THE HARRIS CENTRE Memorial University

MEADOWS

Big Data, Big Ideas:

A Project Based on Community Driven Analysis For Regional Economic Development

Municipal Fact Sheets

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Municipalities Newfoundland and Labrador

Disclaimer

Partner municipalities are more than welcome to share and distribute the fact sheets that have been prepared by the Harris Centre's Regional Analytics Laboratory (RAnLab), as needed, to support their planning activities. It is important to note, however, that all data and graphics have been prepared and organized to meet the specific and agreed upon goals of the "Big Data: Big Ideas" project with Municipalities Newfoundland and Labrador. As such, it is important that these fact sheets be distributed and used whole; the data and graphics cannot be selectively extracted without impacting the integrity and contextual analysis of the linked data modelling.

All of the data used throughout this analysis has been sourced from either Statistics Canada or the Newfoundland and Labrador Statistics Agency, supplemented by observed localized data where possible. All models and projections have been created by RAnLab. While every effort has been made to utilize municipality-level data as much as possible, in cases where data is suppressed or not available the local "Big Data: Big Ideas" project subregion geography has been used as indicated.

Please note that the bulk of the data used in the analysis and projection modelling was gathered prior to the onset of the COVID-19 pandemic; extreme impacts on such factors as the business registry and employment listings may not be reflected at the time of publication. However, the models and projections developed in this study should have a fundamental role to play in contextualizing the various demographic and economic impacts that the COVID-19 pandemic has had on local areas around the province as data is released into the future.

Table of Contents

Part One:

Population, Demography & Economy

Population Projections

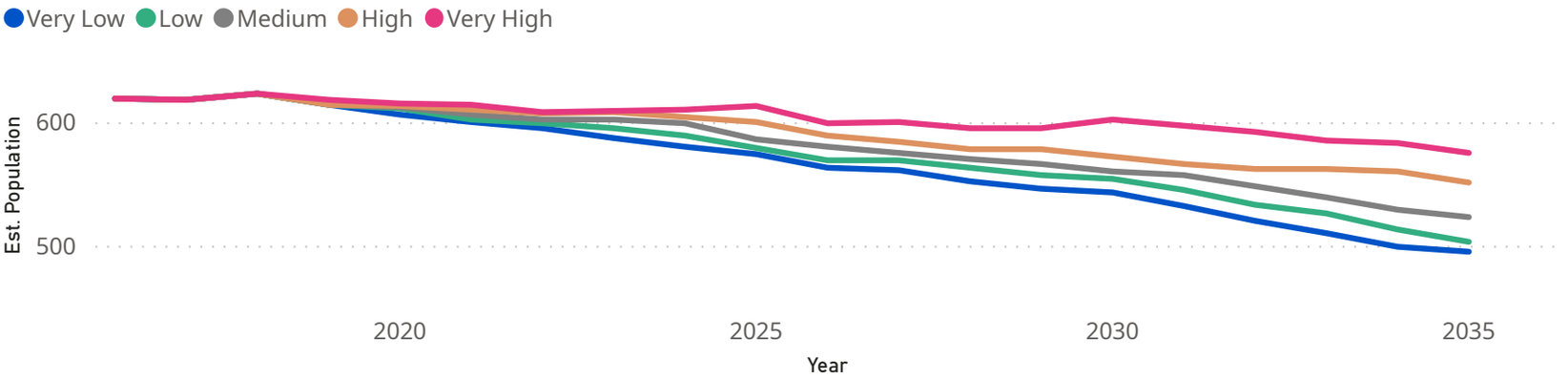
Meadows

The Harris Centre's RAnLab provides demographic and labour market information that focuses on the specific, regional nature of the province. Most available projections in Canada are divided by province, and therefore don't draw attention to the specific differences that can exist even within these borders. For example, information that might relate to NL's largest cities does not apply to its smallest communities. This led RAnLab to develop a new approach to demographic modelling. In terms of migration, RAnLab has looked at over 20 years of data to contextualize future trends. Based on past trends, migration will occur between the **very low** and **very high** estimates **95%** of the time.

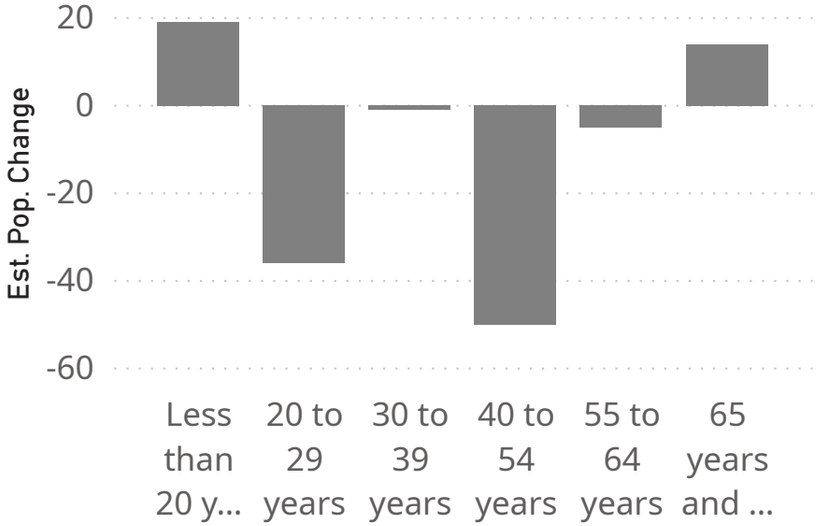
This approach uniquely uses past trends to judge future possibilities rather than 'locking in' to paths of growth or decline. If recent migration patterns continue into the future then outcomes will be closer to the **'grey' (medium) line**. Population targets beyond the **'pink' or 'blue' lines** are associated with migration patterns not recently seen in the area**.**

The spread of the lines indicates **uncertainty**: a tighter spread suggests higher confidence (i.e. migration patterns have been very stable). We can generally be **more certain** about trends for **less mobile** cohorts such as seniors (65+) and **less certain** about **more mobile** cohorts such as young workers (20-34).

Municipal Estimates of Total Population by Model



Estimated Change in Municipal Population by Age Cohort, 2016-2030 (Medium Est.)



Municipal Estimates of Population by Model and Age Group (Medium Est.)

Pop. Model (2030)	0 to 19	20 to 64	65 plus	**Total**
Very Low	105	259	180	**544**
Low	108	264	183	**555**
Medium	109	268	184	**561**
High	112	275	186	**573**
Very High	116	299	188	**603**

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Data Source: Statistics Canada, 2016 Census of Population; Newfoundland and Labrador Statistics Agency

Demographic Age Structure — Meadows

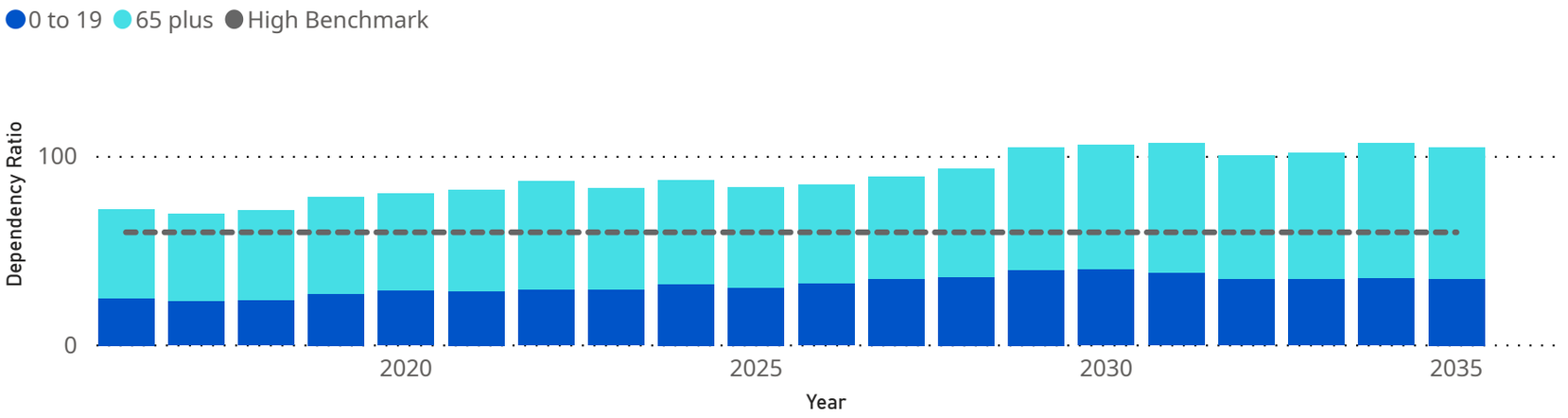
Statistics Canada defines the demographic dependency ratio as a measure of the size of the population in 'dependent' age cohorts in relation to the size of the working age population (who theoretically provide social and economic support).

The dependent age groups are: [i] **youth 0 to 19 years** and [ii] **retirees 65+ years**. The ratio is expressed as the "number of youth or retirees" for every 100 workers aged 20 to 64 years.

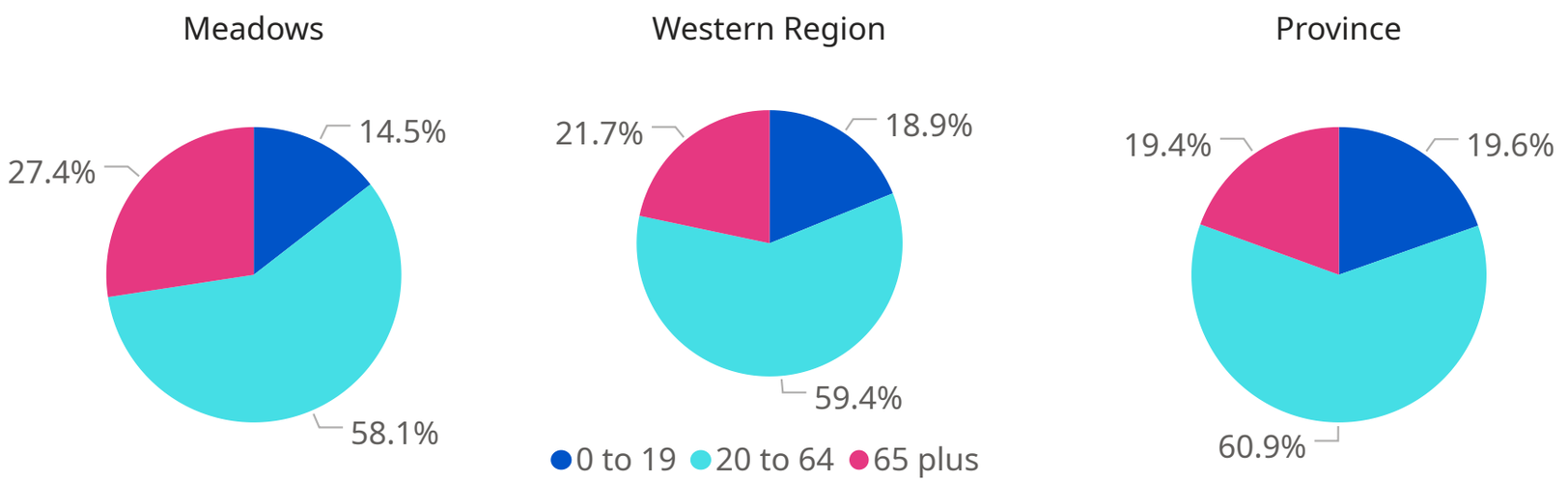
The combined (**youth + seniors**) value for Canada in 2016 was **48.24**. When this value exceeds **60+** it is considered high and there will be increased demand as well as pressure on resources to provide services for the dependents.

Areas with **high 65+** and **low 0 to 19** Future Projected Dependency Ratios may need to explore policies that either attract migrants or increase existing worker productivity to ensure overall economic activity levels do not decrease.

Projected Municipal Age Dependency (Medium Est.)



Observed Demographic Age Breakdown (2016)



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Data Source: Statistics Canada, 2016 Census of Population; Newfoundland and Labrador Statistics Agency

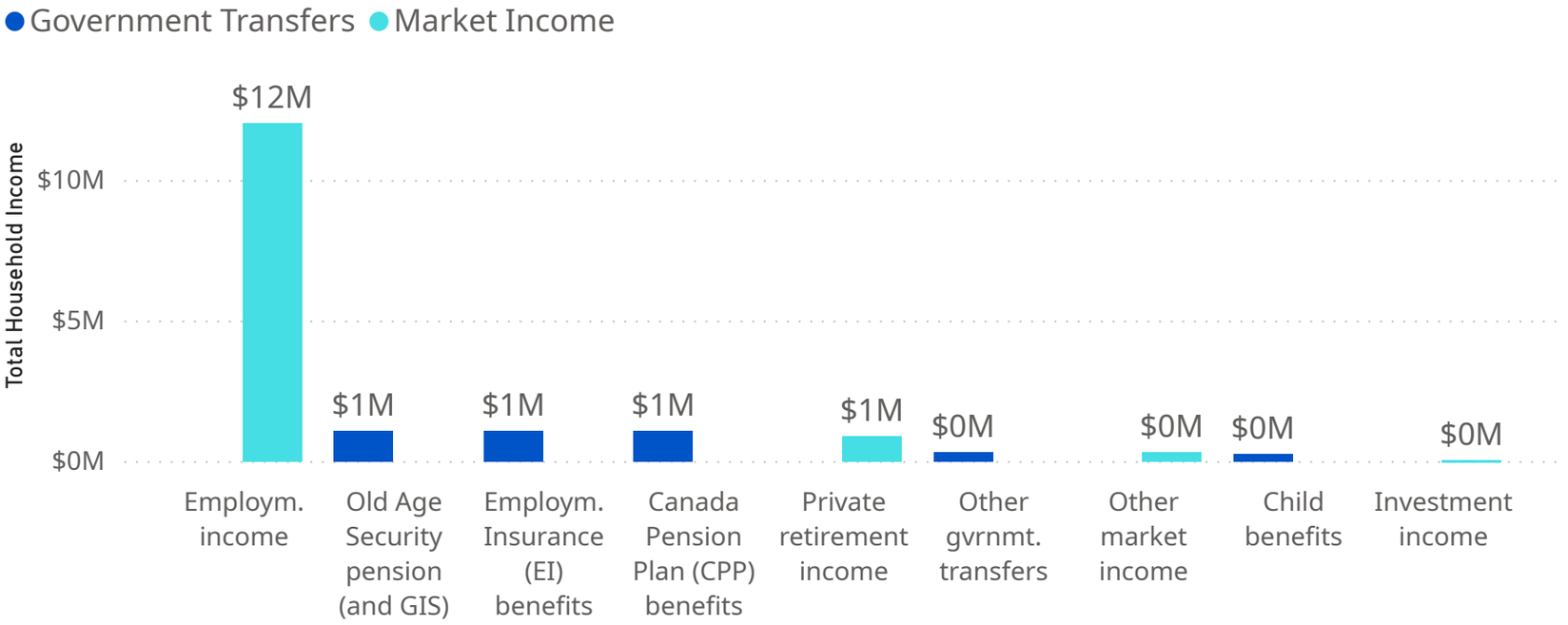
Income Source & Distribution Meadows

Household income is reflective of the economy of an area. Income source provides information of the well-being of a municipality's economy and its dependency on government transfers, while income levels have implications for the nature and viability of demands for housing, retail and service demands, amongst other things.

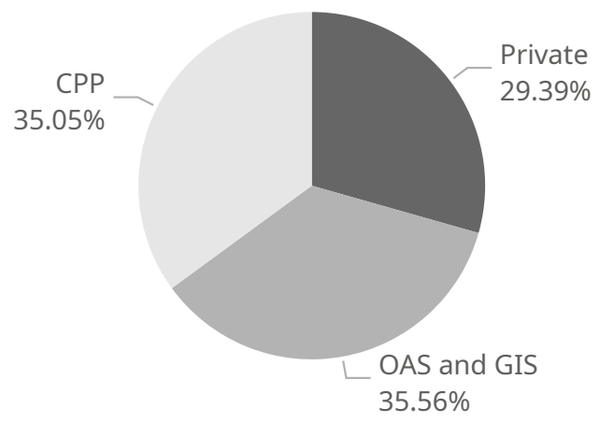
Outcomes for seniors vary considerably due to their income. Depending upon the circumstances, the proportion of seniors reliant upon old age security (and the guaranteed income supplement) may have increased need for affordable housing and services than other groups, for example.

According to the Census, Newfoundland and Labrador had a median household income of **$67,272** in 2016.

Municipal Household Income Source Breakdown (2016)



Municipal Retirement Income Breakdown (2016)



Municipal Household Income Level Breakdown (2016)

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Data Source: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue nos. 98-400-X2016120 & 98-401-X2016055

Workforce Overview

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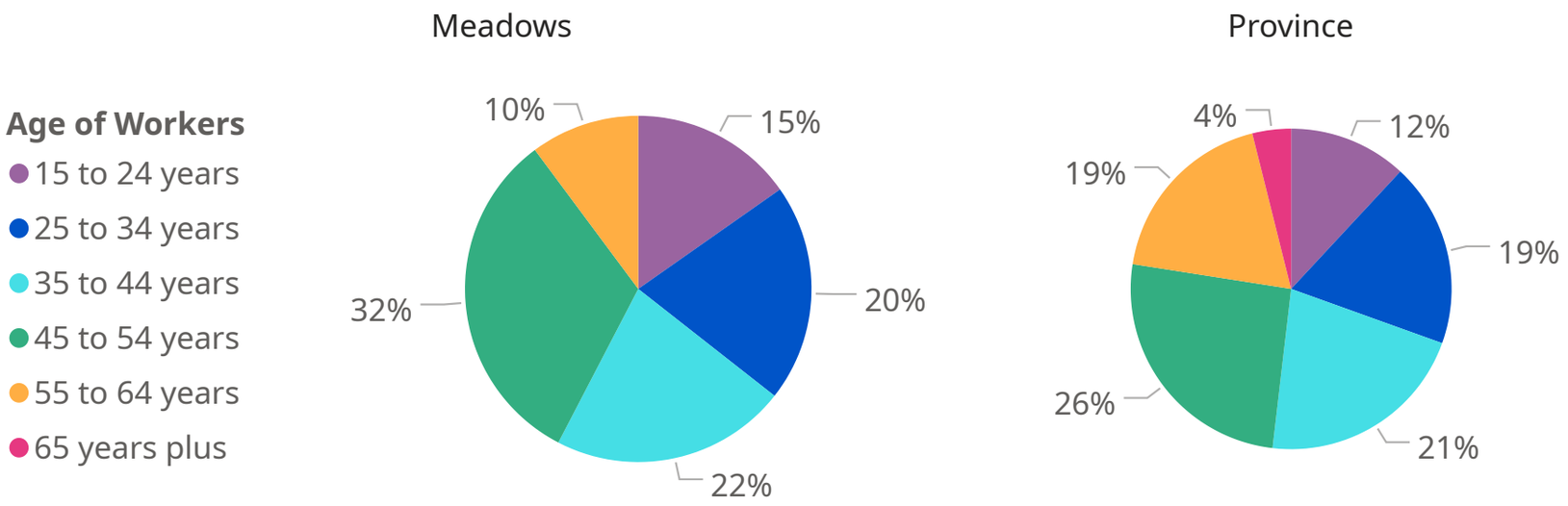
The composition of workforces vary considerably across the province. Areas with relatively more older workers may face greater challenges in attracting or retaining replacements, while those with more high-skilled workers may be better positioned for adapting to shifting technology and skills.

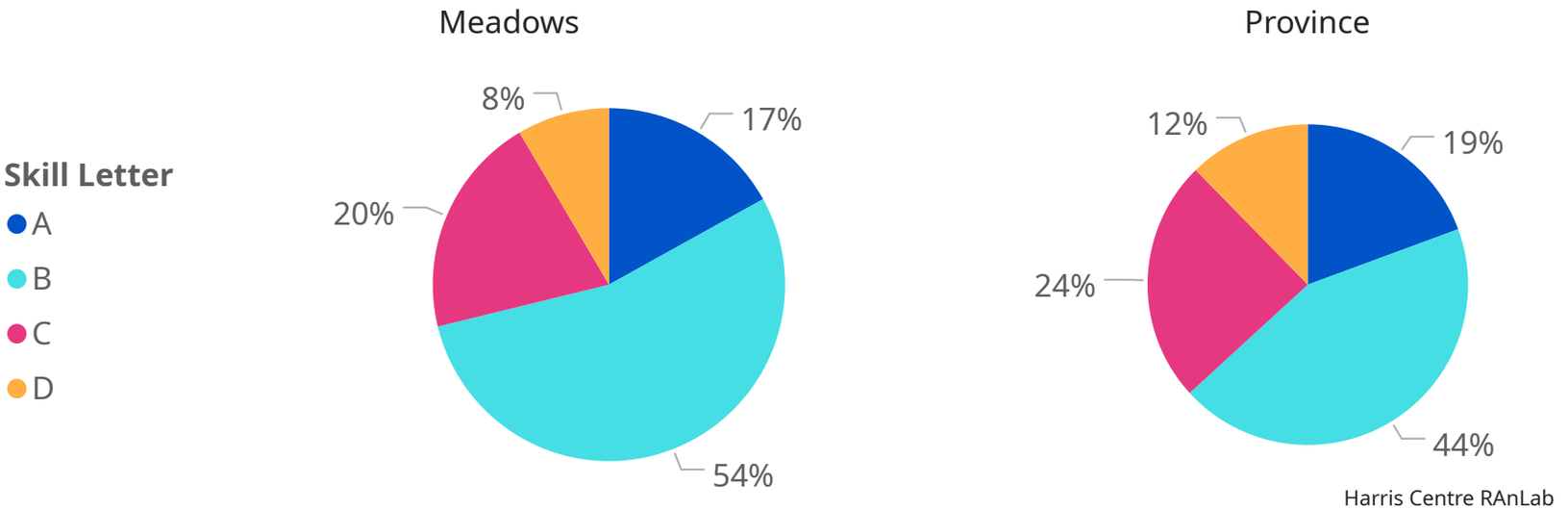
In this case, skills are based on Statistics Canada definitions where:

[1] Skill A refers to a class of workers and related occupations that have a university education,
[**2] Skill B** refers to those workers whose education and training is primarily obtained through colleges and apprenticeships,
[3] Skill C includes workers who have a high school education that is associated with some occupation specific training and
[4] Skill D jobs are related to on the job training whereby the workers may or may not have completed high school.

Labour Force Age Breakdown (2016)



Labour Force Education Level Breakdown (2016)



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Data Source: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016365

Economic Connections

Meadows

Connectivity between places refers to the degree to which places are connected in terms of people, goods/commodities and services. These indicators are an efficient way to measure both a region's structure and the role of each constituent municipality.

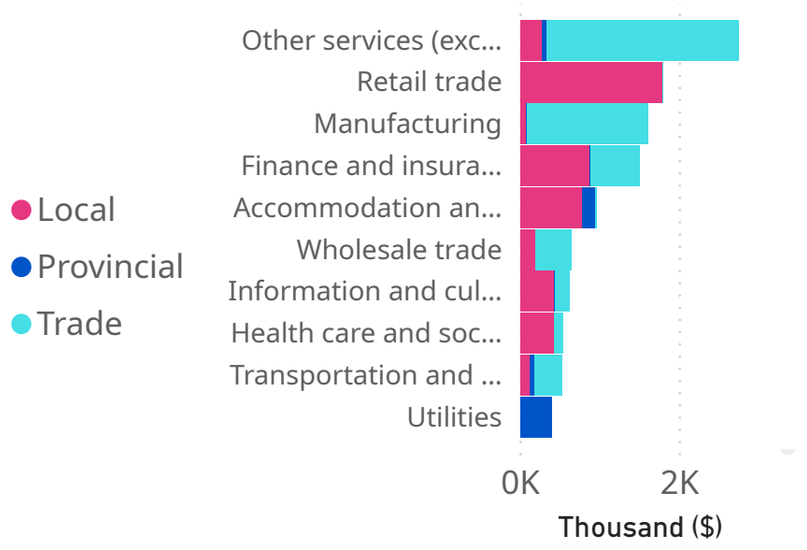
When compared to total population, net daytime population is a way of measuring a place's role in a regional structure. It is defined as the ***population of a place plus the in-commuters minus the out-commuters.*** Municipalities with a **Positive % difference** vs. total population may contain opportunities for businesses focused on consumer services, while the smaller market may present challenges for those with a **Negative % difference**.

The supply chain represents the value linkages (network) between industries and their suppliers required to produce and distribute products to another industry or consumer. Participants in a supply chain include producers, vendors, warehouses (transhipment), transportation, distribution centres and retailers. Everything else being equal, the **higher local %**, the more spin-offs are retained locally.

Net Daytime Population (2016)

--	Meadows		
Destination Municipality	Top (Out) Commuting Flows	Daytime Population	% Difference, Daytime vs. Total Population
Corner Brook	140	22930	15.69%
Irishtown-Summerside	25	1125	-20.49%
Meadows		455	-26.61%

Top Industry Flow Sources (2019 Est.)



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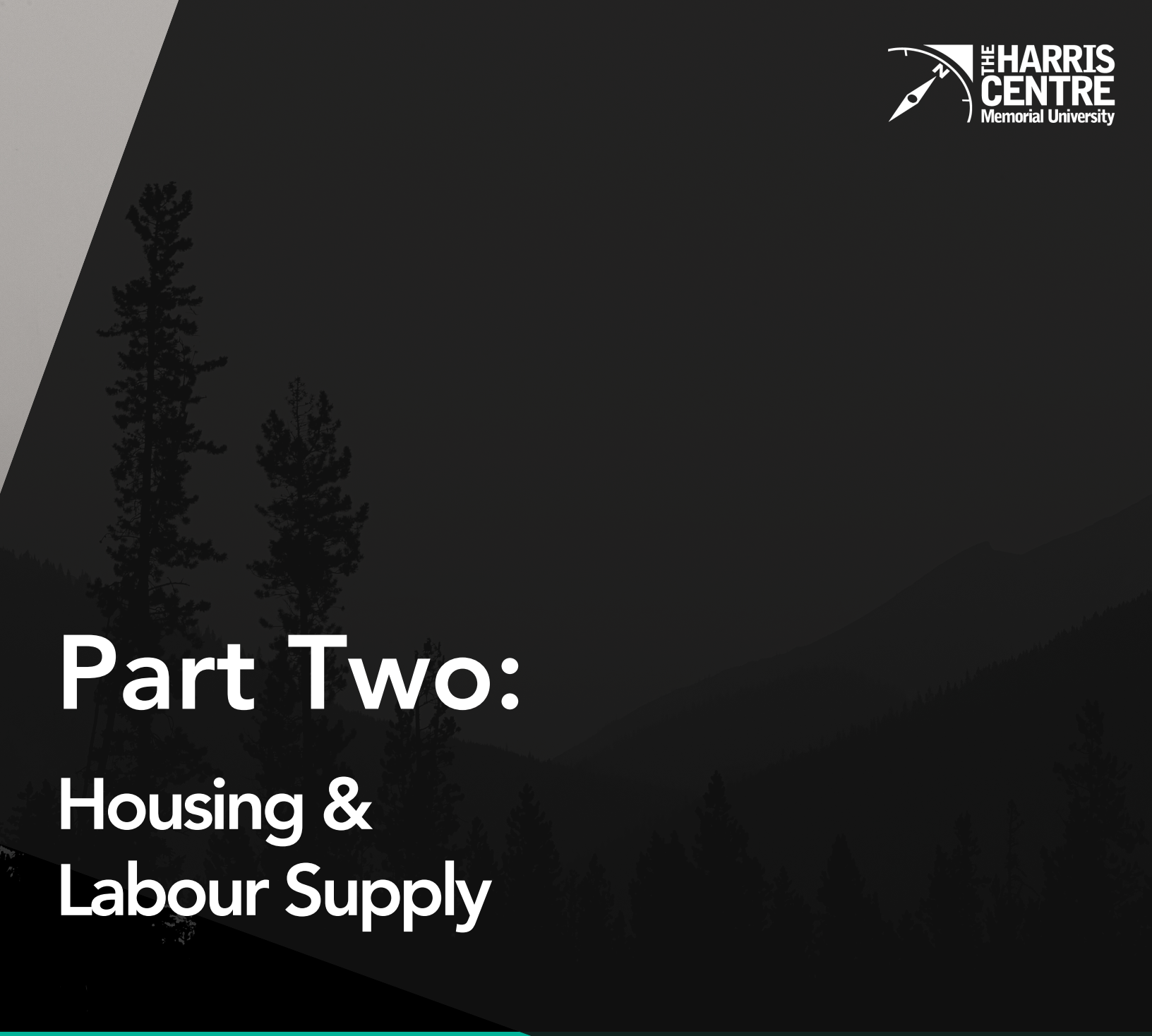
Data Source: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016325; Statistics Canada, Table 36-10-0478-01 Supply and use tables, detail level, provincial and territorial (x 1,000)



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Part Two:

Housing & Labour Supply

Housing Data Overview: Core Housing Need

Meadows

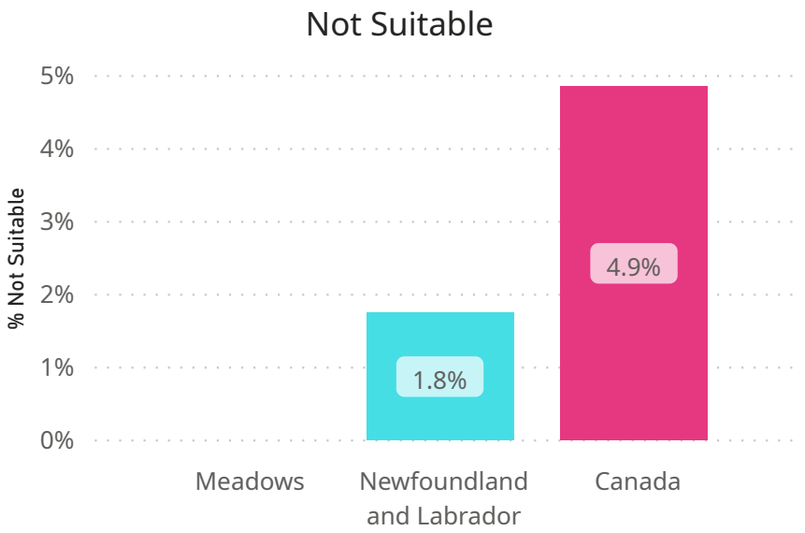
Core Housing Need is a set of indicators developed by the Canada Mortgage and Housing Corporation to identify those who need housing assistance to renovate or move. It is primarily based upon measures of:

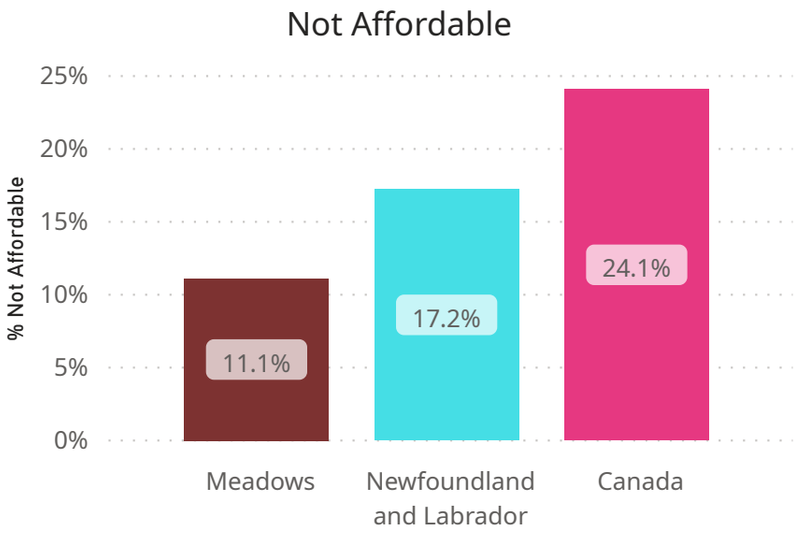
- Adequacy (need for repairs),
- Suitability (need for more bedrooms), and
- Affordability (need for more affordable housing options).

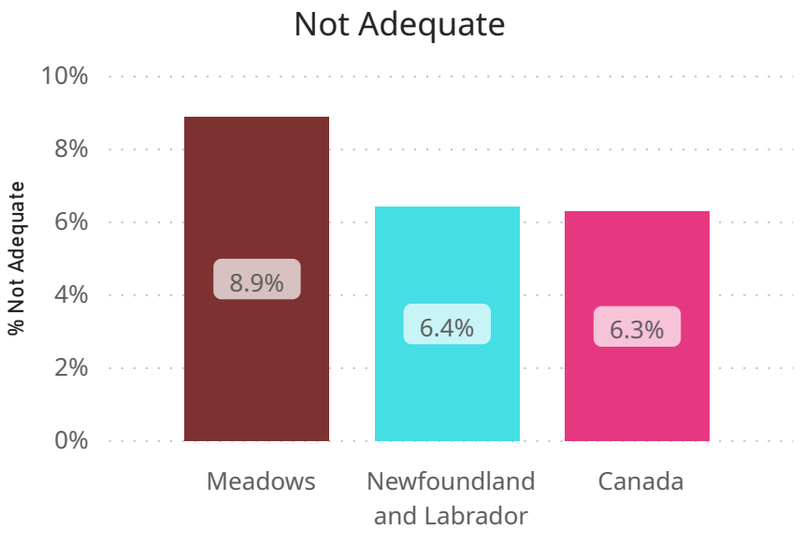
While usually sufficient as an overview, these indicators can struggle to identify specific localized issues unless combined with other indicators.

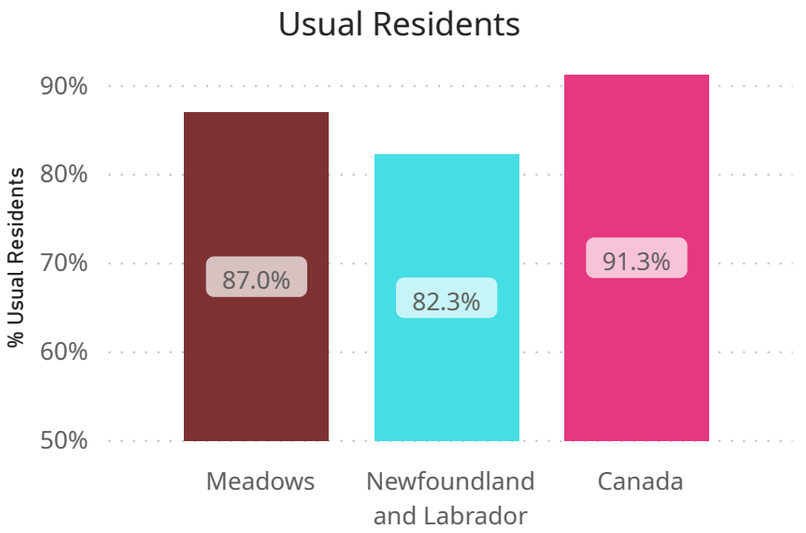
Policies dealing with nuanced issues such as low housing supply or vacancy rates and degrees of homelessness, while often related to core housing need, can benefit from more direct observation. "Private Dwellings Occupied By Usual Residents" is one such complementary indicator. Dwellings that are not occupied by usual residents are either empty or occupied temporarily (i.e. cottages), so a very low figure may indicate low vacancy or flexibility, and a robust figure may be helpful for large transient populations.

Core Housing Need (% of all Households) (2016)









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Data Sources: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue nos. 98-400-X2016231 & 98-401-X2016055

Housing Data Overview: Local Context Data

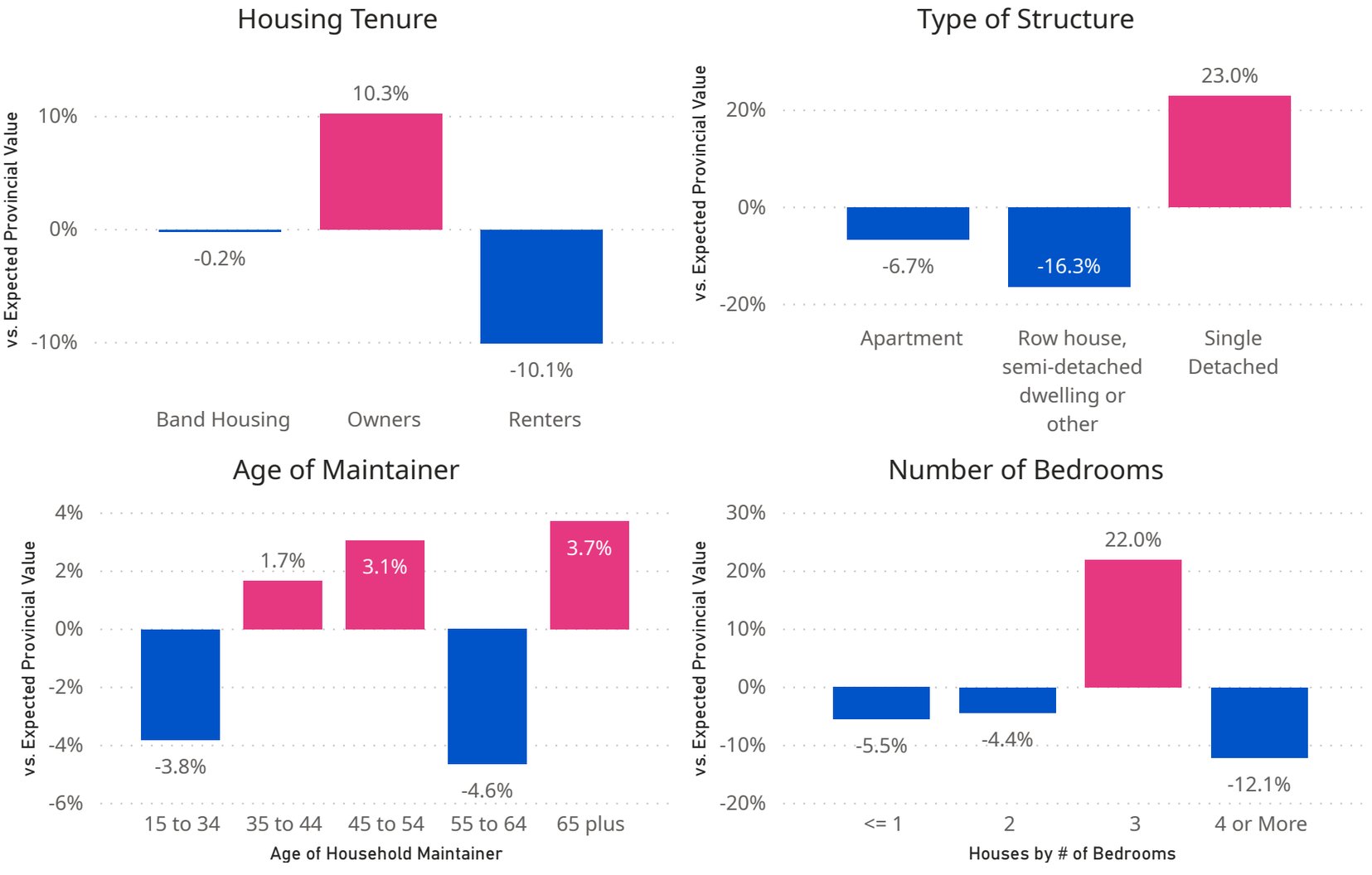
Meadows

Elements of housing structure (tenure, type, age of maintainer, size) can differ greatly between communities, complicating the process of comparative analysis and transferring lessons learned. Evaluating communities relative to provincial averages creates a baseline for more meaningful evaluation.

The bars in the graphs below represent the percentage of the households above or below the provincial average. Indicators above the provincial average are shown with positive pink bars and indicators below the provincial average are shown with negative blue bars.

A community with more senior maintainers and larger homes than the provincial averages may experience a more pronounced housing gap as the demand for smaller housing increases. Conversely, a community with a younger population of home maintainers, compared to the province, may not feel the pressure of an aging population and the related impacts on the housing market.

Relative Housing Indicators (% Difference vs. NL Total) (2016)



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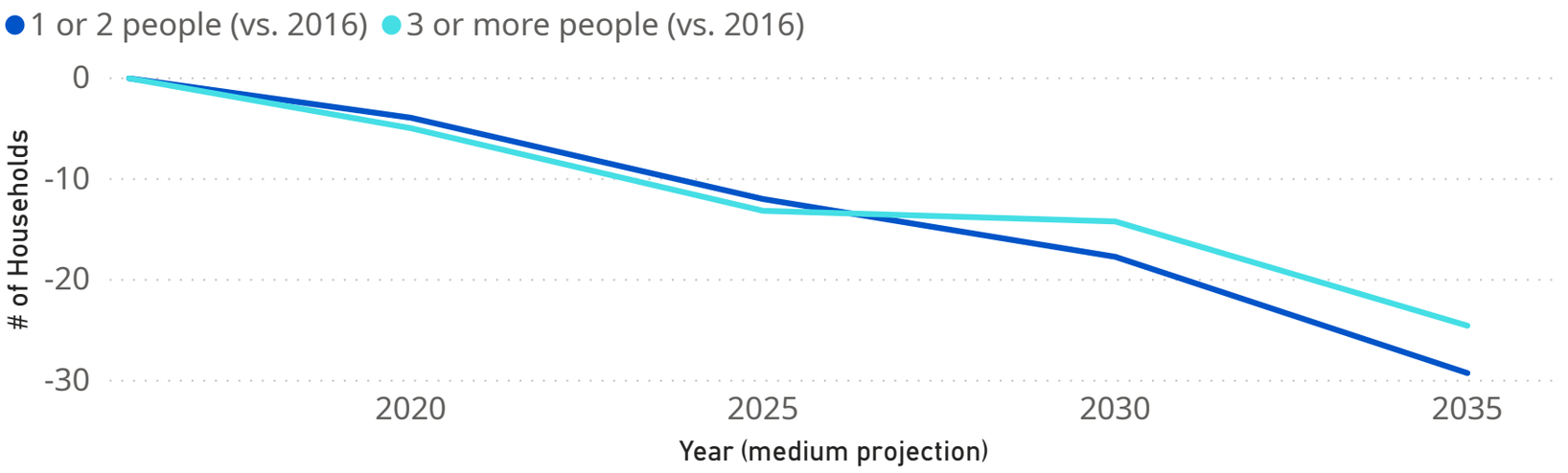
Data Source: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016055

Provincially, long-term decreasing fertility rates, coupled with an aging population, indicates that projected demand for smaller dwellings (1 or two bedrooms) is expected to outweigh the demand for larger dwellings (3 or more bedrooms). For local communities, this may lead to gaps in the housing market, with existing supply not meeting future demand.

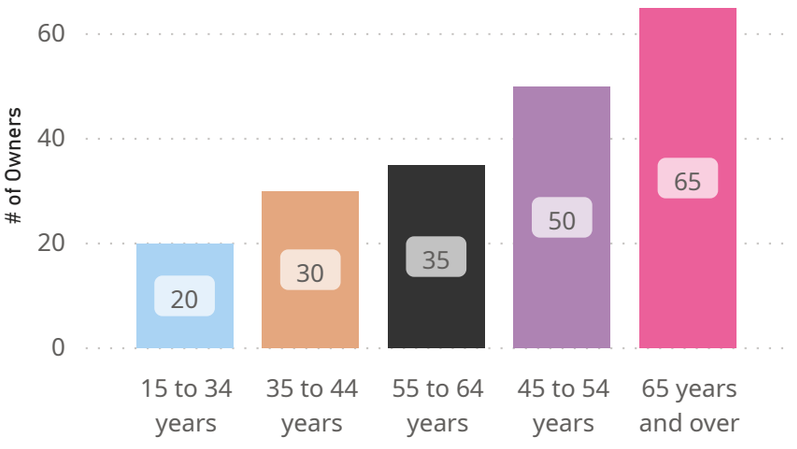
The below graph shows the projected change in the demand for housing, by size, relative to 2016. These projections can help inform planning around social or low-income housing, incentives for potential immigrants, and seniors housing as well as addressing potential implications to housing suitability, affordability, and accessibility.

An age breakdown of homeowners and the change in household size provide more details into both the current (2016) and future (2035) housing market. Current young renters may become homeowners over time and current homeowners may desire smaller dwellings as they age.

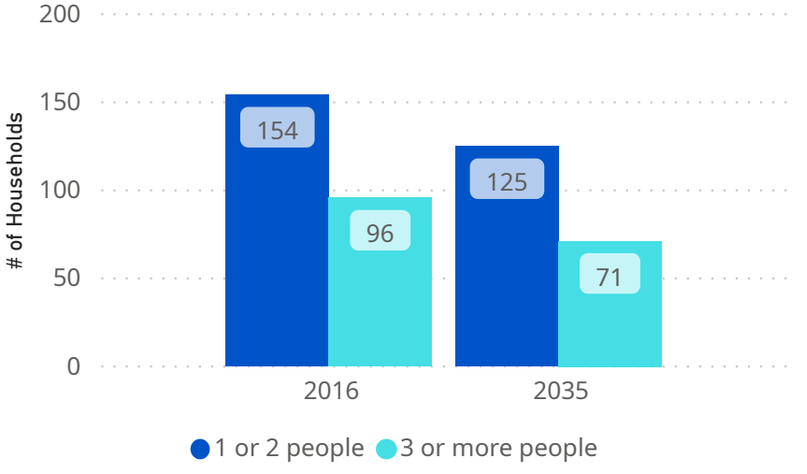
Households by Size Breakdown (2016-2035)



Owners by Age (2016)



Households by Size, 2016 vs. 2035



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Data Sources: Statistics Canada, 2016 Census of Population; Newfoundland and Labrador Statistics Agency

Housing Data Overview: Gaps in the Data and Future Directions

Gaps in the Data

1. Homelessness

The housing market, and non-permanent housing in particular, cannot be fully examined without considering homelessness. Homelessness, however, is a subject that is difficult to capture with available data. While data on the population availing of emergency shelters and services is available, this does not adequately reflect the full and diverse homeless population including unsheltered, provisionally accommodated, and at risk of homelessness populations.

The shifting nature of homelessness, with frequently changing accommodation circumstances, also poses a challenge for data collection often leaving the hidden or invisible homeless population underrepresented within data and analysis.

2. Data Availability at a Local Level.

While data may be more readily available at a provincial or larger municipal level (ie, St. John's) than smaller communities, there is a role for local data gathering in order to understand the community level context when doing policy development. This is especially important during the interim years between large data releases (ie, census) to keep abreast of local activity which can change significantly from year to year.

Further Analysis

Gathering information at the local level should go beyond data collection. Qualitative information, such as anecdotal analysis, surveys, monitoring local news stories, and interviews is just as important as quantitative data in creating and illuminating a contextual baseline for further analysis.

Comparative analysis with other communities can also provide context by showing how your community fits within the province, region, and with other local areas. Examining similarities and differences may influence the types of incentives, policies, and programs developed and implemented.

For More Information

Housing statistics (https://www.statcan.gc.ca/eng/subjects-start/housing)

Older adults and population aging statistics (https://www.statcan.gc.ca/eng/subjects-start/older_adults_and_population_aging)

Population and demography statistics (https://www.statcan.gc.ca/eng/subjects-start/population_and_demography)

Statistical methods portal (https://www.statcan.gc.ca/eng/subjects-start/statistical_methods)

Labour Supply Skills: Labour Market Indicators

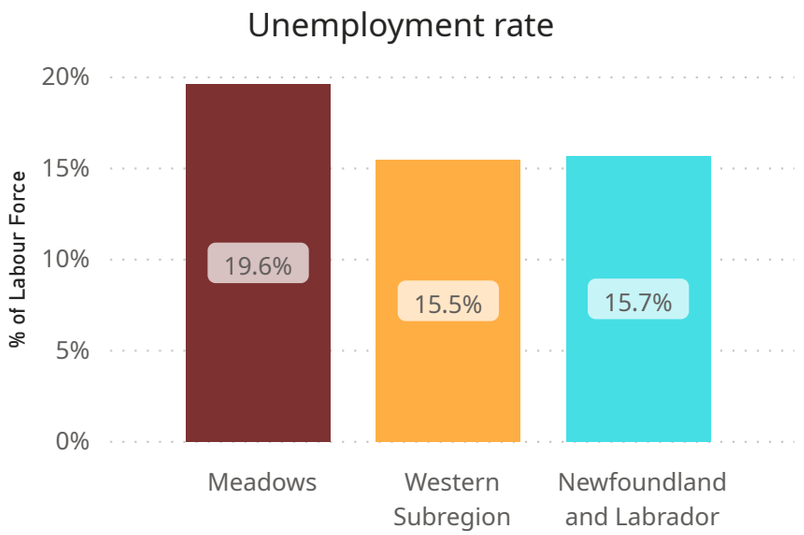
Meadows

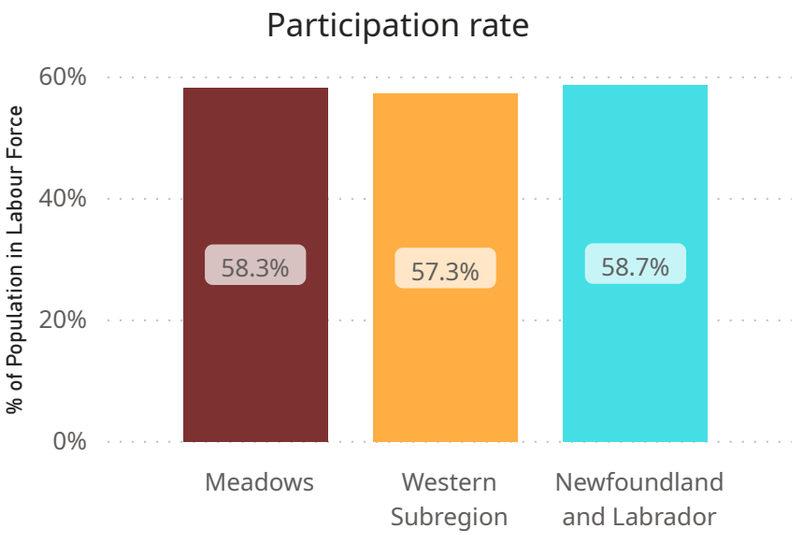
Common indicators used to report on the state of an area's labour market include the unemployment rate (% of the labour force that is jobless) and the participation rate (people working or looking for work as % of total labour force).

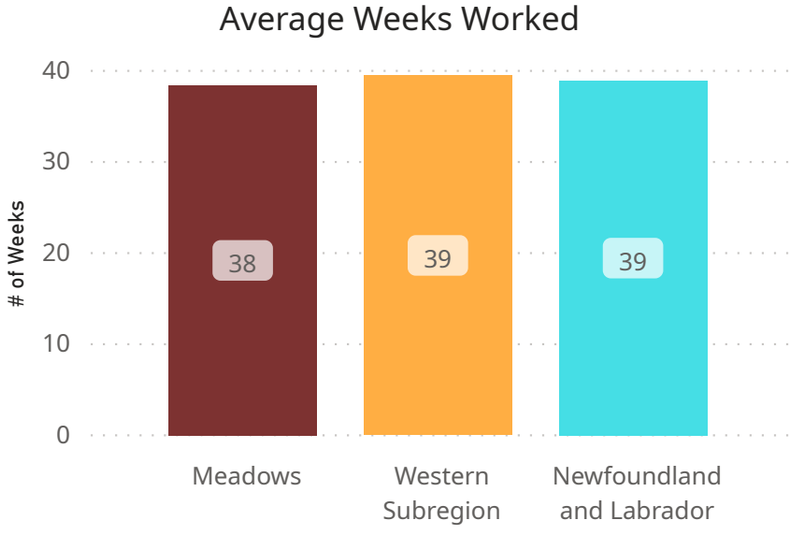
The average weeks worked (weeks worked during the year during which persons worked for pay or in self-employment) and underemployment (% of part-time employed persons who could not find full-time work) indicators provide insight into employment levels and gaps.

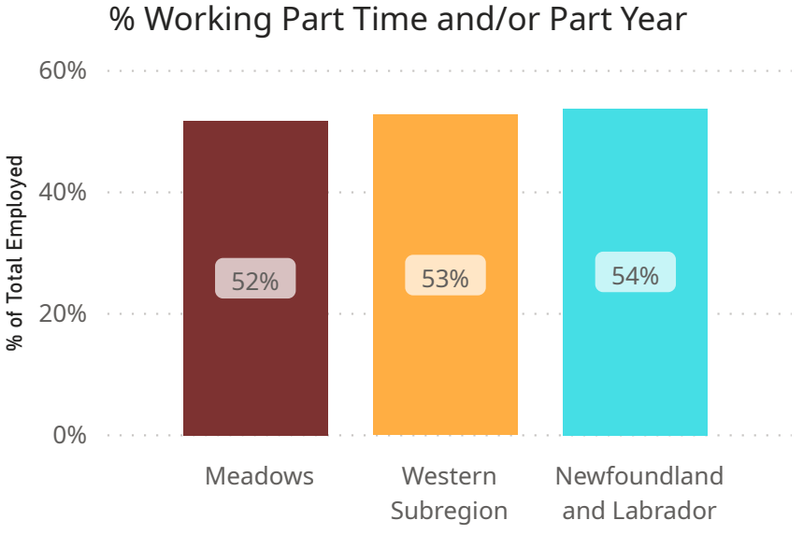
Policies addressing issue such as how to attract and retain a skilled workforce can benefit from analysis of indicators focused on the nuanced details of the local workforce (who is working, how much are they working, who is retiring, who is entering).

Core Labour Market Indicators (2016)









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Data Source: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016055

Labour Supply Skills and Ageing: Projections

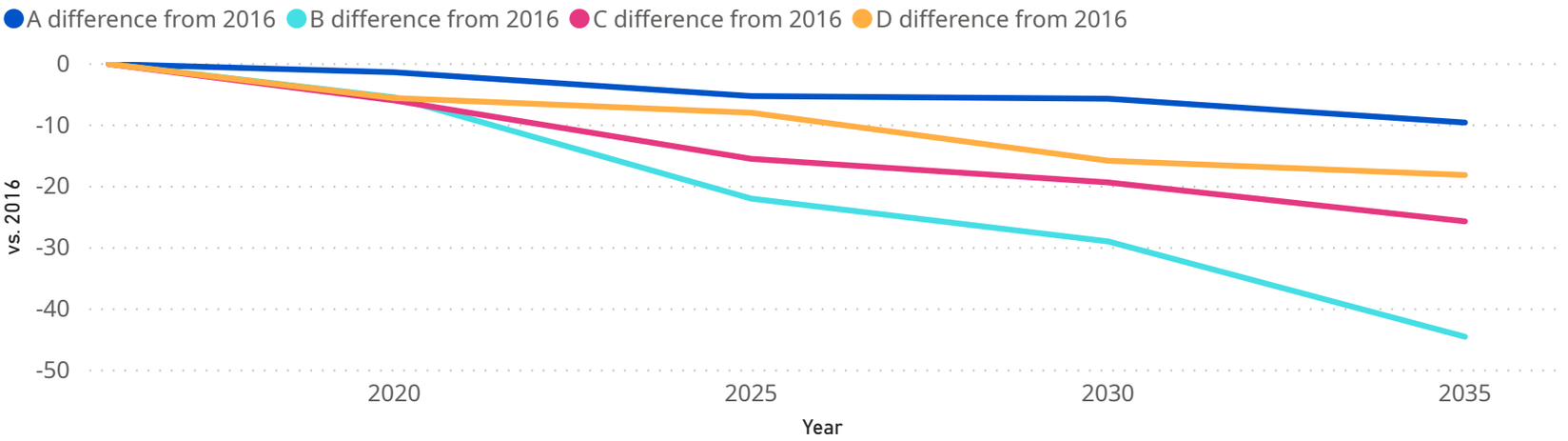
Meadows

Population projections provide insight into the makeup of the labour market as the population, and therefore workforce, ages. Potential labour market shifts, and associated gaps between labour supply and demand, can be identified and addressed.
The graph below projects the change in the number of people by skill level, from 2016.

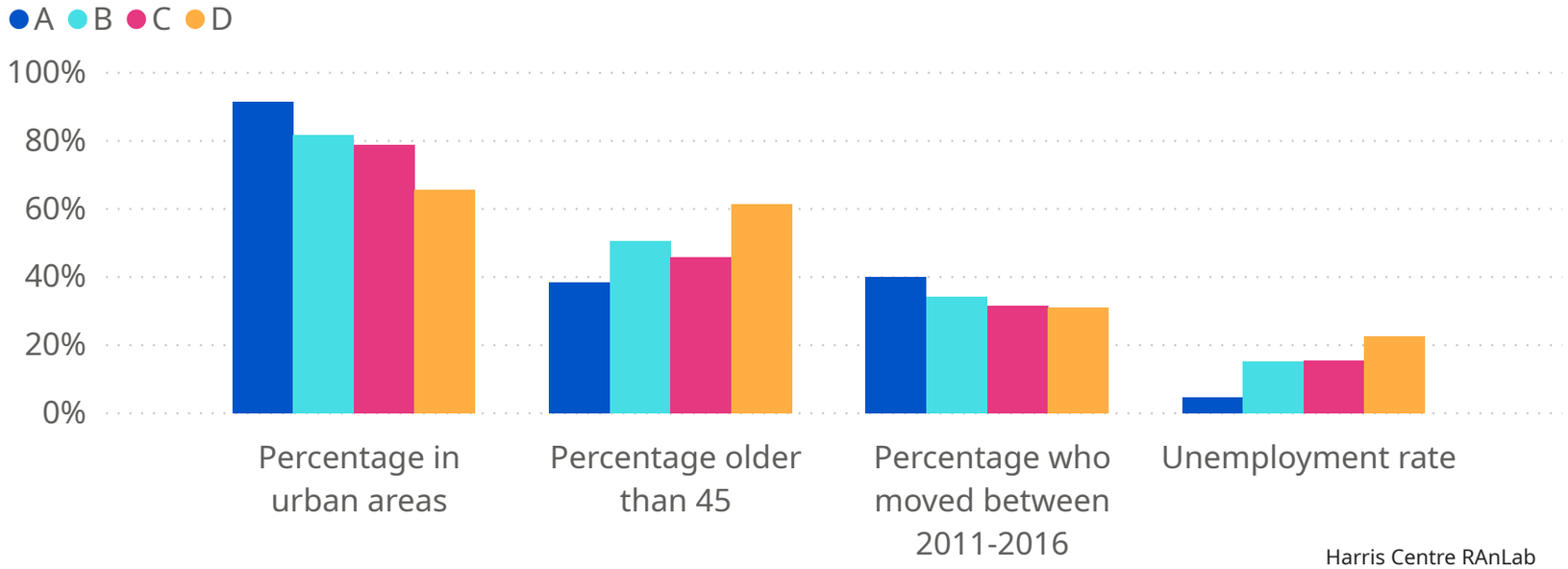
Skills are based on Statistics Canada definitions:
Skill A: University Education
Skill B: College education or apprenticeship training
Skill C: Highschool education and/or occupation specific training
Skill D: On the job training or may not have completed highschool.

Skill level characteristics are detailed in the graphs below. Typically, Skill A tend to be younger, urban, mobile, employed persons while Skill D tend to be an older population that is less mobile, more rural and more unemployed. More detailed breakdowns by skill type are outlined in the following pages.

Medium Estimate Projections by Skill Level



Skill Level Characteristics (NL) (2016)



Harris Centre RAnLab

Data Sources: Statistics Canada, 2016 Census of Population; Newfoundland and Labrador Statistics Agency; ESDC

Labour Supply Skills Overview A: University Education

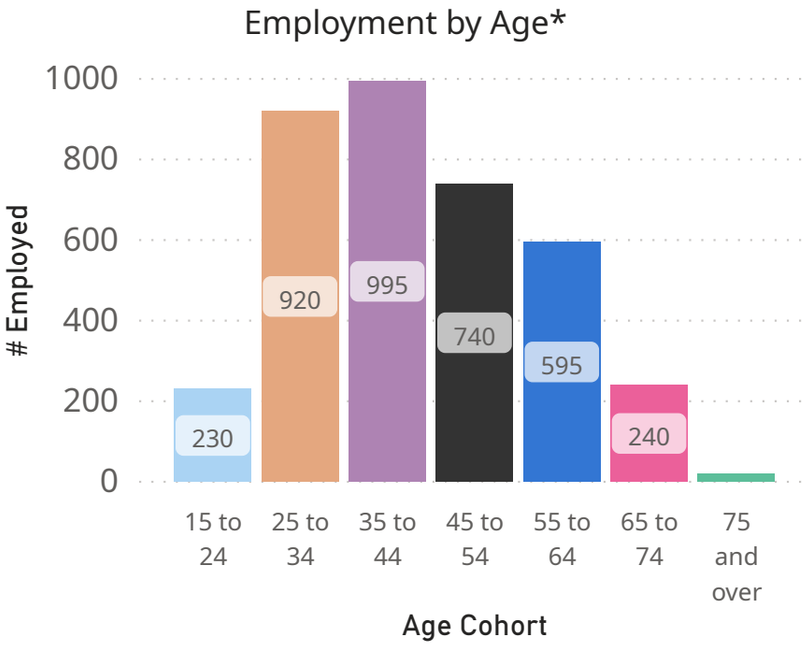
Western Subregion

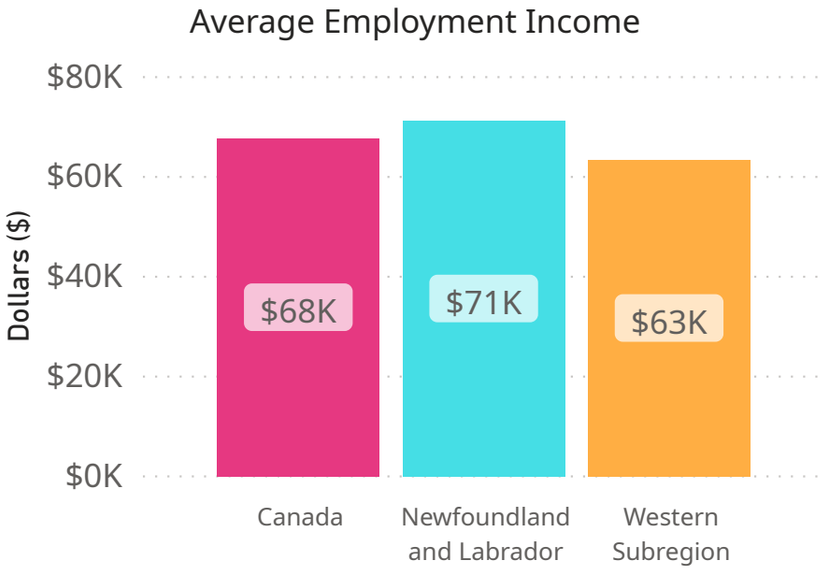
A breakdown of Skill A characteristics can inform what will be needed in the area to attract and retain these skilled workers.

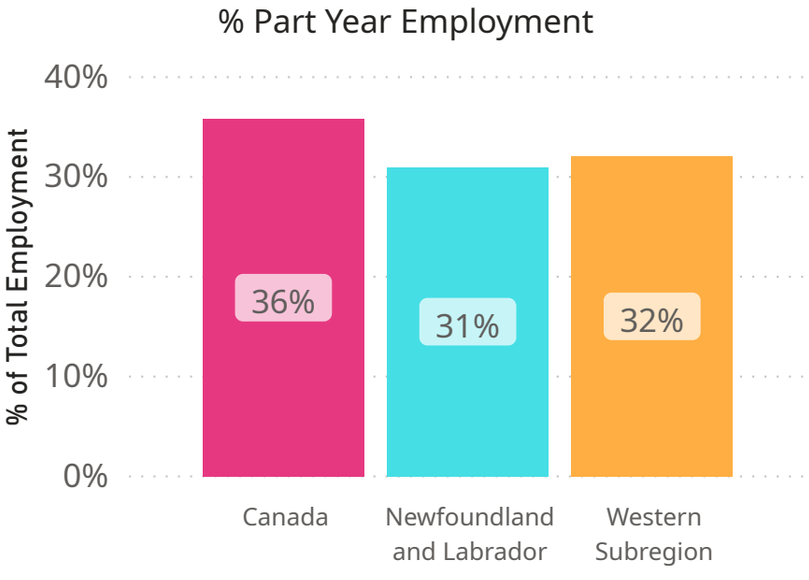
The largest occupations for this skill level, and the percentage of employees over the age of 45, show where replacement will be needed.

Age, Income, and Degree of Seasonal Employment details provide insight into who these skilled workers are and their generalized employment expectations.

Largest Occupations	Employed	%45+
Professional occupations in education services	1725	52%
Professional occupations in nursing	1410	44%
Middle management occupations in retail and wholesale trade and customer services	1235	61%
Specialized middle management occupations	1000	65%
All Others (Skill A)	3525	55%







* Due to data suppression, employment figures by age may not match those of total employment

Harris Centre RAnLab

Data Sources: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue nos. 98-400-X2016352, 98-401-X2016055, & 98-401-X2016261

Labour Supply Skills Overview B: College/Apprenticeship Education

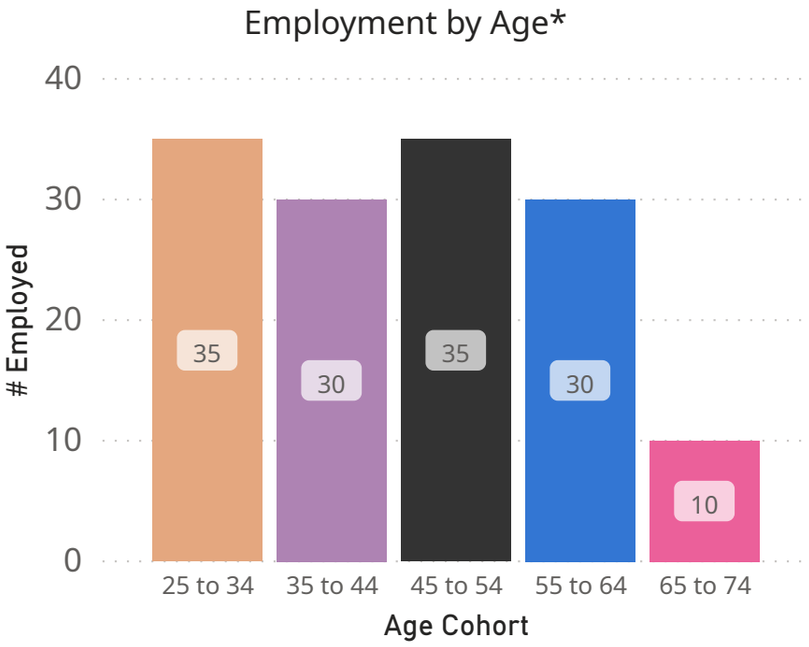
Meadows

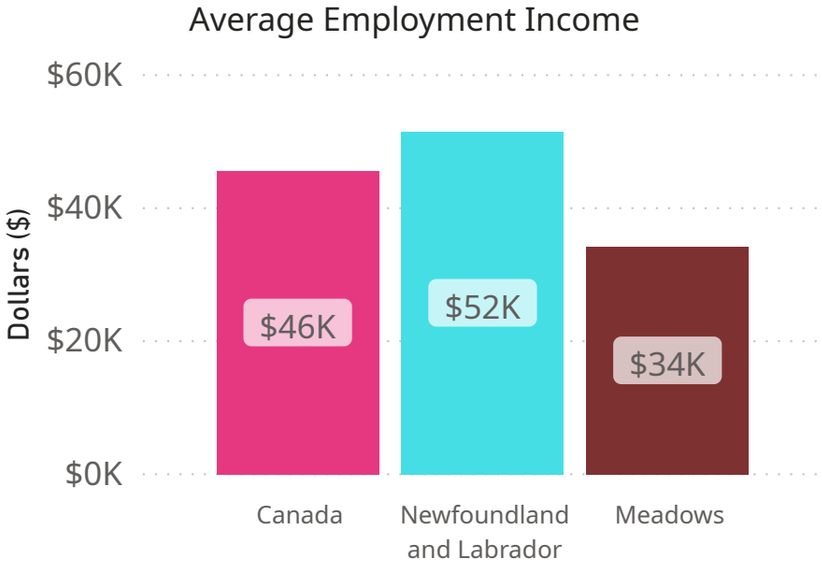
A breakdown of Skill B characteristics can inform what will be needed in the area to attract and retain these skilled workers.

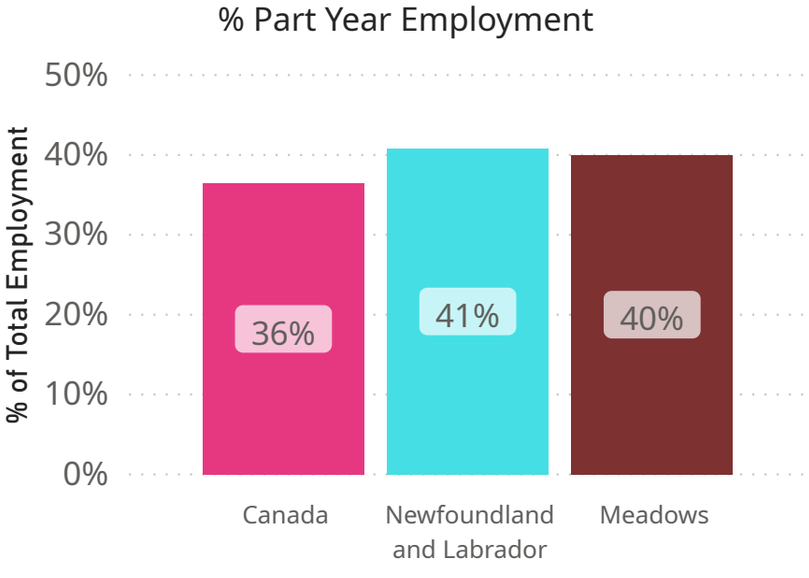
The largest occupations for this skill level, and the percentage of employees over the age of 45, show where replacement will be needed.

Age, Income, and Degree of Seasonal Employment details provide insight into who these skilled workers are and their generalized employment expectations.

Largest Occupations	Employed	%45+
Administrative and financial supervisors and administrative occupations	40	50%
Maintenance and equipment operation trades	30	67%
Industrial, electrical and construction trades	25	100%
Technical occupations in health	25	0%
All Others (Skill B)	80	71%







* Due to data suppression, employment figures by age may not match those of total employment

Harris Centre RAnLab

Data Sources: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue nos. 98-400-X2016352, 98-401-X2016055, & 98-401-X2016261

Labour Supply Skills Overview C: High School (or equivalent) Education

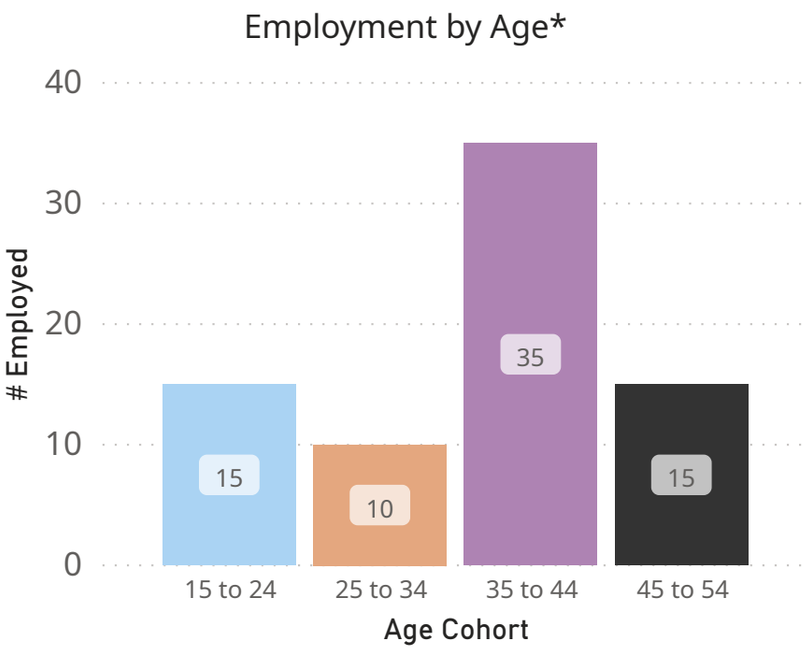
Meadows

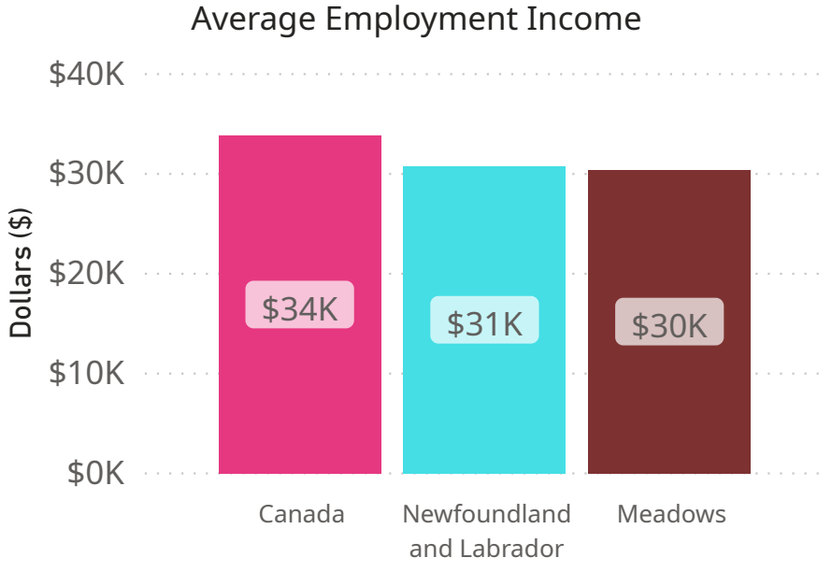
A breakdown of Skill C characteristics can inform what will be needed in the area to attract and retain these skilled workers.

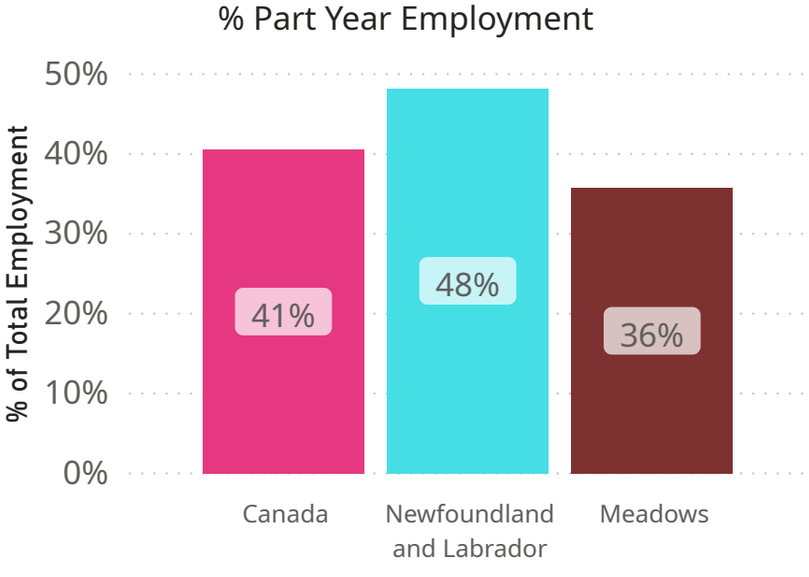
The largest occupations for this skill level, and the percentage of employees over the age of 45, show where replacement will be needed.

Age, Income, and Degree of Seasonal Employment details provide insight into who these skilled workers are and their generalized employment expectations.

Largest Occupations	Employed	%45+
Office support occupations	55	40%
Transport and heavy equipment operation and related maintenance occupations	50	44%
Sales representatives and salespersons - Wholesale and retail trade	40	0%
Distribution, tracking and scheduling co-ordination occupations	25	50%
All Others (Skill C)	55	40%







* Due to data suppression, employment figures by age may not match those of total employment

Harris Centre RAnLab

Data Sources: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue nos. 98-400-X2016352, 98-401-X2016055, & 98-401-X2016261

Labour Supply Skills Overview D:
No Secondary or Post-Secondary Education

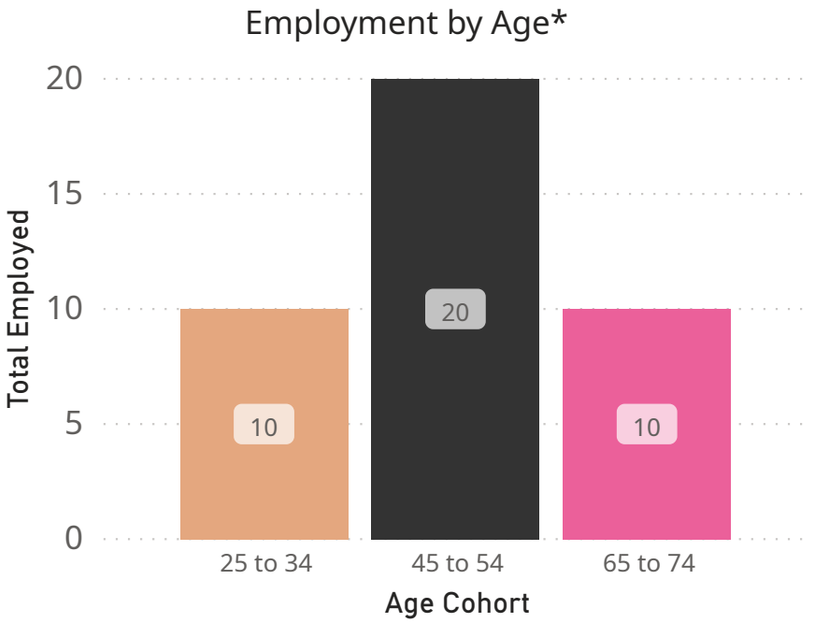
Meadows

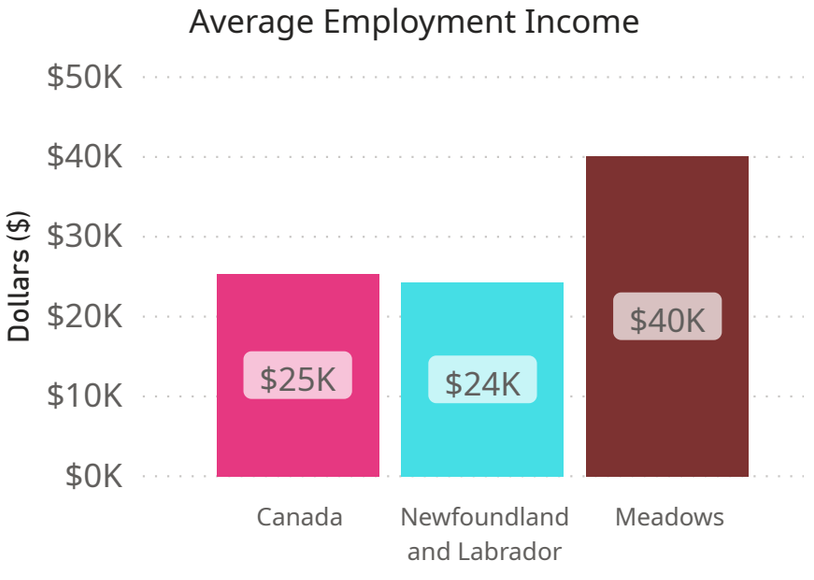
A breakdown of Skill D characteristics can inform what will be needed in the area to attract and retain these skilled workers.

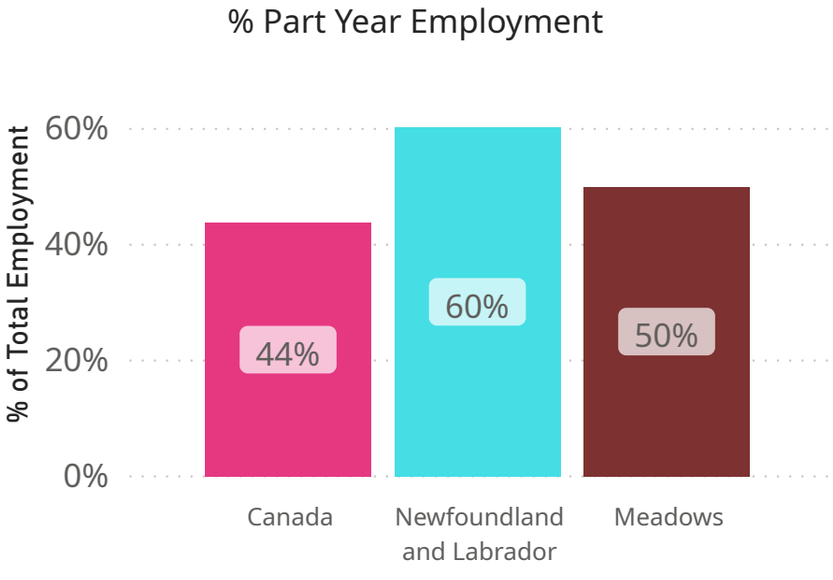
The largest occupations for this skill level, and the percentage of employees over the age of 45, show where replacement will be needed.

Age, Income, and Degree of Seasonal Employment details provide insight into who these skilled workers are and their generalized employment expectations.

Largest Occupations	Employed	%45+
Sales support occupations	25	33%
Labourers in processing, manufacturing and utilities	20	0%
Service support and other service occupations, n.e.c.	10	100%
Trades helpers, construction labourers and related occupations	10	0%







* Due to data suppression, employment figures by age may not match those of total employment

Harris Centre RAnLab

Data Sources: Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue nos. 98-400-X2016352, 98-401-X2016055, & 98-401-X2016261

Labour Supply Skills and Ageing: Gaps in the Data and Future Directions

Gaps in the Data

Skills may be transferable not only across geography but across industries. However, the extent to which one occupation or technology can be replaced with another is not well captured by available local data sources. Insight into this will be valuable as policy makers look beyond the local labour market and traditional local industries to address future labour market gaps.

Further Research

As workers age, gaps in the labour market will emerge, highlighting the disconnect between the skills of those retiring and the skills of those entering the work force. Initiatives to attract and retain skilled workers will be critical to not only fill skills gaps but to also evolve with the changing labour market.

When addressing potential skills gaps, two questions need to be asked: 1) where are the gaps and 2) how can they be filled. Further research in the following areas can help provide answers.

Skill specific projections (demand and supply).

Regional/municipal analysis can be used to identify potential areas from which skilled workers can be transferred.

A more detailed breakdown of skills analysis (micro credentials) can provide more information not only on the specific skill needs of the local labour force but also where these skills can be found elsewhere.

Wages are a key factor in attracting and retaining a skilled workforce.

For More Information

Labour statistics (https://www.statcan.gc.ca/eng/subjects-start/labour_)

Older adults and population aging statistics (https://www.statcan.gc.ca/eng/subjects-start/older_adults_and_population_aging)

Population and demography statistics (https://www.statcan.gc.ca/eng/subjects-start/population_and_demography)

Statistical methods portal (https://www.statcan.gc.ca/eng/subjects-start/statistical_methods)

Canadian Occupational Projection System (COPS) (http://occupations.esdc.gc.ca/sppc-cops)

National Occupational Classification (https://noc.esdc.gc.ca/)