Labrador City Region

1.0 – Introduction

Labrador city is a community of approximately 7,230 people located in the interior of the Labrador (Government of Newfoundland and Labrador, 2011a) (Figure 1.1). Consisting of two communities (Labrador City and Wabush), the Labrador City region is located approximately 2,106 km away from St. John’s, the province’s capital and largest community (Government of Newfoundland and Labrador, 2011b). This profile will provide an introduction to the Labrador City region, including a discussion of the region’s commuting structure, demographics, workforce education, and industrial composition.

Figure 1.1 – Labrador City Location
2.0 – Overview/Structure

*Figure 2.1* depicts the Labrador City ‘function region’. However given the proximity of the communities there is no commuting flow data available.

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![Functional Region Labrador West](image)

**Figure 2.1 – Labrador City Functional Region**

Labrador City is the dominant centre and the subsequent analysis of social economic data supports this assumption. Note that the function region limits are based on provincial commuting averages.
3.0 – Demographics

A viable and sustainable demographic structure is an important and desirable component for any region to have in order to facilitate economic growth. This is especially true in Newfoundland and Labrador, where outmigration and falling birth rates across much of the province have created not ideal conditions for creating and sustaining any amount of economic activity. In this section, the demographics of the Labrador City region will be examined from both a regional and community perspective.

3.1 – Regional Trends

To get a sense of the demographic viability of the Labrador City functional region, a balanced view that considers the entire population is required. As such, a ‘demographic index’ was developed that summarizes the relative viability of all age cohorts (i.e. age groups (e.g. 0-5; 5-10, etc…)) in a single number. This index was created by comparing the relative sizes of age cohorts in the real world to idealized ‘high growth’ and ‘low growth’ cohort distributions. The result of this calculation is displayed in Figure 3.1, for all of the province’s functional regions. Generally, the higher the index value for a functional region, the more viable its demographic structure is. For the purposes of this graph, the red line (index = 0.25) represents the transition between a ‘population decline’ situation (i.e. too few people in younger cohorts to sustain the population at its current level) below the line and a ‘low growth’ situation (i.e. there are just enough people in younger cohorts to sustain the population at its current level) above it. It should be noted that Labrador City is well above the line, which indicates that, as a region overall, Labrador City is in a situation where the population is growing at a low rate.
While the demographic index depicted in Figure 3.1 indicates that, overall, the Labrador City region is in a situation of low population growth, it does not specify which cohorts are responsible for this situation. To rectify this, the relative size of each age cohort in the Labrador City region is displayed, along with the ‘low growth’ and ‘high growth’ benchmarks, in Figure 3.2. Generally, while a region with a population distributed along the top of the red bars would be growing rapidly, one with a population distributed along the top of the blue bars would be growing, but slowly. The actual population distribution of the Labrador City region is depicted in Figure 3.2 by the white bars. In an ideal situation, the population of the Labrador City would be growing moderately, and therefore its distribution would be located in between the red and the blue bars on the graph. It is clear that in reality while there are near-ideal numbers of younger people (< 29 years old) and too few older adults (55+ years old), this is offset to some extent by too many people in many of the older cohorts (35-54 years old). The combination of the over
balance of workers in their most productive years and the large numbers of younger people means that the region is economically well positioned for the foreseeable future, if the younger people stay in the region.

![Labrador City/Wabush FR – Demographics](image)

Figure 3.2 – Labrador City Functional Region: Demographic Profile

To get an idea of how the demographic situation is presently developing, the ratio of births to deaths in the region is presented in **Figure 3.3**. A value of 1.0 roughly means that the population is sustaining itself, because the number of births is equal to the number of deaths in a particular year. For the Labrador City region, the ratio is above both this sustaining benchmark of 1.0, and the average provincial level. While more study into the fertility situation is needed, this suggests that the demographics of the Labrador City region is better than the province as a whole.
While the potential for variability in the two-community Labrador City region is limited, it is still important to note that the situation of low population growth currently exists in both
Labrador City and Wabush (Figure 3.4).

Figure 3.4 – Demographic Index by Community (Labrador City Functional Region)

4.0 – Education

Education is a second indicator strongly related to the economic viability of a region. Due to the competitive and complex nature of the modern economy, a highly skilled and diverse workforce is an important factor underlying economic growth in any area. Similar to the section on demographics, the educational profile of the Labrador City region will be examined from both a regional and community perspective.
4.1 – Regional Trends

To determine how balanced, overall, the educational profile of the Labrador City functional region is, an education index was calculated (Figure 4.1). This index is a sum of workforce concentration in a number of educational categories (no certification (negative), high school, applied trades, college diploma, university diploma, university bachelor’s degree, university medical degree, university masters degree, university doctorate degree), where regions receive a score greater than one if they, on average, have more than the provincial average of workers in the tested categories. In other words, regions receive a score greater than one if they are a higher-level centre and service a population greater than their own region (e.g. Corner Brook), and they receive a score lower than one if they are a lower order centre that is overshadowed by a neighbouring centre (e.g. Bay Bulls/Witless Bay).

In terms of the education index, Labrador City, with a score of approximately 0, is exactly where it should be, given its size and location. This means that it is well balanced and competitive, on average, with similar size functional regions regarding the qualifications of its workforce. It is likely difficult for the region to expand, however, due its isolation.
Similar to demographic structure, no investigation of the educational profile of the Labrador City functional region would be complete without first evaluating the sub-regional variability. Location quotients (LQs) are used to measure this variability in workforce education amongst communities in the region (Figure 4.2). In this case, LQs are used to measure local concentration in each education level with respect to the provincial average. A value of 1.0 for an education level means that the community’s share of workers with that level is equal to the provincial average. A value greater than 1.0 means that workers with that education level are clustered in the community, while a value less than 1.0 means that the community has a lower than average number of workers with that education, given its population.

Due to the small sample size, education location quotients were only calculate for the 2 larger towns in the region (Labrador City and Wabush) and both towns exhibit similar trends.

Figure 4.1 – Education Index by Functional Region

4.2 – Community-Level Trends
(Figure 4.2). The overall education scores are indicative of a single industry town where trade skills are in more demand than other specializations. This trend is fully explored, on a community level (see Figure 4.3)

![Figure 4.2 – Education-Level Location Quotient (LQ): Labrador City vs. Wabush](image-url)
Figure 4.3 – Education-Level LQ by Community (Labrador City Functional Region)

5.0 – Industrial Diversity:

Knowledge of the industrial composition of a region provides an insight into a number of different indicators, including information about its economic base, the complexity (and potential stability) of its economy, and the extent to which it serves as a central service centre for surrounding regions. This section concerning the industrial composition of the Labrador City region will be examined from both a regional and community perspective.

5.1 – Regional Trends

The analysis and implications of the industrial composition of the Labrador City functional region mirrors that of the educational profile. To evaluate the overall balance of employment in different industries in the region, an industry index was created using the same
methods as the education index. In this case, however, the index was created for the relative proportion of workers employed in the industries depicted in Table 5.1. The results of the index, by functional region, are shown in Figure 5.1. Unlike education, Labrador City has an industry index value equal to almost approximately 5, which means that Labrador City region is dominant in one or more industries, and is well positioned to compete with other regions of similar size in those industries.

Table 5.1 – Industry Index Variables

<table>
<thead>
<tr>
<th>Industry</th>
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<tbody>
<tr>
<td>Manufacturing</td>
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<tr>
<td>Finance and insurance</td>
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<tr>
<td>Transportation and warehousing</td>
</tr>
<tr>
<td>Retail trade</td>
</tr>
<tr>
<td>Real estate and rental and leasing</td>
</tr>
<tr>
<td>Accommodation and food services</td>
</tr>
<tr>
<td>Arts, entertainment and recreation</td>
</tr>
<tr>
<td>Health care and social assistance</td>
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<tr>
<td>Construction</td>
</tr>
<tr>
<td>Educational services</td>
</tr>
<tr>
<td>Public administration</td>
</tr>
<tr>
<td>Other services</td>
</tr>
<tr>
<td>Agriculture, forestry, fishing and hunting</td>
</tr>
<tr>
<td>Professional, scientific and technical services</td>
</tr>
<tr>
<td>Mining and oil and gas extraction</td>
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<tr>
<td>Wholesale trade</td>
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<tr>
<td>Admin. and support, waste management &amp; remediation services</td>
</tr>
<tr>
<td>Information and cultural industries</td>
</tr>
<tr>
<td>Utilities</td>
</tr>
<tr>
<td>Management of companies and enterprises</td>
</tr>
</tbody>
</table>
The difference in competitiveness between the education and industry indices, coupled with the region’s isolation, suggests that the economy of the Labrador City region may be clustered in one or more industries that do not have distinct educational requirements. If this is the case, it is important to identify which industries are the most important sources of employment in the region, and whether this dependence is at a level where the stability of the region may be threatened. To perform this analysis, location quotients, which quantify the region’s overall dependence on each industry, were used (Figure 5.2). There is above average regional concentration in the mining and gas extraction (LQ = 13.45), wholesale trade (1.16), construction (1.12), and accommodation and food services (1.10) sectors, and less than average concentration in the rest. With more than thirteen times the provincial number of workers per person, the Labrador City functional region is extremely dependent upon the mining and gas
extraction industry, likely due to the presence of the iron ore mines. This dependence implies that the entire regional economy is very vulnerable to fluctuations in the mining industry.

Figure 5.2 – Industry LQ (Labrador City Functional Region)

5.2 – Community-Level Trends

Like the demographic index, both of the communities in the Labrador City region positively contribute to the region’s overall positive industry index value (Figure 5.3). This is a sign of diversity in both the Labrador City and Wabush economies, and indicates that a number of services and functions in the Labrador City region are shared between the two towns.
While it is difficult to interpret sub-regional trends in a region consisting of two communities, community-level location quotients (LQs) are presented nonetheless for each industry, by community, in Figure 5.4. Cells highlighted yellow represent higher than (provincial) average concentrations of an industry in a town. It is important to note that the heavy regional dependence on mining shown in Figure 5.2 is present in both communities. Despite this concentration, however, the ‘arts’ industry is present in both communities, and clustered in Wabush in particular.
Due to the integrated nature of the regional economy separate graphs for business totals and employees could not be constructed for Labrador City and Wabush.
6.0 – Summary/Conclusions:

- Overall in region there is regional diversification in education, but clustering in industry
  - The region is very dependent upon the mining industry
- Strong demographic situation indicates continued future economic strength
  - Region needs to diversify to ensure viability, however
- Positioned as a primary industry employment centre
  - Majority of labour supply located in region
  - Does not benefit from large centre spin-offs, but does not lose to a larger centre
- Long term demographic sustainability needs further study
  - Initial indications are of strength
  - Region needs to diversify to ensure viability
7.0 – References:
