LABOUR MARKET PLAN 2023



Executive Summary

The Workforce Planning Boards are workplace intermediaries that improve labour market conditions in local communities through enhanced collection and dissemination of local labour market information and community engagement to drive regional approaches in the planning and delivery of employment and training services. The Durham Workforce Authority (DWA) has 27 years of experience delivering local labour market information to Durham Region stakeholders.

The DWA works in partnership with stakeholders, including employers, community leaders, Employment Ontario providers, all levels of government and chambers of commerce and education institutions. Our work and research are better for understanding existing local labour market priorities and needs. These analyses and results will inform local business plans and activities to address labour market issues.

Quality Labour Market Information (LMI) is critical to helping governments, businesses, community organizations, and individuals respond to the changes in Durham Region. Understanding labour patterns and trends is essential if Durham Region is to remain competitive in an economy and labour market that has changing demographics, occupation skills required, technological advances and future training demands.

The plan strives to provide leadership in community planning, creates opportunities to share at least some of our DWA data sets, and seeks to create community partnerships.

The plan is released annually to the broader community in both official languages. The staff will continue our public outreach to provide labour market information to the community

partners to create coordinated program planning.

As 2020 was a census year, we analyzed eight high-level community indicators and custom-purchased other data from Statistics Canada and other research organizations such as Build Force. New this year, the DWA convened ad hoc community advisory groups to review the research projects. We thank those partners for their interest in our work; their insights have enhanced it.

The DWA has created a revised community plan, integrated activities with regional economic development plans, and focused on the coming changes with the Service System Manager.

As we moved through this pandemic, we discovered that many of our residents were not doing okay before it, and they faired poorly during it. Going back to the way things were before is not an option. The pandemic challenges the DWA to rethink how we approach labour market data collection, research and reporting to assist the broader community in ensuring that everyone has a place in the labour market as they desire.

Heather McMillan
Executive Director
Durham Workforce Authority







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This document is current as of February 2023. Please be aware that this information may change over time. The views expressed in this document do not necessarily reflect those of Employment Ontario or the Government of Ontario.

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Part I: Introduction and Project Overview

Background

It has been a turbulent year in the labour market with unexpected labour challenges where employer's need for labour outpaced supply. This has been characterized by low unemployment rates and high labour force participation among those in the core working ages of 25 to 54.

In May 2022, job vacancies in Canada reached a record high, with employers actively seeking to fill over one million vacant positions across Canada (Statistics Canada, January 2023). Meanwhile, the unemployment rate reached a record low of 4 per cent in December 2022 (Statistics Canada, January 19, 2023). At the same time, the participation rate was a record high among core-aged workers.

Durham Region has been affected by these trends. In Oshawa CMA¹, the unemployment rate fell to 4.3 per cent in December 2022, down from 6.6 per cent in January 2022 and this is down from 7.1 per cent in February 2020 (Statistics Canada, February 2023).

Labour Market Plan Overview

The Labour Market Plan (LMP) Report is an annual report prepared by Durham Workforce Authority (DWA) to share labour market information (LMI) and insight into Durham's current labour market conditions and to develop recommendations to improve service coordination; integrate local planning; collect and share up to date labour market information.

The LMP focused on:

- Overview of the national, provincial, and local workforce, including workforce shortage, job vacancies, recruitment and retention, unemployment trends, and workforce aging
- Overview of trends and challenges of the current national, provincial, and local labour market, including the great retirement, new work arrangements, in-demand skills, and the Region's new priority clusters

Methodology

The LMP report draws on data extracted from our Jobs First Durham (JFD) platform, Statistics Canada, and broad academic literature to develop a better understanding of the local labour market. A combination of methodologies informs this report, including an environmental scan, literature review, data analysis, and ad hoc committee.

1. Environmental Scan/Literature Review

The environmental scan focused on the labour market situation and workforce development challenges, including workforce shortages, recruitment and retention challenges, job vacancy trends, unemployment trends, workforce aging, retirement, new work arrangements, and in-demand skills. It also provided an overview of the Durham Region priority clusters.

¹⁻ The Oshawa CMA includes Clarington, Whitby, and Oshawa. While Ajax, Pickering and Uxbridge are part of the Toronto Census Metropolitan Area – which also includes York Region, and areas of Peel Region. Brock and Scugog are statistically too small to be included in the Statistics Canada's monthly Surveys.

2. Ad hoc Committee

In late 2022, the Durham Workforce Authority convened an ad hoc committee to make recommendations on the development and implementation of the Labour Market Planning (LMP) outline, environmental scan, and data gathering. The committee, comprised of Durham Region community members, service providers, and stakeholders, met two times over the period of October and December 2022. We are grateful to the ad hoc committee for their invaluable input and commitment which enabled us to create the Labour Market Planning Report for Durham Region.

3. Jobs First Durham (JFD)

Jobs First Durham is an interconnected set of career development and job search tools made available to our community at no charge through the DWA. This includes a jobs board, career explorer, interactive resume builder and many other tools. These tools compile job postings from more than 40 unique websites and allow users to sort, filter and display all locally available employment opportunities in a format that works for them.

The JFD system also extracts relevant labour market information from all postings which provides job seekers, employers, and the community at large access to the most up-to-date labour market information. Job postings from across Durham Region are automatically added to JFD on an hourly basis meaning that the aggregated data attainable by the community through the DWA is consistently the most accurate and timely data available.

4. Data Analysis

To gain a basic understanding of the labour force, workforce planning boards report on the eight base indicators:

- 1. Changes in the number of employers the area by employee size and 3-digit NAICs.
- 2. A total number of employers, by employee size range, showing a decrease/ increase over four years in local industries.
- 3. Changes in industries showing a decrease/increase in total estimated employment over the past four years.
- 4. Changes in occupation characteristics (based on NOC, distribution of occupations in the local area, compared to Ontario) over five years.
- 5. Changes in average annual income for the population.
- 6. Changes in population over five years.
- 7. Changes in educational attainment of population over five years.
- 8. Annual changes in rate of in and out migration from local area.

The data analysis was predominately based on Statistics Canada's data programmes:

- Census of Population for the years 2011, 2016, and 2021,
- Labour Force Survey,
- Canadian Survey on Business Conditions,
- Job Vacancy and Wage Survey.
- The plan also drew on collecting and analyzing information from stakeholders (including municipal and provincial governments, academic institutions, and Employment Ontario service providers).

Statistics Canada is working toward changing data collection to be more responsive and reflect Canadians. To that end, Men+ and Women+ are new categories Statistics Canada used when breaking down data by gender; the (+) symbol refers to non-binary persons. This is primarily due to the latest statistical standards on gender and sex at birth that Statistics Canada published in April 2018, and used in the 2021 Census, conducted in May 2021.

Based on this new standard, the 2021 Census collected data on sex at birth and gender. Sex at birth refers to the sex assigned at birth. Gender refers to an individual's personal and social identity as a man, woman or non-binary person (a person who is not exclusively a man or a woman).

Previous versions of the classification of gender did not include the distinction between men, women and non-binary distinction between cisgender, transgender and non-binary people until 2021.

The DWA has researched Equity Diversity and Inclusion and a report and detailed data will be available in this report.

Limitations to LMI

The Durham Workforce Authority routinely mines secondary sources for data sets, custom purchases data from a variety of sources and has engaged in the process of data collection using primary, custom data tools yet there remains limitations related to data. These limitations are:

1. Lack of Local LMI Data

Oshawa Census Metropolitan Area (CMA)

Durham Region's geography poses a limitation, requiring the DWA to use the Oshawa Census Metropolitan Area (CMA). The Oshawa CMA includes Clarington, Whitby, and Oshawa. While Ajax, Pickering and Uxbridge are part of the Toronto Census Metropolitan Area – which also includes York Region, and areas of Peel Region. Brock and Scugog are statistically too small to be included in the Statistics Canada's monthly Surveys. While the Oshawa CMA is used as a proxy for Durham Region, to only have access to CMA level labour force data in Census years has an impact on community planning.

In addition, data for smaller geography, such as the Township of Brock, and Township of Scugog are not publicly available, are difficult to access, or simply do not exist. The result is that it is difficult, and at times impossible, to gather quality LMI about certain regions and industries, or specific to certain occupations, training and education. This, in turn, affects the type of data used to make important decisions that influence policy, programming, funding and career paths.

2. Lack of Data Representing the Diversity of Population Groups

There is a growing and long-standing need for LMI and related data for diverse population groups, particularly, for Indigenous Peoples, visible minorities Persons with disabilities, and the 2SLGBTQI+ community. These requirements are primarily based on the need to better understand evolving workforce development trends, to assess the quality of work opportunities and to provide equity analysis.

This need was particularly significant during the COVID-19 pandemic, which affected certain demographic groups far more than others. Unfortunately, because of a lack of data, more detailed information about the full nature of these impacts is limited.

3. Inaccessible LMI Data

Having access to accurate, relevant, and timely data remains the largest limitation faced by the DWA.

In fact, access to and clarity of data and methodologies is an ongoing challenge in the Canadian LMI ecosystem. The Challenges and Opportunities in Canada's LMI Landscape, a report issued by the Labour Market Information Council (LMIC) in November 2022, found that among the majority of LMI publications, tools and platforms, sources are frequently not cited properly, methodologies are unclear or undocumented, data are often shared in PDF formats that are not machine readable, and data sets are separated from LMI tools.

This means that data cannot be referenced or tracked down after publication, stakeholders cannot validate or peer-review findings, and data are difficult or impossible to use. These practices ultimately reduce the entire Canadian LMI ecosystem's ability to access powerful data that could be used to develop labour market projects and tools and to inform public policy.

In response to this concern, the DWA strives to include the source including the table number for readers and other researchers to find data included in the reports published by the DWA.

4. Future Skills Data Gap

Future skills data is important to organizations and governments, to develop education and training programs that are aligned to the qualifications. There is no generally agreed upon methodology for projecting future skills. The LMIC indicated that this LMI gap makes forecasting skills is a difficult task (LMIC, 2022).

5. LMI-Gathering Techniques:

Surveys have been the traditional method for gathering LMI data. There is a significant concern in surveying as a methodology due to non-response rates. Response rates in the Labour Force Survey, fell to a record 72 per cent in June 2020 from 88 per cent in February 2020. Cost concerns, accurate population representation, the length of time it takes to conduct a survey, analyze the results and arrive at insights, respondents' willingness to participate, and the potential biases of respondents and those conducting the surveys are all factors that must be considered when selecting this research and data-gathering method (LMIC, 2022).

6. LMI Tools and Users Needs

LMI is not easily accessible to individual Canadians and is rarely provided in a format that is user-friendly and supports their workforce planning. Job seekers have diverse needs and objectives and reports or LMI tools created with broad audiences in mind often result in individual users being unable to use them. In response to this disconnect, the DWA has created Jobs First Durham a job search tool and an LMI resource that can be used by job seekers, researchers, employment service providers and economic development.

Role, Vision, Mission & Strategic Focus

ROLE

Provide labour market intelligence so community stakeholders can better serve employers and jobseekers.

VISION

To be the premier source of labour market intelligence in Durham Region.

MISSION

Our mission is to support the development and maintenance of a sustainable and dynamic workforce.

STRATEGIC FOCUS

Research and Planning

Demonstrate leadership in community planning to improve labour market outcomes for Durham Region residents.

Become the premier source for labour market data.

Services to Community

Create opportunities to share labour market information.

Strengthen partnership role among community partner organizations.

Part II: Environmental Scan (Canada, Ontario, and Durham Region)

Environmental scans help to set current context, collect information, identify resources, links, and gaps in the research area. An environmental scan was conducted to collect labour market information at the national, provincial, and regional levels where available. This environmental scan contains three sections.

- Section one focuses on the changes in the population of Durham Region over the census periods including changes in population by sex, age group, and municipality.
- Section two focuses on the national, provincial, and local workforce trends and changes. These trends
 and changes include workforce shortage, job vacancies, recruitment and retention, unemployment
 trends, and workforce aging.
- Section three focuses on the national, provincial, and local labour market shifts and challenges
 including the great retirement, new work arrangements, in-demand skills, and the Region's new
 priority clusters.

A snapshot of Durham Region

1. Demographics

The following subsections provide an analysis of changes in the local population by sex, age group, and municipality.

1.1 Change in Population by Gender

According to the 2021 Census of Population, Durham Region population grew by 51,057 residents between 2016 and 2021, reaching 696,922, an increase of 7.91 per cent. This is higher than the number of people added between 2011 and 2016 of 37,740 or 6.20 per cent. The men+ population grew by +25,785 or 8.19 per cent, and women+ population grew by 25,136 or 7.60 per cent.

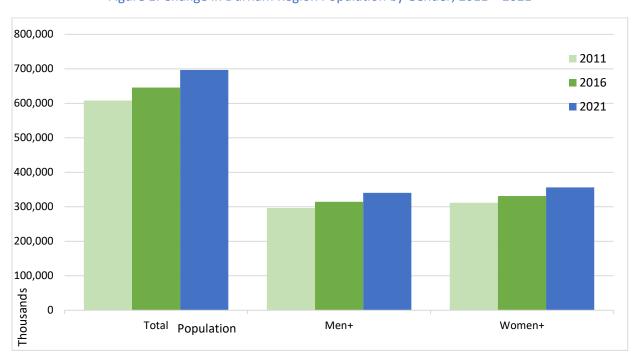


Figure 1: Change in Durham Region Population by Gender, 2011 – 2021

1.2 Change in Population by Age Group

Most of the population growth is in the age 65 and over group. In 2021, almost 15.9 per cent of Durham region population were at least 65 years of age, up 19.71 per cent from the 2016 Census.

Figure 2: Change in Durham Region Population by Age, Over Five Years, 2016 – 2021

Age Group	2016	2021	5-Year change 2016 - 2021
Younger than 15 years	116,185	125,505	8.02
15-24	86,205	84,500	-1.98
25-34	77,230	89,995	16.53
35-54	186,925	188,115	0.64
55-64	86,535	97,810	13.03
65 and over	92,790	111,085	19.71

Source: Statistics Canada, Censuses 2016 – 2021

1.3 Change in Population by Municipality:

Figure 3: Change in Durham Region Population by Municipality, Over Five Years, 2016 – 2021

Municipality	2016	2021	Population percent change, 2016 - 2021
Clarington	92,013	101,427	10.2
Oshawa	159,458	175,383	10
Pickering	91,771	99,186	8.1
Whitby	128,377	138,501	7.9
Brock	11,642	12,567	7.9
Ajax	119,677	126,666	5.8
Uxbridge	21,176	21,556	1.8
Scugog	21,617	21,581	-0.2

Source: Statistics Canada, Censuses 2016 – 2021

2. Migration

Between 2016 and 2021tax filer data reports that there was an inflow of 45,804 migrants to Durham Region. In-migration refers to any movement to a census metropolitan area (CMA) from elsewhere inside or outside Canada. Out-migration refers to any movement out of a census metropolitan area (CMA) to elsewhere inside or outside Canada. Core working-aged migrants between the ages of 25 and 44 made up 61.2 per cent of the total in-migrants during the five-year period, contributing over 28,015 people to the net migrant intake. However, increased out-migration among youth aged 18 to 24 resulted in a net migratory outflow of 1,299 among this younger age group.

Figure 4: Durham Region Migration Patterns by Age Group, 2016 – 2021

Age Group	In-migrants	Out-migrants	Net-migrants
0-17	37,083	20,892	16,191
18-24	15,294	13,995	1,299

25-44	71,362	43,347	28,015
45-64	25,648	26,439	-791
65+	12,310	11,220	1,090
Total	161,697	115,893	45,804

Source: Statistics Canada, Taxfiler.

3. Education Attainment

In Durham Region, 23.9 per cent of the population has at minimum college education, compared to 20.3 per cent provincially. 14 per cent of Durham Region's population does not have a high school, college, or university-level education, 1.3 per cent lower than Ontario's average.

35 ■ Durham Region Ontario 30 25 Percentage 20 15 10 0 No certificate, diploma or High (secondary) school Apprenticeship or trades non-university certificate or University certificate or University certificate or College, CEGEP or other Bachelor's degree diploma or equivalency diploma below bachelor diploma above bachelor certificate or diploma certificate diploma

Figure 5: Education Attainment - Durham Region and Ontario Comparison - 2021

Source: Statistics Canada, 2021 Census of Population

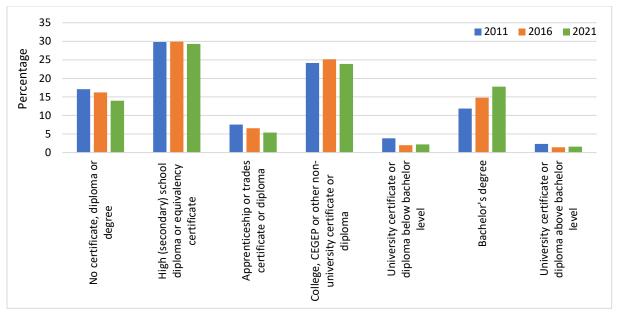
3.1 Five-Year Change in Education Attainment

Educational attainment in Durham Region increased over the last three census. Since 2011 and 2021, an increase in the number of residents with a bachelor's degree from 11.9 per cent in 2011 to 17.8 per cent in 2021.

Since 2011 the number of individuals without a certificate, diploma or degree has decreased by 3.8 per cent, from 17.8 in 2011, to 14 per cent in 2021.

There has been a notable decrease in the number of persons who had completed apprenticeships or a trades certificate/diploma, from 7.6 per cent in 2011, to 5.4 per cent in 2021.

Figure 6: Five-Year Change in Educational Attainment – Durham Region



Source: Statistics Canada, 2021 Census of Population

3.2 Education Attainment by Sex

Nearly 26 per cent of women in Durham region have a college, CEGEP or other non-university certificate or diploma, compared to 21.7 per cent of men.

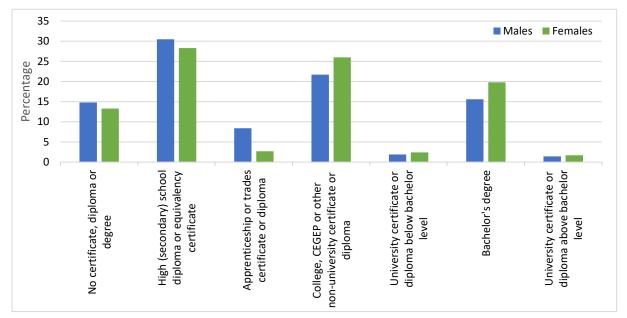


Figure 7: Education Attainment by Sex in Durham Region - 2021

Source: Statistics Canada, 2021 Census of Population

4. Key Performance Indicators (KPIs)

Since 1998, Ontario colleges have been mandated by the provincial government to collect and report performance data to measure how they are meeting the needs of students, graduates and employers.

Ontario college data include four key performance indicators (KPIs): graduate satisfaction rate, employer satisfaction rate, graduate employment rate and graduation rate.

Figure 8: Key performance indicators, Durham College

Durham College	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Graduate employment rate (%)	85.5	85.1	83.2	84.2	86.5	86.6	83.9	76.3
Graduation rate (%)	66.4	69	68.8	68	68.1	67.5	65.9	65.6
Graduate satisfaction rate (%)	78.2	78.7	77.9	76.2	78.1	76.8	75.7	74.2
Employer satisfaction rate (%)	92.2	87.7	92.3	93.8	94.3	93.9	91.4	80

Sources: Ontario Ministry of Colleges and Universities.

5. Income Profile

5.1 Change in Average After-Tax Household Income

The average after-tax income of household income in Durham Region was \$104,200 in 2021, which represented an increase of \$16,335 (+18.59%) from the previous Census of 2016.

Figure 9: Total Household Income, Durham Region, 2016 - 2021

Characteristic	Total (2016)	Total (2021)	Change (%)	Change (#)
Under \$5,000	1,890	1,410	-25.40%	-480
\$5,000 to \$9,999	1,725	735	-57.39%	-990
\$10,000 to \$14,999	3,725	1,750	-53.02%	-1,975
\$15,000 to \$19,999	5,010	2,810	-43.91%	-2,200
\$20,000 to \$29,999	12,480	10,420	-16.51%	-2,060
\$30,000 to \$39,999	13,915	10,775	-22.57%	-3,140
\$40,000 to \$49,999	15,215	12,955	-14.85%	-2,260
\$50,000 to \$59,999	15,510	13,900	-10.38%	-1,610
\$60,000 to \$79,999	30,205	28,845	-4.50%	-1,360
\$80,000 to \$99,999	28,485	27,975	-1.79%	-510
\$100,000 to \$124,999	29,645	31,945	7.76%	2,300
\$125,000 to \$149,999	22,555	26,625	18.04%	4,070
\$150,000 and over	47,545	72,885	53.30%	25,340
Median household total income (\$)	89,834	107,000	19.11%	17,166
Average household total income (\$)	106,886	126,400	18.26%	19,514

Median after-tax household income (\$)	77,398	93,000	20.16%	15,602
Average after-tax household income (\$)	87,865	104,200	18.59%	16,335

Source: Statistics Canada, Census of Population 2016 – 2021

5.2 Change in Average After-Tax Household Income by Municipality

The average after-tax income of household income increased for most Durham Region's municipalities in 2021 except (Brock). Ajax had the largest increase, going from \$93,092 in 2016 to \$112,200 in 2021. Followed by Pickering, the average after-tax income of household increased from \$96,886 in 2016 to \$115,400 in 2021. However, comparisons between municipality should be made with caution, since these income differences do not consider additional factors such as the age of the population, which are unique to each municipality.

Figure 10: Change in Average After-Tax Income Of Durham Region Household, 2016 – 2021

Municipality	Total (2016)	Total (2021)	% Change	Change (#)
Ajax	93,092	112,200	20.53%	19,108
Brock	73,686	65,100	-11.65%	-8,586
Clarington	89,971	106,600	18.48%	16,629
Oshawa	71,579	86,200	20.43%	14,621
Pickering	96,886	115,400	19.11%	18,514
Scugog	90,166	105,500	17.01%	15,334
Uxbridge	99,170	114,100	15.05%	14,930
Whitby	97,877	115,700	18.21%	17,823

Source: Statistics Canada, Census of Population 2016 – 2021

Workforce Trends and Change

This section examines the national, provincial, and local workforce development challenges, highlighting new trends affecting the labour market from workforce shortages, unemployment trends to workforce aging.

1. Workforce Shortage

The Canadian Survey on Business Conditions (CSBC), introduced in the Spring of 2020 by Statistics Canada in partnership with the Canadian Chamber of Commerce, is carried out on a quarterly basis to better understand the current operating businesses environment and their expectations. The CSBC is used, to measure workforce shortages at the national, provincial, territorial levels. Data from the CSBC can be tabulated by industrial sector, employment size, type of business and majority ownership, and other variables.

Durham Region data from the CSBC was included as part of the Toronto Economic Region (ER)². An economic region is a geographical unit generally composed of several census divisions within a province.

²⁻ Toronto (ER), or commonly non as the Greater Toronto Area, commonly known as the GTA includes the City of Toronto, and the regional municipalities of Durham, Halton, Peel, and York.

The DWA does not use ER data; instead, it utilizes data for either the Census Division which covers the Region as a whole or Oshawa CMA.

Based on the results of the survey, labour force shortages, recruiting skilled employees, and retaining skilled employees are leading obstacles businesses expect to face in the post-pandemic world (Statistics Canada, February 2022).

1.1 Percentage of Businesses Expecting a Workforce Shortage

Using data from the CSBC, at the national level, since the first quarter of 2021, the proportion of businesses expecting a labour shortage obstacle grew steadily until the third quarter of 2022 19.5 per cent to 37.1 per cent. At the provincial level, in Ontario; since the first quarter of 2021, the proportion of businesses expecting a labour shortage obstacle grew steadily until the third quarter of 2022 14.6 per cent to 35.6 per cent.

Demographic shifts, retirements and migration have impacted labour supply. In Canada, the fastest growing age group was aged 65 and over. Those over 65 tend to have the lowest labour force participation rate, and that has been pulling down the growth of Canada's labour force in recent years (Macklem, 2022).

An increase in retirements early in the pandemic has reduced labour force growth. COVID-19 prompted many people approaching retirement age to exit a few years earlier than planned. In this context, the National Professional Services Firm, MNP, projected a significant number of retirements over the next few years (MNP, October 2022).

Other factors point that the current labour shortage has been driven by the disruption of immigration flows during the COVID-19 pandemic. The pandemic disrupted immigration flows. Borders closed, and Canada fell short of its 2020 immigration target by about 156,000 people, or an estimated 100,000 workers (Macklem, 2022).

Figure 11: Percentage of Businesses Expecting Workforce Shortage to be an Obstacle at the National and Provincial Levels, 2021–2022

Workforce Shortage 2021			2022				
Workforce Shortage	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Canada (%)	19.5	23.8	30.3	32.7	37.0	35.0	37.1
Ontario (%)	14.6	21.0	27.0	27.9	34.9	30.6	35.6

Source: Statistics Canada, the Canadian Survey on Business Conditions

1.2 Percentage of Businesses Expecting a Workforce Shortage by Industry

In the third quarter of 2022, businesses most likely to report labour shortages as an obstacle were in accommodation and food services, construction, administrative and support, waste management and remediation services, retail trade, and manufacturing.

Figure 12: Percentage of Businesses Expecting Workforce Shortage to be an Obstacle by Industry at the National and Provincial Levels, Q3 2022

North American Industry Classification System (NAICS)	Canada	Ontario
North American moustry classification system (NAICS)	%	%

Accommodation and food services	63.8	65
Construction	54	57.9
Administrative and support, waste management and remediation services	46.6	47.7
Retail trade	40.7	17.1
Manufacturing	38.3	38.2
Health care and social assistance	38	45.7
Arts, entertainment and recreation	34.8	21.3
Wholesale trade	34.2	31.2
Transportation and warehousing	32.5	30.8
Information and cultural industries	30.6	29.1

Sources: Statistics Canada, Canadian Survey on Business Conditions, Table 33-10-0534-01

The 2022 Business Confidence Survey, conducted by the Ontario Chamber of Commerce (OCC), based on a sample of 1,513 Ontario businesses, indicated that more than half of Ontario businesses face labour shortages now and expect this to be a long-term problem. According to the OCC survey, sectors that reported the most labour shortages included: (Desti and Assime, 2022)

- Transportation and warehousing 87 %
- Mining, quarrying, and oil and gas 87 %
- Construction 86 %
- Accommodation and food services 85 %

The Analysis on Labour Challenges in Canada, Second Quarter of 2022, a report conducted by Fair and colleagues in 2022, indicated that in response to these challenges, many businesses plan to have management and current employees work more hours to address these labour obstacles (Fair et al 2022).

The employer responses to labour shortages, a recent report issued by Statistics Canada in 2022, uses data from the CSBC, which were collected during the first quarter of 2022. This report found that businesses in construction, manufacturing, retail trade, and accommodation and food services were most likely to report labour shortages as an obstacle. In response to the labour shortage, businesses in these sectors plan to use the following strategies: (Morissette, 2022)

- 46% plan to increase wages of new employees,
- 64 % plan to increase wages of existing employees,
- 12 % plan to offer signing bonuses or incentives to new employees,
- 34 % plan to start offering flexible scheduling over the next 12 months,
- 14 % plan to offer the option to work remotely,
- 31 % plan to encourage employees to participate in on-the-job training,
- 23 % plan to provide training to employees to take other positions within the organization,
- 18 % plan to offer co-ops, internships and apprenticeships,

2. Job Vacancies

The Job Vacancy and Wage Survey (JVWS) is the primary data source by which Statistics Canada measures the national, provincial and territorial job vacancy levels and rates. This survey is conducted quarterly on 100,000 business locations drawn from Statistics Canada's Business Register. If additional information is

needed, Statistics Canada has released a guide to this survey which contains definitions of the terms and variables associated with the survey.

According to the JVWS Guide, the job vacancy rate is measured as the proportion of vacant positions to all positions (vacant and filled), expressed as a per centage of labour demand, which includes all occupied and vacant jobs (Statistics Canada, December 2020).

Based on the JVWS Guide, the term "job vacancy" refers to the number of vacant jobs on the first day of the month and those that will become vacant during the month. This Guide also indicates that a job is considered vacant if it meets all three of the following conditions:

- It is vacant on the first day of the month or will become vacant during the month,
- There are tasks to be carried out during the month for the job in question, and
- The employer actively seeks a worker outside the organization to fill the job.

Durham Region data from the JVWS was included as part of the Toronto Economic Region. In this instance, the national and provincial data will be provided.

2.1 Job Vacancies (Actual Number & Rate)

Using data from the JVWS, across all sectors, employers are actively seeking to fill about one million 991,680 vacant positions in the third quarter of 2022, a record high (Statistics Canada, September 2022).

In Canada, the number of job vacancies was 958,480 in August 2022, up 39,280, compared to 912,200 in August 2021. In Ontario, the number of job vacancies was 349,695 in August 2022, an increase of +12,215

According to the JVWS, the national job vacancy rate was 5.6 per cent per cent in the third quarter of 2022, matching the record high observed in September 2021. On the other hand, the job vacancy rate in Ontario was 5.4 per cent in the same period (Statistics Canada, September 2022).

Figure 13: Job Vacancies Number & Rate at the National and Provincial Levels, 2021-2022

Joh Vasan	Job Vacancies Rate			2022				
JOD Vacan	icies Rate	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Number	553,480	731,905	912,580	915,545	890,385	1,031,955	991,680
Canada	%	3.6	4.6	5.4	5.3	5.2	5.9	5.6
	Number	196,385	264,530	338,835	348,260	336,760	387,235	372,075
Ontario	%	3.3	4.3	5.3	5.2	5.1	5.7	5.4

Source: Statistics Canada, Job Vacancy and Wage Survey, Table 14-10-0325-01

2.2 Job Vacancies by industry

In JVWS, job vacancy estimates are tabulated by Industry based on the 2017 North American Industry Classification System (NAICS) Version 3.0.

In November 2022, the industries with the highest number of vacancies in Canada were health care and social assistance with 134,040 vacancies, followed by accommodation and food services with 107,535 vacancies, and retail trade with 101,465 vacancies (Statistics Canada, January 26, 2023).

Figure 14: Job Vacancy Rate by Industry and 3-Digit NAICS at the National Level, Q3 2022

North American Industry Classification System (NAICS)	Canada %
722 Food services and drinking places	10.5
812 Personal and laundry services	8.9
484 Truck transportation	8.7
721 Accommodation services	8.3
236 Construction of buildings	8.2
811 Repair and maintenance	8
442 Furniture and home furnishings stores	7.8
623 Nursing and residential care facilities	7.7
155 Support activities for agriculture and forestry	7.7
448 Clothing and clothing accessories stores	7.5

Source: Statistics Canada, Job Vacancy and Wage Survey, Table 14-10-0326-01

Figure 15: Job Vacancy Rate by Industry and 3-Digit NAICS at the Provincial Level, Q3 2022

North American Industry Classification System (NAICS)	Ontario %
722 Food services and drinking places	10.2
442 Furniture and home furnishings stores	9
623 Nursing and residential care facilities	8.5
811 Repair and maintenance	8
484 Truck transportation	8
812 Personal and laundry services	7.9
711 Performing arts, spectator sports and related industries	7.8
236 Construction of buildings	7.7
721 Accommodation services	7.7
448 Clothing and clothing accessories stores	7.6

Source: Statistics Canada, Job Vacancy and Wage Survey, Table 14-10-0326-01

3. Recruitment and Retention

The CSBC, mentioned above, also provides data on the recruitment and retention of skilled workers challenges expected by businesses. In this context, it is important to understand that "skilled workers" refers to highly trained, educated, or experienced segments of the workforce that can complete more complex mental or physical tasks on the job. The DWA, defines "skilled workers" as those who possess the skills outlined in the Skills for Success Framework, which was introduced by the Office of Literacy and Essential Skills (OLES) in May 2021. These skills, which are necessary for learning, work, and life, include foundational skills for building new skills and knowledge, as well as important skills for effective social

interaction. These skills overlap and interact with each other and with other technical and life skills and can be adapted to different contexts. (See Appendix 3)

3.1 Recruitment challenges

According to the CSBC, in the third quarter of 2022, 38.7 per cent of businesses expected recruiting skilled workers as an obstacle in Canada, up 4.1 per cent compared to the same quarter of 2021, 34.6 per cent. In Ontario, 39.1 per cent of businesses expected recruiting skilled workers as an obstacle, up 7.7 per cent compared to the same quarter in 2021, 31.4 per cent.

Figure 16: Per Centage of Businesses Expecting Recruiting Skilled Employees to be an Obstacle by Industry, Q3 2022

North American Industry Classification System (NAICS)	Canada %	Ontario %
Construction	51.1	57
Health care and social assistance	49.3	56.7
Accommodation and food services	48.9	43.5
Administrative and support, waste management and remediation services	45.1	49.7
Manufacturing	41.5	46.1
Wholesale trade	37	36.1
Information and cultural industries	36.6	34.8
Professional, scientific and technical services	35.9	36.7
Finance and insurance	35.3	35.4
Other services (except public administration)	34.7	42.8

Source: Statistics Canada, Canadian Survey on Business Conditions, Table 33-10-0534-01

Nationally, construction 51.1 per cent, health care and social assistance 49.3 per cent, and manufacturing 41.5 per cent are most likely to expect difficulty in recruiting skilled workers in August 2022. Similarly, in Ontario, these industries are also the most likely to expect difficulty in recruiting skilled workers, 57 per cent, 56.7 per cent, and 46.1 per cent, respectively.

3.2 Retention challenges

Based on CSBC data, in the third quarter of 2022, 30.9 per cent of businesses expected retaining skilled workers as an obstacle in Canada, up 6.4 per cent compared to the same quarter of 2021, 24.5 per cent. In Ontario, 33.3 per cent of businesses expected retaining skilled workers as an obstacle, up 7.7 per cent compared to the same quarter in 2021, 23.4 per cent.

Figure 17: Percentage of Businesses Expecting Retaining Skilled Employees to be an Obstacle by Industry, Q3 2022

North American Industry Classification System (NAICS)	Canada %	Ontario %
Accommodation and food services	45.7	45.4
Construction	40.5	54.5
Retail trade	38.3	29.2
Health care and social assistance	37.3	40.3
Administrative and support, waste management and remediation services	36.5	45

Information and cultural industries	32.4	35.5
Manufacturing	29.7	31.5
Other services (except public administration)	26.8	27
Wholesale trade	26.5	25.7
Professional, scientific and technical services	23	26.9

Source: Statistics Canada, Canadian Survey on Business Conditions, Table 33-10-0534-01

4. Labour Force Characteristics

Statistics Canada provides data on the labour force characteristics, which measures the number of persons in the labour force (employment and unemployment) and not in the labour force, unemployment rate, participation rate, and employment rate.

This subsection will focus on the local labour force characteristics, by reviewing the labour market participation, employment, and unemployment rates for the Region's residents.

Figure 18: Labour Force Characteristics by Census - Durham Region, 2016 -2021

Labour Force Characteristics	2016	2021
Person		
Total - Population aged 15 years and over by Labour force status	523,485	565,960
Male	252,970	274,000
Female	270,515	291,965
In the labour force	352,750	367,505
Male	180,575	189,280
Female	172,180	178,225
Per centage (%)		
Participation rate	67.4	64.9
Male	71.4	69.1
Female	63.6	61
Employment rate	62	56.6
Male	65.5	60.9
Female	58.7	52.6
Unemployment rate	8	12.8
Male	8.3	11.8
Female	7.8	13.8

Source: Statistics Canada, Census of Population, (2016 -2021)

According to the 2021 Census of Population, the national unemployment rate reached a high point of 12.8 per cent, compared to 8 per cent in the 2016 census. In addition, the labour force participation rate and the employment rate decreased by -3.7 per cent, -8.7 per cent, respectively Between 2016 and 2021.

The labour market data from the 2021 Census of Population has been significantly affected by COVID-19, and this data does not necessarily reflect the current labour market climate. The DWA prefers to use the Labour Force Survey (LFS) to examine the local labour market characteristics as the LFS is released monthly by Statistics Canada and is considered the most accurate source of employment/unemployment data for periods between census surveys.

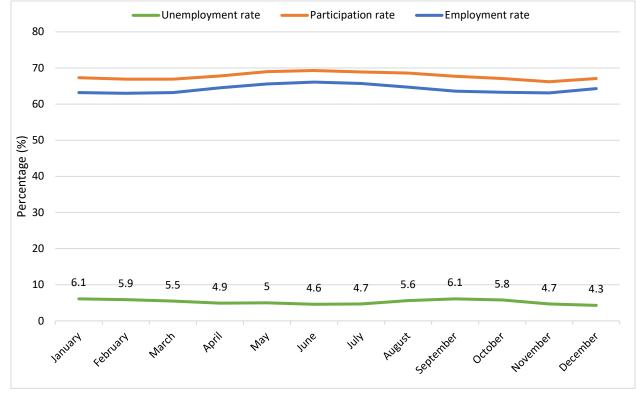


Figure 19: Labour Force Characteristics by Month, Oshawa CMA, 2022

Source: Labour Force Survey, Table: 14-10-0378-01

As figure 12 notes:

- The **participation rate** in Oshawa CMA initially increased in 2022, reaching its highest point in June 69.3 per cent, but it decreased from July on until it reached its lowest point of 66.2 per cent in November 2022.
- The **employment rate** in Oshawa CMA followed a similar trend to the participation rate, which initially increased in 2021. The highest rate, in June, was 66.1 per cent. Then the employment rate decreased from July on until it reached its lowest point of 63.1 per cent in November 2022.
- The **unemployment rate** in Oshawa CMA declined significantly in 2022, peaking in 4.3 per cent in December 2022.

5. Employment Trends

This subsection focuses on the change in employment by occupation and industry in Durham Region from 2016 to 2021.

5.1 Employment by Occupation

Examining employment by occupation is defined as the determination of the number of individuals employed in a particular occupation as defined by the National Occupation Classification (NOC). The NOC provides a standardized language for describing the work performed in the labour market.

The NOC 2021 Version 1.0 introduces a brand new five-digit codification system to replace the NOC 2016 four-digit system. The digits of the NOC code reflect important information about the occupation it

represents. Changes occurred at all levels of the NOC structure. Some items were revised while others were added, split, transferred or merged.

For example, in the 2016 version of the NOC, "broad occupational categories (BOC) 0 – Management" included all unit groups dedicated to managerial occupations. Under the 2021 NOC, the BOC 0 now only contains legislators and senior management occupations. Middle management occupations previously in BOC 0 have been redistributed into the remaining 9 BOCs based on the industry of employment. For example: 0211 - Engineering managers (NOC 2016 V1.3) has been moved to BOC 2 – Natural and applied sciences and related occupations, to unit group 20010 – Engineering managers (NOC 2021 V1.0).

As a result, it is important to understand that the -90 per cent decline in the "BOC 0 - Legislative and senior management occupations" between 2016 and 2021, reflects the change in the NOC structure not the employment losses.

Figure 20: Changes in Employment by Occupation – Durham Region, 2016 -2021

NOC 2021 V1.0 - Broad Occupational Categories (BOC)	2016	2021	2016 – 2021 Change %
All occupations	343,740	355,510	3%
0 Legislative and senior management occupations	40,195	3,830	-90%
1 Business, finance and administration occupations	57,860	69,065	19%
2 Natural and applied sciences and related occupations	22,520	31,780	41%
3 Health occupations	20,795	26,060	25%
4 Occupations in education, law and social, community and government services	41,320	44,000	6%
5 Occupations in art, culture, recreation and sport	9,690	10,025	3%
6 Sales and service occupations	80,975	88,495	9%
7 Trades, transport and equipment operators and related occupations	50,515	62,330	23%
8 Natural resources, agriculture and related production occupations	4,945	5,915	20%
9 Occupations in manufacturing and utilities	14,925	14,010	-6%

Source: Statistics Canada, Census of Population (2016 - 2021)

5.2 Employment by Industry:

Employment by industry looks at the sectors jobs in Durham Region fall into as defined by the North American Industry Classification System (NAICS). The North American Industry Classification System is designed to provide common definitions of the industrial structure for Canada, Mexico and the United States of America.

Figure 21: Changes in Employment by Industry – Durham Region, 2016 -2021

North American Industry Classification System (NAICS) 2017	2016	2021	change 2016 - 2021 (%)
All industries	343,740	355,510	3%

11 Agriculture, forestry, fishing and hunting	3,000	3,365	12%
21 Mining, quarrying, and oil and gas extraction	635	590	-7%
22 Utilities	7,560	7,840	4%
23 Construction	27,260	29,875	10%
31-33 Manufacturing	28,645	24,015	-16%
41 Wholesale trade	13,325	11,715	-12%
44-45 Retail trade	39,965	41,505	4%
48-49 Transportation and warehousing	16,605	17,980	8%
51 Information and cultural industries	9,890	9,220	-7%
52 Finance and insurance	22,350	24,325	9%
53 Real estate and rental and leasing	6,615	7,410	12%
54 Professional, scientific and technical services	24,150	29,255	21%
55 Management of companies and enterprises	835	1,735	108%
56 Administrative and support, waste management and remediation services	17,420	18,055	4%
61 Educational services	26,940	27,200	1%
62 Health care and social assistance	36,610	43,145	18%
71 Arts, entertainment and recreation	7,600	6,830	-10%
72 Accommodation and food services	20,630	17,860	-13%
81 Other services (except public administration)	13,655	13,870	2%
91 Public administration	20,045	19,725	-2%

Source: Statistics Canada, Census of Population (2016 - 2021)

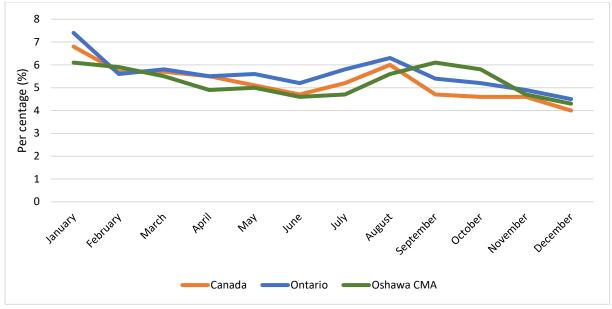
6. Unemployment Trends

Unemployed persons are defined as all those of working age who are not employed, but carried out activities to seek employment during a specified recent period and are currently available to take up employment given a job opportunity.

This subsection examines the national, provincial, and Oshawa CMA unemployment rate, from January to December 2022. It also breaks down the unemployment rate by age group for Oshawa CMA.

6.1 Unemployment Rate (Canada, Ontario, and Oshawa CMA)

Figure 22: Unemployment Rate by Month - Canada, Ontario and Oshawa CMA, 2022



Source: Statistics Canada, Labour Force Survey, Tables 14-10-0378-01 & 14-10-0017-01

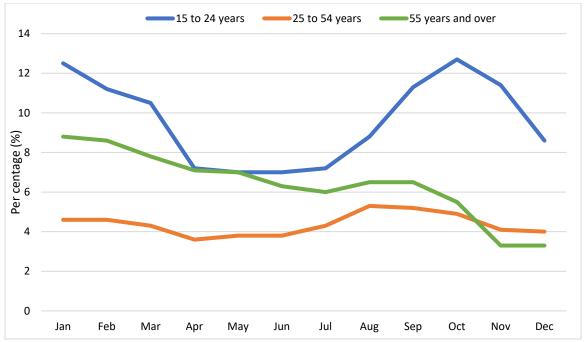
As figure 15 notes:

- In Canada, among those in the working ages of 15 years and over the unemployment rate remains at a record low, edging down by 2.8 per cent to 4 per cent in December 2022, compared to 6.8 per cent in January 2022.
- It is also true in Ontario, the unemployment among people aged 15 years and over fell 2.9 per cent points to 4.5 per cent in December 2022, compared to 7.4 per cent in January 2022.
- In Oshawa CMA, the unemployment rate among people aged 15 years and over decreased 1.9 per cent point to 4.3 in December 2022, compared to 6.1 in January 2022.

6.2 Unemployment Rate by Age Group

The Oshawa CMA overall unemployment rate in December 2022 was 4.2 per cent. Youth aged 15 to 24 years had the highest unemployment rate at 8.6 per cent, followed by the core-aged population aged 25 to 54 years at 4 per cent and senior population aged 55 years and over at 3.3 per cent.

Figure 23: Unemployment Rate by Age Group - Oshawa CMA, 2022



Source: Labour Force Characteristics Survey Table: 14-10-0378-01

7. Workforce Aging

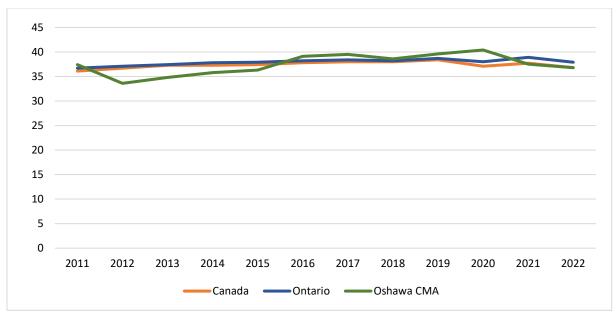
Most workers over the age of 55 are slowly returning to work, with their participation rate³ dropping -1.6 per cent point to 36.8 per cent in 2022, compared to 38.4 per cent in 2019 (Statistics Canada, January 2023).

In Ontario, the participation rate among workers aged 55 and over also decreased by -0.8 per cent point to 37.9 per cent in 2022, compared to 38.7 in 2019 (Statistics Canada, January 2023).

In Oshawa CMA, there is a significant decline in the participation rate among workers aged 55 and over, falling by -2.8 per cent to 36.8 in 2022, compared to 39.6 in 2019 (Statistics Canada, January 6, 2023).

Figure 24: Participation Rate for Workers Aged 55 Years and Over- Canada, Ontario and Oshawa CMA, 2011 - 2022

3- The participation rate is the share of the working-age population that is working or looking for work. The participation rate measures the total labour force (comprised of those who are employed and unemployed, combined) relative to the size of the working-age population.



Source: Statistics Canada, Labour Force Survey, Tables 1 4-10-0385-01 & 14-10-0327-01

The reasons for the decline in the labour force among workers aged 55 and over are not specific, their impact will be noticeable in many sectors that require extended work experience. In 2022, the Royal Bank of Canada (RBC) indicated that the aging population would continue to create disruptions projected to extend into the post-pandemic period. RBC noted that by the end of this decade, labour force participation is expected to fall to levels not seen since the 1970s (Janzen et al, 2022).

LFS data shows that, in Oshawa CMA, employment among workers aged 55 and over declined by 4,500 between 2020 and 2021. Employment among workers aged 55 and over increased from 39.4 per cent in July 2022 to 43.1 in September 2022, employment in this age group is still large compared to prepandemic employment levels.

Figure 25: Labour Market Characteristics for Workers Aged 55 Years and Over in Oshawa CMA, 2019-2022

Labour Market	2019	2020	2021					2022				
Characteristics	2019	2020	2021	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Employment	44,900	46,500	42,000	41,600	40,600	40,600	40,000	38,600	38,500	39,400	40,700	43,100
Unemployment Rate (%)	4.5	7.0	6.7	8.1	7.9	7.7	7.2	8.1	7.2	6.9	6.2	5.7
Participation Rate (%)	39.2	40.2	36.8	37	35.7	36	35.9	35.9	35.3	35.6	35.7	36.5

Source: Statistics Canada, Tables: 14-10-0385-01, 14-10-0378-01, & 14-10-0385-01

Labour Market Shifts and Challenges

The national, provincial, and local labour market is going through a period of unprecedented disturbance following the onset of the COVID-19 pandemic.

This section provides early insights of emerging issues and shifts in the labour market.

1. The Great Resignation in the USA / The Great Retirement in Canada

The Great Resignation is a wave of workers quitting across industries that began in 2021 in the United States after easing the first pandemic restrictions (Kuzior, 2022). In 2021, the United States experienced the so-called Great Resignation with many American employees voluntarily resigning from their jobs. The resignations peaked in September 2021, with 4.4 million American workers quitting their jobs (Tessema et al., 2022), an increase of 2 per cent compared to pre-pandemic rates, and close to double the rates that prevailed a decade ago (Tombe, 2022).

The Great Resignation was mainly the consequence of the COVID-19 pandemic. Employees either left the workforce or searched for job opportunities that offered them more flexibility. In a recent report issued the Scientific Research Publishing (SCIRP), several reasons for the Great Resignation are identified. These reasons include:

- The pandemic allowed employees to think about their careers, explore entrepreneurship, and save
 more money (e.g., through reduced spending during the lockdown, federal stimulus checks, and
 suspension of student loan payments). Many employees realized that their jobs are not fulfilling.
 Therefore, when many employees decided to spend their time differently than they did before the
 pandemic, their thoughts on the risk of resignation are reshaped.
- The fear of COVID-19 is one of the many factors that influenced employees' decisions to resign. When the number of COVID-19-related infections and deaths increased, many employees began to fear COVID-19. The multiple infection outbreak waves and the Delta and Omicron variants also contributed to employee fear. Many employees who are asked to return to the workplace opted to resign.
- The pandemic increased the stress level of American employees in that most of them reported an uncertain economic future (81 per cent) and the coronavirus pandemic (80 per cent) as significant sources of stress in their lives, and thus, these factors had an impact on their intention to resign. (Tessema et al, 2022)

While Canada appears to be avoiding the Great Resignation, there is another potentially more serious source of concern. The government may not be ready for surging retirements. Over the past year, the equivalent of 1.5 per cent of Canada's workforce retired. This is one-third above the roughly 1 per cent that retired a decade ago. And it will only grow much larger from here (Tombe, 2022).

This will have significant implications for Canada's economic future. With a smaller share of its population working, overall productivity will be lower. For context, according to Tombe (2022), the latest projections suggest the national working-age population share may fall from its current 66 per cent to nearly 62 per cent by 2040. This would reduce the average annual economic rate over this time by over 0.3 percentage points (Tombe, 2022).

2. New Work Arrangements

Facing one of the most challenging health crises of a century, many employers and businesses in Canada shifted to teleworking very quickly in the early spring of 2020. In fact, by the end of March 2020, 39 per cent of Canadian workers are teleworking (Saba et al, 2021), and this rate had increased to 43 per cent by May 2020 (Clarke and Hardy, 2022).

Before the pandemic, 5.9 per cent of Canadian businesses are working remotely. With the pandemic, the proportion of businesses that had all their workforces worked remotely rose to 14.4 per cent in May 2020, and this rate rose to 27.2 per cent by August 2020 (Statistics Canada, November 2022)

The Working from Home During The COVID-19 Pandemic, a recent report issued by Statistics Canada in 2022, noted that women employees tended to work from home more than men employees. In May 2020, roughly 43 per cent of Canadian women employees worked from home, while 31 per cent of men employees did so (Clarke and Hardy, 2022). Some of the difference between the rates for men and women can be explained by the relative concentration of women in industries were working from home is more practical.

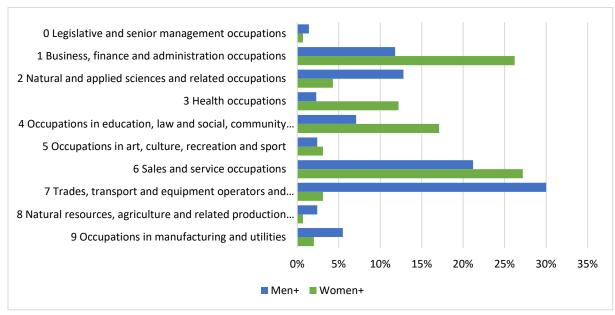


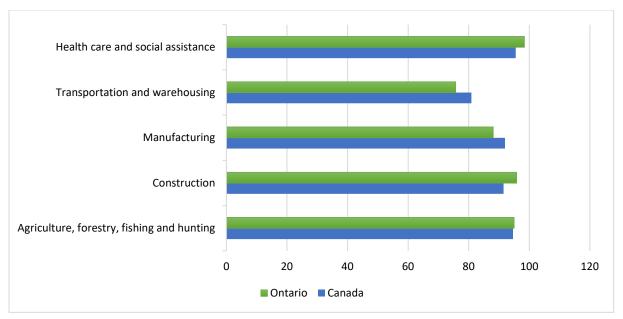
Figure 26: Gender Segregation by Occupation in Durham Region, 2021

Source: Statistics Canada, Census 2021

Industries with the highest rates of work from home tend to be professional services, such as educational services; professional and technical services; financial activities; information, culture and recreation; and public administration. In these sectors, employees can still perform their jobs reasonably All outside the workplace. The ability to work from home is lower in industries that require more person-to-person contact, such as accommodation and food services, and retail trade. Sectors such as manufacturing, and transportation services sectors that require working with large machinery have a limited scope for home-based work (Clarke and Hardy, 2022).

Post-pandemic, 87.2 per cent of Canadian businesses expected to have less than 10 per cent of their workforce working remotely. In Ontario, 85.3 per cent of Canadian businesses expected to have less than 10 per cent of their workforce teleworking (Statistics Canada, August 2022).

Figure 27: Percentage of Businesses Expecting Less Than 10% of Their Workforce to Work Remotely in Q3 2022



Source: Statistics Canada, Canadian Survey on Business Conditions, Table 33-10-0565-01

3. In-Demand Skills

Considering the evolving Canadian labour market and the modernization of workplaces, the Office of Literacy and Essential Skills (OLES) has updated its Essential Skills Framework, rebranding it as Skills for Success. This new framework reflects changing skill needs and is designed to be more sustainable over time.

Skills for Success, introduced in May 2021, are the skills needed to participate and thrive in learning, work and life. These skills include foundational skills for building new skills and knowledge, as well as important skills for effective social interaction. These skills overlap and interact with each other and with other technical and life skills and can be adapted to different contexts. For more information about the Skills for Success, See Appendix 3.

The DWA has created Job First Durham (JFD), which is used, among other things, to calculate in-demand skills mentioned in the local job postings. The JFD Skill Demand Report, provides monthly data on the skills, knowledge, tools and technology that employers are recruiting for, in job postings. The data in Skill Demand Report is tabulated by sector and occupation.

According to JFD, from January to December 2022, there are 55,738 job postings across Durham Region. The top five skills mentioned in these job postings are:

- management skills (34 per cent)
- customer service (31 per cent)
- sales (20 per cent)
- interpersonal skills (16 per cent)
- attention to detail (13 per cent)

Figure 28: Percentage of Skills Mentioned in Job Postings, Durham Region, 2022

Skills mentioned in job postings in Durham Region	Matching Essential skill (Skills for Success)	Matching Employability Skills	Percentage of total job postings 2022	
Management	Problem-solving, communication, writing, and reading	Stress management and time management	34%	
Customer Service	Communication, writing, and reading	Confidence and motivation	31%	
Sales	Numeracy, communication, writing, and reading	Confidence and motivation	21%	
Interpersonal Skills	Collaboration and communication	Adaptability, confidence, and motivation	16%	
Attention to Detail	Problem-solving		13%	
Leadership	Problem-solving, communication,	Accountability, confidence, motivation and attitude	13%	
Planning	Problem-solving	Accountability, confidence, motivation and attitude	11%	
Work Independently	Adaptability		9%	
Time Management		Time management	8%	
Innovation	Problem-solving	Confidence	8%	
Teamwork	Collaboration	Teamwork	7%	
Problem-Solving	Problem-solving		7%	
Microsoft Office	Digital, numeracy, writing, and reading	Presentation	6%	

4. Priority Clusters

Invest Durham (formerly Durham Region Economic Development) released a new Economic Development and Tourism Strategy and Action Plan, "2023-2027 Ready Set Future: A PLACE Blueprint for Durham, with a focus on five priority clusters including:

- 1. **Future Energy**: professional services for energy generation and distribution, nuclear energy and supply chain, medical isotopes, clean renewable energy, battery storage, and energy efficiency retrofit technologies.
- 2. **Next Generation Mobility**: Electric vehicle technologies and charging infrastructure, autonomous/connected vehicle technologies, software development and testing, additive manufacturing and 3D printing, and vehicle testing/prototyping.
- 3. **Applied Digital Technology**: data analytics, immersive technology, cyber security, applied artificial intelligence, next-gen automation, and medical technology.
- 4. **Arts, Culture and Creative**: music, film and television, digital media, E-gaming and E-sports, and cuisine and culinary.
- 5. **Agri-Food**: Agri-technology, on-farm diversified uses, Agri-tourism, local food supply and value chain, and vertical/indoor agriculture.

Businesses in Durham Region

According to the Canadian Business Counts, Durham Region businesses increased by 5.82 per cent, adding (+2,933) new business between 2019 and 2022, edging up to 53,347 businesses in June 2022. Of those businesses, 70.2 per cent of employers have no employees, 17 per cent have 1-4 employees and 75.4 per cent of companies have nine or fewer employees.

1. Businesses Trends

1.1 Total Employment and Sector Employment

Figure 29: Top Ten Sub-Sectors in Durham Region by Number of Employees and Number of Employees, June 2022

North American Industry Classification (NAICS)	0	1 - 4	5 - 9	10 - 19	20 - 49	50 - 99	100 - 199	200 - 499	500	Total	Percentage of Total Employers in Durham Region
531 - Real Estate	10,342	466	52	13	7	0	1	0	0	10,881	20.40
541 - Professional, Scientific and Technical Services	5,731	2,179	211	101	42	17	3	3	0	8,287	15.53
238 - Specialty Trade Contractors	2,495	886	286	143	75	18	4	2	0	3,909	7.33
621 - Ambulatory Health Care Services	1,574	785	252	161	49	9	7	4	1	2,842	5.33
561 - Administrative and Support Services	1,732	452	191	91	47	15	9	5	2	2,544	4.77
236 - Construction of Buildings	1,314	335	94	55	21	3	4	1	0	1827	3.42
484 - Truck Transportation	1,144	425	30	30	22	4	4	0	0	1,659	3.11
722 - Food Services and Drinking Places	505	274	313	250	231	35	14	1	0	1,623	3.04
523 - Securities, Commodity Contracts, and Other Financial Investment and Related Activities	1,331	133	15	6	22	3	0	0	0	1,510	2.83
812 - Personal and Laundry Services	827	276	123	39	13	4	1	0	0	1,283	2.41

Source: Statistics Canada. Canadian Business Count. 2019-2022

Real estate (+ 25.66 per cent), and truck transportation (+14.81 per cent) experienced the large most significant in the number of between 2016 and 2021. In contrast, securities, commodity contracts, other

financial investment and related activities (-9.69 per cent), and specialty trade contractors (-8.82) saw a slight decrease in the number of businesses between 2019 and 2022.

Figure 30: Top Ten Sub-Sectors in Durham Region by Total Number of Employers, June 2022

North American Industry Classification (NAICS)	2019	2022	2019-2022 % Change
531 - Real Estate	8,659	10,881	25.66
541 - Professional, Scientific and Technical Services	7,351	8,287	12.73
238 - Specialty Trade Contractors	4,287	3,909	-8.82
621 - Ambulatory Health Care Services	2,581	2,842	10.11
561 - Administrative and Support Services	2,548	2,544	-0.16
236 - Construction of Buildings	1,917	1,827	-4.69
484 - Truck Transportation	1,445	1,659	14.81
722 - Food Services and Drinking Places	1,551	1,623	4.64
523 - Securities, Commodity Contracts, and Other Financial Investment and Related Activities	1,672	1,510	-9.69
812 - Personal and Laundry Services	1,343	1,283	-4.47

Source: Statistics Canada. Canadian Business Count. 2019-2022

1.2 Distribution of Total Local Employers by 2-Digit Industry

Durham Region is home to slightly more businesses in construction, professional, scientific and technical services, administrative and support, waste management and remediation services compared with Ontario.

Figure 31: Distribution of Durham Region Employers by 2-Digit Industry with Ontario Comparison, June 2020

North American Industry Classification (NAICS)	Durham Region Total	Distribution %	Ontario Total	Distribution %
11 Agriculture, forestry, fishing and hunting	996	1.87	49,576	3.44
21 Mining, quarrying, and oil and gas extraction	32	0.06	1,804	0.13
22 Utilities	83	0.16	2,968	0.21
23 Construction	6,024	11.29	145,568	10.11
31 – 33 Manufacturing	1,280	2.40	37,302	2.59
41 Wholesale trade	1,344	2.52	41,778	2.90
44 – 45 Retail trade	3,856	7.23	95,806	6.65
48 – 49 Transportation and warehousing	3,475	6.51	95,192	6.61
51 Information and cultural industries	686	1.29	22,894	1.59
52 Finance and insurance	2,652	4.97	96,637	6.71
53 Real estate and rental and leasing	11,083	20.78	286,866	19.92
54 Professional, scientific and technical services	8,287	15.53	203,570	14.13
55 Management of companies and enterprises	358	0.67	15,378	1.07
56 Administrative and support, waste management and remediation services	2,648	4.96	58,562	4.07

61 Educational services	674	1.26	17,164	1.19
62 Health care and social assistance	,745	7.02	101,194	7.03
71 Arts, entertainment and recreation	771	1.45	25,265	1.75
72 Accommodation and food services	1,728	3.24	44,934	3.12
81 Other services (except public administration)	3,604	6.76	96,484	6.70
91 Public administration	21	0.04	1,412	0.10
Total	53,347	100	1,440,354	100

Source: Statistics Canada. Canadian Business Count. 2019-2022

1.3 Change in Number of Total Local Employers by 2-Digit Industry

June 2022, real estate and rental and leasing, and professional, scientific and technical services are the largest industries in Durham region accounting for (20.8 per cent and 15.5 per cent respectively) of the total businesses in the region, an increase of (24.88 per cent, and 12.73 per cent, respectively) between 2019 and 2022.

Figure 32: Changes in Number of Employers in Durham Region, 2-Digit NAICs, 2019-2022

North American Industry Classification (NAICS)	2019	2020	2021	2022	2019-2022 % Change
11 Agriculture, forestry, fishing and hunting	1,035	978	975	996	-3.77
21 Mining, quarrying, and oil and gas extraction	41	42	37	32	-21.95
22 Utilities	85	81	80	83	-2.35
23 Construction	6,525	6,296	6,132	6,024	-7.68
31 – 33 Manufacturing	1,351	1,300	1,274	1,280	-5.26
41 Wholesale trade	1,387	1,352	1,349	1,344	-3.10
44 – 45 Retail trade	3,785	3,686	3,728	3,856	1.88
48 – 49 Transportation and warehousing	3,151	3,436	3,768	3,475	10.28
51 Information and cultural industries	673	650	664	686	1.93
52 Finance and insurance	2,755	2,713	2,718	2,652	-3.74
53 Real estate and rental and leasing	8,875	9,338	10,064	11,083	24.88
54 Professional, scientific and technical services	7,351	7,300	7,707	8,287	12.73
55 Management of companies and enterprises	387	380	361	358	-7.49
56 Administrative and support, waste management and remediation services	2,646	2,664	2,771	2,648	0.08
61 Educational services	650	677	715	674	3.69
62 Health care and social assistance	3,511	3,687	3,836	3,745	6.66
71 Arts, entertainment and recreation	873	879	871	771	-11.68
72 Accommodation and food services	1,648	1,580	1,658	1,728	4.85
81 Other services (except public administration)	3,667	3,687	3,725	3,604	-1.72
91 Public administration	18	20	20	21	16.67
Total	50,414	50,746	52,453	53,347	5.82

Source: Statistics Canada. Canadian Business Count. 2019-2022

2. Commuting Patterns

Commuting patterns examinees where people live in comparison to where they work. Nearly 43.2 per cent of people who live in Durham Region commute out of the Region to work. Pickering, Uxbridge, and Clarington tend to see the highest proportion of their residents leaving the municipality to work.

2.1 Workers by Place of Residence

Place of residence refers to where an individual lives, regardless of where they work (i.e., Durham Region residents).

Figure 33: Municipal Commuting Patterns, Top Five Places of Residence by Place of Work, 2021

Place of work	Place of residence	Total (2021)
	Ajax	8,825
Ajax	Oshawa	2,780
	Whitby	2,525
	Toronto	1,600
	Pickering	1,460
	Brock	1,215
	Kawartha Lakes	545
Brock	Ramara	100
	Georgina	100
	Uxbridge	95
	Clarington	10,585
	Oshawa	2,500
Clarington	Whitby	1,035
	Kawartha Lakes	610
	Port Hope	415
	Oshawa	17,860
Oshawa	Clarington	6,045
	Whitby	3,745
	Ajax	1,360
	Toronto	1,065
	Pickering	6,485
	Ajax	3,465
Pickering	Toronto	2,925
	Oshawa	2,325
	Whitby	2,305
Scugog	Scugog	2,635
J04505	Kawartha Lakes	695

	Oshawa	560
	Clarington	275
	Whitby	260
	Uxbridge	2,375
	Scugog	305
Uxbridge	Kawartha Lakes	275
	Brock	270
	Whitchurch-Stouffville	210
	Whitby	11,620
	Oshawa	7,315
Whitby	Clarington	3,565
	Ajax	1,925
	Toronto	1,320

Source: Statistics Canada, Census 2021

2.2 Workers by Place of Work

Place of work is defined as the location of a job regardless of where an individual lives (i.e., jobs in Durham Region).

Figure 34: Municipal Commuting Patterns, Top Five Places of Work by Place of Residence, 2021

Place of residence	Place of work	Total (2021)
	Toronto	12,090
	Ajax	8,825
Ajax	Pickering	3,465
	Whitby	1,925
	Markham	1,590
	Brock	1,215
	Uxbridge	270
Brock	Georgina	235
	Newmarket	225
	Kawartha Lakes	200
	Clarington	10,585
	Oshawa	6,045
Clarington	Toronto	3,870
	Whitby	3,565
	Pickering	1,555
Oshawa	Oshawa	17,860
Osiiawa	Toronto	7,780

	Whitby	7,315
	Ajax	2,780
	Clarington	2,500
	Toronto	10,780
	Pickering	6,485
Pickering	Markham	1,510
	Ajax	1,460
	Whitby	880
	Scugog	2,635
	Oshawa	590
Scugog	Toronto	510
	Whitby	450
	Uxbridge	305
	Uxbridge	2,375
	Toronto	715
Uxbridge	Markham	545
	Whitchurch-Stouffville	445
	Newmarket	260
	Whitby	11,620
	Toronto	8,910
Whitby	Oshawa	3,745
	Ajax	2,525
	Pickering	2,305

Source: Statistics Canada, Census 2021

Employment Ontario Data

The Ministry of Labour, Immigration, Training and Skills Development (MLITSD) provides workforce planning boards with aggregated Employment Ontario (EO) program data, broken down by individual Local Board area, accompanied by regional and provincial comparators. It is intended that these data elements serve as the basis for evidence-based discussions about local service issues —gaps, overlaps and under-served populations - with EO service providers. The purpose of the data analysis and local employment service network discussions is to enable the service network to plan coordinated actions that address the issues.

The program information released and shared within this document is for the largest EO programs for which consistent and reliable information is available. This information is derived from data entered by EO service providers into the Employment Ontario Information System Case Management System and has

been extracted by the ministry's divisional information management unit. Apprenticeship data has been extracted from the Apprenticeship Application and rolled up by Local Board areas.

1. Employment Services

In Durham Region in the 2021 – 2022 there are 4,645 clients who utilized Employment Services with an additional 17,098 clients who used Employment Services for information and referral. The following data figures provide an overview of clients using Employment Services in Durham Region and the outcomes.

1.1 Number of clints 2013 - 2022

Figure 35: Number of clients who utilized Employment Services in Durham Region, 2013 - 2022

Number of clients	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Number of Assisted Service Clients	8,395	8,739	7,979	8,477	7,961	8,272	8,169	4,910	4,645
Number of Unassisted R&I Clients	19,696	18,965	17,190	18,590	17,795	19,927	23,702	12,628	17,098

Source: Ministry of Labour, Training and Skills Development. 2022.

1.2 Clients by Age Group

Figure 36: Employment Services, Client by Age Group, Durham Region 2021 – 2022

Age Group	Total
15-24	1,050
25-44	2,084
45-64	1,404
65 and older	101

Source: Ministry of Labour, Training and Skills Development. 2022

1.3 Highest Level of Education at Intake

Figure 37: Employment Services, Highest Level of Education at Intake, Durham Region, 2021 – 2022

Highest Level of Education at Intake	Total
Less than Grade 9	27
Less than Grade 12	389
Completion of Secondary	1,462
Certificate of Apprenticeship / Journey Person	51
Certificate/Diploma	1,379
Applied/Associate/bachelor's degree	702
Postgraduate	236
Other (Some Apprenticeship/College/University)	398

Source: Ministry of Labour, Training and Skills Development. 2022.

1.4 Designated Groups

Figure 38: Employment Services, Designated Groups, Durham Region, 2021 – 2022

Designated Groups	Total
Indigenous Group	83
Deaf	X
Deaf/Blind	X
Francophone	125
Internationally Trained Professionals	632
Newcomer	439
Person with Disability	560
Racialized	542

Source: Ministry of Labour, Training and Skills Development. 2022.

1.5 Source of Income

Figure 39: Employment Services, Source of Income, Durham Region, 2021 – 2022

Source of Income	Total
Crown Ward	X
Dependent of OW/ODSP	33
Employed	391
Employment Insurance	1055
No Source of Income	2076
Ontario Disability Support Program	223
Ontario Works	279
Other	544
Self Employed	36

Source: Ministry of Labour, Training and Skills Development. 2022.

1.6 Length of Time Out of Employment/Training

Figure 40: Employment Services, Length of Time Out of Employment/Training, Durham Region, 2021 – 2022

Length of Time Out of Employment/Training	Total
Less than 3 months	1,442
3 - 6 months	604
6 - 12 months	761
More than 12 months	1,369
Unknown	469

Source: Ministry of Labour, Training and Skills Development. 2022.

1.7 Outcome at Exit Summary

Figure 41: Employment Services, Outcome at Exit Summary, Durham Region, 2021 – 2022

Outcome at Exit Summary	Total
Employed	3178
In Education/Training	573
Other (Independent, Unable to Work, Volunteer)	112

Unemployed	286
Unknown	496

Source: Ministry of Labour, Training and Skills Development. 2022

2. Literacy and Basic Skills

In the 2021 - 2022 fiscal year there are 982 learners who utilized Literacy and Basic Skills. The following data figures provide an overview of clients using Literacy and Basic Skills in Durham Region and the outcomes.

2.1 Clients by Age Group

Figure 42: Literacy and Basic Skills, Client by Age Group, Durham Region 2021 – 2022

Age Group	Total
15-24	341
25-44	476
45-64	153
65 and older	11

Source: Ministry of Labour, Training and Skills Development. 2022.

2.2 Highest Level of Education at Intake

Figure 43: Literacy and Basic Skills, Highest Level of Education at Intake, Durham Region, 2019 – 2020

Level of Education	Total
Less than Grade 9	33
Less than Grade 12	212
Completion of Secondary	369
Certificate of Apprenticeship / Journey Person	11
Certificate/Diploma	163
Applied/Associate/Bachelor Degree	106
Post Graduate	29
Other (Some Apprenticeship/College/University)	49

Source: Ministry of Labour, Training and Skills Development. 2022.

2.3 Designated Groups

Figure 44: Literacy and Basic Skills, Designated Groups, Durham Region, 2019 – 2020

Designated Groups	Total
Indigenous Group	34
Deaf	27
Deaf/Blind	X
Francophone	21
Internationally Trained Professionals	X
Newcomer	154
Person with Disability	207
Racialized	130

2.4 Source of Income

Figure 45: Literacy and Basic Skills, Source of Income, Durham Region, 2019 – 2020

Source of Income	Total
Crown Ward	X
Dependent of OW/ODSP	Х
Employed	313
Employment Insurance	92
No Source of Income	248
Ontario Disability Support Program	100
Ontario Works	109
Other	75
Self Employed	23

Source: Ministry of Labour, Training and Skills Development. 2022.

2.5 Goal Path

Figure 46: Literacy and Basic Skills, Learner Goal Path, Durham Region 2019 – 2020

Goal Path	Total
Apprenticeship	52
Employment	227
Independence	41
Postsecondary	584
Secondary School Credit	78

Source: Ministry of Labour, Training and Skills Development. 2022.

2.6 Outcome at Exit Summary

Figure 47: Literacy and Basic Skills, Outcome at Exit Summary, Durham Region, 2019 – 2020

Outcome at Exit Summary	Total
Employed	223
In Education/Training	332
Other (Independent, Unable to Work, Volunteer)	X
Unemployed	116
Unknown	X

Source: Ministry of Labour, Training and Skills Development. 2022.

3. Apprenticeship

Apprenticeship remains a critical issue for Durham Region, since 2012 – 2013 there has been a downward trend of new registrants in Durham Region and in the number of Certificates of Apprenticeship issued. Given the demand for individuals to work in the skilled trades there is a need to engage with all stakeholders related to the apprenticeship process to determine ways to encourage new registrants and ensure completions.

3.1 New Registrants

Figure 48: Number of New Apprenticeship Registrations in Durham Region 2012 – 2022

2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1,010	1,139	1,101	961	892	1,071	1,192	965	495	704

Source: Ministry of Labour, Training and Skills Development. 2022.

A Certificate of Apprenticeship is issued by the MILSTD and earned when an apprentice completes all requirements of the apprenticeship program for their chosen trade.

3.2 Certificates of Apprenticeship Issued

Figure 49: Number of Certificates of Apprenticeship Issued in Durham Region 2012 - 2022

201	12-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
E	596	581	434	301	445	541	384	328	199	294

Source: Ministry of Labour, Training and Skills Development. 2022.

Figure 50: Average Age of Apprentices in Durham Region 2012 – 2022

2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
28	27	26	26	26	26	27	26	26	27

Source: Ministry of Labour, Training and Skills Development. 2022.

Figure 51: Number of Apprentices by Age Group in Durham Region, 2021 - 2022

Age	Total
15-24	267
25-44	207
45-64	21
65 and older	-

Figure 52: Distribution of Durham registered apprentices

Apprenticeship	Trade #	2018-19	2019-20	2020-21	2021-22
Automotive Service Technician	310S	172	168	100	130
Cook	415A	13	14	0	0
Child Development Practitioner	620C	54	48	22	53
Electrician – Construction and Maintenance	309A	160	152	104	118

Industrial Electrician	442A	22	12	0	0
Elevating Devices Mechanic	636E	172	115	31	59
Industrial Mechanic Millwright	433A	58	40	25	21
Plumber	306A	98	67	51	91
Steamfitter	307A	0	0	0	20
Welder	456A	14	17	0	0
Truck and Coach Technician	310T	46	40	18	35
Refrigeration and Air Conditioning Systems Mechanic	313A	21	14	17	14
Residential Air Conditioning Systems Mechanic	313D	14	19	0	12
Hairstylist	332A	128	126	45	61
General Carpenter	403A	31	21	14	16
Sheet Metal Worker	308A	16	25	0	0
Auto Body and Collision Damage Repairer	310B	16	11	0	0
Arborist	444A	0	11	0	0
Instrumentation and Control Technician	447A	14	11	0	0
Information Technology - Network Technician	634C	41	0	0	0

Source: Ministry of Labour, Training and Skills Development. 2022.

Certificates of Apprenticeship Issued

Figure 53: Number of Certificates of Apprenticeship Issued in Durham Region 2012 - 2022

2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
696	581	434	301	445	541	384	328	199	294

Source: Ministry of Labour, Training and Skills Development. 2022.

Figure 54: Average Age of Apprentices in Durham Region 2012 – 2022

2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
28	27	26	26	26	26	27	26	26	27

Figure 55: Number of Apprentices by Age Group in Durham Region, 2021 - 2022

Age	Total
15-24	267
25-44	207

45-64	21
65 and older	-

Source: Ministry of Labour, Training and Skills Development. 2022.

Figure 56: Distribution of Durham registered apprentices

Apprenticeship	Trade #	2018-19	2019-20	2020-21	2021-22
Automotive Service Technician	310S	172	168	100	130
Cook	415A	13	14	0	0
Child Development Practitioner	620C	54	48	22	53
Electrician – Construction and Maintenance	309A	160	152	104	118
Industrial Electrician	442A	22	12	0	0
Elevating Devices Mechanic	636E	172	115	31	59
Industrial Mechanic Millwright	433A	58	40	25	21
Plumber	306A	98	67	51	91
Steamfitter	307A	0	0	0	20
Welder	456A	14	17	0	0
Truck and Coach Technician	310T	46	40	18	35
Refrigeration and Air Conditioning Systems Mechanic	313A	21	14	17	14
Residential Air Conditioning Systems Mechanic	313D	14	19	0	12
Hairstylist	332A	128	126	45	61
General Carpenter	403A	31	21	14	16
Sheet Metal Worker	308A	16	25	0	0
Auto Body and Collision Damage Repairer	310B	16	11	0	0
Arborist	444A	0	11	0	0
Instrumentation and Control Technician	447A	14	11	0	0
Information Technology - Network Technician	634C	41	0	0	0

Part III: Recommendations

The Community Labour Market Planning (LMP) not only provides an opportunity to access up-to-date labour market information, but it is also designed to be forward-thinking and to consider what the future holds for Durham Region. As such, this action plan and accompanying recommendations are intended to provide a forward-focused approach to accessing up-to-date labour market information.

Recommendation One: Continued research to understand new trends and their implications for Durham Region labour market

This report has identified the imbalance between the supply and demand of labour as a long-standing issue in the Canadian landscape. This issue has recently been fueled by rising retirement rates, an aging population, technological changes, and the disruption of migration flows during COVID-19. There is a need for further research to understand the impact of these issues and other new trends on the labour market. The DWA will continue to work with partners to develop a deeper understanding of new trends and issues affecting the local labour market.

DWA Role:

- Conduct key informant interviews and focus groups with community partners, service providers, economic developers, and DWA Board of Directors, to identify opportunities, gaps and challenges in the local labour market.
- Conduct comprehensive research to understand the local labour market trends and workforce development challenges in Durham Region.

Recommendation Two: Expand work with community partners to understand local needs for labour market information

The LMP is a detailed snapshot of the Durham Region labour market. It includes the most recent local labour market indicators, Employment Ontario data, local labour market intelligence gathered from employers and service providers, and other economic and occupational data. The DWA will continue to work with partners to develop a shared understanding of local data priorities.

DWA Role:

- Conduct community consultations with key stakeholders to identify the local data priorities.
- Host a labour market information session focused dissemination of DWA generated data points.

Recommendation Three: Expand work with employers and seeking their input and perspective to understand their labour market needs

The DWA will continue to work with employers through a wide variety of initiatives to develop a comprehensive understanding of their labour market needs and workforce challenges.

DWA Role:

• Conduct one-on-one interviews with key employers to better understand the workforce challenges, and their labour market needs.

Bibliography

Appendix 1: Glossary of Terms

Labour Shortage is the excess of labour demand in the labour supply in each occupation.

Job Vacancy is an unfilled position within an organization for which the employer is looking to hire. Labour demand is commonly defined as the sum of met demand (i.e., number of employed) and unmet demand (i.e. number of job vacancies).

Skilled Workers refers to highly trained, educated, or experienced segments of the workforce that can complete more complex mental or physical tasks on the job.

Labour Force (LF) is the number of civilian, non-institutionalized persons 15 years of age and over who, during the reference week, were employed or unemployed. Put differently, it is the sum of those persons deemed either employed and unemployed.

Labour Force Status explains whether an individual is employed, unemployed or not in the labour force.

Participation Rate refers to the number of labour force participants (those deemed employed or unemployed) expressed as a percentage of the population aged 15 years and over.

Not in the Labour Force (NILF) refers to members of the working age population who are neither employed nor unemployed. Retired individuals and "stay-at-home" moms and dads, or other caregivers may be examples of those not in the labour force.

Employment refers to the number of people who are employed in return for wages and other benefits. In addition, there are two broad categories of workers; those who work for themselves (self employed) and those who work for others (employees).

Employment Rate is the number of employed people as a percentage of the working age population. The rate for a particular group; for example, youth aged 15 to 24, is the number employed in that group as a percentage of the population for that group.

Unemployment: A Persons in unemployment are defined as all those of working age who were not in employment, carried out activities to seek employment during a specified recent period and were currently available to take up employment given a job opportunity.

Unemployment Rate is the number of unemployed persons expressed as a percentage of the labour force. The unemployment rate for a particular group is the number of unemployed persons in that group expressed as a percentage of the labour force for that group

Census Metropolitan Area is an area consisting of one or more adjacent municipalities centered on a population core. It has a population of at least 100,000, of which 50,000 or more live in the core.

National Occupation Classification (NOC) provides a national organizational framework for classifying occupations in the Canadian labour market. The basic principle for classification of the occupations is the nature of the work. Occupational groups are determined according to the tasks performed, duties and responsibilities in the job description. It has a four-level hierarchical arrangement. The NOCs contains

broad occupational categories (one-digit), major (two-digit), minor (three-digit) and unit groups (four-digit).

North American Industry Classification System (NAICS) is an industry classification system developed by the statistical agencies of Canada, Mexico and the United States. NAICS is a comprehensive system encompassing all economic activities in Canada and is important to the study of the labour market. NAICS also has a hierarchical structure. At the highest level, NAICs divides the economy into 20 sectors. At lower levels, it further distinguishes the different economic activities in which businesses are engaged. The NAICs numbering system has adopted a six-digit code. The first two digits designate the sector, the third digit designates the subsector, the fourth digit designates the industry group and the fifth digit designates the industry. The sixth digit is used to designate national industries. A zero as the sixth digit indicates that there is no further national detail.

Appendix 2: Literature Review:

The COVID-19 pandemic has significantly affected economic activities in Canada over the past two years, as public health interventions aimed at controlling the spread of the virus, such as border closures, lockdowns, and social distancing, have significantly reduced economic activity. To illustrate this point, a number of important research literature has examined the impact of the pandemic on the labour market and workforce. For example, research by Laura and colleagues (2021), found that among workers ages 55 and older, the likelihood of leaving work over the course of a year rose by 7.6 percentage points, a 50-percent increase over the pre-pandemic rate. In addition, women, those without a college degree, Asian-Americans, and those in occupations less amenable to remote work saw disproportionate impacts. Moreover, the likelihood of retiring increased by only 1 percentage point, with retirements concentrated among those over age 70.

In 2021, Statistics Canada issued, the COVID-19 in Canada: A One-year Update on Social and Economic Impacts report. This report found that the historic declines in output, employment and hours worked that resulted from the economic shutdown in the spring of 2020 affected virtually all sectors of the economy. Accordingly, at the end of 2020, 1.1 million workers were impacted by COVID-19 through employment losses or substantial reductions in hours worked. On the other hand, while businesses that provide accommodation and food services remained severely impacted, the number of active businesses has declined substantially in most sectors, largely reflecting closures among small firms.

On the organizational side, the Labour Market Information Council (LMIC) produced the Pandemic and Emerging Labour Market Information Gaps report, in November 2020. This report identified several important labour market information gaps that have emerged during the pandemic. For example, this report found that systems for transmitting raw administrative data into usable information are slow. In addition, this report found that tracking labour market outcomes by demographics such as ethnicity and gender identity will help support the long road to recovery in an inclusive manner (Amery, 2020).

In the same vein, a report issued by the Blueprint and Future Skills Centre in 2021, considered promising practices in breaking down barriers to career guidance to highlight areas for action and evidence gathering on the part of governments and organizations. This report found that career guidance systems must be designed with a whole-of-person lens. To fully benefit from career guidance, people with complex barriers may need access to other, complementary supports. Career services that seek to support a "whole" person, rather than just one challenge in isolation, can help prevent clients from falling through the cracks.

Equity, Diversity, and Inclusion Issues

Women, persons with disabilities, visible minorities, immigrants, 2SLGBTQI+, and Indigenes typically experience multiple challenges and barriers to employment and are more likely to face discrimination in the workplace. A report by Feenan and Madhany (2021) indicated that immigrants with higher international educational attainment, as well as those with more international employment experience, tended to have lower rates of employment in Canada than those with lower levels of international educational attainment. For those with one to five years of experience, 83 per cent were employed, compared to 72 per cent of those with 15 or more years of international work experience.

Similarly, a study by Milan and Gagnon (2020) found that Black women (66.1 per cent) had the highest participation rate in 2016 compared with South Asian (59.6 per cent) and Chinese (55.9 per cent) women

as well as the rest of the female population (61.2 per cent). However, Black women were underrepresented in many occupations usually requiring a university degree. Additionally, this study found that Chinese and South Asian women were overrepresented in a number of professional occupations in 2016. Computer and information systems professionals in 2016, 15 per cent were Chinese and 11 per cent were South Asian women, more than double women in professional occupations overall (6 per cent and 5 per cent, respectively).

Likewise, a report by Burlock (2017) found that people with disabilities were less likely to participate in the labour force compared with people without disabilities. A similar proportion of women and men with disabilities aged 25 to 54 participated in the labour force in 2011 (61.3 per cent and 63.4 per cent, respectively). This was not the case among same-aged women and men without disabilities as women were less likely to have participated in the labour force (83.4 per cent versus 92.8 per cent, respectively). In addition, this report found that people with disabilities often work in part-time jobs and work more precariously than the average worker.

Moreover, a report by Zou and colleagues (2022) found that two in five Indigenous employees experience discrimination in the workplace because of their Indigenous identity. This rises to one in two for First Nations employees. Indigenous women are more likely to experience discrimination in the workplace than Indigenous men (36 per cent of men vs. 45 per cent of women).

Appendix 3: Skills for Success & Employability Skills

1. Skills for Success

Skills for Success, formerly known as Essential Skills, has been updated to include two new skills and revised versions of existing skills (Palameta, et al, 2021).

- Document Use is now embedded in Reading, Writing and Numeracy;
- The scope of Computer Use has been expanded to Digital Skills, which include different types of digital devices and platforms; Research report to support the launch of Skills for Success: Structure, evidence, and recommendations: Final report Social Research and Demonstration Corporation 2
- Oral Communication has been changed to Communication to include broader concepts, such as non-verbal communication;
- The scope of Working with Others has been expanded to Collaboration, which includes inclusivity and respect for diversity;
- Thinking has been changed to Problem Solving, with components of Finding Information, Critical Thinking, and Decision Making added to the original narrower Problem Solving, as this resonated more with users and is more focused; and
- Adaptability and Creativity and Innovation have been added as two new skills, with Continuous Learning embedded in Adaptability.

The Social Research and Demonstration Corporation (SRDC) is defining these skills as following: (Palameta, et al, 2021)

- Reading: is the ability to find, understand, and use information presented through words, symbols, and images.
- Writing is the ability to share information using written words, symbols, and images.

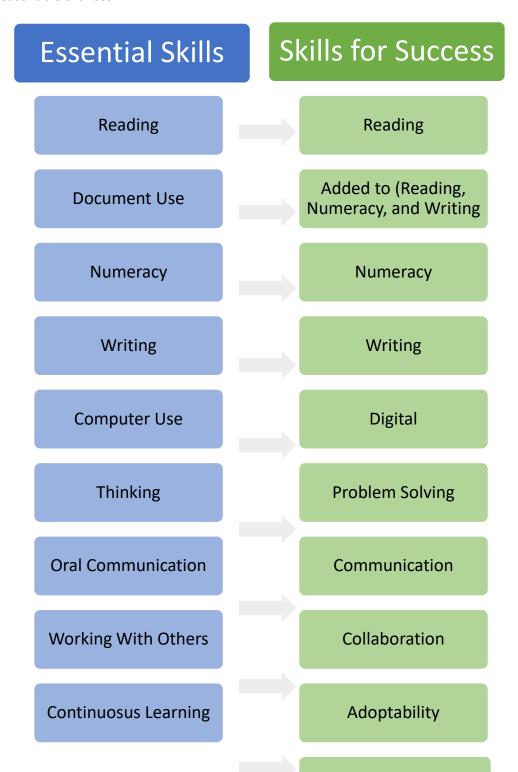
- **Numeracy** is the ability to find, understand, use, and report mathematical information presented through words, numbers, symbols, and graphics.
- **Digital** is the ability to use digital technology and tools to find, manage, apply, create and share information and content
- **Problem solving** is the ability to identify, analyze, propose solutions, and make decisions. Problem solving helps you to address issues, monitor success, and learn from the experience.
- **Communication** is the ability to receive, understand, consider, and share information and ideas through speaking, listening, and interacting with others.
- **Collaboration** is the ability to contribute and support others to achieve a common goal.
- Adaptability is the ability to achieve or adjust goals and behaviours when expected or unexpected change occurs. Adaptability is shown by planning, staying focused, persisting, and overcoming setbacks.
- **Creativity and innovation** is the ability to imagine, develop, express, encourage, and apply ideas in ways that are novel, unexpected, or challenge existing methods and norms

2. Employability Skills

Employability skills are critical skills needed in the workplace – whether you are self-employed or working with others. These are the soft skills individuals need to enter, stay in and progress in the workplace.

- Motivation is the desire to set and achieve high standards on the job. Fundamentally, motivation
 speaks to the individual's desire to be an excellent employee; it involves showing a willingness to
 expend the effort needed to excel. This can include striving for specific work standards, but also high
 personal standards associated with goal setting, showing initiative, and doing one's best and without
 supervision.
- **Accountability**: A person's willingness to admit mistakes, accept responsibility for them, learn from mistakes, accept feedback constructively, monitor the quality of their work when unsupervised; and display an honest and ethical approach to work and others in the workplace.
- Attitude: The way an individual shows or expresses their feelings about a person (i.e. supervisor, coworker), work activity, event or ideal. They can show their feelings verbally (tone, inflection, whining, etc.) or behaviorally (body language, inappropriate physical actions, etc.). The focus is not on internally held attuites
- **Time Management:** A person's ability to set and follow priorities, properly follow schedules for arrival, breaks, etc., and stay on task in an efficient manner. The latter includes meeting deadlines and communicating efficiently with others.
- Stress Management: A person's ability to experience workplace stress without it impacting on their performance or coworkers. It also includes the person's ability to keep personal stress out of the workplace. It requires that an employee seek help for stress issues in a timely manner.
- **Presentation:** How a person appears to others in terms of their dress and adornments, hygiene, etiquette, manner and language.
- Teamwork: A person's ability to work cooperatively with others; handle conflict and anger appropriately, communicate effectively, be empathetic and respect differences (cultural, religious, gender, etc.)

- Adaptability: A person's ability to react constructively to both anticipated and unanticipated changes
 in the workplace, take responsibility for learning needed to adapt to change, and adjust how they
 interact with others based on previous experience or the formality of the situation.
- **Confidence:** Having a belief in one's own competence and the ability to express one's own perspective to others. It includes being able to function in uncertain situation, being appropriately assertive and taking reasonable chances.



Creativity & Innovation

Appendix 4: DWA Research Strategy

In 2017, the DWA released its research strategy. The strategy has served as the foundation and guiding principle for all research undertaken by the organization since then. Since 2017, several of our research projects have revealed important gaps in our work. The Skilled Trade report noted that the racialized individuals, newcomers, immigrants, and persons with disabilities had challenges attaching and remaining employed in skilled trades in Durham Region. The DWA's Post-Pandemic Recovery Report noted that the same job seekers faired poorly during the pandemic's darkest days and continue to struggle in the labour market. A review of the DWA's existing research strategy revealed a weakness that did not include an EDI lens.

Equity, diversity, and inclusion in research is a continuous process of cultural transformation that requires leadership in communication, awareness-building (creating inspiring conversations) and recognizing excellence.

Other larger research bodies have recently updated their research strategy and the DWA reviewed them, taking inspiration from Dalhousie University, the University of Ottawa and Qualtrics. The revised research strategy is built on these sources. It takes much of our research strategy from the Natural Science and Engineering Research Council of Canada (NSERC) EDI research strategy committed to increasing equitable and inclusive participation in the research.

The DWA believes a research strategy is a living document and wants to create an inclusive research strategy, ensuring all Durham Region residents are included in the Labour Market Information (LMI) collected, viewed, actioned and future research is collected without unconscious bias. Barriers faced by underrepresented and marginalized groups are reduced or removed.

This plan includes the following:

- Removes as much as possible biased norms and stereotypes
- Options for consulting an EDI expert to review materials
- Expands the applicability of research findings and new technologies across a broader segment of society
- Strategies to mitigate biases by conducting inclusive research and improving technologies
- Research outcomes that fairly benefit communities most impacted by the research
- A formal complaints management process

Values

- Equity, Diversity, and Inclusiveness celebrate diversity in culture, language, gender, race, ethnicity and other forms of identity and experience in research.
- Equality of rights and non-discrimination against people based on racism, sexism, ableism, homophobia, biphobia, transphobia, ageism, or other grounds established by the Ontario Human Rights Code.

Best Practices/Strategies

Consider the use of EDI approaches in the overall design of the research projects; follow the lead of Indigenous, Black-led, and ethnocultural organizations in developing best practices for data use, as the

potential collection, sharing, and use of administrative data disproportionately impact these communities.

Support Community-Based Research and Other Research Initiatives

The DWA will examine LMI, work with underrepresented groups, and engage underrepresented and disadvantaged groups in research to reduce disparities and make research relevant to their needs.

Common Language

The DWA research strategy will use the following definitions:

- EQUITY people of all identities are treated fairly. Equity is removing systemic barriers and biases, ensuring all individuals have equal opportunity to access and benefit.
- DIVERSITY is the conditions, expressions, and experiences of different groups.
- INCLUSION ensures that all individuals are valued and respected for their contributions and equally supported. Source: Social Sciences and Humanities Research Council Underrepresented Groups
 - Women
 - Indigenous peoples
 - Visible minorities /racialized persons
 - 2SLGBTQI+ community
 - Persons with disabilities

Unconscious bias is an implicit attitude, stereotype, motivation, or assumption that can occur without knowledge, control or intention. Unconscious bias results from one's life experiences and affects everyone. Everyone carries implicit or unconscious biases. Examples of unconscious bias include gender, culture, race/ethnicity, age, language, and institutional biases. Decisions based on unconscious bias can compound over time to significantly impact the lives and opportunities of others affected by the decisions one makes. Anti-racist approaches that consider systemic racism and the <u>intersectionality</u> of different identities in the conceptualization of the research (e.g., age, culture, disability, education, ethnicity, gender expression and gender identity, immigration and newcomer status, Indigenous identity, language, neurodiversity, parental status/responsibility, place of origin, religion, race, sexual orientation, and socioeconomic status)

The following are steps that can be practiced mitigating bias:

- Stereotype replacement: Think about a stereotype you hold and consciously replace it with accurate information.
- Positive counterstereotype imaging: Picture someone who counters a traditionally stereotyped role.
- Perspective taking: Take the perspective of someone in a stereotyped group.
- Individuation: Gather specific information about an applicant to prevent group stereotypes from leading to potentially inaccurate assumptions.

Complaints Management

It is the policy of the Durham Workforce Authority to settle all complaints or disputes in a civil and timely manner. All DWA surveys include a preamble with an opt-out option and an email link to the Executive Director to express concerns. At that point, the DWA complaints policy will take over:

Any individual, survey respondent, or research respondent must provide a written complaint to the Executive Director within five business days. The Executive Director will endeavour to provide a written response within three business days of submitting the complaint. If unresolved, a written complaint must be sent to the DWA Board of Directors within five business days of receiving the Executive Director's response. The Board will meet with the Executive Director before responding to the complainant. The Board of Directors will endeavour to provide a written response within ten business days of receiving the complaint. The Board's decision shall be final.

Outcomes

An equitable, diverse, and inclusive research environment that supports excellent, innovative, and impactful research. All Durham Region community members can participate in the study, regardless of their situation. Diversity allows for differing information and perspectives. Inclusion creates an environment for open discussion and debate.

The EDI research strategy will be equitable, diverse, and inclusive research, critical for research excellence, ensuring it is locally relevant and impactful to advance knowledge and understanding and to respond to Durham Region's LMI needs.

Appendix 5: Guiding questions for incorporating EDI considerations in your research

Guiding Questions

Are all groups represented across all levels of research?

What is the impact of implicit bias in the team environment?

Does your research involve racialized and underrepresented or disadvantaged groups?

Who benefits from the research findings?

Have you considered which populations might experience significant unintended impacts (positive or negative) because of the research?

Have you considered the accessibility needs of participants involved in the research?

Does your proposal consider the different forms of support required (e.g., financial, logistical, cultural, linguistic) to ensure that the individuals or communities involved in the research are able to participate in it meaningfully?

Does your literature review address relevant EDI considerations?

What keywords could be used in your literature review to gain a deeper and broader knowledge of who might or might not be impacted by or contribute to the research?

Are certain diversity factors and/or intersections known to affect the phenomenon of interest? What are the relevant knowledge gaps?

Have previous studies failed to incorporate relevant diversity factors or omitted to investigate their intersections?

How will your research questions and the subsequent findings from your study apply to the needs or experiences of various groups?

Who should be consulted about the needs and wishes of the group under study (subjects or users)? What contextual factors are relevant and important, and what may be overlooked without a conscious, intersectional integration of these considerations?

Have you made assumptions regarding certain diversity factors? Are these based on empirical evidence?

Study Design

Will members from the population/community of interest be invited to help shape the study's objectives? Which diversity factor(s) could be embedded to strengthen the study?

Why would you consider or not consider these factors and their intersections?

What is your position relative to the research problem's context or the subjects?

What biases related to identity, privileges and power imbalances could impact the study? How will they be mitigated?

Does the proposed research follow relevant protocols and/or best practices on how, why and by whom research is conducted with relevant or impacted communities and how knowledge is accessed and shared (such as in Indigenous communities)?

In cases that involve a research site, have you determined which Indigenous government or community has authority over or interests in the research site?

Have you genuinely engaged with the community and considered their research priorities and interests in the co-production of knowledge (even if you are from the community)?

Are there opportunities for reciprocity in the study's design, such that to benefit both the community and the research ecology

Data collection

How will you obtain information for each diversity factor under consideration?

How will privacy be protected?

How will you ensure that the research participants reflect the diversity categories in the design?

If the analysis is based on existing data sets, is there potential for bias due to the cultural and institutional contexts in which the data were generated?

For Indigenous research, how will data collection and monitoring be conducted using established guides for/by Indigenous Peoples?

How will bias be monitored, mitigated, and recorded?

Do EDI considerations impact relations between those conducting the research and those participating in it in ways that affect data collection?

How will this be identified and mitigated?

Analysis and interpretation

Have you presented your data disaggregated by diversity factors?

Have you evaluated whether diversity factors and/or their intersections impact outcomes? Statistically, evaluate your data to determine whether the magnitude of effects is different for each diversity factor and their intersections.

If diverse groups are involved in the research, will they participate in the interpretation of the data and the review of research findings before the completion of the proposed research?

If the results are inconclusive, will they be reported in a disaggregated format for future studies?

Are you applying your research findings to the population when your method and design were limited to specific groups?

Did you report the diversity factor(s) used in the study to ensure that experiments are reproducible, and findings are not over-generalized?

If relevant diversity factors were not included in the study, did you acknowledge that it is a limitation of the study?

Did you discuss the implications of the lack of such analyses on interpreting the results? Dissemination of results

What means of dissemination will be most effective in reaching those who will use and/or could benefit from the findings?

How will inclusivity be integrated during dissemination? Will accessible formats be used?

Will anyone who participated in the research receive a summary of the findings and/or be invited to a presentation about the work?

Does the dissemination plan consider the language of use (i.e., English, French or other appropriate languages) depending on the groups identified?

Does the dissemination material consider gender-sensitive and inclusive communication (e.g., gender-neutral language or unbiased content)?

Are the dissemination strategies the product of collaborative efforts with diverse inputs, or have they been envisioned with a narrower focus?

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