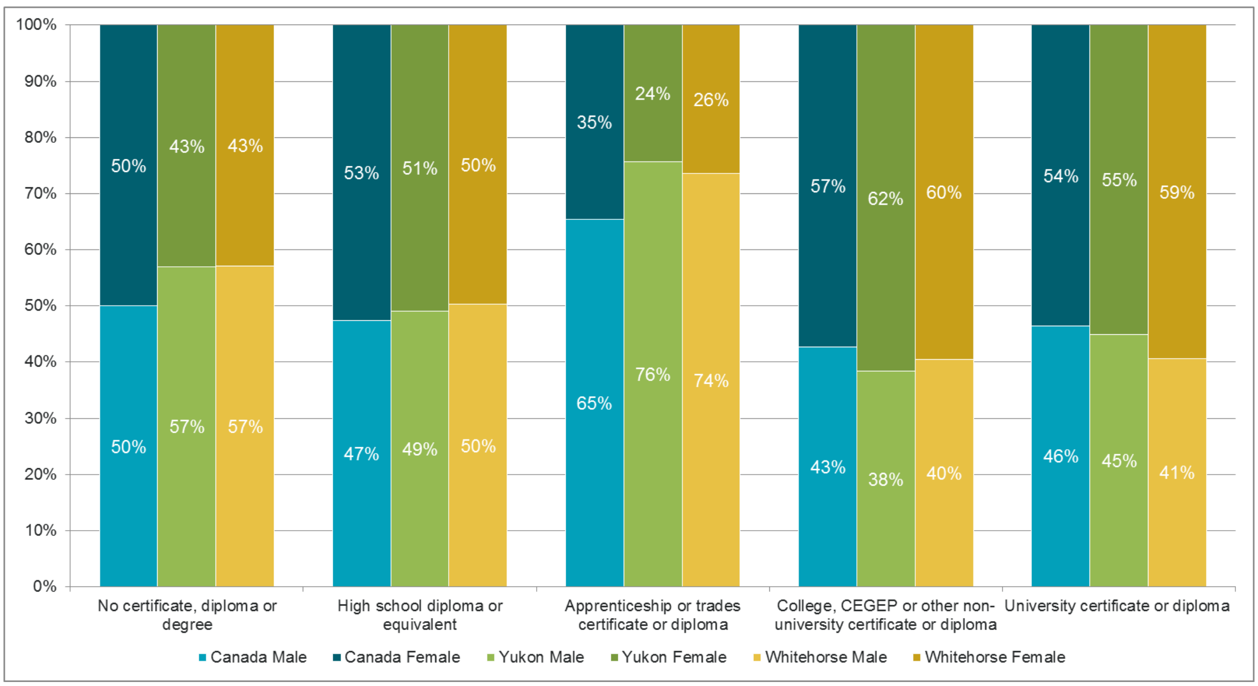
[15] Online March 2014 [www.workingincanada.gc.ca/report_skillknowledge-eng.do?action=search_form]

2.3 Training and Educational Attainment

In this section, rates of educational attainment are examined for Whitehorse, the remainder of Yukon's communities and Canada. In other words, the data labelled 'Yukon' describes most of Yukon's communities, with the exception of 'Whitehorse'. Therefore, the data for these mutually exclusive geographies is presented separately in the discussion and accompanying figures.

Figure 18 below shows the gender profile of different education levels for selected geographies, according to the 2011 National Household Survey. In Yukon and Whitehorse the percentage of those with 'no certificate, diploma and degree' who were male was 7% higher than the national percentage. The percentage of people with apprenticeships who were male in Yukon and Whitehorse was 11% and 9% higher, respectively, than the national percentage. This figure also shows that the percentage of college-educated Yukon and Whitehorse residents was respectively 5% and 3% higher for females than the national rate. On the other hand, the proportion of university-educated residents of Yukon and Whitehorse who were female was 1% and 5% higher, respectively, than the national percentage.

FIGURE 18: EDUCATION BY GENDER IN YUKON, 2011



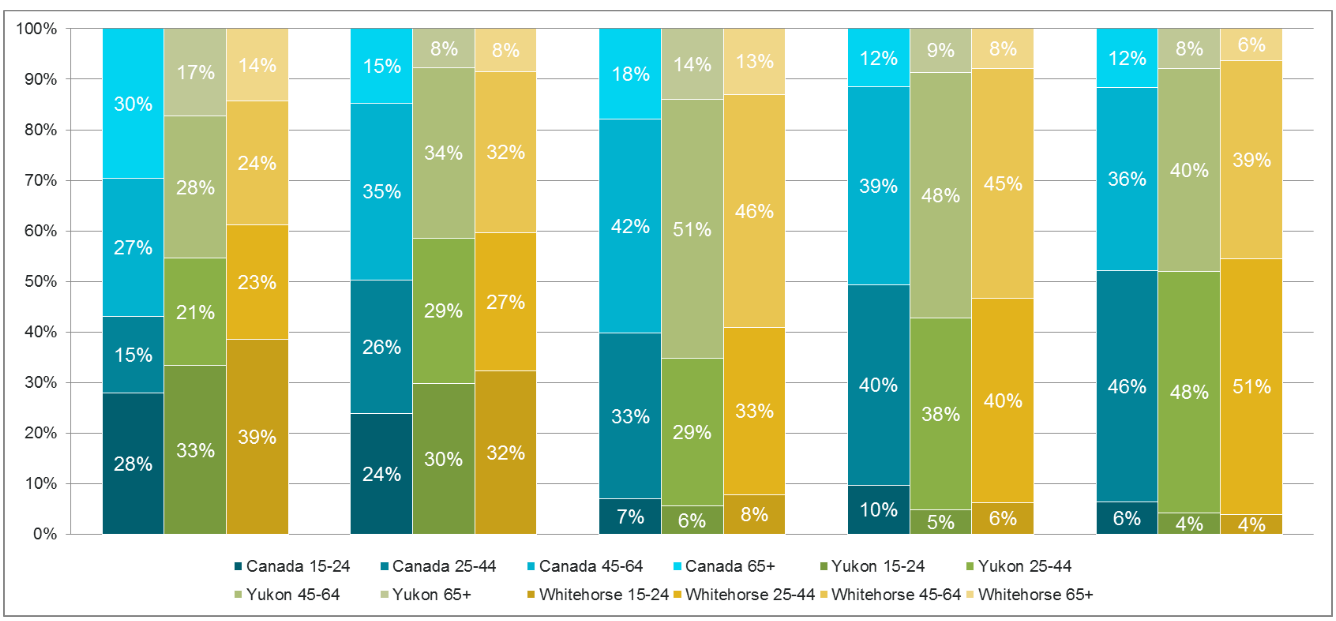
Source: Statistics Canada, 2011 National Household Survey, Statistics Canada Catalogue no. 99-012-X2011041 and 99-012-X2011055.

The proportion of males (as opposed to females) with 'no certificate, diploma or degree' is higher in Yukon and Whitehorse as compared to the ratio across Canada. This may present an opportunity for the territory to increase education credentials among males. Moreover, given the percentage of females (as opposed to males) with an ‘apprenticeship or trades’ education in Yukon and Whitehorse is lower than the national percentage, there may exist potential for more females to become involved in the trades.

This subsection compares the ‘highest level of educational achievement’ in Yukon and Whitehorse against the national average. The figure below indicates that in both Yukon and Whitehorse, the percentage of those in the 25-44 age group with ‘no certificate, diploma or degree’ was higher by 6% and 8%, respectively, when compared to the national rate. This suggests there is room for the territory to get involved in increasing the educational achievements for the labour force between the ages of 25-44. The percentage of the labour force with an ‘apprenticeship or trades education’ between the ages of 45-64 also was higher in Yukon (51%) and Whitehorse (46%) when compared to Canada (42%). This data suggests the territory has been better able to attract and retain workers between the ages of 45-64 compared to Canada.

Among the labour force with a college education, Yukon and Whitehorse had a higher proportion of its population in the 45-64 age cohort compared to Canada; however, the proportion of young workers (15-24 age group) was lower than the national average. The same trend was observed for young workers in Yukon and Whitehorse, as those with a university education made up a lower percentage of the labour force as compared with the national average. This suggests the Yukon may not be attracting and/or retaining young workers with a college or university degree to the same extent as other areas of Canada.

FIGURE 19: POST-SECONDARY EDUCATION BY AGE GROUP IN YUKON, 2011

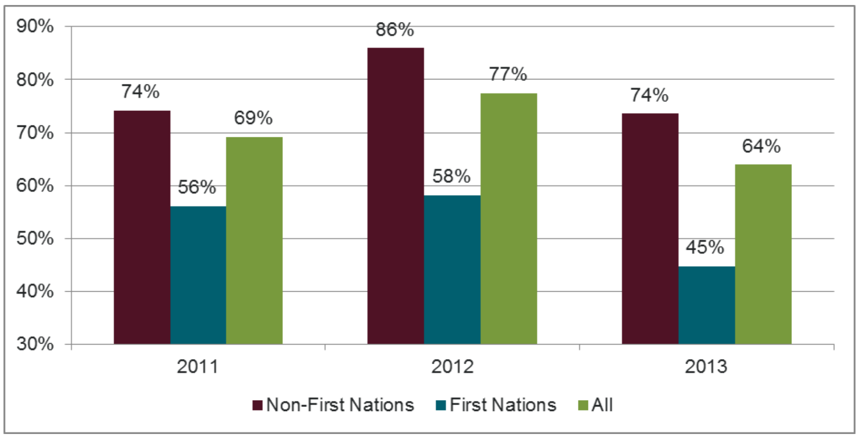


Source: Source: Statistics Canada, 2011 National Household Survey, Statistics Canada Catalogue no. 99-012-X2011041 and 99-012-X2011055.

2.3.1 Graduation Rates

Graduation rates in Yukon show there is a significant difference between the Non-First Nations and First Nations populations. From 2011 to 2013 the graduation rate gap between the two groups increased from 18% to 29%. This trend is concerning and in recognition of this educational gap, the Yukon government has rolled out programming explicitly designed to close the gap.

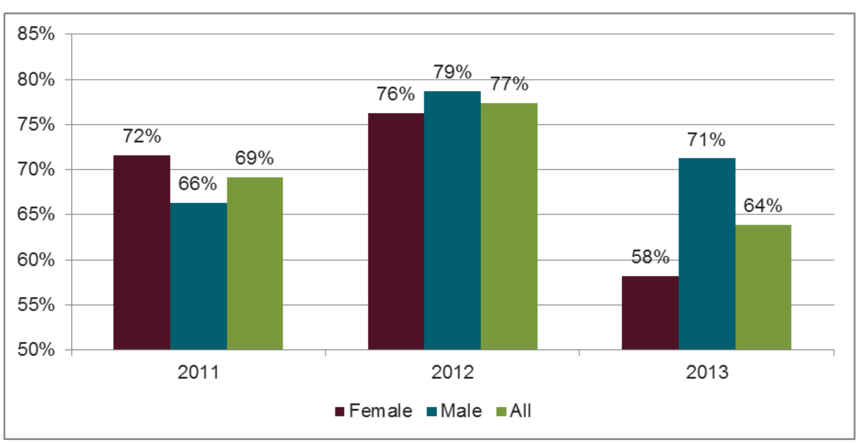
FIGURE 20: SECONDARY SCHOOL GRADUATION RATES IN YUKON, 2011-2013



Source: Yukon Government Department of Education Annual Reports, 2010/2011, 2011/2012 and 2012/2013

The figure below shows secondary school graduation rates by gender from 2012 to 2013. According to this figure, males had a higher graduation rate than females. In 2013 the graduation rate was 58% for females, which was the lowest rate for either gender over these three years. In light of this trend, the monitoring of graduation rates by gender will be important to justify any further programming required to mitigate this trend.

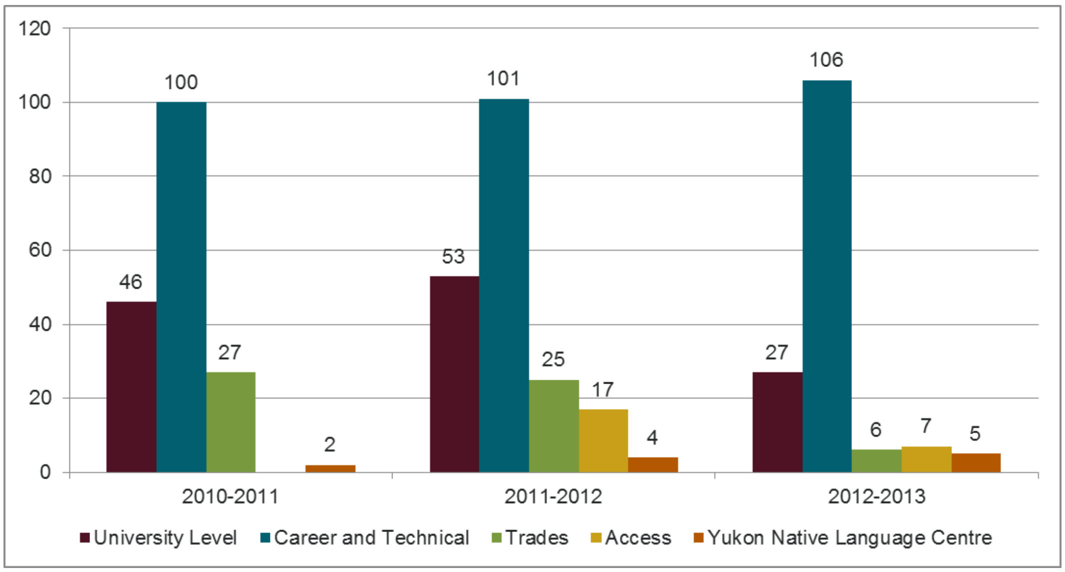
FIGURE 21: SECONDARY SCHOOL GRADUATION RATES IN YUKON BY GENDER, 2011-2013



Source: Yukon Government Department of Education Annual Reports, 2010/2011, 2011/2012 and 2012/2013

The below figure shows the number of Yukon College graduates by program level from 2010 to 2013. The figure indicates 'career' and 'technical program' graduate numbers have remained relatively stable over the past three academic years. However, from the 2011-2012 to 2012-2013 school year, 'university level', 'trades' and college 'access' pathways[16] have all have experience a significant decline in the number of graduates. The results suggest that there is a strong and consistent demand for career and technical programs at Yukon College while for other programs the demand varies from year to year.

FIGURE 22: YUKON COLLEGE GRADUATES BY PROGRAM LEVEL



Source: Yukon College Annual Reports, 2010/2011, 2011/2012 and 2012/2013

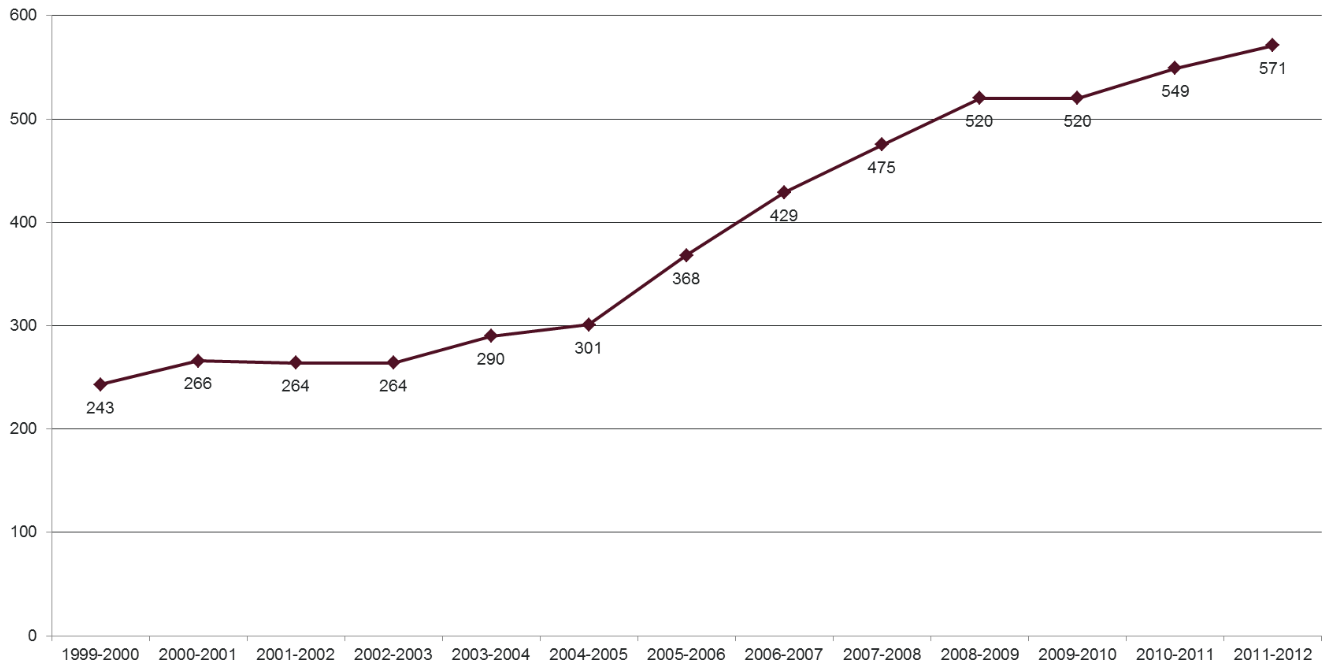
2.3.2 Apprenticeship Program

In the Yukon an apprenticeship is a training program that combines both school training and hands on experience. The Department of Education registers monitors and coordinates each individual's apprenticeship training while employers are responsible for providing on-the-job experience.

The number of apprentices registered in the territory has been steadily increasing since 1999. While the population of the Yukon increased by 18% from 2001 to 2011, the number of registered apprentices in the territory grew by 108% during the same time frame. This suggests a strong uptake in apprenticeship training among the local labour force, which may be attributed to at least two factors. First, these changes may be a result of a large increase in skilled trades and technical jobs in the territory. The increase may also be a result of the increased availability of apprenticeship programming, availability of on-the-job positions, or incentive programs.

[16] Yukon College Access Pathways enable students to obtain prerequisites to meet admission requirements for programs at Yukon College and other academic institutions.

FIGURE 23: NUMBER OF APPRENTICES REGISTERED IN YUKON EACH YEAR



Source: Yukon Government Department of Education Annual Reports, 2006/2007, 2010/2011 and 2011/2012

3 Labour Force Migration

3.1.1 Yukon Migration and Labour Market Activity

Introduction and summary of key findings

Net interprovincial migration played an important role in supplying workers to Yukon over the past decade. This section focuses on custom tables procured by Yukon Government from Statistics Canada regarding various characteristics of resident and interprovincial workers in the Yukon.

Based on this assessment the following conclusions can be drawn:

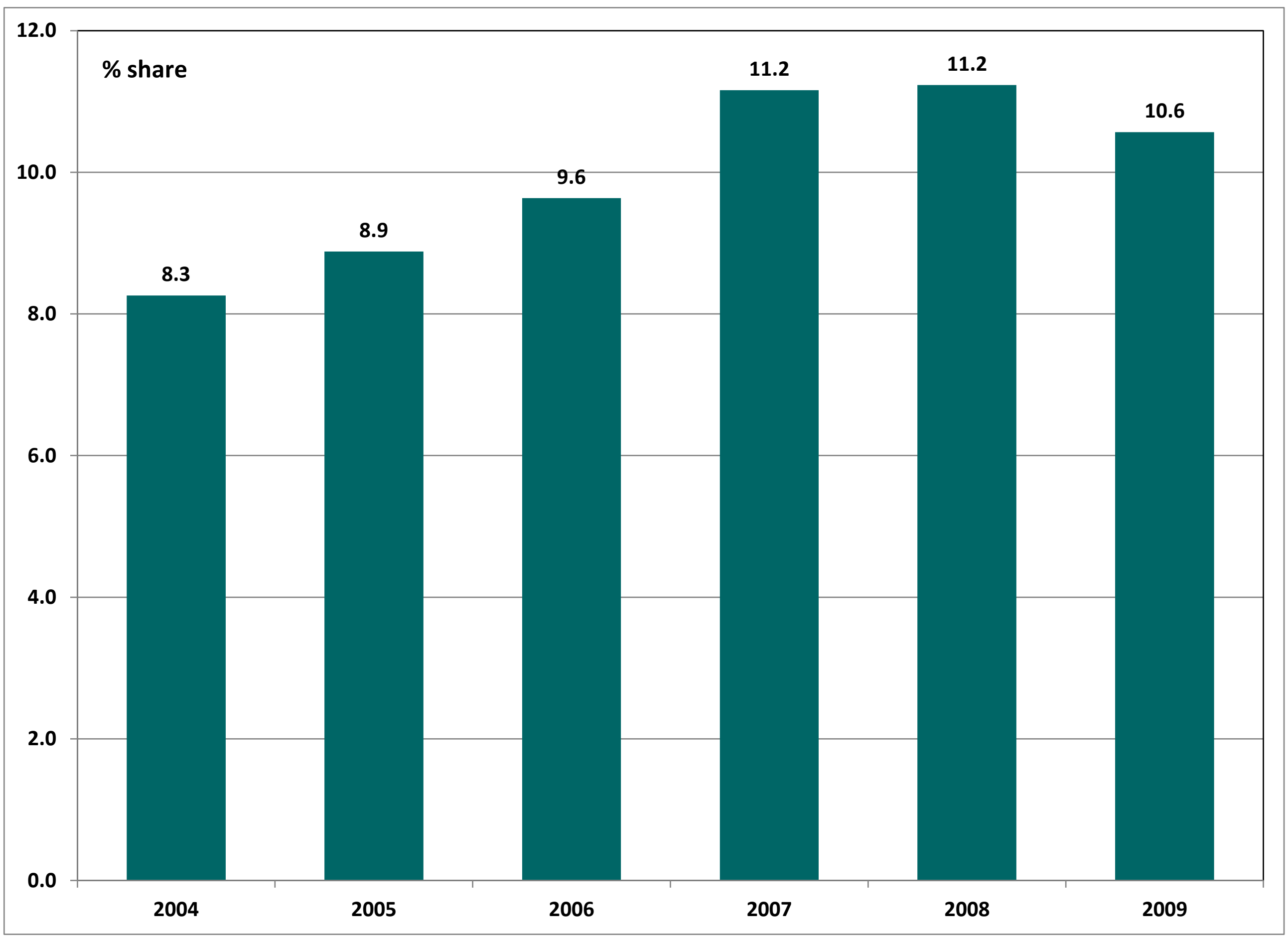
- Interprovincial workers were a growing share of total workers in Yukon between 2004 and 2009. Statistics Canada migration data indicate interprovincial flows in and out of Yukon were significant through to 2012 This suggests their share of workers might have continued to increase over that span.
- On average, interprovincial workers earn less across all industries than their resident counterparts. Interprovincial earnings on average are equal to or greater among those working in mining, construction and transportation/warehousing. This suggests that occupations in these three industries are more difficult to fill from resident labour pools and that these industries, therefore, depend on interprovincial workers more than most industries to fill their skill and labour requirements.
- Males and younger people are overrepresented among interprovincial workers when compared to resident workers. The male dominance likely reflects the number of male workers in such industries as mining, construction and transportation/warehousing, which rely more heavily than most on interprovincial workers.
- The data tables examined to inform this discussion do not reveal the age distribution of interprovincial workers. However, given their dominance among interprovincial workers across all industries, it is likely that these industries – mining, construction and transportation/warehousing – have recruited interprovincial workers that are younger than the resident workers they employ.
- The relative high share of younger workers among interprovincial workers is consistent with historical trends that show the share of people under the age of 35 among migrants accounts for a disproportionate share irrespective of the source of migration (international, interprovincial or intra-provincial).

3.1.2 Migrant Characteristics and Migration Trends

This section describes the characteristics of interprovincial migrants in the Yukon labour market. These migrants' demographic and socio-economic characteristics are examined and, whenever appropriate, compared to Yukon's resident labour force. The discussion begins with identifying the changes to the proportional share of interprovincial employees in the Yukon compared to the total employed labour force.

Figure 24 shows workers in Yukon who are not residents of Yukon as a percent share of total workers in Yukon from 2004 to 2009. The data is based on personal tax files. A worker is defined as any person earning $1,000 or more in each year. Figure 24 reveals that interprovincial employees accounted for a growing share of all workers in Yukon from 2004 to 2007. The interprovincial share held steady between 2007 and 2008 then declined slightly in 2009. The reduced share in 2009 coincides with the recession that occurred throughout most of Canada that year.

FIGURE 24: INTERPROVINCIAL EMPLOYEES AS A PERCENT SHARE OF TOTAL EMPLOYEES IN YUKON – 2004 TO 2009

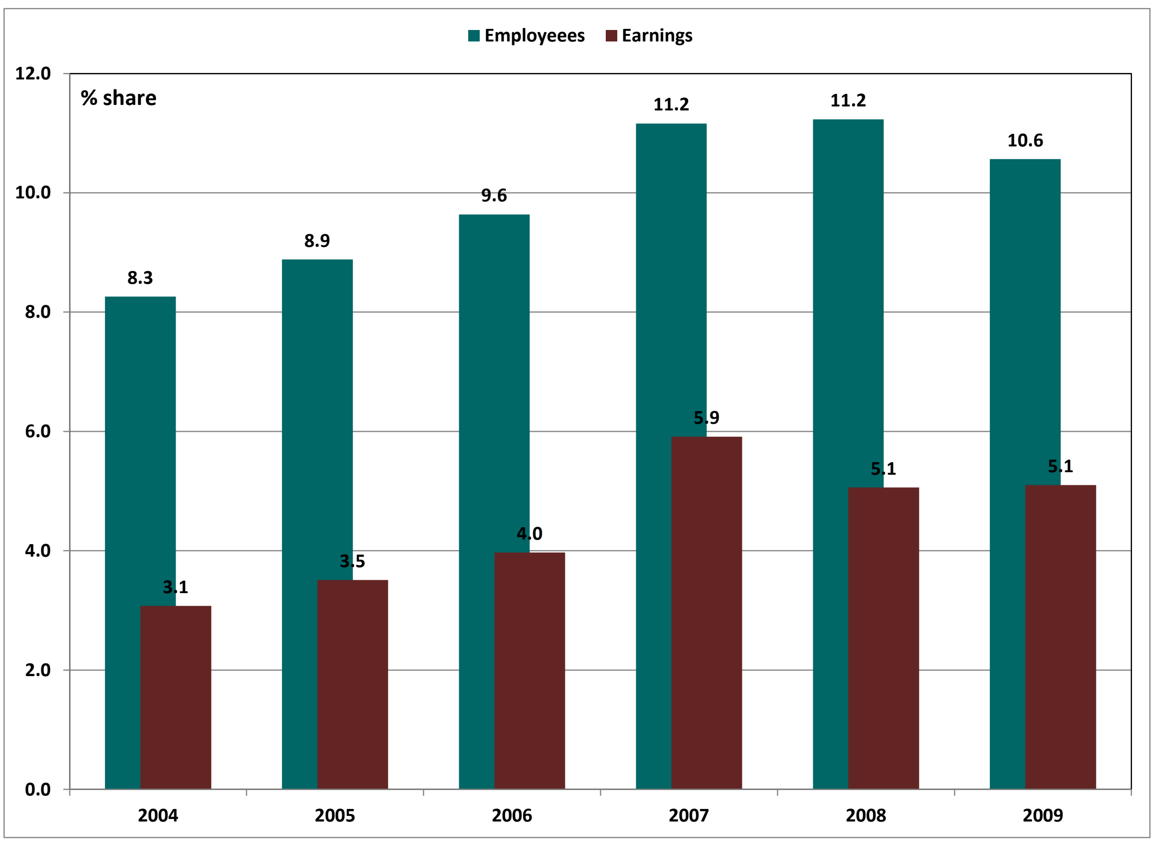


Source: Statistics Canada Custom Tables (Table 3)

The data file on which the above information is based indicates that in 2006 a total of 20,723 people earned at least $1,000 or more in Yukon that year with resident workers accounting for 18,726 of the workers and interprovincial workers accounting for 1,997. The Census that year reveals that as of mid-May 2006 a total of 17,230 residents of Yukon held jobs. While there is a difference between these two figures of 1,496 (18,726 according to the tax data less 17,230 according to the Census) the difference can be explained by the fact that the Census total is a snap shot of all those working in Yukon on the day the Census was taken whereas the taxation data includes all residents of Yukon who worked at any point in time that year over a 12 month period.

Figure 25 compares the interprovincial share of workers over that same period in Yukon to the interprovincial share of income earned by workers each year. Figure 25 reveals that the share of earnings by interprovincial workers was disproportionately low over the 2004 to 2009 time span. Over that period interprovincial workers accounted for an average of 10.0% of all workers in Yukon, but for an average of only 4.5%of all worker earnings.

FIGURE 25: INTERPROVINCIAL EMPLOYEES AND EMPLOYEE EARNINGS AS A PERCENT SHARE OF TOTAL EMPLOYEES AND TOTAL EMPLOYEE EARNINGS IN YUKON – 2004 TO 2009



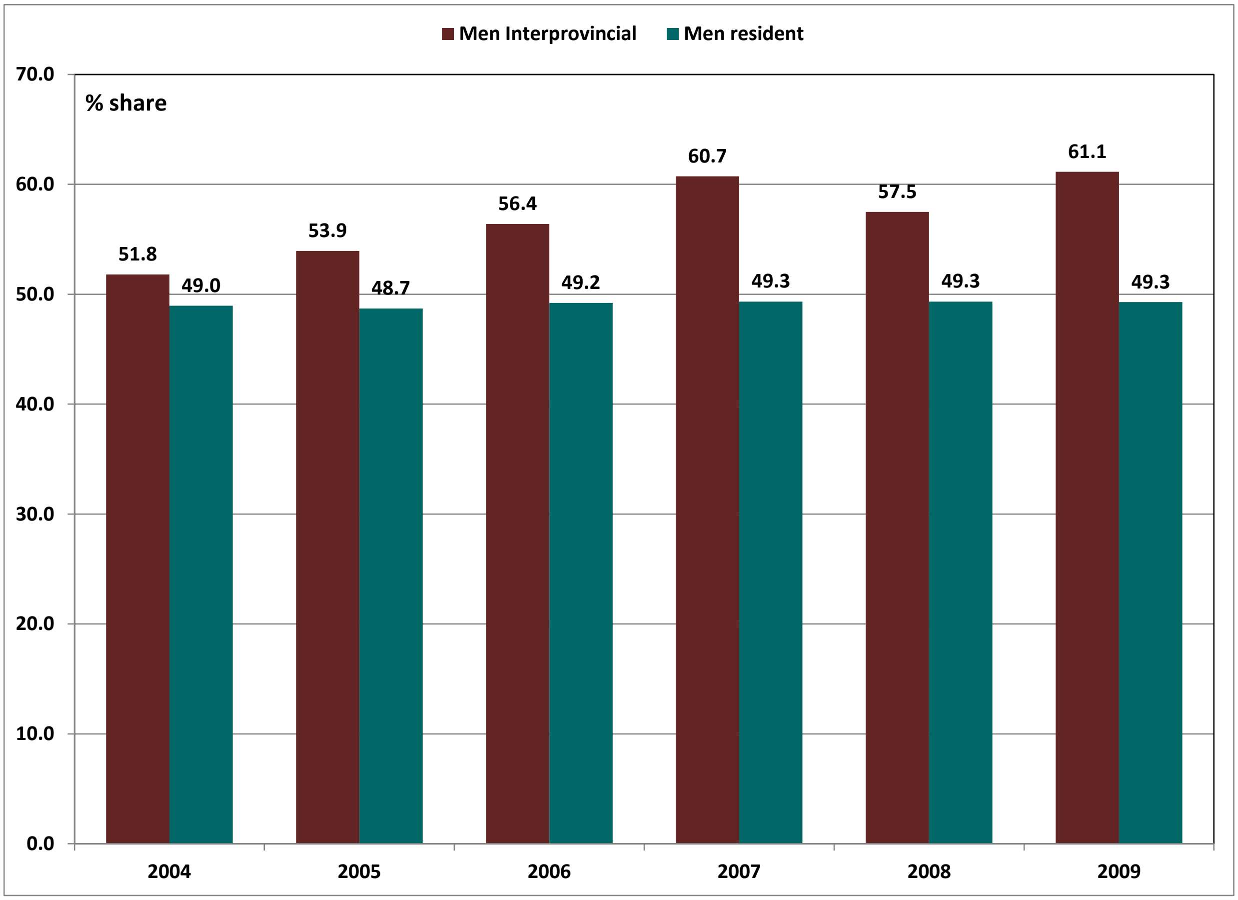
Source: Statistics Canada Custom Tables (Tables 3 and 4)

Figure 26 compares the interprovincial share of male workers to the resident share of male workers over the 2004 to 2009 period. Males accounted for an average of 56.9%

of interprovincial workers compared to an average of 49.1% of resident workers over that span.

The male share of interprovincial workers increased significantly from 51.8% in 2004 to 61.1% in 2009 (following on a slight dip in 2008) whereas the male share of resident employees was steady across that span at around 49%.

FIGURE 26: MALE PERCENT SHARE OF INTERPROVINCIAL AND RESIDENT WORKERS IN YUKON – 2004 TO 2009



Source: Statistics Canada Custom Tables (Table 5)

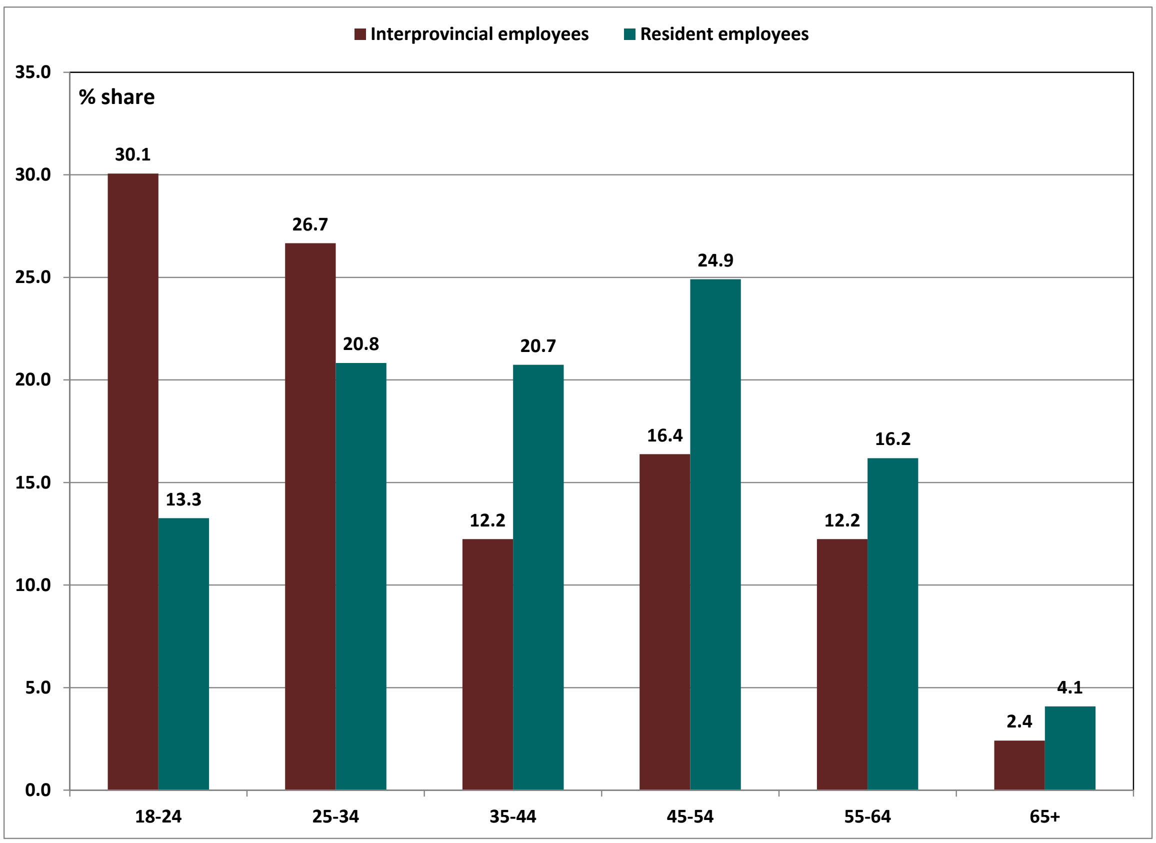
Figure 27 compares the age distribution of interprovincial workers to the age distribution of resident workers in the Yukon as of 2009. There is clearly a tendency toward younger workers among interprovincial workers compared to resident workers. For example in Yukon in 2009:

- 30.1% of interprovincial workers were aged 18 to 24 compared to just 13.3% of resident workers
- 26.7% of interprovincial workers were aged 25 to 34 compared to 20.8% of resident workers

In contrast the interprovincial share across all other age groups fell short of the resident shares:

- Only 12.2% of interprovincial workers were aged 35 to 44 compared to 20.7 % of resident workers
- Only 16.4% of interprovincial workers were aged 45 to 54 compared to 24.9 % of resident workers
- Only 12.2% of interprovincial workers were aged 55 to 64 compared to 16.2% of resident workers
- Only 2.4% of interprovincial workers were aged 65 and over compared to 4.1% of resident workers

FIGURE 27: AGE DISTRIBUTION OF INTERPROVINCIAL AND RESIDENT WORKERS IN YUKON IN 2009



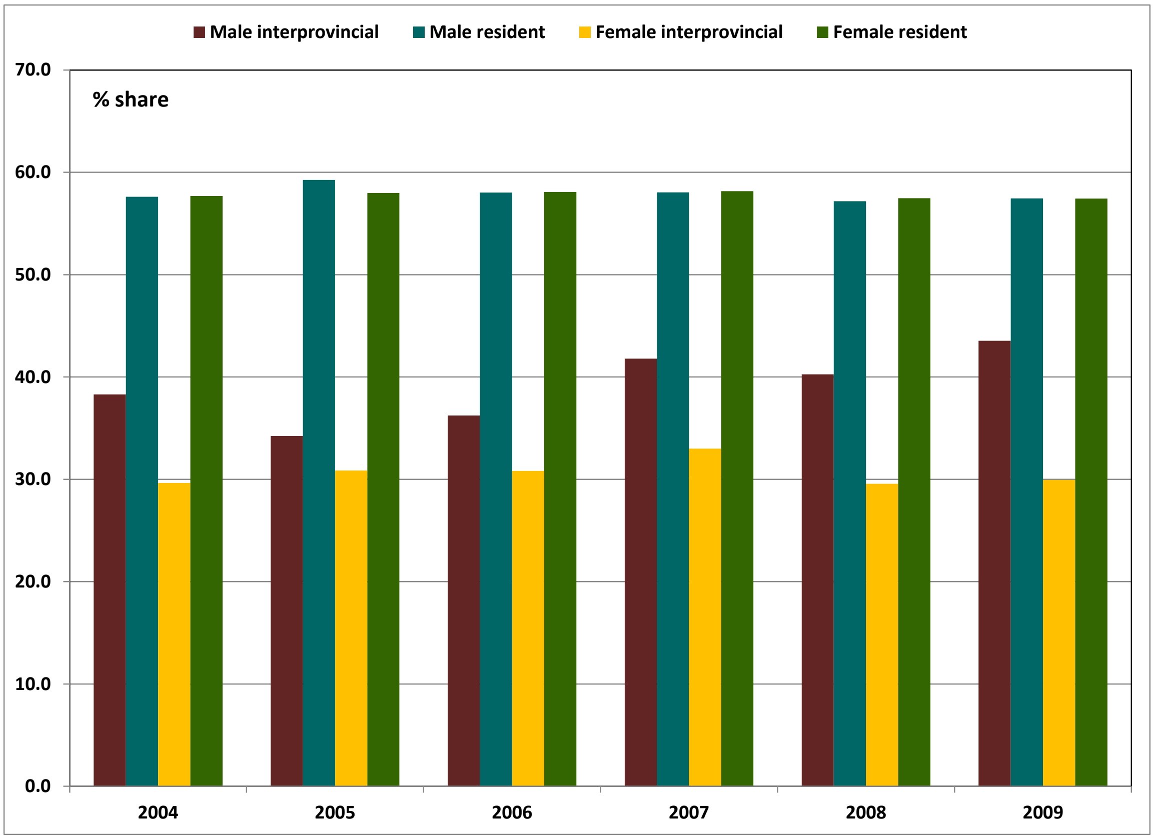
Source: Statistics Canada Custom Tables (Table 6)

Figure 28 compares the marital status of interprovincial workers to the marital status of resident workers by gender over the period 2004 to 2009. Over that span:

- Among resident workers a steady share of 58% of males and 58% of females were married

- Among interprovincial workers the married share of males averaged just 39% while the married share of females averaged just 31%
- The married share of interprovincial male workers increased slightly over the 2004 to 2009 span whereas the married share of interprovincial female workers held steady

FIGURE 28: MARRIED SHARE OF MALE AND FEMALE INTERPROVINCIAL AND RESIDENT WORKERS – 2004 TO 2009



Source: Statistics Canada Custom Tables (Table 8)

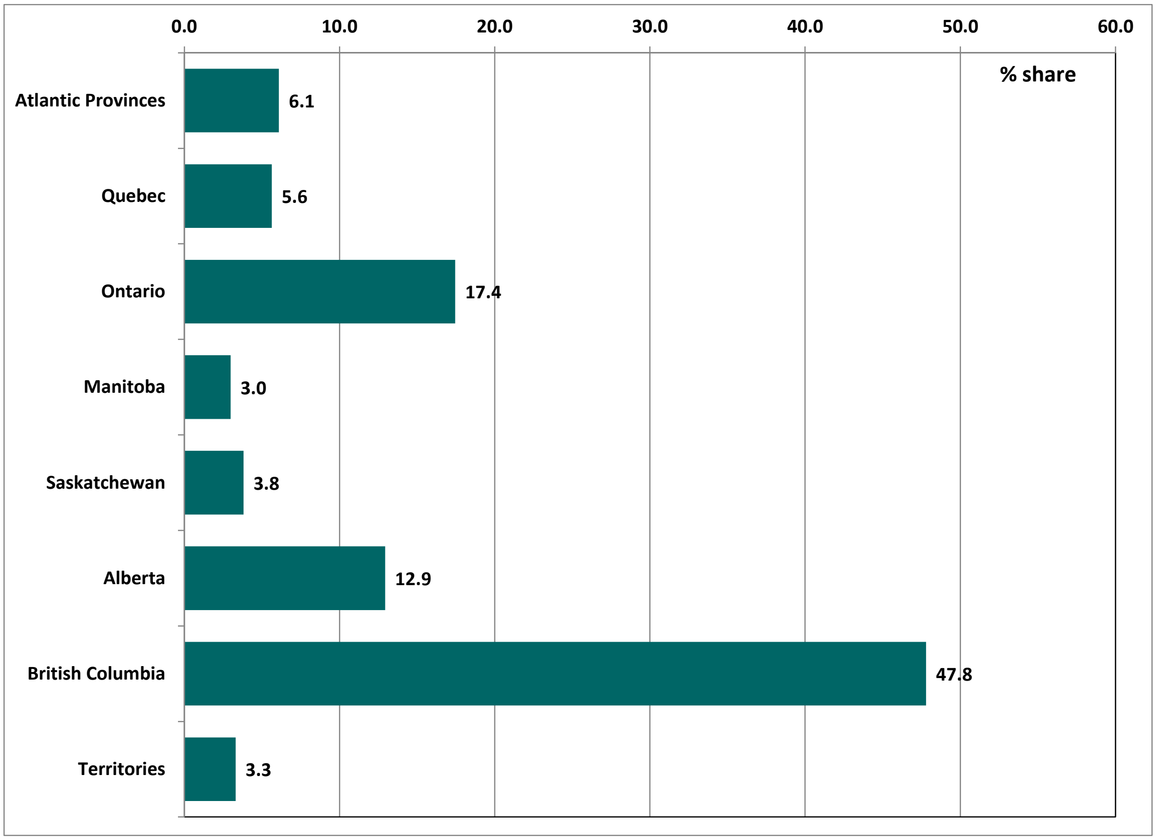
Figure 29 reveals the contribution of each province in Canada to the total number of interprovincial workers in Yukon in 2009:

- British Columbia accounted for the greatest share of interprovincial workers at 47.8%
- Ontario accounted for the second largest share at 17.4%
- Alberta accounted for the third largest share at 12.9%

These three provinces collectively accounted for 78.1% of the interprovincial workers in Yukon in 2009.

The remaining five areas each accounted for somewhere between 3.0% (Manitoba) and 6.1% (the Atlantic Provinces combined).

FIGURE 29: PERCENT SHARE OF INTERPROVINCIAL WORKERS BY PROVINCE OF ORIGIN – 2009



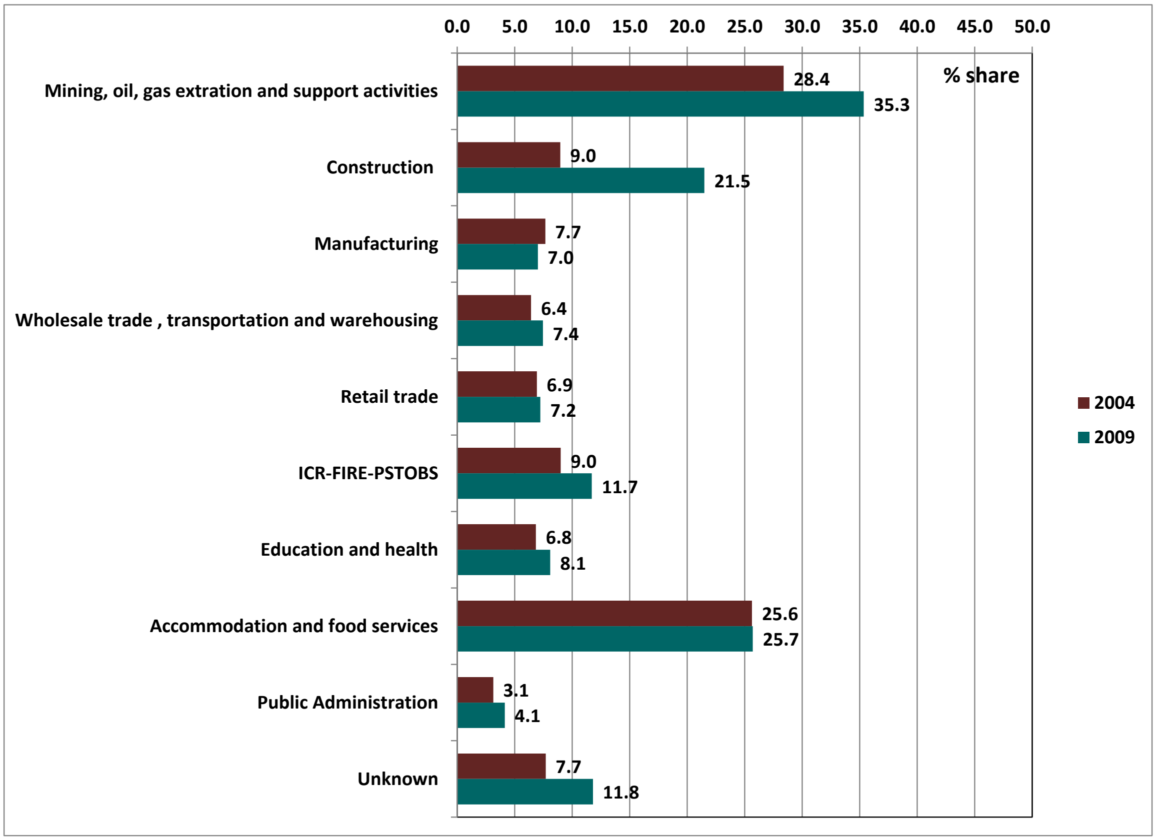
Source: Statistics Canada Custom Tables (Table 10)

Figure 30 reveals the contribution of interprovincial workers in Yukon to the total number of workers by major industry group in 2004 and 2009:

- Interprovincial workers accounted for the largest share of total workers in Yukon's mining, oil and gas extraction and support industries category, and their share increased from 2004 to 2009; in 2004 interprovincial workers accounted for 28.4% of the workers in this industry whereas by 2009 their share had increased to 35.3%
- Interprovincial workers accounted for 25.6% of all workers in Yukon's food and accommodation sector in 2004; the share increased only slightly to 25.7% in 2009
- Interprovincial workers increased their share of all Yukon construction jobs significantly from 9.0% in 2004 to 21.5% by 2009
- Interprovincial workers increased their share of all Yukon jobs in the combined category that includes information, culture and recreation; finance, insurance and real estate; and professional, scientific and technical services and other business services (ICR-FIRE-PSTOBS) from 9.0% in 2004 to 11.7% by 2009

- The interprovincial share in all other industries was less than 10% in both 2004 and 2009

FIGURE 30: INTERPROVINCIAL WORKERS AS A PERCENT SHARE OF ALL YUKON WORKERS BY MAJOR INDUSTRY GROUP – 2004 AND 2009



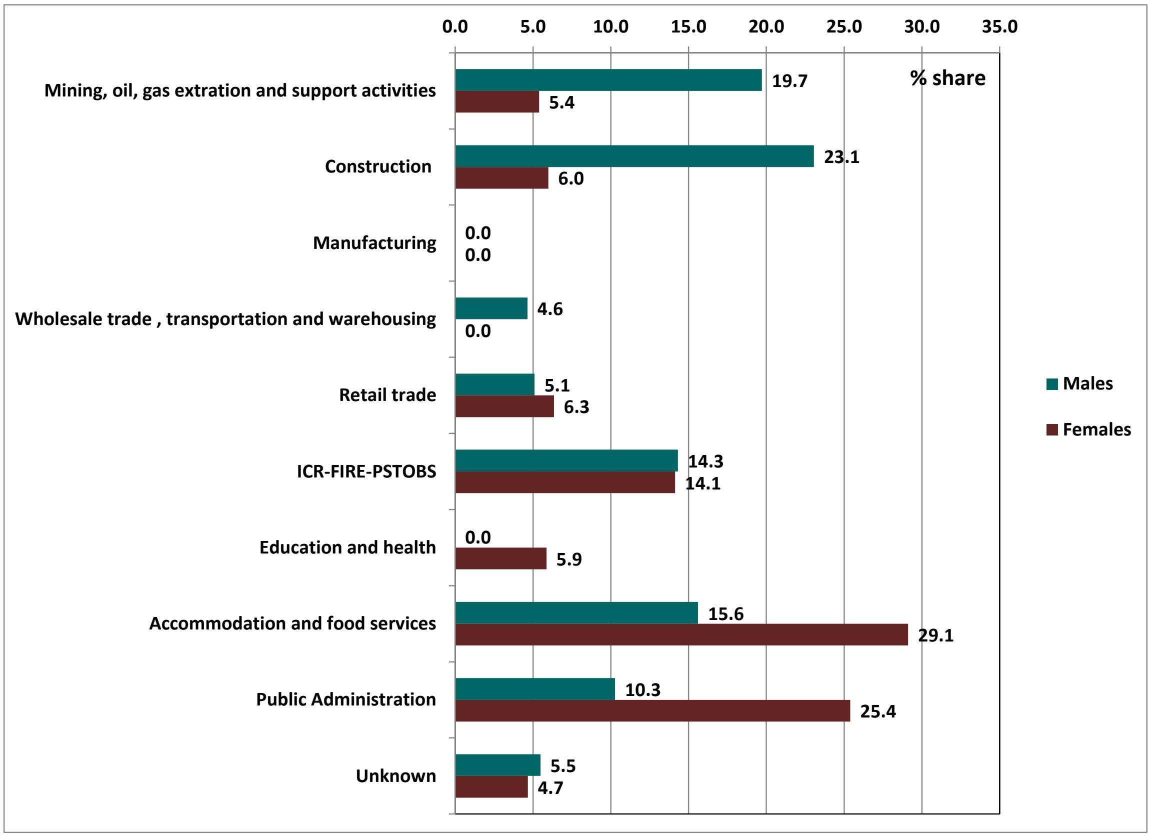
Source: Statistics Canada Custom Tables (Table 11)

Figure 31 reveals the percentage distribution of all male interprovincial workers and of all female interprovincial workers in Yukon by major industry group in 2009:

- The greatest shares of male interprovincial workers are accounted for by construction (23.1%); mining, oil and gas extraction and support industries (19.7%); accommodation and food services (15.6%); and information, culture and recreation; finance, insurance and real estate; and professional, scientific and technical services and other business services (14.3%)
- These four industries collectively account for 72.7% of all male interprovincial workers
- The greatest shares of female interprovincial workers are accounted for by accommodation and food services (29.1%); public administration (25.4%); and professional, scientific and technical services and other business services (14.1%)
- These three industries collectively account for 68.6% of all female interprovincial workers

- Though interprovincial workers account for about 7% of Yukon's manufacturing workers, the data by gender are suppressed by Statistics Canada.

FIGURE 31: PERCENTAGE DISTRIBUTION OF ALL MALE AND FEMALE INTERPROVINCIAL WORKERS BY MAJOR INDUSTRY GROUP – 2009

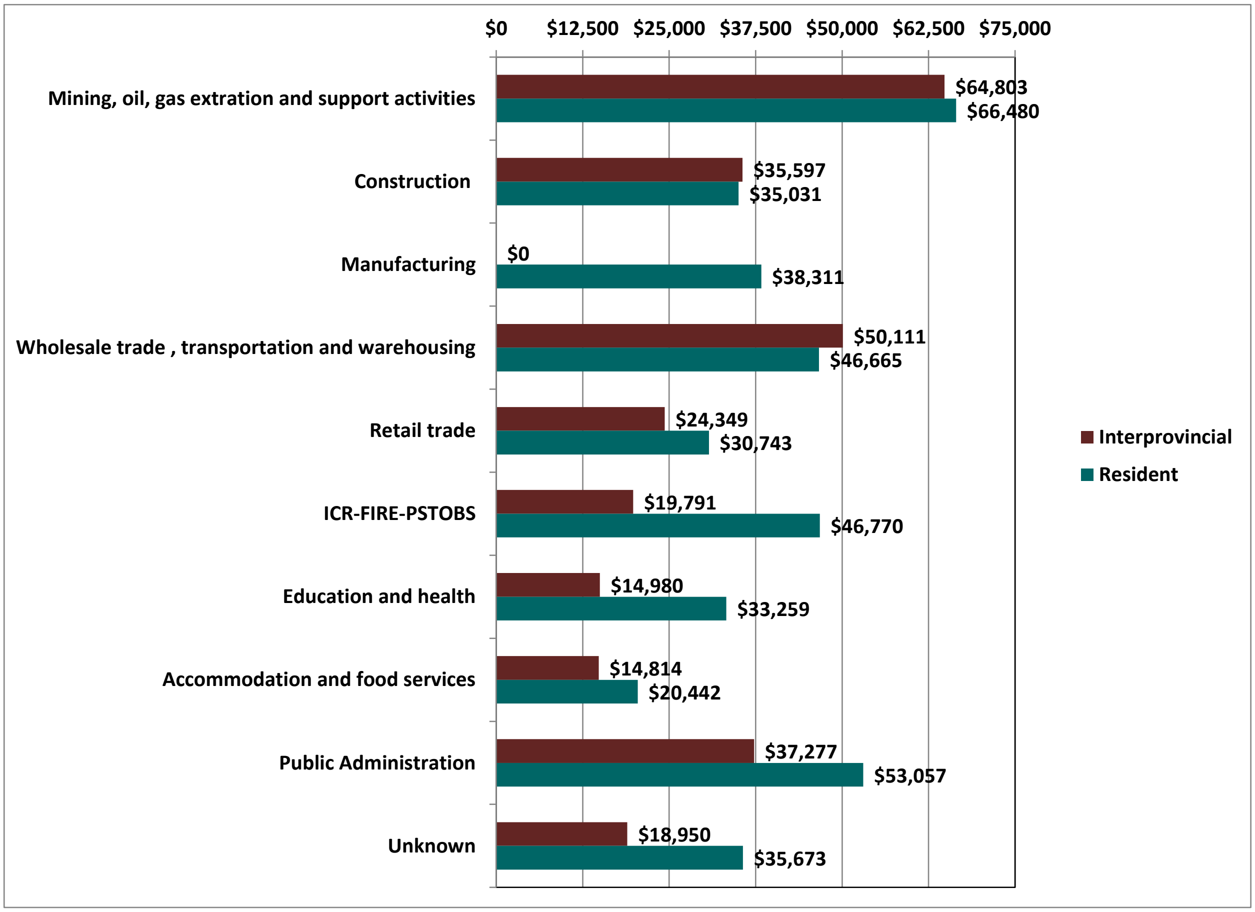


Source: Statistics Canada Custom Tables (Table 15)

Figure 32 compares the annual earnings of resident and international workers in 2009 across the major industry groups. This figure shows:

- The highest paid workers – resident or interprovincial – are in the mining, oil and gas extraction and support industries; resident worker earnings at $66,480 exceed those of interprovincial workers at $64,803 by $1,677
- Resident worker earnings exceed those of interprovincial workers by a wide margin in every industry except in construction where interprovincial workers have a slight advantage ($566 per year) and in wholesale trade, transportation and warehousing where they have a larger advantage ($3,446)

FIGURE 32: ANNUAL EARNINGS OF INTERPROVINCIAL AND RESIDENT WORKERS BY MAJOR INDUSTRY GROUP – 2009



Source: Statistics Canada Custom Tables (Table 19)

4 Economic Impact Analysis

This section describes the relative productivity of the Yukon's workforce against that of the rest of Canada's provinces and territories. The purpose of this discussion is to pinpoint the contribution of migrant workers to Yukon's economy.

Production and Production per Worker in Yukon

Figure 33 shows for Yukon by industry for 2011 real GDP in thousands of constant 2007 dollars, total employment, and real GDP per worker (or real output per worker) measured in constant 2007 dollars. The sum of all production across all industries provides the wherewithal for paying for workers, for the supplies and services needed to carry out these business activities and for providing returns (profits) to the owners of the business activities.

FIGURE 33: YUKON REAL GDP ($2007 THOUSANDS), EMPLOYMENT AND OUTPUT PER WORKER IN 2011

	Real GDP	Employed	Output per Worker
Total all industries	2,160,900	16,920	127,713
Agriculture, forestry, etc.	4,400	110	40,000
Mining	313,700	385	814,805
Manufacturing	20,500	225	91,111
Utilities	33,700	135	249,630
Construction	239,500	795	301,258
Wholesale Trade	37,100	210	176,667
Retail Trade	100,300	2,085	48,106
Transportation, Warehousing	62,900	575	109,391
Information, Culture	65,000	570	114,035
Finance, Insurance	345,400	420	822,381
Professional Services	58,100	900	64,556
Other Business Services	37,800	400	94,500
Education	118,200	1,120	105,536
Health, Social Assistance	159,300	1,275	124,941
Arts, Entertainment, Recreation	8,600	360	23,889
Accommodation	67,700	1,220	55,492
Other Services	33,900	890	38,090
Public Administration	454,800	5,245	86,711

Source: Statistics Canada and calculations by SPI

The industries with the highest output per worker values in 2011 were mining ($814,805 constant 2007 dollars per worker), construction ($301,258) and utilities ($249,630). Across all industries the average output per worker was $127,713. The lowest output per worker values were in arts, entertainment and recreation ($23,889), other services (mostly personal services like drycleaners, etc. $38,090) and agriculture, forestry, etc. ($40,000).[17]

Projected Real GDP and real GDP per Worker and per Household in Yukon

In an earlier section of this report the methodology behind the projections for employment by industry for Yukon was described. The same projection of employment by industry was used here to assess Yukon's future skill requirements across 500 occupations.

In this section the employment by industry projections are transformed into projections for Yukon's real GDP. This is accomplished by starting with the information above regarding real GDP per worker in Yukon in 2011 and projecting real output per worker by industry in Yukon forward at rates that reflect SPI's expectations regarding output per worker growth by industry from 2011 to 2021 Canada-wide.

These projections for Yukon output per worker by industry are then multiplied by SPI's projections for Yukon employment by industry to develop projections for real GDP.

These projections suggest that between 2011 and 2021:

- Total employment will grow from 16,920 (NHS estimate, place-of-work) to 20,603, or by 22% (that is at an annual rate of 2.0%)
- Total output per worker will grow from 127,713 to 188,800, or by 48 percent (an average annual rate of 4.0%)
- Real GDP will grow from 2.16 billion in constant 2007 dollars to 3.89 billion, or by 80 percent (an average annual rate of 6.1%)

Recall that the projections developed for this study find a 50% increase in mining and related jobs from 2011 and 2021. Accordingly, these projections should be considered as but one of any number of possible employment scenarios of the Yukon.

According to this projection model, over the 2011 to 2021 period:

- The number of households in Yukon will grow from 14,120 to 17,379, or by 23% (an average annual rate of 2.1%)
- Real GDP per household will grow from $153,038 in constant 2007 dollars to $223,868, or by 46% (an average annual rate of 3.9%)

[17] Note that finance, insurance and real estate at $822,381 output per worker is the highest of all. This is so because the economic accounting procedures include in the annual output of the real estate industry an imputed estimate for the annual value to home-owners of residing in their homes. Homes are consumed over a long period of time, not in the year they are constructed. This imputation properly reflects this phenomenon but clearly overstates the annual value provided to society of the average worker in the real estate industry.

In this context, it is important to note real GDP per household is one of the best measures available for assessing the relative standard of living of one country compared to another, one province or territory compared to another, etc. at one point in time and over time.

Yukon’s Relative Standard of Living within Canada

Based on average income per household, Yukon has the fourth highest standard of living across Canada’s 13 provinces and territories. Yukon’s relative position with respect to output per worker is fifth among the 13. Yukon’s income per household is 21% above the national average while its output per worker is 22% above the national average.

Over time the standard of living nation-wide and within provinces and territories grows in tandem with gains in output per worker. Productivity gains provide society with the wherewithal for improving the standard of living received by its people over time.

Figure 34 compares real output per worker in each province and territory of Canada to average household income in 2011. This output is expressed in index form relative to the national average for each variable. In other words, the index for Yukon for average household income at 121 means the average household income in Yukon exceeds the national average by 21%. Therefore, in this example, the national average is the baseline of 100, from which all other jurisdictions are measured.

Based on average income per household, Yukon has the fourth highest standard of living across Canada's 13 provinces and territories. Yukon's relative position with respect to output per worker is fifth among the 13. Yukon's income per household is 21% above the national average while its output per worker is 22% above the national average.

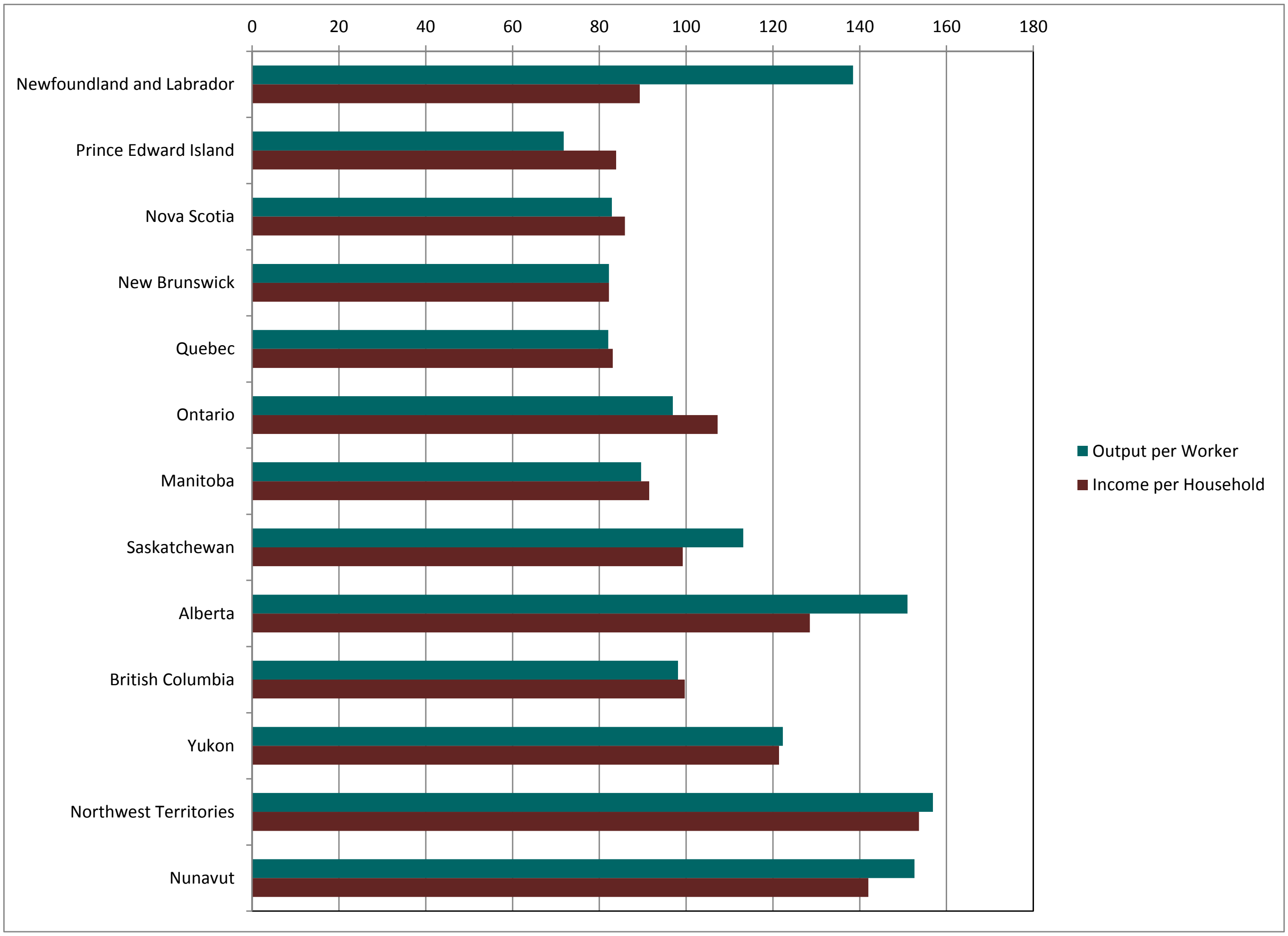
Over time the standard of living nation-wide and within provinces and territories grows in tandem with gains in output per worker. Productivity gains provide society with the wherewithal for improving the standard of living received by its people over time.

Figure 34 reveals that the average income received by households by province and territory across Canada is directly related to the average output per worker achieved by each. In fact, with the exceptions of Newfoundland and Labrador, Alberta and Saskatchewan, the relationship is almost one to one. The relationship is less than one to one in these three (relative household income is lower than relative output per worker) because of Canada's federal transfer payment system that transfers money from the relatively rich to the relatively poor provinces in order that an equalized level of government services can be achieved by all.

Based on average income per household, Yukon has the fourth highest standard of living across Canada's 13 provinces and territories. Yukon's relative position with respect to output per worker is fifth among the 13. Yukon's income per household is 21% above the national average while its output per worker is 22% above the national average.

Over time the standard of living nation-wide and within provinces and territories grows in tandem with gains in output per worker. Productivity gains provide society with the wherewithal for improving the standard of living received by its people over time.

FIGURE 34 YUKON REAL OUTPUT PER WORKER AND INCOME PER HOUSEHOLD IN 2011 AS AN INDEX RELATIVE TO THE NATIONAL AVERAGE



Source: Statistics Canada and calculations by SPI

The projections developed here suggest that the standard of living in Yukon will increase significantly between 2011 and 2021. In the scenario developed here real GDP per worker is expected to grow by about 4% per year at a rate that could result in average household incomes increasing on average by almost one-half.

Several key assumptions lie behind the projection developed here, and further expanded in the Appendix, beginning on page 58:

- Mining and related employment will grow by about 50% between 2011 and 2021
- Output per worker in mining will continue to grow
- Enough interprovincial migration will occur to ensure no labour shortages emerge in mining or any other industry

The Importance of Migration to Yukon

The special tables purchased from Statistics Canada and discussed in another section of this report provide information regarding the share of workers accounted for in each industry in Yukon for 2004, 2008 and 2009. In this case, an assessment of the impact of inter-provincial employment on jobs and GDP in Yukon is permitted by interpolating shares for 2005, 2006 and 2007 and by assuming the shares for 2009 will hold from 2010 through 2021.

The projections suggest that Yukon's real GDP will grow from $2.16 billion in constant 2007 dollars in 2011 to $3.89 billion, a gain of $1.73 billion. Applying the inter-provincial shares to employment as described above suggests inter-provincial workers will account for $288 million in constant 2007 dollars of that increase, or for 16.6% of the total gain.

That share assumes inter-provincial workers will account for 35.3% of the overall increase in mining workers of 50% over that span. With that said, the special tables provide estimates for these shares only to 2009. Consequently, without more-current data it is not at all clear whether the shares continued to grow through to 2013. Furthermore, it is not at all clear whether Yukon can achieve a 50% gain in mining employment without the inter-provincial share of jobs in mining and other industries increasing beyond the levels of 2009.

In other words, the estimate here – suggesting that inter-provincial employees will account for 16.6% of Yukon's overall real GDP gain between 2011 and 2021 – is likely on the low side.

The uncertainty around the likely future growth in mining and the uncertainty around the likely future inter-provincial shares of Yukon's labour market illustrate how critical it will be for Yukon to facilitate increased flows of these workers and encouraging these workers to permanently settle in the Yukon. These inter-provincial workers have assisted the Territory in achieving a higher than average standard of living for its permanent residents. Moreover, moving forward, these inter-provincial workers will be critical to the achievement of further gains to Yukon's standard of living.

5 Community Engagement

To better understand the perspective of residents on the positive and negative aspects of employment in Yukon, the challenges of finding and retaining quality work were explored through community engagement. Community engagement activities included a series of nine targeted focus groups and a labour supply survey completed by 115 respondents. The contents of this section are elaborated on in Community Engagement Activities, starting on page 61 in the report appendix.

Labour Market Supply Survey

The Yukon Labour Supply Survey polled individuals in the labour force about their interest in new employment opportunities, their challenges in advancing career ambitions, and the length of time they have lived in Yukon.

The number and variety of employment opportunities available in the territory was stated as a challenge for members of the labour force who responded to the survey. Access to a car for transportation and access to training opportunities emerged as common barriers for those who were seeking work or seeking new employment. Respondents also expressed a desire for more online tools to support their search for employment, and indicated a lack of training programs that meet their needs.

The themes in the survey echo the findings of the focus groups and include:

- **Employment opportunities (quantity and quality)** In Figure 36,47% of respondents qualified the availability of high quality jobs as poor and 27.1% stated fair, making this by far the most significant barrier to improving employment status. Figure 48 captures responses to what assistance was required to achieve employment potential, with 36% of respondents stating “access to opportunities” as their highest response.
- **Transportation barriers:** In Figure 39 19% of respondents stated transportation is a barrier in their search for employment; of these, 36% do not own/have access to a vehicle.
- **Education and training (availability related to employment opportunities):** When asked about the types of information, tools or services that job seekers could not find, the #1 response was training institutions for specific occupations, as depicted in Figure 46. When asked what assistance is needed to achieve employment potential, 18% of respondents said retraining programs, as shown in Figure 48.
- **Labour Market Information (availability of services and information online):** When asked how availability of labour market information could be improved, the top response was the improvement of online resources. In Figure 43, 19% of respondents identified word of mouth as the dominant job search tactic while 17% identified newspaper. Other sources of information are comparably rated, with 15% identifying local employment agencies and 14% YuWIN.ca.

A total of 115 individuals completed the labour force supply survey, which was distributed online. The survey was not intended to be statistically valid, but to provide a sense of the public views on labour market trends and uncover areas that are worthy of further investigation. The majority of respondents live in Whitehorse, and 25% of the sample living in other communities. This ratio indicates somewhat more representation from rural communities than the current balance of Yukon’s rural and urban population, which is 82% urban as of the 2011 census; regardless, urban views can be expected to dominate the responses to some extent. Respondents tended to be between the ages of 25 and 34 and employed in professional, management, or trades positions in the fields of retail, trades, or public administration. Many survey respondents had either lived in Yukon for less than five years, representing 38% of respondents, or had lived in Yukon for more than 20 years, 34%; this is another indication of high labour mobility.

Focus Groups

Focus groups were conducted with job seekers, employers, service providers, union representatives, First Nation representatives, and young professionals, to gather further information about the perspectives of residents on labour supply and migration challenges. Eight focus groups were completed with a total of 49 participants. The common themes arising from the focus group discussions are as follows:

- **Education:** For those who are seeking work or seeking to enter the job market, education is a leading concern. Stakeholders shared that low-skilled jobs require at least a high school diploma, while high paying skilled jobs required a post-secondary degree. Foreign workers were concerned that their international degrees were not recognized and First Nations responders highlighted challenges some community members face in finishing high school.
- **Transportation**: Many employment opportunities require a car or access to a car to reach the job site, in part because public bus schedules in Whitehorse did not always align well with work schedules or because the job site is not in a location where public transportation is an option. When transit or a car is not available, alternative transit such as a taxi comes at a high cost, which can be prohibitive – if there is any transportation available at all.
- **Skills mismatch:** Highly skilled jobs are reported as not going to locals and/or remaining vacant for long periods. Meanwhile, the unemployed and employment service providers report difficulty accessing entry-level jobs, and those employed in low-skilled jobs also report difficulty accessing both low-skilled and high-skilled positions.
- **Job readiness:** In some cases, more than education and training are needed to secure and maintain work. Workers and employment service providers report widespread challenges associated with preparing a resume and a lack of basic interview and networking skills. Employers reported a lack of basic job skills, especially for low-skilled jobs.
- **Access to training programs:** Funding for training programs and employment services was described in consultations as piecemeal and unstable. Specialized courses and youth programming tend to suffer from low enrolment and availability. Participants also identified the completion of training programs a challenge.

6 Recommendations

6.1 SWOT Analysis

The findings from the research have been aggregated into a SWOT (strengths, weaknesses, opportunities, and threats) analysis, in order to summarize its insight into recommendations.

For the purposes of this report the terms of the SWOT are defined as:

- Strengths (Positive, Internal): Positive attributes or assets currently present in Yukon;
- Weaknesses (Negative, Internal): Issues or characteristics that limit the current or future growth opportunities for Yukon;
- Opportunities (Positive, Internal and External): Areas where Yukon can remedy its weaknesses; and
- Threats (Negative, External): trends that threaten the future of Yukon and the progress of its work force.
-

Strengths	Weaknesses
Yukon has a proven ability to attract interprovincial and international workers, particularly in mining, oil and gas extraction and support industries	Some Yukon residents feel a lack of availability of education and training opportunities are barriers to advancement in the work force
Yukon residents, on average, have high rates of educational attainment	Yukon residents report using limited information to make labour market decisions, and access to this information is not centralized
High participation rate in the labour force indicates that many who are able to work are securing employment	Public transportation has been identified as a barrier for many residents who struggle to find and maintain work
Yukon offers career opportunities and is an exciting and unique place, which is attractive for many young workers	Those who struggle to join and remain in the workforce report challenges with job readiness, literacy/numeracy and securing entry level employment
Yukon college offers post-secondary education opportunities in the territory, and apprenticeship registrations are up	Businesses have difficulty recruiting and retaining new employees, particularly for highly skilled positions
Cultural diversity creates a unique and exciting mix of cultures to Yukon	Retention of residents is a challenge, while many migrate to Yukon, recessionary trends lead to out-migration
	High school graduation rates among First Nation students are low
	The lack of variety of post-secondary training, including trades training, available in Yukon forces students to leave to study, and it is reported this leads to out-migration of skilled workers and youth

Opportunities	Threats
Strong medium and long term employment for natural resources, particularly mining, is very positive, which has associated positive effects on other sectors of the economy	Demand for labour is expected to be greater than the supply available, in the mining sector alone 2,900 jobs are projected to be created over the next 10 years with only 280 new workers entering the mining sector
The tourism sector has experienced recent growth and has an export market	Occupations projected to be in demand tend to require post-secondary education
Interprovincial workers tend to come from British Columbia, followed by Ontario and Alberta	The cyclical nature of the natural resource sector creates boom and bust cycles which lead to volatility in the labour market
Young workers (18-38) are more likely to move for work and are a good target market for Yukon employers	Greater national and international competition for skilled labour is expected over the next ten years and beyond

Yukon has an advantage in the global search for workers to meet its employment demands, as the territory has been attracting workers from other areas of Canada and the world for decades. As one of the more experienced regions in Canada, Yukon has an established image as a destination for workers, particularly in the natural resources. The territory's high participation rate has also become a culture, and more Yukoners are engaged in the workforce than in other areas of the country.

With that said, global workforce trends are continually changing, and according to the research it is about to get much more competitive. Yukon must be prepared to compete and to remain informed and flexible in its strategy to ensure that past success translates to future success.

6.2 Priority Themes

Four key themes have emerged from the research, around which recommendations will be based. These themes are based on the understanding and key learning which emerged through the primary and secondary research and data analysis undertaken in this study. The following themes represent puzzle pieces that will guide strategic planning. When properly positioned they create a collective whole.

Job seekers and labour force participants require access to reliable and valid information, as they seek career pathways that respect and respond to individual needs. Location, access to services and supports, and quality of life are all influencing factors in workforce development. Each theme will require initiatives that work independently as well as collectively and there can be cross over between themes.

The key themes of the *Yukon Labour Market Supply and Migration Study* are described as follows:

Inform: Increase the efficiency of the labour force by supplying accurate labour market information to the local labour force as well as those that might relocate to Yukon.

Attract and Retain: Ensure a targeted and strategic approach to attract talent that aligns to the labour market demand, while establishing a strong commitment to retain existing talent; Regional and local assets and quality of life strengthen capacity to attract and retain talent.

Collaborate: Increase collaboration between and among key stakeholder groups including employers, educators, government, economic development, and not-for-profit and voluntary sectors to strengthen opportunities to align supply and demand.

6.2.1 Inform

Many baby-boomers are within ten years of retiring, which will create not only opportunities for advancement as they exit, but also new employment opportunities for those transitioning into or active within the labour market. A key priority is ensuring a strong, relevant communication strategy that promotes these opportunities to the local labour force and those outside of Yukon, as a means of increasing talent attraction. All of these local labour force messages need to be communicated effectively, highlighting both the opportunity and the attractiveness of Yukon as a place to live and work.

Influencing research findings that informed this theme include:

- Lack of awareness of and access to employment opportunities identified as a challenge in community engagement;
- The Labour Force Survey and Focus Groups point to a preference for word of mouth recruitment, and a desire for a more centralized source of information regarding employment opportunities, employment services, and education and training.

The following activities are offered for consideration:

6.2.1.1 Empower evidence-based decision making through reliable, current and relevant information

- Encourage ongoing development and updating of a local training and post-secondary program inventory to support labour market development
- Share the results of the Supply and Migration Study with all relevant stakeholders
- Invest in audience specific interpretations of labour market data, geared to the needs of students, First Nations people, new Canadians, employers and statisticians; make labour market information easy to understand and relevant to each audience.

6.2.1.2 Centralize access to labour market information, career planning and employment services

- Pursue the creation of Yukon specific online labour market information tools that provide guidance on career planning, employment services and programs, and educational opportunities
- Engage YST partners in promoting centralized LMI access points to ensure widespread adoption of online labour market information tools
- Work with employment service providers to increase accessibility, through hours of operation, and ensuring staff have strong cultural and community connections
- Align resources available in physical locations accessible to the public with online resources to meet the needs of all residents.

6.2.2 Attract and Retain

Yukon is home to a concentration of specialized professionals and an educated workforce, as compared to the rest of Canada. Individuals attracted to the territory for employment are oftentimes accompanied by their spouse or partner who is also active in the labour market and needing to secure employment. This is often challenging when they are also in a specialized field, or lack local networks and contacts. If Yukon is to successfully attract and retain talent that is in demand, there must be a focus on addressing this dual career family challenge.

The ‘attract and retain’ theme is based on the following research findings:

- Labour market projections indicate the gap between future demand for workers and the size of the local labour market will necessitate both increased labour market participation rates and increased migration to Yukon
- Labour Market Survey respondents tend to have lived in Yukon for either less than five years or more than twenty years, indicating a significant percentage of residents that migrate in and out of Yukon

- Migration trends suggest that during recessionary times, Yukon's labour force rapidly decreases due to out-migration
- Global trends suggest that international competition for labour is increasing, particularly in the natural resource sector; Yukon may need to be more aggressive to achieve past results

For delivering on this theme, the following activities are offered for the consideration:

6.2.2.1 Promote Yukon as an employment destination

- Document and promote community and regional assets to increase awareness of lifestyle benefits and quality of life attributes
- Profile local employment opportunities and showcases business success stories
- Validate specific geographic areas within Canada and internationally to inform employer recruitment efforts to target a mobile workforce
- Review ongoing initiatives to create a regional labour market dashboard/portal that promotes employment and career opportunities.
- Examine opportunities to add a "Dual Family Career Portal/Platform" to an existing web portal – promoting Yukon as a place to live, work and raise a family.

6.2.2.2 Retain workers in Yukon and convert short term workers to residents through community engagement, incentives and housing

- Increase community engagement activities to create connections between new residents and community organizations, increasing the sense of "home"
- Examine the success of relocation incentives as a means of supporting newcomers
- Develop a strategy to increase entry-level or rental housing, increasing potential for those choosing to relocate to meet basic settlement needs

6.2.2.3 Empower youth through increased career awareness and experiential learning

- Create direct interaction opportunities between senior students, graduates and local employers as a means of retaining graduating talent
- Inventory and promote programs to support experiential learning for youth
- Work with partners to communicate occupations in demand and career pathways with materials that are targeted to high school and post-secondary students
- Create and make available a comprehensive resource for businesses regarding training programs and employer incentives that support experiential learning for students

6.2.3 Collaborate

As global competitive pressures for workers rise and the already tight labour market in Yukon tightens even further, collaboration will become more important. Stakeholders report that duplicated efforts and labour market development programs are confusing for the public, and tend to create gaps in services. The Yukon Skills Table has made great strides in creating greater collaboration in labour market planning and workforce development in the territory; continuing these efforts will serve to benefit the public, job seekers, employers and the service delivery networks.

This theme is based on the following research findings:

- Although many employment services and programs exist, public perception is that these services are hard to access and require interacting with multiple agencies/organizations
- Most of the top occupations forecast to be in demand in Yukon from now until 2021 will require a post-secondary certificate, diploma or degree
- Consultation engagement findings call for greater communication between business and educational institutions and more specialized local programming
- In community engagement, job seekers and employment service providers expressed concern about the accessibility of highly skilled positions to the local labour market, and the ability of the work force to adapt to its requirements
- Issues associated with workforce development, such as social issues and prejudices, transportation, and the cost of living are reported to impact employability; to address these interconnected challenges, collaboration is necessary
- High school graduation rates for First Nations students are significantly lower than non-First Nations students, indicating barriers to employment for First Nations communities

For delivering on this theme, the following activities are offered for the consideration:

6.2.3.1 Ensure the skills of the labour force are aligned with labour market needs by working with community partners

- Actively promote longer-term career planning targeting those that did not complete high school, to validate long term benefits of high school and post-secondary completion
- encourage alignment of post-secondary educational programs with the needs of the labour force Work with educational institutions to connect with the business community on an ongoing basis and
- Work with Yukon College to promote educational opportunities locally, nationally and internationally, to increase awareness of the value of post-secondary education and to attract more students to Yukon to study

- Work with social agencies and organizations to address cross-cutting issues such as cultural awareness and empowerment

6.2.3.2 Promote career engagement, learning and skills development

- Support access to ongoing professional development and shorter-term targeted programs that increase opportunities for individual life-long learning, life skills, and career readiness.
- Work collaboratively with secondary and post-secondary institutions to develop career profiles and pathways to employment for occupations experiencing labour force gaps, such as the certified trades.

6.2.3.3 Maintain collaboration between stakeholder groups and communities to strengthen opportunities and impact

- Continue to support the activities of the Yukon Skills table to bring stakeholders together and collaborate to address work force challenges.
- Convene annual/bi-annual forum (Labour Market Framework Committees) with economic development, employment offices, chambers and other intermediary groups, and post-secondary and training institutions to evaluate skill and occupation needs; promote awareness of ongoing services and initiatives; create a neutral space for information sharing and promote collaboration
- Encourage and support increased dialogue and connections between business community, employment services and other client serving agencies

7 Appendix

7.1 Strategic Projections Inc. and SPI's Economic Region Based Model Framework

Strategic Projections Inc. (SPI)

SPI specializes in assessing historical trends and in modeling the economic and demographic future of countries, provinces, states, metropolitan areas and individual communities, and in carrying out customized investigations of local area past trends and prospects. Our assessments measure labour market, industrial market, consumer market, and socio-economic conditions and project future trends. They are used by government agencies to support the development, for example, of labour market strategies, economic development strategies, official land use plans, etc., and by private developers to evaluate the financial and/or market potential of existing or newly proposed projects. Our clients include government departments, municipalities, crown corporations, national retail chains, industry and occupational associations, real estate developers, etc. SPI is a corporate partner of the Centre for Spatial Economics.

For more information visit: www.strategicprojections.com and www.c4se.com

The SPI Regional Modeling System

Most population projections at the economic region or community level are prepared using an age cohort model that ages people in place by one year each year, projects births by applying assumed rates of fertility by age of mother, projects deaths by applying assumed mortality rates by age and gender, and assumes an annual profile for net migration by age and gender that reflects past trends. In this framework the key driver of the economic region's population growth is net migration.

Missing from this straight forward and time tested framework, however, is a link between net migration and the economic growth potential of the economic region. Projecting net migration into the future at a rate that reflects the past is unrealistic given the major changes in industrial production and consumer spending trends underway across the country and around the world.

The SPI population projection framework amends the above framework in a significant way by turning net migration from an assumed variable into one that is determined by the economic region's economic prospects and its availability of workers.

Economic Activities at the Economic Region Level

The economic activities occurring in an economic region can be divided into those that are export-based and those that are community-based.

- Export-based industries produce goods that are shipped to markets outside the economic region (agriculture, forestry, fishing and manufacturing), or they provide services to visitors and seasonal residents of the economic region (hotels, restaurants, recreation attractors, specialized hospitals, colleges and universities) or to businesses outside the economic region (specialized financial, professional, scientific and technical services).
- Community-based industries produce services that meet the needs primarily of the local residents in the economic region (retail, medical, education, personal services, etc.).

Growth in an economic region will typically occur only if its export base is expanding. Expansion of the export-based industries drives the growth of the economic region at large. Without growth in an economic region's export-based industries growth in its economic community-based activities is unlikely to occur.

The export-based industries in an area as a group are often referred to as the economic base of the area. The terms *export-based* industries and *economic-base* industries can be used interchangeably as they refer to the same concept.

The SPI Projection Framework

The SPI projection framework explicitly recognizes the distinction between these two types of economic activities and establishes a link between total employment – the sum of both economic-base and community-based employment – and the number of people available for work in an economic region. In the SPI framework, if total employment growth exceeds the number of workers available (as determined by the demographic model) net migration increases to clear the labour market (reflecting the situation today in the Calgary and Golden Horseshoe areas where the population is growing rapidly due to significant net in-migration). In sharp contrast, if employment growth falls short of the number of workers available net migration turns negative in the SPI framework and workers leave to find jobs where they are more plentiful, thus again clearing the local labour market (reflecting the situation today in most rural areas of Canada where the population is declining).

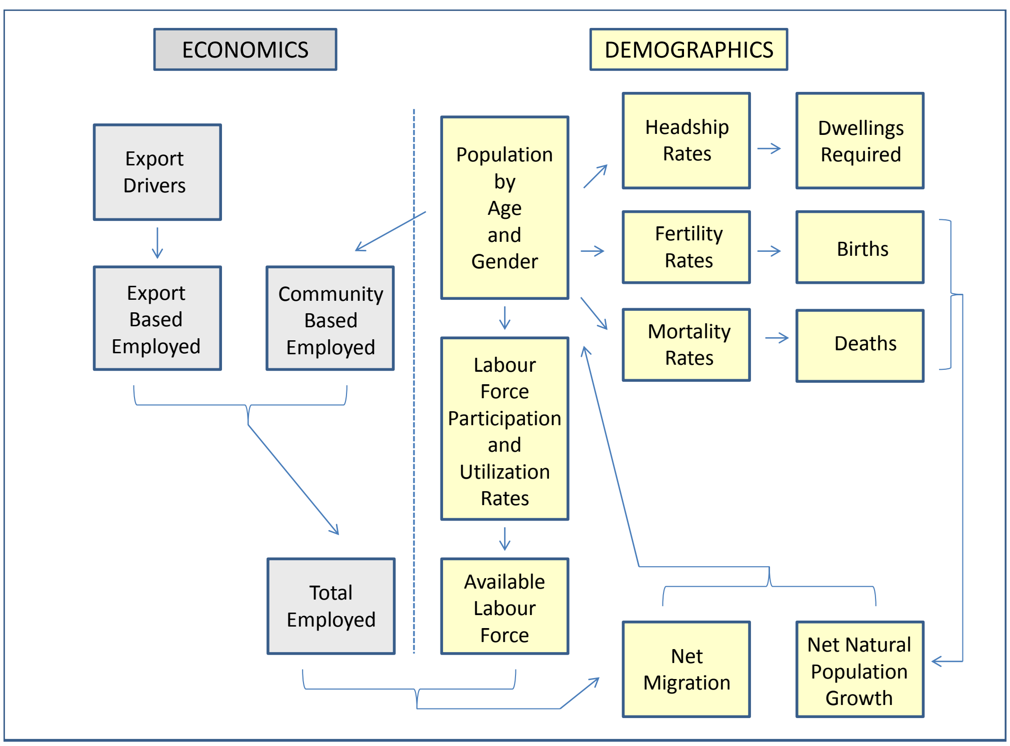
SPI's projections for an individual economic region's prospects are prepared using this detailed economic and demographic framework following on a detailed evaluation of the economic region's economic base and on an assessment of the prospects for growth of the region's economic drivers. SPI prepares and routinely updates detailed economic projections at the national, provincial and metropolitan area level that can be readily used to assess the prospects for growth in individual communities throughout the country.

The SPI framework handles the demographic projections of an economic region as do most forecasters, drawing on information regarding the population by age and gender in a base year and altering it in the future using assumed fertility and mortality rates (the right side of the schematic diagram above). The SPI framework, however, drives net migration by linking it to the economic region's labour market requirements. This need is driven by the potential for the economic region to grow its economic base which, in turn, is determined by the potential for growth in its exportable goods and services (the left side of the schematic diagram below). ***In other words the demand side and supple side of a region's growth are determined simultaneously in the SPI system with net in migration serving as the variable ensuring the labour market remains in equilibrium in all future years.***

The above framework underpins the Canada-wide base case projections we update on a regular basis and is used when required by clients to develop customized projections based on alternative assumptions (as it was here with respect to Yukon). In the Yukon projection we assumed mining production in Yukon would double over the next several years and we measured the labour market and population implications of that assumption. Other assumptions about Yukon's future mining production could have been made and tested.

The employment by industry projections for Yukon were translated into real GDP or real output projections by industry by (1) calculating the latest known output per worker by industry levels for Yukon (2012), (2) projecting them forward based on our national projections of productivity growth by industry, then (3) multiplying the projected output per worker by industry by the projected number employed by industry to get out by industry.

FIGURE 35: SCHEMATIC DIAGRAM OF THE SPI PROJECTION FRAMEWORK



7.2 Community Engagement Activities

7.2.1 Labour Force Supply Survey

The Yukon Labour Supply Survey polled individuals in the labour force about their interest in new employment opportunities, their challenges in advancing career ambitions, and the length of time they have lived in Yukon.

The number and variety of employment opportunities available in the territory was stated as a challenge for members of the labour force who responded to the survey. Access to a car for transportation and access to training opportunities emerged as common barriers for those who were seeking work or seeking new employment. Respondents also expressed a desire for more online tools to support them in their search for employment, and indicated a lack of training programs that meet their needs.

The themes in the survey echo the findings of the focus groups and include:

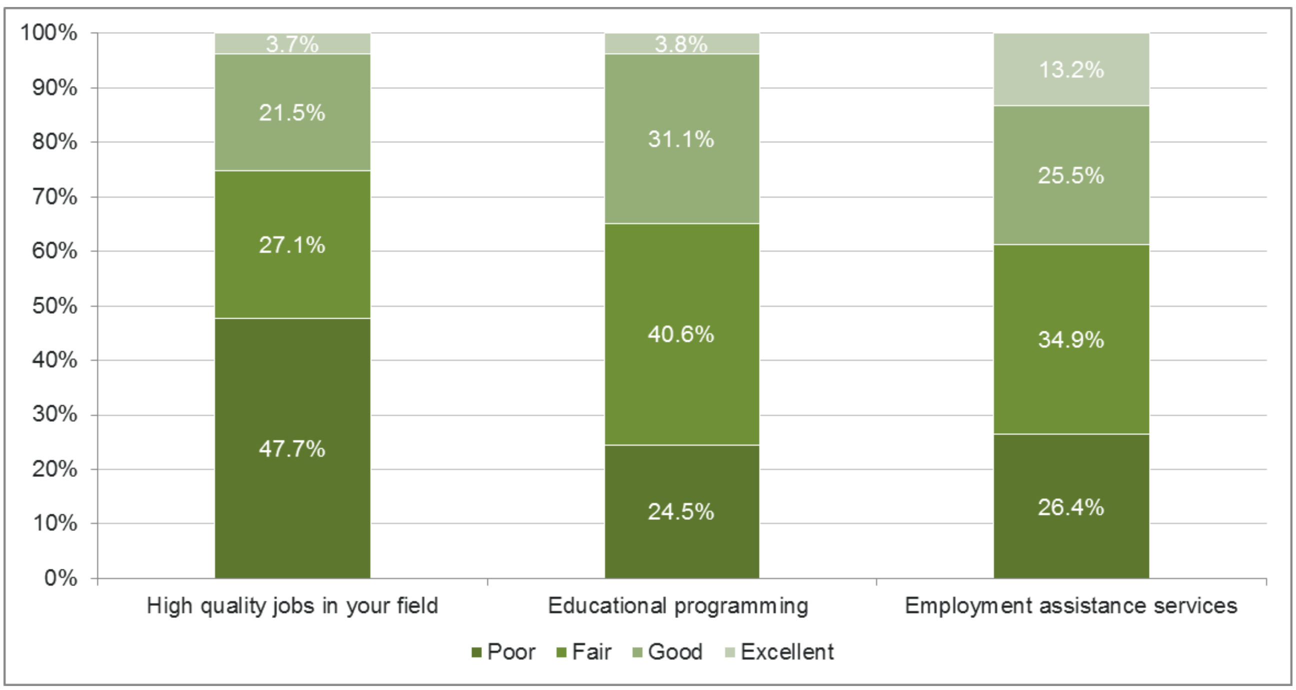
- **Employment opportunities (quantity and quality)** In Figure 36,47% of respondents qualified the availability of high quality jobs as poor and 27.1% stated fair, making this by far the most significant barrier to improving employment status. Figure 48 captures responses to what assistance was required to achieve employment potential, with 36% of respondents stating “access to opportunities” as their highest response.
- **Transportation barriers:** In Figure 39 19% of respondents stated transportation is a barrier in their search for employment; of these, 36% do not own/have access to a vehicle.
- **Education and training (availability related to employment opportunities):** When asked about the types of information that job seekers could not locate, the #1 response was training institutions for specific occupations, as depicted in Figure 46. When asked what assistance is needed to achieve employment potential, 18% of respondents said retraining programs, as shown in Figure 48.
- **Labour Market Information (availability of services and information online):** When asked how availability of labour market information could be improved, the top response was the improvement of online resources. In Figure 43, 19% of respondents identified word of mouth as the dominant job search tactic while 17% identified newspaper. Other sources of information are comparably rated, with 15% identifying local employment agencies and 14% YuWIN.ca.

A total of 115 individuals completed the labour force supply survey, which was distributed online. The survey was not intended to be statistically valid, rather utilized to provide a sense of the public views on labour market trends and uncover areas that are worthy of further investigation. The majority of respondents live in Whitehorse, with 25% of the sample living in other communities. This ratio indicates somewhat more representation from rural communities than the current balance of Yukon’s rural and urban population, which is 82% urban as of the 2011 census; regardless, urban views can be expected to dominate the responses to some extent. Respondents tended to be between the ages of 25 and 34 and employed in professional, management, or trades positions in the fields of retail, trades, or public administration. Many survey respondents had either lived in Yukon for less than five years, representing 38% of respondents, or had lived in Yukon for more than 20 years (34%); this is another indication of high labour mobility.

Detailed Survey Responses

When asked to rate the local availability of high quality jobs in their field, educational programming, and employment assistance, respondents were most satisfied with employment assistance services, including non-government organizations, as 39% of respondents stated availability was good or excellent. Survey respondents were least satisfied with the number of high quality-jobs in their field, defined in the survey as good paying and /or quality jobs that are of interest and that respondents felt qualified for, with 48% of participants indicated that the availability of high-quality jobs was poor.

FIGURE 36: PLEASE RATE LOCAL AVAILABILITY OF:

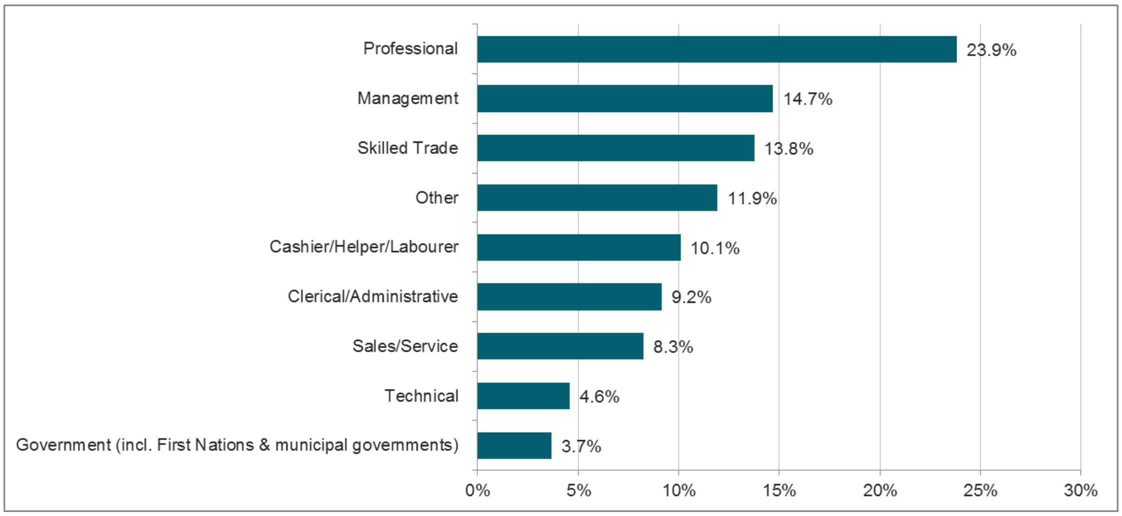


Educational programming was rated between the other options, with 42% of respondents indicating availability as fair. The question defines educational programming as Kindergarten to grade 12 education, college, university, and/or trades training, intending to provide an overall impression of educational programming.

Current Job Profile

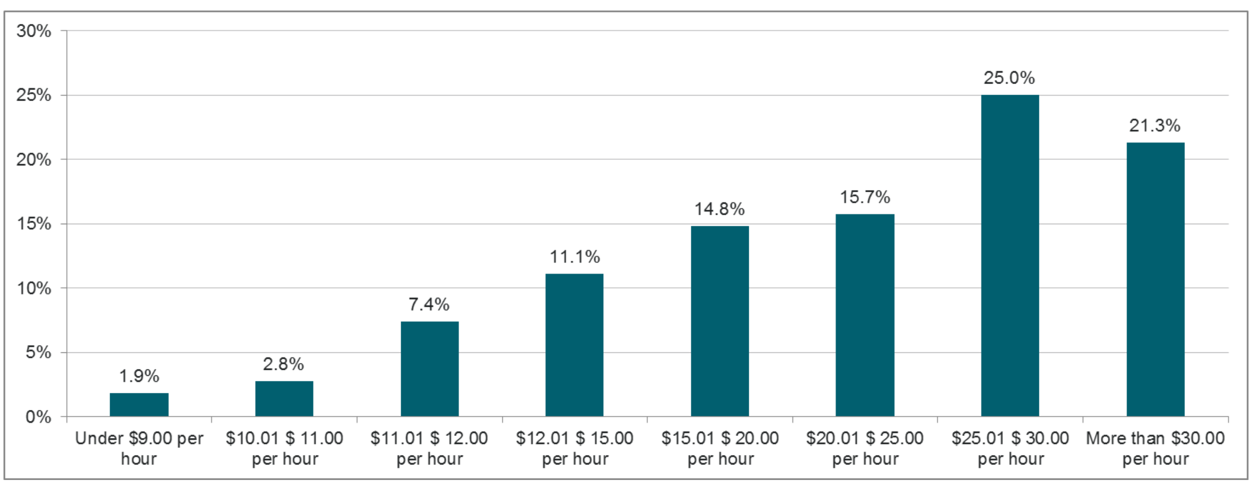
As part of the survey, participants shared the characteristics of their current or most recent job. The most commonly cited fields of employment were in trades, retail, and public administration. Participants were further asked to classify their current or most recent job and nearly a quarter identified their position as professional, 15% as management and 14% as skilled trades.

FIGURE 37: HOW WOULD YOU CLASSIFY YOUR CURRENT/ MOST RECENT JOB?



In Figure 38, participants identified their average hourly salary at their current or most recent job. The responses show that many of the respondents earn more than $25 per hour. The '$25.01 - $30.00 per hour' and 'More than $30.00 per hour' wage ranges received the highest number of responses at 25% and 21% respectively.

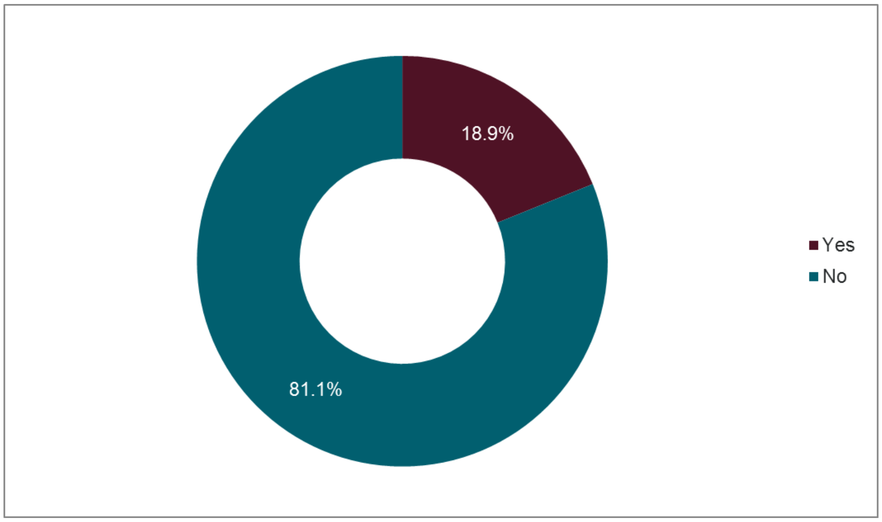
FIGURE 38: WHAT IS THE AVERAGE HOURLY WAGE (EXCLUDING BENEFITS) YOU EARN IN YOUR CURRENT [OR MOST RECENT] JOB?



No responses were received in the wage category of $9.01 -$10.00 per hour.

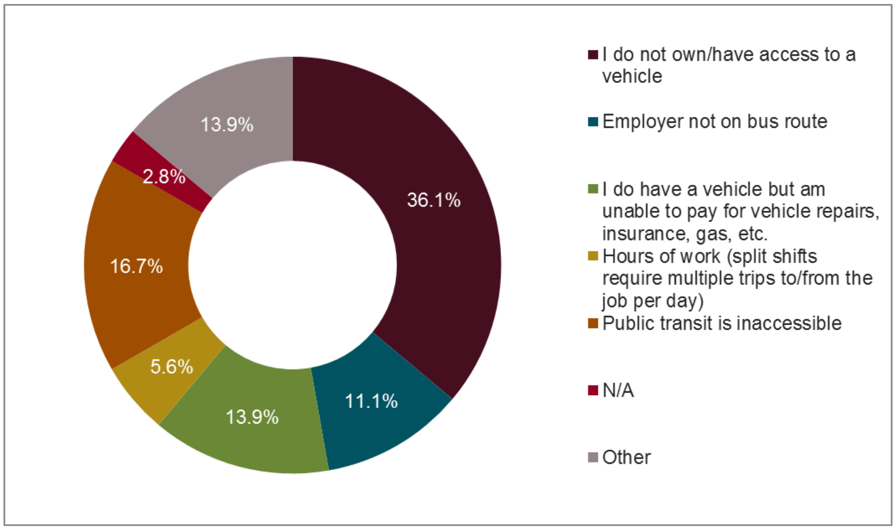
Figure 39 describes to what extent access to transportation is a barrier to employability. Out of the 106 participants who responded to this question, 86 individuals or 81% reported that access to transportation was not a barrier in their job search.

FIGURE 39: IS ACCESS TO TRANSPORTATION A BARRIER TO YOUR JOB SEARCH?



Survey participants who experience challenges with transportation were further asked to identify why transportation access created a barrier to finding employment. The result is presented in Figure 40.

FIGURE 40: IF ACCESS TO TRANSPORTATION IS A BARRIER TO EMPLOYMENT FOR YOU, PLEASE IDENTIFY WHY



Twenty individuals responded to the question. Respondents could select multiple responses to this question and thirteen identified car ownership or access to a vehicle as the reason for difficulty in finding employment, representing 36% of total responses.

The next most commonly ranked challenge was inaccessible public transit, representing 17% of responses.

Labour Market Information

This section of the survey presents labour market participants' view of the labour market and its constraints. Participants were asked to rank a range of factors which may be hindering them from obtaining a job and/or better job. The most highly ranked factor were "a lack of suitable job opportunities", with 66% ranking it as either a significant factor and somewhat of a factor hindering them from obtaining a job. The next most common response was "a lack of jobs that pay enough", which received a similar rating of 56%. The next two highest ranked factors were "I would have to leave my community" and "a lack of related work experience" which received 27% and 20% response rates, respectively.

Among the factors with a low ranking, "I have a criminal record" and "lack of literacy skill" received the lowest responses, with at 95% and 88% rating them as not a factor. Please refer to the below figure for more information.

Participants were also asked to identify any other obstacles in getting a job, with the results displayed in Figure 41. The most commonly cited barriers were skills and education. Participants stated that many jobs required a high level of education and skills which they did not meet and found it difficult to upgrade their skills while they worked as they could not access funding. Respondents also reported that there was a lack of training programs for specific occupation within the community.

The next commonly cited factor was government transparency. Participants stated that many public sector jobs were advertised internally which prevented qualified people from applying. They also reported that when the government does employ workers that it usually on a casual or contract basis. Finally participants also stated that the presence of interprovincial workers created a tough job market as local workers had to compete with all Canadians when a job is posted as there was no priority in hiring locals.

FIGURE 41: LIST OF FACTORS WHICH MAY BE HINDERING YOU FROM GETTING A JOB AND/ OR A BETTER JOB.

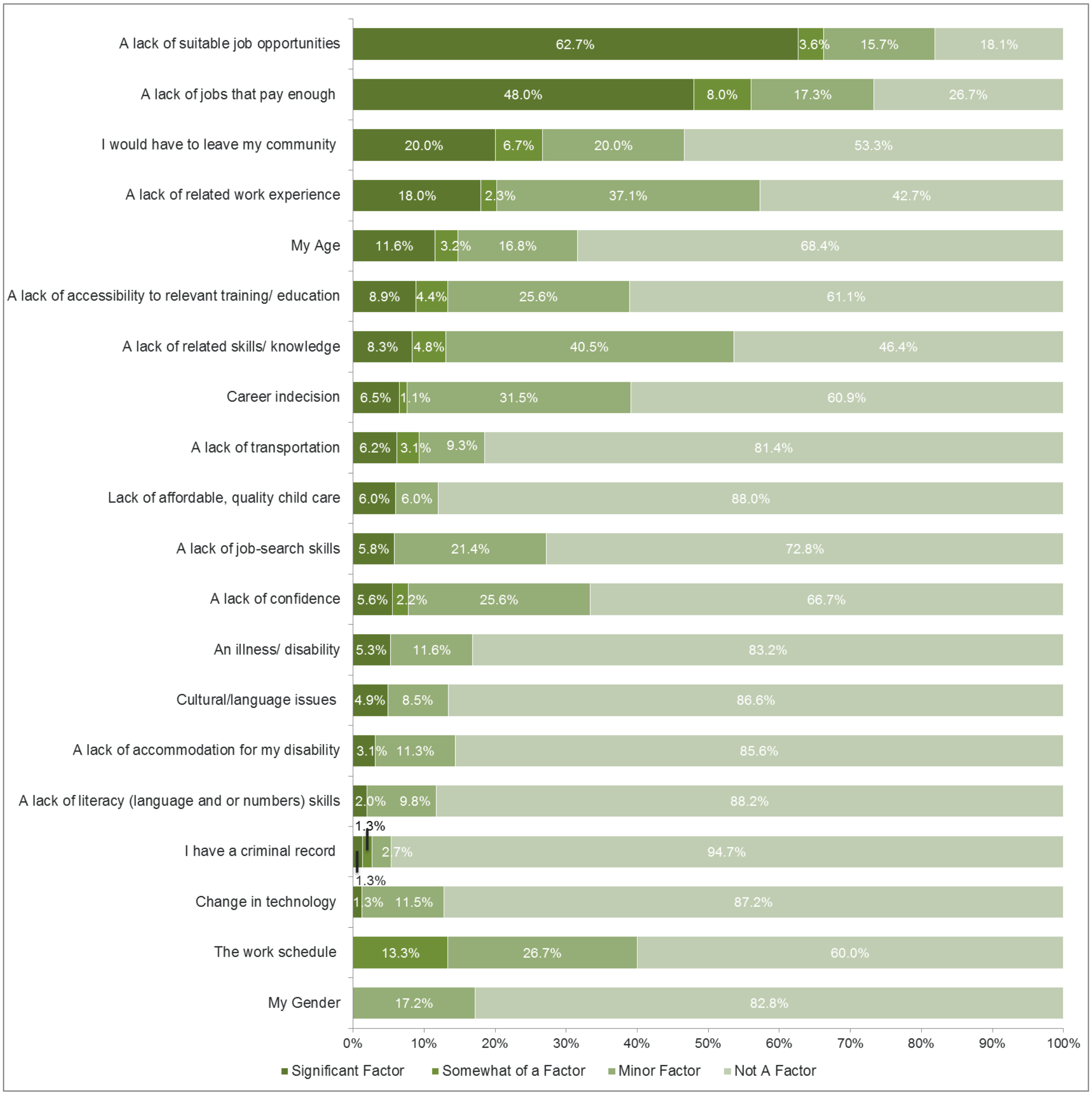
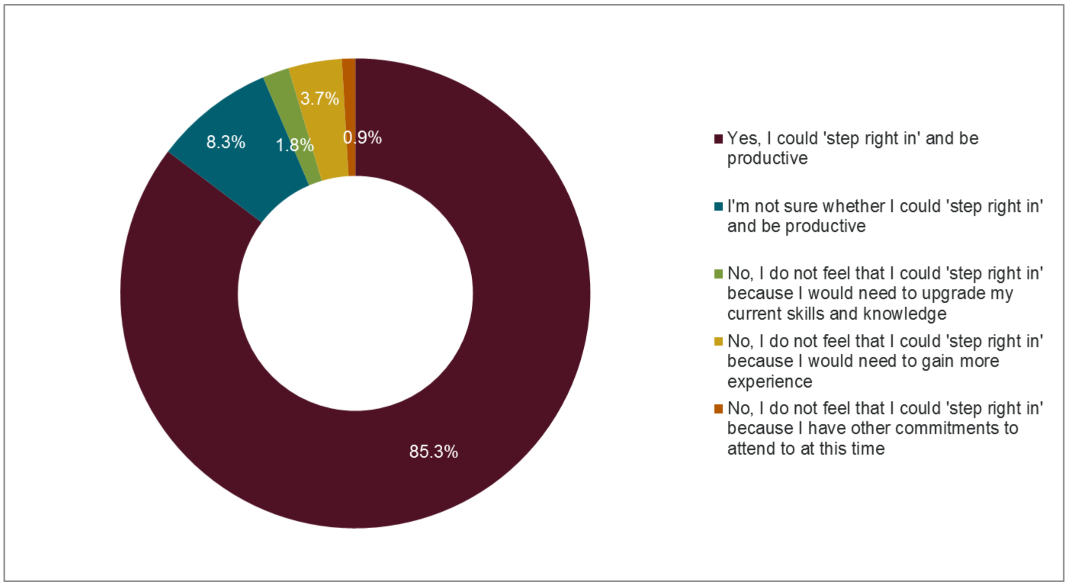


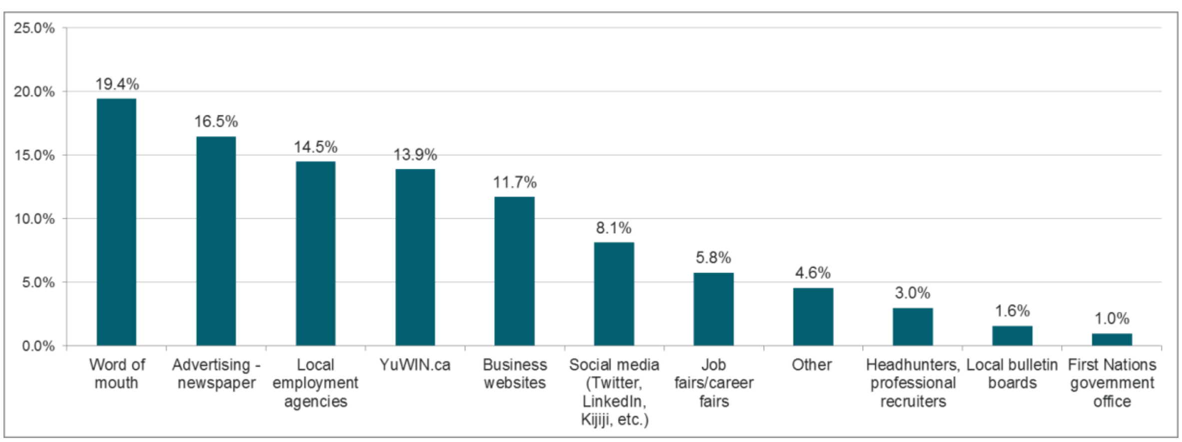
Figure 41 shows how job ready survey participants perceived themselves to be. Out of the 109 people who responded to this question, 93 individuals or 85% of respondents felt that they were job ready and could step right into a job and be productive. Approximately 8% of participants expressed less confidence, stating they were not sure if they could step right in and be productive.

FIGURE 42: DO YOU CONSIDER YOURSELF JOB READY'?



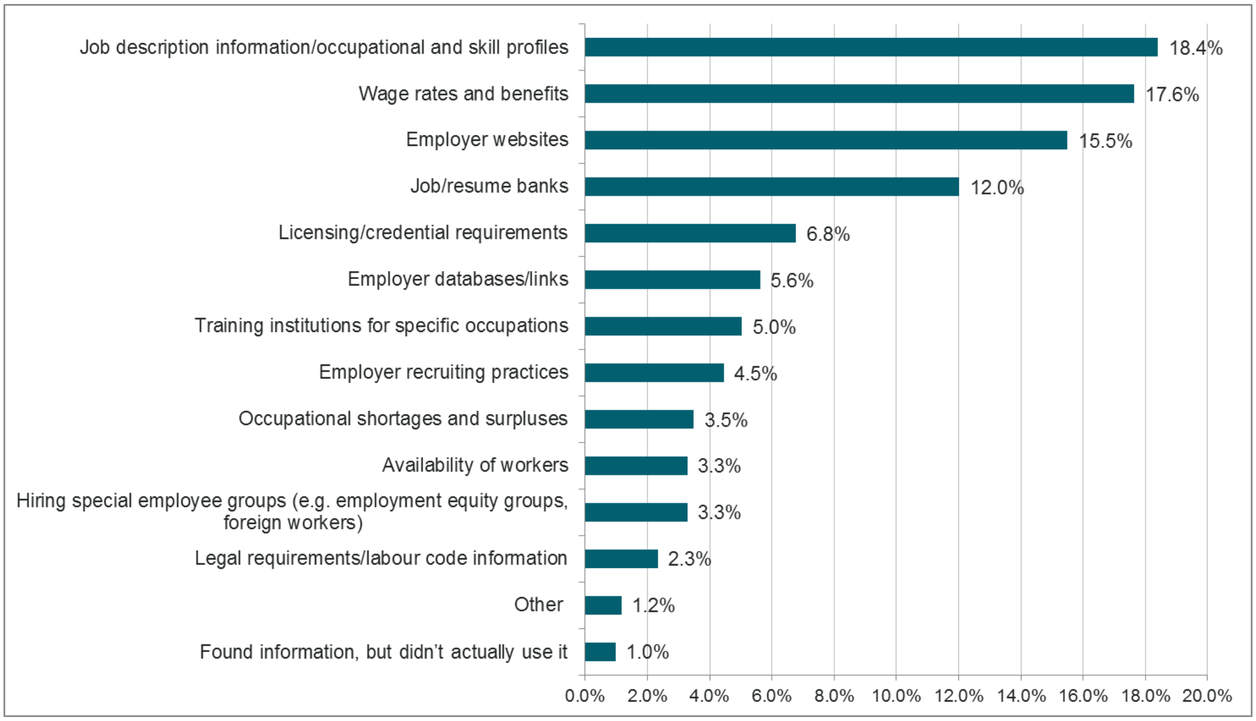
To determine what tools job seekers use in their employment search, participants were asked to identify the methods they have used when looking for a job. The highest ranking methods were "word of mouth" and "advertising –newspaper", with response rates of 19% and 17%, respectively. "Local employment agencies", "YuWIN.ca" and "Business websites received responses of 15%, 14% and 12%, respectively.

FIGURE 43: WHICH OF THE FOLLOWING METHODS HAVE YOU USED WHEN LOOKING FOR A JOB?



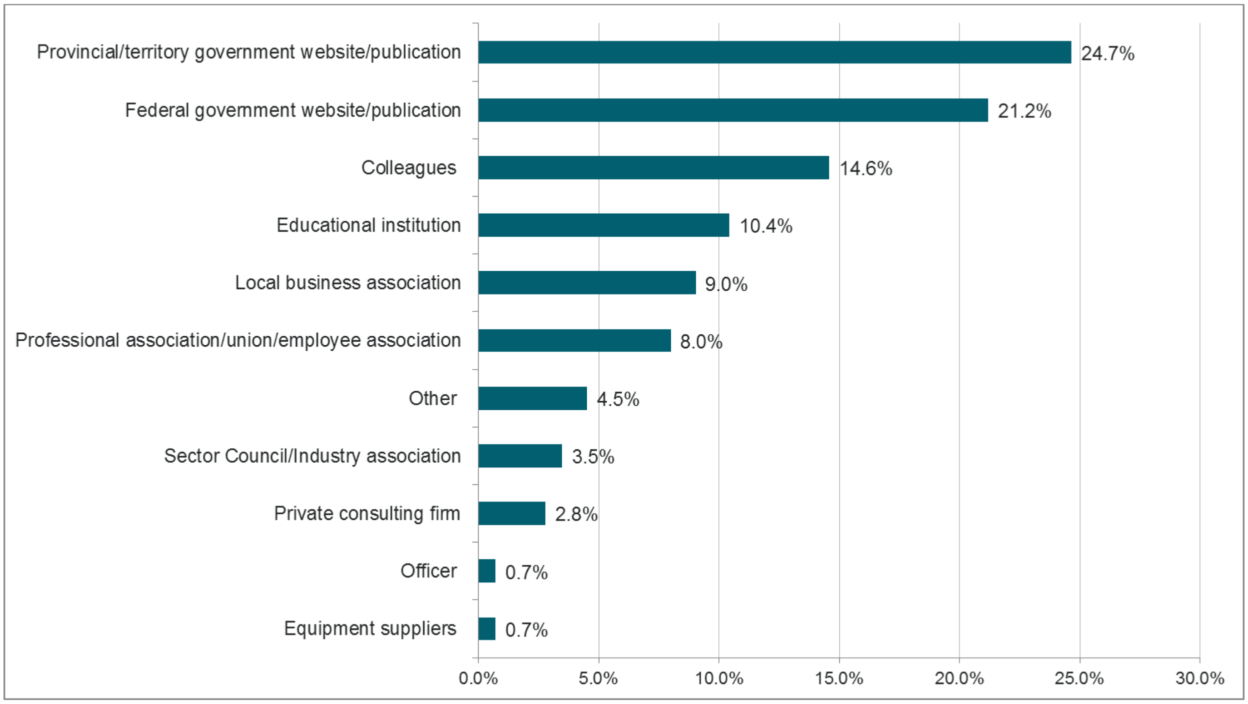
In Figure 44, respondents were asked to identify the information, tools or services they use in making career decisions. Participants identified “job description information/ occupational and skill profiles” and “wage rates and benefits” as the factors they most use, each received a response of 18%. The next two highest ranking factors were “Employer websites” and “Job/resume banks” which obtained responses of 16% and 12%, respectively.

FIGURE 44: WHAT KINDS OF INFORMATION, TOOLS OR SERVICES DO YOU TYPICALLY USE IN MAKING DECISIONS ABOUT THE TYPE OF JOB YOU ARE SEEKING?



Participants were then asked where they found the information they used in making decisions about the type of job they were seeking. The results are shown in Figure 45. Government websites/publications were the highest ranking sources as "Provincial/territory government website/publication" and "Federal government website/publication" received responses of 25% and 21%, respectively. The next highest ranking source was "Colleagues" which obtained a 15% response rate.

FIGURE 45: WHERE DID YOU FIND THE INFORMATION YOU WERE LOOKING FOR?



As a follow up to the above questions, participants were asked how the information, tools or services they have used could be improved, in an open ended question. The most commonly cited improvement was website development. Participants suggested YuWin could play a more central role in an online presence in Yukon as all community job searching tools should be integrated with YuWin. Respondents also expressed that job postings should have a job full description including working hours and wages instead of just a job title. Participants also suggested that job posting websites should have a feature that would allow users to receive notifications for new jobs that have been posted in their area of interest.

Training facilities and programs were another set of improvements that were commonly cited as needed. Respondents suggested that Employment Central could be improved by being open during lunch hours and providing more information on technical trades. Participants also expressed a need for assistance in resume writing and interview preparations.

Survey participants were asked to identify the type of information, tools or services they had trouble locating. Respondents identified “Training institution for specific occupations” and “Wage rates and benefits” as the factors they had the most difficulty finding; each received a response rate of 12%. The next two highest ranking factors were “Availability of workers” and “Occupational shortages and surpluses” which each received a response rate of under 10%.

FIGURE 46: WHAT TYPE OF INFORMATION, TOOLS OR SERVICES WERE YOU LOOKING FOR THAT YOU COULD NOT FIND?

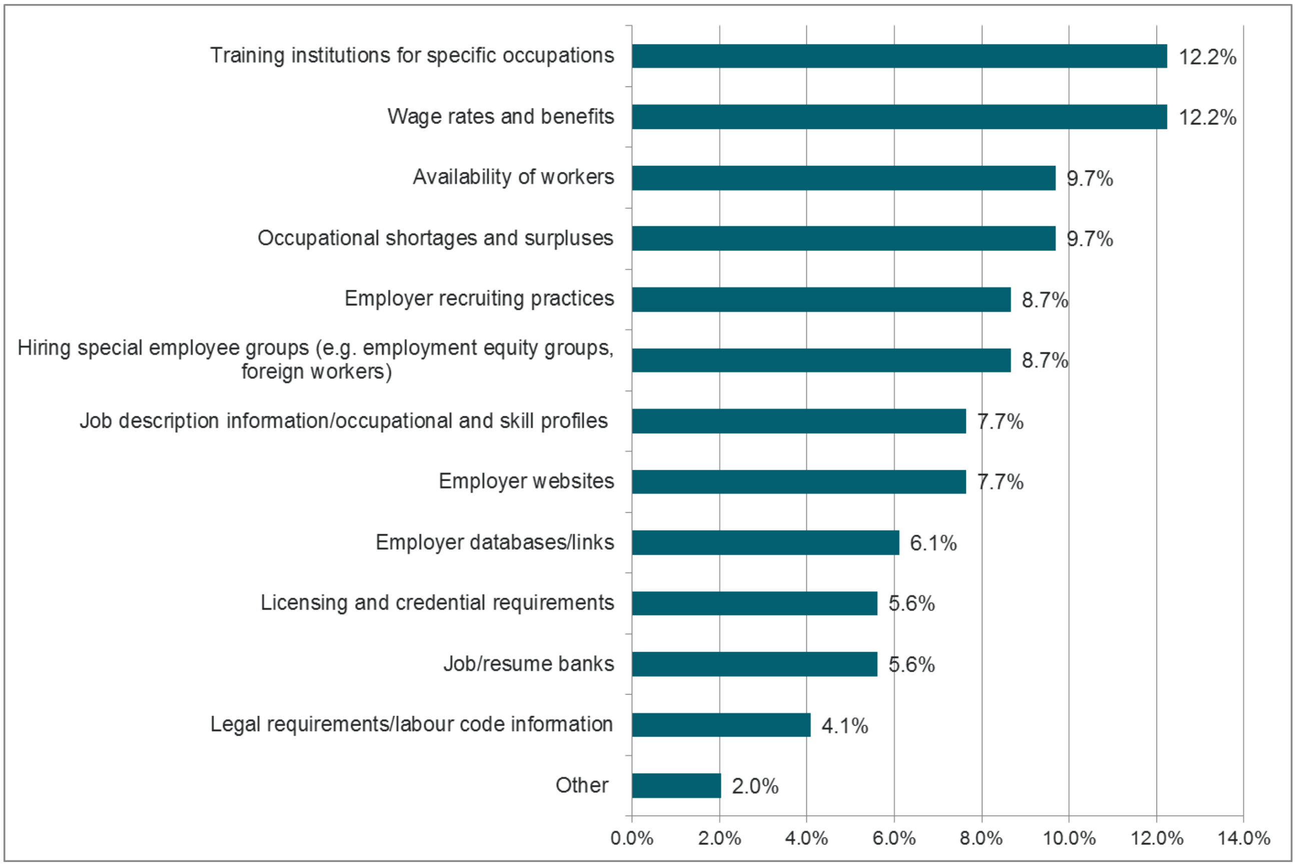
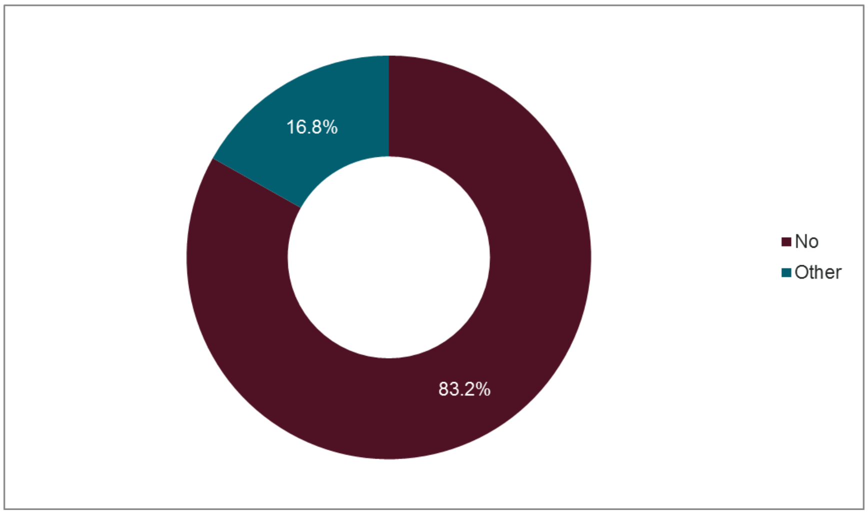


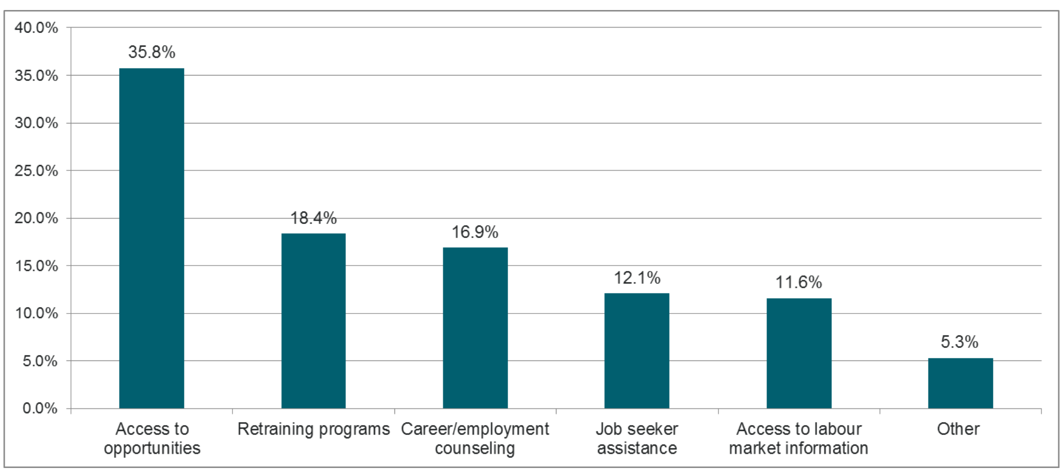
Figure 47 shows the number of participants that are using an employment service to help with their job search. Out of the 107 participants that responded to this question, 89 individuals, or 83%, reported that they did not use an employment service organization.

FIGURE 47: ARE YOU CURRENTLY WORKING WITH AN EMPLOYMENT SERVICE ORGANIZATION TO HELP YOU CONDUCT YOUR JOB SEARCH?



Respondents were asked to identify the type of assistance they required to achieve their full employment potential, and the response is shown in Figure 48.

FIGURE 48: WHAT ASSISTANCE DO YOU NEED TO ACHIEVE YOUR FULL EMPLOYMENT POTENTIAL?

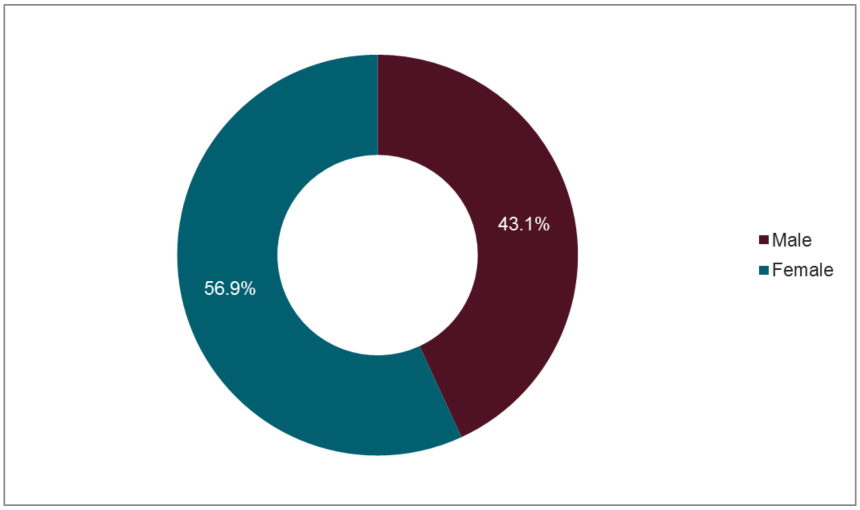


The highest ranking response was “access to opportunities” which received a 36% response rate, while “retraining programs” and “career/employment counselling” received responses of 18% and 17%, respectively.

Respondent Profile

This section provides a profile of the survey respondents. Out of the 109 responses, the majority of participants (56.9%) identified themselves as male.

FIGURE 49: GENDER



Respondents were also asked about their age. Figure 50 displays the age distribution of survey participants. A large majority of respondents, 39%, were between ages 25-34, while the next most represented age groups were 35-44 and 45-52, at 18% and 17% percent respectively.

FIGURE 50: AGE PROFILE

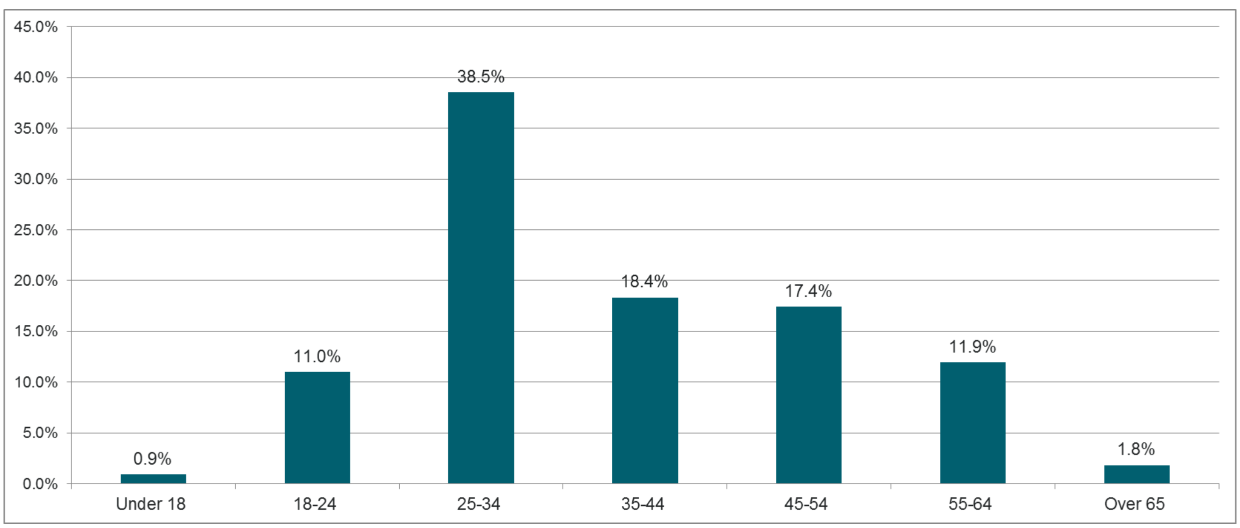
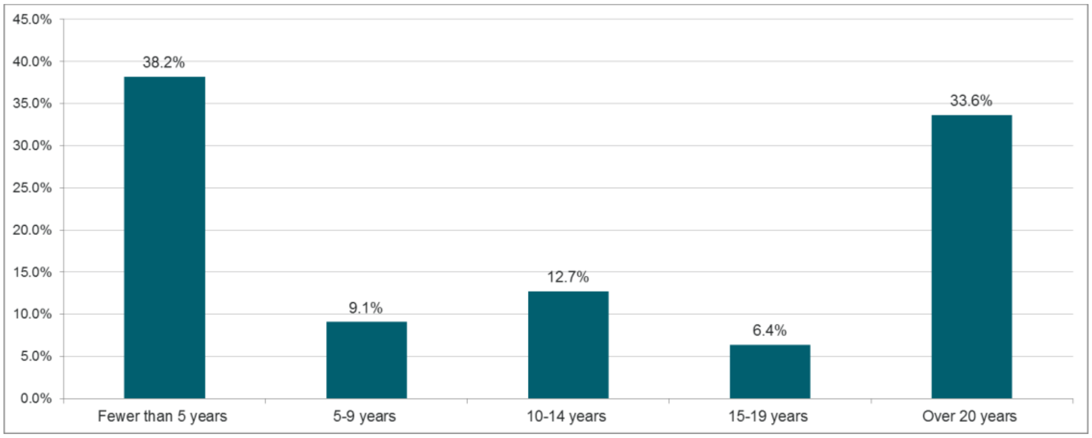


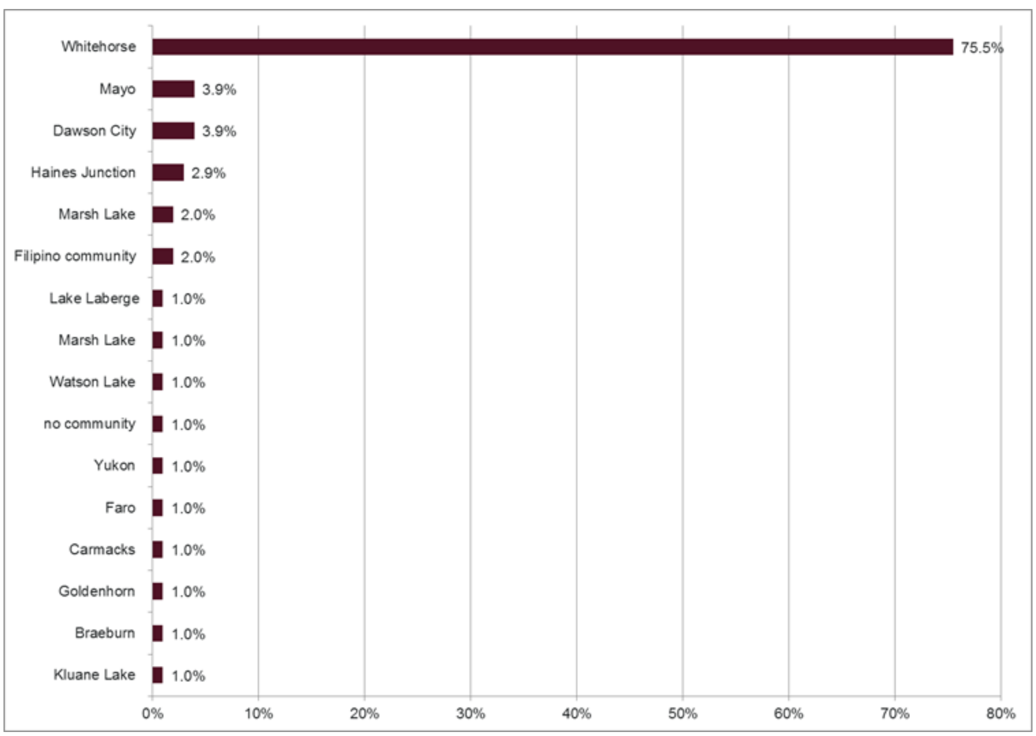
Figure 50 displays the length of time respondents have been living in the territory. The results show that 38% have been living in Yukon for less than 5 years, and 34% lived in the territory for longer than 20 years. The gap in representation between these two time periods is striking and could bear closer investigation.

FIGURE 51: HOW LONG HAVE YOU LIVED IN YUKON?



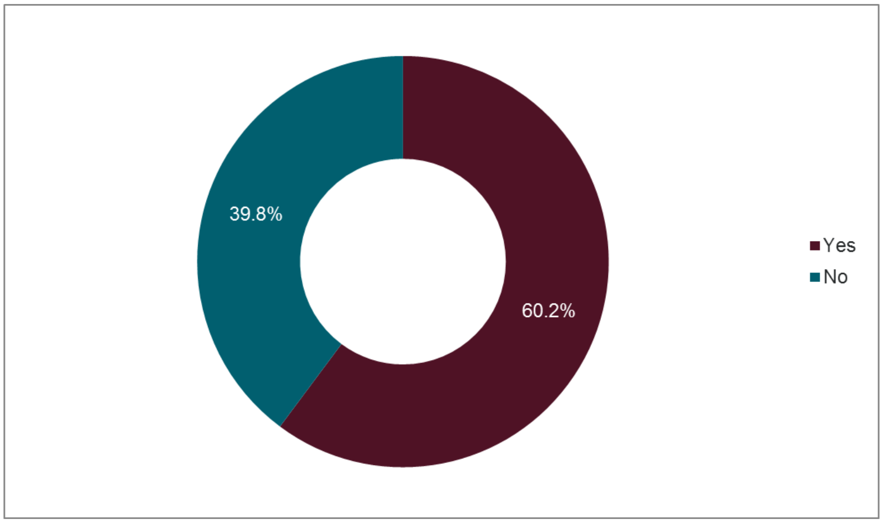
When asked to identify what community they currently live in, the vast majority of participants (75.5%) identified Whitehorse, while the other communities in Yukon received a response less than 25%. It should be noted that unique answers were given for this questions as two respondents identified themselves living in the Filipino community, while “no community” and “Yukon” were each identified by one participant.

FIGURE 52: WHAT COMMUNITY DO YOU CURRENTLY LIVE IN?



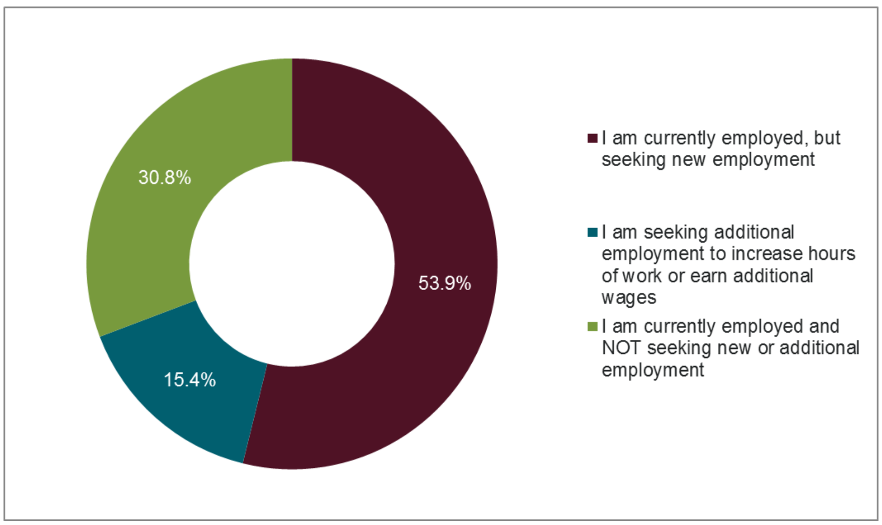
When asked if they were employed, out of the 108 responses, 60.2% identified themselves as being employed while a significant portion of participants (39.8%) identified themselves as being unemployed.

FIGURE 53: ARE YOU CURRENTLY EMPLOYED?



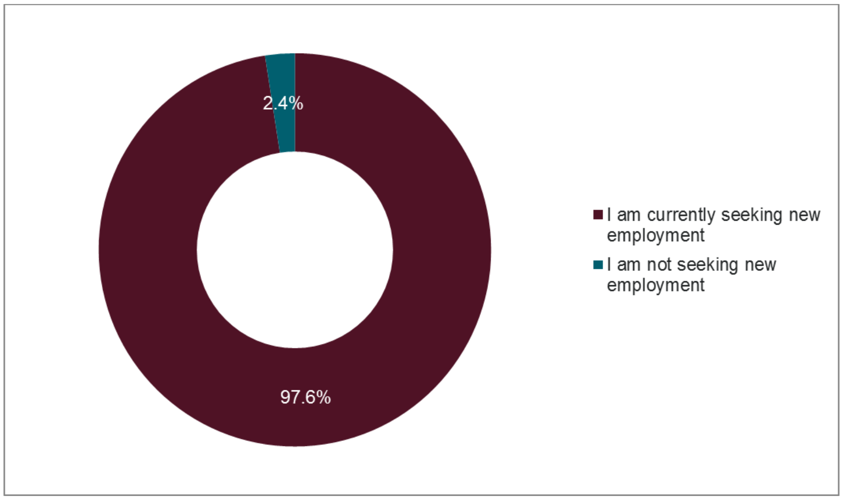
Employed participants were then asked if they were seeking new employment, and the results are in Figure 54. The majority of responders, 54% stated that they were looking for new employment while 31% of participants stated that they were not seeking new or additional employment.

FIGURE 54: IF YOU ARE CURRENTLY EMPLOYED, ARE YOU SEEKING NEW EMPLOYMENT?



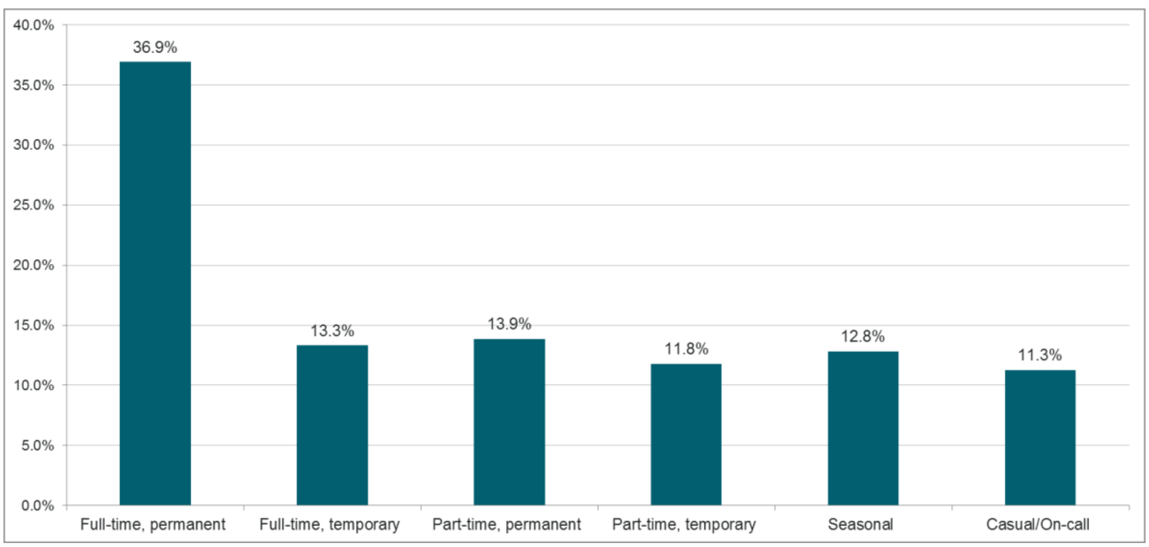
Participants that were not employed were asked if they were currently seeking new employment and the vast majority of these respondents, 98%, identified that they were looking for new employment. The results are illustrated in Figure 55.

FIGURE 55: IF YOU ARE CURRENTLY NOT EMPLOYED ARE YOU CURRENTLY SEEKING NEW EMPLOYMENT?



In an effort to determine the demand in the labour market, respondents were asked to identify the types of jobs they were seeking. As illustrated in Figure 56, many participants (37%) picked “full-time, permanent” as the type of employment they were seeking.

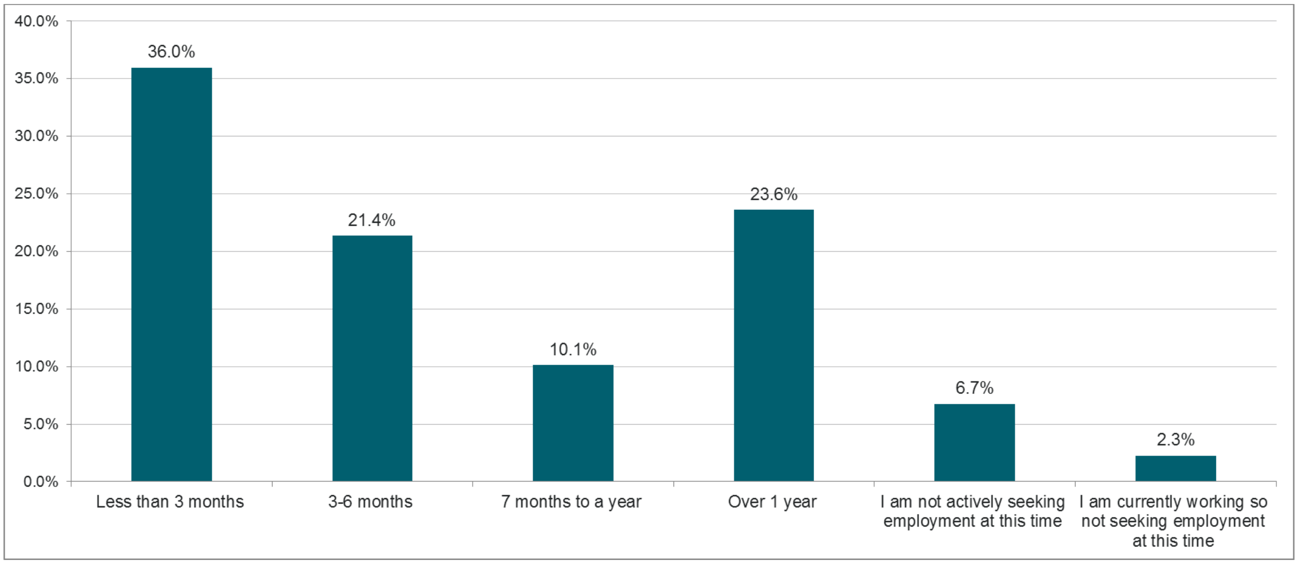
FIGURE 56: WHAT KIND OF EMPLOYMENT ARE YOU CURRENTLY SEEKING?



To understand unemployment trends in the local workforce, participants were asked how long they have been seeking employment, with the results shown in Figure 57. Of the 89 responses to this question, 36% of participants reported “less than 3 months”.

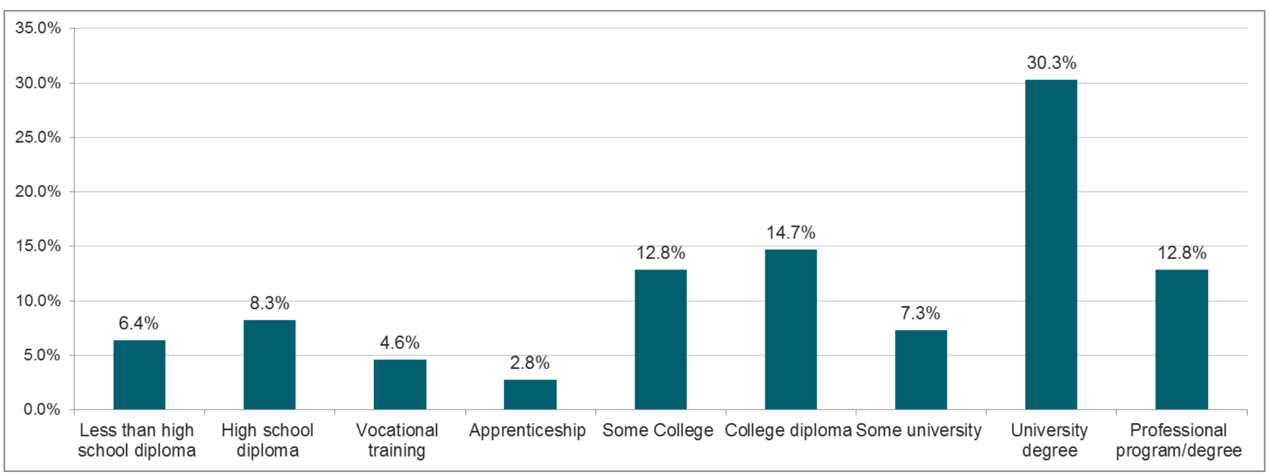
The next two ranking responses were “over 1 year” and “3-6 months” which received a response of 24% and 22%, respectively.

FIGURE 57: HOW LONG HAVE YOU BEEN ACTIVELY SEEKING EMPLOYMENT?



Finally, as shown in Figure 58, participants were asked to identify their highest level of educational attainment. A number of participants had a university degree, 30%, while 15% of respondents indicated they had a college diploma. The next most frequently selected categories included “some college” and “professional program/degree”, each with 13% of responses.

FIGURE 58: WHAT LEVEL OF EDUCATIONAL ATTAINMENT HAVE YOU OBTAINED?



7.2.2 Focus Groups

Focus groups were conducted with: job seekers, employers, employment and education service providers, union representatives, First Nations and young professionals to gather further information about the perspectives of residents on labour supply and migration challenges. Eight focus groups were completed with a total of 49 participants. The common themes arising from the focus group discussions are as follows:

- **Education:** For those who are seeking work or seeking to enter the job market, education is a leading concern. Stakeholders shared that low-skilled jobs require at least a high school diploma, while high paying skilled jobs required a post-secondary degree. Foreign workers were concerned that their international degrees were not recognized and First Nations responders highlighted challenges some community members face in finishing high school.
- **Transportation**: Many employment opportunities require a car or access to a car to reach the job site, in part because public bus schedules in Whitehorse did not always align well with work schedules or because the job site is not in a location where public transportation is an option. When transit or a car is not available, alternative transit such as a taxi comes at a high cost, which can be prohibitive – if there is any transportation available at all.
- **Skills mismatch:** Highly skilled jobs are reported as not going to locals and/or remaining vacant for long periods. Meanwhile, the unemployed and employment service providers report difficulty accessing entry-level jobs, and those employed in low-skilled jobs also report difficulty accessing both low-skilled and high-skilled positions.
- **Job readiness:** In some cases, more than education and training are needed to secure and maintain work. Workers and employment service providers report widespread challenges associated with preparing a resume and a lack of basic interview and networking skills. Employers reported a lack of basic job skills, especially for low-skilled jobs.
- **Access to training programs:** Funding for training programs and employment services was described in consultations as piecemeal and unstable. Specialized courses and youth programming tend to suffer from low enrolment and availability. Participants also identified the completion of training programs a challenge.

Education was highlighted by many focus group participants as a significant barrier to finding work. Participants felt that low skilled jobs required at least a high school diploma while high-paying skilled jobs required post-secondary education (college or university degree, certificate or diploma), and that this could be a barrier to success for Yukon residents.

Foreign workers stated that their international credentials were not recognized, leading them to take low-skilled jobs despite a significant skill set.

First Nations participants highlighted that First Nations students (particularly in rural communities) face challenges finishing high school; many students have to move to Whitehorse to complete their high school education. Some parents express resistance to the idea of their children moving away from home as they felt that they were losing their kids or recalling the experience of residential schools. Others felt that their children won't have enough support or will be exposed to negative influences. This resistance may result in students dropping out or staying in their communities and not completing their diploma. For students that make the move to Whitehorse, some get homesick and return home before completing their high school diploma. Overall this challenge of distance from family is seen as an important part of the reason for low high school completion. Union representatives stated that many tradespeople leave Yukon to complete their apprenticeship training/education due to a lack of relevant courses of study. Participants were concerned that many do not return after completing their trades training because of strong demand for tradespeople in other areas of the country.

Transportation was also stressed by focus group participants as a barrier to finding and maintaining employment. Young professionals stated that the expense of a vehicle to get to work could be prohibitive and that many jobs required a vehicle to get to the job site. First Nations participants commented that some community members did not own vehicles and have to continually find a ride into Whitehorse, making it difficult to find and maintain employment. Many participants highlighted that the public bus schedules in Whitehorse do not align with their work schedules, making them late to work or prevented them from securing employment. Alternate transportation such as a taxi is considered a possibility but the cost is reported as prohibitively high. Some employers have taken the step of covering some transportation costs for employees. A related issue identified in the employee focus group is a high cost of living relative to wages; this makes transportation a particularly significant issue in low skilled jobs.

Focus group participants pointed out they face difficulties in finding high paying skilled jobs. Employment service providers reinforced this by saying that highly skilled jobs tend to go to people from outside the community. They also commented that entry level jobs were disappearing making it more difficult for people without skills to secure jobs. In contrast, foreign workers shared that securing low skilled jobs was not as challenging, but obtaining highly skilled jobs was more of a challenge, specifically due to the lack of recognition for their international experience and education. Employers stated that they had difficulty finding workers; particularly for high-skilled positions and that some jobs had been vacant for more than 6 months.

A lack of job readiness was observed in job seekers by employers and employment service providers. For example, some job seekers did not know how to prepare a resume and lacked interview and networking skills. In general, the local lower-skilled workforce lacks computers skills, which not only prevented some residents from getting jobs but also from applying to jobs as they did not know how to fill out an online job application. Employers commented that they had difficulties in finding locals for unskilled jobs as they found the local workforce did not know what was expected from them in a workplace environment.

Several responders also cited that members of the work force face difficulties in upgrading their skills through training programs. Access to funding programs was described as too restrictive. For many programs, the applicant had to be on Employment Insurance, which is discouraging for people who want to upgrade their skills while they were working. Service providers highlighted that funding for training programs and employment services tends to be piecemeal and unstable. Program enrollment was also a challenge. Some service providers have had to concentrate on providing general training instead of specialized skills training as the demand for specialized courses was limited. Service providers also found it difficult to get people to stay committed for the duration of the training programs. Employers responded that they were unable to provide training program as they lacked the resources. Union representatives commented that trades people had to go outside the territory to upgrade their skills as the Yukon lack these specific programs. Young professionals stressed that there was a lack of youth development and mentorships from their employers.

Finally, each of the focus groups was asked how these barriers to employment could be overcome. Responders stressed that job postings should list the exact qualifications and skills employers were looking for, whereas current postings were too broad and job seekers did not know how to respond accordingly. They also highlighted that job openings had to be advertised better as most vacancies were found through word of mouth and through local contacts. Responders stated that they needed more extensive employment services; they wanted better training on computer literacy, resume writing and interview preparations. They also commented that placements through colleges and training programs should be extended to increase the amount of direct experience and learning workers obtained on the job. Young professionals highlighted the need for knowledge exchange through mentorships between young professionals and senior staff and job orientations within organizations.

The above summary gives an overview of the answers that the different focus groups provided and the common themes that emerged. However in order to gain a deeper understanding of the answers that were offered, the following presents the answers each of the focus groups provided.

Jobseekers

Job seekers in the Yukon faced many challenges in seeking employment due to their education, skill level and access to public transportation. Focus group participants discussed that low-wage jobs simply didn’t pay enough to sustain them, due to the high cost of living in Yukon, creating a barrier to entering the workforce. Highlights of the comments by job seekers include:

- Public transit is a main barrier to finding and keeping employment
    - Bus schedules do not align with work schedules, making people arrive late for work, and there is no bus service on Sunday

  - Transportation (taxi) fares are high (respondents noted that some employers would share the costs of transit)

- Workers are not aware of workers' rights
- Many jobs require a minimum of a high school diploma
- There are no temp agencies in Yukon to assist job seekers in finding employment
- Job seekers use Employment Central, YuWin and word-of-mouth to look for work
- Lack of computer skills are a barrier to finding employment and not all job seekers have the computer skills to complete online job application forms
- Some local job seekers feel companies prefer to hire foreign workers as they will accept lower wages
- The cost of living and the price of rent do not align with wages. This is particularly challenging where the wages for non-skilled jobs are low
- Funding for training programs is too restrictive. For example recipients are often required to be on Employment Insurance in order to qualify, making it difficult to upgrade their skills while working
- Hours of operation for Employment Central can be a barrier to accessing services Hours are not always consistent and lunch time would be a convenient time to be open
- A skills gap exists between what job seekers are taught in college programs and what employers are looking for
- The high level of unemployment is creating competition for job seekers in the area

First Nations job seekers faced their own unique challenges in finding employment in the territory, due to cultural difference and the location of communities.

- Participants feel discrimination influences the recruitment process
- First Nations communities may not be taking full advantage of the funding that is available to them for training and education
- The lack of a First Nations staff member in Employment Central makes it less comfortable to access services
- Many First Nations workers do not have a drivers' license or regular access to a vehicle making it difficult to get to work

Foreign workers in Yukon face significant challenges in finding a job. Some of the hurdles include a lack of (recognized) qualifications, cultural differences and costs.

- The Temporary Foreign Worker program is a long process and does not allow workers to find another job, while the Territorial Nominee Program is seen as slow and difficult to access
- There is no 'one stop shop' for job seekers: they look for jobs online, go to Employment Central for job search help and other service providers such as the Yukon Mine Training Association for work place training. It can be difficult to navigate these competing systems
- Workers found it difficult to find high paying skilled jobs because:
  - Most jobs required that the applicant have a post-secondary degree

- International post-secondary credentials and experiences are often not recognized in Canada
- Easy to find service industry jobs but wages are low
- Only entry level jobs were posted on Employment Central, not skilled jobs
- Lack of Permanent Residency can be a disincentive in the hiring process

- Access to daycare is challenging when both parents need to work
- In the community there is not good awareness of where they can go to access job search assistance
- Tuition is very expensive for international students
- Existing relationships can influence the recruitment process and the lack of a local network can make job search difficult

Job seekers highlighted that the following actions could overcome barriers to finding employment:

- Improve the information included in job ads such as wage range and required skills and qualifications
- Improved English language skills
- Access to training, notably food safety and WHIMIS
- Provide more extensive employment services programing, included enhanced training in computer literacy, resume writing and interview preparation
- Improve access to work experience programs through Yukon College
- Create a centralized job search website - YuWIN could be such a site
- Improve access to transportation during weekends

Employers

Employers in Yukon reported difficulties finding employees for all skill levels. It is generally understood that the local workforce may lack the education or specific skill sets required for some high-skilled jobs, but even for low skilled jobs, employers find the local labour force is increasingly not adequately prepared for the workplace. The struggle to find local labour to fill vacant positions has led employers to look overseas to hire foreign workers.

Comments from the employers focus group include the following:

- Employers tend to advertise employment opportunities on YuWin and in local papers
- Jobs that require specialized skills are difficult to fill, and some positions have been vacant for more than 6 months
- Employers are having difficulty finding locals for unskilled jobs and find that the local population could be much better prepared for workplace, including job performance and job hunting skills like resume writing

    - Housing costs are a barrier for finding employees as it prevents potential workers from finding affordable housing; this is an issue for non-skilled and skilled workers alike
- Some employers offer incentives to get people to move to Yukon for jobs, such as relocation assistance and the cost of flights if they are working away from home
- Employers prefer to grow their own local workforce through training programs and internships. Hiring foreign workers is time consuming and expensive; therefore not the first choice but some have to look overseas to fill some positions because they cannot find local staff for low-and-high-skilled jobs such as stock filler or mechanic
- The Yukon Nominee Program can be slow compared to the pace of business. It can take up to 6 months before a worker arrives in Yukon. However, the benefits of foreign workers were as follows:
    - Locals stay at job until they find a better paying job, while foreign workers stay for at least 2 years
    - Foreign workers tend to be more flexible about the hours they can work while locals were less accommodating
    - Foreign workers want to come to Yukon because it is easier to get their permanent residency in the territory
    - Foreign workers will either stay at the jobs they received in Yukon or find jobs in their original profession
    - Workers in the Yukon Nominee Program can work two jobs, however they can then leave their present employer and go work for someone else
    - Philippines was the number one choice for finding foreign workers as they have a strong local support system in Yukon, and most Pilipino are now Permanent Residents

Service Providers

Service providers gave insights into how they operate to support the local labour market and the difficulties the local work force faces in securing employment.

- Stigma against people with disabilities exists in the community which can impact employability; often based in misunderstandings about managing a disability in the workplace and how much it might cost
- Entry level jobs are disappearing, making it more difficult for people without skills to find jobs
- Highly skilled jobs are not going to locals, instead these jobs were going to people from outside the community
- Local labour force have need to adapt to the changing labour market
- Local work force faces difficulties in upgrading their skills for the labour market
    - Access to funding for skills training is restrictive
    - Specialized skills training is limited as the demand is low (as a result of the size of the population and, sometimes, as a result of the availability of jobs)

- Computer literacy is low among local lower-skilled workforce
  - Funding for training programs and employment services is piecemeal and unstable
  - Difficult to get people to commit for the entire duration of training programs
  - Employers do not have the resources to invest in high-level training

- Local workforce do not know how to market themselves to employers, including knowing how to write a resume properly, and finding out what information is needed if a job posting doesn't have a lot of details, for example
- Some providers feel that employers favour nominees for jobs over local population
  - If job posting has NOC code, people will not apply as they assume the employer is looking for someone from Nominee program
  - Employers need a better understanding of the nominee program
- People cannot afford to take minimum wage jobs so they stay on social assistance. Ideally, a transition program would be in place for people moving from Social Assistance to work

Union

Interviews with Union representatives provided insights into training services the unions provide, reasons why workers leave the territory and the impact that the education is having on the labour market.

- There are many job seekers in the area as only two mines are active
- Carpentry is one of the most common occupations in the area; there are more carpenters than carpentry jobs
  - Carpentry is the only trade program where students can complete their four year apprenticeship at Yukon College
  - Carpentry is the only trade that is consistently offered and in demand and seen as an easy profession for First Nations citizens to get into
- Many injuries and lost time occurs on the job site due to lack of procedures and safety practices
- Implementation of more pre-employment apprenticeship programming is a good idea because it provides opportunities for people to decide if they like the job or not
- Unions provide some workplace training
- Discrepancy exists between the careers youth are choosing to study in college and the job that are available. For example industrial mechanics are in demand but few choose to pursue this field
  - Seasonal mining exploration creates higher levels of unemployment in the winter and rather than working in low-skilled service jobs, workers will tend to go on EI or out of the territory to work

    - Union has more apprentices than journey persons, at a ratio is 2 to 1, and this high supply makes it difficult to put apprentices to work, especially when more journeypersons are going outside of the territory to work
- The availability of education and training opportunities plays a major role in the high ratio of apprentices to journey persons and workers leaving the territory
    - Many people do not finish high school and are unable to get past their second year of apprenticeship
    - Many younger workers are not finishing their apprenticeships as they go straight into work
    - People cannot complete their apprenticeships in Yukon; instead they have to go to BC and AB to get their 3rd and 4th years.
    - Yukon is losing people because it cannot train them
- Union provides funding for members that go back to school through a program called the Education Trust Fund
    - Union negotiates with employers to pay a certain amount into the trust fund
    - Fund covers tuition and other related expenses for members of the union that are going back to school
    - Members have to be working in a unionized environment in advance of accessing these funds.
    - Union sends members to Alberta as Yukon does not offer programs members were looking for, thus union is sending members away to upgrade skills and some leave the territory permanently
- A formal relationship between the union and college needs to be established to influence program delivery
- There are plans to build a union training centre which may compete with trade schools
    - Instead of completing there is a preference for collaboration
    - Schools provide the facility and unions provide instructor and curriculum
    - Many workers have left the territory going to Alberta and British Columbia to find work. For example welders and industrial-themed workers are leaving for as much as $20 per hour more than they can get in Yukon
- Collaborative relationship exist between union and employers, and employers go to unions looking for skilled labour

First Nations

Yukon First Nations citizens face many unique challenges due to their cultural background and history. Interviews with First Nations job seekers and employment service providers reveal that, even though First Nations have become major economic players in the territory, many people have challenges completing their education, and are not workforce-ready, and are dealing with social issues.

- Some First Nations people experience challenges entering and participating in the workforce; within First Nations communities there are a lack of access to services, which exacerbates this issue
- Completing a high school diploma is not as common for First Nations youth and can be challenging
    - Schools in some communities only go up to Grade 9
    - If there is no high school near a community, children have go to Whitehorse to complete their education; some parents resist the idea as they feel that they are losing their kids, and negatively associate this with leaving for a residential school
    - Participants observe that many students drop out of high school in Whitehorse as they get homesick
    - Participants observed that many students have challenges with their academic achievement, and those that do graduate have to take college prep courses
- Community members struggle disproportionately with social issues such as substance abuse, and low self-esteem; they cannot vision a life for themselves
- Community needs education and support to deal with drugs and alcohol
- People get lost in the system and would benefit from better case management
- Many First Nations communities have Employment and Training Officers, however there is a high turnover rates among ETOs, many ETOs suffer from burnout as they have to serve too many roles, such as client servicing, HR, training, etc.

Employers were also interviewed to get their perspectives on the First Nations labour force. They cited work-place readiness and social issues as major barriers to employing First Nations people.

- Difficult to find First Nations workers that are dedicated and willing to stay on for the job; negative experiences tend to influence future perceptions, such as a number of new hires that left the job after the first pay cheque
- Many concerns would circle back to social issues that need to be addressed
- Employers perceived the lack of motivation in the First Nations workforce as a consequence of the social assistance system
- Workers do not know what is expected of them and how they should act in a workplace environment
- Employers do not provide any training, thus there is no support for employees

Service Providers provided the following information

- Need to address social issues in the community to make real progress on employment

- The Council of Yukon First Nations Is trying to create a “Skills Inventory” database that could link potential employees with employers

Young Professionals

Many young professionals report difficulties finding jobs in their field of study which could cause them to relocate. They found accessing information on new positions could be challenging and that they had to rely on world-of-mouth and their network to learn what opportunities were available. They also responded that although the STEP and Grad Corp program were good for getting their foot in the door, many changes could be made to improve the participants’ experience in the programs.

- Difficult to find entry level jobs in their field of study, which are typically high skilled occupations, and some may move out of the territory to find jobs
- Age is a factor in not being able to take on more responsibilities at work
    - Transportation is a major factor in finding and maintaining employment, as a car is needed to get to jobs and some jobs require driving to different sites
- Some jobs require a degree as employers screen applicants for degrees, but others may have lower qualifications than elsewhere. For example jobs that require a masters degree elsewhere in Canada, may only require an undergraduate university degree in Yukon
- Job-seeking services focus on resumes but there is more to the job searching process than just resumes
- Job searching skills such as interviews, resume-writing, and networking are lacking in youth, and most job seekers lack experience and interview skills. They need feedback from the people that interview them to help them learn
- More opportunities for knowledge exchange would be beneficial, like mentorships between young professionals and senior staff, and job orientations within organizations
- Lack of services for young people that arrive in Yukon
- STEP and Grad Corp programs are good ideas but there is room for improvements
    - Some people are stuck doing administrative work
    - Only gets your foot in door, gaps in how to turn job into career
    - Needs pairing and mentoring
    - Managers look at STEP as a labour supplement instead of youth development
- Job services and programs could be better coordinated and advertised as people do not know how to access them