

Transportation Plan of Nord-du-Québec

Technical Study

Public transportation and public services

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ACRONYMS

CPR	Cardiopulmonary Resuscitation
CTQ	Commission des transports du Québec
EVAQ	Évacuation aéromédicale du Québec
ISQ	Institut de la statistique du Québec
KRG	Kativik Regional Government
KRPF	Kativik Regional Police Force
MEQ	Ministère de l'Éducation du Québec
MRC	Municipalité régionale de comté
MSSS	Ministère de la Santé et des Services sociaux
MTQ	Ministère des Transports du Québec
OPHQ	Office des personnes handicapées du Québec
QPDB	Quebec Planning and Development Bureau
RRSSS	Régie régionale de la Santé et des Services sociaux
SDBJ	Société de développement de la Baie James

NOTICE TO THE READER

Unless otherwise indicated by the context, the following expressions and words mean:

"Technical study" This technical study has no scientific pretence. It is not an opportunity study by any means, nor an exhaustive research on the subject. It aims at drawing up an overview of the situation in the specific area of transportation in Nord-du-Québec. Although the study is internal, the Ministère is nonetheless pleased to make it available to the reader.

"The Ministère" The Ministère des Transports du Québec

In the text, words in italics are found in the glossary; except for laws, regulations and document titles.

SUMMARY

This study was conducted as part of the development of the *Transportation Plan of du Nord-du-Québec*. It aims at establishing the characteristics of the region's public transportation and emergency public services. It is not usual to address the issue of emergency public services in the transportation plans developed by the Ministère des Transports du Québec. However, this choice was made following the concerns expressed by the local people and with a view to establish a link between the transportation modes and services.

It must also be mentioned that there are several isolated villages in the Nord-du-Québec region. These villages have no road links with other municipal territories. Therefore, all outside transportation must be made either by air or sea or by informal land networks.

Concerning the transportation modes examined in the study, the main stakeholders in the region are the Ministère des Transports du Québec, the school boards and the regional health and social services boards.

PROFILE OF THE SERVICES

The only urban public transportation mode found in all the thousand Aboriginal villages of the region is school transportation. However, as indicated by its name, it is only available to a very specific clientele: elementary and secondary schools students.

In the James Bay territory, a para-transit service is available but only in the neighbor towns of Chibougamau and Chapais. In Nunavik, each village is equipped with a para-transit vehicle.

In the James Bay territory, there are several types of bus transportation: interurban routes, chartered transportation and contract services. Interurban routes serve a varied clientele. Chartered transportation is intended to recreation groups or tourists whereas contract transportation is for the employees of important natural resources exploitation or energy companies. Four bus transportation companies have a business place in the James Bay territory. Since the Nunavik villages are not connected by road, interurban bus transportation service cannot be provided.

There is no urban public transportation by bus in the Nord-du-Québec towns and Aboriginal villages.

Taxi services are quite widely used in the region. In the James Bay territory, the main towns and Cree villages have taxi services in their area, except for the communities of Chisasibi and Waskaganish, where there are over 1,000 people. The same is true for Nunavik, where Kuujuaq and Inukjuak have taxi services, but not Puvirnituq that has 1,320 people. Globally, Taxi services are available to 61% of the Nord-du-Québec population.

Ambulance services are not available in all the towns and Aboriginal villages of the region. The James Bay territory is the best served although three Cree communities have neither an ambulance service nor first response personnel. In Nunavik, there are only two ambulances, in Kuujuaq and in Puvirnituk, operated by CPR trained people. A shuttle service is available on request in the small Nunavik communities to transport people to the airport. This transportation service provides no specialized support for the sick.

Police services are provided for all towns and villages. The Sûreté du Québec oversees the entire region from four stations, located in Chibougamau, Matagami, Radisson and Kuujuaq. The Cree and Inuit villages are serviced by their own police force.

Finally, fire-fighting services are found in all the Nunavik villages and the Cree villages and towns of the James Bay territory.

OPPORTUNITIES AND CONSTRAINTS

The opportunities and constraints of public transportation and public services in Nord-du-Québec have been addressed from three angles: services provided and operations, networks and infrastructures, and demand and users.

One constraint is common to the whole process: the lack of a detailed knowledge of the transportation needs of the Nord-du-Québec residents. This study, and the whole development process of the regional transportation plan, is a contribution to filling this gap.

Public services and their operations are better organized where the needs are deemed essential and the demand is greater. With respect to public transportation, only school transportation is found in all the towns and Aboriginal villages. Concerning public services, emergency pre-hospitalization transportation services are provided, but there is room for improving their quality and availability. As for police and fire-fighting services, they are well distributed across the region.

The surface transport networks and infrastructures in the Nord-du-Québec region do not connect all the municipalities and villages: the Inuit villages have no road links among themselves and with the rest of the territory. Because of the long distances, the low potential traffic levels, and the lack of resource development projects or major economic development projects, building roads in the territory is not a priority for the moment.

The users' needs and characteristics as well as the demand are not well known in the Nord-du-Québec region. The demographic model used by MTQ foresees that the high birth rate prevailing in the Aboriginal communities will lead to a growth and rejuvenation of the village populations. Therefore the need for school transportation will very likely increase. Informal collective transportation modes (ridesharing) are very common in these communities as well.

STRATEGIC POLICIES AND ACTION LEADS

The strategic policies and action leads which can be recommended are limited by the lack of knowledge of the local people. Following is what can be recommended for now. The strategic policies have been grouped into three broad segments: development of knowledge, assessment of the needs and resources, and implementation.

Knowledge development:

- Acquire a better knowledge of the people's needs through specific surveys;
- Acquire a better knowledge of the available resources (namely: infrastructures, mobile equipment, funding).

Needs and resources assessment:

- Follow-up on the regional economic development and remain receptive to new transportation needs;
- Assess the needs of the Nunavik people for interurban transportation and submit suitable solutions;
- Acknowledge and support local public transportation initiatives;
- Value partnership initiatives in and between the town and Aboriginal villages;
- Assess the potential partnerships and collaborations of the Ministère des Transports with the Ministère de l'Éducation, Ministère de la Sécurité publique and the Ministère de la Santé et des Services sociaux and their regional representatives.

Implementation:

- As much as possible, increase the pooling of services and maximize the use of available resources;
- Ensure the sustainable development of public transportation in the region, through interventions suited to the size of the territory, the low-density population and the isolation of the communities.

Action leads:

- Assess possible ways to maximize the use of school vehicles;
- Follow-up on the development of the demand for para-transit vehicles to transport people in wheelchairs;
- Maintain a priority for disabled and mobility impaired persons while providing services to other types of clients as well;
- Set up a working committee to address urban transportation needs in the main towns and Aboriginal villages;
- Ensure the follow-up of the applications for assistance to the development of public transport in rural areas, where the Politique nationale de la ruralité applies, i.e. to Villebois and Valcanton in southern James Bay;
- Suggest to the companies that provide bus transportation to their employees to expand their services to other clientele;
- Set up a consultation table with the local stakeholders to validate the opportunity to develop bus transportation service links between the Cree villages and the south of the province;
- Analyse the feasibility of making an exception for emergency bus transportation requests in remote regions;
- Verify the true impact of the Air Fare Reduction Program on the number of users and in relation to the fluctuating rates;
- Follow-up on the development projects that could impact on the construction of road links;
- Monitor the development of the taxi service offer and examine all requests to modify the regulations with a view to support and facilitate the implementation of the service;
- Monitor the implementation of the recommendations set out in the Dicaire report, prepared for MSSS;
- Make sure there is an interrelation between the various fire-fighting services in the territory. This applies to police services as well.

INTRODUCTION

This study is part of the development process of the *Transportation Plan of Nord-du-Québec*.

First of all, this document aims at presenting an overall picture and analysis of the various features of public transportation and public services in Nord-du-Québec, keeping in view the specific socio-economic context of the region. The following elements are addressed:

- the role and responsibilities of the stakeholders;
- the networks;
- the infrastructures;
- the users;
- the services provided;
- the demand;
- the operations.

Public transportation and public services include:

- school transportation;
- para-transit (elderly and disabled people);
- public transit (urban, suburban and *chartered*);
- taxi;
- emergency public services (ambulance, police and fire-fighting services).

The study addresses mainly surface transportation modes (roads). Train and marine passenger transportation modes are little or minimally used in the region and, therefore, will only be briefly covered. The air transportation mode is briefly addressed as well, from the perspective of the programs facilitating its access where there is no alternate surface transport. A comprehensive study specifically covers this transportation mode.

Also, a comparison is made between the ambulance services provided in the Nord-du-Québec, Abitibi-Témiscamingue and Côte-Nord regions.

Secondly, the strengths and constraints of public transportation and public services in the Nord-du-Québec region are identified and analyzed.

Finally, based on the collected information and the analyses carried out, strategic policies and action leads are suggested in relation to public transportation and public services in the region.

1. ELEMENTS OF THE SOCIO-ECONOMIC AND GEOGRAPHIC CONTEXT

The territory under study is the Nord-du-Québec administrative region. It covers a surface area of 840,000 km²¹, which represents 55% of the province.

However, the region is the least populated in the province, with its 39,450 inhabitants accounting for 0.5% of the provincial population. The demographic projections conducted in 2000 by MTQ foresaw a significant 12% increase of the regional population for the 1996-2021 period². Nevertheless, following the 2001 census projection readjustments foresee a slight decrease of 4%. However, it is important to note that for the Aboriginal populations, at the exception of Kuujjuarapik and Ujé-Bougoumou, an increase varies from 5.1% to 76.7%. For the same period of 1996-2021, we estimate a decrease of the Jamesians populations of 30.8% to 57.2% following the area³. A noteworthy difference is the age average of the Nord-du-Québec population that is at 28.3 years old compared to years old for Québec⁴.

Economically, the region relies mainly on natural resources development activities: hydroelectricity, mines and forests. The companies that are active in these three activity sectors are the main employers in the region, and particularly so in the James Bay territory. The mining and energy sectors could be more developed. In the last few years, for that matter, the region has been targeted for mining exploration which could generate new development projects⁵. With regard to energy production operations, an agreement was signed in February 2002 between the Gouvernement du Québec and the Crees of Québec and that will permit, among other things, to carry out large hydroelectric projects. In Nunavik, studies of the hydroelectric potential will begin in 2002, following the agreement signed with the Inuit in April 2002.

The public sector also represents an important employer. For the Inuit people, this sector accounts for 70% of the jobs. For the Crees, the percentage is approximately 60% while it is 18% for the *Jamesians*⁶.

The population's economic indicators show an unemployment rate generally above the provincial average and a lower average income. In the last years, the unemployment rate has gone down. However, the number of jobs has also decreased by 1,900 jobs between 1991 and 2000. Generally speaking, this means that no jobs were created⁷.

The territory is not divided into Municipalité régionale de comté as the rest of Québec but into two territories called Nunavik and James Bay. The former refers to the area

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- 1 Ministère des Transports du Québec, (2001) *Transportation Plan of Nord-du-Québec, Work Program*.
 - 2 Ministère des Transports du Québec, Desgagnés, P. (1999) ES-3: projections de la population et des ménages, 1996-2021: le modèle, sa mise en œuvre et les résultats.
 - 3 Ministère des Transports du Québec, Desgagnés, P. (2002) Rajustement des projections démographiques du MTQ en fonction des chiffres du recensement de 2001.
 - 4 Ministère de l'Industrie et du Commerce, (2001) *Profil économique de la région Nord-du-Québec* (10) Website: <http://www.mic.gouv.qc.ca/PME-REG/regions/index.htm>, p. 1-2.
 - 5 Ministère des Régions, (2001) Politique de développement du Nord-du-Québec.
 - 6 Ibid., p. 9.
 - 7 Ibid., p. 2-2 à 2-4.

located north of the 55th parallel; it is administered by the Kativik Regional Government (KRG). The latter, located south of the 55th parallel, is mainly administered by the Municipalité de la Baie James and the Band Councils for the Cree territories.

Several types of entities are present in the territory: municipality (m), town (t), Cree village (cv), northern village (nv) and Naskapi village (kv). The table on the next page shows a list of the various territorial entities, their surface area and the population occupying them, if any. It can be observed that the population is mainly concentrated in the southern part of the region.

TABLE 1

OCCUPIED MUNICIPAL TERRITORIES, POPULATIONS AND SURFACE AREAS, 2001

Municipalities and villages	Type	Population	Surface area km ²
James Bay territory			
Municipalité de la Baie James: Radisson, Valcanton and Villebois	M	2,191	333,255.55
Chapais	V	1,921	62.78
Chibougamau	V	8,503	1,041.97
Lebel-sur-Quévillon	V	3,337	44.74
Matagami	V	2,063	64.75
Chisasibi	VC	3,432	809.06
Eastmain	VC	544	154.78
Mistissini	VC	2,441	854.33
Nemaska	VC	526	97.38
Waskaganish	VC	1,660	489.77
Waswanipi	VC	1,236	364.93
Wemindji	VC	994	326.60
Oujé-Bougoumou	VC	526	2.70
Total James Bay	13	29,374	337,569.34
Nunavik territory			
Whapmagoostui	VC	632	202.49
Kuujuarapik	VN	585	7.46
Umiujaq	VN	327	25.50
Inukjuak	VN	1,387	64.45
Kangiqsualujuaq	VN	726	36.23
Kuujuaq	VN	2,099	390.33
Tasiujaq	VN	233	68.08
Aupaluk	VN	206	32.93
Kangirsuk	VN	390	58.73
Quaqtaq	VN	274	26.49
Puvirnituq	VN	1,327	111.00
Akulivik	VN	457	79.37
Kangiqsuaq	VN	479	12.47
Salluit	VN	1,057	14.33
Ivujivik	VN	284	36.59
Kawawachikamach	VK	581*	284.70
Total Nunavik	16	10,463	1,451.15
Nord-du-Québec	29	39,837	339,020.49

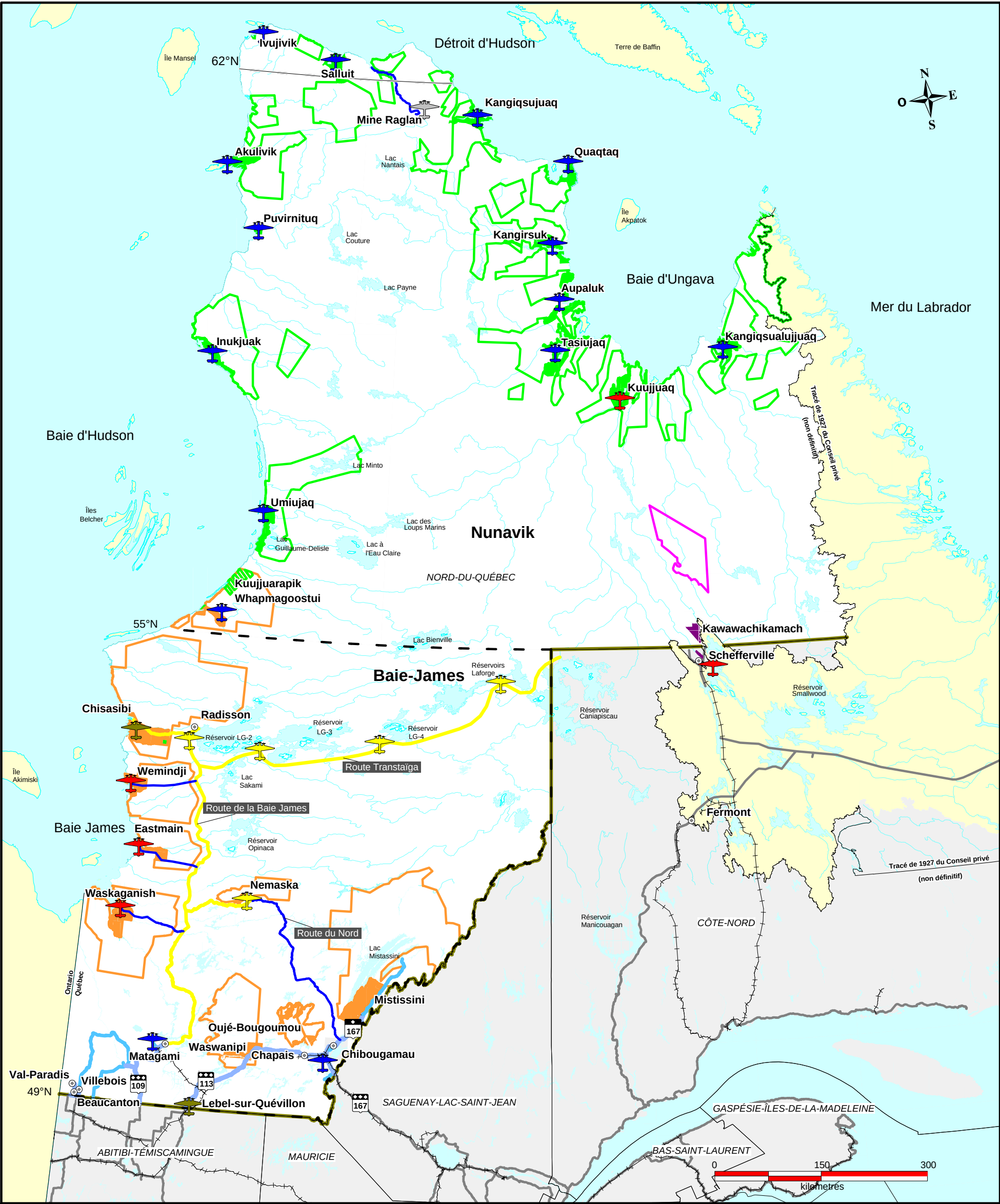
Sources: Commission des transports du Québec, (2001) *Agglomérations et régions de taxi par MRC ou territoire équivalent*

Website: http://www.ctq.gouv.qc.ca/secteurs/taxi/portraits_taxi.htm

Ministère des Affaires municipales, (2001) *Répertoire des municipalités du Québec*, Website.

<http://www.mam.gouv.qc.ca/mambin/repert1>

* The Naskapis live on 1A--N land located in the Côte-Nord region.



Direction de la coordination
du Nord-du-Québec

Transportation Plan of Nord-du-Québec

Public transport and public services

Source:
- Ministère des Transports du Québec

Basic map:
- Ministère des Ressources naturelles,
digital maps, scale 1 : 250,000 and 1 : 8,000,000

October 2002

Map 1: Territory under study

Road

Financial responsibility

- MTQ - National, regional, collector
- MTQ - Access and mining
- MTQ - Other roads
- Hydro-Québec

Others

- Railway
- City or town

Administrative limit

- Municipalité de la Baie James
- South limit Nord-du-Québec region
- Other Québec regions

Airport

Financial responsibility

- Ministère des Transports
- Transports Canada
- Hydro-Québec
- Band council / Municipality
- Other

Land regime

- | (category I) | (category II) |
|--------------|---------------|
| Cree | Cree |
| Inuit | Inuit |
| Naskapi | Naskapi |

Note: The limits of the Oujé-Bougoumou territory are defined under the Cree-Québec Agreement of February 7, 2002.

2. THE STAKEHOLDERS

The following sections identify the main stakeholders in public transportation and public services in the Nord-du-Québec region and their specific mandates and activities. In addition, the main components of the legislative framework and the intervention tools of each stakeholder are described.

2.1 Ministère des Transports du Québec

The Ministère des Transports du Québec (MTQ) plays several roles in the transportation activities, and notably in public transportation and public services. It simultaneously plays the roles of main regulator, developer and owner as well as that of a subsidizing agency.

Generally, under the *Loi sur les transports*⁸, the role of Ministère des Transports du Québec is to draw up plans of the transport systems for its territory, establish the list of costs and fares, and take the measures to improve transportation through co-ordination and integration.

The Ministère is also responsible for establishing the standards for the use and safety of transportation services as well as for issuing permits for taxi, school transportation, and public transit and para-transit services. With regard to taxi, public transit, para-transit and bus transportation, it can also enact certain regulations on pricing (taxi and bus) and financing, as the case may be. The Commission des transports du Québec and the Société de l'assurance automobile du Québec are in charge of the operational administration of these regulations.

2.1.1 Urban and suburban public transportation

MTQ implements public transportation subsidy programs across Québec that are designed for urban and suburban public transportation and para-transit services. Urban public transportation benefits from a *Programme d'aide au transport en commun* (Public Transit Assistance Program). However, to be eligible to government assistance, the municipalities or groups of municipalities providing public transit services must have more than 20,000 inhabitants⁹. Now, the populations of the Nord-du-Québec municipalities are all under 10,000 people; therefore, they are not eligible. In addition, the grouping of the municipalities and villages is not possible, given the distances between them.

8 Gouvernement du Québec, (April 1, 2000) *Transport Act*, Chapter T-12, p. 2.

9 Ministère des Transports du Québec, (2001) *Information programs, Transport en commun*, Website: <http://www.mtq.gouv.qc.ca/ministere/programmes/c11.htm>

2.1.2 Para-transit

With regard to para-transit services, the public transit corporations have the obligation to set up a para-transit service and are therefore eligible to funding. All other municipalities who wish to set up this type of service may do so, and they are eligible to the subsidy program under the same conditions. Namely, the service must be provided five days per week and the required fare must be equivalent to the regular public transit fare. A development plan must be submitted to MTQ to demonstrate the need for a para-transit service five days or more per week, based on the characteristics of the potential clientele. MTQ pays for a large part of the eligible costs¹⁰.

2.1.3 Air Fare Reduction Program

MTQ also finances the Air Fare Reduction Program for remote regions that is applicable to Nunavik since September 2001. This program is intended to the Nunavik residents who travel to any destination for personal reasons, except for holidays outside Québec. These people are entitled to a refund equal to 30% of the ticket price, up to a maximum of \$75 one way and \$150 return. The maximum yearly refund per person is \$450¹¹.

2.1.4 Infrastructures

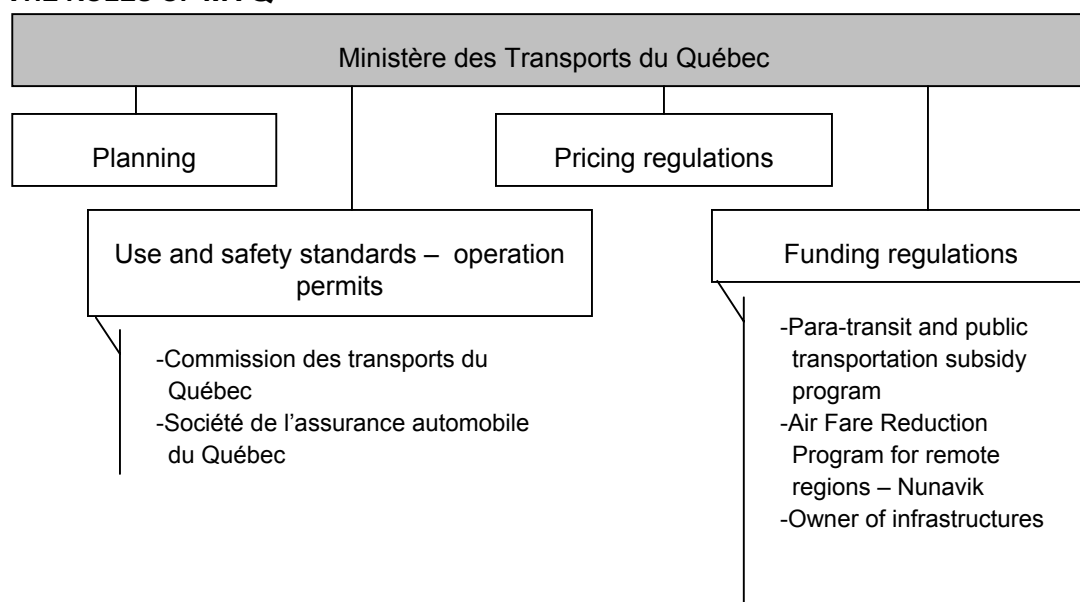
Finally, MTQ also acts as owner of several types of transport infrastructures in Nord-du-Québec. Namely, 15 of the 26 airports of the region are under its responsibility and approximately half the length of the road network of the region¹².

10 Ministère des Transports du Québec, (2001) *Information programs, Transport en commun*, Website: <http://www.mtq.gouv.qc.ca/ministere/programmes/c11.htm>

11 Ministère des Transports du Québec, (2001) Appendix B, Modalités du programme de réduction des tarifs aériens pour les résidents du Nunavik, p. 1.

12 Ministère des Transports du Québec, (2001) *Plan de transport du Nord-du-Québec, Programme de travail*, p. 9.

FIGURE 1
THE ROLES OF MTQ



2.2 Ministère de l'Éducation du Québec

Since 1998, the Ministère de l'Éducation du Québec (MEQ) is responsible for the funding of school transportation. The *Education Act*, the *Education Act for Cree, Inuit and Naskapi Native Persons* and the *Act respecting private education* have assigned to MEQ the authority to fund the school transportation provided by school boards¹³.

MEQ must enact the budget rules that determine the subsidies to be allocated to the school boards providing school transportation. Different rules apply to the special status school boards which include the Kativik and Cree school boards.

The subsidies cover daily transportation, from home to school, inter-school transportation for students who must attend mandatory classes in other institutions, and the periodical transportation of students who do not transit daily but on week-ends or at another frequency because of the distance.

For the territories with no colleges or universities, a subsidy program has been initiated for the youth who wish to continue their studies. MEQ funds this program especially intended to the Kativik and Cree school boards and the Naskapi community school in

13 Gouvernement du Québec, (June 14, 2000) *Education Act*, Chapter I-13.3, 137 pages.
Gouvernement du Québec, (June 14, 2000) *Education Act for Cree, Inuit and Naskapi Native Persons*, Chapter I-14, 145 pages.
Gouvernement du Québec, (June 14, 2000) *Act respecting private education*, Chapter I-13.3, 137 pages.

Kawawachikamach¹⁴. These programs provide for monthly passes to public transit in the host town and three return trips per year between the village of origin and the place of study¹⁵.

2.3 School boards

School boards are responsible for providing school transportation in their territory. According to the *Education Act* and the *Student Transportation Regulations*, they have the authority to decide on the access conditions to the service, its length, the establishment of the routes and the standards of discipline. School boards may also provide para-transit services for disabled students attending their institutions¹⁶.

There are four school boards in the Nord-du-Québec region: the Commission scolaire de la Baie-James (francophone), the Cree School Board (special status), the Kativik School Board (special status) and the Central Quebec School Board (anglophone). These school boards have different vocations. The Kativik School Board approximately covers the entire Nunavik territory. The Commission scolaire de la Baie-James serves the non Aboriginal municipalities located in the James Bay territory, and the Cree School Board serves the Cree communities in the territory. The Central Québec School Board serves Chibougamau and Kawawachikamach (Naskapi village) only¹⁷.

2.4 Ministère de la Santé et des Services sociaux, regional health and social services boards and institutions

This department has the responsibility to ensure that all Québécois have access to health services and social services pursuant to the *Public Health Protection Act* and the *Act respecting health services and social services for Cree native persons*¹⁸. The *Act respecting health services and social services for Cree native persons* does not specify any particular powers or rights for the Cree communities with regard to ambulance transportation.

The MSSS (Ministère de la Santé et des Services sociaux) is in charge of granting permits, defining service zones, establishing prices and standards for services, transportation, funding, staff qualification, and ambulance service safety. In this respect, the *Public Health Protection Act* establishes the rules for the ambulance service zones.

14 Kativik School Board, (2001), *Guide to Postsecondary Studies*, Website: http://www.kativik.qc.ca/français/our_services/postsec/postsec_guide_f.html

15 Tremblay, C., (2001), Personal communication, Ministère de l'Éducation du Québec.

16 Gouvernement du Québec, (June 14, 2000), *Education Act*, Chapter I-13.3, 137 pages.

Gouvernement du Québec, (2001), *Student Transportation Regulations*, c. I-13.3, r. 7, 11 pages.

17 Ministère de l'Éducation du Québec, (2001), Commissions scolaires de la région administrative du Nord-du-Québec (10), Website: <http://www.meq.gouv.qc.ca/ADMINIST/OrgScol/r10/cs.htm>

18 Gouvernement du Québec, (April 1, 2000), *Public Health Protection Act*, Chapter P-35, 22 pages.

Gouvernement du Québec, (April 1, 2000), *Act respecting health services and social services for Cree native persons*, Chapter S-5, 78 pages.

A maximum number of vehicles is determined in relation to various criteria such as population size and distances to be traveled.

But these powers have actually been delegated to the regional health and social services boards (regional boards). These agencies do the planning and managing of the emergency and ambulance transportation services. The role of the regional boards is to organize the pre-hospitalization system in their territory, including ambulance transportation, according to the above mentioned acts. They must submit a plan to this effect to the Minister of Health and Social Services.

Three regional health and social services boards serve the Nord-du-Québec territory: the James Bay Regional Board, the Cree Regional Board and the Inuit Regional Board¹⁹.

The health and social services network has four institutions and 34 facilities in the Nord-du-Québec territory²⁰. With regard to transportation, the hospitals may also make agreements with transports other than ambulances for people with non urgent needs, for example, taxis or para-transit companies.

Through MSSS, the Gouvernement du Québec offers in remote regions, an aeromedical evacuation service called EVAQ. This service is available when the health condition or the lack of other transportation modes justifies the need for a quick, secure and immediate transfer to a specialized hospital center. The patients from Matagami, Chibougamau, the Municipalité de la Baie James, Kuujuaq and Puvirnituq are sent to Montréal²¹.

19 The official names of these regional boards are: - "Cree Board of Health and Social services of James Bay" - "Nunavik Regional Board of Health and Social services". But to simplify understanding in the text, the name used will be regional board.

20 Ministère de la Santé et des Services sociaux, (2001), *General information, networks*, Website: <http://www.msss.gouv.qc.ca/f/reseau/index.htm>

21 Secrétariat du Conseil du Trésor, (2001), *Évacuations aéromédicales par avion du Québec (EVAQ) (hospital plane)* Website: http://www.formulaire.gouv.qc.ca/cgi/affiche_doc.cgi?dossier=3589&table=0

2.5 Federal government

The federal government does not have a direct role to play in public transit and public services. However, the Nord-du-Québec region includes several parcels of Aboriginal land that are under federal authority. Therefore, the federal government's assistance in the economic development of these regions is important and may apply to some aspects of people mobility (for example, para-transit services in the Inuit villages), although there are presently no specific programs.

Transport Canada has certain responsibilities with regard to marine, rail and air transportation. The federal government has the power to build infrastructures for these transportation modes and to regulate the service offers in relation to these. In fact, four of the region's airports are owned by the federal: the Kuujuaq, Wemindji, Eastmain and Waskaganish airports. The Band Councils are responsible for the operations of the James Bay airports while the Kativik Regional Government is in charge of the operations for the Kuujuaq airport, the only one in Nunavik under federal jurisdiction²².

2.6 Public security – fire-fighting services and police force

In Nord-du-Québec, police services are mainly ensured by the Kativik Regional Police Force in the Nunavik region and by the Cree Police and the Sûreté du Québec in the James Bay region. The first two police forces are mainly responsible for patrol and security in the Aboriginal communities and villages. The roles of these police forces are not defined by the *Police Act*²³ as is the case for the other police forces in Québec.

The Sûreté du Québec is also present in the territory. It has the same role as in the rest of Québec: keep peace, order and public security, and prevent crime and offences against the Québec laws²⁴. It must, in particular, supplement to police intervention needs when the services are not provided or when the local or regional police force cannot meet certain needs²⁵. Its intervention is more limited in Nunavik though, where its role is mainly one of support in certain investigations. In the James Bay territory, it also patrols the municipalities (municipalité de la Baie James, Chapais, Chibougamau, Lebel-sur-Quévillon, Matagami) and the provincial roads connecting them. An important part of the work consists in controlling the use of explosives across the territory.

The Royal Canadian Mounted Police has no station nor staff in this territory, but it remains available if necessary. It contributes notably to drug-related investigations and problems.

22 Paquette, F., (2001), Personal communication, Transport Canada, Québec region.

23 Gouvernement du Québec, (June 16, 2000), *Police Act*, Chapter 12, 77 pages.

24 Ministère de la Sécurité publique, (2001), Sûreté du Québec, Website: <http://www.msp.gouv.qc.ca/police>

25 Roussy, R., (2001), Personal communication, Ministère de la Sécurité publique, Direction des communications.

With regard to fire-fighting services, the municipalities in Québec have the power to organize fire prevention services in accordance with the *Cities and Towns Act* and the *Act respecting northern villages and the Kativik Regional Government*²⁶.

2.7 Regional governments

2.7.1 Kativik Regional Government (KRG)

KRG has particular powers with regard to transportation and public security under the *Act respecting northern villages and the Kativik Regional Government*²⁷. Concerning transportation, it has the power to establish and administer the regional and intermunicipal public transportation services. Moreover, with regard to police and fire-fighting services, it can establish and maintain these services in its territory.

KRG also plays a management role for certain assistance programs funded by the provincial and federal governments. Notably, KRG is responsible for managing the Air Fare Reduction Program for the Nunavik residents, funded by the Ministère des Transports du Québec²⁸. KRG also operates 14 airports in Nunavik.

2.7.2 Société de développement de la Baie James

The Société de développement de la Baie James (SDBJ) has the mandate to encourage the development and exploitation of natural resources other than hydroelectricity in the territory corresponding to the Municipalité de la Baie James. It also sees to the administration and development of this territory in accordance with the competent Québec legislation. SDBJ also operates the roads without a status of the James Bay territory and the Hydro-Québec airports. The *Transport Act*²⁹ does not apply to the operations of this corporation.

26 Gouvernement du Québec, (July 19, 1999), *Cities and Towns Act*, Chapter C-19, 201 pages.
Gouvernement du Québec, (June 15, 2000), *Act respecting northern villages and the Kativik Regional Government*, Chapter V-6.1, 102 pages.

27 Gouvernement du Québec, (June 15, 2000), *Act respecting northern villages and the Kativik Regional Government*, Chapter V-6.1, 102 pages.

28 Laplante, J., (2001) Personal communication, Ministère des Transports du Québec.

29 Gouvernement du Québec, (April 1, 2000), *James Bay region Development Act*, Chapter D-8, 11 pages.

2.8 Municipalities

The municipalities of the region have certain powers over public transportation and public services according to the *Cities and Towns Act*³⁰. They have the power to set up public transit, para-transit and fire prevention services in their territory.

2.9 Private carriers

Private carriers provide transportation services whenever they identify an interesting market in a region. However, with a small, scattered and remote population, the transport business potential is rather limited in the Nord-du-Québec region.

2.9.1 Bus transportation

Approximately a dozen bus transportation companies are active in the southern part of the region, James Bay. Four of them have a business place in the territory³¹. In addition, many bus companies from other regions also make chartered trips to Nord-du-Québec, mainly with tourists.

No bus transportation companies were identified in Nunavik; no form of interurban bus transportation is possible since the villages are not connected by road. Moreover, even if they were connected, the business potential would probably be too limited on account of the small and remote populations.

2.9.2 Air transportation

This transportation mode is a particularly important type of public passenger transportation in Nord-du-Québec since it is the only one to connect all the communities year round, at least in Nunavik. The villages are not connected by road, so air transportation is a must for interurban mobility. However, its high costs limit their regular use by all residents. Twenty-six airports serve the region.

Three air transportation companies provide services in the region: First Air, Air Inuit and Air Creebec. Other airlines also provide chartered transportation to Nord-du-Québec.

Air transportation services are also needed in cases of health-related emergencies. Medical evacuations by plane are frequent.

30 Gouvernement du Québec, (July 19, 1999), *Cities and Towns Act*, Chapter C-19, 201 pages.

31 Commission des transports du Québec, (2001), Fiches des enregistrements de permis des entreprises de transport par autocar in the region du Nord-du-Québec.

2.9.3 Rail transportation

Rail transportation in the region is used to transport goods only. CN operates four connections, namely: Barraute-Franquet (126 km), Chapais-Chibougamau (48 km), Franquet-Matagami (99 km) and Triquet-Faribault (216 km)³². No rail link reaches Nunavik although one comes close to the territory, ending in Schefferville in the Côte-Nord region. Passengers are transported on this line at the rate of one return trip per week to Sept-Îles³³.

2.9.4 Marine transportation

Marine transportation in Nord-du-Québec is greatly limited by the freezing of the navigable waterways during six to seven months per year. All the villages in the region may be accessed by water in July, August and September, sometimes a little before and after this period depending on the years³⁴. In Nunavik, each village has access to water, and a marine infrastructure construction program is on going³⁵. There is no official marine passenger transportation. However, this transportation mode is used to some extent between the Nunavik villages, with small marine crafts³⁶.

2.10 Companies

Certain companies, for the purpose of their own activities, have had an influence in the development of the region's transportation infrastructures. They also purchase public transportation services for their employees exclusively and, in some cases, for the tourist groups who visit their facilities.

Hydro-Québec is certainly the company who has played a leading role in the development of the James Bay region. This para-governmental company has built a good part of the road links and owns five airports. It also provides air and surface transportation to its employees with its own vehicles. Raglan mine is a similar case, located at the northernmost point of Nunavik.

32 Ministère des Transports du Québec, (2001), *Transportation Plan of Nord-du-Québec*, Work program, p. 5-6.

33 Ibid., p. 9.

34 Guimond, A. et Vigneault, C., (2001), Personal communication, Ministère des Transports du Québec, Direction de l'Abitibi-Témiscamingue-Nord-du-Québec.

35 Ibid., p. 4-5.

36 Makiuk, W., (2001), Personal communication, Makivik Corporation.

2.11 Summary

It is possible to succinctly summarize the information found in this section. The following table presents the major stakeholders for each public transportation mode and public service, according to four main roles.

TABLE 2

MAIN STAKEHOLDERS AND ROLES PER PUBLIC TRANSPORTATION MODE AND PUBLIC SERVICE

	Control and regulation	Funding	Organization and planning	Service delivery
School transportation	MTQ, MEQ	MEQ	School boards	School boards and private companies
Para-transit service	MTQ	MTQ	Municipalities or local organizations	Municipalities or local organizations and private companies
Bus transportation	MTQ (CTQ)	Private	Private	Private
Taxi	MTQ (CTQ)	Private and public	Private	Private
Ambulance transportation	MSSS	MSSS	RRSSS	RRSSS and private companies
Fire-fighting services	Ministère de la sécurité publique	Municipalities or local organizations	Municipalities or local organizations	Municipalities or local organizations
Regional police services	Ministère de la sécurité publique	Ministère de la sécurité publique	Ministère de la sécurité publique	Ministère de la sécurité publique
Local police services	Ministère de la sécurité publique	Municipalities or local organizations	Municipalities or local organizations	Municipalities or local organizations

3. PROFILE OF SUPPLY AND DEMAND

The supply for public transportation and public services is characterized using information on transportation means (infrastructures, vehicles, facilities) and available services and their operating characteristics. The demand refers to the clientele and data on the utilization of services.

Very little data have been systematically collected on the supply and demand conditions in the Nord-du-Québec region. To gather more information, the stakeholders were contacted; a list of the contacted persons and organizations appears in Appendix 1. In most cases, data are incomplete since the majority of the organisations reached do not systematically compile this type of data. Moreover, regarding certain services, the information is not centralized and would have required to contact each branch, which could not be done in all cases since there are so many services and villages to cover. However, a typical picture of the situation is presented in this document and will be used to identify the strengths and constraints at the next stage of the mandate.

Surface transportation being the passenger transportation mode mainly addressed in this study, a short description of the available road infrastructures will be presented first.

3.1 Road infrastructures

The regional road network extends on more than 3,000 kilometers of roads, concentrated in the James Bay territory. As shown on Map 1, the James Bay road and the Transtaïga lead the farthest north in the territory, except for the road connecting Deception Bay to Raglan Mine. These roads connect the James Bay hydroelectric developments and the locality and Cree villages of Radisson, Nemaska, Chisasibi, Wemindji, Eastmain and Waskaganish (link under construction since August 2000). The highways 109, 113 and 167 are used to access the towns and villages located in the south.

In Nunavik, the road infrastructures all have a municipal vocation, except for the access road to the Raglan project, and they do not cover long distances. For example, in Kuujuaq, the largest village in Nunavik, there are approximately thirty kilometers of road³⁷.

37 Harvey, L., (2001), Personal communication, Kativik Regional Police Force.

3.2 School transportation

School transportation is for school-age students, i.e. from five to fifteen years of age. In the region, this age group has decreased by 2.1% between 1991 and 1996. However, according to MTQ's demographic projections, this age group, in Aboriginal communities, should increase by 11% between 1996 and 2021³⁸.

All the school boards of the region provide school transportation services. But only the elementary and secondary schools benefit from daily transportation services.

TABLE 3

SCHOOL BOARDS, NUMBER OF EDUCATIONAL INSTITUTIONS, NUMBER OF STUDENTS AND FUNDING OF SCHOOL TRANSPORTATION IN THE NORD-DU-QUÉBEC REGION, 1999-2000 AND 2000-2001

	Elementary and secondary public schools	MEQ funding and students transported in 1999-2000	MEQ funding and students transported 2000-2001
Francophone school board			
Commission scolaire de la Baie-James	12 schools 2,963 students	\$651,197 756 students \$861/student	\$673,450 806 students \$836/student
Anglophone school board			
Commission scolaire Central Québec/Central Quebec School Board	1 school 80 students	\$27,000 approximately 20 students \$1,350/student	\$27,000 22 students \$1,227/student
Special status school boards			
Cree School Board	9 schools (not available)	\$2,363,606 1,190 students \$1,986/student	\$2,250,000 1,228 students \$1,832/student
Kativik School Board	14 schools 2,942 students	\$1,796,961 (not available)	\$1,944,008 (not available)

Source: Ministère de l'Éducation, (2001) Commissions scolaires de la région administrative du Nord-du-Québec, Website: <http://www.meq.gouv.qc.ca/ADMINIST/OrgScol/r10/cs.htm>

38 Ministère des Transports du Québec, Desgagnés, P., (1999), ES-3: projections de la population et des ménages, 1996-2021: le modèle, sa mise en œuvre et les résultats, p. 11.

3.2.1 Commission scolaire de la Baie-James³⁹.

The Commission scolaire de la Baie-James provides transportation services to all the elementary and secondary schools under its responsibility. Access rules only apply to the school-to-home distance: 0.8 km for kindergarten students and 1.6 km for elementary and secondary students. The Jacques-Rousseau school, in Radisson, is an exception: school transportation is provided to all elementary and secondary students regardless of the distance. The following table summarizes the main information collected.

TABLE 4

DESCRIPTION OF SCHOOL TRANSPORTATION FOR THE COMMISSION SCOLAIRE DE LA BAIE-JAMES

Town	Transport company	Vehicles	Users/school	Total distance traveled
Chibougamau	Autobus Messier-Chibougamau	6 12- row buses 3 4 to 5-row minibuses	Notre-Dame-du-Rosaire: 15 Bon Pasteur: 95 Porte du Nord: 242 Vatican II: 142 MacLean: 31	339 km/day
	Transport adapté Chapais-Chibougamau	1 para-transit minibus (room for 4 wheel chairs and for 4 sitting places)	10 students	10 km/day
Chapais	Individual agreements	3 cars	St-Dominique-Savio: 5 kindergarten	Approximately 30 km/day
Lebel-sur-Quévillon	Autobus SP Fortier	1 9-row bus	Boréal: 22 kindergarten pupils	40 km/day
	Not available	Taxi	Taïga: 2 secondary students – special cases	Not available
Matagami	Transport Baie-James limitée	1 minibus 1 bus	Galinée; 16 kindergarten Delta: 28 elementary and 2 secondary (mobility impaired)	80 km/day
Radisson	Commission scolaire de la Baie-James	1 12-row bus	Jacques-Rousseau: 69; 5 kindergarten, 40 elementary, 24 secondary	28 km/day
Valcanton—Villebois	Autobus Maheux in La Sarre	3 12-row buses 1 9-row bus 1 5-row minibus	174 students in all	155 km/day

Source: Asselin, P., (2001), Personal communication, Commission scolaire de la Baie-James.
Maheux, P., (2002), Renseignements sur les circuits scolaires de Valcanton et Villebois, Autobus Maheux.

39 Asselin, P., (2001), Personal communication, Commission scolaire de la Baie-James.

The school board has two agreements with other school boards, one with the Commission scolaire du Lac-Abitibi for the transportation of students from the Beauvalois school to Valcanton and the other with the anglophone Central Quebec School Board for the MacLean Memorial School in Chibougamau.

The students of the localities of Valcanton and Villebois are sent to different schools: Val-Paradis, the Polyno in La Sarre, the Académie and St-André in La Sarre. Several students must change buses during the trip⁴⁰.

Bus service is provided in the morning, at lunchtime and in the evening in Radisson, Lebel-sur-Quévillon and Matagami. In Chibougamau, a round trip at lunchtime is optional and costs 50 ¢/student/day. In Chapais, the parents must make an agreement directly with the transport company and pay for the service. Finally, in Valcanton, there is no school transportation at lunchtime.

Also, there may be inter-school transportation once or twice per year, and field trips and special events twice a year as well.

The present system appears to meet the school transportation needs. Generally, a slight decrease of the clientele has been noted for the last several years. Concerning territorial development events that may impact on the school transportation demand, a certain urban expansion has been observed in Chibougamau.

STUDENT PARA-TRANSIT SERVICE

Para-transit services for mobility impaired students are available in Chibougamau; they are included in the public para-transit service. In Matagami, they are part of the school transportation service and in Lebel-sur-Quévillon, the service is provided by taxis.

POST-SECONDARY STUDIES

There are no structured transportation services for post-secondary students. Youth from this school board do not have access to the MEQ subsidy program for post-secondary studies; therefore, it is not possible to present data in relation to their travel.

40 Maheux, P., (2002), Information on the Valcanton and Villebois school routes, Autobus Maheux.

3.2.2 Cree School Board⁴¹

The Cree School Board provides school transportation to all the kindergarten and first-cycle elementary students in all the communities. However, in the community of Chisasibi, service is provided to all the elementary and secondary students who live more than 1.5 kilometer from the school. Thus the Chisasibi regular clientele is made up of first-cycle elementary students, a few second-cycle elementary students and secondary students. There is transportation also for all the students to field trips or special events. Each village has at least one regular 12-row bus.

Service is provided mornings and evenings. There are no round trips at lunchtime, except for the pre-kindergarten and kindergarten pupils who attend school for half days. The schools also organize special trips approximately four to five times a year.

STUDENT PARA-TRANSIT SERVICE

With regard to student para-transit services, such services are found in Whapmagoostui (two children), Chisasibi (18 to 20 children), Wemindji (two children, by taxi), and in Waskaganish and Mistissini (four children, service is part of regular school transportation).

POST-SECONDARY STUDIES

Concerning post-secondary studies, the following table shows the number of students in the last three years as well as the expenses relating to their moving expenses and other interurban trips between their community and the place of study.

TABLE 5

POST-SECONDARY STUDENTS OF THE CREE SCHOOL BOARD, 1998-1999, 1999-2000, 2000-2001

	Number of students	Transportation costs related to moving (\$)	Travel costs during the year (\$)	Total (\$)
1998-1999 Youth	421	282,354	807,281	1,089,635
Adults	17	14,542	27,312	41,854
1999-2000 Youth	384	243,369	756,954	1,000,323
Adults	8	6,193	12,286	18,479
2000-2001 Youth	365	276,834	776,248	1,053,082
Adults	10	0	10,867	10,867

Source: Tremblay, C., (2001) ,Personal communication, Ministère de l'Éducation du Québec

41 Gratton, J.-P., (2001), Personal communication, Cree School Board.

3.2.3 Kativik School Board⁴²

Because of the particular climatic conditions prevailing in Nunavik, school transportation is provided to all the students in all the fourteen villages, regardless of their age or the distance to travel.

The total fleet of vehicles for regular student transportation in the territory belongs to the school board. It is made up of eleven 54-seat buses, nine 34-seat buses and one 20-seat bus. These are regular school buses that have been modified and adapted to the road and weather conditions in Nunavik (90% of the roads are on gravel); the frames have been modified to be fitted with an all-wheel-steering system.

The service is provided in the morning, a round trip at lunchtime and a return home in the evening. There is no transportation for field trips or special events, only the regular daily transportation from home to school.

STUDENT PARA-TRANSIT SERVICE

With regard to para-transit services, the school board has made an agreement with the communities that provide transportation for mobility impaired people. Four northern villages are serviced by student para-transit: Inukjuak (ten children), Kuujuaq (two children), Puvirnituq (one child) and Salluit (two children).

POST-SECONDARY STUDIES

The post-secondary studies access program is used by some 60 students each year. A monthly public transit pass gives them access to urban public transportation (city bus). It is worth \$48.50 approximately. Transportation costs for travels between the community and the place of study amount to thousands of dollars⁴³ each year.

3.2.4 Central Quebec School Board

The Central Quebec School Board has one school in the Nord-du-Québec region, the MacLean Memorial School in Chibougamau, and also the Jimmy Sandy Memorial School in Kawawachikamach.

The Chibougamau school is mainly serviced by the Commission scolaire de la Baie-James' school transportation, which carries thirty-one students. Moreover, the Central Quebec School Board has a contract with a private carrier for a few students who live farther in neighboring towns. A small 5 to 6-row bus is used. This year, there are seven students travelling on this bus; typically, there are between five and ten. In general, 38 elementary school students use school transportation out of a total 106 (35%)⁴⁴.

42 Génereux, E., (2001), Personal communication, Kativik School Board (Nunavik).

43 Cacchedorian, P., (2001), Personal communication, Kativik School Board (Nunavik).

44 Rourke, N., (2001), Personal communication, Central Quebec School Board

Concerning the Kawawachikamach school, transportation is provided to pre-kindergarten and kindergarten pupils only. A small seven-row bus provides the service in two trips. Students at these levels do half-days; therefore, the bus is used in the morning, at lunchtime and in the evening. The vehicle belongs to a private company and is used for school transportation only. In this small community, students have less than a kilometer to go to school. This is why the service is not offered to the elementary and secondary school students⁴⁵.

Also, some youth of the Montagnais community of Schefferville go to school in Kawawachikamach. The Montagnais Band Council provides bus transportation for them.

POST-SECONDARY STUDIES

The Naskapi community has access to the post-secondary studies subsidy program. Each year, some twenty youth pursue their studies and benefit from the subsidies.

TABLE 6

POST-SECONDARY STUDENTS FROM THE NASKAPI COMMUNITY, 2000-2001 AND 2001-2002

		Number of students	Total travel costs (\$)
2000-2001	Youth	23	108,800
2001-2002	Youth	21	107,800

Source: Tremblay, C., (2001) Personal communication, Ministère de l'Éducation du Québec.

3.2.5 Adequacy of the school transportation services in relation to the needs

According to the information collected with the school boards, the daily school transportation services provided in the region meet the students' needs.

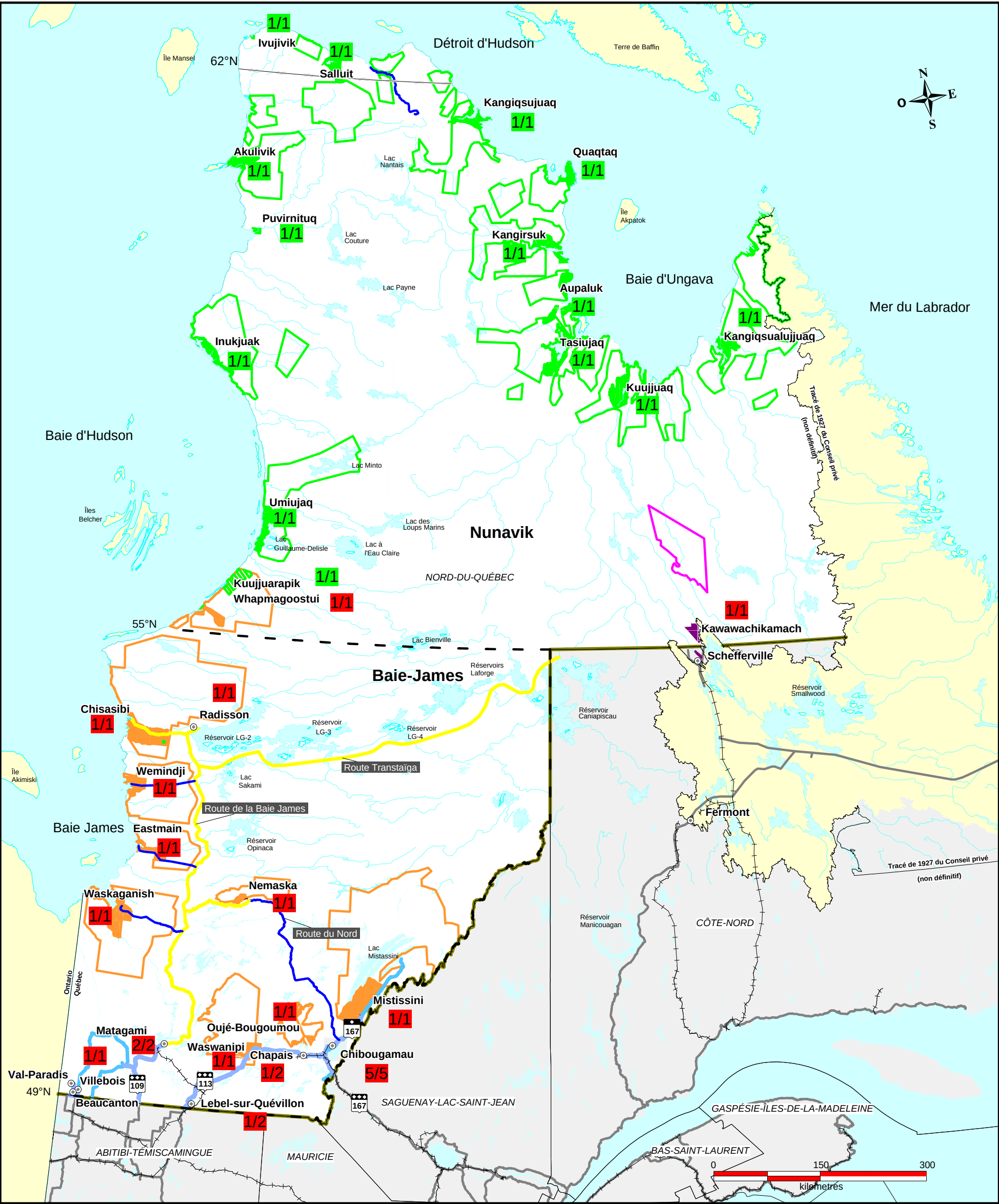
An area where services may be lacking is field trips and special events. In Nunavik, the potential for this type of activities is very limited because the communities are enclaved. In the James Bay territory, the schools have little means to perform this type of activities, including school transportation.

It should be mentioned that, given the school boards' lack of financial resources, a bus transportation company has subsidized student transportation for extracurricular, sports and cultural activities for several years⁴⁶.

Map 2 on the following page shows the number of schools serviced by school transportation in relation to the total number of schools. A restricted service is indicated where secondary school students and sometimes second cycle primary school students do not have access to the service.

45 Marotta, M., (2001), Personal communication, Central Quebec School Board.

46 Langlois, N., (2001), Personal communication, Transport Baie-James limitée.



Direction de la coordination
du Nord-du-Québec

Transportation Plan of Nord-du-Québec

Public transport and public services

Source:
- Ministère des Transports du Québec

Basic map:
- Ministère des Ressources naturelles,
digital maps, scale 1 : 250,000 and 1 : 8,000,000

October 2002

Map 2: School transportation service supply

Road Financial responsibility

- MTQ - National, regional, collector
- MTQ - Access and mining
- MTQ - Other roads
- Hydro-Québec

Others

- Railway
- City or town

Administrative limit

- Municipalité de la Baie James
- South limit Nord-du-Québec region
- Other Québec regions

School transportation service supply

Number of school served
Number of school

- Restricted service
- Unrestricted service

Land regime (category I) (category II)

- Cree
- Inuit
- Naskapi

Note: The limits of the Oujé-Bougoumou territory are defined
under the Cree-Québec Agreement of February 7, 2002.

3.3 Para-transit

The elderly and physically or mentally disabled people make up the potential clientele for this type of transportation. In 2001, the number of persons with disabilities has been estimated at 2,200 for the whole Nord-du-Québec region⁴⁷. In 1996, persons 65 years and over accounted for 3.4% of the population, i.e. approximately 1,300 people. Of these, approximately 220 live in the Nunavik territory and 1,080 in the James Bay territory⁴⁸. The Cree communities do not have para-transit services.

3.3.1 Municipalité de la Baie James

According to the Groupe de travail sur l'intégration des modes de transport terrestre des personnes (Working group on the integration of passenger surface transportation modes)⁴⁹, there were no para-transit services in James Bay in 1996. Since then, a para-transit service has been set up in Chibougamau: Transport adapté Chapais-Chibougamau-Baie-James. It serves two towns, Chapais and Chibougamau and part of the Municipalité de la Baie James as well, located between these two towns. Ninety persons in all are eligible to the service⁵⁰.

The vehicles used are a taxi and a minibus (room for four wheel chairs and four sitting). The minibus carried a total of 8,215 persons in 1999 while the taxi carried five. The minibus service is provided five days a week, 40 hours, i.e. eight hours a day (Monday through Friday from 7:30 a.m. to 5:00 p.m.), 52 weeks per year. Since the beginning of November 2001, the service has been extended to Thursday nights till 10:00 p.m. and Saturdays from 1:00 p.m. to 5:00 p.m. It is an on-call and door-to-door service. Moreover, service to Chapais is provided twice a week only, on Tuesdays and Thursdays⁵¹.

The contribution of the various stakeholders to the service in 1999 is presented in the following table.

47 Office des personnes handicapées du Québec (OPHQ), (2001), Statistiques, Région du Nord-du-Québec (2000), *Estimation du nombre de personnes ayant des incapacités selon le sexe et le groupe d'âge*, Website:

http://www.ophq.gouv.qc.ca/Bureaux/Services/D_Services10.htm

48 Institut de la statistique du Québec, (1999) Table 2: Âge, sexe, état matrimonial et familles: Les MRC de la région administrative du Nord-du-Québec (10), Website:

<http://www.stat.gouv.qc.ca/donstat/lesregions/region10/rec2r10.htm>

49 Ministère des Transports du Québec, Direction du transport terrestre des personnes, Groupe de travail sur l'intégration des modes de transport terrestre des personnes, (1996) *Transport terrestre des personnes, Bilan et perspectives*, p. 426.

50 Ministère des Transports du Québec, Direction du transport terrestre des personnes, (2000), *Transport adapté aux personnes handicapées 1999, région administrative: (10) Nord-du-Québec*, page 18.

51 Girard, J.-F., (2001), Personal communication, Transport Adapté Chapais-Chibougamau-Baie-James.

TABLE 7

STATEMENT OF INCOME OF TRANSPORT ADAPTÉ CHAPAIS – CHIBOUGAMAU – BAIE-JAMES, 1999

Contributor	Contribution
MTQ	\$80,274
Passengers	\$14,625
Municipalities	\$22,325
Other transportation services	\$517
Other revenues	\$101
Total revenues	\$117,842

Source: Ministère des Transports du Québec, Direction du transport terrestre des personnes (2000), *Transport adapté aux personnes handicapées 1999, région administrative: (10) Nord-du-Québec*, page 18.

Since expenditures amounted to \$112,756 for the same year, the organization has made a benefit of approximately \$5,000. Fares varied from \$1 to \$5⁵².

3.3.2 Nunavik

In Kuujuaq, a para-transit service was set up in 1995 through various funds, notably: the Kativik Regional Development Council Fund, Kuujjuamiut Corporation and Transport Canada. It is an on-call service, available five days a week. Approximately 25 clients use it⁵³.

A para-transit service has been provided since 1999 or 2000 to the elderly and the disabled in all the Nunavik villages. Makivik Corporation has provided an eight-seat minibus to each village and funds their operation as well, jointly with the Kativik Regional Development Council Fund. The service is operated by the municipalities that are responsible for the maintenance of the vehicle and for hiring a driver. However, certain villages cannot provide the service in winter because of the harsh weather conditions⁵⁴.

With regard to the operation of the service, in Puvirnituq for example, it is available from 7:00 a.m. to 9:00 p.m., seven days a week. The service is free and available on call. The clientele is approximately 20 to 30 persons, of which six to seven in wheel chairs. Although the vehicle is not specifically adapted for the transportation of people in wheel chairs, service is provided to this clientele. There are generally around 40 calls per day⁵⁵. In Inukjuak, the service is similar, but the schedule is slightly different, i.e.: Monday through Friday from 8:30 a.m. to 5:00 p.m. and Wednesday nights and Sundays for religious services. Approximately 45 people benefit from the service, of these 11 are

52 Ministère des Transports du Québec, Direction du transport terrestre des personnes, (2000), *Transport adapté aux personnes handicapées 1999, région administrative: (10) Nord-du-Québec*, page 18.

53 Fortin, L., (2001), Personal communication, Municipality of Kuujuaq.

54 Makiuq, W., (2001), Personal communication, Makivik Corporation.

55 Angutiguluk, J., (2001), Personal communication, Municipal Council of Puvirnituq.

persons with disabilities. The number of calls for service may vary from approximately 6 to 20 in one day⁵⁶.

3.4 Taxi

Taxi services are available in the region, in both the James Bay and Nunavik territories.

In 1999, according to the Institut de la statistique du Québec, there were 25 taxi vehicles in all, 24 in James Bay and 1 in Nunavik⁵⁷. Table 8 shows that there are now 32 taxis. Thus, from 1999 to 2001, seven taxi vehicles were added in the Nord-du-Québec region.

In 2001, there are ten taxi territories in the region (urban areas for taxis (AG) and taxi regions: (RG). Three are in Nunavik and service 33% of the territory's population. The seven others are located in the James Bay territory and serve 71% of the territory's population. Thus, for the Nord-du-Québec region as a whole, 61% of the population is serviced by taxi⁵⁸.

Table 9 (section 3.5.1) shows that, in 1996, certain workers actually said they were going to work by taxi.

56 Williams, J., (2002), Personal communication, Municipal Council of Inukjuak.

57 Institut de la statistique du Québec (ISQ), (2000), *Véhicules de transport utilisés, par territoire équivalent aux MRC de la région administrative du Nord-du-Québec (10)*, Québec, 1999, Website: http://www.stat.gouv.qc.ca/donstat/lesregions/region10/t_1599r10.htm

58 Commission des transports du Québec, (2001), *Agglomérations et régions de taxi par MRC ou territoire équivalent*, Website: http://www.ctq.gouv.qc.ca/secteurs/taxi/portraits_taxi.htm

TABLE 8

TERRITORIES AND TAXI PERMITS, 2001

	Designation	Population	Number of permits-vehicles	Number of trips
James Bay territory				
Chibougamau	AG	8,503	11	10
Matagami	AG	2,063	3	1
Baie-James (Radisson)	RG	2,191	2	1
Lebel-sur-Quévillon	RG	3,337	4	1
Mistissini	RG	2,441	5	4
Chapais	RG	1,921	2	2
Oujé-Bougoumou	RG	526	1	1
Waswanipi	RG	1,236	1	1
Total James Bay	8 areas	20,982	29	21
Nunavik territory				
Kuuujuaq	RG	2,099	2	2
Inukjuak	RG	1,387	1	1
Total Nunavik	2 areas	3,486	3	3
Nord-du-Québec	10 zones	24,468	32	24

Source: Commission des transports du Québec (2001), Agglomérations et régions de taxi par MRC ou territoire équivalent Website: http://www.ctq.gouv.qc.ca/secteurs/taxi/portraits_taxi.htm
 Commission des transports du Québec (2001), *Fiches des permis de taxi in the Nord-du-Québec region.*

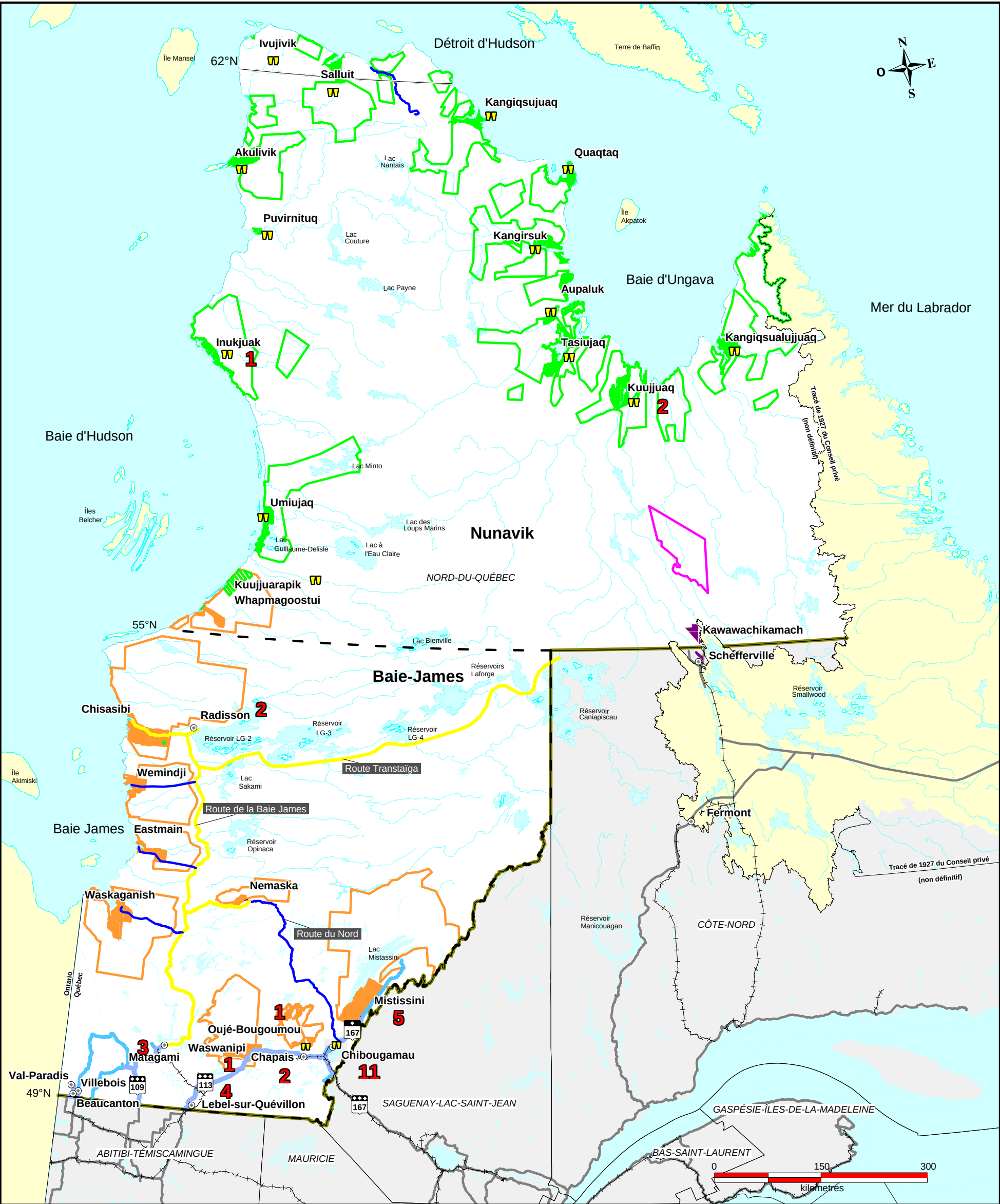
The main towns and communities have taxi services. However, there are a few exceptions: Chisasibi and Waskaganish, in the James Bay territory, and Puvirnituq, in Nunavik, that have a population of over 1,000 people.

Besides, there is no indication that these vehicles are specifically adapted to the transportation of persons with disabilities. In Québec, there are approximately fifty vehicles that have been modified this way and the majority of them are in the Montréal urban area.

At the present time, the Ministère des Transports is working on a new taxi adaptation subsidy program for the transportation of persons in wheel chairs. This program aims at providing Québec with a fleet comprising a minimum of 4% of the total number of available taxis, that will be able to transport persons in wheel chairs, and this at both the national and regional levels. Concerning the number of adaptations to be made after five years, objectives have been set for each MRC and the urban communities including the northern territories. In order to meet the 4% objective, it will be possible to change the distribution during the program to take into account any territorial modifications.

Whatever the number of taxis in service in a specific MRC, it is planned to have at least one adapted taxi per territory.

Map 3, on the following page, identifies the transportation services for the elderly or disabled persons and taxi permits in Nord-du-Québec.



Transportation Plan of Nord-du-Québec
Public transport and public services

Source:
- Ministère des Transports du Québec

Basic map:
- Ministère des Ressources naturelles,
digital maps, scale 1 : 250,000 and 1 : 8,000,000

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Map 3: Public transportation for elderly or disabled
persons, and taxi permits

- Road**
- Financial responsibility
- MTQ - National, regional, collector
 - MTQ - Access and mining
 - MTQ - Other roads
 - Hydro-Québec
- Others**
- Railway
 - City or town
- Administrative limit**
- Municipalité de la Baie James
 - South limit Nord-du-Québec region
 - Other Québec regions

- Legend**
- 3** Number of taxi permits
- Transportation services for elderly or disabled persons
- Land regime**
- (category I) (category II)
- Cree
 - Inuit
 - Naskapi
- Note: The limits of the Oujé-Bougoumou territory are defined under the Cree-Québec Agreement of February 7, 2002.

3.5 Bus transportation

According to the Institut de la statistique du Québec, in 1999, the region had a 50-bus float, with eight in Nunavik and 42 in James Bay. This number represents the vehicles licensed in the territory and does not specify their public or private use⁵⁹.

Four private bus transportation companies have been recorded in the region (with a local business place). They are active in the James Bay region only since Nunavik is not connected by any interurban roads⁶⁰. Many other businesses are active in the region without having a business place there.

3.5.1 Urban public transit service

There are no organized public transit services in the Nord-du-Québec region⁶¹. However, according to the 1996 Canadian census, a portion of the region's population stated using public transits to go to work. It is important to know that the meaning of public transit had not been specified and, therefore, was left to the respondents' free interpretation.

Table 9 on the following page shows that, for the James Bay territory, there are public transit trips made in the main towns, where the most important employers of the region are found. Now, employers provide bus transportation to their employees. But these transportation services are private since they are not available to the general population (see section 3.5.4).

59 Institut de la statistique du Québec (ISQ), (2000), *Véhicules de transport utilisés, par territoire équivalent aux MRC de la région administrative du Nord-du-Québec (10)*, Québec, 1999, Website: http://www.stat.gouv.qc.ca/donstat/lesregions/region10/t_1599r10.htm

60 Business records, for those that have been contacted within this study, can be found in Appendix 2. Appendix 3 presents a list of businesses that are active in the region and the type of transport permit.

61 Ministère des Transports du Québec, Direction du transport terrestre des personnes, Groupe de travail sur l'intégration des modes de transport terrestre des personnes (1996), *Transport terrestre des personnes, Bilan et perspectives*, p. 426.

TABLE 9

EMPLOYED LABOR FORCE 15 YEARS AND OVER ACCORDING TO THE RESIDENCE-TO-WORKPLACE TRANSPORTATION MODE USED, 1996

	Territory	Municipality					Aboriginal community		Territory	Municipality	Nord-du-Québec region	Province of Québec
	James Bay	James Bay	Chapais	Chibougamau	Lebel-sur-Quévillon	Matagami	Chisasibi	Mistissini	Nunavik	Kuuujuaq		
Employed labor force	12,615	845	765	4,015	1,735	1,100	1,280	750	2,860	740	15,475	2,908,730
Car, pick-up truck or van - driver	6,650	475	505	2,725	1,170	800	345	220	340	165	6,990	2,126,705
Car, pick-up truck or van - passenger	1,415	35	80	465	225	90	180	110	130	40	1,545	173,485
Public transit	265	90	25	105	35	-	10	-	10	-	275	342,630
On foot	3,285	175	145	620	265	195	510	320	1,670	355	4,955	215,365
Bicycle	60	-	-	30	10	10	-	10	-	-	60	29,125
Motorcycle	20	-	-	-	10	-	-	-	10	-	30	2,220
Taxi	65	-	-	10	25	20	-	-	-	-	65	4,970
Other means	785	50	-	35	-	-	230	90	670	170	1,455	14,215

Source: Institut de la statistique du Québec, (2000), Table 4: Travail, scolarité et mobilité 1996, Les territoires de la région administrative du Nord-du-Québec (10) Website [http://www.stat.gouv.qc.ca/donstat/lesregions/region 10/rec4r10.htm](http://www.stat.gouv.qc.ca/donstat/lesregions/region%2010/rec4r10.htm)

Note: Data from the 1996 federal census. Transportation related questions refer to a typical week of the month of May. This explains why there are so many walking and bicycle trips.

Also, a few years ago, a pilot project for *urban bus transportation* had been started in Kuujjuaq. After a few months, however, the initiative was ended because of the small number of users. People preferred to walk or use a snowmobile or ATV or other. Even the children, a potential clientele, use these other individual transportation modes⁶².

3.5.2 Interurban service

In 1996, interurban bus transportation served 25% of the region's municipalities. The service was provided by five private transport companies, on five local lines, of which three were intra-regional and three extra-regional. In 1995, there were fifty-eight departures each week, for a total of 2,726 travellers⁶³.

In 2001, four transport companies provide regular transportation: Etudah Entreprises enr., Intercar Saguenay, Autobus Maheux and Autobus Messier de Chibougamau inc. Together they serve three extra-regional and two intra-regional lines⁶⁴. The extra-regional lines provide 1,906 seats per week.

EXTRA-REGIONAL INTERURBAN ROUTE

Extra-regional interurban routes extend between Amos and Matagami, Val-d'Or and Chibougamau and between Chibougamau and Saint-Félicien. The Amos–Matagami line is 183 kilometers and travel time is approximately two hours⁶⁵. The carrier provides round trips every day except on Saturday and it is synchronized with other lines, including the line to Montréal. However, this line serves a very small number of people and it will have to be re-evaluated soon. The regular fare is \$32.90 (taxes included), but students and elderly people enjoy a 30% and 25% rebate respectively⁶⁶.

The Val-d'Or–Chibougamau line extends on 409 kilometers and travel time is seven hours⁶⁷. It provides a daily service (round trip) and goes through all the small localities such as Lebel-sur-Quévillon, Waswanipi and Chapais. The regular fare is \$61.25 (taxes included); students are entitled to a 30% rebate and elderly people to a 25% rebate⁶⁸.

Finally, the carrier servicing Chibougamau from Saint-Félicien travels 233 kilometers in three hours. It operates seven days a week, at a rate of one round trip per day. The occupancy rate may vary considerably from trip to trip, that is, from five people to the

62 Fortin, L., (2001), Personal communication, Municipality of Kuujjuaq.

63 Ministère des Transports du Québec, Direction du transport terrestre des personnes, Groupe de travail sur l'intégration des modes de transport terrestre des personnes, (1996), *Transport terrestre des personnes, Bilan et perspectives*, page 427.

64 Commission des transports du Québec, (2001), Fiches des enregistrements de permis des entreprises de transport par autocar in the region du Nord-du-Québec.

65 Drouin, R., (1997), *Vers un plan de transport pour la Côte-Nord*, Chapter 13; Le transport collectif, p. 3-4-6.

66 Maheux, P., (2001), Personal communication, Autobus Maheux.

67 Drouin, R., (1997), *Vers un plan de transport pour la Côte-Nord*, Chapter 13; Le transport collectif, p. 13-4-6.

68 Maheux, P., (2001), Personal communication, Autobus Maheux.

maximum capacity of the bus. With respect to the fares, a one-way ticket is \$29.60 for adults, \$22.25 for students and elderly people, and \$14.80 for children (plus taxi)⁶⁹.

Generally, the buses on these lines can seat 48 passengers. Table 10 reviews the main characteristics of these lines. Of course, the fares correspond to the total trip; a person getting on half way will pay an amount proportional to the distance to travel.

TABLE 10
MAIN CHARACTERISTICS OF THE EXTRA-REGIONAL LINES, 2000-2001

Liaison	Distance (km) and travel time (hours)	Frequency	Total annual passengers	Regular fare (taxes included)
Val-d'Or – Chibougamau	409 km 6 h 15 min	Seven days/week	10,457	\$61.25
Amos–Matagami	183 km 2 h	Six days/week	976	\$32.90
Saint-Félicien – Chibougamau	233 km 3 h	Seven days/week	5 991	\$33.89

Table 11 shows the monthly number of passengers on the three lines for twelve consecutive months.

69 Côté, D., (2001), Personal communication, Intercar.

TABLE 11

NUMBER OF PASSENGERS ON THE EXTRA-REGIONAL BUS LINES, 2000-2001

Month	Val-d'Or– Chibougamau	Amos–Matagami	Saint-Félicien– Chibougamau
July 2000	872	96	594
August 2000	963	55	578
September 2000	830	54	365
October 2000	757	41	477
November 2000	848	47	438
December 2000	1,268	86	601
January 2001	863	106	558
February 2001	785	91	406
March 2001	912	122	640
April 2001	762	105	475
May 2001	705	94	402
June 2001	892	79	457
Total annual	10,457	976	5,991

Source: Côté, D., (2001) , Personal communication, Intercar.

INTRA-REGIONAL ROUTE

The two intra-regional lines are between Chibougamau and Mistissini via highway 167; the two routes are identical. The service is provided by Etudah Entreprises enr. and Autobus Messier de Chibougamau inc.⁷⁰.

These lines are operated in a particular way since the service is shared between the two companies. Etudah Entreprises enr. is a Cree business that provides service on specific evenings and on week-ends mainly, for the people of the community of Mistissini who wish to go to Chibougamau for recreational purposes. The clientele is made up of a majority of elderly people. In fact, Autobus Messier de Chibougamau inc. serves certain groups when Etudah Entreprises enr. cannot provide the service. This agreement between the two companies aims at respecting the rights of Aboriginal people under the James Bay Agreement. About three years ago, Autobus Messier de Chibougamau inc. operated this route on a regular basis to provide transportation to the non-Aboriginal students living in Mistissini and going to Chibougamau. But this service was terminated because of a decrease in the demand. However, the permit is maintained for sporadic and future requests⁷¹.

70 Commission des transports du Québec, (2001), Fiches des enregistrements de permis des entreprises de transport par autocar dans la région du Nord-du-Québec.

71 Lamontagne, B., (2001), Personal communication, Autobus Messier de Chibougamau inc.

3.5.3 Chartered transportation

Chartered transportation is offered by some ten transport companies in the region. The trips may not be numerous but they are generally long.

The clientele includes the Aboriginal communities, golden age clubs and sports groups (hockey clubs). Aboriginal groups are the largest clientele⁷².

Each year, over one hundred chartered trips are organized by the Nord-du-Québec companies.

Chartered transportation from other regions of Québec to Nord-du-Québec is also an interesting activity for the québécois chartered bus companies. A fair portion of the tourists visit the main James Bay hydroelectric facilities. For example, approximately 12,000 people visit Radisson between the months of May and September, accounting for about three-thirds of all annual visitors. Tourists travel mainly by car and by bus. Several tourist agencies provide transportation to Radisson from Montréal. A good fifty schools also visit the area each year⁷³.

Only one company holds a tourist transport permit for the visit of LG-2 hydroelectric facilities. It is Entreprise N.T. enr. which owns a modified school bus seating approximately 48 people and a minibus with a seating capacity of eight to fifteen places. Its route is limited to the James Bay road between Radisson and LG-2 hydroelectric facilities⁷⁴.

Traffic data are collected at kilometer 6 of the James Bay road; kilometer 0 being in Matagami, kilometer 6 is located six kilometers north of Matagami. Table 12 presents the number of tourists or chartered buses going through that point each month.

72 Maheux P., (2001), Personal communication, Autobus Maheux
Lamontagne, B., (2001), Personal communication, Autobus Messier de Chibougamau inc.
Langlois N., (2001), Personal communication, Transport Baie-James limitée.

73 Hamel, É., (2001) Personal communication, Hydro-Québec.

74 Commission des transports du Québec, (2001), Fiches des enregistrements de permis des entreprises de transport par autocar dans la région du Nord-du-Québec.

TABLE 12

NUMBER OF BUSES AND PEOPLE TRANSPORTED PER MONTH FOR RECREATIONAL PURPOSES, AS RECORDED AT KILOMETER 6 OF THE JAMES BAY ROAD

Month	Number of buses	Number of people
November 2001	4	110
October 2001	2	60
September 2001	8	194
August 2001	12	293
July 2001	12	368
June 2001	18	493
May 2001	24	965
April 2001	3	141
March 2001	3	46
February 2001	3	110
January 2001	5	115
December 2000	3	67
Total	97	2,962

Source: Côté, G., (2001), Fichier de compilations de données AUTOBUS, Poste de contrôle au kilomètre 6 de la route de la Baie-James.

TABLE 13

NUMBER OF BUSES AND PEOPLE TRANSPORTED PER TRAVEL PURPOSES, AS RECORDED AT KILOMETER 6 OF THE JAMES BAY ROAD, 2001

Travel purpose	Number of buses	Number of people
Other	7	175
Hunting	7	125
Fishing	1	4
Vacationing	2	13
Visiting hydroelectric power plant	41	1,608
Cultural visit	5	125
Celebrations	3	96
Visiting relatives	6	297
Resident	25	519
Total	97	2,962

Source: Côté, G., (2001), Fichier de compilations de données AUTOBUS, Poste de contrôle au kilomètre 6 de la route de la Baie-James.

Close to 3,000 persons have gone through this point in one year for recreational purposes, mainly during the summer season.

The information may also be grouped under more detailed travel purposes, as presented in Table 13. It can be observed that visits to the hydroelectric power stations attract the majority of the travelling groups, who also go in the territory to hunt and fish, and for cultural or personal visits. The detailed data are shown in Appendix 4.

The length of travel and the isolation of the land raise certain issues concerning the safety of travel in the territory. This is why data are collected at kilometer 6 of the James Bay road. In addition, with respect to bus transportation, it has been observed that the regulations relating to service transfer from one transport company to another may cause problems in emergency assistance situations. If a chartered bus breaks down and the company contacts another transport of the region to take over, the latter must make sure the company needing assistance owns a chartered transportation permit and that it is valid. Now, these administrative procedures do not always apply when the bus belongs to an Aboriginal group. Also, it often is urgent to answer a call because of the isolation and the climatic conditions of the Nord-du-Québec territory⁷⁵. Therefore it is not always appropriate to wait for all the information concerning the transport company having difficulties before providing assistance. Not answering an emergency call to avoid receiving a notice could have regrettable consequences for the passengers.

3.5.4 Contract employee transportation

Employee transportation concerns natural resources development companies (mines) and the energy production company (Hydro-Québec) for whom employee access to the work sites is not easy due to distance, road conditions and weather. Bus routes are pre-established according to an agreement made with the employers.

This private bus service carries the employees from a point close to their residence to the work site. It is organized like school transportation, that is, there are a few strategic pick up points selected so that the employees have only a short distance to walk (a maximum of three minutes approximately)⁷⁶.

According to the transport permit register of the CTQ (Commission des transports du Québec), seven transport companies provide this type of service to eight companies. Since the permits issued by the CTQ do not require annual fees, it is possible that the register does not provide an accurate picture. Some of the information from the CTQ had to be completed or modified following telephone communications with a few transport companies. Moreover, the service to the Gonzague-Langlois mine has been suspended for an indefinite period.

75 Lamontagne, B., (2001), Personal communication, Autobus Messier de Chibougamau inc.

76 Lamontagne, B., (2001), Personal communication, Autobus Messier de Chibougamau inc.

TABLE 14

SUMMARY TABLE OF CONTRACT TRANSPORTATION SERVICES FOR EMPLOYEES

Carrier	Client enterprise	Fleet of vehicles	Territory or route	Schedule
Autobus Chevrette (1986) inc.	Canadian International Paper Company	-	From La Tuque to James Bay (Lake Vendatour)	-
Autobus Maheux	Mine Gonzague-Langlois	Three buses of 48 passengers	From Lebel-sur-Quévillon to the mine - 40 km	Monday through Sunday
Autobus Messier de Chibougamau inc.	Mine Troilus	(Variable) ^a		Monday through Friday
	Hydro-Québec	One bus	From Chibougamau (H.-Q. Administrative Center) to Poste Abitibi	Monday through Thursday
	Les Ressources du Lac Meston inc.	Three day buses and one night bus	From Chibougamau to all mining sites along road 167	Monday through Sunday
Les Transports E. Verrault Ltée	Scierie Donohue in Chibougamau	Two regular buses	From Saint-Félicien to La Doré and Chibougamau	Monday through Friday
Transport Baie-James limitée	Mine Géant Dormant Cambior	Six 48-passenger buses		
		Three 12-passenger buses		
Summary	Seven client enterprises	At least 15 buses and three minibuses daytime	Chibougamau is an important activity center	At least four days a week

a: This company has dormitories on the site, which contributes to the variation in the transportation demand during the week.

Sources: Commission des transports du Québec, (2001), *Fiches des enregistrements de permis des entreprises de transport par autocar in the region du Nord-du-Québec*.

Lamontagne, B., (2001), Personal communication, Autobus Messier de Chibougamau inc.

Langlois, N., (2001), Personal communication, Transport Baie-James limitée.

Maheux, P., (2001), Personal communication, Autobus Maheux.

Also, some companies provide transportation services to their employees with their own vehicles and personnel. This is considered private transportation in every respect since it is carried out for the company itself and for a specific clientele.

For example, Hydro-Québec transports its employees by plane to the Nemiscau, La Grande Rivière, LG-3, LG-4 and Fontanges airports from Montréal, Abitibi-Témiscamingue and Saguenay-Lac-St-Jean. The total number of employees is approximately 800; they work on two shifts on a 8-6 schedule (eight days work, six days off).

Hydro-Québec has five buses, two of which are based in LG-3 and LG-4 respectively to transport its employees to the residences. The three other buses, based in Radisson (LG-2), are used to transport the employees to the residences and also for visits at the Robert Bourassa hydroelectric power station. Workers at the other stations and at Poste Nemiscau use the company's trucks to travel back and forth between their place of work and residence⁷⁷.

Another example is the case of Raglan Mine, located at the northernmost point of Nunavik, will be described. The mine employees are conveyed by plane to the Donaldson airport, which belongs to Raglan Mine, then by a road shuttle to the mining site. The company uses its own resources; therefore, this is private transportation. It owns a 57-passenger plane connecting Toronto–Montréal–Rouyn-Noranda–Raglan at least twice a week and three times a week once a month. The plane is filled to capacity on 98% of the trips. The bus travels a distance of 30 kilometers, at the same frequency as the plane. Since the bus can seat 37 to 47 people, extra passengers travel by van. Aboriginal employees are serviced by Air-Inuit at a rate of three times a week⁷⁸.

3.5.5 Development of bus transportation services

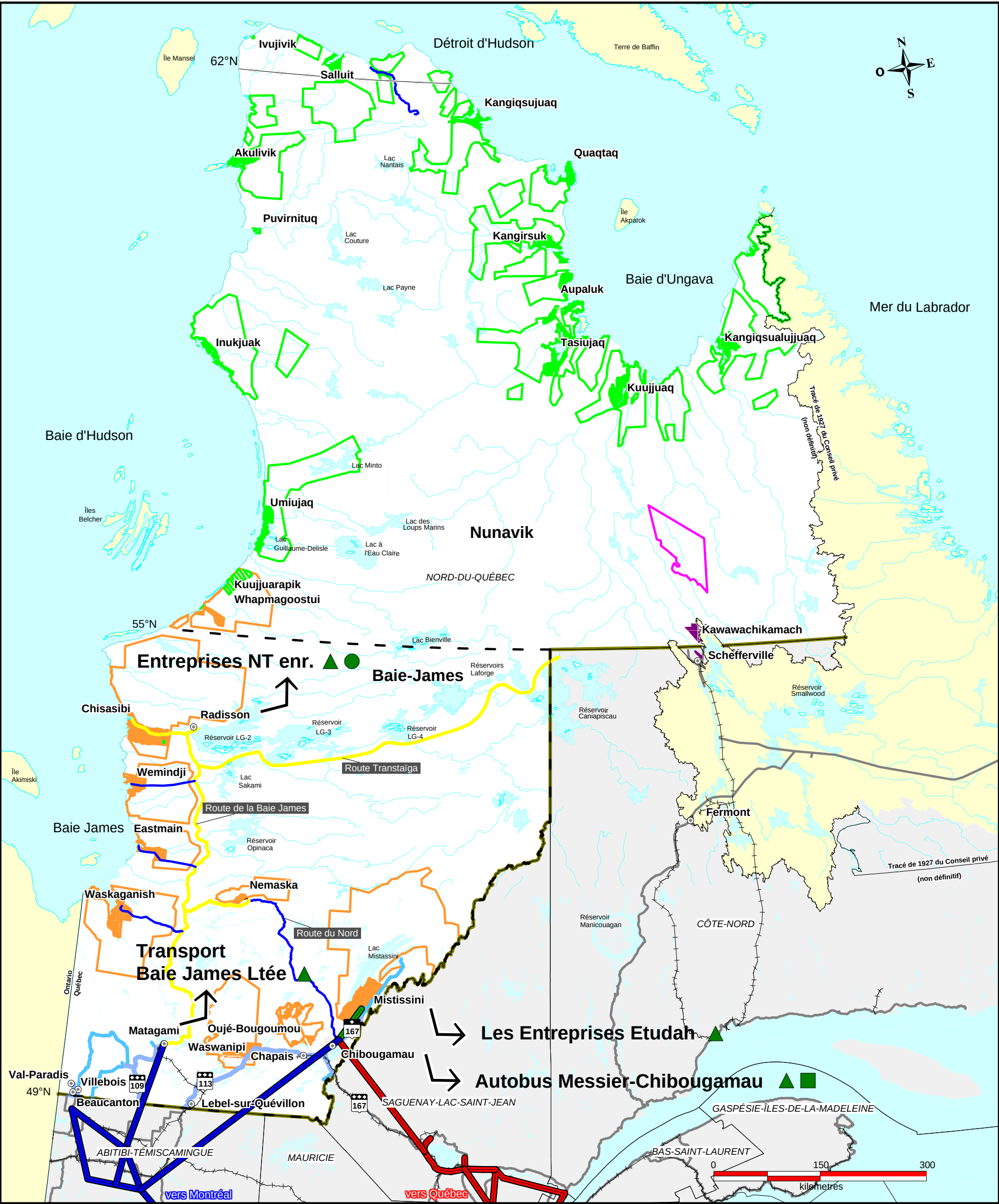
The development of the region's bus transportation companies depends largely on economic development initiatives, in particular on natural resources and energy production development⁷⁹. Moreover, the region's companies are willing to develop services suited to the needs of the Aboriginal communities or other groups.

Map 4 on the following page pictures the regular bus routes, the location of the bus transportation companies in the territory and the type of transport permits they hold.

77 Lemay, M., (2002), Personal communication, Hydro-Québec.

78 St-Pierre, J. et al, (2001), Personal communication, Mines Raglan.

79 Lamontagne, B., (2001), Personal communication, Autobus Messier de Chibougamau inc.



Map 4: Bus transportation companies and services



Direction de la coordination
du Nord-du-Québec

Transportation Plan of Nord-du-Québec
Public transport and public services

Source:
- Ministère des Transports du Québec

Basic map:
- Ministère des Ressources naturelles,
digital maps, scale 1 : 250,000 and 1 : 8,000,000

October 2002

Road
Financial responsibility

- MTQ - National, regional, collector
- MTQ - Access and mining
- MTQ - Other roads
- Hydro-Québec

Others

- Railway
- City or town

Administrative limit

- Municipalité de la Baie James
- South limit Nord-du-Québec region
- Other Québec regions

Bus transportation
companies and services

- Autobus Maheux
- InterCar Saguenay
- Shared intra-regional route

Types of permit

- Chartered transportation
- Contract transportation
- Tourist transportation

Land regime

- (category I) (catégorie II)
- Cree
- Inuit
- Naskapi

Note: The limits of the Oujé-Bougoumou territory are defined under the Cree-Québec Agreement of February 7, 2002.

3.6 Ambulance services

Pre-hospitalization transportation services work differently in each of the three regional boards that operate them in the Nord-du-Québec region. They will first be addressed separately before presenting a regional summary.

The use of air transportation will be briefly described here since this mode is essential to convey emergency cases and persons requiring specialized care to the regional hospitals.

3.6.1 Régie régionale de la santé et des services sociaux de la Baie-James⁸⁰

This regional board covers the towns of Radisson, Matagami, Lebel-sur-Quévillon, Chibougamau and Chapais. Seven ambulances are found in this territory: one in Chibougamau, one in Chapais, one between Chibougamau and Saint-Félicien (road 167), one in Matagami, one in Lebel-sur-Quévillon, one at kilometer 381 of the James Bay road and one in Radisson. These two last vehicles are operated by *first responders*.

The Régie régionale de la Baie-James has contracts with two ambulance companies: SLN in Chicoutimi and Chapais and Ambulance Abitemis in Lebel-sur-Quévillon and Matagami. The vehicles on the James Bay road and in Radisson are owned by the RRSSS de la Baie-James.

Concerning the trips in 2000-2001, the vehicles operated by the *first responders* traveled very little, a maximum of 5,000 km each. Generally, they answer a maximum of eight calls per year. The data for the other ambulances are presented in Table 15. The kilometrage under load means the distance traveled with a patient on board.

TABLE 15

DISTANCES AND NUMBER OF TRIPS MADE BY THE JAMES BAY AMBULANCES

	Total km	Km under load	% km under load/ total km	Nb of trips	Nb of emergency trips	% emergency
Chibougamau and Chapais (2 vehicles)	193,127	68,974	36	575	350	60
Road 167	71,313	25,469	36	133	133	100
Matagami	25,327	11,379	45	120	109	91
Lebel-sur-Quévillon	16,956	8,130	48	72	34	47

⁸⁰ Mingant, C., (2001), Personal communication, Régie régionale de la santé et des services sociaux de la Baie-James.

The RRSSS de la Baie-James does not formally plan to increase its ambulance service, but the addition of one vehicle in Chibougamau during the week is under study.

The localities of Valcanton and Villebois are served by the La Sarre ambulance service, which is operated by the RRSSS de l'Abitibi-Témiscamingue⁸¹.

AEROMEDICAL EVACUATIONS

Emergency medical evacuations for the towns of Radisson, Matagami, Chapais and Chibougamau are made by the government air service (EVAQ) or by the Propair company. As for Valcanton, Villebois and Lebel-sur-Quévillon, they mostly use the ambulance, to La Sarre or Amos⁸².

3.6.2 Cree Board of Health and Social Services of James Bay⁸³

Presently, five out of the nine Cree communities have an ambulance transportation service. The communities of Whapmagoostui and Wemindji have a *first responder* service while the communities of Chisasibi, Waswanipi and Mistissini have a real ambulance service operated by ambulance technicians. For these last two communities, approximately 250 trips are made each year. In 90% of the cases, they are *inter-institutions transportation*.

The difference between the services provided by *first responders* and by ambulance technicians relates mainly to the required training and the range of the care they can provide. The size of the communities and their needs justify the choice for either one of these services. An ambulance technician must deal with enough cases and have enough practice in one year so as not to forget what he has learnt. This is why, in the Cree communities, the choice of a *first responder* service with the option of bringing along nursing personnel for the more serious medical cases, is often the most appropriate.

Ambulances do not serve fixed areas. They may travel some hundred kilometers to go on an emergency call and sometimes the Cree and James Bay communities pool in to provide ambulance services. For example, there are approximately 100 km between the Cree villages and the James Bay road. Ambulances in the Cree villages may answer calls on the James Bay road and vice-versa.

Moreover, each village has a 12 to 15 passenger van, used for *inter-institution transportation* and for airport service. These vans serve the non urgent transportation of injured or sick persons. They are not adapted to persons on stretchers or in wheel

81 Régie régionale de la santé et des services sociaux de l'Abitibi-Témiscamingue, Charron, G., (2001), *Description des limites et des couvertures de zones, Abitibi-Témiscamingue*.

82 Mingant, C., (2001), Personal communication, Régie régionale de la santé et des services sociaux de la Baie-James.

83 Tousignant, A., (2001), Personal communication, Cree Board of Health and Social Services of James Bay.

chairs. The vans of Mistissini, Waswanipi and Oujé-Bougoumou make one round trip per day to Chibougamau. In Mistissini, a second van makes two trips a day.

Between now and the summer of 2002, the communities of Nemaska, Waskaganish, Eastmain and Oujé-Bougoumou should have a *first responder* operated ambulance service.

AEROMEDICAL EVACUATIONS

In the cases of Waswanipi, Mistissini and Oujé-Bougoumou, people are transported by ambulance or by van to the Chibougamau hospital. But for the other communities, emergency transportation to health institutions can be made by air only. The hospitals of Val-d'Or, Rouyn-Noranda, Amos and Montréal are selected, according to the type of care needed. As much as possible, an effort is made to limit the distance to be traveled. Thus, for the past five years, the Abitibi hospitals have been selected more often than the Montréal hospitals. This not only decreases the health costs but it also makes it easier for the families to visit the hospitalized person.

Propair, an airline based in Rouyn-Noranda, provides most emergency air transportation; a few of its air planes are adapted to hospital transportation. Non urgent transportation is carried out by Air Creebec.

3.6.3 Nunavik Regional Board of Health and Social Services⁸⁴

Among the 14 Inuit villages in Nunavik, only Kuujuaq and Puvirnituk benefit from an ambulance service. This service is provided by a person with a cardiopulmonary resuscitation training; there are no ambulance technicians nor *first responders*. In all the other villages, people must go to a health institution by their own means.

In Kuujuaq and Puvirnituk, ambulances also make transfers between the hospital and the airport. In the other villages, a contract is made with a person of the village to make these transfers when necessary.

An ambulance service development plan has been undertaken and should be completed by the spring of 2002. This plan would aim at providing all the villages with a *first responder* service (ambulance vehicle and personnel with a minimum of training) in four or five years from now.

The Naskapi community of Kawawachikamach is served by the Schefferville ambulance services, on the Côte-Nord⁸⁵.

84 Gratton, J., (2001), Personal communication, Régie régionale de la santé et des services sociaux du Nunavik.

85 Régie régionale de la santé et des services sociaux de la Côte-Nord, (2001), *Détenteurs de permis d'ambulance – Région Côte-Nord*, 2 pages.

AEROMEDICAL EVACUATIONS

Emergency trips between the nursing stations, located in each village, and the regional hospitals, located in Puvirnituq and Kuujjuuaq, are made by Air Inuit. Then, the patients are taken care of by the medical team of the government evacuation service (EVAQ) and directed to a hospital in Montréal or to Enfant-Jésus in Québec city. But there is an exception in the case of Kuujuarapik, where they call directly on the government services or Propair because of the village's geographic situation and also because of the length of the landing strip that can accommodate EVAQ's Challenger. For non urgent transfers, regular flights and fares apply. Table 16 gives an overview, for a period of two years, of the number and type of medical evacuations in Nunavik. More than a thousand trips were made by plane. The emergencies covered by the government ambulance plane account for approximately 20% of the annual trips.

TABLE 16

MEDICAL EVACUATIONS IN THE NUNAVIK TERRITORY PER TYPE OF TRIP, 1999-2000 AND 2000-2001

	Non urgent 29 days and over	Follow- up	Surgery	Urgent 0-28 days	EVAQ	Escort for patient	Social ^a	Total
Hudson^b								
2000-2001	143	191	83	217	162	24	22	842
1999-2000	225	37	66	169	146	23	15	681
Ungava^b								
2000-2001	86	168	55	121	112	23	37	602
1999-2000	191	17	96	117	110	13	9	553
Total								
2000-2001	229	359	138	338	274	47	59	1,444
1999-2000	416	54	162	286	256	36	24	1,234

a: Persons needing psychological care or welfare

b: The Hudson sub-region includes seven villages from Kangiqsujuaq to Kangiqsualujuaq while the Ungava includes the villages from Kuujuarapik to Salluit.

Source: Régie régionale de la santé et des services sociaux du Nunavik, (2001) *Table V: Arrivées par catégorie d'évacuation.*

3.6.4 Regional summary of ambulance transportation

In a general way, it is possible to observe that ambulance services are more numerous and of a better quality in the southern part of the territory than in the northern part. Several Nunavik villages do not have a *first responder* service yet.

The various road ambulance services may be classified as follows:

- ambulance and ambulance technician;
- ambulance and *first responder*;
- inter-institution and airport transfer service(van);
- airport shuttle (car).

TABLE 17

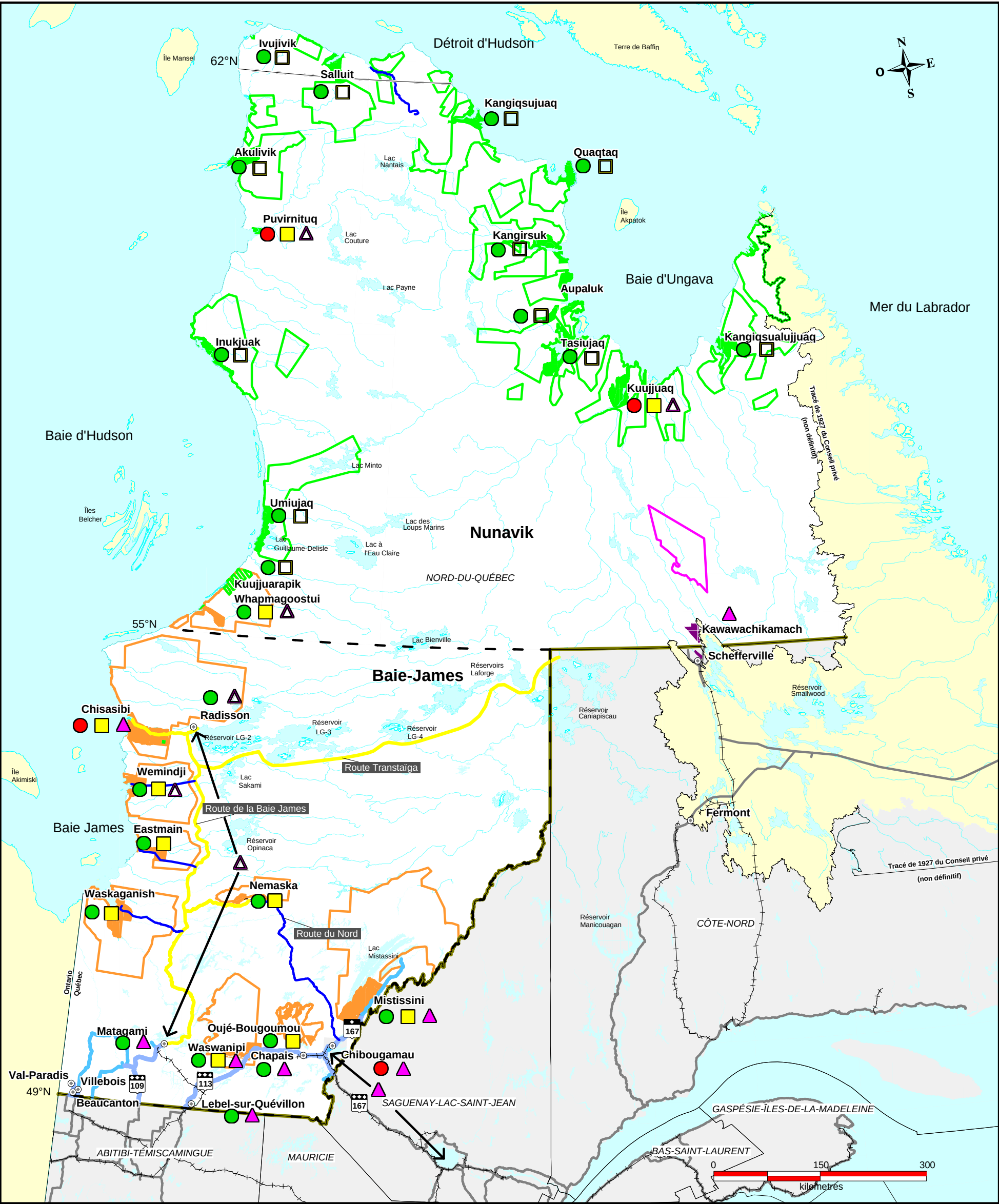
NUMBER OF PRE-HOSPITALIZATION SURFACE TRANSPORTATION SERVICES PER TYPE FOR EACH REGIONAL BOARD IN NORD-DU-QUÉBEC

Regional board	Ambulance and ambulance technician	Ambulance and first respondent	Inter-institution and airport transfer service (van)	Airport shuttle (car)
James Bay	5	2	--	--
Cree	3	2	9	--
Nunavik	0	2	2	11

The inhabited James Bay territory, (excluding the Cree villages) is completely covered by ambulance services. The Cree villages are serviced in a ratio of five out of nine while the regional board communities in Nunavik in a ratio of two out of fourteen.

Indeed, following the report by the Comité national sur la révision des services préhospitaliers d'urgence and the report's recommendations, the regional boards should adjust, in the coming years, the services they provide to better serve the clientele.

Map 5 on the following page locates the health services and the pre-hospitalization transportation services in the Nord-du-Québec region. There are four hospital centers, across the territory. With respect to the other health services, they can be found in most town and Aboriginal villages. With respect to the distribution of pre-hospitalization transportation services, the James Bay towns and Cree villages receive better quality services than the Nunavik.



Map 5: Location of health services and pre-hospitalization transportation



Direction de la coordination
du Nord-du-Québec

Transportation Plan of Nord-du-Québec

Public transport and public services

Source:
- Ministère des Transports du Québec

Basic map:
- Ministère des Ressources naturelles,
digital maps, scale 1 : 250,000 and 1 : 8,000,000

October 2002

Road

Financial responsibility

- MTQ - National, regional, collector
- MTQ - Access and mining
- MTQ - Other roads
- Hydro-Québec

Others

- Railway
- City or town

Administrative limit

- Municipalité de la Baie James
- South limit Nord-du-Québec region
- Other Québec regions

Pre-hospitalization transportation

- Ambulance service
- Ambulance operated by a first responder or a CPR trained person
- Inter-hospital or airport transportation vehicle
- On call airport shuttle

Location of health services

- Health institution
- Health service facilities

Land regime

(category I)	(catégorie II)
Cree	Cree
Inuit	Inuit
Naskapi	Naskapi

Note: The limits of the Oujé-Bougoumou territory are defined under the Cree-Québec Agreement of February 7, 2002.

COMPARISON OF AMBULANCE SERVICES WITH OTHER REGIONS OF QUÉBEC

A comparison is made between the Nord-du-Québec ambulance transportation services and those of Abitibi-Témiscamingue and Côte-Nord. The latter are more densely populated and have a smaller number of isolated villages. Therefore, it can be expected that the pre-hospitalization transportation services operate differently in these three regions.

Tables 18 and 19 are taken from the Comité national sur la révision des services préhospitaliers d'urgence released in December 2000. These tables make a comparison between the three regions based on comparable data. Note that data on the number of *first responders* do not match those collected under this study for the Nord-du-Québec region. This may be due to the fact that some of the *first responders* may not be integrated into the emergency pre-hospitalization transportation services.

TABLE 18

COMPARISON OF FIRST RESPONDERS' SERVICE SUPPLY

Regional boards	Number of municipalities per regional board	Number of first responders	Profile of first responders
Abitibi-Témiscamingue	1	16	-
Côte-Nord	6	60	Fire fighters and citizens
Nord-du-Québec	1	8	Citizens

Source: Comité national sur la révision des services préhospitaliers d'urgence (André Dicaire, president), (2000) *Urgences préhospitalières « un système à mettre en place »*, Ministère de la Santé et des Services sociaux, p. 31.

TABLE 19

COMPARISON OF AMBULANCE SERVICE SUPPLY

Regional boards	Population per region	Number of zones	Number of ambulances	Ratio ambulance per zone ⁸⁶
Abitibi-Témiscamingue	156,039	13	17	1.0
Côte-Nord	103,735	12	20	2.0
Nord-du-Québec	39,304	7	8	1.0

Source: Comité national sur la révision des services préhospitaliers d'urgence (André Dicaire, president), (2000) *Urgences préhospitalières « un système à mettre en place »*, Ministère de la Santé et des Services sociaux, p. 44.

In these three regions, the Côte-Nord has the best pre-hospitalization transportation services, with respect to both *first responders* and ambulance services. When the number of people served by these two services is calculated, this region leads with one

⁸⁶ This ratio represents the number of ambulances in relation to the number of zones.

vehicle for 1,296 persons. In Abitibi-Témiscamingue, the ratio is one vehicle for 4,728 persons and in Nord-du-Québec, one vehicle for 2,456 people.

In addition, the population is not evenly distributed in these three regions. Abitibi-Témiscamingue is the most populated of the three, but it also has the smallest territory and does not have any isolated populations (see Table 19). This relative population concentration in space, and their accessibility as well, results in some resources savings. Table 20 gives the total surface area of the regions and the number of municipalities according to size.

TABLE 20

NUMBER OF MUNICIPALITIES AND VILLAGES IN RELATION TO DEMOGRAPHY, 2001

	Surface area	< de 1,000	1,000 to 9,999	10,000 to 24,999	25,000 and +
Abitibi-Témiscamingue	65,000 km ²	56	24	2	1
Côte-Nord	328,693 km ²	17	12	1	0
Nord-du-Québec	840,000 km ²	16	13	0	0

Source: Ministère des Affaires municipales et de la Métropole, (2001) Répertoire des municipalités du Québec, Website: <http://www.mamm.gouv.qc.ca/mamm.html>

It was not possible to collect other comparable data for these three regions; therefore, the comparison exercise on ambulance transportation is rather limited to the service supply aspects. In fact, the Côte-Nord and Abitibi-Témiscamingue regional boards collect data on the number of trips per year, the regional boards of the Nord-du-Québec region do not do so. Also, data on the response time had not been collected or were not reliable enough.

3.7 Fire protection services

In the Nord-du-Québec region, there are 28 fire protection services for a total of 437 persons. Of these, 13 fire-fighting services and 282 employees are in the James Bay territory while 15 fire-fighting services and 155 employees are in the Nunavik territory (see Table 21). Most of the staff work part time and they are called volunteer fire fighters⁸⁷.

Fifteen fire vehicles service the Inuit villages of Nunavik; there is one in each village, except for Kuujuaq that has two. Each year, there are five to six calls per village in the smaller communities and approximately 80 in Kuujuaq⁸⁸.

87 Ministère de la Sécurité publique (2000), *La sécurité incendie au Québec, Quelques chiffres*, p. 9. Desgagnés, M., (2002), Personal communication, Grand Council of the Crees.

88 Harvey, L., (2001), Personal communication, Kativik Regional Police Force.

In all the Cree villages, fire service supply is relatively recent. At the request of the communities, the Grand Council of the Crees has taken responsibility for coordinating the implementation of these services in the villages where there were none. This has required financial assistance from the federal. All the villages have a fire station and a water supply system with fire hydrants. Equipment also includes: fire pumps, extrication equipment and specialized forest fire equipment. In addition to the specialized fire and rescue vehicles, each service has a utility vehicle. Their intervention area is the village's territory. They may be called on an accident scene on the provincial roads, but no formal agreements have been made in this respect⁸⁹.

In 1998, the Nord-du-Québec region had the lowest number of fires, with 0.26 fire per 1,000 people. However, it had the highest death occurrence during a fire, with 2.6 per 100,000 people⁹⁰.

89 Desgagnés, M., (2002), Personal communication, Grand Council of the Crees.

90 Ministère de la Sécurité Publique, (1998), Incendies de bâtiments, pertes matérielles et décès, selon la région administrative.

TABLE 21

LOCATION OF FIRE-FIGHTING SERVICES, POPULATION SERVED, STAFF AND VEHICLES

Municipalities and villages	Population	Staff	Vehicles
James Bay territory			
Radisson	350	1 full t., 16 part t.	2 pump trucks, 1 rescue vehicle, 1 emergency vehicle
Chapais	1,921	22 part t.	2 pump trucks, 1 emergency unit
Chibougamau	8,503	1 full t., 26 part t.	3 pump trucks, 1 tank truck, 1 emergency vehicle, 1 equipment unit
Lebel-sur-Quévillon	3,337	37 part t.	1 pump truck, 1 tank truck, 1 emergency vehicle, 1 equipment unit
Matagami	2,063	34 part t.	2 pump trucks, 1 emergency vehicle, 1 equipment unit
Valcanton and Villebois ^a			
Chisasibi	3,432	2 full t., 20 part t.	1 75-ft aerial ladder truck, 1 pump truck, 1 rescue vehicle, 1 foam truck
Eastmain	544	1 full t., 17 part t.	1 pump truck, 1 rescue vehicle

CONTINUED

Municipalities and villages	Population	Staff	Vehicles
James Bay territory			
Mistissini	2,441	2 full t., 20 part t.	1 75-ft aerial ladder truck, 1 pump truck, 1 rescue vehicle
Nemaska	526	1 full t., 15 part t.	1 pump truck, 1 rescue vehicle
Waskaganish	1,660	1 full t., 15 part t.	2 pump trucks, 1 rescue vehicle
Waswanipi	1,236	3 full t., 15 part t.	2 pump trucks, 1 rescue vehicle
Wemindji	994	1 full t., 15 part t.	2 pump trucks, 1 rescue vehicle
Oujé-Bougoumou	526	2 full t., 15 part t.	2 pump trucks, 1 crash trailer
Total James Bay	29,374	15 full t., 267 part t.	44 vehicles (non-exhaustive)

a: These two localities are served by the Normétal fire-fighting services, in Abitibi-Témiscamingue.

Sources: Ministère de la Sécurité publique, (2001), *Bottin des services de sécurité incendie du Québec*, Website: <http://www.msp.gouv.qc.ca/incendie/sida/formasp/>

Bégin, R., (2002), Personal communication, Locality of Valcanton.

Desgagnés, M., (2002), Personal communication, Grand Council of the Crees.

Jutra, D., (2002), Personal communication, Locality of Radisson.

Leblanc, C., (2002), Personal communication, Town of Matagami.

Lessard, S., (2002), Personal communication, Chapais Fire-fighting services.

Lortie, R., (2002), Personal communication, town of Chibougamau.

Riopel, S., (2002), Personal communication, Town of Lebel-sur-Quévillon.

Continued

Municipalities and villages	Population	Staff	Vehicles
Nunavik territory			
Whapmagoostui	632	1 full t., 16 part t.	1 (4x4) pump truck, 1 rescue vehicle
Kuujjuarapik	585	13 part t.	1
Umiujaq	327	8 part t.	1
Inukjuak	1387	8 part t.	1
Kangiqsualujuaq	726	9 part t.	1
Kuujuaq	2,099	23 part t.	2
Tasiujaq	233	9 part t.	1
Kangirsuk	390	11 part t.	1
Aupaluk	206	Not available	1
Quaqtaq	274	12 part t.	1
Puvirnituq	1,327	12 part t.	1
Akulivik	457	8 part t.	1
Kangiqsujaq	479	11 part t.	1
Salluit	1,057	8 part t.	1
Ivujivik	284	6 part t.	1
Total Nunavik	10,463	1 full t., 154 part t.	16
Nord-du-Québec	39,837	16 full t., 421 part t.	28 vehicles (non-exhaustive)

Sources: Ministère de la Sécurité publique, (2001), *Bottin des services de sécurité incendie du Québec*, Website: <http://www.msp.gouv.qc.ca/incendie/sida/formasp/>
 Desgagnés, M., (2002), Personal communication, Grand Council of the Crees.

3.8 Police services

The Sûreté du Québec has four stations in the region, located in Chibougamau, Matagami, Radisson and Kuujuaq. There is also a sub-station in Lebel-sur-Quévillon. Vehicles are used to patrol and to answer emergency calls. In Kuujuaq, since there is a regional police, the Sûreté du Québec is called for assistance on emergency calls, but their activities deal primarily with investigations.

TABLE 22

VEHICLES AND ESTIMATED KILOMETERS TRAVELED BY THE SÛRETÉ DU QUÉBEC

	Number and type of vehicles	Approximate distance traveled per year (km)
Matagami	2 4x4 vehicles 2 cars	65,000 to 70,000
Radisson	3 4x4 vehicles 1 car	50,000
Kuujuaq	2 4x4 vehicles 2 snowmobiles	7,000 to 8,000

Source: Sûreté du Québec in Matagami, Radisson and Kuujuaq, 2001

In Nunavik, the Kativik Regional Police Force (KRPF) is present in all 14 villages. Each station has a vehicle, Puvirnituk and Kuujuarapik have two and Kuujuaq has four. These are all sports utility vehicles (4X4s), except for one car in Kuujuaq. The frequency of emergencies is not known, but the distance traveled by the vehicles can be estimated at 10,000 per year⁹¹.

In the James Bay region, the Cree Police is present in the nine Cree villages. With respect to transportation, in Eastmain for example, the Cree Police owns two 4X4 vehicles and one snowmobile. The police must cover more than one hundred kilometers of road and several hundred kilometers off roads. The vehicles travel between 25,000 and 30,000 kilometers per year. Eastmain being a small Cree village of approximately 550 people on a 155 square kilometer territory, we can expect these data to represent the minimum service for each village and the larger communities (Chisasibi, Mistissini, Waskaganish, Waswanipi, Wemindji and Whapmagoostui) to have more resources⁹².

The Naskapi village of Kawawachikamach has its own police force and it is serviced when needed by the Sûreté du Québec stationed in Schefferville on the Côte-Nord⁹³.

91 Harvey, L., (2001), Personal Communication, Kativik Regional Police Force (KRPF).

92 Tivnan, M., (2001), Personal Communication, Cree Police of Eastmain.

93 Ministère de la Sécurité publique, (2001), *Police et sécurité privée*, Website: <http://www.msp.gouv.qc.ca/police/>

4. BASIC PRINCIPLES FOR THE ANALYSIS OF STRENGTHS AND CONSTRAINTS

Public transportation requires significant investments in infrastructures and mobile equipment. Because of their public nature, they are often controlled, managed and operated by governments or their agencies. From a social perspective, governments must also ensure the well-being of the overall population and this includes the possibility to travel and to access various places for social and economic activities. But within the whole population, a portion of the people cannot ensure their own individual transportation.

The Ministère des Transports du Québec is committed to this objective. Its mission statement is as follows:

“To ensure the mobility of people and goods throughout Québec with an efficient and safe transportation system that contributes to the economic, social, and sustainable development of Québec.”⁹⁴

Two fundamental principles underlie governments’ policy decisions to invest in a given area or region: equity and efficiency. The combination of these two principles in a region or in a given context, will determine the level of services to be offered. Following is a brief definition of these two principles.

4.1 Equity

The notion of equity is central to governments’ decisions to invest in social infrastructures or to create social programs.

In the field of transportation, three ways to approach equity can be applied: horizontal equity, vertical equity with respect to income and vertical equity with respect to the need and ability to travel. Horizontal equity concerns fairness in the allocation of costs and benefits between individuals and groups with comparable income and ability to travel. This is the issue when we analyze the financial contribution of each group in relation to their use of transportation goods and services or when two communities compete to obtain transportation investments⁹⁵.

Vertical equity with respect to income states that transportation is most equitable if it provides the greatest benefit at the lowest cost to disadvantaged groups, therefore compensating for overall social inequity⁹⁶.

94 Ministère des Transports du Québec, (2001), Déclaration de services aux citoyens du ministère des Transports du Québec, Mission du Ministère, Website: <http://www.mtq.gouv.qc.ca/ministere/min/declaration.htm#mission>

95 Litman, T., (1999), *Evaluating Transportation Equity*, Website: <http://www.vtpi.org>, Victoria Transport Policy Institute.

96 Litman, T., (1999), *Evaluating Transportation Equity*, Website: <http://www.vtpi.org>, Victoria Transport Policy Institute.

Finally, vertical equity with regard to mobility need and ability measures how well an individual's transportation needs are met compared with others in their community. It assumes that everyone should enjoy at least a basic level of access, even if people with special needs require extra resources⁹⁷.

4.2 Efficiency

Efficiency refers to obtaining the best results from invested resources. Thus, any investor wishes to obtain maximum benefits while investing the least possible resources. This notion of efficiency also applies to public-service institutions.

4.3 Structure of analysis

So, keeping in mind these principles of equity and efficiency, the strengths and constraints of public transportation and services are presented under three aspects:

- the services offered and the operation of the said services;
- the networks and the infrastructures;
- the demand and the users.

Then, strategic policies and action leads in the area of public transportation and public services for the Nord-du-Québec region are suggested.

97 Litman, T., (1999), *Evaluating Transportation Equity*, Website: <http://www.vtpi.org>, Victoria Transport Policy Institute.

5. STRENGTHS AND CONSTRAINTS OF SERVICES PROVIDED AND OPERATION OF SERVICES

First, in order to identify the strengths and constraints of public transportation and public services in the Nord-du-Québec region, verifiable service level criteria for each service examined are defined. Each town and Aboriginal village compliance with these criteria is then validated, in light of the information gathered during phase one.

5.1 Definition of service level criteria

The service level of a transportation mode can be characterized using several criteria related to service cost, frequency and availability, and service quality.

The stated criteria are based on existing policies, standards and laws. However, they must also be selected on the basis of the possibility to assess them. The selection and assessment of the criteria is of course limited by the available data.

Indeed, the reliable quantitative data on transportation demand and supply in the Nord-du-Québec region are rather scarce; this is the conclusion we came to during phase one of this technical study. It is therefore not possible, using the collected data, to accurately define the current needs and the potential demand for public transportation.

Concerning public emergency transportation services, it is not as much the frequency of the needs that is important as the need to respond to them with an adequate service quality level, since these are situations where human life is at stake. And it was difficult to find data that would allow to assess the quality of the public emergency services provided. The quality of these services is generally measured by the response time and the responders' skill level.

These general considerations will now be applied to the various public transportation modes and public services examined in order to establish service level criteria for each one of them.

5.1.1 School transportation

Legally speaking, school transportation must be offered to kindergarten pupils when they reside at more than 0.8 kilometer from school, and to elementary and secondary level students residing at more than 1.6 kilometers. This criterion will be used.

Criterion: Service provided to kindergarten pupils residing at more than 0.8 km from school and to elementary and secondary students living at more than 1.6 km.

5.1.2 Para-transit

Para-transit is aimed at specific clienteles (students) or the general public. There exist four types of such services: stand-alone para-transit service, para-transit service integrated in the regular public transit, regular or adapted taxi, and transportation by volunteers⁹⁸.

According to the *Loi sur le transport en commun*⁹⁹, para-transit must be provided by cities that have a public urban transportation service for passengers. Moreover, municipalities or groups of municipalities may organize a para-transit service and receive subsidies from MTQ. However, the law does not contain any obligation to offer minimum service to these clienteles.

The OPHQ is currently taking steps in that direction and is recommending that each municipality have the obligation to know what are the transportation needs of people with disabilities and see that a service be made available to them on its territory¹⁰⁰.

Criterion: Knowing what the needs are and making sure that there be at least one transportation service for people with disabilities on the territory, accessible to all those in need of such service.

5.1.3 Urban and suburban bus transportation

In the case of urban bus transportation, MTQ's rules for subsidies include standards of minimum population to be eligible to the subsidies. So we can use this rule to state a criterion: cities of over 20,000 people can have an urban transportation system. However, in the present case, no town, Aboriginal village or grouping of those entities has this level of population.

Contract transportation is another form of urban and suburban transportation that provides regular service to a clientele of workers. But this is a private type of service.

Criterion: Cities of over 5,000 people should have access to a form of public urban and suburban transportation service, provided that demand is real and long-lasting.

98 Office des personnes handicapées du Québec, Gilbert, G. et Zawilski, J., (2000), Mémoire de l'Office des personnes handicapées du Québec sur la révision des services préhospitaliers d'urgence (transport ambulancier), Déposé au Comité national sur la révision des services préhospitaliers d'urgence.

99 Ministère des Transports du Québec, (2001), *Information programmes, Transport en commun*, Website: <http://www.mtq.gouv.qc.ca/ministere/programmes/c11.htm>

100 Gilbert, G., (2001), Personal communication, Office des personnes handicapées du Québec.

5.1.4 Interurban bus transportation

Concerning bus transportation permits for interurban, chartered, contract and touring services, the carriers' applications are evaluated on a case per case basis and they must demonstrate the need for such service. Six evaluation criteria are defined in the *Règlement sur le transport par autobus*¹⁰¹. Two of them refer to the notion of service level: the services for which the applicant is requesting a permit shall meet the needs of the clientele or the population of the territory to be serviced, as the case may be; the delivery of the permit requested by this applicant shall not cause the termination of any other bus transportation service or significantly affect its quality. However, these criteria include no minimum limit or obligation to provide minimum service.

The efforts made to define criteria for a minimum supply of urban bus transportation are not very conclusive. MTQ is of the opinion that, for the regular routes, the use of under one third of the seats available is not profitable if we want to keep competitive rates, comparable to those in other regions¹⁰². Since bus transportation services are provided and operated by private interests, and that the issue of profitability must necessarily be considered, it is not possible to establish a criterion that is too restrictive.

We may suggest as a criterion that all towns and Aboriginal villages should have the possibility to be serviced, on request, by an interurban bus company. However, in the present context, it would not be realistic to propose such a criterion as many Aboriginal villages have no road link.

Criterion: Where road infrastructures exist and where profitability level can be reached companies deem it profitable.

101 Gouvernement du Québec, (2001), *Règlement sur le transport par autobus*, Loi sur les transports.

102 Blais, J., (2001), Personal communication, Ministère des Transports du Québec.

5.1.5 Taxi

The *Act respecting transportation by taxi* provides that “the maximum number of taxi permits issued for a region may not exceed 1 permit per 1,000 persons. The Commission may issue 2 permits even if the number of persons in a region is less than 2,000, and may refuse to issue a permit even if the maximum number of permits has not been reached. Notwithstanding the first paragraph, the Commission may, within each territory that it has made into a region and that is listed in Schedule C, issue a number of permits in accordance with the ratio established in that Schedule.” The municipalities of Lebel-sur-Quévillon and Mistissini (Cree village) are included in those territories. As for Radisson, the issuance of two permits was based more on the notion of locality, i.e. a demographic entity included within a very large municipality and without population density.

The *Act respecting transportation by taxi* has been amended in 2001 and new regulations will follow. The new Act provides that permit quotas will be set based on population centers, and the ratio of 1/1,000 persons and the notion of region will no longer exist. The quotas will be set by order in council as an absolute value. Since the criteria have not been defined yet, the absolute value during the transition period corresponds to a projection of the current values, i.e. the existing standards including that of the 1/1,000 persons. It should be added that even if the maximum number of permits on a territory identified as a region is 1/1,000 persons, the CTQ does not have to apply this ratio. The applicant must also demonstrate the need¹⁰³.

Criterion: At least one taxi permit for each town or Aboriginal village of over 1,000 inhabitants.

5.1.6 Ambulance transportation

There is a need for a service to transport people requiring medical care to the health center or the airport. Given the condition of the transported persons, the people providing this service must be in a position to provide a minimum of care. Therefore, our criterion is that there be at least one *first responder* service with an ambulance in each municipality and village.

Criterion: At least one *first responder* service operating an ambulance.

5.1.7 Police services

There needs to be one dedicated police service in each town and Aboriginal village and it should be equipped with vehicles adapted to the number of people and the conditions of the territory to be covered.

103 Martin Claude, Personal communication, Direction du transport terrestre des personnes.

According to the *Police Act*¹⁰⁴, any police force in Québec shall provide at least level 1 services. According to the definition of service levels, a number of personnel and vehicles are required. However, in the Nord-du-Québec region, the Cree and Inuit police forces are not bound by this legal requirement.

Criterion: One dedicated police force in each town and Aboriginal village.

5.1.8 Fire-fighting services

There needs to be one dedicated service in each town and Aboriginal village and this service must be equipped with fire-fighting vehicles based on the number of housing units, buildings and industries as well as on the conditions of the territory to be covered.

Criterion: One dedicated fire-fighting service in each town and Aboriginal village.

5.2 Assessment of criteria compliance

The following tables show, first, the compliance or non-compliance of town and Aboriginal villages with the service level criteria established for each public transportation mode, and, second, for each public service. To lighten the presentation, James Bay and Nunavik are presented separately.

The possible answers to the assessment of each criterion compliance are as follows:

- Yes: The criterion has been met
- No: The criterion has not been met
- N/A: Non applicable
- N/doc.: Non documented

104 Gouvernement du Québec, (June 16, 2000), *Police Act*, Chapter 12, 77 pages.

5.2.1 Compliance with public transportation criteria – James Bay Region

TABLE 23

COMPLIANCE WITH PUBLIC TRANSPORTATION CRITERIA – JAMES BAY REGION

	School transport.	Para-transit	Urban and suburban bus transport.	Interurban bus transport.	Taxi
Municipalité de la Baie James (Radisson, Valcanton and Villebois)	Yes	No	N/A	N/doc.	Yes
Chapais	Yes	Yes	N/A	N/doc.	Yes
Chibougamau	Yes	Yes	No	N/doc.	Yes
Lebel-sur-Quévillon	Yes	No	N/A	N/doc.	Yes
Matagami	Yes	No	N/A	N/doc.	Yes
Chisasibi	Yes	No	N/A	N/doc.	No
Eastmain	No	No	N/A	N/doc.	N/A
Mistissini	No	No	N/A	N/doc.	Yes
Nemaska	No	No	N/A	N/doc.	N/A
Waskaganish	No	No	N/A	N/doc.	No
Waswanipi	No	No	N/A	N/doc.	Yes
Wemindji	No	No	N/A	N/doc.	N/A
Oujé-Bougoumou	No	No	N/A	N/doc.	N/A (yes)

In many cases, school transportation services do not meet our service level criterion. However, the local stakeholders said that the transportation services do meet the current needs and the problem might be a simple lack of accurate information on the distances the students must travel. Since the Cree villages concerned are spatially concentrated, the walking distances for the older students, which are not carried by school bus, may possibly be under 1.6 kilometer.

Transportation for disabled or mobility impaired persons is not much developed on this territory.

The criterion developed for urban and suburban transportation applies only to Chibougamau and it is negative. Regarding interurban bus transportation, it is not possible to determine if the criterion is positive or not, due to a lack of information.

Finally, two Cree villages with relatively large populations do not have a taxi service.

5.2.2 Compliance with public transportation criteria – Nunavik

TABLE 24

COMPLIANCE WITH PUBLIC TRANSPORTATION CRITERIA – NUNAVIK

	School transport.	Para-transit	Urban and suburban bus transport.	Interurban bus transport.	Taxi
Kuujjuarapik / Whapmagoostui	Yes	Yes	N/A	N/A	No
Umiujaq	Yes	Yes	N/A	N/A	N/A
Inukjuak	Yes	Yes	N/A	N/A	Yes
Kangiqsualujuaq	Yes	Yes	N/A	N/A	N/A
Kuujuaq	Yes	Yes	N/A	N/A	Yes
Tasiujaq	Yes	Yes	N/A	N/A	N/A
Aupaluk	Yes	Yes	N/A	N/A	N/A
Kangirsuk	Yes	Yes	N/A	N/A	N/A
Quaqtaq	Yes	Yes	N/A	N/A	N/A
Puvirnituq	Yes	Yes	N/A	N/A	No
Akulivik	Yes	Yes	N/A	N/A	N/A
Kangiqsujuaq	Yes	Yes	N/A	N/A	N/A
Salluit	Yes	Yes	N/A	N/A	No
Ivujivik	Yes	Yes	N/A	N/A	N/A
Kawawachikamach	Yes	Not available	N/A	N/A	N/A

School transportation and para-transit services are well developed in the Nunavik region. But it should be reminded that para-transit services do not use adapted vehicles; more particularly, wheelchairs cannot enter directly into the vehicles.

The criterion developed regarding urban, suburban and interurban bus transportation is not applicable to the villages in the region.

Finally, three Aboriginal villages with relatively large populations do not have a taxi service.

5.2.3 Compliance with public services criteria – James Bay Region

TABLE 25

COMPLIANCE WITH PUBLIC SERVICES CRITERIA – JAMES BAY REGION

	Ambulance transportation	Fire services	Police services
Municipalité de la Baie James (Radisson, Valcanton and Villebois)	Yes	Yes	Yes
Chapais	Yes	Yes	No
Chibougamau	Yes	Yes	Yes
Lebel-sur-Quévillon	Yes	Yes	Yes
Matagami	Yes	Yes	Yes
Chisasibi	Yes	Yes	Yes
Eastmain	No	Yes	Yes
Mistissini	Yes	Yes	Yes
Nemaska	No	Yes	Yes
Waskaganish	No	Yes	Yes
Waswanipi	Yes	Yes	Yes
Wemindji	Yes	Yes	Yes
Oujé-Bougoumou	No	Yes	Yes

Ambulance transportation services do not meet the criterion in four Cree villages. However, they should meet it by the end of 2002.

According to the collected information, fire-fighting services exist in all the towns and Cree villages, except for Valcanton and Villebois, which are desserved by the fire-fighting services of Normétal in Abitibi-Témiscamingue.

There is no police department in the municipality of Chapais, but the Sûreté du Québec covers this territory from Chibougamau.

5.2.4 Compliance with public services criteria – Nunavik

TABLE 26

COMPLIANCE WITH PUBLIC SERVICES CRITERIA – NUNAVIK

	Ambulance transportation	Fire services	Police services
Kuujjuarapik / Whapmagoostui	No	Yes	Yes
Umiujaq	No	Yes	Yes
Inukjuak	No	Yes	Yes
Kangiqsualujuaq	No	Yes	Yes
Kuujuaq	No ^a	Yes	Yes
Tasiujaq	No	Yes	Yes
Aupaluk	No	Yes	Yes
Kangirsuk	No	Yes	Yes
Quaqtaq	No	Yes	Yes
Puvirnituq	No ^a	Yes	Yes
Akulivik	No	Yes	Yes
Kangiqsujaq	No	Yes	Yes
Salluit	No	Yes	Yes
Ivujivik	No	Yes	Yes
Kawawachikamach	Yes (served by the Côte-Nord Regional Board)	Yes	Yes

a: Kuujuaq and Puvirnituq have ambulances operated by a person trained in CPR.

Ambulance services are not much developed in Nunavik. Nevertheless Kuujuaq and Puvirnituq have an ambulance operated by a person trained in CPR.

There are fire-fighting services in all the villages. As for police services, they are found in all the villages and meet the established criteria.

6. STRENGTHS AND CONSTRAINTS OF NETWORKS AND INFRASTRUCTURES

A first constraint to public transportation and public services in the Nord-du-Québec region is the large size of the territory and the dissemination of the towns and Aboriginal villages. Thus, the distances to be traveled are long and this impacts on the cost and time of surface transportation. This context is both favorable and unfavorable to public interurban transportation. It is advantaged as compared with individual surface transportation. However, the distances are such and the populations are so small that their use is limited. Also, for certain trips like medical appointments, people will prefer air to surface transportation, even if it is more expensive.

Another territorial characteristic has a bearing on public transportation and public services: the type of development of the towns and Aboriginal villages. In the Nord-du-Québec region, urbanized areas have a relatively high density. This urban pattern lowers the need for public urban transportation. Distances being relatively short, they can be traveled more easily with individual transport or taxi. However, there will always be a captive clientele, such as children, the elderly, persons with disabilities as well as people who have less financial resources to spend on transportation.

At the regional level, surface transportation infrastructures are not much developed. Nunavik has no road link to the rest of the province. In the James Bay region, transportation infrastructures are not much extended, and the access roads to resources, often used for other purposes, are still on gravel or earth. The low traffic flow makes it difficult to justify interventions to improve road surfaces.

Climate and natural conditions (storms, cold, etc.) represent a limitation to means of transportation that expose people to these conditions, such as walking, cycling or even public transportation which require people to wait outside. As a result, people prefer a door-to-door service or something very similar.

These climatic conditions, as well as permafrost, also limit the durability of transportation infrastructures and equipment. Their technical characteristics must therefore be specifically adapted to the conditions. Let us mention for instance school buses equipped with all-wheel drive.

7. STRENGTHS AND CONSTRAINTS OF DEMAND AND USERS

7.1 Demographic aspects

The main constraint on the demand for public transportation and public services in the Nord-du-Québec region is due to the small populations that, furthermore, are scattered over a vast territory. The population should grow in the years to come in most Cree and Inuit villages, but not in the most populated and closely spaced non Aboriginal towns, i.e. Chibougamau, Chapais, Lebel-sur-Quévillon and Matagami.

The population growth is a result of the high birth rate in the Aboriginal communities. But this high birth rate is partly off-set by emigration. As a result, globally as well as specifically for many Aboriginal villages, the population's mean age should decrease. The need for public transportation of a young population is mainly for school transportation.

7.2 Transportation-generating factors

Passenger transportation-generating factors in the Nord-du-Québec region are mainly related to natural resource development and energy production activities. These activities may generate needs for public suburban and interurban transportation. Furthermore, these activities bring people in the region who will have to be conveyed over a few logically designed routes from the municipalities where they reside to their workplace. This is both a strength and a constraint, depending on the continued existence of the resource development operations. This represents a strength for public transportation since critical masses of people to be conveyed are reached. On the other hand, if the life-span of the development operations is compromised, the motivation of bus companies to provide the service may decrease accordingly.

Another important factor generating demand is the education of youth. As previously mentioned, this factor should grow in the future, and thus stimulate the demand for school transportation services. Specifically for the Nord-du-Québec region, this factor will also stimulate the demand for extra-regional transport.

Finally, tourism is another factor generating trips in the Nord-du-Québec region. They are mainly inter-city travels within or outside the region made by both local and outside people.

7.3 Habits

The Nord-du-Québec people are more used to individual types of transportation in urban and suburban areas. Among others, snowmobiles and all-terrain vehicles (ATV's) are relatively popular transportation means, even with youth.

Besides, Aboriginal people are used to informal public transportation: they have been practicing ride-sharing for a long time. Both automobiles and utility vehicles such as snowmobiles and ATV's are used to convey several people at a time. It is possible that the community spirit and maybe also the harsh weather conditions are reflected in the organization of transportation services.

Finally, a constraint to the assessment of demand for public transportation and public services is that it is not well known. The present study has highlighted certain data gaps in this area and the process to develop a first transportation plan for this region will certainly contribute significantly to a better knowledge of the transportation needs.

8. POLICY DIRECTIONS AND ACTION LEADS

Based on the analysis of strengths and constraints as well as the overall information gathered, policy directions for development and action leads are proposed.

This section of the study also discusses the importance of public transportation and public services for the Nord-du-Québec's socio-economic development. Elements and criteria for the strategic planning of public transportation and public services are identified. Finally, potential improvements to the quality of public transportation and public service infrastructures are presented.

In the statement of policy directions and action leads, certain elements of the current political context are considered. Indeed, governments must deal with significant budgets cutbacks. This is why interventions must target the needs they are meant to respond to. Therefore, when selecting action leads, the socio-economic benefits must be greater than the invested resources.

Certain government programs offer opportunities for the development of public transportation in the Nord-du-Québec region. For instance, programs such as the Airfare Reduction and the post-secondary education access programs are directly intended to the northern communities. Other programs have access constraints that limit the opportunities for the region concerned. For example, the public transit subsidy program is not accessible due to the eligibility conditions based on town size. We have to keep in mind that these programs are designed according to a rationale of efficiency and equity.

We also have to keep in mind that in air transportation, the last few years have been characterized by deregulation, which resulted in fewer air carriers. Let us mention, for instance, Air Alma that offered lower rates than its competitors in the Nord-du-Québec region. Changing competition is reflected in transportation costs. In remote areas depending heavily on air transportation, in the absence of road links or for travels that need to be done faster, the impact is even more important.

8.1 Transportation: a structuring element for socio-economic development

One of the functions of transportation services is to support social and economic development. Transportation consists in ensuring mobility of goods and passengers from one point to another in order to provide access to other socio-economic activities. However, if we want transportation activities to be economically viable, they need to meet social and economic profitability criteria. But in terms of their developmental function, transportation services are often not economically profitable per se.

It is possible to observe that our knowledge of the needs and demand in the area of public transportation and public services is only partial.

In remote and lowly populated regions, transportation activities play an important role. Among others, they allow the youth to access education. In Aboriginal communities, where the dropout rate is an important issue and where birth rate is on the rise, any kind of support may appear crucial.

From an employment perspective, transportation activities also have a role to play. Potential jobs to be created in public transportation and public services are rather limited in number. However, in a context where the unemployment rate is above the provincial average and job creation is low, jobs have a relatively major significance. In the area of transportation, the challenge consists in creating long-lasting jobs.

On the other hand, job creation should allow for and enhance local hiring. The transportation activities profile suggests that Aboriginal people should be more involved in the fields of activities controlled by public institutions. For example, the Cree Regional Board employs only one non-Aboriginal ambulance technician and the future hiring of technicians or first responders will exclusively target Aboriginal candidates¹⁰⁵. The Nunavik Regional Board has a similar policy; Inuit people hold the ambulance driver positions and they are awarded the patient airport transportation contracts. The total number of jobs created for Inuit people is 25, but only one fourth of them are full-time jobs¹⁰⁶.

Transportation activities is also conducive to business development. The collected information suggests that Aboriginal people do not hold a large share of the market in the area of surface passenger transportation companies; non-Aboriginal people are a majority. The fact that the latter are already doing business in the more accessible southern territories is certainly a factor explaining this situation. In addition, among the bus transportation companies with a business office in the region, only one out of four is Aboriginal-owned. As for taxi, about ten permits are held by people of Aboriginal ancestry, representing one third of the permits.

105 Tousignant, A., (2001), Personal communication, Régie régionale de la santé et des services sociaux crie.

106 Gratton, J., (2001), Personal communication, Régie régionale de la santé et des services sociaux du Nunavik. Auclair, S., (2002), Personal communication, Inuulitsivik Health Center.

This being said, public transportation needs to adjust to demand and therefore keep up with the pace of economic development. In remote areas, the development of public transportation and public services must show some flexibility as the balance of demand is more fragile in these regions due to small and disseminated populations, and the nature of the main travel-generating factors.

8.2 Strategic policies

In light of the above considerations, a number of strategic policies may be formulated. They are broken down along three main axes: knowledge development, needs and resources assessment, and implementation.

Knowledge development:

- Acquire a better knowledge of the people's needs through specific surveys.
- Acquire a better knowledge of the available resources (namely: infrastructures, mobile equipment, funding).

Needs and resources assessment:

- Follow-up on the regional economic development and remain receptive to new transportation needs;
- Assess the needs of the Nunavik people for interurban transportation and submit suitable solutions;
- Acknowledge and support  al public transportation initiatives;
- Value partnership initiatives in and between the Aboriginal communities and the municipalities;
- Assess the potential partnerships and collaborations of the Ministère des Transports with the Ministère de l'Éducation, Ministère de la Sécurité publique and Ministère de la Santé et des Services sociaux and their regional representatives.

Implementation

- As much as possible, increase the pooling of services and maximize the use of available resources;
- Ensure the sustainable development of public transportation in the region, through interventions suited to the size of the territory, the low-density population and the isolation of the communities.

8.3 Action leads

8.3.1 School transportation

The current supply of daily school transportation services meets the communities' needs. But the anticipated growth of the Cree and Inuit populations, as a result of a high birth rate, should increase the needs in the coming years. The Ministère de l'Éducation and the Cree and Inuit school boards will have to follow up on these evolving needs.

Another factor that may increase the need for and the costs of school transportation services is urban expansion. This phenomenon is not presently widespread in the Nord-du-Québec region, as this trend is observed in Chibougamau only.

On the other hand, the concerns gathered suggest that it might be advisable to take a closer look at the transportation needs to implement special outings/field trips, for sports or cultural activities. This type of activities is complementary to formal education and helps breaking social ghettoization. This certainly has a beneficial effect on individual development.

Finally, from a public transportation development perspective, the possibility to use school vehicles to convey other clienteles could be examined. Using these vehicles for other purposes entails various constraints such as schedules, legislation and coordination between the various stakeholders.

- Intervention: Assess possible ways to maximize the use of school vehicles.

8.3.2 Para-transit

In the James Bay region, there exist few transportation services for people with disabilities. The program to adapt taxis for people using wheelchairs, adopted in October 2001, could offer an alternative to resolve the situation. In Nunavik, there exist transportation services for these clienteles; however, the vehicles are not necessarily specifically adapted to accommodate people using wheelchairs.

- Intervention: Follow-up on the development of the demand for para-transit vehicles to transport people in wheelchairs.

The stabilization of funding for these transportation services in Nunavik has raised a few comments. Presently, a significant portion comes from private fund raising. Clientele diversification could represent an alternative and independent funding source.

- Intervention: Maintain a priority for disabled and mobility impaired persons while providing services to other types of clients as well.

8.3.3 Urban and suburban bus transportation

Urban and suburban bus transportation can hardly be considered in most Nord-du-Québec town and Aboriginal villages, at least as far as the implementation of a service intended for this sole purpose is concerned. Indeed, population density is too low to justify the implementation of a regular bus service. The municipality of Kuujuaq has made an attempt in the past but the latter was a failure. The development of urban public transit in the Nord-du-Québec region could use alternatives such as car pooling or a form of shared taxi. Incidentally, since 1998, the Ministère des Transports has been promoting a more efficient use of the available resources in the area of passenger transportation through the sharing of public transportation services. But again, demand for such services may possibly be insufficient.

- Intervention: Set up a working committee to address urban transportation needs in the main towns and Aboriginal villages.

On the other hand, under the new *Politique nationale de la ruralité* adopted in December 2001, the government will allocate, starting with the next fiscal year, a global amount \$M10 over five years for the development of public transportation in rural areas. To this end, the Ministère des Transports has the responsibility to prepare a draft assistance program for rural Municipalité régionale de comté that will be designed to establish a supply of transportation using the existing resources.

- Intervention: Ensure the follow-up of the applications for assistance to the development of public transit in rural areas, where the *Politique nationale de la ruralité* (national policy on rural development) applies, i.e. to Villebois and Valcanton in southern James Bay.

Suburban bus transportation is provided by the private sector; transportation contracts are made between natural resources development and energy production companies and bus carriers.

- Intervention: Suggest to companies that provide bus transportation to their employees to expand their services to other clientele.

8.3.4 Interurban bus transportation

Collected information show that the Crees wish to have bus transportation linking their communities among them and to southern municipalities. Studies by experts could be considered to assess the advisability and possibility of implementing a service between the Cree villages and the main southern towns.

- Intervention: Set up a consultation table with the local stakeholders to validate the opportunity to develop bus transportation service links between the villages and the south of the province

It was mentioned during the study that the chartered service transfer rules between carriers could impose limitations in emergency assistance situations in remote areas.

- Intervention: The possibility to introduce an exception which could facilitate charter service transfer when answering an emergency request in remote areas.

Nunavik villages are completely isolated from southern Québec due to the lack of road links, which makes this region dependent upon air transportation. But this transportation mode is more expensive and, in recent years, deregulation in this field of activities impacted on air rates, more particularly in remote areas. The Air Fare Reduction Program should help offsetting these disadvantages. However, a follow-up of the program will have to be made. In this context, it seems relevant to assess the advisability of developing new road links in the region.

- Intervention: Verify the true impact of the Air Fare Reduction Program on the number of users and in relation to the fluctuating rates.
- Intervention: Follow-up on the development projects that could impact on the construction of road links.

8.3.5 Taxi

A few large towns and Aboriginal villages do not have a taxi service and could possibly assume such a service. Since taxi is operated by private interests, supplying this service cannot be mandatory without financial assistance.

- Intervention: Monitor the evolution of taxi service and examine all requests to modify regulations aimed at supporting and facilitating the implementation of such a service.

8.3.6 Ambulance transportation

It should be noted that in terms of ambulance transportation, the Dicaire report, prepared for the MSSS, has set the tone. More particularly, the Cree and Inuit Regional Boards have committed themselves to improving both the quantity and quality of services.

- Intervention: Monitor the implementation of the recommendations set out in the Dicaire report, prepared for the MSSS.

8.3.7 Fire-fighting and police services

MTQ provides the infrastructures that allow emergency vehicles to operate. However, in the Nord-du-Québec context, it appears preferable to adapt the transportation modes to

the existing local conditions: for example, using snowmobiles where road access is limited.

Concerning fire-fighting services, it could be advisable to develop and sign cross-servicing agreements, notably in the James Bay region where Aboriginal and non-Aboriginal communities offer these services within the same area.

- Intervention: Make sure the various fire-fighting services in the territory work together. This applies to police services as well.

CONCLUSION

The Nord-du-Québec region is characterized by a low-density population disseminated over a vast territory. It includes several isolated Aboriginal villages communities with no road links to the other municipalized territories. This demographic and geographic context poses special challenges to public transportation and public services.

Only one urban public transportation mode is available in all the towns and Aboriginal villages and that is school transportation.

As for interurban transportation, air transportation is the only link connecting all the communities year-round, at least in Nunavik. In the James Bay territory, interurban bus transportation depends heavily on the development of the region's natural resources and tourism. Cree communities are also frequent users of these services. There is regular service to Matagami, Chapais and Chibougamau, linking them to the rest of Québec. As for the remaining bus transportation needs, they consist of yearly or special charter contracts.

Concerning public services, pre-hospitalization transportation services are provided in all inhabited areas, but service quality varies enormously. Air transportation is crucial for medical evacuation.

Fire-fighting services are found in all Nunavik villages. In James Bay, towns and municipalities all have fire services, as do all the Cree villages.

Police services cover the entire territory. There are three policing organizations based on the territory: Cree Police, KRPF and Sûreté du Québec.

The public transportation and public services opportunities and constraints in the Nord-du-Québec region have been addressed from different perspectives: services provided and operation, networks and infrastructures, and demand and users. A summary is presented in Appendix 5.

Among the constraints relating to the development of public transportation services, there is the lack of detailed information on passenger transportation needs in the Nord-du-Québec region. This study, as well as the whole development process of the regional transportation plan, is a contribution to filling this gap.

Public services and their operation are better organized where the needs are deemed essential and the demand is sufficient. With respect to public transportation, only school transportation is found in all the towns and Aboriginal villages. Concerning public services, fire-fighting services and emergency pre-hospitalization transportation are provided, but there is room for improving their quality and availability of the latter. As for police services, they are well distributed across the region.

Transport networks and infrastructures in the Nord-du-Québec region do not link all the towns and Aboriginal villages: one Cree village and all Inuit villages do not have road links between them and with the rest of the territory. Due to long distances and low traffic potential, it is difficult to justify road construction on the territory.

The needs and characteristics of users and demand in the Nord-du-Québec region are not well known. The demographic model used by MTQ foresees that the high birth rate prevailing in the Aboriginal communities will lead to a population growth in the villages. Therefore the need for school transportation will very likely increase as well.

The Nord-du-Québec people are more used to individual type of transportation in urban and suburban areas. However, informal public transportation (ride-sharing) is also a widespread practice.

Strategic policies and interventions that can possibly be recommended now are limited by data gaps. Therefore, the policy directions are focused on acquiring more detailed information regarding the organization and specific needs of public transportation in the region. More detailed studies on the needs and appropriate solutions to respond to them are required. Closer working relationships and cooperation among the various stakeholders is of a particular importance in the region, for the purpose of sharing planning objectives and resources.

GLOSSARY

Health services institution

A legal entity holding a permit from the Minister of Health and Social Services to administer services corresponding to the five main mandates as defined by the law.

Health services facility

A place where health and social services are delivered to the Québec population, as part of one or several mandates as defined by the law.

Jamesians

Non Aboriginal population living in the James Bay territory.

First responder

Personnel trained and assigned to intervene in certain medical emergency situations. The role of first response personnel is to provide emergency care required by victims according to the clinical intervention protocols designed for them. They receive a less advanced training than ambulance technicians. However, for the more serious medical cases, they may be accompanied by nursing personnel.

Para-transit

Transport system for persons who, due to physical or mental characteristics, cannot use other public and private transportation modes.

Public transportation

Transport system meant to move a group of people and that is done for account of a third party.

Inter-institution transportation

Transfer of wounded or sick persons requiring special care from a health institution to another health institution.

Chartered transportation

A transportation mode (bus, airplane, boat) rented by and for the exclusive use of a group of individuals or company/organization.

School transportation

Transport system for students.

Town

Aggregation of houses recongnized has a distinct place with a place-name.

Urban transportation

Urban transportation represents all the transportation trips made within the limits of the territory of a town or a municipality. They are short trips.

Suburban transportation

Suburban transportation represents all the transportation trips made towards the outer areas of a town.

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APPENDICES

APPENDIX 1
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APPENDIX 2
CONTACTED BUS CARRIERS INFO SHEETS

Sheet 1

Autobus Maheux Itée

Description	Information
Company/Organization Name	Autobus Maheux Itée
Head Office and Branches	La Sarre, Rouyn-Noranda, Val-d'Or
Type of Permit and Activity	Interurban, urban routes, charter, contract, contracts with schools
Number and Type of Vehicles	135 vehicles including 3 in Nord-du-Québec Coaches, school bus, modified school bus, urban, minibus
Description of Networks in the Nord-du-Québec Territory	Interurban routes • Amos and Matagami: 183 kilometers, travel time of 2 hours • Val-d'Or and Chibougamau: 409 kilometers, travel time of 6 hours and 15 minutes
Type of Clientele	Interurban route: General public Charter: Aboriginal communities and sports clubs (hockey)
Evaluation of Travel Purposes	Interurban route: All purposes Charter: Recreational activities and tourism
Regional or Extra-Regional Carrier	Regional and extra-regional
Schedule and Frequency	Interurban routes • Amos and Matagami: daily round trip except Saturday; synchronized with other bus routes. • Val-d'Or and Chibougamau: daily service (round trip) and goes through small localities such as Lebel-sur-Quévillon, Waswanipi and Chapais; synchronized with other bus routes. Charter: about 100 trips per year.
Seating/Bus, Seating/Week, Seating/Km/Week	Buses in service in the region generally have 48 seats, rarely those with 55 or 56 seats which are used on other routes. 1,248 seats per week 0.16 seat per kilometer per week
Fare	Amos–Matagami: \$32.90 (taxes included) Val-d'Or–Chibougamau: \$61.25 (taxes included) 30% rebate for students and 25% for elderly people
Development Projects	No specific project for now. The company is willing to develop transportation services to respond to an expressed need.

Sheet 2

Autobus Messier de Chibougamau inc.

Description	Information
Company/Organization Name	Autobus Messier de Chibougamau inc.
Head Office and Branches	Chibougamau
Type of Permit and Activity	Employees contract transportation, charter, school transportation and para-transit
Number and Type of Vehicles	Ten coach-type buses, four minibuses with seating capacity of 15 to 20, ten school buses and one para-transit bus
Description of Networks	Employees transportation: - Troilus Mine - Hydro-Québec - Meston Mine School transportation: in Chibougamau, 339 km per day Para-transit: vehicle loaned to Transport adapté Chapais – Chibougamau – Baie-James
Type of Clientele	Employees contract transportation: employees Charter: Aboriginal communities, sports clubs, golden age clubs and tourists School transportation: school boards, children Para-transit: disabled or mobility impaired persons
Travel Purposes	Employees transportation: work School transportation: education Para-transit: recreational and others
Regional or Extra-Regional Carrier	Mainly regional, occasionally extra-regional
Schedule and Frequency	Employees contract transportation: - Troilus Mine: Monday to Friday, round trip - Hydro-Québec: Monday to Thursday, round trip - Meston Mine: seven days a week, day and night Charter: about 100 trips per year School transportation: Monday to Friday Para-transit: on call
Seating/Bus Seating/Week Seating/Km/Week	Employees contract transportation: 48 seat bus – Troilus Mine: minimum 480 seats/week – Hydro-Québec: minimum 384 seats/week – Meston Mine: minimum 1,344 seats/week Charter: N/A. School transportation: 48 seats buses and 12 seats buses Para-transit: 8 seats per bus
Fare	ND
Development Projects	Depends on regional economic development. The company is willing to develop transportation services to respond to an expressed need.

Sheet 3

Intercar Saguenay

Description	Information
Company/Organization Name	Intercar Saguenay
Head Office and Branches	Head Office: 4511, boul. Talbot, Chicoutimi (Qc), G7H 5B1 Branch: 5,675
Type of Permit and Activity	Regular route, regular permit
Number and Type of Vehicles	1 47-seat bus
Description of Networks	From Saint-Félicien to Chibougamau, 233 kilometers, travel time of 3 hours
Type of Clientele	General public
Travel Purposes	All purposes
Regional or Extra Regional Carrier	Extra regional
Schedule and Frequency	7 days/week, one round trip/day.
Seating/Bus, Seating/Week, Seating/Km/Week	Number of passengers per trip varies from 5 to 47 Number of passengers per month varies from 354 to 640 47 seats per bus 658 seats per week 2.8 seats/km/week
Fare	One-way: \$29.60 adult, \$22.25 student and elderly people, and \$14.80 child (taxes not included)
Development Projects	None

Sheet 4**Transport Baie-James limitée**

Description	Information
Company/Organization Name	Transport Baie-James limitée
Head Office and Branches	Matagami
Type of Permit and Activity	Charter, contract and school transportation
Number and Type of Vehicles	Six 48-seat buses Three 12-seat buses
Description of Networks	Charter: N/A Contract: ND School: in Matagami
Type of Clientele	Charter: Youth and golden age groups Contract: Employees School: Students
Travel Purposes	Charter: Recreational and tourism Contract: Work School: Education
Regional or Extra Regional Carrier	Regional
Schedule and Frequency	Charter: N/A Contract: 7 days/week, twice a day School: Monday to Friday
Seating/Bus, Seating/Week, Seating/Km/Week	Contract: 48 and 12-seat buses School: 48-seat buses
Fare	N/A
Development Projects	None

APPENDIX 3

BUS TRANSPORTATION –RECORD OF COMPANIES, PERMITS AND BUSINESS AREAS

BUS TRANSPORTATION COMPANIES HOLDING PERMITS IN THE NORD-DU-QUÉBEC REGION, TYPES OF PERMITS AND TERRITORY COVERED – COMPANIES WITH A BUSINESS PLACE IN THE NORD-DU-QUÉBEC REGION

	Business Branch	Interurban	Charter	Contract	Tourism
Autobus Messier de Chibougamau inc.	Chibougamau	From Chibougamau to Mistissini	Chisasibi and Waswanipi Mistassini, James Bay, Chapais and Chibougamau	Chibougamau and James Bay From Chibougamau to all mining sites along road 167	
Entreprises N.T. Enr.	James Bay		Radisson (James Bay and Chisasibi)		James Bay road between Radisson and LG-2 hydro facilities
Etudah Entreprises enr.	Mistissini	From Chibougamau to Mistassini and Mistissini (Baie-du-Poste)	Mistassini and Mistissini (Baie-du-Poste)		
Transport Baie-James Ltée	Matagami		James Bay, Matagami, Lebel-sur-Quévillon		

Source: Commission des transports du Québec, (2001), *Fiches des enregistrements de permis des entreprises de transport par autocar dans la région du Nord-du-Québec*.

BUS TRANSPORTATION COMPANIES HOLDING PERMITS IN THE NORD-DU-QUÉBEC REGION, TYPES OF PERMITS AND TERRITORY COVERED – COMPANIES WITH NO BUSINESS PLACE IN THE NORD-DU-QUÉBEC REGION

	Business Branch	Interurban	Charter	Contract	Tourism
164463 Canada inc.	Châteauguay		James Bay, Chapais, Eastmain, Matagami, Waswanipi		
Autobus Chevette	La Tuque			From La Tuque to James Bay	
Barvillon inc.	Barraute		Lebel-sur-Quévillon		
Intercar Saguenay	Chicoutimi	From Saint-Félicien to Chibougamau	Chibougamau		
Les Autobus Maheux Ltée	La Sarre	From Val-d'Or to Matagami From Val-d'Or to Chibougamau	James Bay, Lebel-sur-Quévillon, Waswanipi	Lebel-sur-Quévillon and James Bay (Gonzague Langlois Mine)	
Les transports E. Verrault Ltés	Saint-Félicien			From Saint-Félicien to La Doré and Chibougamau	

Source: Commission des transports du Québec, (2001) *Fiches des enregistrements de permis des entreprises de transport par autocar dans la région du Nord-du-Québec.*

APPENDIX 4

**BUS TRANSPORTATION, FOR RECREATIONAL AND OTHER PURPOSES, GOING THROUGH
KILOMETER 6 OF THE JAMES BAY ROAD**

Table 4A

Bus transportation, for recreational or other purposes, going through kilometer 6 of the James Bay road

Entry date	Passenger s	Nb of nights	Québec	Elsewh e	Territory	Outside	Activity	Exit date
Other activity								
2001-09-12	52		RADISSON			MATAGAMI	OTHERS	
2001-09-12	24		CHIBOUGAMAU			ROUYN-NORANDA	OTHERS	
2001-08-01	14			ONTARIO	NEMASKA		OTHERS	2001-08-02
2001-06-27	11	35		ONTARIO	CAN 059		OTHERS	2001-06-30
2001-03-28	2		WEMINDJI			MATAGAMI	OTHERS	2001-04-24
2001-02-11	25		VAL-D'OR		WASKAGANISH		OTHERS	2001-02-11
2001-02-08	47		WASWANIP		WASKAGANISH		OTHERS	2001-02-12
	175						7	
Hunting activity								
2001-09-27	7		CANIAPISCAU			SAINT-JULIENNE	HUNTING	
2001-09-14	22		BLAINVILLE		CANIAPISCAU		HUNTING	37150
2001-09-08	20	10	BOISBRIAND		CANIAPISCAU		HUNTING	
2001-09-02	24		BLAINVILLE		CANIAPISCAU		HUNTING	2001-09-04
2001-08-27	31		MONTRÉAL		CANIAPISCAU		HUNTING	2001-08-29
2001-08-21	14		MONTRÉAL		CANIAPISCAU		HUNTING	2001-08-24
2001-08-17	7		BLAINVILLE		CANIAPISCAU		HUNTING	2001-09-10
	125						7	
Fishing activity								
2001-06-25	4	3	MATAGAMI		KM 395		FISHING	
	4						1	
Vacationing								
2001-08-19	13	10	MATAGAMI		KM 232 (rest area)		VACATIONING	2001-08-29
	13						2	
Visiting hydro plant								
2001-11-07	42	2	MONTRÉAL		RADISSON		VISIT HYDRO PL.	37204
2001-11-07	42	2	MONTRÉAL		RADISSON		VISIT HYDRO PL.	2001-11-09
2001-10-15	30		SAINT-HUBERT (MONTÉRÉGIE)		RADISSON		VISIT HYDRO PL.	2001-10-20
2001-08-23	2	5	POINTE-CLAIRE		RADISSON		VISIT HYDRO PL.	
2001-08-16	48	2	LÉVIS		RADISSON		VISIT HYDRO PL.	37121
2001-08-05	25		MONTRÉAL		RADISSON		VISIT HYDRO PL.	2001-08-07
2001-07-26	56		VICTORIAVILLE		RADISSON		VISIT HYDRO PL.	2001-07-28
2001-07-24	45		QUÉBEC		RADISSON		VISIT HYDRO PL.	37098

Continued

Entry date	Passenger s	Nb of nights	Québec	Elsewh e	Territory	Outside	Activity	Exit date
Visiting hydro plant - continued								
2001-07-20	50		MONTREAL		RADISSON		VISIT HYDRO PL.	2001-07-23
2001-07-17	34		QUEBEC		RADISSON		VISIT HYDRO PL.	2001-07-19
2001-07-15	18		QUEBEC		RADISSON		VISIT HYDRO PL.	37089
2001-07-11	46	3	MONTREAL		RADISSON		VISIT HYDRO PL.	2001-07-14
2001-07-04	5		NICOLET		RADISSON		VISIT HYDRO PL.	2001-07-12
2001-06-14	40	2	ROUYN-NORANDA		RADISSON		VISIT HYDRO PL.	37058
2001-06-10	42		RADISSON			LAVAL	VISIT HYDRO PL.	
2001-06-10	26	2	SAINT-JEAN-SUR-LE-RICHELIEU		RADISSON		VISIT HYDRO PL.	2001-06-12
2001-06-08	44		LAVAL		RADISSON		VISIT HYDRO PL.	
2001-06-06	46	1	VALLEYFIELD		RADISSON		VISIT HYDRO PL.	2001-06-08
2001-06-04	34	3		ONTARIO	RADISSON		VISIT HYDRO PL.	
2001-06-03	35	3	MONTREAL		RADISSON		VISIT HYDRO PL.	37046
2001-06-02	45	3	LACHINE		RADISSON		VISIT HYDRO PL.	2001-06-03
2001-05-28	41	3	LA SARRE		RADISSON		VISIT HYDRO PL.	2001-05-31
2001-05-24	20		CHISASIBI			MONTREAL	VISIT HYDRO PL.	
2001-05-24	33		RADISSON			MATAGAMI	VISIT HYDRO PL.	
2001-05-24	44		RADISSON			TROIS-RIVIERES	VISIT HYDRO PL.	
2001-05-23	34	1	SHERBROOKE		RADISSON		VISIT HYDRO PL.	37035
2001-05-22	43	2	SAINTE-THERESE (LAURENTIDES)		RADISSON		VISIT HYDRO PL.	
2001-05-22	44	2	SAINTE-THERESE (LAURENTIDES)		RADISSON		VISIT HYDRO PL.	
2001-05-20	50		VALLEYFIELD		RADISSON		VISIT HYDRO PL.	37033
2001-05-19	56		GRANBY		RADISSON		VISIT HYDRO PL.	2001-05-21
2001-05-19	33		MONTREAL		RADISSON		VISIT HYDRO PL.	2001-05-21
2001-05-19	41		BEAUPORT		RADISSON		VISIT HYDRO PL.	37032
2001-05-18	53		MONTREAL		RADISSON		VISIT HYDRO PL.	2001-05-20
2001-05-17	42		LAVAL		RADISSON		VISIT HYDRO PL.	2001-05-19
2001-05-17	43		NICOLET		RADISSON		VISIT HYDRO PL.	37030
2001-05-16	43		CHATEAUGUAY		RADISSON		VISIT HYDRO PL.	2001-05-17
2001-05-15	40		LAVAL		RADISSON		VISIT HYDRO PL.	2001-05-16
2001-05-15	40		LAVAL		RADISSON		VISIT HYDRO PL.	37027
2001-05-07	26		RADISSON			LONGUEUIL	VISIT HYDRO PL.	
2001-05-05	26		SAINT-HUBERT (MONTÉREGIE)		RADISSON		VISIT HYDRO PL.	2001-05-06

Continued

Entry date	Passenger s	Nb of nights	Québec	Elsewhere	Territory	Outside	Activity	Exit date
Visiting hydro plant - continued								
2001-05-04	49		SHERBROOKE		RADISSON		VISIT HYDRO PL.	37016
2001-05-03	52		JOLIETTE		RADISSON		VISIT HYDRO PL.	2001-05-04
	1,608						41	
Cultural visit								
2001-08-16	36		WASWANUPI		WASKAGANISH		CULTURAL VISIT	2001-08-18
2001-08-10	23		VAL-D'OR		CHISASIBI		CULTURAL VISIT	37114
2001-06-28	23			TORONTO	EASTMAIN		CULTURAL VISIT	2001-06-29
2001-06-23	42	2	CHISASIBI			WASWANUPI	CULTURAL VISIT	
2001-06-09	1		WASKAGANISH			ROUYN-NORANDA	CULTURAL VISIT	2001-06-10
	125						5	
Celebrations								
2001-08-07	34			MANITOBA	CHISASIBI		CELEBRATIONS	
2001-07-28	36		CHISASIBI			ONTARIO	CELEBRATIONS	37138
2001-05-24	26		CHISASIBI			VAL-D'OR	CELEBRATIONS	2001-05-28
	96						3	
Visiting relatives								
2001-08-01	46			ONTARIO	CHISASIBI		VISIT RELATIVES	2001-08-30
2001-04-21	100		QUEBEC		RADISSON		VISIT RELATIVES	
2001-04-10	39		SAINT-JÉROME		RADISSON		VISIT RELATIVES	
2001-03-04	18		CHISASIBI			VAL-D'OR	VISIT RELATIVES	
2001-01-22	47		WASWANUPI		WASKAGANISH		VISIT RELATIVES	
2001-01-18	47		WASKAGANISH			MATAGAMI	VISIT RELATIVES	
	297						6	
Transporting residents								
2001-11-22	1		MATAGAMI		WASKAGANISH		RESIDENT	
2001-11-02	25		MISTISSINI		CHISASIBI		RESIDENT	
2001-10-29	30		CHISASIBI			MISTASSINI	RESIDENT	
2001-09-13	1		ROUYN-NORANDA		RADISSON		RESIDENT	
2001-09-07	44		CHISASIBI			OUJÉ-BOUGOUMOU	RESIDENT	2001-09-09
2001-07-26	1		AMOS		NEMASKA		RESIDENT	37105
2001-07-08	45		VAL-D'OR		CHISASIBI		RESIDENT	
2001-07-05	27		CHISASIBI			VAL-D'OR	RESIDENT	
2001-07-04	5		WASKAGANISH			VAL-D'OR	RESIDENT	2001-07-07

Continued

Entry date	Passenger s	Nb of nights	Québec	Elsewh e	Territory	Outside	Activity	Exit date
Transporting residents - continued								
2001-06-20	23		AMOS		CHISASIBI		RESIDENT	37071
2001-06-17	27		MONTREAL		NEMASKA		RESIDENT	
2001-06-15	23		MONTREAL		WASKAGANISH		RESIDENT	
2001-06-13	25		CHISASIBI			ROUYN-NORANDA	RESIDENT	
2001-06-12	2		VAL-D'OR		CHISASIBI		RESIDENT	
2001-05-25	50			ONTARIO	WASKAGANISH		RESIDENT	2001-06-03
2001-05-02	36		CHISASIBI			VAL-D'OR	RESIDENT	37015
2001-04-12	2		RADISSON			VAL-D'OR	RESIDENT	2001-09-12
2001-03-09	26		VAL-D'OR		CHISASIBI		RESIDENT	36965
2001-02-15	38		CHISASIBI			WASWANAPI	RESIDENT	2001-02-18
2001-01-27	19			ONTARIO	NEMASKA		RESIDENT	
2001-01-17	1		WASKAGANISH			VAL-D'OR	RESIDENT	2001-01-18
2001-01-09	1		AMOS		NEMASKA		RESIDENT	36951
2001-12-10	9		VAL-D'OR		WEMINDJI		RESIDENT	
2001-12-15	17		VAL-D'OR		EASTMAIN		RESIDENT	
2001-12-15	41		VAL-D'OR		WASKAGANISH		RESIDENT	2001-12-16
	519						25	
Total	2,962						97	

Definition of types of activity

Others:

Cannot be put under any other category, for instance, sports or bird watching

Hunting:

Hunting trip

Celebrations:

Large Aboriginal gathering

Fishing:

Fishing trip

Vacationing:

Vacation in summer camp or camping

Visiting hydro plant:

Visiting hydroelectric power plants

Cultural visit:

Visiting Aboriginal villages because interested in their culture

Visiting relatives:

Other Cree groups visiting relatives living on the territory

Transporting residents:

Trips by residents living north of kilometer 6

APPENDIX 5
SUMMARY TABLE OF OPPORTUNITIES AND CONSTRAINTS

TABLE 5A
SUMMARY OF OPPORTUNITIES AND CONSTRAINTS

	CONTEXT	OPPORTUNITIES (+) AND CONSTRAINTS(-)
Services provided and operation		
1	School transportation	
	Criterion: Provided to kindergarten pupils residing at more than 0.8 km from school and to elementary and secondary students living at more than 1.6 km.	(+) Daily service supply available in all communities and villages. (-)
2	Para-transit	
	Criterion: Knowing what the needs are and ensuring at least one transportation service, for people with disabilities on the territory, available to all.	(-) Supply offer available in all Northern villages, but not well developed in James Bay. (-) Needs are little known.
3	Urban and suburban bus transportation	
	Criterion: Towns of over 5,000 people should have access to a form of public urban and suburban transportation service, provided that demand is real and long-lasting.	(+) (-) Only one municipality has more than 5,000 people, but there is currently no service, the needs are not known.
4	Interurban bus transportation	
	Criterion: Where infrastructures exist and where companies deem it profitable.	(+) There are carriers in the James Bay region. (-) Few intra-regional routes. (-) Nunavik villages are not linked by road.

TABLE 5A
SUMMARY OF OPPORTUNITIES AND CONSTRAINTS - CONTINUED

	CONTEXT	OPPORTUNITIES (+) AND CONSTRAINTS (-)
Services provided and operation – continued		
5	Taxi	
	Criterion: At least one taxi permit for each municipality or village with a population of over 1,000 people.	(+) There exists a supply offer in the territory. (-) Service provided through private entrepreneurs' initiative. A few large communities have no service.
6	Ambulance transportation	
	Criterion: At least one first responder service operating an ambulance.	(+) Services are presently being developed and are growing, following the Dicaire report. (-) There is room for improving the services.
7	Fire-fighting services	
	Criterion: One dedicated fire-fighting service in each community.	(+) Nunavik villages and James Bay towns all have fire services.
8	Police services	
	Criterion: One dedicated police force in each community.	(+) There is Aboriginal police in each village. (-)

TABLE 5A
SUMMARY OF OPPORTUNITIES AND CONSTRAINTS - CONTINUED

	CONTEXT	OPPORTUNITIES (+) AND CONSTRAINTS (-)
Networks and infrastructures		
1		
	Size of territory and distances between towns and villages.	(+) (-) Interurban distances are very long. Interurban travel is not frequent.
2		
	Municipalities and villages relatively dense.	(+) This limits travel needs. (-) This decreases the need for public transit, individual transportation is preferred for its flexibility.
3		
	Road infrastructures limited in James Bay, almost non existing in Nunavik; the present situation does not command the development of new road links.	(+) (-) Surface public transportation requires road infrastructures.
4		
	Extreme climatic conditions.	(+) (-) Special technical requirements for the infrastructures and mobile equipment.

TABLE 5A
SUMMARY OF OPPORTUNITIES AND CONSTRAINTS - CONTINUED

	CONTEXT	OPPORTUNITIES (+) AND CONSTRAINTS (-)
Demand and users		
1	Demography	
	Low-density population disseminated in a large number of towns and villages.	(+) (-) Public transportation efficiency is based on a critical mass of demand that, generally, cannot be attained in Nord-du-Québec.
2	Transportation-generating factors	
	Natural resources development and energy production, education, tourism.	(+) An increase of these three factors is anticipated in the coming years and planned for in the economic development plans. (-) Need to ensure the sustainability of these activities in order to maintain the demand for transportation.
3	Habits	
	Community spirit of small communities (togetherness).	(+) Informal public transportation and ride-sharing is common practice.. (-) People are used to individual transportation for urban trips.