# JW NO. NFS8558-0025

# COMMUNITY LIFE, EMPLOYMENT AND BUSINESS COMPONENT STUDY

# TRANS LABRADOR HIGHWAY – PHASE III (HAPPY VALLEY-GOOSE BAY TO CARTWRIGHT JUNCTION)

**JANUARY 2003** 

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#### PREPARED FOR:

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#### **EXECUTIVE SUMMARY**

Community life and employment and business have been identified as a Valued Environmental Components (VECs) for the Trans Labrador Highway (TLH) - Phase III (Happy Valley-Goose Bay to Cartwright Junction) environmental assessment. The descriptive information provided in this report addresses aspects of settlement and demographics, infrastructure and services, social and health characteristics, characteristics of local and regional economies, employment and business, and income. A baseline understanding of these allowed for the development of a thorough environmental effects study, including an effective assessment of the potential effects of the project, the required mitigation measures, and the significance of any residual effects. The information was collected through reviews of existing information and interviews with key community social and economic development agencies.

Southern Labrador includes the towns of Cartwright, Charlottetown, Port Hope Simpson, St. Lewis (Fox Harbour), Mary's Harbour and other smaller communities. The region of Central Labrador encompasses one town, Happy Valley-Goose Bay, and the communities of Mud Lake, North West River and Sheshatshiu. Happy Valley-Goose Bay is one of the largest centres in Labrador. The population in these areas is a mix of aboriginal (i.e., Innu, Inuit and Métis) and non-aboriginal peoples. Between 1996 and 2001, both Southern and Central Labrador underwent population changes. In Southern Labrador, all but two towns (Cartwright and Charlottetown) had a decline in population. In Central Labrador, Happy Valley-Goose Bay showed a decline in population, while other communities experienced a population growth.

In Southern Labrador, Cartwright, Charlottetown, Port Hope Simpson, St. Lewis, Mary's Harbour and Red Bay are incorporated towns. In Central Labrador, the Town of Happy Valley-Goose Bay and North West River are incorporated, while the community of Sheshatshiu is administered under their Band Council. Happy Valley-Goose Bay serves as the main administrative centre for Central Labrador. All incorporated municipalities have municipal plans that define land use designations and the manner in which development may occur, and each municipality is in charge of providing and maintaining infrastructure such as roadways and solid waste management.

Residents rely on marine transport in the summer and fall for travel and the movement of goods, and snowmobiles in the winter. Access to scheduled air service is available year-round to all communities for travel within Labrador and to other regions. Common daily transport within towns and communities is by foot, vehicle, and all-terrain vehicles in the spring to fall and snowmobiles in the winter. While large centres have year-round road access, snowmobile use is still common in the winter. A network of secondary roads connects all towns and two primary roads, sections of the TLH, extend from western Labrador to Happy Valley-Goose Bay and Red Bay to Cartwright. Both sections of the highway are two-lane, all-season gravel roads.

Health care services and infrastructure in Southern and Central Labrador fall under the jurisdiction of Health Labrador Corporation and Grenfell Regional Health Services. The Health Labrador Corporation, based in Happy Valley-Goose Bay, is responsible for community clinics and mental health services in the local communities. The Grenfell Regional Health Services is based in St. Anthony (Newfoundland) and is responsible for health care and community and mental health services in the remaining areas of Southern Labrador and the Labrador Straits. The Department of Human Resources and Employment is responsible for income support and labour market services. The Department of Health and Community Services is responsible for child welfare, community corrections services, and family and rehabilitative services. Within Southern Labrador, social services are provided through offices in Cartwright, Mary's Harbour and Forteau. Within Central Labrador, services are provided through offices in Happy Valley-Goose Bay and Sheshatshiu. These government departments have a number of programs in place.

Policing in Southern and Central Labrador is the responsibility of the Royal Canadian Mounted Police. There are detachments in Happy Valley-Goose Bay, Cartwright, and Mary's Harbour. Happy Valley-Goose Bay has a semi-volunteer fire department. There are volunteer fire departments in North West River/Sheshatshiu, Charlottetown and Cartwright. Volunteer departments are responsible for handling all fires within towns and at waste disposal sites. Forest fire suppression and monitoring is the responsibility of the provincial Department of Forest Resources and Agrifood. The Labrador Regional Office is located in Happy Valley-Goose Bay, supported by district offices in Cartwright (Districts 20 and 21) and North West River (District 19). In addition, there are satellite offices for District 21 in Port Hope Simpson and Red Bay.

Most towns and communities have recreational facilities available for residents. Snowmobiling is a popular pastime in the winter months as a recreational activity, with a large amount of trails available for travel. In addition, there are other outdoor activities such as skiing and snowshoeing. Sports such as curling, hockey and skating are also popular, and many communities have outdoor and indoor rinks. Various churches have been established throughout the communities. The region also has a tradition of local "craft" culture, which is reflected across all of Newfoundland and Labrador.

Southern Labrador has a total labour force of 1,040 persons (1996). The labour force participation rate was 48.3 percent, which was considerably lower than that for Labrador, and Newfoundland and Labrador as a whole. The regional unemployment rate was 52.4 percent, which was also considerably higher than that for Labrador as a whole. Of the Southern Labrador residents who received employment income in 1995, only approximately 17 percent worked full-time for the entire year. The remainder worked seasonally or on a part-time basis. Central Labrador has a total labour force of 5,320 persons (1996), of which 90.5 percent resided in Happy Valley-Goose Bay. The region had a participation rate of 72.4 percent, and the overall unemployment rate was 18.0 percent. Of those who received employment income in 1995, 50.3 percent worked full-time for the entire year.

The proposed highway has the potential to have direct and indirect effects on the local economies of individual communities and of the region as a whole. This includes changes in the production and supply of goods and services, business climate, and community life as a result of improved access.

Happy Valley-Goose Bay is the largest community in Labrador with a relatively diverse economic base. Low-level military flight training is considered the most important contributor to the economy of the Central Labrador region. Happy Valley-Goose Bay offers a range of commercial goods and services. It also serves as the primary administrative and service centre for Central and Northern Labrador, hosting various government agencies and educational and health care services. Economic activity in Southern Labrador was traditionally based primarily on the inshore fishery, particularly harvesting and processing of species such as cod and salmon. Despite the downturn in these traditional fisheries, exploitation of alternative species (particularly shellfish) has resulted in a substantial amount of fish harvesting and processing in Southern Labrador in recent years.

#### KA MAMUSHTAKANT EIMUN

Kassinu tshekuan eshi-inniuimikak nete tshe itamutakant (Labrador ) Napatau Mishte Meshkanau, tutakanipan mashineikan, nishtinua tshekuana anu uet uauitakanipan. Uinepekut etananut, atusseun kie ne auen katshitshepantuatishut atusseune. Eukunua anu uet ishpitentakuaki nete kassinu ka ishi-inniuimikak tshekuan euauitakant meshkanau Phase III (Apipani-Kuspe nuash nete Nutapieunant). Minu utuitakanipan nete uinepekut eitanut kie eshinakuak nete etanut, nikan eshi-tshitapatakant tshe ishinakuak ne atusseun, ka mamu tananut kie minuenniun tshipa itentakun, shipa itentakunua ka apishshashiikau kie ka mamishatshi atusseuna, eatussanut mak uetshiit auen katshitshepantuatishut atusseunu mak tan tshipa ishi-tutakanu mashneikan kie tshetshi minu nantussentakant kie tshetshi minu nishtutakant tan tshe ishi-matentakuak ne meshkanau mishte tshitshepananutshi etutakant, kie ne eshi-tapuetatishunanut tshe ishi-tutakant meshkanau. Ume eimun miamushtakant nete sheshekan tutakanipan mashineikan kie kuetshimakanipant auentshe eitat nete utenamuaut, mamunikanipan uteimunuau nenu etentak meshkananu euauitakanit.

Ka apishashiikau utenaua Mamit ut Napatau (Labrador) takunua Nutaieunant, Charlottetown, Port Hope Simpson, St. Lewis (Fox Harbour), Mary's Harbour kie nenua kutaka utenaua kaiapishashiitshi. Eku nete Uinepekuut, Apipani-kuspe, Muat Nek, Northwest River mak Sheshatshiit takunua muk. Apipani-Kuspe anu uet mishat utenau nete uinepekut. Mamitshetuit tatishinanu nenua utenaua ntshe etat (Innut, Aissimeut mak Metis) kie ntshe akeneshaut. Nete pupun 1996 nuash 2001 nashukupanipan ne etatishinanut nete utenat (Nutapienant mak Charlottetown). Kie nete Apipani-Kuspe nashukupanu etatishinanut, eku nete kutaka ka apishashiitshi utenaua matenaua matentakunipan ua mistshetnanut.

Shash nenu nishtuapatum Tshishe Utshimau utenaua nete Nutapieunant, Charlottetown, Port Hope Simpson, St Lewis, Mary's Harbour mak Red Bay. Kie nete Apipani-kuspe mak North West River eukun etutuakanit kie uinuau, nishtuapamukut Tshishe Utshimaua, eku nete Sheshatshiu, Innutshimat uetshi nishtuapatak ne Tshishe Utshimau muk nete Apipani-Kuspe anu uet mishat epempantakant utenau. Eku kassinu ntshe ka nishtuapamukut Tshishe Utshimaua uinuau nete tutamut tshe ishi apishtakanit assinu ua tutakantshi emishant atusseunu nete eitat kie uinuau ntshe uetshimakatuakanit ueteshutamut tshipa ishi atushkatenu atutakau tshetshi takunetshi atusseunu nete eitat miam mate meshkananu kiemak ka uepinashunanut nete tshe takuak etanut uetenau.

Ntshe auebtshe etat nete Napatau (Labrador) utnnu apishtaut niapenetshi kie tekuatnetshi petautakanua nenu tshekuana eshi ntuentakau nete katak kie shkitunu apishtaut pepunetshi. Kie ka pempanetshi pesse apitshieut piushiittau nete kutaka utenaua tekunetshi nete Napatau (Labrador) kie nete ushte ua ishpanitau kie eshukumpuna pempanu ne ka pempant. Eku eshukum tshishikau pimutatamut pesse kiemak utapanu apishtaut kiemak ka neukatiashent utapanu apishtaut tekuatnetshi kie shiakunetshi eku shkitunu pepunetshi apishtaut. Eku nete ka.

mamishatshi utenaua eshukum-puna shenikanu mishte meshkanu, kie pepuaki shkitu apishtakanu. Kie nishuet nete tutakanua meshkanaua tshetshi nete itamutshi kutaka utenaua etanutshi nete Apipani-Kuspe nuash nete Labrador City kie Uapush (Wabush) mak ne kutak meshkanu nete itamu Red Bay nuash Nutapieunant. Peikutakanua nenu enishinikau meshkanaua, kie eshukum-puna apishtakanua.

Minuenniunt e-uauitakant eshi uitshiiakant auen kie ne eshi uauitakant eshi tshitshepananut nete Mamit kie nete Uinepekut ut Napatau (Labrador) kie nete ut nakatuapakant nete ut Health Labrador Corporation kie Grenfell Regional Health Services. Ne Minuenniun Ka Atushkatet nete ut Labrador Corporation, nete Apipani Kuspe ut pempanu kie ekute ut tshitapatakant. Kie nenua atushkateua ntukuntshuapissa kie auen katat nete utenamiit tshetshi atushkuakant. Eku ntshe Grenfell Regional Health Services nete ut St. Anthony, (Newfoundland) nakatuapatakanu. Nete ut mamit itetshe Napatau (Labrador) kie Labrador straits utenaua ka apishashiikau ekute etushkatet. Kie ekute uet shetshiint Ka Tshishe Utshimau Atusset kie ne auen ka pempantaua ushuniam. Kie ekute ut shetshiitik ne auass ka nakatuapamukut Ka Tshishe Utshimau Atussentshi kie ntshe mamu uikaishimaut ka uitshiiakanit kie ne auen ka ui uitshiitishut tshetshi puntat unnapim kiemak kutakanu tshekuanu miam put kapitauatshanut kiemak metshen ntukuna. Eku nete mamit ut Napatau Labrador, ka tshishe utshimau atusset takunua nenua umashineikantshuapa nete Nutapieunant, Mary's Harbour mak Forteau. Eku nete uinepekut, takunua umashineikantshuapa nete Apipani-Kuspe kie Sheshatshiit. Mitshetnua eshi uitshiiakant auen shash nete ut tshishe utshimat.

Nete ut Tshishe Utshimat pempanuut kie nakatuapamakanut ntshe kamakunueshiit Royal Canadian Mounted Police. Kie takunua umashineikantshuapuau nete Apipani-Kuspe, Nutapieunant mak Mary's harbour. Nete Apipan-Kuspe takunu ntshe ka ashtueitsheshiit eshkuatentshi mitshuapinu kie nete Northwest River/Sheshatshiit, Nutapieunant, Charlottetown. Apu shishiikuakanit ntshe ka ashtueitsheshiit kie uinuau atushkatamut nete etat utenamuat. Eku nete ut Ka tshetshishkutueuntshi ut nakatuapamakanut nete Tshishe Utshimat. Nete Apipani-Kuspe takun ne tshitshue mashineikantshuap kie eukute ut aiatnikant Nutapieunant (Districts 20 mak 21) kie Northwest River(District 19) e-atshiitashuneshtetshi. Kie takunua nenu katak ka petakunua ka eiminanutshi nete District 21 nete Port Hope Simpson mak Red Bay.

Pesse nenua utenaua ka apishashiikau takunua metueutshuapa tshetshi apishtat auentshe. Anu uet mishte apishtant anutshish, ne shkitu pepuaki mishte apishtakanu kie shash takunua shkitu meshkanaua tshetshi apishtakantshi. Kie ne takun iat ka shushkapaniunanut utapanashkuut ka apitshiakanit kie ne ashamiit e apitshiakanit. Metuenna takuna miam mate, ka shushkupantakant ashini nete mishkamiit kie ne kashunashkuateikant takunua muk mitshet utenaua unnuitamiit nete takunua kashunashkuateikant. Kie mitshet shash aiamieutshuapa takunua nete utenaua. Kie ne eshinniut auen nukutakanu nete nutem Newfoundland mak Napatau (Labrador).

Nete mamit ut Napatau etusset auentshe 1.040 tatishishipant (1996) pupunu. Emamunekant ne atshitashun 48.3 percent muk ishpanu kie ushmikat nashukupanu nete mamu etshitapatakant nete Newfoundland mak Napatau Labrador kie ne epeikutshitapatakant muk Napatau Labrador. Mamu nete etshitapatakant 1995 pupun 52.4 percent tatishishiipant auentshe muk eatusset, kie ishkupanishpane kie muk 17 percent atusseshiipant auentshe ishkunupuna. Eku ntshe kutakat nanukuntni muk attusseshipant kie mamu 5,320 auentshe itusseshipant (1996) pupunu nete uinepekut etat 90.5 ishpish tatishut nete Appipani kuspe etusset. Eku ntshe ka mamu uitshiaushiit nenu enantussentakaniit etashiit auen atusset 72.4 percent ishpish eku emamunikant etshiitapatakant muk 18.0 percent ishpanu. Eku ntshe kantuentakau ushuniamiau nete 1995 pupunu, 50.3 percent ishpish tatishut ntshe ka itushkatakau tshetshi pempantat ushuniamuau.

Appipani-kuspe anu uet mishat utenau nete Napatau Labrador mamu ne takun shimakeishiit uet tshi takuak ne utenau. Ka pempanissit ka tsheishkutamashuatshet assinu eujun anu uet shuniatshepant ne utenau anutshish eshitapatakant. Apipani-Kuspe mamitshetuit ishi takun tshetshi uitshiiaushiit nete etanut. Kie ekute uet pempanikau pesse atusseuna kie ekute uet nakatuapatakant nemenua kutaka ka apishashiikau utenaua katakuak nete Napatau Labrador. Eku nete mamit itetshe etshitapatakant Napatau Labrador nutameshanuipan muk kie shash ne apu nutameshenanut apu shuka mitshetapuna shash nutameshananut nete mamit ut Napatau Labrador.

Eku ne meshkanau tshe tutakant tshika mishte mishau tshe ishi uiitshiakant auen kie tshika matentakun nete utenaua ka apishashikau. Tshika mishkutshipanu kassinu tshekuan eshi atushkatet anutshish, eshi uitshiiakkant auen, atusseunt kie nete etat auen utannamit tshika matentam tshe etu minuanit nenu tshi tutakantshi.

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## 1.0 INTRODUCTION

# 1.1 The Study

Community life, employment and business has been identified as a Valued Environmental Component (VEC) for the Trans Labrador Highway (TLH) - Phase III (Happy Valley-Goose Bay to Cartwright Junction) Environmental Assessment. The environmental impact statement (EIS) being prepared for the Department of Works, Services and Transportation (WST) must describe present environmental conditions, identify the potential environmental effects associated with the proposed undertaking, identify appropriate mitigation measures, and evaluate the significance of any residual environmental effects.

Component studies were carried out to address baseline information gaps for specific VECs. The additional information was needed to determine the potential for significant effects on these VECs due to the proposed undertaking, as well as provide the necessary baseline information for monitoring programs.

# 1.2 Rationale and Objectives

The component study is a descriptive document addressing the elements of community life, employment and business in the study area. The information on existing conditions provided by this study was required to prepare the environmental effects analysis presented in the EIS. No environmental effects analysis was carried out as part of the component study, as this analysis is presented in the appropriate sections of the EIS.

As outlined in the guidelines for the EIS, this component study is to:

- describe the functioning and health of the socio-economic environment, addressing a broad range of matters that affect people and communities in the study area;
- describe the local economies of individual communities and the region as a whole; and
- describe the production and supply of goods and services within individual communities and the region.

These are described by profiling the current conditions, including a description of the processes and interrelationships, as well as the sensitivities to disturbance of those community components that are valued and that are potentially affected by the project. The description is of sufficient detail to permit the identification, assessment and determination of the significance of potentially adverse effects that may be caused by the project.

# 1.3 The Study Area

The TLH - Phase III preferred route is located within two economic zones. Other regions (e.g., Labrador as a whole and the island of Newfoundland) are also included in the discussion, as applicable. This broader context is important because the TLH – Phase III will provide a connection with the TLH – Phases I and II, the provincial highway network in Quebec and the network on the island of Newfoundland (via ferry between Blanc Sablon, QC and St. Barbe, NL).

The study area for the work is based on the boundaries for Regional Economic Zones 3 and 4 (Figure 1.1). These correspond approximately to Statistics Canada Census Division C (including the communities of North West River and Happy Valley-Goose Bay) and Census Division B (including the communities of Port Hope Simpson, St. Lewis, Mary's Harbour, Cartwright and Charlottetown).

# 1.4 Document Organization

The methodology followed in the completion of the study is provided in Chapter 2. The results are organized into a number of sections: settlement and demographics (Chapter 3); infrastructure and services (Chapter 4); social and health characteristics (Chapter 5); characteristics of the local and regional economies (Chapter 6); employment and business (Chapter 7); and income (Chapter 8).

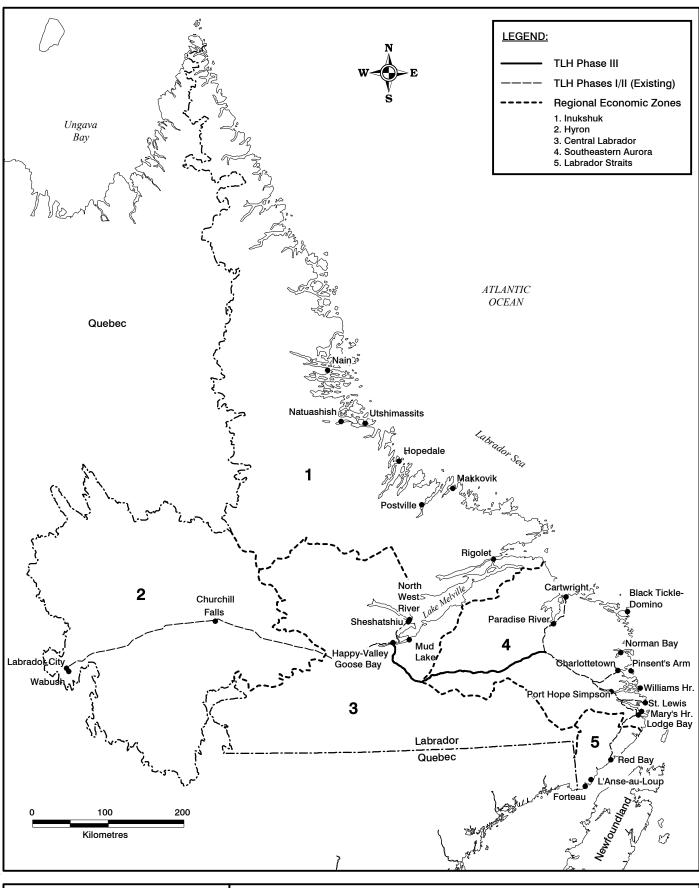




FIGURE 1.1

LABRADOR COMMUNITIES

AND REGIONAL ECONOMIC ZONES

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#### 2.0 METHODOLOGY

Preparation of the component study relied on available existing information from a number of sources. The methodology for data collection included literature and document review, database search and analysis of secondary data, and interviews and communications with key informants. Sources of information primarily included government agencies, industry and private sector organizations, and community groups.

Describing aspects of community life, employment and business requires the use of agreed-upon measures or indicators. In describing the socio-economic functioning and health of the environment, and the characteristics of the local economies, the choice of indicators is clearly identified, where appropriate.

# 2.1 Existing Information Review

A review of literature, documents and databases was conducted to develop the description of existing conditions. In some instances, further analysis of the available secondary data was required. Agencies and organizations from which secondary information was received included:

- Statistics Canada;
- Newfoundland Statistics Agency;
- service line departments within the Government of Newfoundland and Labrador;
- crown corporations;
- the Royal Canadian Mounted Police (RCMP); and
- regional economic development corporations.

# 2.2 Key Informants

Interviews with representatives from various community, social and economic development agencies were carried out as appropriate to fill information gaps. The specific groups or types of individuals contacted were as follows:

- local development corporations and associations;
- chambers of commerce;
- town mayors;
- government departments;
- crown corporations; and
- community service organizations.

In anticipation of the need to conduct an environmental effects analysis of community life, employment and business as part of the EIS, the interviews included questions on the potential effects of the highway on existing conditions. The results of these components of the interviews are not presented here, but are presented in the appropriate section of the EIS. The interview guide is provided in Appendix A.

## 3.0 SETTLEMENT AND DEMOGRAPHICS

## 3.1 Communities

The communities directly affected by the project include those within Southern and Central Labrador. Southern Labrador includes the towns of Cartwright, Charlottetown, Port Hope Simpson, St. Lewis (Fox Harbour), Mary's Harbour, and Subdivision B, Division No. 10 (i.e., Lodge Bay, Williams Harbour, Black Tickle and Paradise River). The region of Central Labrador encompasses one town, Happy Valley-Goose Bay, and the communities of Subdivision C, Division No. 10 (i.e., Mud Lake, North West River and Sheshatshiu). Happy Valley-Goose Bay is one of the largest centres in Labrador, with a population of 7,969 (Statistics Canada 2002a). The population in these areas is a mix of aboriginal (i.e, Innu, Inuit and Métis) and non-aboriginal peoples. The total proportion of the aboriginal population is 28.7 percent for the region that includes Central Labrador and part of Southern Labrador, and 9.6 percent in the remainder of Labrador (Statistics Canada 2000).

Many of the communities of Southern and Central Labrador are located near the coast. The settlement patterns of these communities reflect a history of migration within which residents would have summer fishing stations located directly on the coast and travel to winter settlements in sheltered bays. Through the years, schools, nursing stations, commercial establishments and other infrastructure were established in larger more inland communities. As a result, many summer fishing stations were abandoned.

Some of the communities, such as North West River (established 1743), are very old settlement areas. Others, such as Happy Valley-Goose Bay (established in the 1940s), are relatively new. The following provides a brief overview of the settlement pattern for the communities (CLEDB 2002a; Happy Valley-Goose Bay 2002; SADC 2002).

<sup>&</sup>lt;sup>1</sup> The proportion of aboriginal population is based on Health Canada's regional divisions. These are administrative boundaries for health boards. Almost all the communities of Labrador except the lower half of Southern Labrador falls under the jurisdiction of the Health Labrador Corporation. The Grenfell Regional Health Service extends from St. Anthony (Newfoundland) to the community of Charlottetown (Labrador).

#### 3.1.1 Southern Labrador

Cartwright: Cartwright is located on the eastern side of the entrance of Sandwich Bay and

has been a settlement community since 1775.

Black Tickle: Black Tickle was established in the mid-nineteenth century.

Paradise River: George Cartwright established Paradise River in 1775 as a trading post.

Charlottetown: Charlottetown was originally settled in 1950 for the purpose of a sawmill

business and turned into a settlement that fisherman lived in the winter

months.

Subd. B, Div. No. 10: Pinsent's Arm was settled year-round in the 1950s. William's Arm was a

summer fishing settlement until the 1970s, when it became a year-round community. Lodge Bay was first settled as a trading post by Captain George

Cartwright in the late sixteenth century.

Port Hope Simpson: Port Hope Simpson was founded in 1934 as a logging camp.

Mary's Harbour: Mary's Harbour was established in the 1930s.

St. Lewis: Originally called Fox Harbour, this community was established in the

eighteenth century and is one of the earliest recorded place names of Labrador

(Statistics Canada still refers to the area as Fox Harbour for census data).

#### 3.1.2 Central Labrador

Happy Valley -

Goose Bay: In 1941, the Goose Bay air base was established and in 1943, the town of Happy

Valley was developed to house the workers who came to build the air base. By 1974,

the two communities were amalgamated into a single town.

Mud Lake: Mud Lake was settled in approximately 1850 as a trapping and fishing community,

based on a non-wage economy.

North West River: North West River was established in 1743 as a trading post for the Hudson Bay

company.

Sheshatshiu:

Sheshatshiu, also known as "narrow place in the river", was originally a summer gathering place for Innu who resided inland most of the year. By 1957, the area became a year-round settlement.

# 3.2 Population

Statistics Canada reports that in 2001, the total population for Southern Labrador was 2,771 and the total population for Central Labrador was 9,103 (Table 3.1). Both regions total 11,874, which is 2.3 percent of the Province of Newfoundland and Labrador's total population of 512,930 (Statistics Canada 2002a). In Southern Labrador, the largest community is Cartwright, with a population of 629 (Table 3.1). In Central Labrador, the largest community is Happy Valley-Goose Bay. With a population of 7,969, it contains 87.5 percent of the population in Labrador's central region (Table 3.1).

Between 1996 and 2001, both Southern and Central Labrador underwent population changes. In Southern Labrador, all but two towns (Cartwright and Charlottetown) had a decline in population, ranging from -11.8 to -6.28 percent (Table 3.1). In Central Labrador, Happy Valley-Goose Bay showed a decline in population of -7.9 percent, while the communities of Subdivision C, Division No. 10 experienced a population growth of 11.4 percent in the same period. Overall, the total population of Newfoundland and Labrador showed a decline of -7.0 percent (Statistics Canada 2002a). The provincial government states that since 1993, following the cod moratoria, the population has continually declined due to net out-migration, low fertility rates and death, but counters that over the last three years the rate of decline has lowered in correspondence to a period of stronger growth in the economy (Department of Finance 2002).

Table 3.1 Population in Southern Labrador and Central Labrador, 1996-2001

|                                    | 1996   | 2001   | % Change, 1996-2001 |
|------------------------------------|--------|--------|---------------------|
| Southern Labrador                  |        |        |                     |
| Cartwright                         | 628    | 629    | 0.2                 |
| Charlottetown                      | 330    | 346    | 4.8                 |
| Port Hope Simpson                  | 577    | 509    | -11.8               |
| St. Lewis (Fox Harbour)            | 394    | 344    | -12.7               |
| Mary's Harbour                     | 474    | 450    | -7.0                |
| Subd. B, Division No.10            | 555    | 493    | -11.2               |
| Total                              | 2,958  | 2,771  | -6.28               |
| Central Labrador                   |        |        |                     |
| Happy-Valley Goose Bay             | 8,655  | 7,969  | -7.9                |
| Subd. C, Division No.10            | 1,018  | 1,134  | 11.4                |
| Total                              | 9,673  | 9,103  | 3.5                 |
| Southern and Central Labrador      | 12,631 | 11,874 | -6.0                |
| Source: Statistics Canada (2002a). |        | •      | •                   |

In Southern Labrador, the population structure shows a slightly higher number of males than females in the population, while Central Labrador has a marginally higher female population (Tables 3.2 and 3.3). In Southern Labrador communities, the median age of the population ranges from 31 to 39 years of age (Table 3.3). In Central Labrador, the median age of population for Happy Valley-Goose Bay is 32.7, while the communities of Subdivision C, Division 10 has the youngest median population of both regions, with an average age of 18.5 (Table 3.2). In Southern and Central Labrador, the proportion of youth (25 years of age or less) remains under 50.0 percent of the total populations. However, one exception exists for the communities of Subdivision B, Division No. 10 in Central Labrador, where over 61 percent (690) of the surveyed residents were 25 years of age or less (Table 3.2).

The elderly comprise a much smaller proportion of the population in both Southern and Central Labrador. In Southern Labrador, the elderly (65 years of age or greater) represent 4.3 percent (Charlottetown), 6.0 percent (Subd. B, Div.10), 7.7 percent (Mary's Harbour), 7.8 percent (Port Hope Simpson), 10.0 percent (Cartwright), and 13.0 percent (St. Lewis) of the population (Table 3.3). In Central Labrador, the ratio of elderly in the population is also low with 5.0 percent (Happy Valley-Goose Bay) and 3.0 percent (Subd. C, Div. 10), respectively (Table 3.2).

Table 3.2 Population Structure for Central Labrador, 2001

|                                      | Happy | y-Valley Goo | se Bay | Subd. | C, Division | No. 10 |
|--------------------------------------|-------|--------------|--------|-------|-------------|--------|
|                                      | Total | Male         | Female | Total | Male        | Female |
| Total - all population               | 7,970 | 3,950        | 4,020  | 1,130 | 555         | 580    |
| Age 0-4                              | 540   | 280          | 260    | 145   | 75          | 75     |
| Age 5-14                             | 1,335 | 665          | 670    | 325   | 140         | 185    |
| Age 15-19                            | 615   | 300          | 310    | 135   | 80          | 60     |
| Age 20-24                            | 460   | 200          | 260    | 85    | 50          | 35     |
| Age 25-44                            | 2,980 | 1,140        | 1,540  | 275   | 130         | 140    |
| Age 45-54                            | 1,060 | 555          | 510    | 90    | 45          | 50     |
| Age 55-64                            | 565   | 305          | 265    | 35    | 25          | 15     |
| Age 65-74                            | 280   | 145          | 140    | 25    | 15          | 15     |
| Age 75-84                            | 110   | 40           | 65     | 10    | 5           | 5      |
| Age 85 and over                      | 20    | 10           | 10     | 0     | 0           | 0      |
| Median age of the population         | 32.7  | 33.3         | 32.2   | 18.5  | 19.1        | 17.9   |
| % of the population ages 15 and over | 76.5  | 76.0         | 77.0   | 58.1  | 61.3        | 55.2   |
| Source: Statistics Canada 2002a.     |       |              |        |       |             |        |

 Table 3.3
 Population Structure for Southern Labrador, 2001

|                        | C     | artwrig | ht   | Ch    | arlotteto | wn   | Port 1 | Hope Si | mpson | ,     | St. Lewis |      | Mar   | y's Harb | our  | Subd  | B, Divisio | on 10 |
|------------------------|-------|---------|------|-------|-----------|------|--------|---------|-------|-------|-----------|------|-------|----------|------|-------|------------|-------|
|                        | Total | Male    | Fem  | Total | Male      | Fem  | Total  | Male    | Fem   | Total | Male      | Fem  | Total | Male     | Fem  | Total | Male       | Fem   |
| Total - all population | 630   | 330     | 300  | 345   | 180       | 160  | 510    | 275     | 235   | 345   | 175       | 170  | 450   | 235      | 215  | 495   | 260        | 230   |
| Age 0-4                | 30    | 20      | 15   | 25    | 10        | 15   | 30     | 15      | 15    | 15    | 10        | 5    | 30    | 20       | 15   | 30    | 15         | 15    |
| Age 5-14               | 80    | 35      | 50   | 55    | 35        | 20   | 80     | 45      | 30    | 50    | 25        | 25   | 65    | 35       | 30   | 75    | 40         | 30    |
| Age 15-19              | 55    | 30      | 20   | 30    | 15        | 20   | 40     | 20      | 20    | 30    | 10        | 20   | 45    | 30       | 15   | 45    | 25         | 20    |
| Age 20-24              | 35    | 15      | 15   | 30    | 10        | 15   | 35     | 20      | 20    | 25    | 15        | 10   | 25    | 20       | 15   | 35    | 15         | 15    |
| Age 25-44              | 220   | 125     | 100  | 125   | 65        | 60   | 185    | 100     | 90    | 90    | 50        | 45   | 160   | 70       | 85   | 180   | 95         | 85    |
| Age 45-54              | 105   | 55      | 50   | 40    | 20        | 20   | 60     | 30      | 30    | 55    | 25        | 30   | 65    | 30       | 30   | 55    | 30         | 25    |
| Age 55-64              | 35    | 25      | 15   | 20    | 15        | 10   | 40     | 20      | 20    | 40    | 20        | 15   | 30    | 20       | 15   | 45    | 25         | 20    |
| Age 65-74              | 40    | 25      | 15   | 15    | 10        | 5    | 25     | 10      | 10    | 20    | 10        | 10   | 20    | 10       | 10   | 15    | 10         | 5     |
| Age 75-84              | 20    | 10      | 10   | 0     | 5         | 5    | 15     | 10      | 5     | 20    | 5         | 15   | 10    | 5        | 5    | 10    | 5          | 5     |
| Age 85 and over        | 5     | 0       | 0    | 0     | 0         | 0    | 0      | 0       | 0     | 5     | 5         | 0    | 5     | 0        | 0    | 5     | 5          | 0     |
| Median age of the      | 36.3  | 37.8    | 34.7 | 31    | 31.8      | 30.5 | 32.7   | 33      | 32.4  | 39    | 38        | 40.5 | 31.2  | 30.9     | 31.5 | 31.3  | 31.4       | 31.1  |
| population             |       |         |      |       |           |      |        |         |       |       |           |      |       |          |      |       |            |       |
|                        | 81    | 83.3    | 78.3 | 76.8  | 77.8      | 78.8 | 78.4   | 77.8    | 77.1  | 82.4  | 80        | 85.3 | 77.8  | 77.1     | 81   | 79.8  | 79.2       | 80.4  |

Source: Statistics Canada 2002a.

# 3.3 Family Characteristics

In 2001, Statistics Canada indicated that there were 825 families in Southern Labrador, of which 490 were married-couple families, 160 were common-law families and 155 lone-parent families (Table 3.4) (Statistics Canada 2002a). Of the lone-parent families, 105 were female-headed families, while 60 were male-headed. In Central Labrador, there were a total of 2,625 families, of which 1,645 were married-couple families, 480 were common-law, and 485 were lone-parent families (Table 3.5). The total number of female lone-parent families was 365, while there were 130 male lone-parent families. The range of persons in lone-parent families in both Southern and Central Labrador, ranged from 2.0 (Charlottetown) to 3.1 (Subd. C, Division 10) (Tables 3.4 and 3.5). For the same time period, the total number of families across Newfoundland and Labrador was 154, 380 (Statistics Canada 2002a).

Table 3.4 Family Characteristics of Southern Labrador, 2001

|                                     | Cartwright | Charlottetown | Port Hope<br>Simpson | St. Lewis | Mary's<br>Harbour | Subd. B.,<br>Div. 10 | Total |
|-------------------------------------|------------|---------------|----------------------|-----------|-------------------|----------------------|-------|
| Total number of families            | 185        | 100           | 155                  | 110       | 130               | 145                  | 825   |
| Number of married-couple families   | 80         | 75            | 100                  | 65        | 95                | 75                   | 490   |
| Average number of persons in        | 3          | 3.4           | 3.2                  | 3.1       | 3.3               | 3.2                  |       |
| married-couple families             |            |               |                      |           |                   |                      |       |
| Number of common-law couple         | 60         | 10            | 30                   | 0         | 20                | 40                   | 160   |
| families                            |            |               |                      |           |                   |                      |       |
| Average number of persons in        | 3.2        | 4.5           | 2.7                  | 0         | 3.2               | 3.2                  |       |
| common-law-couple families          |            |               |                      |           |                   |                      |       |
| Number of lone-parent families      | 35         | 15            | 30                   | 35        | 10                | 30                   | 155   |
| Average number of persons in lone-  | 2.4        | 2             | 2.2                  | 2.4       | 2.5               | 2.8                  |       |
| parent families                     |            |               |                      |           |                   |                      |       |
| Number of female lone-parent        | 30         | 10            | 20                   | 25        | 0                 | 20                   | 105   |
| families                            |            |               |                      |           |                   |                      |       |
| Average number of persons in        | 2.3        | 3             | 3                    | 2.6       | 0                 | 2.2                  |       |
| female lone-parent families         |            |               |                      |           |                   |                      |       |
| Number of male lone-parent families | 15         | 10            | 15                   | 10        | 0                 | 10                   | 60    |
| Average number of persons in male   | 2          | 0             | 2.5                  | 0         | 0                 | 0                    |       |
| lone-parent families                |            |               |                      |           |                   |                      |       |
| Source: Statistics Canada 2002a.    |            | •             | •                    | 1         | 1                 |                      |       |

**Table 3.5** Family Characteristics of Central Labrador, 2001

|   | Happy Valley-Goose Bay | Subd. C, Div. 10 | Total |
|---|------------------------|------------------|-------|
| Total number of families                      | 2,360                  | 265              | 2,625 |
| Number of married-couple families             | 1,535                  | 110              | 1,645 |
| Average number of persons in married-couple   | 3.2                    | 4.4              |       |
| families                                      |                        |                  |       |
| Number of common-law couple families          | 405                    | 75               | 480   |
| Average number of persons in common-law-      | 2.8                    | 4.3              |       |
| couple families                               |                        |                  |       |
| Number of lone-parent families                | 415                    | 70               | 485   |
| Average number of persons in lone-parent      | 2.5                    | 3.1              |       |
| families                                      |                        |                  |       |
| Number of female lone-parent families         | 310                    | 55               | 365   |
| Average number of persons in female lone-     | 2.6                    | 3.2              |       |
| parent families                               |                        |                  |       |
| Number of male lone-parent families           | 110                    | 20               | 130   |
| Average number of persons in male lone-parent | 2.2                    | 2.2              |       |
| families                                      |                        |                  |       |
| Source: Statistics Canada 2002a.              |                        |                  |       |

#### 4.0 INFRASTRUCTURE AND SERVICES

## 4.1 Municipal, Provincial and Federal Government Administration

#### 4.1.1 Southern Labrador

In Southern Labrador, Cartwright, Charlottetown, Port Hope Simpson, St. Lewis, Mary's Harbour and Red Bay are all incorporated into towns administered by a mayor, town council and town clerk. All six towns have municipal plans that define the town's municipal planning area (MPA). The MPAs typically encompass the developed area of the town and a large undeveloped area surrounding the community. The municipal plan divides the MPA into land use designations and defines the manner in which development may occur in the MPA.

Cartwright serves as the administrative centre for the northern part of Southern Labrador, while Mary's Harbour is the administrative centre for the southern portion. The communities of Black Tickle, Pinsent's Arm, William's Harbour and Lodge Bay are local service districts. Local service districts are established under the provincial *Municipalities Act* and have responsibility for providing certain services within the district. Paradise River is an unincorporated community.

#### 4.1.2 Central Labrador

In Central Labrador, the towns of Happy Valley-Goose Bay and North West River are incorporated towns administered by a mayor, town council and town clerk. The community of Sheshatshiu, located near North West River, is part of the Sheshatshiu Innu Band and is therefore administered under their Band Council. Mud Lake, with their population under 100, has a planning group, the Mud Lake Improvement Committee, which is in charge of its administration (CLEDB 2002a). Happy Valley-Goose Bay serves as the main administrative centre for Central Labrador. Each municipality is in charge of providing and maintaining infrastructure and services such as roadways and solid waste management.

# 4.2 Transportation

The project is predicted to result in shifts in the pattern of transportation and shipping within the region. Air, marine and ground transportation may each be affected differently. Thus, it is important to understand the existing transportation infrastructure and services.

Central Labrador is accessible by both ground (TLH - Phase I between Western Labrador and Happy Valley-Goose Bay) and marine transport services. In Southern Labrador, residents have traditionally relied on marine transport in the summer and fall for travel and the movement of goods, and snowmobiles in the winter. With the completion of the Phase II portion of the TLH, the region is now accessible by road from the Labrador

Straits region. Access to scheduled air service year-round is available to all communities for travel within Labrador and to other regions. Common daily transport within towns and communities is by foot, vehicle (e.g., pickup truck), all-terrain vehicles (ATVs) in the spring to fall and snowmobiles in the winter. While some large centers such as Happy Valley-Goose Bay and Cartwright have year-round road access, snowmobile use is still common in the winter. Relatively isolated communities, such as Mud Lake, rely on boat transport in the summer and fall, and snowmobile in the winter and spring (CLEDB 2002a).

# 4.2.1 Air Transportation

There are seven operational airstrips in Southern Labrador and one operational airport in Happy Valley-Goose Bay with two airstrips. They provide year-round air access to the communities of Cartwright, Black Tickle, Charlottetown, Port Hope Simpson, St. Lewis, Williams Harbour, Mary's Harbour and Happy Valley-Goose Bay. Residents of Mud Lake, Sheshatshiu and North West River utilize the airport at Happy Valley-Goose Bay. Two commercial airlines, Air Labrador and Provincial Air, currently provide scheduled air service between Southern Labrador and Happy Valley-Goose Bay and St. Anthony. Air Nova (Air Canada) provides scheduled air service between Happy Valley-Goose Bay and St. John's and Halifax. Chartered air services (i.e., airplane and helicopter) are also available in the area.

# **4.2.2** Marine Transportation

Coastal boat service is the primary means for delivering supplies and transporting passengers to and from Southern and Central Labrador communities during the ice-free period (typically June-November).

In 1997, WST assumed responsibility from the federal government for the regional ferry service that links Labrador communities along the coast. Various routes have been subcontracted to different carriers under the Coastal Labrador Marine Services group. The *MV Northern Ranger* ferry provides passenger and freight service from St. Anthony to ports up the coast as far as Nain (WST 2002). The tariffs for travel are a minimum fee for adults of \$11.50, and a minimum fee of \$27.50 for an economy cabin (WST 2002). Marine Atlantic Ferry Service, a federal Crown Corporation, operates an auto, freight and passenger service between Lewisporte, Cartwright and Happy Valley-Goose Bay (Marine Atlantic 2002). Fees vary, but a one way fare for a vehicle between Cartwright and Happy Valley-Goose Bay is \$65.00 and an adult fare for a passenger is \$40.00 (Marine Atlantic 2002).

Coastal towns in Southern Labrador have public wharves (e.g., Cartwright, Charlottetown, Port Hope Simpson, St. Lewis and St. Mary's). These are used for docking coastal boat service and other vessels. In Cartwright and St. Lewis, the wharves join existing fish plants. Cartwright has a marine service centre with 34.4 m of dock face. The centre is used for boat maintenance and repairs and winter storage. Charlottetown and Port Hope Simpson have slipways for small fishing boats. In Central Labrador, Happy Valley-Goose Bay

has three wharves for docking coastal boat service, barges and an official wharf for government. The area also has a local marina for small boat crafts and float dock facilities.

With the completion of the TLH - Phase II between Cartwright and Red Bay, the Government of Newfoundland and Labrador has plans to change the coastal marine services in Southern Labrador (Abbott 2002). As of Spring 2003, the Labrador coastal marine freight and passenger services will be operated out of Cartwright. Terminals currently operating in Lewisporte and St. Anthony on the island of Newfoundland will be closed. Travel in Southern Labrador will primarily be by road, with isolated communities in the region being served by freight and passenger service out of Cartwright.

Freight and passenger movement to Central Labrador will be by way of ground transport to Cartwright and then marine transport to Happy Valley-Goose Bay (Abbott 2002). A dedicated ferry service will be available between Cartwright, Rigolet and Happy Valley-Goose Bay. Joint passenger/freight services will be provided to communities along Labrador's north coast through the Cartwright marine terminal, with transfer points in Happy Valley-Goose Bay and Rigolet, depending on whether passengers and freight are north or south-bound.

When the TLH-Phase II is complete, Central Labrador, which is already linked by road to Western Labrador, will also be serviced by ground transport via Southern Labrador and the Labrador Straits. Marine freight and passenger services will continue to be provided to the north coast communities via terminals in Cartwright and Happy Valley-Goose Bay (Abbott 2002).

# 4.2.3 Ground Transportation

A network of secondary roads connects all towns and two primary roads, sections of the TLH, extend from western Labrador to Happy Valley-Goose Bay and Red Bay to Cartwright. Both sections of the highway are two-lane, all-season gravel roads. WST is responsible for the development and maintenance of roads in Labrador. Highway enforcement officers have been hired to enforce regulations relating to the legal weights on roads, truck inspections and transportation of dangerous goods (Government of Newfoundland and Labrador 2000). Municipalities are responsible for plowing roadways during winter conditions. The secondary roads of Happy Valley-Goose Bay and North West River are paved, as is the highway that connects these two communities. The community of Sheshatshiu has gravel roads.

There are snowmobile trail networks surrounding most communities in the region that are used primarily by local residents for subsistence and recreational activities (T. Kent, pers. comm.). These trails are being increasingly promoted for tourism purposes. A system of trails stretches from Happy Valley-Goose Bay as far as Southern Labrador. Labrador Winter Trails Inc. is coordinating the development of a series of trails that stretch 1,500 km in length across Labrador. The first phase of the plan was completed in December 2000 at a cost of \$3.5 million (Government of Newfoundland and Labrador 2002a). It involved upgrading and developing snowmobile trails from L'Anse au Clair to Cartwright, Cartwright to Happy Valley-Goose Bay,

North West River to Rigolet, and Churchill Falls to Labrador West (Government of Newfoundland and Labrador 2000). These trails are maintained (i.e., trees cut and trails groomed) during the main months of usage and are equipped with signage and emergency shelters (Government of Newfoundland and Labrador 2002a).

# 4.3 Utilities and Community Services

Newfoundland and Labrador Hydro provides electricity to the communities of Southern and Central Labrador. Diesel generating stations are located in Cartwright, Charlottetown, Port Hope Simpson, St. Lewis, Mary's Harbour, the communities of Subd. B, Division 10, and Mud Lake (NLH 2002). Happy Valley-Goose Bay has a gas turbine generating plant for back-up services. Power to the Central Labrador area is supplied from Churchill Falls. The communities of Mud Lake, North West River and Sheshatshiu are all part of the Happy Valley-Goose Bay interconnected service area (R. Smith, pers. comm.). In the case of diesel generating systems, Newfoundland and Labrador Hydro typically maintains twice the required generating capacity to ensure back up for service and emergencies. Fuel for generators is shipped to communities at the start and close of each shipping season and each facility has the storage capacity for a winter supply of fuel. There is a regional office for Newfoundland and Labrador Hydro (NLH) located in Happy Valley-Goose Bay (NLH 2002).

Newtel Communications, now Aliant Telecom, provides telephone service to Labrador via a network of microwave towers. In 2001, NewTel partnered with Telesat under the Industry Canada Smart Communities Initiative to develop a hybrid network using satellites, frame relay and wireless technologies to provide high-speed access and videoconferencing capabilities to public access sites and health centres around Labrador. Internet access is available in most schools and within each community.

Canada Post has offices or outlets in each of the communities, although the mail service is relatively slow, especially with regard to mail sent between communities. CBC television and radio are available to all the communities of Southern and Central Labrador. One local cable station, Cable Labrador, based in Happy Valley-Goose Bay, provides service in the five incorporated communities of Southern Labrador, Central Labrador, Black Tickle, and Lodge Bay. Newspapers that serve the communities include *the Labradorian* (weekly) and *the Northern Pen*.

# 4.4 Water Supply and Waste Disposal

## 4.4.1 Water Supply

The Water Resources Management Division of the Department of Environment administers the Public Water Supply Area Protection Program. The primary goal of this program is to protect the quality of water in these areas through regulatory measures. Protected water supply areas in Southern and Central Labrador include:

- Bridets Brook Protected Water Supply Area (Cartwright);
- Martin's Pond Protected Water Supply Area (Black Tickle);
- John Martin's Pond Protected Water Supply Area (Charlottetown);
- Arnold's Brook Protected Water Supply Area (Port Hope Simpson); and
- Town of Happy Valley-Goose Bay Water Supply Area (Happy Valley-Goose Bay).

All towns, except for unincorporated communities, have piped water supply systems. Other communities rely on private wells. For instance, Happy Valley-Goose Bay is supplied by a system of five wells 30 to 50 m (100 to 160 feet) deep, that are located 6.5 km west of the town on the TLH (S. Normore, pers. comm.)

# 4.4.2 Domestic Sewage

All towns have piped sewer systems serving a portion of the community and, in all cases, raw sewage is discharged directly into the sea. A lack of funding and bedrock conditions are common factors limiting the expansion of sewer systems within communities. As with the water supply system, the service is installed within 1.5 m (5 feet) of buildings, and it is the owner's responsibility to pay for connection. However, not all houses or building owners have elected to be connected. Buildings in the smaller and unincorporated communities and summer fishing stations typically have septic or "honey bucket" sewage systems or private septic systems.

Due to a shallow soil layer covering the bedrock, there are problems obtaining proper depth for drainage from septic fields. This has led to problems with septic systems freezing during the winter and drainage from septic fields seeping into ditches. Some viability studies have been undertaken to assess whether continuing to provide piped sewer service to these communities will be possible.

#### 4.4.3 Solid Waste Disposal

Solid waste is collected regularly by each of the town councils and disposed of at each town's waste disposal site. At some sites, such as in Cartwright, there have been reported problems with bears and drainage. In Port Hope Simpson, St. Lewis and Red Bay, waste disposal involves dumping garbage over a ledge and covering it with gravel in the summer and burning it in the winter. In small communities and fishing stations, responsibility for garbage disposal rests with the individual. In most cases, refuse is dumped into the ocean or burned. There are no official recycling or composting programs in these communities but, containers that require deposits are collected for recycling and returned.

# 4.5 Housing

In 2001, there were a total of 800 dwellings in Southern Labrador and 2,965 dwellings in Central Labrador (Table 4.1). Housing in most communities is in generally good condition, as most homes have been

constructed within the past 30 years. In 1996, 25.6 percent of homes in the communities in Southern Labrador were in need of "minor repairs," while less than 20.0 percent required "major repairs" (Statistics Canada 1998).

Table 4.1 Statistics on Dwellings in Southern and Central Labrador, 2001

|                               | Total<br>Number of<br>Dwellings | Number of<br>Owned<br>Dwellings | Number of<br>Rented<br>Dwellings | Number of<br>Dwellings<br>constructed<br>before 1991 | Number of<br>Dwellings<br>constructed<br>1991-2001 |
|-------------------------------|---------------------------------|---------------------------------|----------------------------------|--|--|
| Southern Labrador             |                                 |                                 |                                  |  |  |
| Cartwright                    | 235                             | 185                             | 5                                | 190  | 45   |
| Charlottetown                 | 100                             | 85                              | 15                               | 65   | 35   |
| Port Hope Simpson             | 150                             | 130                             | 25                               | 105  | 50   |
| St. Lewis (Fox Harbour)       | 125                             | 115                             | 10                               | 115  | 10   |
| Mary's Harbour                | 145                             | 130                             | 15                               | 100  | 45   |
| Subd. B, Division No.10       | 140                             | 130                             | 15                               | 100  | 45   |
| Total                         | 800                             | 720                             | 95                               | 585  | 230  |
| Central Labrador              |                                 |                                 |                                  |  |  |
| Happy-Valley Goose Bay        | 2,745                           | 1,625                           | 1,120                            | 2,070  | 670  |
| Subd. C, Division No.10       | 220                             | 110                             | 15                               | 135  | 85   |
| Total                         | 2,965                           | 1,735                           | 1,135                            | 2,205  | 755  |
| Source: Statistics Canada 200 | 2a.                             |                                 |                                  |  |  |

The Newfoundland and Labrador Housing Corporation (NLHC) administers several programs to communities such as the Rental Housing Program, Provincial Home Repair Program, and Rent Supplement Program. Through the Rental Housing Program, the NLHC has several housing units across Southern and Central Labrador. In Southern Labrador, units are found in the communities of Charlottetown (one unit), Port Hope Simpson (nine units), Black Tickle (six units) and Cartwright (six units). In Central Labrador, there are units in Happy Valley-Goose Bay (93 units), North West River (11 units) and Mud Lake (one unit) (N. Flynn, pers. comm.). In Sheshatshiu, the houses are administered under the Band Council. In some cases, the NLHC partners with other housing organizations to provide services. For instance, in Cartwright, there are 20 units sponsored by Eagle River Housing but run by the NLHC. The NLHC also fund 75 units managed by the Melville Native Housing (N. Flynn, pers. comm.). The average rent of these units is \$450 a month (N. Flynn, pers. comm.).

The NLHC's Home Repair Program is ongoing and has a waiting list of approximately 100 to 200 people for services (N. Flynn, pers. comm.). The NLHC does an average of 55 to 60 home repairs on this program per year. People on the waiting list normally wait 2.5 to 3 years for non-priority repairs and move up to immediate attention for emergency, health and safety issues. The Rent Supplement Program is still not widely implemented and there are only four units under this program in Happy Valley-Goose Bay (N. Flynn, pers. comm.).

In Southern and Central Labrador, houses can be categorized following Statistics Canada's definition as owned, rented or band housing. In general, the number of rented dwellings in most communities is low, except in Happy Valley-Goose Bay, where 40 percent of the dwellings are rental (Table 4.1). The number of owned dwellings is consistently around 60 percent or above in all communities except in Subdivision C, Division 10 of Central Labrador, where Statistics Canada reported in 1996 that 65 dwellings were classified as band housing. There were no statistics for band housing in 2001.

#### 4.6 Health Care

Health care services and infrastructure in Southern and Central Labrador fall under the jurisdiction of Health Labrador Corporation and Grenfell Regional Health Services (GRHS). The Health Labrador Corporation, based in Happy Valley-Goose Bay, is responsible for community clinics and mental health services in the local communities, including North West River, Sheshatshiu, Mud Lake, Cartwright, Paradise River and Black Tickle. The GRHS is based in St. Anthony (Newfoundland) and is responsible for health care and community and mental health services in the remaining areas of Southern Labrador (i.e., Charlottetown, Port Hope Simpson, Mary's Harbour and St. Lewis) and the Labrador Straits. Transportation services are provided to coastal residents who need to travel for secondary medical reasons and emergencies.<sup>2</sup> In Happy Valley-Goose Bay, a road ambulance service is operated by private contractors and an air ambulance is operated by the Government of Newfoundland and Labrador (K. Lefresne, pers. comm.). When residents of smaller communities need to travel to Happy Valley-Goose Bay for treatment, they receive travel vouchers with their referrals (J. Russel, pers. comm.).

All community clinics are set-up with holding beds, basic trauma and resuscitation equipment. The stations do not have cardiac monitoring or defibrillation capabilities. Stations normally have two nurses, a nurse's aide and a maintenance person. Physicians from the Labrador Health Centre or GRHS make community visits every six to eight weeks and are always available to regional nurses by telephone (Health Labrador Corporation 2002). Regional nurses of these stations often play the role as pharmacist, lab technician and practitioner.

In Happy Valley-Goose Bay, Health Labrador Corporation has established the Labrador Health Centre, which provides various services including public, mental health, child, youth and family, and addiction services. Happy Valley-Goose Bay also has two private practice medical clinics, one physiotherapist, private dental offices, and an optometrist (Happy Valley-Goose Bay 2002; Health Labrador Corporation 2002). The private practice dental clinics offer dental services to the local area and provide community visits to the coastal

<sup>&</sup>lt;sup>2</sup> Primary health care services include preventive health measures, as well as basic care for sick individuals. This care is provided at the level of the clinic (fixed or mobile) and is generally limited in scope. Secondary and tertiary health care services such as cardiac, gastrointestinal and surgical are provided at the level of hospitals and specialized medical facilities. Tertiary care specifically refers to hospital care that requires highly specialized skills, technology or support services.

communities approximately every six weeks (Health Labrador Corporation 2002). Health Labrador Corporation does not provide tertiary or specialized treatment, for which patients must go to St. John's.

All departments within the Health Labrador Corporation liaise with the Labrador Inuit Health Commission and the Innu Nation Health Commission in the provision of health care (Health Labrador Corporation 2002). The Innu Nation Health Commission is responsible for the overall health concerns of Labrador Innu and the Labrador Inuit Health Commission is responsible for the overall health concerns of the Labrador Inuit. Due to jurisdictional concerns with the provincial government, the commissions do not yet provide direct medical care, but do deliver programs related to mental health, non-insured health benefits, community health and safety, addictions, public health, and family services (Labrador Inuit Association 2002). The Labrador Health Centre offers translation services for patients.

## 4.7 Social Services

The Department of Human Resources and Employment is responsible for income support and labour market services. Income support involves providing assistance to individuals and families who require financial support to meet basic living requirements. Labour market services assist with identifying and creating employment opportunities throughout the province. This includes career development and job search services, career and employment information, employment programs, youth initiatives, and employability assistance for people with disabilities. The Department of Health and Community Services is responsible for child welfare, community corrections services, and family and rehabilitative services. Within Southern Labrador, social services are provided through offices in Cartwright, Mary's Harbour and Forteau. Within Central Labrador, services are provided through offices in Happy Valley-Goose Bay and Sheshatshiu. These government departments have a number of programs in place to deliver social services. Demand for services varies between regions and programs, and according to the time of the year.

# 4.8 Safety and Security Services

Policing in Central and Southern Labrador is the responsibility of the RCMP. The detachment in Happy Valley-Goose Bay provides policing services to the communities of North West River and Sheshatshiu. The detachment in Cartwright provides services to Black Tickle, Eagle River and Paradise River. The Mary's Harbour detachment serves the remainder of Southern Labrador, from Charlottetown to mid point between Lodge Bay and Red Bay. A detachment in Forteau provides policing services to Red Bay and the Labrador Straits region. Mary's Harbour has two regular officers and three volunteer auxiliary constables. Cartwright has three regular officers and one auxiliary. In addition, a RCMP highway unit based out of Stephenville and Deer Lake is currently available to provide patrol assistance along the TLH – Phase II.

Justice services are provided on a circuit basis by the provincial court in Corner Brook, with court officials visiting the area on a bimonthly basis. The Labrador Correction Centre, operated by the Department of Justice, is located in Happy Valley-Goose Bay. The Cartwright detachment dealt with 357 complaints in 2001, and has received 280 complaints to date in 2002 (B. Brier, pers. comm.). Mary's Harbour typically receives approximately 350 complaints each year (D. Warr, pers. comm.).

Happy Valley-Goose Bay has a semi-volunteer fire department. There are four full-time fire brigade employees, out of a total staff of 34. The town has two pump trucks, one of which is a new acquisition (C. McLean, pers. comm.). The North West River/Sheshatshiu Volunteer Fire Brigade has a volunteer staff of 13 and one pump truck (E. Blake, pers. comm.). The communities of Charlottetown and Cartwright also have volunteer fire departments. Cartwright has a staff of 15 volunteers, one truck (with a 500-gallon tank), and one portable pump (R. Clark, pers. comm.). Volunteer departments are responsible for handling all fires within the town and at its waste disposal site.

Forest fire suppression and monitoring is the responsibility of the Department of Forest Resources and Agrifoods. The Labrador regional office is located in Happy Valley-Goose Bay, supported by district offices in Cartwright (Districts 20 and 21) and North West River (District 19). In addition, there are satellite offices for District 21 in Port Hope Simpson and Red Bay. Fire suppression staff in the study area include two seasonal fire fighters and three conservation officers in Cartwright, two seasonal fire fighters and three conservation officers in Red Bay. In North West River, there are 19 seasonal fire fighters available for deployment throughout the region as required (F. Taylor, pers. comm.). In the event of a forest fire, local residents are commonly hired as casual fire fighters. Forest fire suppression equipment in the area includes 20 Wajax pump units and six smaller pumps. Additional equipment can be brought in from the Gander Fire Protection Centre as required. There are six water bombers in the provincial fleet, one of these is based in Happy Valley-Goose Bay and another is based in Wabush. There is also a contract helicopter based in Happy Valley-Goose Bay. The Cartwright and Port Hope Simpson offices have "bambi buckets" available for use by helicopters to fight fires as required. Other aircraft can be obtained from elsewhere in Labrador and from the island of Newfoundland.

In 2002, there were 51 fires that burned a total of 138 ha of land throughout Labrador (Department of Forest Resources and Agrifoods 2002). This compares to 23 fires that burned a total of 934 ha in 2001. On average, approximately 35 fires burn in the Labrador Forest Region each year (F. Taylor, pers. comm.). Historically, most forest fires have been larger and in remote locations – a 30,000 ha burn is not uncommon. In 2002, a lightening strike 12 km west of Sheshatshiu and North West River lead to the evacuation of those communities as a precautionary measure (Department of Forest Resources and Agrifoods 2002). Port Hope Simpson and Charlottetown were also put on evacuation alert due to the threat of fire. There was one human caused forest fire in 2002 along the TLH – Phase II (F. Taylor, pers. comm.).

#### 4.9 Education

Newfoundland and Labrador's Department of Education stated that in 2001-2002 there were 10 schools in Southern Labrador and eight schools in Central Labrador (Table 4.2). The schools in Cartwright and Black Tickle-Domino (in upper Southern Labrador) and all of Central Labrador fall under the administration of the Labrador School Board. Schools in lower Southern Labrador, such as Charlottetown, St. Lewis and Mary's Harbour, are administered by the Northern Peninsula/Labrador South School Board.

In 2001-2002, Central and Southern Labrador had 2,847 students enrolled and 235 teachers employed (Table 4.2). Computer access is widely available at most schools and the student to computer ratio is 6.1:1, while the student to internet access ratio is 6.9:1 (Table 4.3). Efforts are being made by the Department of Education to upgrade existing schools. In June 2002, the government announced a \$338,000 contract to build a new school in Mud Lake and another proposal is being considered for a new school in Happy Valley-Goose Bay (Government of Newfoundland and Labrador 2002b). All the schools are public and several in Happy Valley-Goose Bay offer French immersion programs.

In Happy Valley-Goose Bay, there are three post-secondary institutions, which include the Compu College School of Business (established in 1995), the Labrador Institute of Memorial University (through which residents can take distance education programs), and the College of the North Atlantic (Happy Valley-Goose Bay 2002).

Table 4.2 Number and Percentage Change in Schools, Enrolment and Teachers in Central and Southern Labrador, 2002<sup>3</sup>

|  | Central Labrador | Southern Labrador |
|--|------------------|-------------------|
| Number of schools  | 8                | 10                |
| Enrolment  | 2,281            | 566               |
| Teachers   | 174              | 61                |
| Percentage change in number of schools (2000/01 to 2001/02)  | -11.1            | 0.0               |
| Percentage change in enrolment (2000/01 to 2001/02)          | -0.2             | 1.8               |
| Percentage change of number of teachers (2000/01 to 2001/02) | 1.8              | 0.0               |
| Source: Department of Education 2002.                        |                  |                   |

<sup>&</sup>lt;sup>3</sup> Classification is based on the provincial government's regional economic development zones for Central Labrador and Southern Labrador (Southeastern Auruora).

Table 4.3 Computers in Schools, Internet Access and Ratio of Students to Computers in Labrador, 2001-2002

|  | Labrador |
|--|----------|
| Total computers                                  | 856      |
| Total classroom-based computers                  | 364      |
| Computer laboratory                              | 391      |
| Library/learning resource center                 | 87       |
| Students to computer ratio                       | 6.1      |
| Computers with internet access                   | 751      |
| Students to computers with internet access ratio | 6.9      |
| Source: Department of Education 2002.            | ·        |

#### 4.10 Culture and Recreation

The culture of Southern and Central Labrador is based on a combination of geographic, economic and historical issues at play. There is a long history of local aboriginal peoples of the area – the Innu, Inuit, and Métis groups. There is also the presence of European settlers and other immigrants who have come to work and live in northern communities over the past five centuries. The major factors influencing life in these regions is isolation, proximity and reliance on industries related to the marine environment, seasonal work patterns and social relationships of different cultural groups living in communities (MUN 1997). South and Central Labrador was first inhabited by various Aboriginal groups that lived off the land, dependent on hunting caribou inland and fishing on the coast (IELP 2002). By the seventeenth and eighteenth centuries, Europeans began to settle in the area to engage in the fisheries and the fur trade. Communities have since developed into towns and with growing industries. Some large projects in the North that have had an influence on communities include large mining developments (e.g., Voisey's Bay Mine/Mill) and the development of the air base in Happy Valley-Goose Bay.

Most towns and communities have recreational facilities (i.e., gymnasiums, recreation centres and community centres) available for residents. Snowmobiling is a popular pastime in the winter months as a recreational activity, with a large amount of trails available for travel. In addition, there are other outdoor activities such as skiing and snowshoeing. Sports such as curling, hockey and skating are also popular, and many communities have outdoor and indoor rinks. Larger centres such as Happy Valley-Goose Bay offer a variety of recreational outlets, including a nine-hole golf course.

Various churches have been established throughout the communities. Denominations represented include Roman Catholic, Pentecostal, Anglican, Moravian, United Church, Nazarene and Bel Jehovah. The region also has a tradition of local "craft" culture, which is reflected across all of Newfoundland and Labrador (MUN 1997). Some traditional aboriginal crafts include caribou tufting and carving. Scheduled events take place throughout the communities such as the Labrador Winter Games, next scheduled for March 2003. These events serve as important social, economic and cultural events. Satellite television is widely available for residents and access to video stores and the Internet is available for entertainment.

#### 5.0 HEALTH AND SOCIAL CHARACTERISTICS

## 5.1 Health

Health indicators (i.e., diet, mortality and reproductive health) provide an important overview on the state of a community. As previously mentioned, the communities of Central and Southern Labrador fall under the administrative jurisdiction for two health organizations – GRHS and the Health Labrador Corporation. These boards monitor local health indicators in populations and provide medical and social programs to the region.

A 2002 comparative health report for the province of Newfoundland and Labrador noted that the general health in the province is good. It was ranked at 66.2 percent with the index used, which is higher than the overall average for Canada at 61.25 percent (Statistics Canada 2002b). Residents of the province are expected to have the same general life expectancy as the Canadian average. Life expectancy in Newfoundland and Labrador is 77.7 years, while across Canada it is 79 years of age. Overall infant mortality for the province is 4.9 per 1,000 births, which lower than the national standard of 5.3 (NLCHI 2002). However, nationally Newfoundland and Labrador have the highest mortality rates from heart attacks (71.9 percent), more than 10.0 percent above the national percentage of 60.2. The province also has the highest rate of stroke across Canada, with 46.3 strokes per 100,000 persons (NLCHI 2002).

Reflecting provincial trends, many modifiable risk factors such as physical inactivity, obesity and smoking are at high rates in the communities of Labrador. In terms of diet, dietary practices for the region showed that 70.1 percent of the population ate five or less servings of fruit and vegetables per day, whereas nationally averages were higher at 5 to 10, or 10 or more servings (Statistics Canada 2002b). Often there are dietary problems for northern communities in Central and Southern Labrador because of restricted access to produce. In addition, residents must buy food from local stores, which contend with small markets and high shipping and handling costs, that are unable to stock the variety and quality of groceries available in larger centres (VBNC 1997). Physical inactivity can also lead to health problems. Recent statistics for the communities of Southern and Central Labrador showed that during leisure time, very few residents were active. For the GRHS region, 59.3 percent of residents were inactive outside of work, while 42.2 percent were inactive in the Health Labrador Corporation region (Statistics Canada 2002b).

In 1996, Statistics Canada indicates that total mortality per 100,000 for the GRHS area was 740.5, and 869.5 for the Health Labrador Corporation communities (Table 5.1). In terms of suicide deaths, there were 19.2 deaths per 100,000 in the Health Labrador Corporation region and the 8.1 per 100,000 in the GRHS region (Table 5.1). This is compared to the national average suicide rate of 12.9 for the country in the same time period. In the Health Labrador Corporation and GRHS regions, there is a higher incidence of respiratory disease deaths compared to the rest of Canada. While national averages are 59.8 per 100,000, the rates in the Health Labrador Corporation region are as high as 121.3 (Table 2.1.1). The Health Labrador Corporation and

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<sup>&</sup>lt;sup>4</sup> Respiratory diseases are defined as pneumonia, influenza, bronchitis, emphysema, asthma and other diseases.

GRHS regions also have a high rate of cancer, at 168.5 per 100,000 and 212 per 100,000, respectively (Table 5.1).

Table 5.1 Health Indicators in Labrador, 1996

| Health Indicators  |                          | Rate per 100,000 <sup>1</sup> |           |  |  |  |  |
|--|--------------------------|-------------------------------|-----------|--|--|--|--|
|  | Total                    | Female                        | Male      |  |  |  |  |
| Total Mortality  |                          | <u>'</u>                      |           |  |  |  |  |
| Health Labrador Corporation                                | 869.5                    | 652.6                         | 1,091.3   |  |  |  |  |
| Grenfell Regional Health Service                           | 740.5                    | 598.5                         | 881.6     |  |  |  |  |
| Suicide Deaths   |                          |                               |           |  |  |  |  |
| Health Labrador Corporation                                | 19.2                     | 0.0                           | 36.5      |  |  |  |  |
| Grenfell Regional Health Service                           | 8.1                      |                               |           |  |  |  |  |
| <b>Unintentional Injury Deaths</b>                         |                          |                               |           |  |  |  |  |
| Health Labrador Corporation                                | 52.5                     | 34.7                          | 71.0      |  |  |  |  |
| Grenfell Regional Health Service                           | 30.2                     | 24.8                          | 34.3      |  |  |  |  |
| AIDS Death   |                          |                               |           |  |  |  |  |
| Health Labrador Corporation                                | 0.0                      | 0.0                           | 0.0       |  |  |  |  |
| Grenfell Regional Health Service                           | 0.0                      | 0.0                           | 0.0       |  |  |  |  |
| All Cancer Deaths  |                          |                               |           |  |  |  |  |
| Health Labrador Corporation                                | 168.5                    | 190.1                         | 149.2     |  |  |  |  |
| Grenfell Regional Health Service                           | 212                      | 254                           | 164.5     |  |  |  |  |
| Lung Cancer  |                          |                               |           |  |  |  |  |
| Health Labrador Corporation                                | 43.1                     | 83                            | -         |  |  |  |  |
| Grenfell Regional Health Service                           | 43.1                     | 94.4                          | 55.7      |  |  |  |  |
| <b>Respiratory Disease Deaths</b>                          |                          |                               |           |  |  |  |  |
| Health Labrador Corporation                                | 121.3                    | 146.7                         | 92.9      |  |  |  |  |
| Grenfell Regional Health Service                           | 43.4                     | 60.5                          | 27.6      |  |  |  |  |
| <sup>1</sup> Male and female rates are proportions; the nu | imber of males and femal | es in the population is no    | ot equal. |  |  |  |  |
| Source: Statistics Canada 2002b.                           | <u> </u>                 |                               |           |  |  |  |  |

In terms of reproductive health, 1996 statistics for the infant mortality rate for the GRHS was low, at 1.9 per 1,000 lives. However, the rate was extremely high for the Health Labrador Corporation region, with a total of 17.3 deaths per 1,000 births (Statistics Canada 2002b). In terms of teen pregnancy, provincial statistics indicated there were 662 pregnancies among the 15 to 19 age group in 1998. Among the same age group, there were 204 induced abortions (Statistics Canada 2002b).

Mental health is also tied to the overall physical health of residents in communities. For instance, unemployment has been associated to mortality rates, as it is thought to be linked to accidental injury, suicide, violence, circulatory disease/cancer, and increased psychoanalytical symptoms (VBNC 1997). Various indicators of mental health problems, in particular alcohol and solvent abuse, suicide, violence, child abuse and vandalism, are an issue in many northern Labrador communities (VBNC 1997). Life stress has been noted in the communities of the GRHS and Health Labrador Corporation regions. Most respondents of both regions note that they have some stress in their daily life (Table 5.2). On a positive note, residents in both communities perceive that they have some social support. Social support is defined by Statistics Canada as emotional or information support when they need someone to listen or need to confide in someone. In the

GRHS and Health Labrador Corporation regions, none of the respondents noted they had low support – in fact, support is reported to be high (Table 5.3).

Table 5.2 Life Stress by Household Population Aged 18 and over by Region, 2000/01

| Region                                 | No Stress | Some Stress | Quite a Lot |
|--|-----------|-------------|-------------|
| Health Labrador Corporation            | 16        | 69.8        | 14.0        |
| Grenfell Regional Health Service       | 13.8      | 71.4        | 14.8        |
| Source: Statistics Canada 2000; 2002b. |           |             |             |

Table 5.3 Level of Perceived Social Support by Region, 2000/01 (percentage)

| Region                                 | Low Support | Medium Support | High Support |
|--|-------------|----------------|--------------|
| Health Labrador Corporation            | -           | 10.9           | 84.4         |
| Grenfell Regional Health Service       |             |                | 95.8         |
| Source: Statistics Canada 2000; 2002b. |             |                |              |

The aboriginal community is considered a distinct part of the province's population. Across Canada, it is recognized that health problems are more pronounced in this group of people than in the remainder of the population (Department of Health and Community Services 2002). Health issues include those associated with smoking, alcohol use, obesity, physical inactivity and infant mortality (Statistics Canada 2000). Additionally, there is a higher incidence of diabetes among this population (Department of Health and Community Services 2002).

#### 5.2 Social

One of the main issues facing communities in Central and Southern Labrador is isolation. Of the social problems that have been noted in northern communities, substance abuse is prominent and is a critical contributory factor in family violence and other crimes. In the northern region (i.e., the provincial health region that includes all of Labrador and the northern portion of the Great Northern Peninsula), the incidence of alcohol consumption (58 percent), cigarette smoking (41 percent) and cannabis use (28 percent) were higher than for the province as a whole (VBNC 1997).

There are several support services that exist to help address social problems. These include the Labrador Health Centre, which is based in Happy Valley-Goose Bay. The facility, which is accessible to the region, provides community services including addictions, public health, mental health and home care. It is also the site of the regional office of Child, Youth and Family Services and the Medical Office of Health (Government of Newfoundland and Labrador 2000). Specific to Innu and Inuit communities, there are programs and facilities administered under the Labrador Inuit Health Commission and Innu Nation Health Commission. In Sheshatshiu, the Charles J. Andrew Youth Restoration Centre was built several years ago to provide

programming in the field of substance abuse treatment. It is a 12-bed facility, which received funding from Health Canada (Government of Newfoundland and Labrador 2000).

Social issues in Southern and Central Labrador are dependent on social group type. In the region, there are both predominantly Innu communities and mixed communities. Mixed communities have groups that define themselves as Innu and Inuit, people who define themselves as settler-people (of European decent who have lived in Labrador for several generations), people who define themselves as Métis, and people that have recently relocated to the area. Each of these groups face different social challenges in terms of adaptation to way of life, work patterns, cultural transitions and geographical characteristics.

#### 6.0 OVERVIEW OF LOCAL AND REGIONAL ECONOMIES

The proposed highway will have direct and indirect effects on the local economies of individual communities and of the region as a whole. This includes changes in the production and supply of goods and services, business climate, and community life as a result of improved access. In assessing the political socio-economic effects of the proposed project, an understanding of the current size and structure of the local and regional economies is required.

The highway will pass through Central and Southern Labrador. Employment and business activities in these regions are within the jurisdiction of various levels of government. Overall, economic development is promoted through the regional economic development boards, which were established under the province's economic zone system. Southern Labrador corresponds to Zone 4 of the system and is administered by the Southeastern Aurora Development Corporation, while Central Labrador (Zone 3) is administered by the Central Labrador Economic Development Board.

# 6.1 Central Labrador Economy

A low population in a large semi-wilderness area characterizes Central Labrador. It incorporates approximately 70,000 km<sup>2</sup> of land area with a population of 9,654 (in 2001). This zone covers 17 percent of the landmass and only two percent of the population of the whole province. The Central Labrador Economic Development Board and Statistics Canada provided the following information about the communities.

## 6.1.1 Happy Valley-Goose Bay

Happy Valley-Goose Bay is the largest community in Labrador. The economy is largely dependent on employment provided by CFB Goose Bay. Although the economy has always been based on earned wages, many residents with Innu, Inuit, Métis and settler heritage still live a traditional lifestyle on land, depending on caribou hunting, fishing and trapping as a means of subsistence living.

A small manufacturing sector is developing in Central Labrador, along with a few small agricultural initiatives in the past 10 years. The Voisey's Bay mine/mill project, the possible future development of the hydro potential of the lower Churchill River and the TLH project offer new employment opportunities to the residents

#### 6.1.2 Mud Lake

The Mud Lake economy is generally a subsistence economy based on fishing and hunting for food, and trapping for furs to buy other goods and services in Happy Valley-Goose Bay and elsewhere. Mud Lake is isolated from other communities by the Churchill River, but it is accessible by boat in summer and fall and by snowmobile in winter and spring.

#### 6.1.3 North West River

North West River has a population of Innu, Inuit, Métis and settler heritage. There are small businesses such as a restaurant, convenience stores, arts and crafts businesses, and a bed and breakfast. Educational and governmental facilities include an all-grades school, a division of the College of the North Atlantic, postal service, tourism businesses, an interpretation centre and the Labrador Heritage Museum. Many residents of North West River still depend on trapping, hunting and fishing for a living.

#### 6.1.4 Sheshatshiu

The majority of the population of Sheshatshiu is Innu. It has a school, a church and several businesses. Many residents of Sheshatshiu travel into the Labrador wilderness for several months in the spring of each year to live their traditional lifestyle of hunting and gathering food.

# **6.2** Southern Labrador Economy

Southern Labrador (Zone 3) has a number of permanent communities, with a total population of 2,717 (in 2001). Most are of Métis descent. The economy is based largely on shrimp and crab fisheries. The Southeastern Aurora Development Corporation and Statistics Canada provide the following information on the communities.

## 6.2.1 Lodge Bay

The Lodge Bay economy is directly linked to the presence of Mary's Harbour. Businesses include a general store, a gas station and a craft shop. A road connection to Mary's Harbour provides residents an access to an airstrip, clinic, marine services and high school.

## 6.2.2 Mary's Harbour

The Mary's Harbour economy depends primarily on fisheries. The Labrador Fishermen's Union Shrimp Company employs over 120 people at the local crab processing facility. Businesses include accommodations, an investment company, a tour operation, a craft shop, a beauty salon, restaurants and general stores.

#### **6.2.3** St. Lewis

St. Lewis is considered a prime fishing centre on the southeastern coast of Labrador. The community's main employer is Coastal Labrador Fisheries Limited, which operates a crab-processing facility employing approximately 80 people. Businesses include accommodations, a restaurant, gas stations, grocery stores, a craft shop and a bar/nightclub.

#### 6.2.4 William's Harbour

In William's Harbour, fishing is the primary source of income. Businesses include a craft shop and a store.

## **6.2.5** Port Hope Simpson

The Port Hope Simpson economy is based on forest harvesting and processing, fisheries, craft construction and adventure tourism. Businesses include accommodations, gas stations, restaurants, stores, crafts, and snowmobile outlets.

## 6.2.6 Pinsent's Arm

Pinsent's Arm had historically served as the winter place for the fishing communities of Square Islands, Triangle, and other stations at the mouth of St. Michael's Bay. The community relies on many services in Charlottetown, such as schooling for high school levels II and III, postal services and medical services. There is only one retail business in the area.

#### 6.2.7 Charlottetown

Charlottetown existed as a winter place for summer fishing stations such as Square Islands, Seal Islands, Hawks Harbour, Dead Islands, Triangle, Tub Harbour, Venison Tickle and Pinsent's Arm. During the summer of 2001, the Labrador Fishermen's Union Shrimp Company Limited opened the first-ever shrimp processing facility for Labrador in the community. Local businesses include accommodations, a gas station, variety stores, craftshop and an auto body repair shop.

#### 6.2.8 Black Tickle

The Black Tickle population depends generally on fishing. Listed businesses include Northern Lights Sales Limited and T & S Variety Limited.

# 6.2.9 Cartwright

In Cartwright, the main source of income is from fishing. Traditionally, it was a salmon-fishing community until the commercial fishery was closed in 1996. The Labrador Fisherman's Union Shrimp Company operates a crab plant employing 100 to 150 workers. The facility also processes whelk. Businesses include a craft shop, variety stores, a gas station, building supplies and a hotel.

#### **6.2.10 Paradise River**

The small population of Paradise River is involved in local sawmill operations or work as guides to fishing and hunting camps. The community has a road link to Cartwright, which enables residents to utilize all services that Cartwright offers. No businesses are recorded for the area.

## 6.3 Subsistence Economy

Subsistence living has been an integral part of the fabric of the communities of Central and Southern Labrador for many centuries. However, during the twentieth century, there was a great transition between a complete reliance on harvesting and trade of primary production, to a gradual assimilation of communities and people into a wage economy (DND1994). Several forces have been at work since the 1920s to produce this result, including demand for products, involvement of isolated communities in construction (and maintenance) of military establishments, and increased government presence in regional development projects (DND 1994). In many cases, harvesting activities such as hunting, trapping, fishing and foraging now supplement wage income.

As subsistence activities involve a large non-market component, comparison with the wage economy is not straight forward. Any attempts to estimate the size or scale of subsistence activities will inevitably miss the social and cultural value associated with use of the land. However, one can discuss the subsistence economy in terms of the replacement-cost value of country food harvest and the value of by-products when they are used for arts and crafts (Simpson 2002). While the subsistence economy is not typically measured in government economic accounts, it does play a role because there is a cash-component element to the process. Often revenue is earned when tangible goods derived from subsistence living are sold. This revenue is then used to buy other items such as gas, hunting equipment and supplies that might finance the cost of a future hunt or fishing trip (Simpson 2002). The nature of harvesting activity and absence of market trading make it difficult to assign values for subsistence production. However, one indicator is the amount of "country foods" (food obtained through harvesting) consumed by families in a year (VBNC 1997). The proportion of country foods consumed by harvesting active families can be high. In Central Labrador, 50 to 100 percent of

the meat intake for some households can be from harvesting (DND 1994). In Labrador, the Central and Western Labrador regions are thought to rely less heavily on harvesting than in the coastal communities (DND 1994).

#### 7.0 EMPLOYMENT AND BUSINESS

## 7.1 Labour Force

In 1996, Southern Labrador had a total labour force of 1,040 persons (Table 7.1). The labour force participation rate was 48.3 percent, which was considerably lower than that of Labrador (65.5 percent), and Newfoundland and Labrador as a whole (56.3 percent). Participation rates in 1996 varied between individual communities, ranging from 35.4 percent (Charlottetown) to 63.0 percent (St. Lewis). The regional unemployment rate was 52.4 percent, which was considerably higher than that for Labrador as a whole (23.5 percent) and the province (25.1 percent) (Table 7.1). Unemployment rates ranged from 35.3 percent in Charlottetown to 65.5 percent in St. Lewis.

Table 7.1 Labour Force Characteristics, Southern Labrador, 1996

| Subd. B,<br>Division<br>No.10 | Port<br>Hope<br>Simpson                                    | St.<br>Lewis   | Mary's<br>Harbour  | Cartwright   | Charlottetown   | Southern<br>Labrador  |
|-------------------------------|--|--|--|--|---|---|
| 420                           | 425  | 230  | 350  | 490  | 240   | 2,155   |
| 165                           | 190  | 145  | 215  | 240  | 85  | 1,040   |
| 75                            | 110  | 45   | 80   | 115  | 55  | 480   |
| 90                            | 75   | 95   | 135  | 120  | 30  | 545   |
| 255                           | 235  | 85   | 135  | 250  | 155   | 1,115   |
| 39.3                          | 44.7   | 63.0   | 61.4   | 49.0   | 35.4  | 48.3  |
| 54.5                          | 39.5   | 65.5   | 62.8   | 50.0   | 35.3  | 52.4  |
|                               | Division<br>No.10<br>420<br>165<br>75<br>90<br>255<br>39.3 | Division No.10         Hope Simpson           420         425           165         190           75         110           90         75           255         235           39.3         44.7 | Division No.10         Hope Simpson         Lewis           420         425         230           165         190         145           75         110         45           90         75         95           255         235         85           39.3         44.7         63.0 | Division No.10         Hope Simpson         Lewis         Harbour           420         425         230         350           165         190         145         215           75         110         45         80           90         75         95         135           255         235         85         135           39.3         44.7         63.0         61.4 | Division No.10         Hope Simpson         Lewis         Harbour           420         425         230         350         490           165         190         145         215         240           75         110         45         80         115           90         75         95         135         120           255         235         85         135         250           39.3         44.7         63.0         61.4         49.0 | Division No.10         Hope Simpson         Lewis         Harbour         3           420         425         230         350         490         240           165         190         145         215         240         85           75         110         45         80         115         55           90         75         95         135         120         30           255         235         85         135         250         155           39.3         44.7         63.0         61.4         49.0         35.4 |

Of the Southern Labrador residents who received employment income in 1995, only approximately 17 percent worked full-time for the entire year. The remainder worked seasonally or on a part-time basis. This reflects the predominantly seasonal nature of employment in the region, especially when compared to Labrador and the province, where proportions of the employed labour force who were employed full-time, year-round were 45 percent and 41 percent, respectively (Statistics Canada 1998).

Central Labrador had a total labour force of 5,320 persons in 1996, of which 90.5 percent resided in Happy Valley-Goose Bay, 5.0 percent in North West River and 4.5 percent in Sheshatshiu/Mud Lake (Subdivision C, Division No.10) (Table 7.2). The region had a participation rate of 72.4 percent, ranging from 43.2 percent in Sheshatshiu/Mud Lake to 75.8 percent in Happy Valley-Goose Bay. The overall unemployment rate was 18.0 percent, which ranged from 15.9 percent in Happy Valley-Goose Bay to 43.8 percent in Sheshatshiu/Mud Lake. The region's participation rate in that year was higher than that for Labrador as a whole, while its unemployment rate was lower. Of those who received employment income in 1995, 50.3 percent worked full-time for the entire year (Statistics Canada 1998).

Table 7.2 Labour Force Characteristics, Central Labrador, 1996

|                        | Happy Valley-<br>Goose Bay | Northwest<br>River | Subd. C,<br>Division | Central<br>Labrador | Labrador | Newfoundland &<br>Labrador |
|------------------------|----------------------------|--------------------|----------------------|---------------------|----------|----------------------------|
|                        |                            |                    | No.10                |                     |          |                            |
| Population (≥15        | 6,350                      | 445                | 555                  | 7,350               | 21,950   | 437,340                    |
| years)                 |                            |                    |                      |                     |          |                            |
| In labour force        | 4.815                      | 265                | 240                  | 5,320               | 14,385   | 246,065                    |
| Employed               | 4,045                      | 170                | 135                  | 4,350               | 11,005   | 184,330                    |
| Unemployed             | 765                        | 90                 | 105                  | 960                 | 3,385    | 61,735                     |
| Not in labour force    | 1,540                      | 185                | 315                  | 2,040               | 7,565    | 191,285                    |
| Participation rate     | 75.8                       | 59.6               | 43.2                 | 72.4                | 65.5     | 56.3                       |
| (%)                    |                            |                    |                      |                     |          |                            |
| Unemployment rate      | 15.9                       | 34.0               | 43.8                 | 18.0                | 23.5     | 25.1                       |
| (%)                    |                            |                    |                      |                     |          |                            |
| Source: Statistics Can | ada 1998.                  |                    |                      | •                   | <u>'</u> |                            |

## 7.2 Education

There were 2,165 persons aged 15 years and over in Southern Labrador in 1996. Of these, nearly half (995 or 46.0 percent) had not completed high school, 210 (9.7 percent) had a high school diploma, 265 (12.2 percent) possessed a trades certificate or diploma, 400 (18.5 percent) held non-university certificates and 80 (3.7 percent) had a university degree. Formal education levels in this region are relatively low compared to Labrador (6.7 percent) and the province (8.1 percent). However, the proportion of the area's population with trades certificate or diploma is more than twice that for Labrador (5.2 percent) and much higher than that for the province (2.9 percent).

Of the total 7,350 persons aged 15 years and over in Central Labrador in 1996, 2,905 (39.5 percent) had attained less than a high school education, 675 (9.25 percent) had graduated from high school, 365 (5.05 percent) had a trades certificate or diploma, 1,730 (23.5 percent) had completed other non-university certificate, and 595 (8.1 percent) had a university degree. The distribution of educational attainment is almost similar with Southern Labrador (Table 7.3).

**Table 7.3** Population ≥ 15 Years of Age by Highest Level of Schooling, 1996

|                          | Total Population ≥15 Years | Less<br>than<br>Grade 9 | Grade 9-13,<br>Without<br>Certificate | Grade 9-<br>13, With<br>Certificate | Trades<br>Certificate<br>or Diploma | Other Non-<br>University,<br>Without Certificate | Other Non-<br>University,<br>With<br>Certificate | University,<br>Without<br>Degree    | University,<br>With<br>Degree              |
|--------------------------|----------------------------|-------------------------|---------------------------------------|-------------------------------------|-------------------------------------|--|--|-------------------------------------|--|
| uthern Labrad            | lor                        |                         |                                       | •                                   | •                                   |  |  | •                                   |  |
| bd. B, Div.<br>.10       | 420                        | 110                     | 70                                    | 25                                  | 75                                  | 40   | 75   | 10                                  | 15   |
| rt Hope<br>npson         | 430                        | 155                     | 100                                   | 35                                  | 35                                  | 15   | 55   | 15                                  | 20   |
| Lewis                    | 230                        | 70                      | 35                                    | 20                                  | 10                                  | 20   | 50   | 20                                  | 10   |
| ıry's Harbour            | 350                        | 80                      | 70                                    | 25                                  | 20                                  | 15   | 100  | 15                                  | 20   |
| rtwright                 | 490                        | 145                     | 110                                   | 85                                  | 35                                  | 25   | 65   | 0                                   | 15   |
| arlottetown              | 245                        | 35                      | 15                                    | 20                                  | 90                                  | 10   | 55   | 15                                  | 0  |
| tal Southern<br>brador   | 2,165                      | 595                     | 400                                   | 210                                 | 265                                 | 125  | 400  | 75                                  | 80   |
| ntral Labrado            | r                          |                         |                                       |                                     |                                     |  |  |                                     |  |
| ppy Valley-<br>ose Bay   | 6,350                      | 640                     | 1,690                                 | 625                                 | 340                                 | 320  | 1,595  | 605                                 | 540  |
| orthwest<br>ver          | 445                        | 75                      | 75                                    | 35                                  | 10                                  | 30   | 100  | 60                                  | 55   |
| bd. C, Div.              | 555                        | 265                     | 160                                   | 15                                  | 15                                  | 30   | 35   | 20                                  | 0  |
| tal Central<br>brador    | 7,350                      | 980                     | 1,925                                 | 675                                 | 365                                 | 380  | 1,730  | 685                                 | 595  |
| brador                   | 21,950                     | 3,060                   | 5,495                                 | 2,395                               | 1,150                               | 1,025  | 5,020  | 2,335                               | 1,465                                      |
| wfoundland<br>d Labrador | 437,345                    | 76,465                  | 122,065                               | 43,040                              | 12,810                              | 17,360   | 83,440   | 46,645                              | 35,520                                     |
|                          | -                          | 76,465                  |                                       | 122,065                             | 122,065 43,040                      | 122,065 43,040 12,810                            | 122,065 43,040 12,810 17,360                     | 122,065 43,040 12,810 17,360 83,440 | 122,065 43,040 12,810 17,360 83,440 46,645 |

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# 7.3 Employment Type and Distribution

The largest type of employment in Southern Labrador is in the manufacturing sector, which employed 270 individuals or 26 percent of the labour force in 1996 (Table 7.4). Apart from handicraft production, most of these workers were involved in fish processing. Retail trade employed 10.6 percent, while educational services and other service industries employed 10.1 percent (110) and 9.6 percent (100), respectively (Table 7.4).

Primary sector activities accounted for a relatively small portion of Southern Labrador's labour force activity in 1996. There were no individuals reportedly involved in commercial agricultural operations, only 10 persons employed in mining and quarrying activities, and 30 employed in forestry operations. Forestry operations were concentrated around Port Hope Simpson and Cartwright, with 20 and 10 persons employed in each community, respectively. Of the primary sector activities, fishing and trapping had the highest employment with 65 persons (6.3 percent), a substantial decline from 1991 of 485 persons (37.7 percent) of the area's total labour force (Statistics Canada 1994).

In Central Labrador, government, educational and health and social service sectors employed about half of the labour force, for a total of 2,505 persons (47.1 percent) (1996 data). Other important industry divisions in the region included retail trade (13.0 percent); transportation and storage (8.1 percent); accommodation, food and beverage services (4.3 percent); construction (3.9 percent); and the other service industries (5.7 percent). The employment distribution reflects the nature of economic activities in Happy Valley-Goose Bay, which is a relatively well developed diversified economy. Employment activity in North West River, Sheshatshiu and Mud Lake is primarily related to the provision of government, educational, and health and social services, although there is some employment related to such industries as transportation and storage, communication and other utilities, retail trade, and other service industries (Table 7.5).

Table 7.4 Labour Force by Industry Division – Southern Labrador, 1996

|   | Subd. B,<br>Div.<br>No.10 | Port Hope<br>Simpson | St. Lewis | Mary's<br>Harbour | Cartwright | Charlottetown | Southern<br>Labrador | Labrador | Newfoundland and<br>Labrador |
|---|---------------------------|----------------------|-----------|-------------------|------------|---------------|----------------------|----------|------------------------------|
| Total labour force                        | 165                       | 190                  | 145       | 215               | 240        | 85            | 1,040                | 14,385   | 246,060                      |
| Not applicable                            | 25                        | 20                   | 0         | 0                 | 10         | 10            | 65                   | 730      | 16,815                       |
| All industries                            | 140                       | 170                  | 135       | 215               | 230        | 80            | 970                  | 13,660   | 229,245                      |
| Agriculture and related services          | 0                         | 0                    | 0         | 0                 | 0          | 0             | 0                    | 10       | 2,130                        |
| Fishing and trapping                      | 15                        | 15                   | 10        | 15                | 10         | 0             | 65                   | 300      | 9,375                        |
| Logging and forestry                      | 0                         | 20                   | 0         | 0                 | 10         | 0             | 30                   | 100      | 3,300                        |
| Mining, quarrying and oil                 | 0                         | 10                   | 0         | 0                 | 0          | 0             | 10                   | 2,225    | 4,640                        |
| Manufacturing                             | 30                        | 0                    | 70        | 100               | 70         | 0             | 270                  | 565      | 22,090                       |
| Construction                              | 10                        | 10                   | 0         | 10                | 0          | 10            | 40                   | 545      | 17,215                       |
| Transportation and storage                | 10                        | 0                    | 0         | 10                | 0          | 0             | 20                   | 690      | 10,215                       |
| Communication and other utilities         | 10                        | 0                    | 10        | 10                | 15         | 10            | 55                   | 570      | 7,300                        |
| Wholesale trade                           | 0                         | 10                   | 0         | 0                 | 0          | 0             | 10                   | 300      | 8,110                        |
| Retail trade                              | 10                        | 20                   | 10        | 20                | 35         | 15            | 110                  | 1,750    | 31,765                       |
| Finance and insurance                     | 0                         | 0                    | 0         | 0                 | 0          | 0             | 0                    | 130      | 4,250                        |
| Real estate operator and insurance agent  | 0                         | 0                    | 0         | 0                 | 0          | 0             | 0                    | 80       | 2,715                        |
| Business services                         | 0                         | 0                    | 0         | 0                 | 10         | 0             | 10                   | 185      | 7,320                        |
| Government services                       | 0                         | 0                    | 15        | 15                | 20         | 0             | 50                   | 2,200    | 21,485                       |
| Educational services                      | 25                        | 25                   | 10        | 15                | 20         | 10            | 105                  | 1,210    | 0,715                        |
| Health and social services                | 10                        | 15                   | 10        | 10                | 10         | 0             | 55                   | 1,000    | 26,465                       |
| Accommodation, food and beverage services | 10                        | 15                   | 0         | 10                | 15         | 0             | 50                   | 810      | 14,045                       |
| Other services industries                 | 20                        | 25                   | 10        | 15                | 20         | 10            | 100                  | 985      | 16,110                       |
| Source: Statistics Canada 1998            |                           | -                    |           | -                 |            | •             |                      |          | •                            |

Table 7.5 Labour Force by Industry Division – Central Labrador, 1996

|                                  | Happy Valley- | North West | Subd. C, Div. | Central  | Labrador | Newfoundland |
|----------------------------------|---------------|------------|---------------|----------|----------|--------------|
|                                  | Goose Bay     | River      | No.10         | Labrador |          | and Labrador |
| Total labour force               | 4,815         | 265        | 240           | 5,320    | 14,385   | 246,060      |
| Not applicable                   | 140           | 45         | 65            | 250      | 730      | 16,815       |
| All industries                   | 4,675         | 220        | 170           | 5,065    | 13,660   | 229,245      |
| Agriculture and related services | 0             | 0          | 0             | 0        | 10       | 2,130        |
| Fishing and trapping             | 35            | 0          | 0             | 35       | 300      | 9,375        |
| Logging and forestry             | 65            | 0          | 10            | 75       | 100      | 3,300        |
| Mining, quarrying and oil        | 25            | 15         | 0             | 40       | 2,225    | 4,640        |
| Manufacturing                    | 100           | 0          | 0             | 100      | 565      | 22,090       |
| Construction                     | 200           | 10         | 0             | 210      | 545      | 17,215       |
| Transportation and storage       | 400           | 20         | 10            | 430      | 690      | 10,215       |
| Communication and other          | 115           | 15         | 10            | 140      | 570      | 7,300        |
| utilities                        |               |            |               |          |          |              |
| Wholesale trade                  | 135           | 0          | 0             | 135      | 300      | 8,110        |
| Retail trade                     | 655           | 35         | 0             | 690      | 1,750    | 31,765       |
| Finance and insurance            | 50            | 0          | 0             | 50       | 130      | 4,250        |
| Real estate operator and         | 15            | 0          | 0             | 15       | 80       | 2,715        |
| insurance agent                  |               |            |               |          |          |              |
| Business services                | 75            | 10         | 0             | 85       | 185      | 7,320        |
| Government services              | 1,525         | 30         | 60            | 1,615    | 2,200    | 21,485       |
| Educational services             | 350           | 15         | 30            | 395      | 1,210    | 20,715       |
| Health and social services       | 425           | 40         | 30            | 495      | 1,000    | 26,465       |
| Accommodation, food and          | 230           | 0          | 0             | 230      | 810      | 14,045       |
| beverage services                |               |            |               |          |          |              |
| Other services industries        | 275           | 15         | 15            | 305      | 985      | 16,110       |
| Source: Statistics Canada 1998.  |               |            |               |          |          |              |

#### 7.4 Business

## 7.4.1 Central Labrador

Happy Valley-Goose Bay is the largest community in Labrador, with a relatively diverse economic base. Low-level military flight training is considered the most important contributor to the economy of the Central Labrador region. The military base in Happy Valley-Goose Bay directly employed 487 Canadians in 1999. In addition, allied air forces maintained 245 permanent positions at the base in 1999, with an additional 8,000 transient personnel stationed at Goose Bay during that year (Department of Finance 2002). Approximately 16,000 military personnel passed through the base in the summer of 2001. The Department of National Defense has traditionally been the largest employer in the town and, in recent years, has employed 21 percent of the community's labour force. Management of the base is the responsibility of a private company, SERCO Facilities Management Incorporated (Town of Happy Valley-Goose Bay, n.d.). The base also generates a substantial amount of indirect and induced employment and business activity.

Happy Valley-Goose Bay offers a wide range of commercial goods and services, with over 100 businesses located in the town (Labrador North Chamber of Commerce 2002). It also serves as the primary administrative and service centre for Central and Northern Labrador, hosting various government agencies and educational and health care services. Major employers in Happy Valley-Goose Bay are shown in Table 7.6.

Table 7.6 Major Employers, Happy Valley-Goose Bay

| Company or Agency                 | <b>Employees</b> | Company or Agency                  | Employees |
|-----------------------------------|------------------|------------------------------------|-----------|
| SERCO Facilities Management Inc.  | 329              | Paddon Memorial Home               | 84        |
| Labrador School Board             | 200              | Provincial Government              | 75        |
| Woodward's Group of Companies     | 178              | Canada Catering                    | 53        |
| Grenfell Regional Health Services | 168              | Glenn Corporation                  | 50        |
| Allied Countries                  | 159              | Town of Happy Valley-Goose<br>Bay  | 42        |
| Labrador Airways/Aviation         | 152              | Terrington Co-op                   | 39        |
| Department of National Defence    | 111              | Newfoundland and Labrador<br>Hydro | 31        |
| Federal Government                | 110              | Warr's Pharmacy                    | 28        |
| North Mart                        | 100              | Newfoundland Telephone             | 25        |
| College of the North Atlantic     | 98               |                                    |           |

Note: Numbers include full-time and seasonal workers, and sub-contractors.

Source: Town of Happy Valley-Goose Bay n.d.

The communities of North West River and Sheshatshiu are located approximately 25 km northeast of Happy Valley-Goose Bay. Businesses in these communities include food and accommodation establishments, retail stores, a service station, taxi service and a number of tourism-related businesses (CLEDB 2002b). A considerable portion of the labour force of these communities is employed in the provision of government services, such as education, postal services and health care. The smaller settlement of Mud Lake, located 5 km east of Happy Valley-Goose Bay, still relies mainly on traditional practices or non-wage subsistence activities such as hunting, trapping and fishing.

#### 7.4.2 Southern Labrador

Economic activity in Southern Labrador was traditionally based on the inshore fishery, particularly harvesting and processing of species such as cod and salmon. Despite the downturn in these traditional fisheries, exploitation of alternative species (particularly shellfish) has resulted in a substantial amount of fish harvesting and processing in Southern Labrador in recent years. There are currently six fish processing plants operating in the region. Two companies (Coastal Labrador Fisheries Limited in St. Lewis and Labrador Sea Products Inc. in Black Tickle) process crab and shrimp (JW 1998; Department of Fisheries and Aquaculture 2001). Fish plants operated by Labrador Fishermen's Union Shrimp Company Limited in Mary's Harbour, Pinsent's Arm, Cartwright and Charlottetown process a range of species, including crab, shrimp, cod, salmon, capelin and whelk (Department of Fisheries and Aquaculture 2001; 2002; Labrador Fishermen's Union Shrimp Company Limited 2002).

The number and type of businesses in Southern Labrador region is relatively limited, although this varies considerably between communities. There are accommodations, restaurants, lounges, convenience and grocery stores, service stations and garages, hardware stores and other commercial establishments in the area, particularly in larger communities such as Cartwright, Port Hope Simpson and Mary's Harbour. Some of these communities are also home to offices of various transportation, utility, communication and finance companies (SADC n.d.). Schools, clinics, municipal governments and offices of federal and provincial agencies also employ a portion of local labour force. Range of goods and services offered in smaller communities in the region is much more limited, with residents of these communities relying on adjacent centres for various products and services. A number of adventure tour operators and fishing camps also exist in the region.

Although isolation has traditionally limited economic development and diversification in Southern Labrador, improved access to, from and within the region as a result of the recently completed TLH - Phase II (Red Bay to Cartwright) will likely provide opportunities for future economic growth.

# 7.4.3 Neighbouring Regions

In Western Labrador, the economies of Labrador City and Wabush are based primarily on iron ore mining. Iron Ore Company of Canada (IOC) currently operates a mine, concentrator and pellet plant at Carol Lake in Western Labrador, with mine workers and their families residing primarily in Labrador City. In addition, Wabush Mines operates its Scully Mine in Western Labrador, with a concentrating plant located in Wabush (Department of Mines and Energy 2001). Labrador City and Wabush are among the most affluent communities in Newfoundland and Labrador, and have relatively well-developed and diversified economies. Churchill Falls (Labrador) Company (CFLCo) operates an extensive 5,428 MW hydroelectric generating plant and related transmission infrastructure at Churchill Falls in Western Labrador. The community of Churchill Falls is a "company town" that was established to accommodate workers of CFLCo and their families. Newfoundland and Labrador Hydro is also exploring the development of a new 2,000 MW dam and power plant on the lower portion of Churchill River and associated transmission infrastructure in Labrador.

Fishing activity has traditionally been an important component of the economy of Labrador Straits, and like Southern Labrador, recent years have seen a focus on harvesting and processing of shellfish. However, the Labrador Straits region is characterized by a somewhat stronger and more diversified economy than those areas further north along the Labrador coast. Communities in the area are connected by a paved road, which has served to expand the market area and labour pool for local businesses. In addition, ferry service between St. Barbe on Newfoundland's Northern Peninsula and Blanc Sablon, Quebec has allowed for greater integration with the provincial economies. There are convenience and grocery stores, accommodations, restaurants and other retail outlets throughout the region. Larger communities such as L'Anse au Clair and Forteau offer a range of goods and services, including construction, heavy equipment and trucking, welding; building supplies, repair services, wholesaling companies, automobile dealerships, rental agencies and financial and consulting services (Labrador Straits Development Corporation, n.d.).

The economy of Northern Labrador has long been based on a combination of casual or seasonal employment and resource harvesting activities such as hunting, trapping, fishing and gathering activities that provide food, income or both (VBNC 1997). Economic activity in northern Labrador includes commercial fishing and fish processing, with fish plants at Nain, Hopedale, Postville, Makkovik and Rigolet (Department of Fisheries and Aquaculture 2001; 2002). Torngat Ujaganniavingit Corp. (TUC) also operates an anorthosite quarry at Ten Mile Bay, near Nain. Businesses in north coast communities include accommodations, restaurants and retail outlets, with the larger community of Nain offering a much wider range of goods and services, including building contractors, heavy equipment operations, and trucking and shipping services (Nanuk Development Corporation, n.d.). A considerable portion of the region's wage economy is also based on the provision of government, health and education services.

VBNC is currently developing a nickel-copper-cobalt mine and mill at Voisey's Bay, located in Northern Labrador approximately 35 km southwest of Nain. This \$2.9 billion project consists of an integrated mine and mill/concentrate processing plant, with the ore transported to the island of Newfoundland (Argentia) for smelting. This project will provide substantial direct, indirect and induced employment and business opportunities throughout Labrador and the province as a whole (VBNC 1997).

## 8.0 INCOME

# 8.1 Individual Incomes

In 1995, average individual incomes in Southern Labrador ranged from \$16,565 in Port Hope Simpson to \$18,630 in Charlottetown. Average individual incomes in Southern Labrador were, in all cases, lower than those for Labrador (\$24,325) and the provincial average (\$19,710). During the same year, 36.8 percent of Southern Labrador residents aged 15 years and over had annual incomes of less than \$10,000, while less than 17 percent had incomes of \$30,000 or over. The majority (54.9 percent) had annual incomes within the \$7,000 to \$19,999 bracket (Table 8.1).

Table 8.1 Individual Income, Southern Labrador, 1995

|                                     | Subd.<br>B, Div.<br>No.10 | Port<br>Hope<br>Simpson | St.<br>Lewis | Mary's<br>Harbour | Cartwright | Charlottetown | Southern<br>Labrador | Labrador | Newfoundland<br>and Labrador |
|-------------------------------------|---------------------------|-------------------------|--------------|-------------------|------------|---------------|----------------------|----------|------------------------------|
| Persons ≥15<br>years with<br>income | 395                       | 400                     | 220          | 340               | 460        | 235           | 2,050                | 19,140   | 387,825                      |
| < \$1,000                           | 20                        | 20                      | 10           | 0                 | 10         | 10            | 70                   | 1,210    | 27,145                       |
| \$1,000 -<br>\$2,999                | 35                        | 25                      | 25           | 25                | 35         | 15            | 160                  | 1,575    | 27,605                       |
| \$3,000 -<br>\$4,999                | 20                        | 15                      | 20           | 15                | 25         | 10            | 105                  | 1,005    | 20,640                       |
| \$5,000 -<br>\$6,999                | 15                        | 20                      | 25           | 15                | 30         | 15            | 120                  | 960      | 21,725                       |
| \$7,000 -<br>\$9,999                | 80                        | 45                      | 25           | 45                | 70         | 35            | 300                  | 1,675    | 38,685                       |
| \$10,000 -<br>\$14,999              | 115                       | 120                     | 50           | 100               | 130        | 65            | 580                  | 2,745    | 69,320                       |
| \$15,000 -<br>\$19,999              | 45                        | 65                      | 20           | 40                | 50         | 25            | 245                  | 1,595    | 40,075                       |
| \$20,000 -<br>\$24,999              | 20                        | 25                      | 10           | 30                | 35         | 20            | 140                  | 1,185    | 33,080                       |
| \$25,000 -<br>\$29,999              | 10                        | 15                      | 10           | 15                | 20         | 10            | 80                   | 830      | 25,140                       |
| \$30,000 -<br>\$39,999              | 20                        | 15                      | 20           | 20                | 25         | 30            | 130                  | 1,725    | 35,615                       |
| \$40,000 -<br>\$49,999              | 10                        | 20                      | 10           | 20                | 20         | 10            | 90                   | 1,505    | 22,525                       |
| ≥\$50,000                           | 25                        | 25                      | 20           | 10                | 30         | 10            | 120                  | 3,110    | 26,270                       |
| A v e r a g e income (\$)           | 16,723                    | 16,565                  | 18,015       | 18,315            | 17,682     | 18,630        | n/a                  | 24,325   | 19,710                       |
| M e d i a n income (\$)             | 10,960                    | 12,192                  | 10,432       | 12,288            | 11,819     | 12,800        | n/a                  | 16,008   | 13,972                       |
| Source: Statisti                    | cs Canada 1               | 998.                    |              |                   |            |               |                      |          |                              |

Average individual incomes in Central Labrador in 1995 ranged from \$11,452 in Sheshatshiu/Mud Lake to \$24,436 in Happy Valley-Goose Bay (Table 8.2). Approximately 28.6 percent of Central Labrador residents had an annual income of less than \$10,000, while 34.8 percent had incomes of \$30,000 and over.

Table 8.2 Individual Income, Central Labrador, 1995

|                               | Happy Valley-<br>Goose Bay | North West<br>River | Subd. C, Div.<br>No.10 | Central<br>Labrador | Labrador | Newfoundland<br>and Labrador |
|-------------------------------|----------------------------|---------------------|------------------------|---------------------|----------|------------------------------|
| Persons ≥15 Years With Income | 5,820                      | 395                 | 465                    | 6,680               | 19,140   | 387,825                      |
| < \$1,000                     | 235                        | 45                  | 60                     | 340                 | 1,210    | 27,145                       |
| \$1,000 - \$2,999             | 375                        | 45                  | 65                     | 485                 | 1,575    | 27,605                       |
| \$3,000 - \$4,999             | 205                        | 35                  | 40                     | 280                 | 1,005    | 20,640                       |
| \$5,000 - \$6,999             | 205                        | 25                  | 35                     | 265                 | 960      | 21,725                       |
| \$7,000 - \$9,999             | 455                        | 25                  | 60                     | 540                 | 1,675    | 38,685                       |
| \$10,000 - \$14,999           | 820                        | 40                  | 75                     | 935                 | 2,745    | 69,320                       |
| \$15,000 - \$19,999           | 490                        | 20                  | 30                     | 540                 | 1,595    | 40,075                       |
| \$20,000 - \$24,999           | 485                        | 25                  | 35                     | 545                 | 1,185    | 33,080                       |
| \$25,000 - \$29,999           | 370                        | 15                  | 15                     | 400                 | 830      | 25,140                       |
| \$30,000 - \$39,999           | 845                        | 65                  | 30                     | 940                 | 1,725    | 35,615                       |
| \$40,000 - \$49,999           | 810                        | 25                  | 10                     | 845                 | 1,505    | 22,525                       |
| ≥\$50,000                     | 520                        | 20                  | 0                      | 540                 | 3,110    | 26,270                       |
| Average income (\$)           | 24,436                     | 19,801              | 11,452                 | n/a                 | 24,325   | 19,710                       |
| Median income (\$)            | 20,818                     | 11,380              | 7,920                  | n/a                 | 16,008   | 13,972                       |
| Source: Statistics Cana       | da 1998.                   |                     |                        |                     |          |                              |

# 8.2 Household and Family Income

Average household incomes in Southern Labrador in 1995 ranged from a low of \$36,970 in Cartwright to a high of \$49,992 in St. Lewis. Average household incomes in all communities were less that those for Labrador (\$52,004), but in almost all cases were greater than that for the province (\$41,064). Approximately 45 percent of Southern Labrador households had incomes of less than \$30,000 in 1995, while 32.3 percent had incomes of \$50,000 and over. The majority of households in the region (54.9 percent) had incomes in the range of \$10,000 to \$39,999 (Table 8.3).

Table 8.3 Household Income, Southern Labrador, 1995

|                              | Subd.<br>B, Div.<br>No.10 | Port<br>Hope<br>Simpson | St.<br>Lewis | Mary's<br>Harbour | Cartwright | Charlottetown | Southern<br>Labrador | Labrador | Newfoundland<br>and Labrador |
|------------------------------|---------------------------|-------------------------|--------------|-------------------|------------|---------------|----------------------|----------|------------------------------|
| Number of private households | 145                       | 150                     | 80           | 135               | 220        | 90            | 820                  | 8,920    | 185,500                      |
| < \$10,000                   | 15                        | 0                       | 0            | 10                | 25         | 0             | 50                   | 555      | 16,420                       |
| \$10,000 -<br>\$19,999       | 30                        | 25                      | 15           | 20                | 55         | 15            | 160                  | 1,020    | 36,220                       |
| \$20,000 -<br>\$29,999       | 30                        | 30                      | 10           | 25                | 45         | 20            | 160                  | 1,000    | 29,455                       |
| \$30,000 -<br>\$39,999       | 20                        | 25                      | 20           | 25                | 30         | 10            | 130                  | 975      | 25,475                       |
| \$40,000 -<br>\$49,999       | 15                        | 10                      | 15           | 20                | 15         | 10            | 85                   | 940      | 21,165                       |
| \$50,000 -<br>\$59,999       | 15                        | 10                      | 10           | 15                | 10         | 10            | 70                   | 975      | 16,640                       |
| \$60,000 -<br>\$69,999       | 10                        | 15                      | 0            | 0                 | 15         | 10            | 50                   | 1,095    | 12,835                       |
| ≥\$70,000                    | 10                        | 30                      | 20           | 20                | 45         | 20            | 145                  | 2,360    | 27,290                       |
| Average income (\$)          | 44,424                    | 43,772                  | 49,992       | 46,821            | 36,970     | 48,853        | n/a                  | 52,004   | 41,064                       |
| Median income (\$)           | 31,296                    | 33,472                  | 39,680       | 39,360            | 27,520     | 40,576        | n/a                  | 49,587   | 34,036                       |
| Source: Statis               | stics Canada              | 1998.                   |              |                   |            |               |                      |          |                              |

In Central Labrador, average household incomes in 1995 ranged from \$29,687 (Sheshatshiu/Mud Lake) to \$51,160 (Happy Valley-Goose Bay). Individual and household incomes in Happy Valley-Goose Bay were similar to those for Labrador as a whole, and higher than those for the province. Mean incomes in North West River were comparable to those in Newfoundland and Labrador as whole, while average individual and household incomes in Sheshatshiu and Mud Lake were considerably lower (Table 8.4)

Table 8.4 Household Income, Central Labrador, 1995

|                                 | Happy Valley-<br>Goose Bay | North<br>West River | Subd. C, Div.<br>No.10 | Central<br>Labrador | Labrador | Newfoundland<br>and Labrador |
|---------------------------------|----------------------------|---------------------|------------------------|---------------------|----------|------------------------------|
| Number of private<br>Households | 2,750                      | 200                 | 175                    | 3,125               | 8,920    | 185,500                      |
| < \$10,000                      | 125                        | 30                  | 15                     | 170                 | 555      | 16,420                       |
| \$10,000 - \$19,999             | 285                        | 30                  | 45                     | 360                 | 1,020    | 36,220                       |
| \$20,000 - \$29,999             | 300                        | 15                  | 40                     | 355                 | 1,000    | 29,455                       |
| \$30,000 - \$39,999             | 285                        | 65                  | 35                     | 385                 | 975      | 25,475                       |
| \$40,000 - \$49,999             | 445                        | 10                  | 15                     | 470                 | 940      | 21,165                       |
| \$50,000 - \$59,999             | 375                        | 0                   | 10                     | 385                 | 975      | 16,640                       |
| \$60,000 - \$69,999             | 290                        | 10                  | 10                     | 310                 | 1,095    | 12,835                       |
| ≥\$70,000                       | 635                        | 25                  | 10                     | 670                 | 2,360    | 27,290                       |
| Average income (\$)             | 51,160                     | 39,482              | 29,687                 | n/a                 | 52,004   | 41,064                       |
| Median income (\$)              | 49,052                     | 34,639              | 25,280                 | n/a                 | 49,587   | 34,036                       |
| Source: Statistics Canad        | da 1998.                   |                     |                        |                     | •        |                              |

#### 8.3 Sources of Income

In 1995, the proportion of total income that came from employment in Southern Labrador ranged from 49.4 percent in Port Hope Simpson to 68.6 percent in St. Lewis (Table 8.5). Averages for Labrador and the province were 83.3 and 68.1 percent, respectively. Government transfer payments accounted for a relatively large portion of the total income, ranging from 30.7 percent in St. Lewis to 48.1 percent in Port Hope Simpson. The proportion of total income derived from such transfer payments was higher in all Southern Labrador communities than in Labrador and the province as a whole.

In Central Labrador, the proportion of total income that came from employment ranged from 57.8 percent in Sheshatshiu/Mud Lake to 84.2 percent in Happy Valley-Goose Bay (Table 8.5). The latter is typical of rural communities as in the case of Southern Labrador.

Table 8.5 Composition of Total Income, 1995

|                         | Employment Income (%) | Government Transfer Payments (%) | Other Income (%) |
|-------------------------|-----------------------|----------------------------------|------------------|
|                         |                       |                                  |                  |
| Southern Labrador       |                       |                                  |                  |
| Subd. B, Div. No. 10    | 55                    | 43.5                             | 1.5              |
| Port Hope Simpson       | 49.4                  | 48.1                             | 2.5              |
| St. Lewis               | 68.6                  | 30.7                             | 0.7              |
| Mary's Harbour          | 62                    | 36.1                             | 1.9              |
| Cartwright              | 67.3                  | 31.7                             | 1                |
| Charlottetown           | 55.3                  | 41.7                             | 3.1              |
| Central Labrador        |                       |                                  |                  |
| Happy Valley-Goose Bay  | 84.2                  | 11.8                             | 4                |
| North West River        | 74.6                  | 19.7                             | 5.6              |
| Subd. C, Div. No. 10    | 57.8                  | 39.9                             | 2.3              |
| Labrador                | 83.3                  | 13.3                             | 3.3              |
| Newfoundland & Labrador | 68.1                  | 24.6                             | 7.3              |

#### 9.0 SUMMARY

As introduced at the beginning of this report, community life, employment and business have been identified as a VEC for the TLH - Phase III (Happy Valley-Goose Bay to Cartwright Junction) EIS. This component study provides information needed to determine the potential for significant effects on this VECs due to the proposed undertaking, as well as provide the necessary baseline information for monitoring programs.

The descriptive information provided in this report has addressed aspects of settlement and demographics, infrastructure and services, social and health characteristics, characteristics of local and regional economies, employment and business, and income. A baseline understanding of these will allow for the development of a thorough environmental effects study, including an effective assessment of the potential effects of the project, the required mitigation measures, and the significance of any residual effects.

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# APPENDIX A

**Interview Guide** 

#### **INTERVIEW GUIDE**

#### **BACKGROUND**

The Department of Works, Services and Transportation (WST) is proposing to construct a 250-km highway between Happy Valley-Goose Bay and Cartwright Junction. This highway will be the final link in an all-season, ground transportation route across Labrador. An environmental assessment is being conducted to identify the potential environmental and socio-economic effects associated with the project. Community life has been identified as a topic area requiring special study.

In particular, we are interested in identifying existing conditions and potential effects associated with the proposed undertaking related to social characteristics of communities and families, health, and infrastructure and services.

You are being asked to provide information as a representative of an agency or organization that has particular knowledge of or stake in the social, health or service sectors in Labrador. Please respond based on the experience of your agency or organization, and be as specific as possible.

## **QUESTIONS**

## SOCIAL CHARACTERISTICS OF COMMUNITIES AND FAMILIES

For the purposes of this study, social characteristics of communities are defined to potentially include: population levels and demographics; social relationships and roles; culture; and ethnicity. Interviewers are to be invited to provide information on other aspects that they feel are important to define the social characteristics.

Are there particular social aspects of community life that may potentially be affected by the highway, either during the construction of the highway or after its completion?

In what ways would you predict the social characteristics of communities would be affected? What social issues would arise?

Are there particular social aspects of family life that may potentially be affected by the construction of the highway, either during the construction of the highway or after its completion?

In what ways would you predict the characteristics of families, and the roles of individuals within families, would change? Would this affect women differently from men?

Is there any other information that you could provide that would assist us in describing the existing social conditions or identifying the potential effects of the highway?

## HEALTH

Are there particular aspects of human health that may potentially be affected by the highway, either during the construction of the highway or after its completion?

In what ways would you predict the health of individuals in communities would change? What health issues would arise?

Is there any other information that you could provide us that would assist us in describing the existing health conditions or identifying the potential effects of the highway?

#### INFRASTRUCTURE AND SERVICES

The following questions are to be directed to specific infrastructure and service sectors: transportation; utilities; community services; water supply and waste disposal; housing; health care; social services; safety and security; education; culture and recreation.

Are there particular aspects of (infrastructure or service) that may potentially be affected by the highway, either during the construction of the highway or after its completion?

In what ways would you predict (infrastructure or services) would be affected?

Is there any other information that you could provide us that would assist us in describing the existing condition or supply of (infrastructure or service), or in identifying the potential effects of the highway?