Transportation Assessment of the
Central and North Coast of British Columbia

March 2, 2009

Disclaimer

This report was commissioned by the Ecosystem-Based Management Working Group (EBM WG) to provide information to support full implementation of EBM. The conclusions and recommendations in this report are exclusively the authors', and may not reflect the values and opinions of EBM WG members.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Purpose of Report

The purpose of this report is to provide an overview of the existing transportation system of the Central and North Coast, identify and analyze the key issues, and make recommendations about what the next steps should be in improving the regional transportation system and readying it for future use. It is our hope that it can be a useful tool in galvanizing Central and North Coast collaboration on transportation matters, and in enlisting greater provincial and federal government support in this regard.

Context

For the purposes of this assignment, we have included the Central and North Coast LRMP Plan area, Kitimat and Kitamaat Village, as well as Port Hardy, Kingcome and Health Bay in our definition of the **transportation study area**. The latter communities have been included because of their strong connection to the transportation systems on the Central and North Coast.

The Central and North Coast LRMP Plan area is an immense area, covering 6.5 million hectares; much of it is remote, sparsely populated and has limited access. The LRMP Plan area's basic economy is largely dependent on forestry, fishing and aquaculture (together these generated 16% of jobs in 2006), however the public and service sectors now both outstrip the resource sector in job creation. In 2006, the public sector generated approximately one third of all employment in the LRMP Plan area, while accommodation and retail accounted for another 19%.

The overall population of the LRMP Plan area was 17,300 in 2006 (comprising 0.4% of BC's total population). Both population and employment have declined in the past decade with the waning fortunes of the forest product and fishery industries. 80% of the Plan area's population is concentrated in Prince Rupert, with the rest spread in a dozen or more small communities. Aboriginals comprise 64% and 40% respectively of the Central and North Coast population but have significantly lower incomes and higher unemployment than the non-aboriginal population.

Despite the decline in resource-based employment, new major investments in Prince Rupert such as the Fairview terminal, and the growth of aquaculture, wilderness tourism and community-owned forestry enterprises hold out new hope for renewed growth and self-sufficiency for the communities of the LRMP Plan area. But aging infrastructure, uncertainty about the future of the Northern ferry service, and costly or infrequent transportation connections are

together hobbling economic opportunities and investment decisions. The communities of LRMP Plan area need to improve their transportation system in order to sustain and grow the regional economy.

Transportation Setting

The transportation system of the Central and North Coast LRMP Plan area encompasses air, road, water and rail modes of transport, with two principal and distinct functions:

- a national and regional economically strategic role in supporting exports and imports through its two major ports, Prince Rupert and Kitimat, as well as the export of resources from various points of productions; and,

- the provision of basic necessities and passenger transportation within and to/from the region.

The system includes the following array of infrastructure and activity:

- Prince Rupert and Terrace regional airport hubs, several minor airports and landing strips, as well as docks to accommodate float planes;

- Scheduled air service to/from Prince Rupert, Hartley Bay, Lax Kw'alaams, Kitkatla, Bella Coola, Bella Bella, Klemtu, Port Hardy and Terrace/Kitimat;

- Several fixed wing and helicopter companies providing charter service and medevac throughout the entire region;

- BC Ferries' routes 10, 11 and 40;

- Two major and 13+ regional or local ports;

- Highways 16, 20 and 37;

- CN Rail line to Prince Rupert;

- Private ferries and water taxis;

- Cruise ships calling on Prince Rupert; and,

- Commercial and charter vessels serving commercial fishing and processing, barges carrying supplies and export resources, and log booms.

Access to and from the communities of the Central and North Coast is made challenging by great distances (and therefore high travel costs), and unreliable weather and visibility, especially during the winter months. Most communities are heavily dependent on the BC Ferries system, and a system of barges and scheduled or chartered aircraft.

The principal transportation infrastructure and activity in the LRMP Plan area are summarized in Table 1 below. We have provided a comprehensive SWOT assessment of each community's transportation amenities and activity in Section 3 of this report.

TABLE 1: SUMMARY OF KEY CENTRAL AND NORTH COAST LRMP PLAN AREA TRANSPORTATION INFRASTRUCTURE

Community/Region	Air Infrastructure		Ferry Service	Ports, docks	Cruise ship stop	Commercial vessels	Road access	Rail access
	Air access	Scheduled Service						
Central Coast								
Bella Coola Valley	Airport; paved strip	Yes	Summer only	Yes – in Bella Coola	No	Served by barge	Highway 20 is only road link	None
Bella Bella	Airport; paved strip	Yes	Year round	Yes	No	Served by barge & water taxi	None	None
Klemtu	Float plane	Yes	Year round; reduced in winter	Yes	No	Served by barge	None	None
Shearwater	Paved strip	No	Year round; reduced in winter	Yes	No	Served by barge & water taxi	None	None
Ocean Falls	Float plane	No	Year round; reduced in winter	Yes	No	Served by barge	None	None
Wuikinuxv	Gravel strip	No	None	Yes	No	Served by barge & water taxi	None	None
North Coast								
Prince Rupert	Airport; paved strips; float plane	Yes	Year round	Yes; facilities for bulk & container ships	Yes	Served by barge & water taxi; container & bulk ships; accom. fishing fleet	Highway 16 only principal road connection to rest of BC	Western terminus of CN rail system & Via Rail's Skeena line
Lax Kw'alaams	Float plane	Yes	Yes; daily	Yes	No	Served by barge	None	None

Community/Region	Air Infrastructure		Ferry Service	Ports, docks	Cruise ship stop	Commercial vessels	Road access	Rail access
	Air access	Scheduled Service						
Metlakatla	Float plane	No	Yes; 1X per week & daily water taxi	Yes	No	Served by barge & water taxi	None	None
Kitkatla	Float plane	Yes	Yes; 2X per week	Yes	No	Barge; local travel by fish boat	None	None
Oona River	Float plane	No	Yes; 2X per week	Yes	No	Barge; local travel by fish boat	None	None
Hartley Bay	Float plane	Yes	Yes; 2X per week	Yes	No	Barge; local travel by fish boat	None	None
Dodge Cove	Float plane	No	Yes; daily	Yes	No	None	None	None
Kitimat & Kitamaat	Airport; paved strips; float plane	Yes	No	Yes; major export facilities for bulk carriers	No	Accom. bulk carriers; Served by barge, water taxi	Hwy 37 connects Kitimat to Terrace & Hwy 16	CN Rail line from Terrace to Kitimat port (cargo)
Port Hardy & Mt. Waddington RD	Airport; paved strips; float plane	Yes	Yes	Yes	No	Served by barge, water taxi; accommodates fishing fleet	North. terminus of Vancouver Island Highway	None

Issues and Recommendations

In the course of our research and consultation, we have identified several critical transportation-related issues, and learned how they affect business, economic growth, and quality of life for residents. Following are the broad strategic issues that affect transportation in the LRMP Plan area, as well as some key community issues. (These are discussed in more detail in the report.) Recommendations are identified for each.

Regional Strategic Issues

► <u>Issue</u>: **Aging infrastructure, high transportation costs, and infrequent service impedes economic development on the Central and North Coast.**

<u>Recommendation</u>: Begin lobbying federal and provincial government <u>now</u> for funding to undertake "shovel-ready" infrastructure projects. Some priority short-term projects with potential 2009 starts and 2010 finishes are as follows:

- improvements to Kitkatla's float dock;

- new ferry dock at Aero Point near Prince Rupert;

- larger and safer ferry terminal in Klemtu, and larger docks in Shearwater and Ocean Falls;

- larger airport terminal and night time runway lights in Bella Bella;

- improvements to Highway 20 between Anahim Lake and Bella Coola Valley, in particular Heckman Pass;

- implementation of a public bus service from Bella Coola to Williams Lake; and,

- pedestrian sidewalk or walkway between Nuxalk Subdivision 4 with the town of Bella Coola.

► <u>Issue</u>: **No coastal BC transportation plan exists.**

<u>Recommendation #1</u>: Create a Central and North Coast transportation investment strategy for longer term projects. We recommend that the BC Ministry of Transportation and Infrastructure be asked to spearhead a multi-stakeholder coalition in order to strategize on current and future coastal transportation. Some priority longer-term transportation infrastructure investments to be addressed in this process will likely include:

- more frequent ferry service to Central Coast communities during the winter months;

- new ferry and passenger rail terminal in Fairview area (Prince Rupert);

- Tsimshian Access project;

- expansion of terminals and attraction of additional port services in Port of Prince Rupert;

- coordinated coastal barging system;

- identification and assessment of an alternative route to Highway 20 between Bella Coola Valley and Anahim Lake;

- improvement of Bella Coola's river dyke system; and,

- Kitimat-based passenger and freight ferry service.

Recommendation #2: Develop a regional ferry advocacy organization.

- The municipalities, Regional Districts and First Nation communities of the LRMP Plan area need to work together and research and advocate their interests on ferry matters, thereby strengthening their collective voice. Tourism sector representatives should also become involved in order to better coordinate their efforts with those of BC Ferries.

Recommendation #3: Hire an economic development manager in Prince Rupert.

- This person would make transportation issues a major focus, and help advance regional initiatives.

► **Issue: BC Ferries' withholding of the Northern Transportation Strategy has created uncertainty about future service and deterred private investment.**

Recommendation: The Northern Transportation Strategy needs to be made public as soon as possible.

► **Issue: The Canadian Marine Act puts Prince Rupert at a financial disadvantage compared to US ports.**

Recommendation: Lobby federal ministers for changes to Canada Marine Act.

► **Issue: The Tsimshian Access Project is the North Coast's #1 transportation priority.**

Recommendation: Support current planning efforts in Prince Rupert and area, in particular the Tsimshian Access (cited earlier as a long term project), as well as the planned expansion of terminals and attraction of additional port services, and gap analysis and feasibility study of services to improve the capacity and service quality of the Prince Rupert Airport to act as a transshipment facility for fish and seafood products.

► **Issue: High costs and poor access have negative social effects in the project area.**

Recommendation: Social and economic development benefits need to be identified and taken into account when assessing proposed projects.

► **Issue: Transportation improvements should meet EBM environmental objectives.**

Recommendation: Should a community choose to adopt alternative-fuel vehicles as part of a move towards greater environmental sustainability, it would need to undertake a comparison of technologies and costs. This will be a longer term initiative.

Community-Level Issues

Most of the following have been identified earlier as either key short or long term priorities.

► **Issue: Bella Coola's Highway 20 connection requires additional maintenance investment.**

Recommendation: Lobby for funding to upgrade Highway 20, especially at Hickman Pass (cited earlier under "short term projects"). A pedestrian sidewalk or walkway should be built on Highway 20 to connect Nuxalk Subdivision 4 with the town of Bella Coola.

► **Issue: There is no public bus service between Bella Coola and Williams Lake.**

Recommendation: Establish a scheduled public bus between Bella Coola Valley and Williams Lake, possibly on a shared-cost arrangement between communities, and with some provincial funding.

► **Issue: The Bella Coola Valley has no alternative road link to Highway 20 in the <u>event</u> of road failure.**

Recommendation: The proposed emergency routes out of the Bella Coola Valley need to be assessed, and the process of discontinuance initiated if the selected route is still on railroad lands.

► **Issue: The Klemtu, Shearwater and Ocean Falls docks are not large enough to accommodate large new BC Ferry vessels.**

Recommendation: Develop a larger and safer ferry terminal in Klemtu, so that it can receive any BC Ferry vessel operating in the North. Also reconfigure the Shearwater and Ocean Falls docks to accommodate larger vessels.

► <u>Issue</u>: **Bella Coola airport runway could be flooded if nearby river dykes give way.**

Recommendation: Bella Coola requires provincial government funding and approval to become a dyking authority responsible for its own maintenance and upgrades of dykes.

► <u>Issue</u>: **Bella Bella's airport needs to be upgraded to accommodate greater volumes of summer visitors.**

Recommendation: Obtain provincial funding to enlarge Bella Bella's airport terminal, and install night landing lights.

► <u>Issue</u>: **A new Aero Point dock and New Fairview Bay terminal and dock are both needed in Prince Rupert.**

Recommendation: The BC Government should get behind these projects as soon as possible given their obvious economic, social and environmental benefits for the Lax Kw'alaams and Prince Rupert communities.

► <u>Issue</u>: **Small craft harbour improvements are needed at Kitkatla.**

Recommendation: Obtain provincial funding for these improvements based on their social and economic development merits.

► <u>Issue</u>: **Kingcome and Health Bay need transportation improvements**

Recommendation: Provide road to the dock in Kingcome, and water taxi service for Health Bay in the Mount Waddington Regional District.

1.   INTRODUCTION

As part of their mandate to foster improved human wellbeing in First Nation and non-native communities throughout the Central and North Coast, the Ecosystem Based Management Working Group (EBM WG) has identified a sustainable and diversified economy as one of the foundation stones for achieving individual and community wellbeing. The economies of the Central and North Coast have often struggled during the past decade, and there has been a significant population outflow during this time. The resurgence of economic activity in Prince Rupert signals a turning point and, it is hoped, renewed long term economic growth. A reliable and efficient transportation system will be at the heart of this economic renewal.

Despite great distances and unpredictable weather, the existing transportation system on the Central and North Coast does a good job of moving both goods and people. But the infrastructure is aging and has seen little investment in the past few decades (this excludes the new ferry that will be starting on Route 10 in 2009). Most communities can cite at least one transportation-related issue – infrequent ferries, small or aging terminals or docks, poor road conditions -- that impedes economic or social development, or poses a problem for the future. And while all communities share similar problems related to geographic isolation, there is no overarching planning process or initiative to plan regional transportation and advance the collective agenda of the Central and North Coast with the provincial government.

The purpose of this report is to provide an overview of the existing transportation system of the Central and North Coast, identify and analyze the key issues, and make recommendations about what the next steps should be in improving the regional transportation system and readying it for future use. It is our hope that it can be a useful tool in galvanizing Central and North Coast collaboration on transportation matters, and in enlisting greater provincial support in this regard.

Extensive consultation was required for this assignment, and we are thankful to many people and organizations for the time and information they generously provided. Their names are provided in the List of Contacts at the end of this report.

2. SITUATION ANALYSIS:
TRANSPORTATION ON THE CENTRAL AND NORTH COAST TODAY

This section describes the physical, population, community and economic factors that drive transportation needs in the LRMP Plan Area, as well as an overview of the various modes of transport that currently exist there.

2.1 Physical and Economic Setting

2.1.1 Physical Setting

The Central and North Coast LRMP Plan area comprises 6.5 million hectares of land, stretching from Smith Sound at the southern extreme, to just south of Stewart in northern BC.

Transportation Study Area: For the purposes of this assignment, we have included the Central and North Coast LRMP Plan area, Kitimat and Kitamaat Village, as well as Port Hardy, Kingcome and Health Bay in our definition of the **transportation study area**. The latter communities have been included because of their strong connection to the transportation systems on the Central and North Coast. (Excluded from our analysis is the Pacific Inland Coast region, which extends east from the Douglas Channel as far as the Kemano River and the Kitlope.[1])

The outer coast portion of the Central and North Coast is characterized by numerous low-lying islands while further inland the terrain becomes very mountainous with scenic inlets. The terrain is famous for its spectacular wilderness features, and abundant natural resources, and draws more visitors every year. Nevertheless, the Central and North Coast comprises one of the most remote parts of BC, and many of the island and inland communities face challenges arising from their limited accessibility.

Kitimat and Kitamaat Village are situated at the north end of the Douglas Channel. The District of Port Hardy also plays a key regional role as the crossroad of transportation for northern Vancouver Island and the Mid Coast, especially as the southern terminal for the Port Hardy to Prince Rupert ferry.

The following map shows the geographic boundaries of the LRMP Plan area.

---

[1] The City of Kitimat is the gateway to the Pacific Inland Coast.

FIGURE 1: MAP OF LRMP PLAN AREA

Source: EBM Working Group.

2.1.2 *Population*

REGIONAL POPULATION

Results from the most recent national Census show that there were approximately 17,300 residents on the Central and North Coast in 2006.[2] Over 80 percent was concentrated on the North Coast, with Prince Rupert being the largest population centre (12,815 in the Census year). Kitimat and Kitamaat Village accounted for another 9,500 residents.

The population trend in the transportation study area has been one of decline since 2000, mirroring the economic difficulties of the coastal forestry and commercial fishing sectors. Altogether, approximately 6,500 people left the Central Coast, Kitimat-Stikine and Skeena-Queen Charlotte Regional Districts between 2000 and 2007.[3]

TABLE 2-1:   REGIONAL DISTRICT POPULATION ESTIMATES, 2000 AND 2007

Regional District	2000	2007	Change
Central Coast	3,980	3,327	-653
Kitimat-Stikine	43,273	39,917	-3,356
Kitimat	10,881	9,332	-1,549
Skeena-Queen Charlotte	23,131	20,610	-2,521
Prince Rupert	15,643	13,435	-2,208
Total	**70,384**	**63,854**	**-6,530**

Source: BC Statistics, BC Regional District and Municipal Population Estimates, 1996-2007, December 2007.

CENTRAL COAST

The key communities of the Central Coast include those in the Bella Coola Valley (Bella Coola, Hagensborg, Firvale and Stuie), as well as Wuikinuxv, Waglisla (Bella Bella), Klemtu, Ocean Falls, Dawson's Landing and Shearwater/Denny Island. During the 2006 Census year, the population of the Central Coast totalled approximately 3,300, approximately 19% of the entire Central and North Coast area.

---

[2] Census Canada 2006.
[3] The Regional Districts do not entirely coincide with the boundaries of the LRMP Plan area, and include some population that is excluded from the latter, such as the Queen Charlotte Islands.

TABLE 2-2: 2006 CENSUS POPULATION OF COMMUNITIES IN CENTRAL COAST AREA

Community	Population	Status	Population Count Captured In
Bella Coola	788	Indian Reserve	n/a
Hagensborg	196	Unincorporated Place A	n/a
Hagensborg	52	Unincorporated Place B	n/a
Wuikinuxv	85	Katit Indian Reserve	n/a
Waglisla (Bella Bella)	1,066	Indian Reserve	n/a
Ocean Falls *Dawson's Landing* *Denny Island*	*138*		*Electoral Area A*
Firvale	*556*		*Electoral Area C*
Tallheo *Bella Coola*	*135*		*Electoral Area E*
Klemtu	282	Kitasoo Indian Reserve	n/a
Total	**3,298**	**Central Coast Regional District**	

Note: Population for communities that are "captured within an electoral area" is not available. The population number presented represents the entire rural area plus small communities not recognized in the Census of electoral district that community falls in.

Source: Statistics Canada, Census 2006.

The population of the Central Coast Regional District (which encompasses most Central Coast communities) has been declining since 1996.[4] It decreased from 4,079 in 1996 to 3,300 in 2006, as residents left to seek employment opportunities elsewhere.[5] The Census results show that the population of the Bella Coola Valley was 1,727 in 2006 (including Firvale and Electoral Area E), just over half of all population of the Central Coast. Long term population growth is expected to be positive but very slow. BC Statistics forecasts that population in the Central Coast School District will rise by only 4.4% between 2007 and 2030.[6] By comparison, the provincial population is forecast to increase by 29.4% over the same period.

First Nations comprise a significant share of the Central Coast population. The on-reserve population accounted for 64% of the total population during the 2006

---

[4] BC Statistics, Municipal and Regional Population Estimates 1996-2007.
[5] Census Canada 2006. Census estimates are slightly different from those of BC Statistics.
[6] BC Statistics, Population Projections (P.E.O.P.L.E. 33)

Census year.[7] The First Nations that inhabit or and/or have territorial claims on the Central Coast are the following:

- Kitasoo/Xai'xai – live in Klemtu;

- Heiltsuk – principal community is Waglisla (Bella Bella);

- Nuxalk – main village near Bella Coola;

- Wuikinuxv – at Rivers Inlet; and,

- Gwa'Sala-Nakwaxda'xw - located in Port Hardy with territorial claims on Mid Coast.

Bella Coola, situated at the head of the North Bentinck Arm of Burke Channel, has a single road link to the rest of the province (Highway 20), and is served by both air and ferry transportation. Ferry service is curtailed during winter months, and poor weather during the winter often makes the Central Coast difficult to reach by air.

Bella Bella is the major outer island transportation hub on the Central Coast, located on Campbell Island beside Seaforth Channel. It is linked to Vancouver Island and the Lower Mainland by year-round ferry service (both Route 40 and Route 10) and scheduled airline service from Vancouver and Port Hardy.

Klemtu, Denny Island/Shearwater (a non-native community situated across from Campbell Island) and Ocean Falls (at the head of cousins Inlet) are all served at least once per week by BC Ferries' Route 40 Discovery Coast service during the summer months, but have curtailed ferry service on Route 10 (Inside Passage service) during the winter months. There is no road access to any of these communities, although Pacific Coastal provides scheduled flights to these smaller communities out of its secondary hub in Port Hardy.

NORTH COAST

The North Coast includes the Tsimshian Nation communities of Lax Kw'alaams, Metlakatla, Kitkatla and Hartley Bay and the incorporated municipalities of City of Prince Rupert and District of Port Edward. The area's total population is approximately 15,900, and an estimated 6,300, 40%, are either First Nation members or self-identify as Aboriginal persons.

Prince Rupert's population peaked in the mid 90s and slipped by approximately 22% over the 1996-2006 decade. Port Edwards population has tumbled by about 15% during the same period. The population trends for both municipalities are presented in the following table.

---

[7] Statistics Canada. Census 2006.

TABLE 2-3: MUNICIPAL POPULATION TRENDS ON NORTH COAST

Year	Prince Rupert	Port Edward
1981	16,652	1,018
1986	16,318	731
1991	17,098	761
1996	17,432	732
2001	15,376	694
2003	14,962	667
2004	15,059	659
2005	14,974	653
2006	13,588	612
2007	13,435	607

Note: The estimate for 2007 is slightly different from the Census figure cited earlier, due to different sources.

Source: BC Statistics.

Future population growth is expected to be positive, but comparatively slow. The 25-year population forecast, prepared by BC Stats, for the Prince Rupert School District, projects a 15.5% rise from 2006 to 2030.

Based on a 2006 census by Skeena Native Development Society, approximately 1,700 Aboriginal persons in total resided in the communities of Lax Kw'alaams, Metlakatla, Kitkatla and Hartley Bay.

TABLE 2-4: POPULATION AND TOTAL MEMBERSHIP OF FIRST NATIONS COMMUNITIES, 2006

	Hartley Bay	Kitkatla	Lax Kw'alaams	Metlakatla
Total Population on reserve	190	582	828	114
First Nation population	186	567	761	113
Total First Nation membership	661	1,806	3,067	732

Source: Skeena Native Development Society (2006).

Both Lax Kw'alaams (Port Simpson) and Metlakatla are on the Tsimshian Peninsula. The latter is connected to Prince Rupert by a scheduled water taxi, and the former

by scheduled float plane and car and passenger ferry service. Kitkatla (Gitxaala First Nation) is on Dolphin Island and Hartley Bay (Gitga'at First Nation) is on the coastal mainland, approximately 150km south of Prince Rupert; both are connected to Prince Rupert by scheduled float plane and passenger ferry services. None are connected by road to major population centres.

A majority of Aboriginal residents of the North Coast live in Prince Rupert and many are members of Tsimshian First Nations.[8] Statistics Canada reports that as of the 2006 Census, 4,480 Aboriginal persons resided in Prince Rupert, accounting for approximately 35% of the city's population and 70% of the North Coast Aboriginal population.

Kitimat

Kitimat and Kitamaat Village (primary community of the Haisla people) are in the Kitimat-Stikine Regional District, which has witnessed a population decline since 1996. In 2006, the population of Kitimat was 8,987, while that of Kitamaat Village was 514.[9] The population of Kitimat peaked during the construction boom in the 1970s, but has declined in subsequent years, 19% from 11,564 in 1996 to 9,332 in 2007.[10]

While population forecasts are not available for these two communities, it is very likely that the population trend is going to be reversed. The magnitude and timing depend on when and if proposed projects such as a liquid natural gas pipeline go ahead.

Port Hardy and Mount Waddington Regional District

In 2006, there were 3,822 residents living in the District of Port Hardy. The nearby rural areas are home to another 2,000 people, including those who live in Coal Harbour, Holberg, Quatsino and Winter Harbour, and on reserves of the Kwakiutl, Quatsino and 'Gwa'sala-'Nakwaxda'xw First Nations. The trading area serviced from Port Hardy includes several thousand more people who live in small coastal communities.

Kingcome (Quaee 7 IR) and Health Bay (Gwayasdums 1 IR) are small First Nation communities located within the boundaries of the Mount Waddington Regional District. The population of the latter is approximately 40 and the population of the former is approximately 90.

---

[8] The First Nations communities located on the North Coast are members of the Tsimshian Nation. In modern times, the Tsimshian Nation consists of seven nations or bands: Kitasoo, Gitga'at, Gitxaala (Kitkatla), Kitselas, Kitsumkalum, Metlakatla and Lax Kw'alaams (or Allied Tsimshian Tribes or ATT). Historically, the Tsimshian Nation consisted of a number of tribes or bands: Gidestsu (Kitasoo), Gitk'a'ata (Gitga'at), Gitxaala (Kitkatla), Gits'ilaasu (Kitselas), Gitsmgeelm (Kitsumkalum), and Giluts'aaw, Ginadoiks, Ginaxangiik, Gispaxlo'ots, Gitando, Gitlaan, Gits'iis, and Gitwilgyoots (Lax kw'alaams or Allied Tsimshian Tribes or ATT).
[9] Census Canada 2006.
[10] BC Statistics, *Municipal and Regional Population Estimates 1996-2007*

2.1.3 Economy

The economy of the transportation study area has historically depended on resources, although this pattern has changed during the past decade with the growth and diversification of the service sector, and decline in the coastal forest industry. Between 2001 and 2006, the total number of jobs in the study area declined from approximately 15,880 to 13,430, an outflow of about 2,450 workers.[11]

Overall, the public sector – which includes school district, hospital and First Nations, local, provincial, and federal government staff – accounted for approximately 3,655 jobs, or 27% of employment in the transportation study area in 2006.[12] The mining sector was in second place, generating 1,500 jobs (11% of total), due largely to the inclusion of Kitimat in these estimates. Retail was the third-largest sector, accounting for 1,300 jobs, or 9.8% of all employment in the study area. Accommodation and food, and the transportation sector, each accounted for 1,000 jobs or 7.5% of the labour force. And the logging & forest products industry made up 885 jobs, or 6.6%.

The importance of the forest industry has declined. Census data shows that logging accounted for 11% of all employment in 2001, declining to 6.6% in 2006.

The fishing industry is historically a major player in the Central and North Coast economy, and although reduced in importance in recent years through smaller salmon returns and license restructuring, it remains a significant force, accounting for employment of approximately 1,135 in the transportation study area.

Mining continues to be a dominant employer in the transportation study area, due to Alcan's smelting operations in Kitimat. The number of workers employed in this industry in 2006 (1,500) was approximately the same as in 2001. The prospects for mining are good, with major new projects now in the planning phase, and this sector is likely to grow in the years to come.[13]

While the overall labour market shrank in the transportation study area between 2001 and 2006, the sector share of some industries grew during this time. One example of this is the public sector on the Central Coast which grew from 40% of all jobs in 2001 to 45% in 2006. On the North Coast, the number of jobs in wholesale trade, and transportation and warehousing, an outcome of Port of Prince

---

[11] BC Statistics. *Community Facts*. Labour Force by Industry (NAICS). Taken from Census 2001 and 2006. October 2008. The table includes results for Prince Rupert, Port Edward, Kitkatla, Hartley Bay, Metlakatla and Area A of the Skeena-Queen Charlotte Regional District, Central Coast Regional District and Kitimat. Some smaller communities are not included due to lack of data.
[12] BC Statistics. *Community Facts*. Labour Force by Industry (NAICS). Taken from Census 2001 and 2006. October 2008.
[13] Note that the economic role of the minerals sector is much smaller in the LRMP Plan areas, which do not include Kitimat.

Rupert developments, grew to over 900 jobs at a time when most sectors were shrinking.

TABLE 2-5:   LABOUR FORCE IN TRANSPORTATION STUDY AREA AS OF THE 2006 CENSUS

Industry	North Coast		Central Coast		Kitimat		Study area	
	Labour Force (#)	Distri-bution (%)	Labour Force (#)	Distri-bution (%)	Labour Force (#)	Distri-bution (%)	Labour Force (#)	Distri-bution (%)
Logging & forest products	235	3.2%	55	3.8%	595	12.6%	885	6.6%
Mining	125	1.7%	10	0.7%	1365	28.8%	1,500	11.2%
Fishing & fish processing	970	12.8%	135	9.4%	30	0.6%	1,135	8.5%
Agriculture, food & beverage	125	1.7%	45	3.1%	0	0.0%	170	1.3%
Accommodation & food	655	9.1%	120	8.4%	230	4.9%	1,005	7.5%
Wholesale trade	150	1.7%	10	0.7%	75	1.6%	235	1.7%
Retail	770	10.6%	135	9.4%	405	8.5%	1,310	9.8%
Transp & warehousing	825	11.4%	35	2.4%	145	3.1%	1,005	7.5%
Public sector	2,025	26.1%	645	44.9%	985	20.7%	3,655	27.2%
Construction	320	4.3%	70	4.9%	200	4.2%	590	4.4%
Finance & insurance	225	3.1%	10	0.7%	55	1.2%	290	2.2%
Prof., scientific & tech. services	140	2.3%	20	1.4%	80	1.7%	240	1.8%
Total	**7,255**		**1,435**		**4,740**		**13,430**	

Note: Not all sectors are shown. The table includes results for Prince Rupert, Port Edward, Kitkatla, Hartley Bay, Metlakatla and Area A of the Skeena-Queen Charlotte Regional District. Data is not available for Lax Kwa'alaams (Port Simpson). Some assumptions were used to construct the table as labour force data from Statistics Canada was incomplete for Kitkatla, Hartley Bay, Metlakatla and Area A, and Kitamaat Village.

Source: Statistics Canada, Census 2006.

The poor economic status of the Aboriginal population is a striking characteristic of the Central and North Coast region. Although Prince Rupert's Aboriginal residents are slightly better off than those in other First Nations communities of the LRMP Plan area, they are economically worse off than the city's non-Aboriginal population. The following table compares the economic and labour force status of non-Aboriginal and Aboriginal communities on the Central and North Coast[14].

---

[14] Only Kitkatla, Bella Bella and Kitasoo are used in the table because average income data is not available for other First Nation communities.

TABLE 2-6:   ABORIGINAL AND NON-ABORIGINAL INCOME STATISTICS FOR CENTRAL AND NORTH COAST, 2005

Labour Force	Average Annual Earnings*	Unemploy-ment Rate	Labour Force Participation Rate	% of Govt Transfers in Income
Prince Rupert Aboriginal	$19,643	23.2%	61.30%	29.3%
Prince Rupert Non-Aboriginal	$36,214	8.8%	71.60%	11.5%
Prince Rupert Overall	$31,481	12.9%	68.30%	14.7%
Kitkatla	$9,710	60.0%	46.30%	54.1%
Bella Bella	$16,243	20.3%	47.10%	27.2%
Klemtu	$14,816	26.3%	45.20%	27.1%

* For people with positive earnings.

Source: Statistics Canada, Census 2006.

While the economic status of Prince Rupert Aboriginal residents is slightly better than in the outlying First Nations communities, as a group they are economically much worse off than the city's non-Aboriginal population. For example, the Aboriginal unemployment rate in Prince Rupert is 2½ times higher than the unemployment rate of the non-Aboriginal labour force. In Kitkatla, the unemployment rate is much higher, 60%. The average income of Aboriginal labour force participants of Prince Rupert is about one-half that of the income level of the city's non-Aboriginal labour force, while the average income in Kitkatla, Bella Bella and Klemtu is much lower. There is no doubt that proximity to employment opportunities in an urban centre like Prince Rupert translates to higher income levels. Nevertheless, Aboriginal residents are not yet fully realizing these benefits.

The unemployment rate is also extremely high in Aboriginal communities of the LRMP Plan area, ranging from 20.3% in Bella Bella to 60% in Kitkatla in the shown table, while the labour force participation rates are correspondingly low. The forestry and wood processing sectors have been neither steady nor significant sources of employment for Central and North Coast First Nations, although resources do form the basis for some employment in most or all of the communities. The tourism sector, where more entry level positions are available than in many other sectors, has also been a weak source of employment for Aboriginal persons. The public sector (specifically health and education jobs) is a major employer in most of the communities of the LRMP Plan area.

TABLE 2-7:   ABORIGINAL COMMUNITY EMPLOYMENT BY SECTOR (PERCENTAGE OF ALL EMPLOYED)

	Hartley Bay	Kitkatla	Lax Kw'alaams	Metlakatla	Bella Bella	Klemtu
Agriculture & resource-based industries	15%	30%	32%	17%	19%	16%
Public sector	67%	64%	58%	54%	30%	21%
Manufacturing	n/a	n/a	n/a	n/a	6%	11%
Tourism	16%	2%	0%	10%	n/a	n/a

Note: Columns do not add to 100%.

Source: Skeena Native Development Society (2006). Statistics Canada, 2006 Community Profiles.

Important contributing factors to the high unemployment rates are the federal government's restructuring of the Pacific salmon fishery in the mid and late 90s (which led to a large reduction in First Nations participation in the fisheries sector) and historically low level of Aboriginal involvement in employment and ownership in the region's forestry and wood processing sectors.

In recent years, there have been several economic difficulties that have affected the population, income and community wealth levels of the transportation study area. This includes but is not limited to the following events.

- Closure of Prince Rupert's SCI pulp mill in June 2001 and the inability of its new owners, first New Skeena Forest Products and then Sun Wave Forest Products, to get the mill re-financed and operational.

- Closure of Northwest Timber's (West Fraser) saw mill and chip line in 2001 and the auctioning of the mill machinery and equipment by the new owner, Arrowhead Forest Products, in November 2003.

- Reduced timber harvesting by Interfor, including disposal of non-core tenures on the Central Coast in 2006 to streamline woodland operations.

- Interfor closed Bella Coola operations in 2001 which accounted for the loss of approximately 70 high paying jobs.

- Closure of the Ministry of Forest office in Bella Coola in 2003, resulting in further loss of employment.

- Downsizing in the commercial fishing industry due to federal government led re-structuring, depleted ocean stocks, catch limit reductions and species closures for sports fishing.

- Relatively higher cost of logging on the Central and North Coast compared to other coastal BC and major timber harvesting regions.

- Sinking of the *Queen of the North* ferry that operated between Port Hardy and Prince Rupert on March 22, 2006, which subsequently disrupted the Prince Rupert tourism industry.

- Layoffs in Kitimat's manufacturing, retail and public sectors since 2001.

A distinguishing feature of the Central and North Coast economy is the high level of non-resident employment in a few resource-based sectors. An example is North Coast timber harvesting, where a couple of surveys have shown that up to 30% of the direct employment in North Coast timber harvesting is undertaken by persons who reside outside of the North Coast.[15] There is a similar experience in the nature-based tourism industry, which includes the wilderness and fishing resorts, in that a large proportion of their positions are filled by workers who do not reside on the Central or North Coast, but rather commute from outside the region and work there seasonally.[16]

Despite the long term structural changes that have occurred in the transportation study area's forestry and fishery sectors, there are several initiatives which have taken place or are planned that will provide future economic stimulus:

- Opening of Phase I of the 500,000 TEU Fairview container shipping facility at Port of Prince Rupert in October 2007. Phase II of this terminal, an expansion to 2 million TEUs, is undergoing an environment assessment but its construction has been delayed by at least 18 months due to the current worldwide economic difficulties.[17]

- Opening of the Northlands cruise ship terminal in 2004, which is attracting large Alaska-bound cruise ships to Prince Rupert. This has led to new or expanded tourism operations, such as the 100-passenger catamaran of Prince Rupert Adventure Tours and Metlakatla Development Corporation-owned Seashore Charters.

- Expansion of Ridley Terminals Inc.'s bulk commodity shipping capacity.

- Growing eco-tourism industry on the Central Coast.

- Construction and opening of Prince Rupert's "Chances" gaming centre in July 2007.

---

[15] Pierce Lefebvre (August 2006) *BC Central Coast and North Coast Timber Harvesting and Processing Employment Survey*. Prepared for Integrated Land Management Bureau, BC Ministry of Agriculture and Lands.
[16] Pacific Analytics (July 2003) *The North Coast Multi-Day Nature-Based Tourism Industry: An Economic Profile*. Prepared for the North Coast Backcountry Caucus.
[17] Patrick Brethour article in the Toronto *Globe and Mail*, Dec. 19, 2008

- Awarding of community forest licenses to the Nuxalk Nation and to the community of Bella Coola in 2007, allowing a total harvest of 50,000 cubic metres of timber per year.

- Awarding of non-replaceable forest licenses to First Nations on the Central and North Coast, which has the potential to raise the involvement of First Nations in the area's forest industry.[18]

- Piloting of shellfish aquaculture projects by coastal First Nations since 2003. Plans are in place to establish shellfish aquaculture operations in the vicinity of several coastal First Nation communities.

- Proposed construction of new natural gas liquefaction and marine export terminal facilities near Kitimat that will connect to a new Pacific Pipeline. Commencement is anticipated for late 2009, with operations by late 2013.

- BC Ferries' improved marketing campaigns for the Discovery Coast Passage and Inside Passage ferry routes to the Central and North Coast during the summer months.

- Collaborative efforts of Aboriginal and non-Aboriginal communities of the North Coast to lead and guide the development of the Tsimshian Access project.

2.2   Overview of Major Transportation Modes

2.2.1 Introduction

The communities of the transportation study area support a complex system of water, air, road and rail transportation. While the Central and North Coast are linked by BC Ferries' Route 10 Inside Passage service, which extends between Port Hardy and Prince Rupert and to several Central Coast communities in between, there are few other direct linkages between these two regions. Both the Central Coast and the North Coast have their own respective transportation hubs and systems that serve the needs of regional communities and operations, while Kitimat's harbour is oriented towards export activity for aluminum and forest products.

To access the Central or North Coasts by air, travelers use either Vancouver's Main or South Terminals or Port Hardy as a hub. There is a flight from Prince Rupert on North Pacific Seaplanes that stops at Hartley Bay and can stop at Klemtu and Bella Bella too, otherwise flight connections between the non-hub communities are limited to charters. Thus, to travel from Bella Coola to Bella Bella on the Central Coast, a traveler is required to fly to Vancouver, and then North to Bella Bella by Pacific Coastal Airlines, or to charter a plane to travel directly between the two

---

[18] To date, North Coast First Nations have been able to harvest only a small proportion of their available volume due to regulatory issues with MOFR and lumber market problems in Japan and the U.S.

communities.[19] This underscores the dichotomy that exists on the Central Coast – the Bella Coola Valley is one transportation hub, while Bella Bella serves as a separate hub for the communities of the outer Central Coast.

Another factor that separates the two parts of the Central Coast is Highway 20. This serves as the Bella Coola Valley's "lifeline". It is the source of almost all supplies and services to the Valley, and its main connection with Williams Lake and the rest of the province. The communities of the outer coast have no highway access, and are completely reliant on water and air transportation.

Prince Rupert is the largest community in the transportation study area, and the primary economic and transportation hub of the North Coast region. It is the western mainland terminus of both Highway 16 and the CN Rail line, the northern terminus of BC Ferries' Route 10, a stop on the Alaska Marine Highway ferry service, connected to Lax Kw'alaams, Metlakatla, Kitkatla and Hartley Bay by private ferry services, connected by scheduled air services to Vancouver, Haida Gwaii, Lax Kw'alaams, Kitkatla, and Hartley Bay and a 'Northern Gateway' port with cruise ship, container, grain and bulk commodity terminals.

Kitimat is the second-largest community in the transportation study area and a key industrial-transportation hub for the processing of raw materials into value-added products. And it, too, is the epicenter of its own transportation network, quite distinct from those of the Central and North Coast. Kitimat is serviced by deep-sea ship, CN Rail rail, road and pipeline and is located at tidewater in the Kitimat Valley. It is connected by Highway 37 to Terrace,[20] the location of the Northwest Regional Airport (Terrace-Kitimat) which can be reached by scheduled flights from several points, such as Vancouver, Prince Rupert, Smithers and Prince George.

The District of Port Hardy—located within the transportation study area but outside the LRMP Plan area—has a regional airport, an excellent harbour, and a regional BC Ferries terminal. It is also the northern terminus of the Island Highway to Victoria.

As the southern terminal for the Port Hardy to Prince Rupert ferry, and the new Discovery Passage ferry to the Central Coast communities, Port Hardy is a significant commercial and transportation hub, and a primary service provider.

In the remainder of this section, we provide a situation analysis of the various modes of transportation in the transportation study area.

---

[19] The price of each is approximately the same.
[20] A distance of 73 kilometres.

2.2.2 Air Transportation

MID COAST

Travel to and from the Mid Coast is generally by air, particularly during the winter months. This is because ferry and chartered boat service is generally infrequent or slow, and because of the considerable distances involved. However, air travel on the Mid Coast during the winter months can be delayed due to poor weather conditions.

Bella Coola, Bella Bella, and Denny Island (Shearwater) all have paved landing strips, while Wuikinuxv's landing strip is unpaved and used seasonally. Denny Island also has a protected float plane base. The other communities—Dawson's Landing, Klemtu and Ocean Falls—are accessible by float plane only. The Bella Coola airport terminal and landing strip is owned by the Central Coast Regional District.

The Bella Bella airport manager estimates their airport has roughly 3,700 landings per annum. Bella Coola's airport sees approximately 600 charter landings per annum[21] and up to 420 scheduled flights[22]. Night landings are forbidden at Central Coast airports because the runways do not have night lights. However, even with night lights, it would be infeasible in Bella Coola, which has no beacon, and is surrounded by steep mountaineous terrain.

Pacific Coastal Airways is the major scheduled carrier that serves the Mid Coast, flying from Vancouver's south terminal to Bella Coola, or through Port Hardy to Bella Bella and Klemtu. There are daily flights to Bella Bella and Bella Coola during the winter months, with two daily flights during the summer months. The Port Hardy – Klemtu route is served once per day, year round, with no weekend service. Pacific Coastal also provides float plane service in a DeHavilland Beaver from Port Hardy to Ocean Falls and to fishing lodges in the Hakai Pass and River's Inlet. From fall to mid-May there are daily scheduled flights, and during the summer two to three flights per day, depending on demand.

The 2001 cancellation of Pacific Coastal's scheduled air service between the communities of Bella Coola and Bella Bella introduced a complication for those who need to travel between these two communities, particularly those working for the Central Coast Regional District, School District 49, the Vancouver Coastal Health Authority and First Nation Services.   It is now necessary to charter a plane to travel between the two communities, or to travel back Vancouver, then travel to the other community from there.

---

[21] These landings are representative of the main charter company based in Bella Coola.
[22] An estimate based on Pacific Coastal Airline's schedule.

Sharp Wings Ltd., based out of Williams Lake, provides regular daily flights to and from Bella Coola and a general charter service to Mid Coast communities. Other companies that provide fixed wing charter service to Mid Coast destinations are Pacific Coastal Air (via Vancouver or Port Hardy), Bella Coola Air and Air Cab (based in Vancouver). There are also three helicopter companies that offer charter services to the region—Prism Helicopters (based in Port McNeil), Rainbow Helicopters (based in Smithers), and West Coast Helicopters (based in Bella Coola and Port McNeill). Charter fixed wing and helicopter operations normally provide services to the general transportation, recreation and industrial sectors (e.g. transporting passengers to fishing, logging or work camps). West Coast Helicopters also provide medevac services between Bella Coola, Bella Bella, Wuikinuxv and Klemtu.

Prince Rupert

The Prince Rupert Airport, located on Digby Island, is the North Coast's major air transportation hub. Previously a federal government airport, the Prince Rupert Airport is now owned by the City of Prince Rupert, and is operated by the Prince Rupert Airport Authority. Most passengers access the airport via a bus service (Farwest Bus Lines) and the city-owned and operated Digby Island ferry, while some use a water taxi or chartered float plane, because it is separated from the city by about 9 kilometres of water and land.

The runway is 6,000 ft. in length and 200 ft. wide, and can accommodate Boeing 727 jet service. Runway 13 is equipped with ILS to Category 1 landing limits, and runway 31 is a non-precision runway. There is a full service terminal that includes customs officers. The interior of the terminal was upgraded in 2004 with federal government financial assistance. The ferry operates at an annual loss of approximately $1 million, assumed by the City of Prince Rupert (city), which is approximately 10% of the city's total property tax revenues. The city receives neither senior government nor BC Ferries financial assistance to help cover the costs of linking Prince Rupert to its airport by ferry.

As shown below, the number of aircraft movements to and from Prince Rupert Airport has declined substantially (by 29 percent) since 2003, while the volume of passengers has increased (by 7 percent). The Prince Rupert Airport Authority believes the decline in aircraft movements is related mainly to a decrease in recreational/private and small Avgas type aircraft. The increase in passenger traffic is related to increased economic activity (e.g. the container port development).

TABLE 2-8:   PASSENGER AND FLIGHT STATISTICS FOR THE PRINCE RUPERT AIRPORT,
              2003 TO 2007

Year	Total Passengers (in/out)	Aircraft Movements
2003	59,482	5,921
2004	62,421	5,644
2005	60,025	4,495
2006	60,570	4,273
2007	63,410	4,196

Source: Prince Rupert Airport Society

Air Canada Jazz and Hawkair offer scheduled services between Prince Rupert and Vancouver. North Coast Seaplanes (a Harbour Air subsidiary) provides scheduled float plane service between City of Prince Rupert owned and operated Seal Cove float plane base and Hartley Bay, Lax Kw'alaams, Kitkatla, Masset and Queen Charlotte City.

North Pacific Seaplanes offers charter and flightseeing services from Prince Rupert as does Inland Air. White River Helicopters and Vancouver Island Helicopters provide charter helipoter services from the Seal Cove float plane base.

NAV CANADA[23] flight statistics indicate that roughly 72 percent of aircraft movements at Prince Rupert Airport in 2003 were commercial in nature. By 2007, this ratio dropped to 63 percent.

Vancouver Island Helicopters (VIH) operates a Bell 222 on permanent call from its base at Prince Rupert under contract to BC Ambulance Service. This is one of four contracted air ambulance providers offering a full-time air medevac service in BC (others are located at Prince George, Kelowna and Vancouver). Its Prince Rupert medevac helicopter services the North and Central Coast. Other helicopter services, such as West Coast Air, are contracted from time to time to provide medevac services as required.

The process for an emergency medical evacuation is based on dialogue among the physician on call and the community nurse or community health representative (CHR). Once the decision to transfer has been made and a hospital bed secured,

---

[23] NAV CANADA, the country's civil air navigation services provider, is a private sector, non-share capital corporation financed through publicly-traded debt. With operations coast to coast, NAV CANADA provides air traffic control, flight information, weather briefings, aeronautical information services, airport advisory services and electronic aids to navigation

the BC Ambulance Service in Victoria is notified. They decide on what kind of air ambulance to use and which emergency medical personnel to dispatch. The VIH helicopter undertakes the pick up and delivery and an ambulance attendant is sent along to tend the patient, along with a physician in severe cases. The patient is delivered to a helicopter landing pad located adjacent to either Prince Rupert, Port McNeill or Port Hardy Hospitals, depending on community location. For example, a patient in Wuikinuxv will be delivered to Port McNeill Hospital and a patient in Kitkatla to Prince Rupert Hospital. Medevacs from the outlying coastal communities also utilize the Bella Coola Hospital.

Helipads are located in each community, the original construction of which was funded by the BC Government but the pads are maintained by the communities, including snow clearing. In terms of night landings, the helicopter has a large spotlight on its undercarriage to facilitate night landings and guide personnel on the ground in loading and unloading. Communities have amber lights that residents can set out on a temporary basis around the helipad to assist with guiding the medevac helicopter.

Kitimat

The Northwest Regional Airport, which serves the communities of Terrace and Kitimat, is located 5.6 km south of Terrace, and 73 km north of Kitimat. It is owned and operated by the Terrace-Kitimat Airport Society, an independent, non-governmental not-for-profit organization. The airport has two paved runways: one is 7,500 feet long and the other is 5,373 feet. Both are 150 feet wide. In 2002, the airport upgraded its instrument landing system and reliability of flight completion increased dramatically. Prior to that time there were between 120 and 145 flights per year that were diverted due to weather—since then there have been an average of 16 flights per year missed due to weather.

The number of aircraft movements to and from the Northwest Regional Airport and the total passengers in and out has increased substantially since 2003, by 67 percent and 36 percent respectively. The Terrace-Kitimat Airport Society believes the increased volume is related to several factors—a dramatic increase in mineral exploration activity in northwest British Columbia, planning activity related to proposed pipeline projects, Pacific Coastal Airline's new competitively-priced service in the spring of 2007, and recent higher fuel prices has made air travel a more cost-time effective option for many.[24] The Airport Society expects 2008 figures to be similar to 2007 as Pacific Coastal Air ceased operations in the spring of 2008, and mineral exploration slowed during the summer.

---

[24] It takes approximately 16 hours of travel time to drive by vehicle between Vancouver and Terrace (not including stops or sleepovers).

TABLE 2-9:   PASSENGER AND FLIGHT STATISTICS FOR THE NORTHWEST REGIONAL AIRPORT, 2003 TO 2007

Year	Total Passengers (in/out)	Aircraft Movements
2003	89,715	10,832
2004	99,062	12,238
2005	98,369	12,272
2006	105,086	14,002
2007	122,070	18,079

Source: Terrace-Kitimat Airport Society

Air Canada Jazz and Hawkair offer daily scheduled services between Northwest Regional Airport and Vancouver. Air Canada provides three scheduled flights daily, while Hawkair has two scheduled flights. Central Mountain Air provides daily service to Prince George and Smithers.

TK Air Charter Ltd., a fixed wing charter company based at the airport, provides charter flights throughout the region, as do helicopter operators Lakelse Air Ltd. and White River Helicopters.

NAV CANADA flight statistics indicate that commercial aircraft movements at the airport have ranged from a low of 70 percent in 2004 to a high of 84 percent in 2006. By 2007, this ratio dropped slightly to 81 percent.

DISTRICT OF PORT HARDY AND MOUNT WADDINGTON REGIONAL DISTRICT

The Port Hardy airport, located 9.6 km southeast of Port Hardy, is owned and operated by Transport Canada. It is fully serviced, with three runways, the longest of which is 5,000 feet, and is equipped to handle both domestic and international carriers. Direct scheduled service is provided by Pacific Coastal Airlines to Vancouver International Airport as well as to points on the Central Coast including Bella Bella and Klemtu and to Prince Rupert on the North Coast of BC. The Port Hardy airport is also an operating base for Vancouver Island Helicopters.

Aircraft movements were 13,953 in 2007, down slightly from the previous two years. In December 2008, NAV Canada announced it was going to review Port Hardy's Flight Service Station status, but strong lobbying by stakeholders on North Vancouver Island has resulted in the postponement of this review for five years.

The Port Hardy Seaplane Base, located in the inner harbour, offers state-of-the-art facilities for float planes in a location that is sheltered from winds, and usually free from fog conditions.

Pacific Eagle Aviation provides an on demand scheduled seaplane service between Port McNeill and Kingcome and Health Bay and Vancouver Island Air offers a similar seaplane service between Campbell River and Kingcome.

2.2.3 Ferries

BC Ferries is a primary link between the Central and North Coast communities, and southwest BC, and provides vehicle and walk-on passenger services on its Route 10, 11 and 40 services, described as follows:

- Route 10, the Inside Passage service, runs between Port Hardy on Vancouver Island and Prince Rupert on the North Coast, with stops at several Central Coast communities during the fall/winter/spring season. During the summer, this is a direct route ferry between Port Hardy and Prince Rupert;

- Route 40, the Discovery Coast Passage, is a **summer-only** service between Port Hardy and Mid Coast ports Bella Bella, Shearwater, Klemtu, Ocean Falls and Bella Coola and,

- Route 11 links Prince Rupert and Skidegate on Haida Gwaii (Queen Charlotte Islands).

Port Hardy is the southern terminus of Routes 10 and 40, while Prince Rupert is the northern terminus of Route 10.

Prince Rupert is a stop on the Alaska Marine Highway System which provides scheduled vehicle and passenger ferry services to Ketchikan, Sitka, Juneau, Wrangell, Petersburg, Hanes and Skagway in Alaska and Bellingham, Washington on a year round basis.

Freight transport is also available to and from all ports, but must be pre-arranged with BC Ferries.

Private ferries also run scheduled services between Prince Rupert and the small North Coast communities.

- North-Co-Corp. Ferry Services Ltd.[25] has operated the *Tsimshian Storm* passenger ferry between Prince Rupert and Metlakatla, Oona River, Kitkatla and Hartley Bay since late 2003. It receives an annual financial contribution

---

[25] Jointly owned by the Metlakatla, Gitxaala and Gitga'at First Nations and operated by Metlakatla Development Corporation.

from the BC Government, channeled through BC Ferries, to help support this service.[26]

- Metlakatla Development Corporation runs a scheduled water taxi service between Prince Rupert and Metlakatla at the south end of the Tsimshian Peninsula. The service does not receive outside financial contributions.

- The *Spirit of Lax Kw'alaams* is a small, older[27] passenger and car ferry, leased from BC Ferries for $1 per year and operated by the Lax Kw'alaams First Nation. It has run between Prince Rupert[28] and Tuck Inlet (connected by road to Lax Kw'alaams)[29] since 1997. BC Ferries pays for the cost of the five-year refit of the ferry, a value of approximately $750,000.[30]

- The City of Prince Rupert owns and operates a small vehicle ferry between Fairview, approximately 10 km south of the city centre of Prince Rupert and Dodge Cove on Digby Island. The ferry services mainly Prince Rupert Airport passengers and workers but also the small community of Dodge Cove.[31] It receives no senior government financial assistance and City of Prince Rupert property taxpayers annually subsidize this ferry by approximately $1 million to cover the ferry's revenue shortfall.

Under the 2003 Coastal Ferry Services Contract and its subsequent amendments, with the Province of BC, BC Ferry Services (an independent corporation) is required to deliver specified service levels on "designated routes" and is paid a "service fee". In 2005, BC Ferries issued a Request for Expressions of Interest to attract alternative service providers (ASPs) for three groups of designated ferry routes, including the "Northern Routes" (i.e., Routes 10, 11, 40 and 26 Skidegate-Alliford Bay). The intention was to test whether a private sector operator could deliver the services at a lower cost than BCF while meeting or exceeding the latter's benchmark in terms of safety, human resources, operational plan, financing, vessel, regulatory compliance, risk mitigation and contractual terms.[32] The sinking of the Queen of the North in 2005 and the acquisition of two new vessels since that time have both changed the circumstances of the Northern Service, and BC Ferries plans to recommence the ASP process for the Northern Routes once the issues of

---

[26] The financial contribution of up to $2.2 per annum for all unregulated routes is listed in the March 31, 2008 addendum to the Coastal Ferries Service Contract between the BC Government and BC Ferries, The Prince Rupert to Hartley Bay route is designated as Route 60. These are referred to as "Unregulated Routes" in the contract. There is an eight year contract between BC Ferries and the provider signed in 2003.

[27] Commissioned in 1960

[28] This ferry uses the Fairview area dock of the Digby Island ferry, located about 10 km south of the Prince Rupert city centre.

[29] An approximately 90 minute journey

[30] Conversation with Band Manager Wayne Drury, Jan. 15, 2009

[31] West Coast Launch also operates a daily water taxi service between Prince Rupert (Atlin Terminal) and Dodge Cove.

[32] Source: BC Ferry Commission website. *Second Performance Term Alternative Service Providers Plan.* March 2008.

the Route 40 service level and the new vessels have been addressed.[33] To date there is one potential alternative service provider, but it is not yet known whether this entity will assume control of the Northern Routes, or what the long term plan is going to be regarding service levels.

CENTRAL COAST

Between early June and mid September, the Queen of Chilliwack ferry travels to and from the Central Coast on the Discovery Coast Passage (Route 40) three days per week in each direction. The service, which is part of a unique "circle tour", extends from Port Hardy to Bella Coola, making several stops per week in Shearwater, Ocean Falls, McLoughlin Bay (near Bella Bella), and Klemtu. Depending on the day of the week that they travel, passengers can sail from Port Hardy to Bella Coola in 11 hours if they select the direct route, or longer if they choose a route that stops at all the smaller communities first. The ferry stops at the smaller islands for one to three hours' duration. The Queen of Chilliwack has the capacity for 115 cars, and 400 crew and passengers.

During the summer months of fiscal year 2007/08, 4,181 passengers travelled to the Mid Coast from Port Hardy on Route 40, with a slightly larger number of passengers (4,730) travelling from the Mid Coast to Port Hardy, and a small volume of passengers travelling between the communities of the Mid Coast (904). The annual number of passengers traveling on Route 40 grew by 6.8 percent between fiscal year 2002/03 and fiscal year 2007/08.[34]

During the fall, winter and spring months, the communities of the Central Coast have been served for many years by the Queen of Prince Rupert as part of the Inland Passage Route 10 between Port Hardy and Prince Rupert. When Route 40 stops after the summer season, Route 10 is the only scheduled ferry connection between Vancouver Island, Prince Rupert and several communities on the Central Coast. The schedule for the winter of 2008/2009 indicates that the ferry stops at Shearwater, Ocean Falls and Klemtu approximately twice per month in each direction, while Bella Bella has ferry service about six times per month.[35]

In 2006, BC Ferries implemented a feeder service to supplement its core service in the wake of the MV Queen of the North sinking. The MV Nimpkish provided scheduled service between Bella Coola, Bella Bella, Klemtu and Shearwater, with stops at Ocean Falls as required. This did not prove to be cost-effective, and the MV Nimpkish route was subsequently cancelled.

---

[33] Ibid.
[34] Source: BC Ferry Services Inc. Nov. 2008
[35] While there is no scheduled service at all to or from Bella Coola, BC Ferry 2007/08 traffic statistics show occasional stops.

TABLE 2-10:   BC FERRIES' TRAFFIC VOLUMES ON ROUTES 10 AND 40 TO THE CENTRAL COAST, FISCAL YEAR 2007/08

	To Central Coast Destinations		To Port Hardy or Prince Rupert	
Route	Vehicles	Passengers	Vehicles	Passengers
Route 10 (Winter) - October to April				
Departs Bear Cove (Pt. Hardy)	829	2,748	1,089	2,905
Departs Prince Rupert	91	801	1,076	2,777
Departs Central Coast communities	164	751	646	2,739
Route 10 (Summer) – May to September				
Departs Bear Cove (Pt. Hardy)	244	811	4,691	16,441
Departs Prince Rupert	28	270	4,878	18,633
Departs Central Coast communities	16	132	185	844
Route 40 (Summer) - June to September				
Departs Bear Cove (Pt. Hardy)	1,366	4,181	0	0
Departs Central Coast communities	190	904	1,602	4,730

Source: British Columbia Ferry Services Inc.

Table 2-10 shows that in fiscal year 2007/08, during the winter months, 2,748 passengers travelled from Port Hardy to the Mid Coast and 801 travelled from Prince Rupert on Route 10. Almost half of northbound passengers from Port Hardy were destined for the Mid Coast, and 22 percent of southbound passengers originating from Prince Rupert. Over 60 percent of the sailings that departed the Mid Coast were southbound for Port Hardy.   These passenger movements underscore the strong connection between the communities of the Central Coast and Port Hardy.

The Queen of Prince Rupert will be decommissioned in the spring of 2009, and replaced by the Northern Adventure which is presently being refitted.[36] Later in the spring or summer of 2009, Route 10 will be taken over by the 150 metre MV Northern Expedition, BC Ferries' newest vessel. The Northern Expedition has the capacity for 130 vehicles and 600 passengers, and can deliver a cruise experience with its 55 staterooms and improved food services. The ports at Prince Rupert, Port Hardy, Skidegate and Bella Bella are being or have been reconfigured to accommodate this new, larger vessel. But no changes have yet been made at smaller communities such as Klemtu or Shearwater, which cannot accommodate a

---

[36] December 2008.

vessel the size of the Expedition. It is our understanding that a smaller vessel will serve these small Central Coast communities on alternate days[37] but we are not aware of a public announcement of how their ferry service needs will be met during the fall, winter and spring months when the new vessel begins its winter 2009 Schedule.

It is not yet clear when the Queen of Chilliwack will be replaced. Service levels and fees are renegotiated every four years, and BC Ferries is now in year one of its new service plan, with a commitment to provide the existing service for the next three years. At this time discussions are underway to replace this vessel.[38]

NORTH COAST

Ferry service between Prince Rupert and Skidegate on Haida Gwaii (Route 11) operates six days per week during the summer months, and three days per week during the low demand months of winter.

In the summer, the ferry from Port Hardy arrives in Prince Rupert every second day. During the winter, the ferry travels between Port Hardy and Prince Rupert six times per month. The route is currently served by the Queen of Prince Rupert, but will be replaced by the MV Northern Expedition in summer 2009, as mentioned earlier.

Traffic to and from Prince Rupert has dropped significantly since 2002/03. BC Ferry traffic statistics show that most of the decline in summer ferry demand has been on the Prince Rupert to Port Hardy route. Traffic between Prince Rupert and Haida Gwaii has not declined to the same extent.

During the summer of 2006, traffic on Prince Rupert's ferry routes plummeted to nearly 50 percent below 2002 levels—a consequence of the sinking of the Queen of the North which led to a loss of capacity, and the implementation of fuel surcharges. With the introduction of the Northern Adventure into service in March 2007, it was anticipated that traffic would return to former levels. While traffic levels have not yet reached those seen in previous years, they are steadily increasing.[39] [40]

---

[37] Telephone conversation with BC Ferries Communication Department, Dec. 2008.
[38] BC Ferry Commission website, Nov. 2008.
[39] BC Ferries 2007/08 Annual Report.
[40] Fiscal year 2007/08 passenger volume is up by 65 percent over 2006/07 on the Port Hardy to Prince Rupert route, and vehicle volume is up by over 100 percent.

TABLE 2-11: AVERAGE SUMMER VOLUMES ON NORTHERN BC FERRY ROUTES, FISCAL YEARS 2002/03 AND 2007/08

ROUTE 10	Port Hardy to Prince Rupert		Prince Rupert to Port Hardy	
	Vehicles	Passengers	Vehicles	Passengers
FY 2002/03	5,510	19,838	5,224	20,961
FY 2007/08	4,195	15,001	4,515	17,268
% change (02/03 to 07/08)	-24%	-24%	-14%	-18%

ROUTE 11	Prince Rupert to Skidegate		Skidegate to Prince Rupert	
	Vehicles	Passengers	Vehicles	Passengers
FY 2002/03	4,717	13,650	4,619	13,450
FY 2007/08	4,348	12,170	4,233	11,975
% change (02/03 to 07/08)	-8%	-11%	-8%	-11%

Source: British Columbia Ferry Services Inc.

OTHER WATER TAXI SERVICES

A Wuikinuxv band member operates a private, non-scheduled water taxi that provides periodic limited passenger and freight service to a maximum of 3,000 kg. It transports passengers, food and supplies frequently between Port Hardy and Wuikinuxv. Shearwater Marina has two water taxis. One of these offers scheduled trips between Bella Bella and Denny Island, and transports children to school. The other is a 12-passenger vessel that can be chartered for a variety of uses. Health Bay and Kingcome are serviced by Port McNeill-based water taxis.

Either formal or informal chartered boat services are available in most coastal communities to transport mainly residents when scheduled ferry and water taxi services are inconvenient.

2.2.4 Cruise Ships

The opening of the Port of Prince Rupert owned and operated Northlands Terminal in 2004 marked the return of large cruise ships to Prince Rupert. Over the five-year 2004-2008 period, an average of approximately 86,000 passengers per season visited Prince Rupert on their cruises between Seattle and Alaska.

The Port of Prince Rupert is now the fifth largest cruise ship destination in Canada. The terminal is designed to accommodate vessels of up to 300 meters in length and

features a state of the art passenger boarding system and Canada Customs facilities.

Vessel traffic and passengers have increased since 2004. The year 2008 marked the Port of Prince Rupert's best cruise season ever, with a record 103,635 passengers. The following table shows the number of large cruise ship passengers per season since 2004 and the number of cruise ship visits.

TABLE 2-12:   CRUISE VESSEL TRAFFIC THROUGH THE PORT OF PRINCE RUPERT, 2004 TO 2008

Year	# of Vessel Calls[1]	# of Passengers
2004	53	65,000
2005	50	98,000
2006	32	62,845
2007	60	99,135
2008	63	103,635

Source: Prince Rupert Port Authority

The ambitions of the Port of Seattle to grow its cruise business (in direct competition with Vancouver) and a US regulatory requirement created the opportunity for the Port of Prince Rupert to build a major cruise ship stop business. Under the Jones Act, American flagged vessels traveling between two American ports must stop at a foreign port.[41] The two main starting points for Alaska cruises are Seattle and Vancouver. Cruises emanating from Vancouver need not stop at another Canadian port whereas Seattle cruises must make at least one Canadian stop. The Jones Act was also a key factor in kick starting the Vancouver cruise business as it provided the needed foreign stop for the cruise companies. Victoria is the main competition for Prince Rupert in attracting Seattle-based cruise ships and Vancouver is the main competition for Seattle as the port of departure for Alaska.

A cruise ship stop in Prince Rupert is typically about 8 hours. Passengers can stay on board or disembark. Almost all disembark and they visit local sites, patronize local shops and restaurants, try their luck at the *Chances* casino and go on shore-based excursions. Amongst the 28 excursions offered in 2008 were flightseeing with either Inland Air or North Pacific Seaplanes, grizzly bear viewing in the

---

[41] The Jones Act is the common name for the US Passenger Shipping Act of1886. This American statute prohibits a foreign-flag ship from transporting passengers between US ports in order to protect domestic carriers. Foreign-flag vessels address this situation by making one foreign stop if transiting between two American ports.

Khutzeymateen Inlet and a Pike Island Aboriginal culture tour offered by Seashore Charters. Passengers sign up for the shore-based excursions through the cruise company and Port of Prince Rupert qualifies the excursions that are offered by the cruise companies to sustain the quality of excursion offerings and match local supply with passenger demand. Two Prince Rupert retailers also participate in a retail shopping program offered by the cruise lines.

The chief factor driving Prince Rupert employment impact of cruise ship tourism is the number of disembarking passengers and their daily spending. The level of passenger spending found to support one on-shore tourism job is approximately $60,000 [Prince Rupert Port Authority December 2001]. In BC the average expenditure per cruise ship passenger is estimated as $139 (cited in Cox 2005).

The number of passengers participating in shore excursions increased in 2008, by 21 percent to 30,962, with cruise passengers spending nearly C$2.4 million in the city on tours and excursions. The port authority estimates the total economic impact of the cruise industry in Prince Rupert exceeded $10 million in 2008.

Over the past 15 years, cruise ship tourism has become a key lynchpin of the BC Government's tourism strategy. To date, it has been a business built around Alaska cruises, however. Various stakeholders believe BC can become a cruise destination too (Colledge Transportation Consulting and Jonathan Seymour & Associates June 2003). Prince Rupert would benefit as a stop on a BC focused itinerary. The Cruise British Columbia initiative (comprised of federal, provincial and municipal representatives, as well as several industry participants)[42] was formed in part to develop the BC coast as a cruise destination and has completed a coastal cruise strategy and undertaken market research and promotion initiatives in support of this goal.

While no cruise industry exists there today, Bella Coola dock has accommodated small, niche pocket cruise ships of a few hundred passengers in the past. This may be an opportunity in the future.

2.2.5 Commercial and Charter Vessels

Many commercial and other private craft ply the waters of the Central and North Coast, but it is difficult to obtain accurate numbers. Instead we focus here on the principal movements, products and their origins and destinations.

As in the case of passenger travel, there is little overlap between commercial vessel movements between the three parts of the Planning Area. Primary water movements are described as follows.

---

[42] The VP of marketing and Business Development for Port of Prince Rupert, Shaun Stevenson, is a VP of this advocacy and market promotion organization.

Fish and seafood catch and processing: While the size of the West Coast fishery has diminished in the past decade, there are still many commercial fishing boats in operation on the Central and North Coast, and in Alaska. Fish and seafood (crab) caught in Hecate Strait, in the vicinity of Haida Gwaii and between Prince Rupert and Alaska are generally offloaded and processed in Prince Rupert (two processing plants), Lax Kw'alaams (one processing plant), and Masset (one processing plant). The vast majority is then transported by truck, with a small percent (10% or less, generally canned product) shipped by rail. There is very little air shipment.

Fish caught south of Haida Gwaii are mainly processed in Port Hardy. Some niche seafoods, such as geoduck and sea cucumbers, are transported by reefer truck to Vancouver for processing and shipment to Asian markets.

Barge activity: A small number of barge transportation companies serve the communities and industrial operations of the Planning Area. The major players include Vancouver-headquartered Seaspan International Ltd. (Washington Marine Group subsidiary), North Arm Transportation of Richmond, Shearwater Marine Group (Bella Bella and Richmond), West Coast Tug and Barge of Campbell River, and Wainwright Marine of Prince Rupert. The log booming sector has a larger number of small players, with a competitive market.

West Coast Tug and Barge serves the entire West Coast from Vancouver to the North Coast. Barging logs is their biggest activity, as well as hauling construction materials and aggregate, and moving seasonal fishing lodges to and from their winter moorages. They deliver equipment, lumber, fuel and containers to Prince Rupert, Kitimat and Bella Bella, generally from their base in Campbell River. West Coast Tug and Barge is presently planning to start a scheduled run to the communities of the LRMP Plan area in 2009, but this initiative is still in its inception as the proponents seek community partners and funding.

North Arm Transportation makes a monthly trip from the Lower Mainland up the Central and North Coast to deliver fuel, freight and occasional heavy equipment to communities and logging camps.

Shearwater Marine Transportation also hauls freight from Port Hardy to the communities of the Central Coast and camps (gas, diesel, propane, freight) with a power barge, every week in summer, and every two weeks in winter.

Menzies Bay-based Marine Link Transportation Group operates a bi-weekly scheduled barge service into the Broughton Archipelago with its 135' landing craft type barge, the MV Aurora Explorer. This company also brings up to 12 tourists along during March through October for a unique Inside Passge working boat tour.[43]

---

[43] See http://www.marinelinktours.com/

Farmed salmon is barged twice per week from Klemtu to Kitimat for 6 to 8 months per year (this was formerly routed through Bella Coola), then trucked south. Fish food is barged from Ocean Falls to Klemtu.

In the past barges were used to transport aluminum from Kitimat, but it is now shipped by truck. Some heavy equipment has been barged recently to the Kitimat harbour for a new construction project there.

Logs are frequently barged from coastal logging or heli-logging sites from several Planning Area locations to the Lower Mainland. Log booms are transported only south of Cape Caution, due to open sea conditions, while north of this point logs are transported by barge.

Barges generally return from their destination empty, which increases the unit cost of transportation. At least one barge operator has indicated that backhaul would lower shipping costs, and that it is feasible in some cases, but it requires logistical planning and effort to establish consistent sharing arrangements.

Log booming: There are 30 to 40 logging sites operated by the major licensees on the Central and North Coast, but in the past year only about ten of these sites were actively creating log booms. The others were either barging their logs, or were dormant. Almost all log booms are transported to the Lower Mainland for processing or further shipment.

2.2.6 *Major Port Facilities*

The Planning Area has many port and dock facilities, which are described in the Community Assessment (Section 2.3). Due to their magnitude and international trade significance, we focus here on the two deep water ports of Prince Rupert and Kitimat.

PRINCE RUPERT

Since 2004, the management and board of the Port of Prince Rupert, BC Government, federal government, and CN Rail have collaborated to fund the construction of new facilities to broaden services and transform Prince Rupert into a high performer that competes directly with the major western North America ports. This public-private initiative has opened up the potential for a diverse range of new transportation services at Prince Rupert and across northern BC. An example is CN's transload operation and intermodal rail terminal built at Prince George in 2007, which loads containers that are shipped by rail to Prince Rupert for backhauls on container vessels.

The BC Government has identified a Northern Gateway initiative to help fully realize the port's potential as an economic development force, including establishing a Northern Gateway office in Prince Rupert.[44]

The main facilities of the port are as follows:

- Northlands Terminal – Operated by Port of Prince Rupert and accommodates large cruise ships. (See section 2.2.4 for information on the terminal's performance.)

- Atlin Terminal – Operated by Port of Prince Rupert and accommodates 'pocket' cruise ships and large yachts. (See section 2.2.4 for information on the terminal's performance.)

- Fairview Terminal – An approximate $170 million investment, opened in October 2007 and operated by New Jersey headquartered Maher Terminals, the new terminal has an annual container handling capacity of 500,000 TEUs. Despite a weakening US and global economy, the new terminal handled 147,787 TEUs and 69 vessel calls last year. The new terminal is estimated to have created approximately 350 direct jobs and supported 350-400 indirect and induced jobs.

- Grain terminal – Owned and operated by Prince Rupert Grain Ltd., this terminal is located on land leased from Port of Prince Rupert and has an annual throughput capacity of 7 million tonnes. It can clean wheat and barley to export standards prior to being loaded onto waiting ships. Canola is also shipped from this terminal.

- Bulk commodity terminal – Owned and operated by Ridley Terminals Inc., a federal crown corporation, this terminal is located on land leased from Port of Prince Rupert and has an annual throughput capacity of 16.5 million tonnes. Coal is the main shipped commodity, along with petroleum coke from oil sands operations, and wood pellets (started in 2007). 2007 throughput was 5.1 million tonnes, 35 percent of capacity, but it rose in 2008.

Proposed Facilities - Canpotex Ltd., the marketing and distribution subsidiary of three Saskatchewan potash producers[45], announced plans for construction of a new $300 million terminal on Ridley Island to handle potash shipments in June 2008.

---

[44] The port developments are also an important element of the Pacific Gateway initiative.
[45] Agrium Inc., Potash Corporation of Saskatchewan Inc. and Mosaic Canada Crop Nutrition LP

KITIMAT

Kitimat boasts a sheltered deepwater passage and harbour, situated 80 nautical miles inland from major shipping routes. It accommodates 250 to 300 deep sea vessels per year, ranging up to 50,000 dwt in capacity.

There are three deep-sea marine terminals available for international imports and a base of operations for a full-service tugboat operator. Two of the marine terminals are single berth, while the third has double berth for handling break-bulk vessels plus a 100 tonne hydraulic RO/RO barge facility. Major cargos handled at the Kitimat Port include alumina, green and petroleum coke, aluminum, condensate, methanol, sackkraft and linerboard.

All terminals in Kitimat are privately owned and operated, and there is no Port Authority. Consequently, vessels and operators are not subject to the same fees and taxes as those under the jurisdiction of a Port Authority, such as harbour dues, berthage or wharfage. However, operators are required to pay marine service fees, and for pilots. And because all operators are subject to the Canadian Marine Act, they are required to adhere to the same security regulations as in any other commercial harbour.

Every ship over 350 gross tons is subject to compulsory pilotage. The pilot boarding station is located on Triple Island, near Prince Rupert. This puts Kitimat Port at a disadvantage because of its distance from Triple Island. The master, owner or agent of a ship that is to arrive in a compulsory pilotage area must notify their time of arrival, and stop to pick up *two* pilots en route to Kitimat. This is because the maximum shift for the pilots is 8 hours, but the trip from Triple Island to Kitimat is more than 8 hours, so two pilots are required. Because of the locational disadvantage, there are higher pilotage fees associated with travel to and from Kitimat than to and from Prince Rupert.

2.2.7 Roads

CENTRAL COAST

Highway 20 is the only road link between the Central Coast and the rest of the province. It runs east-west between the Bella Coola Valley and Williams Lake, a distance of 456 kilometres. At Williams Lake, Highway 20 connects with Highway 97, the key north-south road corridor in BC.

The final portion of Highway 20 into the Bella Coola Valley was completed in 1953 by the citizens who lived there. The western component of Highway 20 that rises out of the Bella Coola Valley and through the mountains (Heckman Pass) is famous for its remarkably steep grades -- as much as 18 percent -- and several switchbacks. This notwithstanding, this part of Highway 20, know as The Hill, is

travelled year round by all kinds of private and commercial vehicles, serving both locals and many tourists during the summer months. Highway 20 is the key supply line for goods and services to the communities of the Bella Coola Valley and beyond.

2005 saw the first upgrade to the Hill since it was first constructed. A part of the road at Heckman Pass was widened and reinforced, but weather conditions continue to wear away the road bed at certain points, raising concern that this critical road could at some point be washed out altogether. At this time, there are no other road routes out of the Bella Coola Valley, although concerned community members have voiced concern about the need to start planning for such a catastrophic event. Rail corridors surveyed in the last century present the best option, but have very challenging environmental concerns.

The provincial Ministry of Transportation and Highways (MOTH) tracks highway traffic at location counters throughout BC.[46] In the Central Coast Region, there is one permanent counter located between Bella Coola and Williams Lake. Traffic data from this counter shows that between 2005 and 2007, traffic on Highway 20 has been declining. In total, it is estimated that there are approximately 7,445 annual traffic movements between Bella Coola and Williams Lake along Route 20 annually. Less than 10% of this is commercial traffic.

There is no public bus service available on Highway 20 between Bella Coola and Williams Lake. Gold Pan City Stage Lines Ltd., in Williams Lake, offers a charter service to and from Bella Coola to any point in Canada or the U.S.

The Bella Coola Valley Transit System provides public bus service within the Bella Coola Valley, funded by several partners including the Ministry of Health and the Bella Coola Hospital. This service operates from Monday to Saturday, providing two scheduled trips a day, with remaining service provided on a Dial-a-Ride basis.

NORTH COAST

Highway 16, part of the Trans Canada and Yellowhead Highway systems, is the only principal road connection between the North Coast and the rest of BC and North America. It runs east-west, connecting Prince Rupert to Terrace and Prince George and, further east, Edmonton and other Canadian cities. At Prince George, the Yellowhead intersects with Highway 97, British Columbia's principal north-south highway corridor. Minor secondary highways link Port Edward and Ridley Island to Highway 16. The eastern terminus is at Masset on Haida Gwaii.

---

[46] These counters provide information on Annual Average Daily Traffic, which is a calculated annual estimate of the average number of vehicles traveling through a traffic measurement site during a midnight-to-midnight period on any day of the year.

TABLE 2-13:   ANNUAL AVERAGE DAILY TRAFFIC, 2004 TO 2007

Location of Traffic Counter	2004	2005	2006	2007
Route 16, Just West Of Route 37 Kitwanga	1,378	1,353	1,375	1,440
Route 16, 0.3 Km East Of Port Edward Road	999	912	891	960

Source: Ministry of Transportation

Traffic counters at two locations on the North Coast show that traffic levels between Prince Rupert and the junction with Route 37 rebounded in 2007 after some years of decline. This rebound is due to port-related traffic.

Greyhound Bus Lines offers daily connections between Prince Rupert and the rest of Canada. It also provides a link between Prince Rupert and the smaller communities of the northwest, such as Terrace, New Hazelton and Stewart.

Most passengers who fly to Prince Rupert reach downtown via a charter bus service (Farwest is the operator) and city owned and operated ferry service, which meets each scheduled airline arrival and departure.

The City of Prince Rupert has a BC Transit bus service with seven lines covering all sections of the city. One of the bus routes connects Prince Rupert with nearby Port Edward.

The other North Coast communities are not connected by road to the rest of the province. A project to link the Tsimshian Peninsula communities of Metlakatla and Lax Kw'alaams with Prince Rupert through a system of a new road between Metlakatla and Lax Kw'alaams, bridge across Venn Passage and improved ferry service between Digby Island and Kaien Island (Prince Rupert) was studied in a 2003 report but not pursued at the time [Trillium Business Strategies Inc. 2003]. North Coast communities recently revived the project. At a November 2008 Community to Community Forum, representatives of Lax Kw'alaams, Gitxaala, Metlakatla and Gitga'at First Nations, City of Prince Rupert, District of Port Edward, and Skeena Queen Charlottes Regional District agreed that the "Tsimshian Access" project was the primary infrastructure priority for the region.[47] These

---

[47] A "Protocol for Regional Cooperation" was also signed by the chief elected representative of each of these communities, which focuses on enhancing service levels and avoiding duplication of efforts.

communities intend to soon issue a Request for Proposal to update the engineering requirements and estimates of the 2003 study.[48]

This project would make it possible for residents of Metlakatla and Lax Kw'alaams to commute to Prince Rupert for work on a daily basis. It would do much to alleviate the high unemployment situation in these two communities and offer a new source of employees for major Prince Rupert employers, especially the port based ones. Other important benefits would be faster access to the Digby Island airport and much improved access to Tsimshian Peninsula recreational and housing opportunities. The only sand beaches in the area are situated on the west side of the peninsula and are not currently available to local and non-resident daytrippers unless they boat over there.

KITIMAT

Provincial Highway 37 connects Kitimat to Terrace, a distance of 73 miles. The latter is an important junction with Highway 16 and the location of the Northwest Regional Airport (Terrace-Kitimat). With heavy daily industrial traffic (e.g., B-train trucks hauling wood chips to Eurocan), and 400 to 500 workers commuting from Terrace to Kitimat, this stretch of Highway 37 is the busiest highway west of Prince George and North of the Okanagan.[49] No traffic count is available for Highway 37, but renewed construction and economic activity in Kitimat will no doubt translate into a higher volume of traffic in the years to come.

Farwest Bus Lines offers a bus service between Kitimat and Terrace.

2.2.8 Rail

The western terminus of the CN Rail system is located at the Port of Prince Rupert. CN Rail, the Port of Prince Rupert and Maher Terminals have cooperated to offer North America's first ship to rail intermodal facility. The excess capacity on CN Rail's line between Prince Rupert and Prince George was a key point of leverage for constructing a new container terminal at the port.

CN also has a cargo line that extends south to the Kitimat port and for more than forty years an "AquaTrain" service has operated between Prince Rupert and Whittier, Alaska. This service makes approximately 30 (10 day) round trips per year using a 150' long barge that can carry 45 railcars on 8 tracks.

VIA Rail offers a scheduled passenger rail service between Prince Rupert and Jasper, called the "Skeena".

---

[48] The BC Ministry of Transportation and Infrastructure (MITI) is involved with this project too as there are stakeholder-based working and steering committees, which include MITI representation.
[49] Source: Diane Hewlett, District of Kitimat.

FIGURE 2: MOVEMENT OF PEOPLE BY MODE IN THE CENTRAL & NORTH COAST

FIGURE 3: MOVEMENT OF GOODS BY MODE IN THE CENTRAL & NORTH COAST

FIGURE 4: MOVEMENT OF GOODS BY MODE – INTERNATIONAL

2.3   Communities

2.3.1   *Central Coast*

BELLA COOLA VALLEY

The Bella Coola Valley is 80 km long, extending east-west from the eastern end of North Bentinck Arm to Tweedsmuir Park. It comprises five communities – the Bella Coola town site, Hagensborg, Firvale, Stuie and the Nuxalk Nation reserve. The first four communities are non-native, while the last is the home of the Nuxalk First Nation.   The Bella Coola town site and the Nuxalk reserve are in close proximity, and share some infrastructure. The main Nuxalk village is adjacent to the town of Bella Coola, while the remainder of the population lives in the Four Mile Subdivision located a few kilometres up the Valley.

The communities of the Bella Coola Valley are situated along the Bella Coola River and Highway 20, extending from the North Bentick Arm to Tweedsmuir Park at the east end of the valley. All are unincorporated communities. Census data shows that the Bella Coola Valley had a population of approximately 1,727 in 2006 (shown in Table 2-2 of this report), with the Nuxalk people accounting for almost 46% of this. This was an overall decline in population from the Census of 2001. Almost 70% of the population, including that of the Nuxalk Nation reserve, is concentrated in the lower half of the Bella Coola Valley (Hagensborg and west), with the rest scattered throughout the upper Valley.

Historically, forestry was a major employer in the Bella Coola Valley, but its demise and the closure of the regional Ministry of Forests office in Bella Coola led to the loss of many jobs in this sector. The fisheries sector is still important, particularly to the Nuxalk, although it now plays a diminished role in the regional economy, and today the public sector accounts for a significant share of employment in the Bella Coola Valley. Retail and the accommodation and food services sector are also critical in sustaining the regional economy.

All food and most supplies arrive in the Bella Coola Valley by truck, making Highway 20 its lifeline.   Driving conditions can be treacherous in inclement weather, but the road has closed down very few times because of driving conditions. Road was closed for several days because of road repairs in 2005. There is no public bus service between Bella Coola and Williams Lake, making car travel mandatory. A local bus serves the Bella Coola Valley six times per week. Many pedestrians use Highway 20 between Four Mile and Bella Coola, but there is only a narrow shoulder on the roadway, which creates a safety hazard.

Ferries visit Bella Coola several times per week during the summer between June 1 to mid September, as part of the Route 40 route, which is a growing tourism attraction.   This is an important source of business to local tourism and accommodation operators.

Air travel to Bella Coola is unreliable during the winter months because of the steep valley and low cloud conditions, and travelers are often required to land in Anahim Lake and take a 2 hour bus ride to Bella Coola from there. Flying conditions can also interfere with emergency air evacuation throughout the Central Coast, although the Coast Guard/SAR helicopter from Comox has done night medevacs form Bella Coola in life threatening situations. Air evacuations from the Central Coast occur approximately two to five times per month, or as often as three times per week.

TABLE 2-14:   TRANSPORTATION INFRASTRUCTURE, BELLA COOLA VALLEY

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Airport near Hagensborg • Daily scheduled flights on Pacific Coastal Airlines • Charter flights available with Bella Coola Air and West Coast Helicopters • Private planes and helicopters can land at the airport • Bella Coola-based West Coast Helicopters provide emergency air evac for Central Coast communities
Ferry	• Served by BC Ferries' Route 40 (Discovery Coast Passage) during summer months • Important source of summer tourist traffic • No winter ferry service • Nimpkish feeder service in 2006 failed due to cost overrun
Port Facilities	• BC Ferries dock, which can handle small, pocket cruise ships • BC Harbour has large & small concrete wharves, launching ramp, boat basin, large turn dolphin; protected by 3 breakwaters • Dock can accommodate approx. 200 vessels • 2 dryland sorts
Private/commercial vessel	• Infrequent water taxi service to Outer Coast • Fishing vessels use dock in winter; some pleasure craft in summer • Diesel & gas and some supplies barged to Bella Coola • Farmed fish were barged to BC (now go through Kitimat) • Nothing significant shipped by water out of BC • In the past, logs were loaded in Bella Coola for direct shipment to Asia
Road	• Highway 20 is only road route into Bella Coola Valley • Subject to severe conditions in winter • No designated alternative route • All community roads paved • No sidewalk or wide shoulder on Highway between Bella Coola townsite and Nuxalk's Four Mile Subdivision
Communication	• Telus wireless; broadband internet service

WAGLISLA (BELLA BELLA)

Waglisla is located on Campbell Island beside Seaforth Channel. It is also know as New Bella Bella. It is the largest settlement on the outer Central Coast and is the home of the Heiltsuk Nation. It also serves as the main supply and communication centre on the outer Central Coast. In 2006, Bella Bella had a population of approximately 788 people, down 13% from the population level in 2001.[50]

Government services represent the largest portion of the labour force with approximately 30 percent employed in health and education services; including employment in band administration would increase this number. The resource sector, with employment in commercial fishing and forestry activities provides employment for approximately 19 percent of the labour force.   Shellfish aquaculture pilot projects have been initiated in several Central Coast communities, including Bella Bella, and it is hoped that this will generate greater local employment. Tourism is increasingly recognized as an important potential source of economic growth in Bella Bella, but this sector is just beginning to grow. Retail, manufacturing, construction, transportation and accommodation services comprise the remaining jobs in Bella Bella.

Pacific Coastal Airlines provides daily scheduled service to Bella Bella. There is a 3,500' paved runway on Campbell Island with an air terminal. The air terminal often fills up during the summer months, and the community has lobbied both federal and provincial government for a larger one, as well as lights on the airstrip to guide aircraft at night. Although Bella Bella is a regional transportation hub, there is no direct air connection to Prince Rupert on the North Coast. Charter flights are available in Bella Bella from Bella Coola Air and West Coast Helicopters in Bella Coola.

Campbell Island at McLoughlin Bay is a port of call for BC Ferries' Inside Passage (Route 10) and Discovery Coast (Route 40) services.   Ferries on the Discovery Coast route visit Bella Bella a few times per week during the summer between June 1 to mid September, but service is curtailed during the winter months, with only Route 10 in service, making two trips per month in each direction. This is Bella Bella's main source of fresh food shipments, which are transported weekly from the Lower Mainland by Heiltsuk Freight Company on refrigerated or freezer trucks.

There are four docks in Bella Bella:

- government dock, used as point of sale by Bella Bella Fuel, and accommodates marine aircraft and a range of private and commercial fishing vessels;

- a roro ramp at the south end of town (off reserve), used by BC Ferries;

---

[50] Census Canada 2006.

- the Martin's dock facility at the north end of town, used by many pleasure crafts, commercial fishing craft and punts; and,

- dock facility for Bella Bella fish plant, which operates seasonally (there was little use this year because of poor herring run).

The ferry ramp is presently being upgraded to accommodation the MV Northern Expedition which goes into service on route 10 next year. The Heiltsuk are also developing a business plan to expand the Martin's dock facility, although it remains under the jurisdiction of Small Craft Harbours of DFO.

The primary transportation related issues are the need for a new offload site for barges, and improvements to the airport and runway. Runway lights for emergency landings are a particular concern, after the death of a Bella Bella resident last year when an air evac flight could not land.

TABLE 2-15:   TRANSPORTATION INFRASTRUCTURE, WAGLISLA (BELLA BELLA)

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• 3,500' paved runway & terminal • Daily scheduled flights on Pacific Coastal Airlines • Charter flights available with Bella Coola Air and West Coast Helicopters • Bella Coola-based West Coast Helicopters provide emergency air evac for Central Coast communities • Airport terminal often exceeds capacity • Runway lights for emergency landing are required
Ferry	• Served by BC Ferries' Route 40 (Discovery Coast Passage) during summer months • Served by Route 10 (Inland Passage) year round – twice per month in winter, each direction • Nimpkish feeder service to Outer Island in 2006 failed due to cost overrun
Port Facilities	• Four docks, including BC Ferry dock • All are congested, and Martin's Bay dock requires upgrade
Private/commercial vessel	• Food and supplies barged from Vancouver to Bella Bella weekly • Shearwater Marina provides water taxi service for children traveling to school on Denny Island
Road	• No road access to Bella Bella • Roads within community paved, but congested with traffic

KLEMTU

Klemtu is situated on a sheltered harbour safe on the southeast side of Swindle Island. It is the only occupied village in Kitasoo/ Xai'xais territory. The 2006 Census results show that there were 282 residents in Klemtu that year, down slightly from 2001.

The fish and forest industries are vital to the Klemtu economy. While there has been a decline in commercial salmon fishing on the Coast, a local salmon farm now thrives and employs at least 45 workers through most of the year.[51] And the Kitasoo Forest Company, which is actively logging, is also a significant employer. Klemtu also has a growing wilderness tourism industry, due in part to their proximity to the Great Bear rainforest. The government services sector (health, education, and Band administration) continues to be the largest employer in the community. Transportation, goods and services are also economic generators for this community and make up the remaining employment opportunities.

Food and supplies are transported to Klemtu by BC Ferries' Route 10 service from Port Hardy. In the summer months this is a weekly service, but it declines to twice per month (north and south bound) during the winter. Such infrequent fresh food delivery during the winter months raises real concerns about the cumulative effect on the diet and health of Klemtu residents.

Shearwater Marine also provides a scheduled fuel & supply service from Richmond to Klemtu and the other Central Coast communities on a year round basis, arriving weekly during the summer and every 2 weeks during the winter months.

The Klemtu ferry terminal was designed and built as a temporary measure. It does not allow for stops in poor weather and cannot accept large vessels. Moreover, terminal configuration does not allow semi-trailer trucks longer than 32 feet in length. Thus, Klemtu will be unable to accommodate the MV Northern Expedition that begins service in 2009 on Route 10 and, instead, will be served by a smaller vessel such as the Northern Adventure. At the present time, BC Ferries' Northern Service Strategy – and plans for any renovations to the Klemtu terminal – are still unknown.

Most Klemtu residents avoid air travel because of personal preferences and its rising cost. Weather conditions during the winter months result in delayed or cancelled trips and mail delivery. It can also delay emergency air evacuation from Swindle Island, and the Central Coast in general.

---

[51] Prince Rupert Daily News. *Anxious Wait for Villagers Over Fish Farms*. March 13, 07.

TABLE 2-16:   TRANSPORTATION INFRASTRUCTURE, KLEMTU

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Scheduled Pacific Coastal Airways air service from Port Hardy • Also served by charter airlines; air evac helicopters come in from Vancouver or Bella Coola • Weather affects reliability in winter months • Klemtu residents often bumped during summer months by tourism travel
Ferry	• Route 40 provide weekly summer service (30 hr. trip from Pt. Hardy) • Route 10 winter service 2X per month, north and south bound – primary source of food delivery to Klemtu
Port Facilities	• Located on inside passage ferry route to Prince Route • Ferry & fuel dock • Moorage available • Terminal in Klemtu does not allow for stops in poor weather and cannot accept larger vessels. Semi-trailer trucks cannot exceed 32' because of terminal configuration.
Private/commercial vessel	• No water taxis • Kitasoo Forest Co. has 12 passenger crew boat that is used for multiple purposes – logging in winter, tourists, sports teams, etc. • Fuel & freight barged from Pt. Hardy every 2 weeks in winter; weekly in summer
Road	• No road access

WUIKINUXV

The Wuikinuxv Nation has a resident population of up to 100 in its village located in the southern portion of the Mid Coast, at the east end of Rivers Inlet on the banks of the Wannock River at the entrance to Owikeno Lake. Wuikinuxv has no direct road link to neighbouring communities and is accessible only by boat or plane.

In the past, Wuikinuxv was the center of the region's fisheries with over 14 salmon canneries and a solid commercial fleet. The Rivers Inlet / Wuikinuxv Lake sockeye run was once considered one of the top producers in British Columbia, but this system is on the endangered list, and sockeye populations are at a critical low. Today employment is generated by watershed and fisheries restoration projects, forestry and to a limited extent in commercial fishing. More jobs are expected to be created due to business agreements with several forest companies.

Food, supplies and fuel are transported to Wuikinuxv by barge from the Lower Mainland or Campbell River, or by water taxi. There is a local school, and children are not required to travel by ferry to school, although they must leave the community to attend high school elsewhere. Transportation costs are significant and rising, and most residents avoid air travel because of this.

As in the case of Klemtu, the community's remoteness poses health concerns. The first is diet. There is a high incidence of diabetes in Wuikinuxv as residents stray from their traditional diet, and they cannot afford to bring in healthy fresh food often enough. The second threat to health is dependency on air evacuation for emergency treatment. Some critically ill residents have died while waiting for a helicopter.

TABLE 2-17: TRANSPORTATION INFRASTRUCTURE, WUIKINUXV

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• airstrip; heli landing site for emergency evac • scheduled flights from Port Hardy on Pacific Coastal Airway, Mon to Friday, as part of a regional 'milk run' through the Central Coast • chartered flights – commercial and sportfishing
Ferry	• no ferry service to Wuikinuxv
Port Facilities	• govt dock at Rivers Inlet • new village-owned dock being constructed • dry land sort
Private/commercial vessel	• some private water taxis; a few boats with capacity of 2-3,000 lbs • fuel, food and supplies barged, or brought by water taxi from Pt. Hardy • charter boats for commercial, sportsfishing use • small number of pleasure craft visit during summer months • barges transport logs
Road	• gravel road through reserve (5 km), and access to Owekeeno Lake • small number of trucks and vans in community
Communication	• Telus wireless; broadband internet service

DENNY ISLAND/SHEARWATER

Shearwater is located on Denny Island across from Campbell Island; it is a non-native community under the Central Coast Regional District settlement area. In 2006, the total population of Denny Island, Ocean Falls and Dawsons Landing was 138, a slight decline from 2001.[52]

Shearwater is a full service marine hub for the Central Coast. It has 1,500 feet of concrete floats, which are booked solid in July and August, and a full contingent of supplies for boaters, including repair service. The Shearwater Marina is a destination resort for sports fishers and those seeking eco adventures. It also provides water taxis (including a scheduled route to and from Bella Bella), and is on BC Ferries' Routes 10 and 40 (summer service). Freight is transported once or twice weekly from Richmond throughout the year on Shearwater Marine Group's scheduled route. During the summer months, Shearwater employs 65 workers.

A Canadian Coast Guard Station and Fisheries Management Office was opened on Denny Island in 2004, and presently employs 8 full time workers.

TABLE 2-18:   TRANSPORTATION INFRASTRUCTURE, DENNY ISLAND/SHEARWATER

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• 3,000' paved airstrip on Denny Island for private and other chartered aircraft
Ferry	• Route 40 provide weekly summer service (30 hr. trip from Pt. Hardy) • Route 10 winter service 2X per month, north and south bound
Port Facilities	• 1,500' of moorage • BC Ferries terminal • Fuel station • 150' ramp barge, two large crawler cranes, redi-mix truck, loaders, forklifts and an array of construction and marine response equipment

Private/commercial vessel	• Owned by Shearwater Marine Group:
	   – 2 water taxis
	   – 120' self powered barge
	   – 400 hp tug

Road	• No road access

---

[52] Census Canada 2006.

OCEAN FALLS

Ocean Falls is located at the head of Cousins Inlet. Although established as a sawmill and pulp mill town in 1909, the owner closed the kraft and sulfite mill in 1968, with the loss of 100 jobs. At its peak, over 4,000 people lived in Ocean Falls, but its population has declined with its economic fortunes since that time. The final exodus of residents took place in 1980 and today there is a core of less than 50 people living there year round, mostly original pulp mill workers and others seeking a quiet way of life. The population of Ocean Falls rises slightly during the summer.

A privately owned power company provides power to Ocean Falls, Denny Island and Bella Bella. There is an on-land fish farm nursery facility, and employment is also found in beach combing, tourism and with the power company.

TABLE 2-19: TRANSPORTATION INFRASTRUCTURE, OCEAN FALLS

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Float plane access
Ferry	• BC Ferries' terminal
Port Facilities	• Deep sea port • Moorage consists of a timber trestle approach with a steel gangway leading to a series of floats
Private/commercial vessel	• n/a
Road	• no road access

DUNCANBY LANDING AND DAWSONS LANDING

Both situated near Rivers Inlet, these are small service centres for the marine tourism and commercial fisheries industries.

2.3.2 North Coast

PRINCE RUPERT AND PORT EDWARD

The City of Prince Rupert is located on Kaien Island and the District of Port Edward is located on the Tsimshian Peninsula, approximately 10km from Prince Rupert, and is a 'bedroom' community for the larger centre. Information about the populations and economies of Prince Rupert and Port Edward is provided in section 2.1 and about transportation in section 2.2.

TABLE 2-20:   TRANSPORTATION INFRASTRUCTURE, PRINCE RUPERT & PORT EDWARD

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Airport on Digby Island, full services, including terminal and customs • Float plane base at Seal Cove • Scheduled flights on Air Canada Jazz and Hawkair from the Digby Island Airport • Scheduled flights on North Pacific Seaplanes from the Seal Cove float plane base • Charter flights and flightseeing available with North Pacific Seaplanes and Inland Air Charters Ltd. • VIH Helicopters Ltd. provides emergency medevac for North Coast communities from its Seal Cove base • VIH Helicopters, White River Helicopters and Alpen Helicopters provide charter services from Seal Cove bases
Ferry	• BC Ferries' Route 10 (Inside Passage) between Prince Rupert and Port Hardy, new vessel starting in 2009 • BC Ferries' Route 11 between Prince Rupert and Skidegate • Bus, car and passenger ferry service between Digby Island (airport) and Prince Rupert • Alaska Marine Highway system ferry service between Prince Rupert and Bellingham, WA and Prince Rupert and several Alaskan ports, such as Ketchikan • Passenger and car ferry service on *Spirit of Lax Kw'alaams* between Prince Rupert and Tuck Inlet (which is connected by road to Lax Kw'alaams), operated by Lax Kw'alaams First Nation • Passenger ferry service on *Tsimshian Storm* between Prince Rupert and Metlakatla, Kitkatla, Oona River and Hartley Bay, owned by North-Co-Corp. Ferry Services Ltd. and operated by Metlakatla Development Corp. • Water taxi service between Prince Rupert and Metlakatla, operated by Metlakatla Development Corp.
Port Facilities	• Fairview container terminal, current annual capacity of 500,000 TEUs • Northlands cruise ship terminal • Atlin 'pocket' cruise ship terminal • Ridley Terminals Inc., bulk materials terminal with annual throughout capacity of 16.5 million tonnes • Prince Rupert Grain Ltd., grain terminal with annual throughout capacity of seven million tonnes
Private/commercial vessel	• Port Edward Harbour Authority oversees extensive series of docks and marina facilities at Porpoise Harbour (Port Edward) and Rushbrook Harbour, Fairview Harbour and Cow Bay (Prince Rupert)
Road	• Highway 16 (Yellowhead Highway) is only road route into North Coast, connecting Prince Rupert to Terrace and Prince George
Rail	• CN Rail, Prince Rupert is the western terminus of the CN system and services the Port of Prince of Prince Rupert; Fairview Terminal is the first ship-rail intermodal facility in North America • AquaTrain railbarge service between Prince Rupert and Whittier, Alaska • VIA Rail, *Skeena* passenger rail service between Prince Rupert and Jasper
Communication	• CityWest wireless; broadband internet service, Telus available for business customers

LAX KWA'ALAAMS

The large Tsimshian community of Lax Kw'alaams has an approximate population of 1,000 and is located on the Tsimshian Peninsula. A European settlement was established here by the Hudson's Bay Co. in 1834 and named Port Simpson. A fur trading post and whaling station in the 1800s, it was the busiest community in BC during the first half of the 1800s. The backers of the Grand Trunk Railway planned that it would be the western terminus but the railway was constructed only as far as Prince Rupert in 1906. Port Simpson quickly lost business activity to Prince Rupert and the fort burned down in 1914.

Although unemployment is high, there is a fish plant in the community now operated by the band. Coast Tsimshian Resources LP (owned by the band) is a major player in the northwest forest industry and owns three timber tenures. A tourism development report was recently completed, economic development marketing trips have been made to Europe and Asia and band leadership and management have been aggressive in their efforts over the past several years to improve the employment and economic base of the community.

The community is approximately 35km from Prince Rupert (as the crow flies) and is accessed by scheduled flights from Prince Rupert three times per day during the week and two times per day on the weekend. A round trip costs approximately $114. Passengers are allowed to bring 40 lbs. of freight for free. Additional freight is $0.35 per pound. A passenger ferry service operates daily between Prince Rupert (dock shared with Digby Island ferry in the Fairview area) and Lax Kw'alaams (Tuck Inlet). Since 2003, the band has been attempting to persuade the BC Government to allow for the construction of a new dock at Aero Point, near the Seal Cove float plane base. This would reduce the one-way ferry trip time by two-thirds, from approximately 90 to 35 minutes, and offer environmental benefits by reducing GHG emissions. It would also allow for the transport of large trucks via ferry thereby saving barge costs. It would reduce costs for walk-on passengers from Lax Kw'alaams because they must travel by taxi from the Fairview area dock if they can not make alternative car transport arrangements whereas public transit could be made available at Aero Point. Some residents also use local fish boats to travel between Lax Kw'alaams and Prince Rupert.

Alaska Marine Highway System has expressed interest in relocating its Prince Rupert Terminal to Lax Kw'alaams as it would reduce crew costs and facilitate seafood and shellfish shipments to the Lax Kw'alaams processing plant.

The band, DIAND and BC Ministry of Transportation and Highways cooperated to re-construct the 22km Tuck Inlet road in 2004 between the ferry terminal at the head of Tuck Inlet and the community.

The ferry connection to nearby Prince Rupert does not support commuting to a Prince Rupert job. This lack of an expeditious transportation connection to Prince

Rupert has been a contributor to this community's high level of unemployment. A band member who wants to work in Prince Rupert effectively must live in the city and not in Lax Kw'alaams. Community leadership is a strong backer of the Tsimshian Access project as it would allow Lax Kw'alaams residents to commute daily to jobs in Prince Rupert, provide a direct connection to the airport, which would facilitate air shipment of fish and seafood products from its plant, and create tourism and residential development opportunities on the Tsimshian Peninsula.

TABLE 2-21:   TRANSPORTATION INFRASTRUCTURE, LAX KW'ALAAMS

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Float plane dock (maintained by North Pacific Seaplanes) • Scheduled flights through North Pacific Seaplanes from the Seal Cove float plane base (Prince Rupert) and Lax Kw'alaams
Ferry/Water Taxi	• Passenger and car ferry service on *Spirit of Lax Kw'alaams* between Prince Rupert (Fairview) and Tuck Inlet (which is connected by road to Lax Kw'alaams), operated by Lax Kw'alaams First Nation, started in 1997
Private/commercial vessel	• Small dock for pleasure and commercial fishing boats, new gangway and float funded by DFO in 2008
Road	• 22 km road between ferry terminal at head of Tuck Inlet and Lax Kw'alaams, re-constructed in 2004

METLAKATLA

Metlakatla is located at the southern end of the Tsimshian Peninsula, approximately 7km across Prince Rupert harbour from the city, and has an approximate population of 125.[53]

The poor transportation link to nearby Prince Rupert has been the main contributor to this community's high level of unemployment. A band member who wants to work in Prince Rupert effectively must live in the city and not in Metlakatla. The downsizing of the salmon fishing industry and the downturn in the coastal forest industry are other contributors to a high level of unemployment in this community. Specific population and employment data is given in Sections 2.1 and 2.2.

This First Nation too has an active and well recognized economic development program. In December 2008, the band's longstanding development corporation, Metlakatla Development Corporation (MDC), won an Aboriginal Business Award

[53] There is a Metlakatla community on Annette Island in Alaska, created by a group of approximately 800 Metlakatla First Nation members who chose to follow a missionary in 1881 to establish a new community.

from the BC Government as community owned business of the year. The marine operations division of MDC operates a daily scheduled water taxi services between the community and Prince Rupert; the one-way adult fare is $5. It also manages the *Tsimshian Storm* passenger ferry service for North-Co-Corp. Ferry Services Ltd., jointly owned by Metlakatla, Gitxaala and Gitga'at First Nations. It is one of five First Nation owners of Prince Rupert-headquartered TriCorp, which extends business loans to First Nation members and organizations and delivers business training programs. MDC owns and operates Seashore Charters Ltd., which offers Pike Island cultural tours and bear and whale watching trips. It also owns and operates First Nations Training and Development Centre, Grassy Bay Services Ltd., Metlakatla Forestry Corporation, and Northland Marine Sales and Service Ltd.

A daily commute to Prince Rupert for work is almost impossible from Metlakatla under current conditions so completion of the Tsimshian Access project would allow Metlakatla residents to secure jobs in Prince Rupert and commute daily to them.

TABLE 2-22:   TRANSPORTATION INFRASTRUCTURE, METLAKATLA

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Dock available for float plane • Accessible by making arrangements for a pick-up at Metlakatla with a scheduled North Pacific Seaplanes flight or a charter flight
Ferry/Water Taxi	• Daily scheduled water taxi service between Prince Rupert and Metlakatla, operated by Metlakatla Development Corp. • Once per week service between Metlakatla and Prince Rupert via *Tsimshin Storm* passenger ferry service, owned by North-Co-Corp. Ferry Services Ltd. and in which Metlakatla First Nation has an ownership position • No school at Metlakatla so children use a water taxi service that is contracted by school district; West Coast Launch is the current contract holder
Private/commercial vessel	• Two docks for pleasure and commercial fishing boats, operated by Metlakatla First Nation

KITKATLA

Kitkatla is the home community of the Gitxaala First Nation and is located on Dolphin Island, a small island adjacent to larger Porcher Island. With an approximate population of 500, the downsizing of the salmon fishing industry and the downturn in the coastal forest industry coming when the band finally obtained a timber tenure from the BC Government has led to a very high level of

unemployment in this community. Specific population and employment data is given in sections 2.1 and 2.2.

The community is accessed by scheduled flights from Prince Rupert three times per day during the week and two times per day on the weekend. A round trip costs approximately $145. Passengers are allowed to bring 40 lbs. of freight for free. Additional freight is $0.37 per pound. A passenger ferry service operates twice per week between Prince Rupert and Kitkatla, Oona River and Hartley Bay. Some residents also use local fish boats to travel between these communities. There is no road connection to other communities.

The communities of Kitkatla, Hartley Bay, Metlakatla and Lax Kw'alaams are discussing with INAC and the City of Prince Rupert a barge service that would transport their garbage and recyclable materials on a regular schedule to the Prince Rupert landfill.

Currently these communities have no recycling programs and need to find alternatives to their landfills. The four First Nations plan to own and operate this barge service, which could possibly be broadened to transport other items between Prince Rupert, these communities, angling resorts and logging camps.

TABLE 2-23:   TRANSPORTATION INFRASTRUCTURE, KITKATLA

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Float plane dock • Scheduled flights through North Pacific Seaplanes from the Seal Cove float plane base (Prince Rupert) and Kitkatla
Ferry/Water Taxi	• Scheduled passenger ferry service (2x per week) on *Tsimshian Storm* between Prince Rupert and Oona River, Kitkatla and Hartley Bay, owned by North-Co-Corp. Ferry Services Ltd. and in which Gitxaala First Nation has an ownership position
Private/commercial vessel	• Small dock for pleasure and commercial fishing boats, operated by Gitxaala Harbour Authority
Road	• Located on Dolphin Island, no road connection to other communities

OONA RIVER

Oona River is a small community of approximately 50, which is mainly a residential community today. In the 1950s it had three small sawmills, but the last one, Group Mills closed in 2006.

The community is accessed by a passenger ferry service that operates twice per week between Prince Rupert and Kitkatla, Oona River and Hartley Bay. Some residents also use local fish boats to travel back and forth from Prince Rupert. Residents make arrangements with either North Pacific Seaplanes or Inland Air to make an on demand stop in Oona River. There is no road connection to other communities.

TABLE 2-24:   TRANSPORTATION INFRASTRUCTURE, OONA RIVER

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Dock available for float plane • Accessible by making arrangements for a pick-up at Oona River with a scheduled North Pacific Seaplanes flight or a charter flight
Ferry/Water Taxi	• Scheduled passenger ferry service (2x per week) on *Tsimshian Storm* between Prince Rupert and Oona River, Kitkatla and Hartley Bay, which is owned by North-Co-Corp. Ferry Services Ltd.
Private/commercial vessel	• Small dock for pleasure and commercial fishing boats, operated by Oona River Community Association, breakwater, difficult to access in poor weather
Road	• Community located on Porcher Island (forest roads)

HARTLEY BAY

With a population of approximately 150, Hartley Bay is the home community of the Gitga'at First Nation and is located at the confluence of Grenville and Douglas Channels[54], approximately 145km south of Prince Rupert and 80 km south of Kitimat. The downsizing of the salmon fishing industry and the downturn in the coastal forest industry has hurt the community's employment but band leadership has been aggressively trying to improve the economic, social and cultural wellbeing of Hartley Bay in recent years. These efforts include a new cultural centre, participation in a small hydro development to replace diesel electricity generation, tourism plan (including bear and whale watching guidelines), exploration of new marketing opportunities made available through Ecosystem

---

[54] Kitimat is at the head of Douglas Channel.

Based Management (EBM) of forest resources (such as selling carbon offsets), a seafood aquaculture pilot project, and benefits agreements with sportfishing and wilderness resort and sailing charter operators.

The community is accessed by scheduled flights from Prince Rupert two times per day Monday through Thursday and once per day Friday through Sunday. A round trip costs approximately $315. Passengers are allowed to bring 40 lbs. of freight for free. Additional freight is $0.69 per pound. A passenger ferry service operates twice per week between Prince Rupert and Kitkatla, Oona River and Hartley Bay. The trip to Hartley Bay is 3 ½ hours and the one-way cost is $45 per adult, $35 per senior and $25 per 5 to 12 year old child. Some residents also use local fish boats to travel back and forth to Prince Rupert and Kitimat. There are also a few ten passenger crew boats available for charter in Hartley Bay. Hartley Bay is an attractive stop for coastal mariners but limited infrastructure, such as no store or lodge, hinders full development of this tourism opportunity.

The Haisla First Nation is investigating the feasibility of a passenger and freight vessel service between Kitimat and Hartley Bay and points on the Central Coast. This service would have the advantage of providing a direct link to Central Coast communities from Hartley Bay. There is no road connection to other communities.

TABLE 2-25:   TRANSPORTATION INFRASTRUCTURE, HARTLEY BAY

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Float plane dock • Scheduled flights through North Pacific Seaplanes from the Seal Cove float plane base (Prince Rupert) and Hartley Bay
Ferry/Water Taxi	• Scheduled passenger ferry service (2x per week) on *Tsimshian Storm* between Prince Rupert and Oona River, Kitkatla and Hartley Bay, owned by North-Co-Corp. Ferry Services Ltd. and in which Gitga'at First Nation has an ownership position
Private/commercial vessel	• Small dock for pleasure and commercial fishing boats, operated by Gitga'at First Nation, fuel station, breakwater
Road	• Boardwalks in the shore area, road to new subdivision

DODGE COVE

Dodge Cove is a small community of approximately 80, situated across Prince Rupert harbour on Digby Island. The residents of the community are retirees or craftspersons or persons who commute to work in Prince Rupert or work at the Prince Rupert airport.

There is a daily scheduled ferry service between Digby Island and a dock near the Fairview Terminal, approximately 10km south of downtown Prince Rupert. The main purpose for the ferry service is to transport airport staff and airline passengers between the Digby Island airport and Prince Rupert. West Coast Launch operates a daily water taxi service between Dodge Cove and the Atlin Terminal.

TABLE 2-26:   TRANSPORTATION INFRASTRUCTURE, DODGE COVE

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Float plane dock at Digby Island ferry dock
Ferry/Water Taxi	• Scheduled passenger and vehicle ferry service (daily) operated by City of Prince Rupert that services the Digby Island airport • Daily water taxi service operated by West Coast Launch
Private/commercial vessel	• Small dock for pleasure and commercial fishing boats, no breakwater
Road	• Paved roads connect Dodge Cove to Digby Island ferry terminal and ferry terminal to Digby Island airport

2.3.3 Kitimat and Kitamaat Village

Both the District Municipality of Kitimat and Kitamaat Village are situated at the north end of the Douglas Channel, BC's widest and deepest fjord, and east of the North Coast LRMP Area. In 2006, the District of Kitimat's population was 8,987, while that of Kitamaat Village (located 3.2 km southeast of the District of Kitimat) was 514.[55]

Kitimat had its beginnings as a company town planned and built by the Aluminum Company of Canada during the 1950s. Since that time it has diversified its economy, while manufacturing continues to account for the largest number of jobs. Today Rio Tinto Alcan and Eurocan Pulp and Paper are the biggest employers in Kitimat, while other key activities include the import of petrochemical products (methanol and condensate), metal fabrication and industrial engineering. In 2006,

---

[55] Census Canada 2006.

there were 2,035 workers in Kitimat's manufacturing sector, and this number is expected to growth if proposed new projects go ahead. Agriculture & resources accounted for 95 jobs in the same year, with 200 more in construction, and 675 in health care and education.

Between $11 and $16 billion in pending investment is proposed for Kitimat over the next decade.[56] This includes the proposed $3 billion+ natural gas liquefaction and marine export facility, which would be connected to the proposed Pacific Trail, and Alcan's $3.2 billion expansion and upgrade of its Kitimat aluminum plant to 400,000 tons/yr. In addition, there are at least two independent power projects in the works, four major pipelines (for natural gas, and condensate for the Alberta oil sands project), and two new marine terminals. If only a few of these projects proceed during the next few years, it will generate new employment in both the construction and operations phases.

A description of the Kitimat transportation setting is provided in Sections 2.2.2, 2.2.6 and 2.2.7 of this report.

Kitamaat Village is the Haisla First Nation community located at the north end of the Douglas Channel, approximately 3 km from Kitimat along a paved road, and has an approximate population of 500. The band council is in the midst of finalizing an interim treaty agreement (ITA) with the BC Government that would transfer almost 2,500 acres of fee simple land, an area larger than its current reserves, to the Haisla. It is only the second ITA in the province, and includes lands where the Haisla plan a joint venture hydroelectricity project at Europa Lake. The Haisla First Nation has an active forestry management program and is discussing benefits agreements with various parties in regard to industrial activities carried out within their traditional territories. It has developed a concept plan for a passenger and freight service between Kitimat and Hartley Bay, Klemtu and Bella Bella.

Residents work in nearby Kitimat industrial, retail and services operations and with the village's public services.

Kitamaat Village is well positioned to access the extensive transportation infrastructure of the Kitimat area. There is a small craft harbour dock operated by the band, which has a breakwater that is perceived as needing upgrading or re-location. The Haisla see a potential vessel-based tourism opportunity using some of their cabins along Douglas Channel and are using a boat for initial tours and test runs.

---

[56] Source: http://www.kitimat.ca/ (January 2009).

TABLE 2-27:   TRANSPORTATION INFRASTRUCTURE, KITIMAT AND KITAMAAT VILLAGE

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Northwest Regional Airport in Terrace, 73 km N of Kitimat , has 2 runways • Air Canada Jazz & Hawkair provide at least 2 scheduled trips to Vancouver per day • Central Mountain Air provides daily scheduled trips to Prince George • Two federal aerodrome locations handle small seaplanes in and out • Also served by one local fixed wing charter company, and two helicopter operations
Rail	• CN Rail line from Terrace to Kitimat port (cargo) • Rail time from Kitimat to Chicago is 108 hours (2,520 miles), slightly longer than from Vancouver
Port Facilities	• Kitimat has deepwater passage & harbour • Port of Kitimat is privately owned and operated • Three marine terminals available for international imports and a base of operations for a full-service tugboat operator. Two of the marine terminals are single berth, while the third has double berth for handling break-bulk vessels plus a 100 tonne hydraulic RO/RO barge facility.
Private/commercial vessels	• Up to 300 privately owned vessels accommodated per year in Port of Kitimat • Cargos handled by Private Port of Kitimat terminal operators include alumina, green and petroleum coke, aluminum, condensate, methanol, sackkraft and linerboard. • Aurora Marine Services and Eagle Edge Ocean Charters provide water taxi and charter boat service • Kitamaat Village has small dock for pleasure and commercial fishing boats, breakwater
Road	• Highway 37 from Terrace to District of Kitimat is part of provincial road system • Paved Kitamaat Village Road (2.3 km long) connects the village to the District of Kitimat • District of Kitimat has public local transportation, and Farwest Bus Lines offers a bus service between Kitimat and Terrace

2.3.4 Port Hardy and Mount Waddington Regional District

DISTRICT OF PORT HARDY

The District of Port Hardy and vicinity has an approximately population of 5,000. It is the northern terminus of the Island Highway (Highway 19), linking Port Hardy with Victoria and all other major centres on the island.

As the southern terminus of BC Ferries' Routes 10 and 40, Port Hardy has water connections to the Central Coast, Prince Rupert, Haida and Gwaii and Alaska. In addition to passengers, refrigerated truck service for aquaculture products on Vancouver Island is well established. The salmon aquaculture industry ships over 70,000 tonnes of fresh salmon worth $300 million to markets 48-60 hours after it has been harvested. Three quarters is destined for the US market.

TABLE 2-28:   TRUCK SHIPPING TIMES FROM NORTHERN VANCOUVER ISLAND

Destination	Time (hours)
To Vancouver International Airport	9
To Seattle International Airport – Seatac	12
To San Francisco	28
To Los Angeles	34

Port Hardy has the following port facilities:

- Seagate Wharf in downtown Port Hardy – accommodates vessels to 250' in length. Used by coast guard service ships, larger drag fleet vessels;

- Three small craft harbour facilities, including a float, seine floats and small craft dock in inner harbour (Fisherman's Wharf); and,

- Quarterdeck Marina – A large private marina with full range of services including boat repair and a 60 ton travel lift. The combined length of the floats is 1150 m creating 195 slips for smaller vessels. Adjacent to resort hotel.

BC Ferries uses the Bear Cove terminal near Port Hardy. It is presently being reconfigured to accommodate the new MV Northern Expedition vessel.

TABLE 2-29:   TRANSPORTATION INFRASTRUCTURE, PORT HARDY

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Airport with 3 runways; • Seaplane base in inner harbour; • Scheduled flights to Vancouver, Prince Rupert & Central Coast; • Charter flights available.
Ferry/Water taxi	• Southern terminus for BC Ferries' Routes 10 and 40 • charter service available
Port facilities	• large dock (Seagate); • 3 small craft harbour facilities • Quarterdeck privately owned dock; • Ferry terminal at Bear Cove being reconfigured for larger vessel.
Road	• Northern terminus of Highway 19.

Port Hardy has a fully-serviced, all-weather airport, owned and operated by Transport Canada. The airport has three runways and can accommodate both domestic and international carriers. Scheduled service is available to Vancouver International Airport as well as to points on the Central Coast including Bella Bella and Klemtu and to Prince Rupert on the North Coast of BC. Airlines include: Pacific Coastal Airlines, and Vancouver Island Helicopters. Both jet fuel and aviation gas is available. The Port Hardy Seaplane Base in the inner harbour provides excellent wind shelter.

HEALTH BAY

Health Bay is a Kwicksutaineuk-aw-kwaw-aw-mish Aboriginal community located on the west side of Gilford Island. There are approximately 40 residents and approximately 230 band members live elsewhere. Development of a 26 home subdivision is underway, which includes a new water system. There are eight temporary trailers housing local residents, along with a couple of older homes, the remainder of the older homes are no longer habitable. The community has been subject to a longstanding potable water alert and a new water system is part of the re-construction.

A scheduled seaplane service (a "mail run" service to several mid-coast locations) flies into the community and there is a small dock with a natural breakwater. The community currently relies on chartered water taxi services from Port McNeill but is actively trying to set up its own water taxi service, which might also service Kingcome.

TABLE 2-30: TRANSPORTATION INFRASTRUCTURE, HEALTH BAY

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Scheduled seaplane service via Port Mc Neill-based Pacific Eagle Aviation Ltd.
Ferry/Water taxi	• Chartered water taxi services available from Port McNeill
Private/commercial vessel	• The Kwicksutaineuk First Nation is attempting to acquire a vessel to provide local water taxi services
Road	• no road access

KINGCOME

Kingcome (also known as Gwa'Yi Village) is a Tsawataineuk Aboriginal community located at the head of remote Kingcome Inlet. There are approximately 90 residents at Kingcome and approximately 420 band members who live elsewhere.

There is an on-demand scheduled seaplane service to Campbell River via Vancouver Island Air and to Port McNeill via Pacific Eagle Aviation (a "mail run" service to a few locations). There is a small government dock with no breakwater, which lies approximately three kilometers from the community so residents must travel by boat down the Kingcome River to reach the dock. There was a dock for float plane service on the river but it was destroyed in flooding and the exposed dock must now be used. The band council and administration have a proposal to develop a road between the community and the dock and improve the float dock. The community currently relies on chartered water taxi services from Port McNeill but may use the service being developed by the Kwicksutaineuk First Nation.

TABLE 2-31: TRANSPORTATION INFRASTRUCTURE, KINGCOME

Transportation Mode/ Infrastructure	Description
Air Services & Infrastructure	• Scheduled seaplane service to Port Mc Neill-based Pacific Eagle Aviation Ltd. and to Campbell River via Vancouver Island Air
Ferry/Water Taxi	• Chartered water taxi services available from Port McNeill
Road	• no road access

3.   SWOT ASSESSMENT

During the process of preparing the situation analysis (Section 2), we have obtained an information base to use in the first stage of assessment. Our research findings have demonstrated each region and community's strongest transportation assets, and where the challenges lie. The next step is to use a SWOT analysis (strengths, weaknesses, opportunities and threats) to help focus on key transportation issues. By taking a regional approach to the SWOT assessment, we can identify the key overarching issues that affect current and future transportation development on the Central and North Coast, and Kitimat.

3.1   Air Transportation

CENTRAL COAST

Strengths	Weaknesses
• Scheduled flights available to Bella Coola, Bella Bella, Klemtu • All communities served by charter fixed wing and/or helicopter • Pacific Coastal Airlines and charter fixed wing and helicopter companies that serve Central Coast are profitable, have long history in region, well-established • Paved landing strips in Bella Coola, Bella Bella & Shearwater • Gravel landing strip at Wuikinuxv • Klemtu, Denny Island (Shearwater), Dawson's Landing & Ocean Falls accessible by float plane • Local pilots have extensive knowledge & experience in region	• No direct scheduled air connection between inner and outer Central Coast • Wuikinuxv has unpaved landing strip, used seasonally • Airport landing strips do not have lights for nighttime evacuation • Weather and prohibition on night flying can delay response to medical emergencies that require air evacuation • Airport in Bella Bella congested during summer months & needs larger terminal • Local travelers given lower priority during summer months • No local training in avionics or aeronautics
Opportunities	**Threats**
• Growing demand for ecotourism, heliskiing, adventure travel • Limited growth of shellfish aquaculture & herring roe on kelp shipments to overseas market • Construction of new energy projects (transportation of supplies & workers to camps) • Long term emergence of new industries such as drinking water export, non-timber forest products • Central Coast model of ecologically-based growth as a draw for more visitors	• Weather conditions during winter limits reliability of air travel • Loss of local industry & govt offices means fewer professional air travelers than in the past • Rising fuel and other operating costs • Risk of flooding of Bella Coola airport under extreme winter conditions

NORTH COAST

Strengths	Weaknesses
• Prince Rupert Airport on Digby Island is a major regional hub, with a paved 6,000 ft. runway, refurbished terminal, full service FSS and Canadian Customs • Seal Cove seaplane at northern end of Prince Rupert, has a terminal and is located adjacent to helicopter operations and Coast Guard base • Scheduled services by Hawkair and Air Canada Jazz between Prince Rupert and Vancouver • Scheduled floatplane services by long established operator, North Pacific Seaplanes, between Prince Rupert and Lax Kw'alaams, Kitkatla, Hartley Bay, Masset, and Queen Charlotte City • Charter fixed wing service available through North Pacific Seaplanes and Inland Air and helicopter service through Vancouver Island Helicopters and White River Helicopters	• Cost of airport includes City of Prince Rupert operated ferry that services Digby Island and incurs a large annual loss of approximately $1 million, which is covered by city taxpayers; no financial contribution from senior governments for this link to the regional airport • Additional trip time required to access the airport by ferry • Terminal experience for travellers has improved in recent years but room for more improvement remains • Relatively high cost of air fares between Prince Rupert and scheduled air serviced communities, issue is exacerbated by low incomes of First Nation communities • Digby Island runway is too short for international jets and large cargo jets • No on site customs • Lack of fuel capacity and hangars • Access road improvements needed
Opportunities • Airport is close to Port of Prince Rupert's Fairview Terminal, which offers basis for inter-modal container transportation • Tsimshian Access project completion would much improve access to Digby Island by shortening the ferry crossing and allow for a larger capacity ferry • Opportunity for airport to service a BC destination cruise that terminates or starts in Prince Rupert	**Threats** • Rising airplane fuel cost, leading to higher air fares • Worldwide economic and financial difficulties slowing or cutting off investment in expansion of port infrastructure and services

KITIMAT

Strengths	**Weaknesses**
• Northwest Regional Airport in Terrace a major regional hub, with two paved landing strips including a 7,500 ft runway • full service Flight Service Station (FSS), and an Instrument Landing System that ensures 99.9 per cent reliability • Seaplane aerodrome located within community at Minette Bay to handle small seaplanes access/egress • Kitimat Airpark (3,000 ft. all weather runway) • Scheduled flights available 6 times per day from Terrace/Kitimat to Vancouver; at least once daily to Prince George & Smithers • Charter fixed wing and/or helicopter flights also available	• Expensive to travel to many parts of BC, because of connections required in Vancouver or Prince George • No direct overseas flights available
Opportunities	**Threats**
• Growth in air travel to Terrace/Kitimat due to industrial activity in the mineral sector and planning in pipeline projects • If these projects go ahead, the decline in population will be reversed as more people seek work in Kitimat and Terrace – more demand for air travel • Fishing, adventure travel will attract more visitors	• Recent downturn in minerals and oil markets could stall investment on proposed projects • Weather conditions during winter reduces reliability of air travel • Future rising fuel and other operating costs

3.2   Road Transportation

Strengths	**Weaknesses**
Central Coast:	*Central Coast:*
• Highway 20 is most reliable and cost-effective form of travel in and out of the Bella Coola Valley to/from Chilcotin Plateau and Williams Lake	• Reliability of Highway 20 affected by bad weather and flooding, heavy snow in winter, particularly at Heckman pass
• Only alternative mode to air travel when weather conditions prevent flying	• Weight restrictions during spring break
• Highway 20 is in fairly good condition, with exception of certain portion of Heckman Pass	• No public bus service out of Bella Coola Valley – creates social & environmental costs
• "Lifeline" – Highway 20 is the source of most supplies into Bella Coola Valley	• Highway 20 has no sidewalk or shoulder between Reserve #4 and Bella Colla, but is a popular pedestrian route – safety problems
North Coast:	• Little coordination between BC Ferries and tourism operators to retain disembarking visitors in Bella Coola
• Collaborative municipal, First Nation and Regional District commitment to move forward with the Tsimshian Access project	*North Coast:*
• Highway 16 links the Prince Rupert area to Terrace, Prince George and Vancouver, and is part of the Yellowhead Highway that stretches to Winnipeg and terminates in Masset	• Port needs control of road access to Ridley Island for security and development reasons
• Unique and scenic ferry–highway circle route between Vancouver and Prince Rupert	• First Nation communities of Lax Kw'alaams and Metlakatla that are near Prince Rupert are not connected by efficient road/ferry service
• Highway 16 is in good condition	• Increased port activity has led to perceptions amongst some Prince Rupert residents that port truck traffic is too noisy and a safety hazard
• Attractive scenic drive between Prince Rupert and Terrace	*Kitimat:*
• Scheduled bus service between to Terrace, Prince George and Vancouver	• Some delays in winter due to accidents
Kitimat:	• Weight restrictions during spring break
• Highway 37 paved and reliable	
• Kitimat & Kitamaat Village linked by paved road	
• Public bus system operates between Kitimat and Terrace	
• Most on-reserve roads paved or maintained gravel	
• Essential part of provincial highway system – links Northern Interior via Highway 16 and 20 to ocean	
• Independent strong communities well prepared for road closures	

Opportunities	**Threats**
Central Coast:	*Central Coast:*
• Implement scheduled bus to Williams Lake with possible cost-sharing arrangement	• Potential exists for road failure at Heckman pass on Highway 20 due to eroding conditions – no alternative route exists
• Bus would link other communities including Anahim Lake, Nimpo, Tatla Lake, Red Stone, Alexis Creek – opportunity for regional transportation planning	*North Coast:*
• Reputation as part of a scenic ferry-highway circle route	• Tsimshian Access project requires a high level of collaboration between several governments and senior government financial contributions
• Alternative corridors exist which could serve as alternative route from Bella Coola Valley in event of highway failure	• New port access via Ridley Island would alleviate truck pressures in the city but requires BC Government cooperation in a land transfer
• Smart cars and electric or alternative fuel vehicles in small communities	• Return of high gas prices would inhibit rubber tire tourism traffic
North Coast:	*Kitimat:*
• Tsimshian Access project offers new labour supply, tourism development, residential housing development and improved airport access and development opportunities for Prince Rupert area	• Increased truck traffic on Highway 37 from new construction and development in Kitimat could place a strain on Highway 37 road infrastructure
• Increased tourism activity on ferry-highway circle route between Vancouver and Prince Rupert	
• Increased tourism activity on ferry-highway circle route between Bellingham (Seattle) and Prince Rupert	
• Increased ferry transported tourism traffic to Haida Gwaii	
• Remote First Nation communities have potential for electric vehicles	

3.3   Ferries and Other Commercial Vessels

Strengths	**Weaknesses**
• Ferry system is long-standing primary connection between Central and North Coast communities and southern BC • Well maintained BCF dock facilities in Prince Rupert, Bella Bella, Bella Coola, Shearwater, and Ocean Falls, although Prince Rupert is older; good Alaska ferries terminal and dock in Fairview area • BCF dock at Prince Rupert has been reconfigured to accommodate new *Northern Expedition* ferry (Route 10) and Port Hardy and Bella Bella docks are being re-configured • BCF ferries offer some freight transportation services • Route 10 (Inside Passage) and 40 (Discovery Passage) draw visitors during summer months • With implementation of its Northern Service Strategy, BC Ferries taking more encompassing and better resourced marketing of its Northern Services • New *Northern Expedition* ferry adds a cruise experience, with its staterooms and better food • Northern Service Ferry Advisory Committee composed of knowledgeable coastal residents • First Nation owned and operated ferry or water taxi services connect Lax Kw'alaams, Kitkatla, Oona River, Hartley Bay, and Metlakatla to Prince Rupert • Barges serve all coastal communities and for several are a source of fuel, food, and freight • Water taxi serves Shearwater • Prince Rupert is a stop on the Alaska Marine Highway ferry service between Alaska communities and Bellingham, WA • New Alaska Marine Highway service ferry and schedule for Prince Rupert • Route 11 service between Haida Gwaii and Prince Rupert • Other formal or informal charter boat services between Central Coast communities and Port Hardy or Port McNeill	• Revenues from passenger and vehicle traffic on BCF's Northern ferry routes fall well short of service costs, mainly due to small population base of region • Frequency of service to Prince Rupert has not changed in almost 30 years • Passenger and freight service to isolated coastal communities has declined in past 30 years • Northern Service Ferry Advisory Committee is BCF appointed, has limited mandate, has limited First Nation input and holds no public meetings • Funding conduit for Northern Service is through BC Government, not BCF, but no ongoing regional advisory body appointed by BC Govt. for either ferry services or coastal transportation • Several ferry docks and a train station at Fairview, south of Prince Rupert, missing cost reduction opportunity and eroding traveller experience • City of Prince Rupert had to re-build relationship with Alaska ferry system after ferry blockade, including assuming responsibility for its Prince Rupert terminal • Reduced winter schedules to Central and North Coast communities • Existing ferry docks at Klemtu, Shearwater and Ocean Falls are not large enough to accommodate the new *Northern Expedition* on Route 10 • Bella Bella terminal facility is small, and overcrowded in summer months • Long distances resulting in high operating costs and small passenger and freight volumes make it expensive to operate a local ferry service – e.g., Nimpkish ferry on Central Coast failed • BCF service on Route 40 is unlikely to appeal to tourists seeking more comfortable accommodation • Lax Kwa'laams ferry service shares a Fairview dock that is inadequate for freight service and costly for ferry operation and ferry users

	Weaknesses *continued*
	• Metlakatla and Lax Kw'alaams ferry/water taxi services don't support commuting to Prince Rupert work
	• Most barges have empty backhauls
	• No regularly scheduled barge services between main supply points & remote communities.
Opportunities	**Threats**
• New Fairview dock facility project being spearheaded by City of Prince Rupert would greatly improve traveller experience and reduce city's costs	• Lack of clarity about BC Government's and BC Ferries' commitment to northern routes and building up their tourism traffic volumes
• Discovery Coast service can be marketed as mini-cruise	• Uncertainty about who will service the northern routes and their levels of service if BCF sells or leases northern service infrastructure and ferries
• Central Coast "circle route" (Vancouver Island – Bella Coola – Williams Lake – Vancouver)	
• Packaged tours based on Inside and Discovery Passage and Haida Gwaii routes	• General community uncertainty about the future of the northern routes translates into investment stumbling blocks
• Re-scheduling to facilitate tourism opportunities for isolated communities	• Lack of long-term BC Government transportation strategy or plan for small coastal communities
• More comfortable amenities on *Northern Expedition* can form the basis for stronger marketing efforts to attract more travelers, especially older demographic group, to Route 10	• Improved Digby Island ferry service (Tsimshian Access project) requires a high level of collaboration between several governments and senior government financial contributions
• Coordination in schedules and marketing between BCF Inside passage service and Alaska ferry service	
• Tsimshian Access project would open up opportunity for Alaska Marine Highway to re-locate its dock to Lax Kw'alaams	• Aero Point landing project for Lax Kw'alaams ferry has been delayed for several years by lack of BC Government cooperation
• Improved ferry services would facilitate access to Prince Rupert employment opportunities for Lax Kw'alaams and Metlakatla residents	• Barge service frequency and cost for transporting community items, such as fuel and food, is tied to level of industrial economic activity, current downturn in coastal forest industry has negatively affected barge services for community purposes
• Cost of water transportation for people and goods between Lax Kw'alaams and Prince Rupert would be lowered by Aero Point project, environmental benefit as well due to shorter route	
	• Reduced ferry service during the winter months affects availability of fresh food in communities such as Klemtu – subsequent effects on locals' health
• Improved Digby Island ferry service (Tsimshian Access project) would offer new labour supply, tourism development, residential housing development and improved airport access and development opportunities for Prince Rupert area	• Food supply also an issue in Wuikinuxv
	• Access to health care and education services limited, esp in winter months

Opportunities *continued*	
- Garbage barge service to North Coast Aboriginal communities opens up potential for expansion to transporting other items - Under study scheduled passenger and freight service between Kitimat, Hartley Bay and Bella Bella offers some cost saving possibilities for these two remote communities and would be a new scheduled tourism route - Four lodges within one hour of Hartley Bay during the season offers potential for vessel-based services - New scheduled barge runs on Central & North Coast could ensure more frequent food delivery - Using currently empty backhaul barges to transport products out of Planning Area	

3.4   Rail

Strengths	Weaknesses
• Improved CN Rail service into Port of Prince of Rupert • Excess capacity on CN Rail service that can accommodate port expansion • Close proximity of CN Rail service to Fairview container terminal facilitating inter-modal transport efficiencies • Collaborative relationship between CN Rail and Port of Prince Rupert • Rail connection to Alaska via CN's well established Prince Rupert-based AquaTrain railbarge service • Scenic VIA Rail service, the *Skeena*, between Prince Rupert and Jasper	• Location of Prince Rupert marshalling yards on valuable waterfront property • Freight rail traffic takes precedence over VIA Rail, which experiences some delays as a result
Opportunities	**Threats**
• Competitiveness advantages of Port of Prince Rupert can lead to increased traffic on CN Rail line • Availability of Ridley Island lands can facilitate efficient port train service through addition of a rail loop • *Skeena* passenger rail service between Prince Rupert and Jasper is attractive for baby boomer tourism • *Skeena* passenger service could be linked with the Inside Passage ferry service or small cruise ship and possibly a Prince George to Vancouver passenger rail service to create a unique travel experience • Tracks and Prince Rupert station provide basis for private rail tour opportunity	• Proposed Ridley Island rail loop likely requires senior government financial contributions • VIA Rail's financial situation limits its marketing

3.5   Cruise Ships

Strengths	**Weaknesses**
• New Northlands and Atlin Terminals for hosting large and small cruise ships • Good range of outdoor adventure and cultural excursions for passengers • Marketing by Port of Prince Rupert to build up cruise ship traffic and cooperative marketing efforts of Cruise BC • Strategic direction and coordination by Port of Prince Rupert for onshore excursions to ensure a high quality passenger experience • Collaboration of main Prince Rupert area community and tourism business leaders to expand and improve onshore offerings for cruise ship passengers • Port and community capacity to host additional cruise ships	• Retail community response to cruise ship passenger opportunity needs improvement • Spectacular natural vistas from city of Prince Rupert but streetscapes are drab due to haphazard condition of many city centre buildings and lack of street level design theme in a downtown shopping/walking area • Lack of small cruise lines based in Vancouver that feature BC coast tours • No large cruise ships focused on BC as a cruise destination • Lack of cruise ship line investment in Prince Rupert retail or on-shore excursions
Opportunities	**Threats**
• Aggressive marketing of Port of Seattle to secure cruise ship business • Thriving cruise line industry and increasing numbers of baby boomers turning to cruise lines for vacation experiences (avg. age of Alaskan "cruisers" is 55) • Alaskan cruise lines that start in Vancouver do not stop in Prince Rupert, which offers a counter scheduling opportunity for a Vancouver-based cruise ship • Market research shows that #1 and #2 interests of potential "cruisers" to BC are wilderness/scenery and visit small towns/villages • Availability of opportunities to market safe, smaller cruise ship experiences in coastal rainforest waters • Potential for increased large yacht tourism	• Basis of large vessel cruise business continues to be "Jones Act" that requires one foreign stop for foreign flagged vessels travelling between American ports; hence dependence on US shipping policy • Competition from Victoria and, to a lesser degree, Campbell River for stops by cruise ships leaving from Seattle, Portland and San Francisco • Competition between Seattle and Vancouver for cruise lines servicing the Alaskan market • Current worldwide economic difficulties has led to price cutting for the 2009 season but may lead to fewer ships/voyages in 2010 and beyond if problems persist • Development of BC as a cruise destination requires collaboration from many parties, complicated by significant investment of cruise ship lines in on-shore Alaskan retail and excursions

3.6   Major Ports

PRINCE RUPERT

Strengths	Weaknesses
• Closest North American port to Asia; 3-4 days closer than LA and 1.5-2 days closer than Vancouver/Seattle, with fuel cost savings and GHG emissions environmental benefits	• Canada Marine Act, Ottawa-based federal government control of certain important port business parameters, such as maximum borrowing authority and installing infrastructure to service land
• Efficient rail connection to American mid-west and south to Mexico	• Canadian port authorities, including Prince Rupert port, have much less ability/authority to lead and conduct their business; American west coast ports are municipal entities so have local direction (no federal government control), access to tax exempt municipal bond financing, and flexibility to expand into related businesses, such as warehousing, airports and marinas
• Lands for growth	
• Efficient inter-modal container terminal, avg. dwell time of one day vs 4 days for Vancouver and 3 days for Seattle and Long Beach	
• Deepest natural harbour in North America	
• Safe, sheltered harbour and access/egress	
• New security system and general ability to sustain high standards in less complex Prince Rupert security environment	• Management of American west coast ports is often guided by economic development considerations (jobs and local spending) whereas Canadian port authorities are structured to be profit making entities
• Strong, clear leadership by port management team	
• Strong support from CN Rail	• Canadian port authorities, including Prince Rupert port, must pay annual charge to federal government on gross revenues
• Flexible and less expensive labour in comparison to American west coast ports	
• Less costly property taxes compared to Port of Vancouver	• American west coast ports do not pay property taxes and municipal property taxes on terminals and other facilities on leased port lands are lower than in Prince Rupert
• BC Government has established Northern Gateway office in Prince Rupert to facilitate economic growth based on transportation opportunities	• Municipal control and financial flexibility of American west coast ports lead to lower cost of capital and potential for lower terminal lease rates
	• Weak access to capital for large-scale infra-structure & service improvement investments
	• Certain new port services would assist in attracting new business and investment but additional port business needed to sustain new services
	• High infrastructure investment cost required to get a new port enterprise underway
	• Limited amount of serviced land and high building cost on Port of Prince Rupert lands

	Weaknesses *continued*
	• Port of Prince Rupert is a relatively new player on the international scene so must build awareness and relationships on a global basis • Lack of marina space within the four small harbours (Porpoise Harbour, Fairview, Cow Bay and Rushbrook Harbour)
Opportunities • Asian economies, especially China's, continue to record positive growth numbers, and Port of Prince Rupert is well positioned to access larger amounts of their container shipments to North America • Asian shippers are seeking lowest cost alternative in current difficult economic environment • New port related businesses, such as warehousing, reefer facility, container repair, logistics (such as re-stuffing), bunkering, additional commodity terminals (such as proposed potash terminal), LNG terminal, logistic services, transload facilities, barge and flexi terminal, Ro Ro terminal, industrial development (such as pipe reform) and product assembly • Demand for new marina berths	**Threats** • Worldwide economic downturn has curtailed American imports from Asia and slowed Chinese imports of Canadian commodities in the short term • Competition from Port of Vancouver and American west coast ports, especially the latter which have more organizational and legal flexibility to respond to economic downturn conditions • Expansion of Panama Canal, due to be finished in 2014, will heighten competition • Dependence of Port of Prince Rupert on Ottawa-based federal government decision-makers for infrastructure monies, borrowing authority and control over other competitiveness factors

KITIMAT

Strengths	**Weaknesses**
• Ice-free, sheltered deepwater passage and harbour 80nm from great circle shipping route (international) • One day closer to Asia than ports in the south. Its Pacific Inland Coast location enables it to compete with the southern port of Vancouver in both rail distance and comparable service from the Pacific to Chicago and North America Heartland markets, an advantage not shared by other Northwest Corridor Ports • Deep inland location reduces land transportation costs • Three deep-sea marine terminals in use for international imports and a base of operations for a full-service tugboat operator • All facilities privately owned and operated. Operators not required to pay harbour dues, berthage or wharfage to a Port Authority • Local labour contracts in facilities; no shipping disruptions due to national/federal port transportation labour agreements or conflicts • Efficient rail connection to Terrace, and US mid-west destinations • Private and Provincial Crown land available • 2,863ha industrial zoned harbour/backup land available, and total of 11,660ha suitable for development	• Historic dependence on demand for resource-based exports (e.g., forest products, aluminum) • High pilotage costs associated with need for two pilots because of duration of trip to/from Triple Island pilot boarding station • US infrastructure policy puts BC ports at a cost disadvantage -- municipal control and financial flexibility of American west coast ports lead to lower cost of capital and potential for lower terminal lease rates • Has been unable to manufacture aluminum products because of lower costs of shipping raw aluminum to assembly centres or markets for manufacturing there • No opportunities for container-related work because there is no container facility in Kitimat • High infrastructure investment cost required to get a new port enterprise underway
Opportunities	**Threats**
• Greatest opportunities lie with export products – eg., LNG, aggregate • Asian economies, especially China's, continue to record positive growth numbers, and Port of Prince Rupert is well positioned to access larger amounts of their container shipments to North America • Asian shippers are seeking lowest cost alternative in current difficult economic environment	• If Alcan modernization does not proceed, aluminum exports would decline and many jobs would be lost • Worldwide economic downturn has slowed Chinese imports of Canadian commodities in the short term • Competition from American west coast ports, which have more organizational and legal flexibility to respond to economic downturn conditions

4. STRATEGIC ISSUES

Communities and industries in the LRMP Plan area must contend with a spectrum of transportation-related challenges arising from their remote location, and the effects of weather. In the course of our research and consultation, we have identified many of these, and learned how they affect business, economic growth, and quality of life for residents. This section of the report identifies the broad issues that generally affect the entire region, and isolates the key issues for each community.

4.1 Regional Issues

► **Issue: High transportation costs and infrequent service impedes economic development**

High transportation costs and poor community access prevent some businesses from flourishing in the Planning Area, and pose a barrier to new investment. Here are some examples.

- The logistics and cost of transportation have made it infeasible to operate value-added mills in remote locations when it is much cheaper to boom or barge timber to the Lower Mainland for processing there. After barges have delivered supplies, food, equipment and fuel to the various coastal communities in Planning Area, they generally return to the Lower Mainland or Campbell River empty, posing additional costs for the suppliers and buyers.

- BC Ferries' 2007 local feeder service on the Central Coast, the Nimpkish, was not profitable, and was subsequently cancelled.

- Heiltsuk Freight transports goods from Vancouver to Bella Bella on BC Ferries at an operating loss.

- Without an efficient link to Prince Rupert, residents of Metlakatla and Lax Kw'alaams cannot commute to work on a daily basis. This means local problems of unemployment.

- Improved transportation is essential for the success of the growing wilderness tourism sector.

Poor connections and in some cases inefficient operations are together suppressing employment and economic growth in the transportation study area, and raising the cost of doing business.

► <u>Issue</u>: **BC Ferries' withholding of North Transportation Strategy has created uncertainty about future service and deterred private investment**

Our consultation with residents, business owners and government representatives from throughout the transportation study area revealed the commonly held concern that transportation infrastructure and service will not stay at its current level, and could decline in the future. The status of BC Ferries Northern Service is a leading transportation concern among residents of the Central and North Coast, particularly in the remote communities. Uncertainty about the provincial and federal government and BC Ferries' plans for coastal transportation deters private and public investment decisions.

BC Ferry Services (an independent corporation) is paid a service fee by the provincial government to deliver specified service levels on "designated routes". In addition, the BC Government pays BC Ferries an amount for "reimbursement" of delivery of the "Social Program" and a service fee of up to $2.2 million to help financially support several "Unregulated Routes" that are serviced by other parties. For example, BC Ferries has an eight-year contract with North-Co to provide a passenger ferry and light freight service between Prince Rupert and Metlakatla, Oona River, Kitkatla and Hartley Bay (Route 60).

Neither BC Ferries nor the BC Government has released the Northern Service Strategy that BC Ferries developed after a public consultation in 2003 and 2004. BC Ferries prepared a Northern Service Strategy and submitted it to the BC Government and the latest amendment (April 1, 2008) to the Coastal Ferry Services Contract[57] reflects that such a strategy is either being prepared or now exists, but it has not been released to the public.

As discussed earlier, BC Ferries' plans to review Alternative Service Providers for the northern routes were delayed after the sinking of the Queen of the North. In a March 27, 2008 letter to the BC Ferries Commissioner, BC Ferries presented its Alternative Service Providers Plan, explaining how it intends to proceed with a second RFQ/RFP to outsource its Northern Service.[58]

The lack of a publicly available Northern Service Strategy and the restructure of BC ferries into a private corporation, with less accountability to the public and BC legislators on a legal basis, feed a general sense of public uncertainty about the future of the Northern Routes. This notwithstanding, the anecdotal feedback is that BC Ferries' management has become more responsive and communicative about local concerns with the new private corporation

---

[57] Pg 2 states as follows, " BC Ferries, in consultation with stakeholders, has developed a "Northern Strategy" to improve customer service and to enhance operational efficiency on those routes [Ferry Routes 10, 11, and 40], which has been delivered to the Province. The Core Service Levels in relation Designated Ferry Routes 10, 11 and 40 will include any adjustments arising out of the Northern Strategy …."
[58] Available at http://www.bcferrycommission.com/ASPPlanPT2FINAL.pdf

mandate, a positive change that is ascribed to the management of the CEO David Hahn.

There is a longstanding system of community-based ferry advisory committees (FAC) in the province and there is a Northern Ferry Advisory Committee. It meets one to two times per year and the minutes are posted on the BC Ferries' web site.   However the meetings are staged in private and although knowledgeable persons with deep community roots are appointed to the committees, these appointments are made by BC Ferries and not by community entities. They do not have independent budgets or staff help, and appear to have limited control over the meeting agenda and follow-up by BC Ferries on recommendations.

There is a BC Ferries Commissioner that has a role in monitoring BC Ferries adherence to its contract with the BC Government and the average level of ferry fares.   It has a decision making role when BC Ferries proposes to discontinue a route but has no role in deciding if a new route should be supported as either an unregulated or regulated route.

The following graphic illustrates avenues for public input about BC Ferries. The graphic shows the complexity of influencing the various aspects of ferry service delivery in the province but it also minimizes the role of the BC Government as BC Ferries negotiates its service plans and service fees with its owner, the BC Government.

British Columbia's Ferry System:
Some Avenues For Public Input

Prepared by BC Ferry Commission
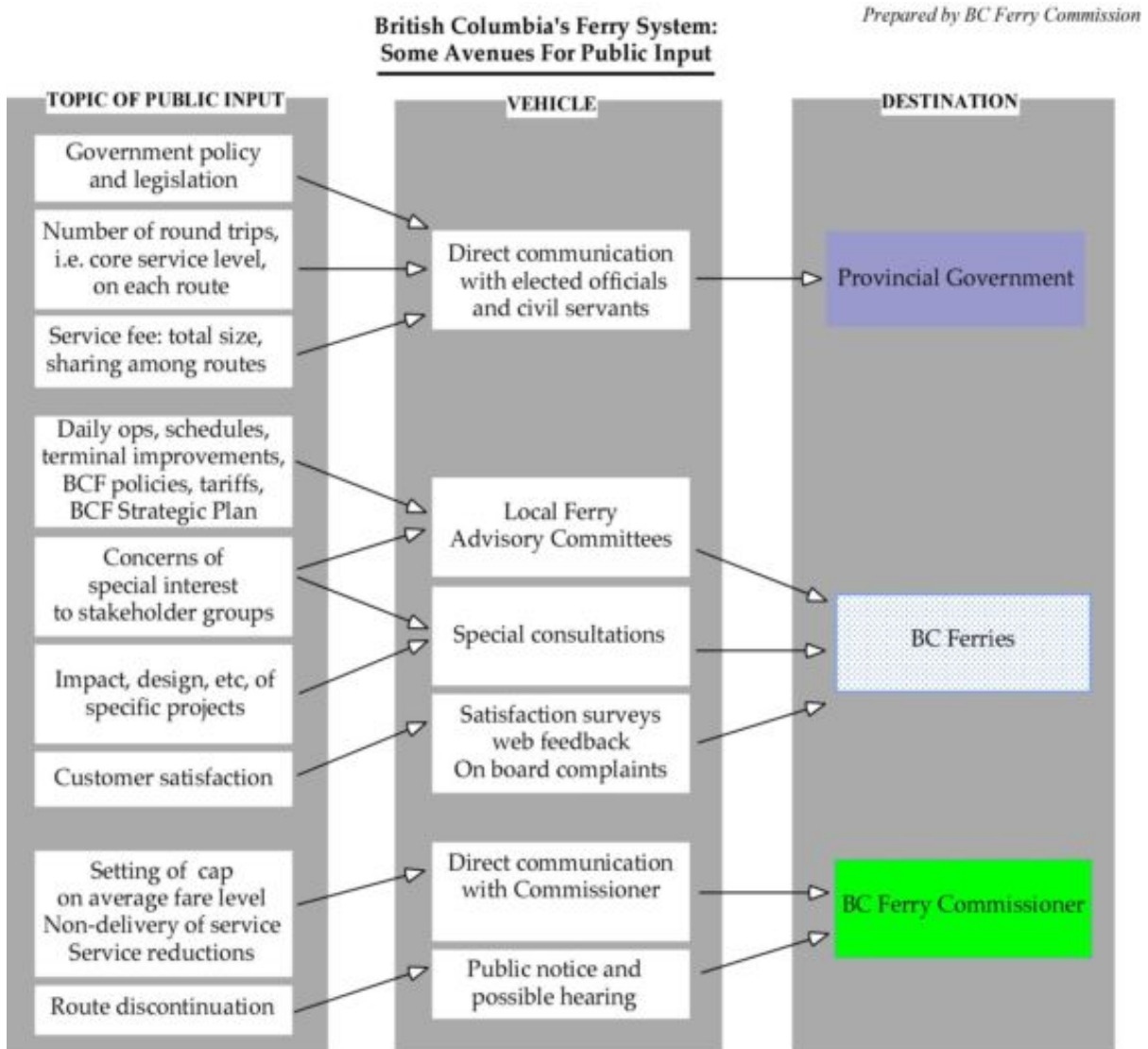
Service strategies and funding decisions for the scheduled and unscheduled (contracted) routes ultimately are finalized through discussions and negotiations with the BC Government.

The provincial government, particularly the Ministry of Transportation and Infrastructure, plays a very important role in the delivery, support and regulation of all modes of transportation. The BC government needs to work more closely with the communities of the Planning Area to identify the critical problems, develop a regional transportation strategy, and commit to its implementation. This will be essential in helping to eradicate the atmosphere of uncertainty that currently prevails, and stimulating new economic and community growth.

► <u>Issue</u>: **The provincial government needs to recognize the LRMP Plan area's current and future strategic importance in the transportation system**

The transportation system in the LRMP Plan area is an essential element of the provincial and national network. Highways 16 and 20 connect inland BC and the rest of Canada to the West Coast and provide northern access to the Pacific Ocean. Prince Rupert is the western terminus of the CN Rail system, providing access to important North American markets in the US Midwest and South, as well as an exit point for Canadian exports. Both the Prince Rupert and Kitimat ports offer a strong locational advantage to Asian markets. And the communities of the Planning Area are linked to each other, the rest of the province and the US by a complex and well-established system of ferry, commercial ship and air operations.

Geographic remoteness and limited access are daily facts of life for the communities of the LRMP Plan area. While this is seen as a benefit by some residents, and an obstacle to development by others, the communities' need for a functioning transportation system to bring in food, supplies and medical care, and to support economic activity, is the same as anywhere else in BC. But it appears that BC's remote and smaller communities sometimes have less of a voice in decisions pertaining to provincial government spending.

The challenge is for the communities of the Planning Area to preserve and improve on their transportation infrastructure to sustain social and economic activity, and to adapt it to meet emerging needs. For example,

- in Prince Rupert the Fairview container terminal is expected to quadruple its capacity to accommodate much larger volumes of exports from throughout North America;

- developing aquaculture operations on the Central Coast need more cost-effective and reliable water transportation to ship their products to market; and,

- in Kitimat, two new industrial ports are proposed, and as many as four pipelines, to supply Alberta oilfield operations, and to export Liquid Natural Gas.

It is important to recognize and support the planned expansion of the Prince Rupert and Kitimat ports as fundamental pillars for coastal and northern BC economic development. But while these major projects have garnered the most attention from provincial media and policy makers, the fact remains that *all* the communities of the Planning Area have an essential role in the transportation network, and that initiatives in these communities also require support.

► **Issue: No coastal BC transportation plan exists**

There is no overarching transportation strategy for coastal BC. At the BC level there is a 2003 transportation plan, which is somewhat dated, and makes reference to only a few coastal BC projects. The BC Ports Strategy, completed by the Ministry of Small Business and Economic Development and the Ministry of Transportation in 2005, focused on the province's major trading ports. It is our understanding that the Ministry of Transportation and Infrastructure is presently working on a strategy for BC's "medium-sized" ports. There is also the Northern Service Strategy of BC Ferries cited earlier, which is not yet available to the public, and the BC Ferries' Service Plan. In addition, the Port of Prince Rupert likely has a rolling strategy and/or business plan.

While BC lacks a coastal transportation plan, several good examples exist, including the Southeast Alaska Transportation Plan produced by the Alaska Department of Transportation.[59] This is directly relevant to the North and Central Coast because the Alaska Panhandle has the same type of high reliance on ferries, in combination with a few roads and air services, albeit a more populous area.

The North Coast and Central Coast LRMP and government-to-government negotiations on land and resource use plans are examples of where First Nations and the BC Government have jointly participated in collaborative planning endeavours. These strategies and plans are piecemeal but they are undertaken in their own silos for the most part and do not feature synergies between communities, industries and transportation modes. Coordinating resources -- whether money, skill or knowledge -- in the transportation area will be important in coastal BC, where there is not the margin for error that exists in large metropolitan areas.

Good transportation links have historically played a fundamental role in the economic and social wellbeing of coastal BC. However, the economy of the region has undergone major structural change in recent years with the downsizing of the coastal forest industry, re-structuring and consolidation in the fishing industry, emergence of nature-based tourism featuring fly-in lodges, resurgence of large cruise ship tourism, the attempt by BC Ferries to find a private sector operator for its northern routes, land use plans providing for many more new protected areas and Ecosystem Based Management, and the diversification and re-positioning of Port of Prince Rupert. In addition, there are community-based changes with First Nation communities seeking new economic endeavours and partnerships led by a new generation of leadership.

A collaborative, multi-stakeholder transportation strategy-making initiative focused on coastal BC would allow for a dialogue and sharing of information

---

[59] Available at
http://www.dot.state.ak.us/stwdplng/projectinfo/ser/newwave/SATP_FINAL/assets/FinalSATP.pdf

and lead to strategies that could guide transportation infrastructure providers and services, communities, businesses and investors to incorporate into their own thinking and plans. In the longer term, it may also be beneficial for the coastal regions to participate in the international Pacific Coast Collaboration.

► **Issue: Barge service is high cost and infrequent**

A complex system of privately owned tugs, barges, and log booms ply the waters of the LRMP Plan area, transporting supplies, fuel and freight into the area from Vancouver Island and the Lower Mainland, and shipping resource products out. The barges hauling food, fuel, seafood, forest products, building materials, equipment and other supplies often serve multiple customers, including combinations of community and corporate customers. When corporate activity slumps in a sector, such as the current situation with the coastal forest industry, deliveries to communities are negatively affected, as there is less frequent service and higher cost (if a barge is not full).

BC Ferries carries a limited amount of freight on its three northern services but does not see hauling freight and supplies as part of its strategic mandate. BC Ferries does a good job of moving people and vehicles along the major and minor "marine highways" of the coast. The marine highways are also there, however, for moving freight and products, not fundamentally dissimilar to the role of other highways around the province.

Almost all barges -- the water borne trucks -- which travel into the Planning Area from the south return empty, which means less frequent delivery of food and other supplies to communities, higher transportation costs/lower net revenues for contractors of barge services, and higher costs for buyers of barged products if part or all of those costs can be passed on, and ultimately less cost competitive products from the North and Central Coast. The rising and fluctuating cost of fuel raises the risk for new private investment to those communities that need more frequent service.

This is a "bad business model" according to a major barge operator on the Central and North Coast. Some amelioration would come from arranging partially filled or full backhauls. However this answer generally requires considerable planning among shippers at both ends of the route. It requires knowing and planning for customers' monthly volume shipments.

A solution likely lies with a collaborative endeavour, possibly a linkage between a new northern ferry services provider from the private sector and one or more barge operators, whereby information on space and bookings on ferries and barges is monitored and distributed from a centralized web-based system.

There are presently several coast-, Vancouver Island-, and Lower Mainland-based barge companies serving the Central and North Coast, and we understand

that one is now contemplating the opportunity of a new scheduled run from Campbell River to Prince Rupert in 2009 assuming the market proves to be a productive venture.

Reducing the number of empty backhauls, increasing barge frequency to communities, and lowering barge service cost will require BC Government leadership because of the multiplicity of players and interests embedded in this issue. This issue is not in need of a government solution and is not a matter of imposing a new arrangement but of leading a collaborative process that improves services and reduces costs. The issue is a marine "trucking" problem and will have to be solved by marine freight transport providers and their many customers but the lack of one or two major players means a BC Government facilitation and leadership role would be helpful.

► <u>Issue:</u>   The Canadian Marine Act puts Prince Rupert at a financial disadvantage compared to US ports

In the early years of 2000, the Port of Prince Rupert was focused on a few commodities, grain, coal and pulp, and throughput volumes of each were declining. The SCI pulp mill closed in June 2001 and its new owners, first New Skeena Forest Products and then Sun Wave, were unable to get it re-financed and operational. The last Tumbler Ridge coal mine, Bullmoose, closed in 2003.

In the wake of these difficult economic events, Port of Prince Rupert leadership, in collaboration with CN Rail, BC Government and other partners, embarked on diversifying its services and customers by planning and organizing the financing for large cruise ship and container terminals and obtaining a major operator for the new container terminal. With the openings of the new cruise ship terminal for the 2004 Alaska cruise season and Phase I of the Fairview Terminal in October 2007, many new economic opportunities became available for Prince Rupert area residents and BC communities along the CN Rail line. New or expanded tourism excursions have started, and there is greatly heightened awareness of the importance and potential of tourism as an economic generator. New port jobs have been created in container movement, customs, security, and logistics. A new inter-modal facility was built at Prince George, and port management continues to make arrangements to expand port facilities, such as the Canpotex potash terminal project.

There have been some recent setbacks in the port's expansion. Westpac moved the proposed location of its LNG project to Texada Island in the Strait of Georgia in early 2007[60] and the current worldwide economic difficulties has led to a delay in going forward with the Phase II expansion of the container

---

[60] Calgary headquartered Westpac LNG entered into a Memorandum of Understanding with the Prince Rupert Port Authority for a 30-year lease in mid 2006 for a liquified natural gas terminal on Ridley Island but cancelled the project in early 2007 and announced that it instead planned to build a LNG terminal and associated gas-fired electricity generating plant on Texada Island in the Strait of Georgia.

terminal, but this turbulence is to be expected in a complex endeavour that involves very large capital investments and global economic linkages.

The course that the Port of Prince Rupert is on holds tremendous promise for the whole of the Prince Rupert area based on transportation-supported economic activity. It has led to the resurrection of the Tsimshian Access project, bringing together leadership of the area's Aboriginal and non-Aboriginal communities on an unprecedented scale. It has contributed to the City of Prince Rupert spearheading an initiative to build a multi-modal terminal in the Fairview area, which would service a few ferries and VIA Rail. Some of these developments could lead to an airport expansion and air freight services.

The BC Government's Rural Development Secretariat has a manager in Prince Rupert focused on working with local governments, First Nations and transportation operations to anchor and enhance the Northern Gateway concept.

The port's success is the lynchpin to the blossoming of Prince Rupert as a transportation hub. A focus on what the port needs to increase the number of its facilities and financial stability should be paramount amongst all parties that have some influence over its success (and, the flip side of the coin, lack thereof). A Canadian Port Authority (CPA) is an unusual economic beast, lots of potential but needs help from many external parties to achieve its strategic objectives.

A serious concern is the competitiveness position of the port vis a vis its main competitors and the parties that most influence that competitiveness. The Port of Prince Rupert has several natural competitive advantages and has built others in cooperation with partners, such as its efficiency in container handling. But the port has serious financial disadvantages compared to American west coast ports because of the federal government's *Canada Marine Act*. These were enumerated in the SWOT analysis. And simply getting financial contributions on a project-by-project basis from the federal government is an insufficient answer given that American ports obtain project monies from their federal government too.

► **Issue:** **Tsimshian Access Project is the North Coast's #1 transportation priority**

At a November 2008 Community to Community Forum, representatives of Lax Kw'alaams, Gitxaala, Metlakatla and Gitga'at First Nations, City of Prince Rupert, District of Port Edward, and Skeena Queen Charlottes Regional District agreed that the "Tsimshian Access" project was the primary infrastructure priority for the region.

The project entails the following key elements:

- gravel road linking Metlakatla to the south end of the Tuck Inlet Road along a north-south diagonal through the Tsimshian Peninsula;

- bridge across narrow Venn Passage between Metlakatla and Digby Island;

- gravel road from the Venn Passage bridge to Metlakatla;

- gravel road from the bridge to the Prince Rupert Airport;

- re-constructed road from Prince Rupert Airport to a new Digby Island ferry dock;

- construction of new ferry terminal at Tobey Point on Digby Island;

- paved road connecting new Digby Island ferry terminal to the existing airport road; and

- a new ferry dock for the Fairview area south of Prince Rupert that serves BC Ferries, VIA Rail, Alaska Marine Highway System and the Digby Island ferry.

The project is expected to significantly improve access between Prince Rupert, Lax Kw'alaams and Metlakatla, as well as passenger access to/from the Prince Rupert Airport. It would also generate new economic development opportunities, such as inter-modal transport between Prince Rupert Airport and Port of Prince Rupert, and the possible re-location of Alaska Marine Highway System terminal to Lax Kw'alaams.

A major study on a similar project was commissioned by City of Prince Rupert and completed in 2003 but was not pursued. The current project cost estimate is $100 million. This latest proposal has the advantage of full commitments from the leadership of all communities in the Prince Rupert area. These communities intend to soon issue a Request for Proposal to update the engineering requirements and cost estimates of the 2003 study.

► <u>Issue</u>: **High costs and poor access have negative social effects**

Residents of the North and Central Coast have some of the lowest average personal incomes in the province. The present economic downturn will likely exacerbate this situation. And yet, for many, travel to Williams Lake, Port Hardy or Vancouver by ferry, air or car is necessary to obtain health or dental care. This poses a burden on poorer families. Under these circumstances, few will fly unless necessary, making the ferry and road system their first choice.

For those remote island communities that depend on BC Ferries or water taxi for food delivery (Klemtu,Wuikinuxv, Hartley Bay) reduced or unreliable service during the winter months means less availability of fresh produce, dairy products, and other kind of food. Consequently, many residents have poorer diets, and diabetes presents a more widespread problem than it did in the

past. Depleted salmon stocks means that it is more difficult for First Nation people to rely on their traditional diet.

Poor visibility and unreliable weather during the winter, and night flying restrictions in the smaller airports of the Planning Area, have delayed several air evacuation operations in the case of acute medical emergencies. In a few very serious cases (most recently Bella Bella) this has resulted in the death of the patient while awaiting transportation to a hospital elsewhere.

Unreliable or infrequent passenger service also makes it difficult to attract high quality teacher to remote communities. Students have difficulty accessing education services outside of their community and the Central and North Coast, and for those who leave to attend school elsewhere, it often makes it difficult to return home during holidays.

► **Issue: Transportation improvements should meet EBM environmental objectives**

Taking account of the environmental impacts of transportation is a fundamental consideration on coastal BC as elsewhere. One of the Port of Prince Rupert's advantages is its shorter sea shipping distance to Asia resulting in less fuel consumption and associated GHG emissions. However its train travel distance to mid-America locations is greater than from West Coast ports located further south. It has to be factored in that shipping by sea is less GHG emissions intensive per tonne km (about 15g per tonne-km) than shipping by train (about 30g), plane (about 500g) and diesel truck (about 75g). Ferry travel is a form of public transit so the GHG emissions per passenger km can often be lower than auto or airplane travel. What mode has less impact has to be examined on a case specific basis. The proposal to re-locate the Lax Kw'alaams ferry terminal to Aero Point could result in lower GHG emissions, for example. The Tsimshian Access project could lead to higher GHG emissions, which would be one of the trade-offs for new economic development opportunities it would bring.

Drivers in the LRMP Plan area depend on fossil fuel, and many drive larger cars, SUVs and trucks with a high rate of gas consumption. The EBM WG has raised the question whether the communities of the study area could be encouraged to use smaller cars or those that depend on alternative fuels such as electricity or hydrogen.

There is some limited availability of electric or small cars in the LRMP Plan area. In Bella Coola, a local eco-lodge offers the use of a SmartCar to its guests. In Hartley Bay, a few golf carts are used to travel short distances for reasons of practicality.

BC Hydro has initiated a pilot project to use hydrogen to supplement renewably generated power in Bella Coola. This is the first of its kind in BC. As a non-integrated community,[61] Bella Coola was selected as a test case for using a hydrogen energy system in remote communities. The project will generate hydrogen using an electrolyser at times when there is a surplus of renewably generated electricity at a local run-of-river generating station. The hydrogen fuel will be stored, and later used during peak demand times. The objective is to reduce diesel fuel consumption during peak periods.

As part of this initiative, a hydrogen fuelled truck will also be operated in Bella Coola by BC Hydro staff. It has already been manufactured, and is expected to be in use by the summer of 2009.

Based on our consultation with representatives from the Central and North Coast, there does not yet appear to be a lot of interest in adopting non-conventional vehicles, especially due to their higher costs at this juncture. Residents in Prince Rupert, Kitimat and Bella Coola use their vehicles to travel long distances, transport goods and for recreational purposes. In the island communities, capacious cars and trucks are often necessary for a multitude of purposes. These communities could be receptive to having the choice of smaller and/or alternative fuel cars but are unlikely to abandon larger vehicles for the foreseeable future.

Demand for alternative fuel cars is rising in North America, and the past few years have seen more research into this mode of transportation and the adoption of alternative fuel vehicles, sometimes on a widespread community level. Some examples include the following.

- **Berlin** has launched the world's largest community effort for climate-friendly electric cars, with the goal of having 100 electric Smart Cars on the streets by the end of 2009. Five hundred power-points will be installed, where electric cars can charge up.

- As part of its plan to be **Scotland's** first "green power" island, the remote Island of Eigg plans to install solar thermal panels in several homes, investing in wood fuel business, and buy six electric vehicles to be leased to residents.

- A developer in **Fargo**, North Dakota is working with Global Electrical Motorcars to incorporate neighborhood electric vehicles as a part of the green focus of its master planned communities.

Should a community choose to adopt alternative-fuel vehicles as part of a move towards greater environmental sustainability, it would need to undertake a comparison of technologies and costs. In the case of electric cars, the load would need to be assessed and the required infrastructure, including the installation of power points, along with the GHG emissions implications if the local electrical source is diesel fueled. Given that hydrogen is still an

---

[61] That is, not integrated to BC Hydro main power grid.

emergent technology, the most reliable option at this time is the electric vehicle.

4.2   Community Level Issues

4.2.1   Central Coast

► **Issue: Bella Coola's Highway 20 connection requires additional maintenance investment.** The mountainous portion of Highway 20 between the Bella Coola Valley and Anahim Lake has seen few improvements since its completion in the 1950s. While Heckman pass was upgraded approximately five years ago, there are signs that this part of the road is slowly washing away. The provincial government does not devote enough funds to the maintenance and rehabilitation of this road. In the event of catastrophic road damage on this portion of Highway, there would be no other road route out of the Bella Coola Valley.

Local residents have identified some railway corridors into the Bella Coola Valley surveyed early in the last century that could be used as alternative routes in the event of permanent disruption to Highway 20. But at least two of these corridors – the Atnarko and Precipice routes – have significant grizzy, fish or other environmental values, and an environmental assessment of alternative routes informed by modern engineering capability would be one of the first steps in determining which route is feasible.

► **Issue: There is no public bus service between Bella Coola and Williams Lake.** The lack of public bus service into and out of the Bella Coola Valley poses a financial burden on those who must travel by car to Williams Lake or beyond at their own expense. For those residents who do not have cars, this is an even more onerous burden. Because the Bella Coola Hospital no longer undertakes obstetric procedures, expectant mothers and their families must drive to Williams Lake and stay in a hotel at their own expense for the final part of their pregnancy.   A public bus service would provide a reliable source of transportation and reduce personal travel costs out of the Valley for many. It would also reduce the overall level of GHG and particulate matter emissions from vehicles.

► **Issue: The Klemtu, Shearwater and Ocean Falls docks are not large enough to accommodate the large new ships** in the Northern ferry fleet (e.g., Northern Expedition). We are informed by BC Ferries that a smaller vessel will be used to service these ports of call on Route 10, but as yet there is no clarification how it will work.

► **Issue: The Klemtu ferry terminal cannot accept large vessels and does not allow for stops in poor weather**. The terminal configuration limits truck length.

► **Issue:** **Kingcome lacks road access to its dock.** Kingcome residents must travel down the Kingcome River for approximately 3 km to reach its dock. The community has a proposal for a road to connect Kingcome and its dock and improve the dock.

► **Issue:** **There is not enough coordination between BC Ferries' summer schedule for Route 40, and the tourism industry of the Central Coast**. Route 40 sailings from Port Hardy arrive in Bella Bella and Bella Coola either late at night, or early the morning. Travellers are more inclined to keep driving if they disembark at an early hour, rather than stay and enjoy the surroundings. This is lost business to Central Coast tourism operators.

► **Issue:** **The Bella Coola airport runway could be flooded if nearby river dykes give way**. While the provincial government periodically inspects the dykes, they do not maintain or service them. The Central Coast Regional District (airport owner) does not have dyking authority or the funds to improve the dyke system.

► **Issue:** **Bella Bella's airport needs to be upgraded.** A larger terminal is required to accommodate summer volume of traffic, and night lights are needed on the runway to accommodate emergency night landings.

4.2.2 North Coast and Kitimat

► **Issue:** **Aero Point dock in Prince Rupert would offer cost and environmental advantages**

The Prince Rupert terminus for the Spirit of Lax Kw'alaams ferry is the Fairview area dock of the Digby Island ferry that is owned and operated by the City of Prince Rupert. The Lax Kw'alaams band council and administration has been attempting since 2003 to be allowed to construct a new dock at Aero Point, located on Crown Land adjacent to the Seal Cove float plane base at the northern end of Prince Rupert. The benefits of this site would be a shorter ferry distance (with associated reduction in emissions and greenhouse gases), access to public transit at Seal Cove, and the opportunity for the Lax Kw'alaams to use the ferry to transport freight thereby lowering the community's outlays for barge services. The project cost is estimated as approximately $3.5 million and Lax Kw'alaams band has already bought some equipment for the new dock.

► **Issue:** **Small craft harbour improvements are needed at Kitkatla**

Despite a population of approximately 500, Kitkatla has a limited transportation infrastructure that affects its community economic development. It is serviced twice per week by the Tsimshian Storm passenger ferry service based in Prince Rupert and two to three times daily by North Pacific Seaplanes. BC Ferries vessels travelling between Port Hardy and Prince

Rupert on Route 10 (Inside Passage) does not stop between these two communities during the summer season. During the winter, the Route 10 service stops at Bella Bella, Klemtu, Ocean Falls, and Shearwater, as well as Prince Rupert and Port Hardy.

Since Kitkatla does not have BC Ferries service, it does not have direct access to tourists who travel on the Route 10 ferry, can not move vehicles between Kitkatla and Prince Rupert except by barge, and must use barge service to move freight between the two communities.

The band council and administration (through the Gitxaala Harbour Authority) has a small float dock that requires upgrading. A fuel station is needed along with improvements to the float dock and dredging of the channel leading into the dock which services the float plane service, fish boats, and personal vessels.

Although the consolidation of the fishing industry and licence buyback programs have severely curtailed the number of fishing vessels in remote communities like Kitkatla and reduced demand for capacity and services at small craft harbours, they continue to fulfill a very important role in these communities like Kitkatla where transportation infrastructure and services is limited.

► **Issue: Route 10 has potential to increase its capacity utilization during the summer**

The summer season on Route 10 service between Prince Rupert and Port Hardy starts in mid-May and continues through mid-September. The ferry makes 3.5 round trips per week during this season. These are the peak traffic months for this service as vacation trips outnumber other trip purposes and non-coastal residents outnumber coastal residents (see the tables below).

TABLE 4-1: TRIP PURPOSE OF PASSENGERS ON BC FERRIES ROUTE 10 SERVICE

	Work Related	Vacation	Shopping	Visiting
Summer	6%	86%	1%	6%
Winter	34%	34%	15%	19%

Source: BC Ferries 2003

TABLE 4-2:   RESIDENCY OF PASSENGERS ON BC FERRIES ROUTE 10

	Coastal BC	Other BC	Other Canada	United States	International
Summer	8%	20%	10%	18%	44%
Winter	62%	31%	1%	4%	2%

Source: BC Ferries 2003

The surge in summer visitors on Route 10 is due in part to Prince Rupert's links to several Alaska communities via the Alaska Marine Highway System, as well as VIA Rail's *Skeena* service from Jasper and Easter Canada. BC Ferries can also take credit for their improved efforts to market the vacation experiences that are possible on their Northern Services, including some joint marketing with other entities, such as VIA Rail.

Since the coming on-stream of the Northlands cruise ship terminal, the tourism excursion products in the Prince Rupert area have been expanded and enhanced by local businesspersons and others to meet the demand from the new visitors. The cruise ship business has heightened the awareness of the local business community and community leadership in the current and potential contribution of tourism to the area's wellbeing.

Starting in summer season 2009, the new Northern Expedition will go into service on this route, offering 55 staterooms and an expanded range of food services, offering a cruise vacation experience. Local tourism leaders see an increase in weekly round trips by BC Ferries, in combination with additional marketing of this wilderness cruise vacation experience by BC Ferries and local partners, as a tremendous business opportunity to increase ferry capacity utilization.

► **Issue: New Fairview Bay terminal and dock needed**

The City of Prince Rupert owns and operates the dock for its Digby Island ferry service, which is also used by the *Spirit of Lax Kw'alaams* ferry service, and the dock and terminal used by the Alaska Marine Highway Ferry Service. The Digby Island ferry dock will be re-built as part of the proposed Tsimshian Access project, and the Lax Kw'alaams band council wants to build a dock for its ferry service at Aero Point (discussed earlier) and leave Fairview Bay.

The City of Prince Rupert plans to divest itself of ownership and maintenance of the Digby Island ferry dock and the Alaska ferry dock and terminal, from which it earns no revenue. It has proposed the construction of a terminal and dock facility at Fairview Bay that would accommodate BC Ferries, VIA Rail, a

new Digby Island ferry and the Alaska ferry, in the event that it does not re-locate its Prince Rupert area terminal to Lax Kw'alaams. The new facility would be multi-modal as it would also accommodate VIA Rail's Skeena service. The intent is to create an attractive gateway facility experience for arriving and departing passengers on ferries and passenger trains.

The City of Prince Rupert, Port of Prince Rupert, and BC Ferries have signed a MOU to plan a "transportation hub" at Fairview.[62]

► <u>Issue</u>: **High piloting costs for vessels traveling to Kitimat**

Kitimat's distant location from the pilot boarding station on Triple Island creates extra shipping costs for vessels traveling to its Port. This arises from the need to take on and pay two pilots, so that neither works more than an 8 hour shift. One City of Kitimat representative has pointed out that this is an inequitable arrangement that gives the Prince Rupert Port a cost advantage. A pilot boarding station located at some mid way point, or a station dedicated to the Kitimat Port only would reduce these operating costs by reducing travel time, and therefore making it unnecessary to take on two pilots en route to Kitimat.

---

[62] Alaska Marine Highway System has been invited to join this endeavour.

5.   RECOMMENDATIONS

5.1   General Strategic Recommendations

► **Begin lobbying federal and provincial government <u>now</u> for funding to undertake "shovel-ready" infrastructure projects.** As part of its economic stimulus program, the federal government has earmarked funds to accelerate and expand infrastructure. Some major projects are moving forward, but the kind of infrastructure projects that will proceed at the provincial or municipal level will likely be repair work with 2009 starts and 2010 finishes.[63]

We have identified some **priority short-term projects** as follows (Note that these are described more fully in Issues, and later in this section.):

- new ferry and passenger rail terminal in Fairview area (Prince Rupert)[64]

- new ferry dock at Aero Point (Prince Rupert);

- improvements to Kitkatla's float dock (small float dock related projects are possible throughout the coast);

- larger and safer ferry terminal in Klemtu;

- larger airport terminal and night time runway lights in Bella Bella;

- improvements to Highway 20 between Anahim Lake and Bella Coola Valley, in particular Heckman Pass;

- implementation of a public bus service from Bella Coola to Williams Lake; and,

- pedestrian sidewalk or walkway between Nuxalk Subdivision 4 with the town of Bella Coola.

► **Create a coastal transportation investment strategy for longer term projects**

As cited earlier, there is no overarching Coastal BC Transportation Strategy or Plan. Our recommendation is that the BC Ministry of Transportation and Infrastructure be asked to spearhead a multi-stakeholder strategy-making process for coastal transportation. We envision the strategy being undertaken within a roundtable format by a coalition group that includes First Nations, BC Government, federal government, BC Ferries, municipalities, regional districts, and industry and NGO representatives.

Any regional transportation plan should take into account the role that the North Coast and Kitimat will play in the proposed Northwest Corridor strategy.

---

[63] *National Post*, January 31, 2009.
[64] This project requires additional planning, considerable collaboration and is connected to the Tsimshian Access project so it may not be feasible to undertake within the short term.

Because geography makes it difficult for the Central Coast to plug into this initiative, any connection the Central Coast makes to broader, province-wide initiatives will likely be on the basis of its reputation as a model for environmental stewardship. One option may be in pursuing a future active role in the Pacific Coast Collaborative as a way to gain recognition and leverage for the Central Coast. The Pacific Coast Collaborative (PCC) was formed by the governments of BC, Alaska, Washington, Oregon and California to synchronize efforts at preserving coastal ecology, and addresses issues related to transportation and other common concerns. By virtue of its resources and the extensive work that has been done pertaining to these matters, the Central Coast will be a logical future participant.

We recommend the following as some **priority longer-term transportation infrastructure investments** (all discussed later in this section):

- more frequent ferry service to Central Coast communities during the winter months;

- more frequent ferry service on Route 10 between Port Hardy and Prince Rupert during the summer months;

- Tsimshian Access project;

- expansion of terminals and attraction of additional port services at Port of Prince Rupert;

- improved collaboration in coastal barging network;

- identify and assess an alternative route to Highway 20 between Bella Coola Valley and Anahim Lake; and,

- improve Bella Coola's dyking system, including near the airport.

► **Lobby the federal and provincial governments for funding to implement the longer-term investment items of the Coastal Transportation Investment Strategy.** Once the coalition group has identified the priority projects, they can make a case to both levels of government as to their social and economic development merits. While the provincial government makes decisions about the distribution of funds, the coalition can enlist federal support through agencies such as Indian and Northern Affairs Canada or DFO Small Craft Harbours. The coalition may require the assistance of a specialized consultant in packaging their proposal, and advancing and lobbying for their transportation funding request.

► **BC Ferries should make public the Northern Service Strategy as soon as possible.**

This would help lessen public uncertainty about the future of the Northern Service, and likely help communities and investors on the Central and North

Coast to move forward with their decisions and plans for projects that are influenced by the amount and quality of ferry service.

► **Develop a regional ferry advocacy organization**

The municipalities, regional districts and First Nation communities of the LRMP Plan area need to work together to strengthen their collective voice, and find ways to jointly improve the regional transportation system. They can do this by combining their efforts on regional transportation matters, and establishing a regional organization to research and advocate their interests on ferry matters.

Ferry services are the primary mode for moving local residents between coastal communities and bringing tourists into the region. Although the re-structure of BC Ferries into a BC Government-owned private company, the creation of a BC Ferries Commissioner, publication of more information about service levels and costs, continued support of Ferry Advisory Committees and more community-engaged senior BC Ferries executives have all helped to improve relationships between communities and BC Ferries, service plans and strategies are all subject to discussions between BC Ferries and the BC Government, especially BC Ministry of Transportation and Infrastructure.

The communities along the coast have many common interests on ferry matters, many of which are complex. It is probably easy to see communities as somewhat in competition for scarce dollars to enhance ferry infrastructure and services but the benefits outweigh the costs of working collaboratively. Communities will always be "outgunned" in terms of knowledge and experience on ferry matters by BC Ferries and BC Ministry of Transportation and Infrastructure but by acting collectively they can pool resources, including political will, monies, access to trusts and foundations, and local knowledge about ferry matters.

► **Lobby federal ministers for changes to Canada Marine Act**

The BC Government (possibly through the Northern Gateway Manager), Port of Prince Rupert, CN Rail and Prince Rupert area communities should work to formulate a list of changes to the Canada Marine Act that could enhance the Prince Rupert Port's competitiveness vis a vis American west coast ports. The west coast American ports are tough competitors and handle the bulk of the volume on the west coast of North America. The Port of Prince Rupert needs to be unshackled from statutory constraints if it is to compete to the maximum of its abilities.

This is a well known issue[65] and a lone Canadian Port Authority (Port of Prince Rupert) is not likely to obtain statutory exemptions from this legislation

---

[65] See BC Ports Strategy 2005

through some lobbying of federal ministers. It is a serious matter for the Prince Rupert and provincial economies, so proactive measures on this file by its stakeholders, possibly acting in conjunction with one or more other Canadian Port Authorities, will keep the matter's head above the crowd of legislative proposals seeking attention from Ottawa decision-makers.

Prince Rupert's first rate competitive advantages were recognized in the Pacific Gateway initiative that the federal government has unequivocally supported. There has been extensive research on the benefits of the Pacific Gateway measures, their challenges, and how to compete as a west coast port on a global scale.[66]

► **Hire an economic development manager in Prince Rupert**

The Prince Rupert Economic Development Corporation is without an economic development manager. The Prince Rupert area communities are under severe financial stress because of property tax owing by the pulp mill's new owners, diminished industrial property tax base and the ongoing cost of financially supporting the Digby Island ferry. Hiring an economic development manager may be difficult to fund from the area's property tax base at this time.

There are, however, many economic development initiatives underway on the North Coast, many with a transportation element. The EBM Working Group's successor, the Land and Resource Forum, might consider approaching the Northern Development Initiative and other funding sources, in concert with local governments, to have the economic development manager position and function fully funded by these outside entities for a period of time.

► **Undertake socio-economic impact and benefit-cost studies of additional summer and winter service on Route 10 (Inside Passage)**

The communities of the Central Coast should initiate a business and social development case for more frequent service during the winter months. The results would be presented to the Ministry of Transportation and Infrastructure as a prelude to discussing a greater transportation subsidy to the region. The analysis would include a comparison of financial costs with the social benefits (quantified where possible) that would be generated in terms of health, safety, improved business opportunities, greater mobility, etc. at the local, regional and provincial levels, as well as any distributional effects.

On the North Coast, BC Ferries, the BC Ministry of Tourism, Culture and the Arts and Tourism and the City Prince Rupert should consider sponsoring an in-depth analysis of the costs and benefits of additional ferry capacity on the

---

[66] See International Conference on Gateways and Corridors held in Vancouver on May 2-4, 2007, http://www.gateway-corridor.com/vancouverconference/conferenceprogram.htm

Route 10 summer service. The costs and benefits should be looked at from the perspectives of each of BC Ferries, the Prince Rupert area and the province.

The Northern Development Initiative or another funding source could possibly supply Tourism Prince Rupert's share of this project. It would be advisable to have the projects carried out by consultants with substantive experience in costing ferry services in order to assure a maximum level of credibility with all interested parties. This experience may have to be partly found outside BC.

► **Formulate a plan to coordinate coastal barging services**

Reducing commercial transportation costs will be essential in ensuring that service is more frequent and reliable in coastal BC.   There are several barge service providers, including large concerns and smaller, local operations on the coast and many customers that range from band councils, to logging companies, to floating resort operators, to individual residents, etc.   There is the seemingly intractable backhaul issue, reduced forestry operations, higher fuel costs, environmental concerns about GHG emissions, and other matters that exert pressures on barge service providers and users. The barging industry has many of the same features as the highway trucking industry, including how intense competition can yield unhappy results for all in the long-term.

There is no one fix that can bring down the cost of coastal barge services, but industry and community stakeholders can pool their knowledge, experience and ideas to coordinate barging and possibly reduce costs. One idea might be a centralized web-based system that helps with information sharing about schedules, departure and arrival times, available capacity and service requirements from users. A large integrated operation can provide this type of IT-based service on an internal corporate basis but it is more difficult to do so in a situation of multiple competitive service providers and multiple relatively small customers.

The process could begin with a Joint Land and Resource Forum workshop on barging issues and perhaps lead to the implementation of one or two collaborative initiatives. Many of the barge service issues on the coast are not new, but the knowledge and expertise exists to attack some of them. The Land and Resource Forum can provide the impetus and leadership for a collaborative attempt to tackle some of these issues.

► **Conduct feasibility study for a Kitimat-based passenger and freight ferry service**

The Haisla First Nation have researched and prepared a concept plan for a passenger and freight ferry service between Kitimat, Hartley Bay, Klemtu and Bella Bella. The Haisla staff person who prepared the concept plan used a

consultant in making some inquiries and researching the idea. When approached, BC Ferries refused to engage in a discussion about the proposal.

The Joint Land and Resource Forum should consider supporting the Haisla First Nation in seeking funding to undertake a feasibility study and associated business plan (if the feasibility work indicates proceeding to the business plan is worthwhile). This more in-depth research would identify the parameters of the project and its associated risks so that all stakeholders could make a sound stop/go decision.

Kitimat is closer by half to Hartley Bay than is Prince Rupert and possibly has some distance advantages for Klemtu and Bella Bella from Port Hardy. To date, however there has been no regular service between Kitimat and any of these communities although there is some contracted boat service from Hartley Bay and Kitimat.

5.2   Community Level Recommendations

► **Obtain funding for improvements to Kitkatla's float dock**

Kitkatla has relatively limited transportation infrastructure and services for a community of its population, about 500. Its small craft harbour performs several functions in the community and its current needs for a fuel station, float dock improvements and channel dredging are important when transportation infrastructure for community wellbeing and economic development is limited. The likely cost of these works is probably small when thought of in terms of cost per resident of Kitkatla. A likely candidate for funding is DFO's Small Craft Harbours.

► **Build a new ferry dock at Aero Point**

Lax Kw'alaams band council and administration has sought cooperation from the BC Government for several years to facilitate the location of a new ferry dock at Aero Point. The BC Government should get behind this project as soon as possible given its obvious economic, social and environmental benefits for the Lax Kw'alaams and Prince Rupert communities.

► **Support planning efforts in Prince Rupert and area**, specifically:

• Tsimshian Access project being spearheaded by North Coast communities.

• planned expansion of terminals and attraction of additional port services in Port of Prince Rupert;

• Undertake a gap analysis and feasibility study of services to improve the capacity and service quality of the Prince Rupert Airport to act as a trans-shipment facility for fish and seafood products.

► **Develop a larger and safer ferry terminal in Klemtu**, so that it can receive any BC Ferry vessel operating in the North.

► **Establish a scheduled public bus between Bella Coola Valley and Williams Lake.** The Central Coast School District enrolment has declined to the point that there is now at least one surplus bus that might be used for this endeavor. But liability concerns do not allow the School District to operate a public bus service, and the initiative would have to be taken by a private operator or another public agency, for example the Coastal Health Authority. This could also be a shared cost arrangement between the two communities. It may be cost-effective to use the same model as Beeline Couriers, whose drivers en route from William Lake to Bella Coola (or in the other direction) meet at Anahim Lake to switch vehicles.

There is also a shortage of qualified bus drivers in the Bella Coola Valley. Offering a bus driver training course at North Island College in Bella Coola could ameliorate this shortage, and create local employment.

► **Enlarge Bella Bella's airport terminal.** The terminal is often overcrowded during the summer months, because of a significant increase in the number of sportsfishers and charter landings traveling to the Central Coast. Bella Bella has unsuccessfully lobbied the provincial and federal government for funds to upgrade the terminal. The community has also requested runway lights to accommodate emergency night landings.

► **Protect and improve Bella Coola Valley's transportation infrastructure**

More provincial government funding is needed to upgrade and maintain the section of Highway 20 between Williams Lake and Bella Coola, particularly Heckman's Pass, reputed to be the steepest road in British Columbia's provincial system.

The proposed emergency routes out of the Bella Coola Valley need to be assessed, and process of discontinuance initiated if the selected route is still on railroad lands. This could be a lengthy process, and will certainly need to cross environmental hurdles, but it could expedite and pave the way for the construction of a future emergency road if in the event of a catastrophic failure on Highway 20.

If Bella Coola is to become a dyking authority responsible for its own maintenance and upgrades of dykes near the airport and elsewhere, it will require provincial government funding.

A pedestrian sidewalk or walkway should be built on Highway 20 to connect Nuxalk Subdivision 4 with the town of Bella Coola in order to enhance pedestrian safety.

► **Improve access to Kingcome and Health Bay communities**

Provide road to dock access for Kingcome and water taxi service for Health Bay communities in the Mount Waddington Regional District.

BIBLIOGRAPHY

Alaska Department of Transportation and Public Facilities Planning Team, Southeast Alaska Transportation Plan, August 2004. (http://www.dot.state.ak.us/stwdplng/projectinfo/ser/newwave/SATP_FINAL/assets/FinalSATP.pdf)

BC Ferries Commission website. (http://www.bcferrycommission.com/asp_plan_milestones.html)

BC Ferries, Northern Services Advisory Committee, Meeting Minutes, see http://www.bcferries.com/about/public_consult/bcf_facs/

BC Ferries, Northern Strategy Public Consultant Report, 2004.

BC Ferries, Northern Strategy Public Consultation, April 2004, presentation.

BC Ferries, Second Performance Term Alternative Service Providers Plan, March 27, 2008.

BC Ministry of Transportation, Opening Up BC A Transportation Plan for British Columbia, 2003.

BC Statistics, Community Facts.

BC Statistics, Population and projections.

Central Coast BC website. (http://www.centralcoastbc.com/oweekeno/intro.asp

Central Coast Regional District website. Economic Development Operating Plan. (http://www.centralcoastbc.com/ccrd/docs/Economic%20Development%20Documents/Bella%20Coola%20Valley%20Economic%20Development%20Operating%20Plan%20-%202007%20Q2%20Report.pdf)

City of Prince Rupert, Building the City of Prince Rupert, February 23, 2007, presented to BC Government.

Clover Point Cartographics Ltd., 2004, Forest and Fisheries Tourism Opportunities Study for the North Coast Forest District, prepared for BC Ministry of Sustainable Resource Management.

Colledge Transportation Consulting and Jonathan Seymour Associates, BC Coastal Cruise Strategy, June 2003, prepared for Cruise BC.

Colledge Transportation Consulting, Economic Development Research Group and WESTAC, Northwest Trade and Manufacturing Opportunities Study, 2007, Northern Development Initiative.

Cox, J., The Cruise Industry and Bitish Columbia, April 2005, presentation to Cruise BC Annual General Meeting.

Crane Management Consultants Ltd. and Strategic Land Policy and Legislation Branch, Ministry of Agriculture and Lands, Socio-Economic Assessment for the North Coast Land Use Plan: Government-to-Government Recommendations, December 2007, prepared for BC Ministry of Agriculture and Lands.

Daystar Marketing, Colledge Transportation Consulting, Economic Development Research Group. Northwest Corridor Manufacturing Strategy, Prepared for Northern Development Initiatives Trust and Canadian Manufacturers and Exporters, June 2008.

District of Kitimat website. (http://city.kitimat.bc.ca/)

Economic Analysis Directorate Policy Group, Government of Canada, Transportation in Canada 2007 An Overview, May 2008.

Economic Growth Solutions Inc., Prince Rupert / Port Edward Container Port Business Opportunities Study, July 2005, prepared for Prince Rupert and Port Edward Economic Development Corporation.

Ecotrust Canada website A Strategy to Build a Wholly New Industry on the North Coast. (http://www.ecotrust.ca/ocean/a-strategy-build-a-wholly-new-industry-north-coast)

Grant Thornton, 2002, Preliminary Economic Impact Assessment Bella Coola and Port Hardy Service, prepared for BC Ferry Corporation.

Grant Thornton, LLP, 2002, Preliminary Economic Impact Assessment Route 10: Inside Passage Summer Day Cruise, prepared for BC Ferry Corporation.

Grant Thornton, LLP, 2002, Preliminary Economic Impact Assessment Route 11: Prince Rupert to Skidegate Summer Service, prepared for BC Ferry Corporation.

Harbour Authority Association of BC website. (http://www.haa.bc.ca/index.php)

Heiltsuk Nation, 15 Year Transportation, Safety and Distribution Management and Development Plan 2005/07 – 2017/19.

Industry Advisory Group, Pacific Gateway Strategy Action Plan, April 2006.

InterVISTAS Consulting, Prince George Intermodal Cargo, November 2006, prepared for Initiatives Prince George.

Kingzett Professional Services and AXYS Environmental Consulting, First Nations Shellfish Aquaculture Regional Business Strategy, 2002.

LSM Consulting and Resource Matters, Kitimat: Unleashing the Potential, August 2003.

MacConnachie, S., Hillier, J., and Butterfield, S., Marine Use Analysis of the Pacific North Coast Integrated Management Area, 2007, Fisheries and Oceans Canada.

Marlyn Chisholm & Associates. Tourism Opportunity Strategy for the Mid Coast Forest District of British Columbia, Prepared for BC Ministry of Sustainable Resource Management April 2001.

Mathews, R., Globalization and Neo-Liberalism as Contexts for Rural Development: The Case of Lax Kw'alaams, 2008, presentation.

Northwest Corridor Development Corporation, Northwest Corridor Strategic Profile, June 2008.

Office of the Auditor General of British Columbia, Decemner 2006, Changing Course: A New Directiion for British Columbia's Coastal Ferry System.

Pacific Analytics Inc. and Harris, D., 2004, Revitalizing BC's Coastal Economy: A New Economic Vision for the North and Central Coast and Haida Gwaii, prepared for Rainforest Solutions.

Pierce Lefebvre Consulting and Stuart Gale and Associates, 2004, Marine Ecotouism Marine Cruising Operator, prepared for Economic Development Branch, BC Ministry of Sustainable Resource Management.

Pierce Lefebvre Consulting, EBM Working Group – Inventory of Economic Development Initiatives in the BC Central and North Coast Region. (May 31, 2008.)

Ray, R. and Williams, P. (2003) *Potential Spatial and Management Implications of Cruise Ship Passenger Activity on the Development of the North Coast LRMP*. Centre for Tourism Policy and Research, School of Resource and Environmental Management, Simon Fraser.

Redstone Strategy Group LLC (2003) *Coastal BC Economic Development Phase Two Working Draft*. Prepared for CIII Forum.

Rubus Ecoscience Alliance, Benchmark Consulting, Westcoast CED Consulting, Indicators of Human Well-Being for the Central and North Coast: Review and Recommendations for Schedules C and G, August 30, 2007l.

Skeena Native Development Society (2006) *Pacific Northwest Labour Market Census*.

Statistics Canada, 2006 Community Profiles.

Sypher, Alberta-British Columbia Northern Airports Strategy, September 2006, prepared for Government of BC and Government of Alberta.

Tourism British Columbia, Research and Planning, 2007 Prince Rupert Visitor Study Findings, June 2008.

Transport Canada Policy Research Branch, Strategic Policy Directorate, Policy Group, Directory of Pacific Coast Container Ports, Terminals, and Services - TP 14711E (January 2007).

Transport Canada, Departmental Evaluation Services, Evaluation of Transport Canada's Grant to the Province of British Columbia for the Provision of Ferry Services, June 2005.

Tretheway, M., Emerging Gateway Opportunities in Northern BC, February 2006, presentation to 2006 Winter Opportunities Summit.

Trillium Business Strategies, Assessment of Potential Road and Ferry Improvements Digby Island/Tsimshian Peninsula Access Project, March 2004, Prepared for City of Prince Rupert.

Western Provincial Transportation Ministers' Council, Western Canada Transportation Infrastructure Strategy: A Time for Vision and Leadership, March 2005.

Wilson, G. and Summerville, T., Transformation, Transportation or Speculation? The Prince Rupert Container Port and its Impact on Northern British Columbia. Canadian Political Science Review 2(4) December 2008: 1-13.

CONTACTS

Anderson, David. Economic Development Office, Central Coast Regional District.

Baschynski, Dave. Ministry of Transportation and Infrastructure.

Bazille, Michel. COO, Bella Coola General Hospital.

Bedard, Ron. Administrator, District of Port Edward.

Bergmann, Karl. Area C Director, Skeena Queen Charlotte Regional District.

Birch, Max. Government of Canada DFO, Fleet Operations, Victoria.

Borovoy, Phil. Cruise Development Officer, Port of Prince Rupert.

Brandt, Roger. Owner of Hagensborg Mercantile. Bella Coola.

Brown, Cameron. Heiltsuk First Nation.

Cardinall, Dan. Consultant, Gitga'at First Nation.

Carney, Tom. Bella Coola Harbour Authority.

Chamberlin, Bob. Chief. Kwicksutaineuk-aw-kwaw-ah-mish First Nation.

Chrabasz, Karen. BC Ferries.

Davidge, Rick. Chief Administrative Officer. District of Port Hardy.

Delay, Peter. West Coast Helicopters.

Dennis, Betsey. Coast Tsimshian Resources Ltd.

Drury, Wayne. Band Administrator, Lax Kw'alaams Band.

Fraser, Gerry. Manager of Sustainable Forestry, Interfor.

Gillis, Mike. North Arm Transportation, Richmond.

Gladden, Janet. District of Kitimat.

Greba, Larry Kitasoo Development Corporation.

Grenander, Hans. Project Manager, Central & North Coast Transportation Study.   Bella Coola.

Grodecki, Robert. Assistant Administrator, Metlakatla Band.

Grzybowski, Alex. Executive Director, EBM Working Group. North Saanich.

Gunderson, Pat. Interior Roads, Bella Coola.

Hamilton, Andrew. Manager, Business Development, Port of Prince Rupert.

Handrahan, Kirk. Executive Director, Infrastructure Division and Marine, Ministry of Transportation and Infrastructure.

Hayes, George.

Henn, Denise. VIA Rail.

Hewlitt, Diane. Manager of Economic Promotion & Investor Services, District of Kitimat.

Hilland, Russ. Central Coast School District Trustee.

Howie, Gord. CAO, City of Prince Rupert.

Ignas, Mark. Business Manager, Gitxaala Band.

Irwin, Paul. Pacific Coast Collaborative Commission.

Johnson, Frank. Chief Wuikinuxv First Nation, Wuikinuxv.

Lawson, Leo. Capital Project Manager. Heiltsuk First Nation.

Leighton, Ryan. Metlakatla Development Corporation.

Lukuku, Whitney. Land and Resources Manager, Haisla Band.

McGregor, Dan. Vancouver Island Helicopters.

Marshall, Dave. Consultant and former BC Ferries' executive.

Morgan, Kelly. Band Manager, Wuikinuxv First Nation, Oweeneko.

Muro, Brad. Aero Trading, Prince Rupert.

Nylen, Kathy. Bella Coola Valley Tourism.

Olsen, Lukas. West Coast Tug.

Passmore, Linda. Scarlett Point Seafoods, Pt. Hardy.

Perry, Denise. Superintendent of Central Coast School District #49.

Richardson, Dale. Northern Gateway Manager, BC Ministry of Community Development.

Scott, Grant.

Sissons, Laurie. Bella Coola Air.

Siwallis, Spencer. Chief, Nuxalk Nation, Bella Coola.

Slett, Marilyn. Chief of Heiltsuk First Nation.

Smart, Rosemary. Owner & operator of Eagle Lodge, Bella Coola.

Smith, Steve. Owner Crest Hotel and Pacific Inn, Prince Rupert.

Starr, Percy. Kitasoo First Nation.

Storey, Gene. General Manager, North Pacific Seaplanes.

Waugh, Stephen. Acting President, Bella Coola Valley Tourism.

Widsten, Craig. Shearwater Marina and Resort.

Wilson, Brendon. Operations Manager, Coast Tsimshian Resources Ltd.

Wilson, Sandy. BC Seafood, Bella Coola.

Wishart, Bruce. Executive Director, Prince Rupert Tourism Association.

Wong, Joe. Powertech, Manager, Infrastructure Systems.