DIGBY TO SAINT JOHN FERRY

IMPACT STUDY

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CONTENTS

1. INTRODUCTION

The Digby to Saint John ferry has been an important communication link between South West Nova Scotia and New Brunswick for well over a century. Service on the route commenced in 1783 and became more established from 1830 onwards following the award of a Nova Scotia mail contract. Formalized by the Dominion Atlantic Railroad in 1894, it became a part of the CP Rail system in 1911. Changes occurred in the 1970s with delivery of the *Princess of Acadia*, and again in 1997 when the service was privatized. In June 2006, the current operators announced their intent to terminate service as of October of that year because of ongoing losses.

Through extensive local representation regarding the service, a short term funding solution was introduced with federal, New Brunswick and Nova Scotia provincial and municipal resources to permit operation to continue until end of January 2009.

ACOA commissioned a short study, delivered in August 2006, to provide a background to the funding proposal. Further study is being undertaken under the aegis of Transport Canada in 2007, with formal consultation taking place in June 2007. A consultant (Opus International[1]) has also been retained to analyse the existing service and Transport Canada have indicated that other studies are also ongoing.

2. BACKGROUND

In preparation for the public consultations, and in anticipation of input to broader studies being undertaken by the federal government and ACOA, a regional working group, The Bay of Fundy Transportation Coalition has been established. The present study was entered upon to prepare a well-informed position paper as to both the impacts on local and regional stakeholders and to provide insight as to future opportunities. These stakeholders are businesses, organizations and residents in SW Nova Scotia, New Brunswick and elsewhere. The present study is designed to provide as comprehensive an overview as possible within a tight time frame and limited budget.

[1] The August 2006 study on behalf of ACOA and the Nova Scotia Office of Economic Development was undertaken by a group of three companies, including Geoplan Opus Consultants Inc. of Fredericton

3. EXECUTIVE SUMMARY

3.1 The consultants were asked to investigate whether there were any current or past ferry services that were similar to the Digby to Saint John service. As far as we can ascertain, there is no ferry service that comes close to meeting the attributes of the Digby-Saint John Ferry Service in terms of equivalent ferry ports, length of trip, traffic mix and alternative travel options. Two services across Lake Michigan are provided as comparisons.

Importance of the ferry

3.2 Because of the ferry, regional fisheries have been able to develop a premium, just-in-time fresh seafood market. Without the ferry it is not possible to guarantee delivery within 24 hours of catch being landed. In 2006 product value was at least $400m, of which about 60% moved via the ferry. Opportunities are improving with fish stock recovery on the Georges Bank.

3.3 The ferry is critical to strategic planning for regional tourism. Without the ferry, the region will be shut out of changing travel markets that focus on shorter vacations. Visitors will not be able to take the time to drive to and from the region, and still have a vacation.

3.4 Survey results indicate that loss of the ferry traffic immediately puts an estimated 375 rooms and over 100 tourism jobs in jeopardy. Another 100 jobs would be lost in related businesses[2]. The fisheries, and related businesses that currently truck by the ferry would have to absorb an additional $11.5m in trucking costs. Inability to access the premium fresh seafood market would take another $12m out of the regional economy if product value[3] dropped just 5%. Thus the probable direct loss to the SW Nova regional economy is in excess of $28m, but could be as high as $40m[4].

3.5 The region lost rail service in 1990, year round Yarmouth ferry service in 1994, and scheduled air service in 2003 *Scotia Prince* service in 2005. SW Nova Scotia lacks safe, fast arterial road access to major highways in Eastern Nova Scotia, and as a result the ferry represents a critical alternate access point to major markets in the USA and Canada.

3.6 Transportation infrastructure is recognised as being a key attribute of any region for economic development. With the ferry, SW Nova Scotia has the opportunity to attract new business. Without, it is moot whether companies will even consider the region.

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[2] Based on Statistics Canada data for labour force and average earnings in 2001, job losses equate to about $4.5m

[3] The industry feels that this is the minimum loss, but delayed seafood delivery could easily lose 10% in value

[4] These are direct impacts in SW Nova Scotia. No attempt has been made to assess indirect or induced impacts, but these could be considerable. Also excluded are any direct costs associated with loss of the ferry itself.

- Three new business opportunities walked away from negotiations when the termination of ferry service was announced in 2006. This lost the opportunity for at least 120 new jobs[5].
- A new resort will not be built without the ferry service[6].
- Motor coach business has been lost because of the uncertainty regarding ferry service. Motor coach tours benefit accommodations, retail and food service operations.
- Attracting health care professionals to the region becomes much more difficult.
- An additional 40,000 auto trips and 16,500 truck trips would be added to Highway 101.

3.7 If the link between Digby and Saint John were a two-lane road, rather than a ferry, it would cost an estimated $83m to build, and $2.5m per annum to maintain[7].

3.8 The ferry contributes important economic and social benefits[8] to Nova Scotia and New Brunswick. At 2005 traffic levels these were estimated to be worth $6.7m and reduce CO_2 emissions by 3,400 tonnes. At 1999 traffic levels the benefits would be about $10m and 8,800 tonnes of CO_2 .

Survey results

3.9 Survey respondents believe that the ferry between Digby and Saint John has to be treated as essential infrastructure; it is no different from a road or a bridge.

3.10 Respondents to the survey identified fares and schedule changes as the most important issues relative to decreased traffic. Reduced costs, a faster crossing and packages were seen as key to increased usage.

3.11 Respondents in accommodation, retail and food service all saw the need for a morning departure from Digby and an early afternoon departure from Saint John.

3.12 Respondents in the fisheries sector felt that a late afternoon/early evening departure from Digby, and an early morning departure from Saint John met their needs.

3.13 According to survey respondents in SW Nova Scotia, loss of the ferry service would:

- Probably cause the end of the Wharf Rat Rally, and with it the loss of $1.3m in economic benefit to Digby and area[9].
- Cause the closure and bankruptcy of several accommodation and retail establishments in Digby and cutbacks in other operations resulting in significant job loss and hardship.

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[5] Anecdotal information from a qualified local source in the Digby/Annapolis region.

[6] Discussions with a US summer resident of the area who has extensive property interests.

[7] 2007 prices

[8] Monetisation of the costs of pollution, greenhouse gases, accidents, noise and road wear and tear.

[9] Figure provided by the organisers.

3.14 Compared with the impact in SW Nova, the limited number of responses from regional tourism-related operations in New Brunswick indicated that the impact of ferry closure in the St Stephen/Saint John corridor would be minor.

3.15 US seasonal residents of SW Nova Scotia, of which there are many, see the ferry as a crucial transportation link, without which they may be forced to sell their properties.

3.16 If the ferry service ceases there is great concern that this will lead to almost complete isolation of SW Nova Scotia.

3.17 According to respondents, the regional economy is already suffering from reduced ridership on both the Digby and Yarmouth ferries.

3.18 Many families depend on the ferry for regular visits. Family connections have been built up based on the ferry, and it's existence for well over 100 years.

Regional Travel

3.19 The St. Stephen to Saint John region had access to 282,382 US travellers in 2005. This number included day trip, one night and two night plus arrivals. There would have been additional activity from Canada. SW Nova Scotia had access (2000 data) to about 220,000 travellers. These numbers have declined considerably in recent years.

3.19 The Digby and Yarmouth ferries provided 100,000 travellers in 2000, or close to 50% of regional visitors. In 2006 they provided 60-70,000 travellers.

Ferry Tariff Review

3.20 Between 2005 and 2006, Bay Ferries increased off peak passenger-related fares by nearly 60%. Peak season fares went up about 50%. Over the same period, commercial fares went up between 6-7% including fees and surcharges.

3.21 The cost of travel on the CAT service from Portland to Yarmouth (introduced in 2006) is competitive with fares on the *Princess of Acadia,* when extra travel costs are accounted for.

Ferry Timetable Review

3.22 Bay Ferries has effectively reduced the number of sailings on the Digby Saint John route by 25% since 2005

3.23 Timetable requirements for industry and tourism are different, and at present the ferry schedule meets the needs of neither stakeholder group. It is considered possible to run a schedule that meets all departure needs on a two round trip per day basis, with the existing vessel.

SUMMARY OF ANNUAL FERRY QUANTIFIED IMPACTS & BENEFITS

Additional trucking costs	$11.5m
Lost jobs in SW Nova Scotia **(first year only)**	$4.5m
Reduced market value to fishery	$12-24m
Loss of special event revenue	$1.3m
Loss of environmental & social benefits	$6.7m -10m
Total	$36.0m -51.3m

This does not account for ferry job losses, income or property tax losses or broader trickledown impacts on the regional economy due to reduced incomes and opportunity with consequent out migration of population.

4. THE SURVEY PROCESS & RESULTS

The survey was posted on Mariport's website on Friday, 8 June and the first email notices went out on Monday, 11 June. The survey, which can be reviewed in Annex 8.4, was organized around six stakeholder groups. These were:

Regional Employers	(regional employers for whom the ferry may represent quality of life issues for employees)
Commercial Interests	(e.g. Fishery, Forestry etc)
Trucking Companies	
Tourism Related Entities	(hotel, motel, campground, B&B etc)
Retail & Food Service Establishments	
Individuals & Students.	

A database was developed from material provided by the Coalition, together with research by Mariport. In all, nearly 300 emails were sent out, of which seven addresses were rejected. Survey research was extended through regional Boards of Trade and contact with the Canadian Consul General in Boston. As of 2 July there were 349 valid returns. Nine returns were rejected as incomplete, inappropriate or not representative of a specific stakeholder group[10]; these were not counted towards the total valid returns. The survey form had an area for call backs[11], and 64 respondents requested a discussion. We spoke with 46 persons and left messages for another eighteen. Additional telephone interviews, not connected with the survey returns, were also undertaken.

The concentration of Mariport's email delivery was to business stakeholders. Individual responses have come where a person completing a business related form has also responded privately, through press reports and posters on local bulletin boards and "word of mouth". In addition to email activity, Mariport also delivered handbills regarding the survey to retail businesses in Digby, Conway and Annapolis Royal and posted to local bulletin boards in Digby, Annapolis Royal and Clementsport.

[10] One return was on behalf of a regional Board of Trade, with valuable comments.

[11] A number of persons interpreted the question in terms of Mariport needing further information, not that it was an opportunity for them to make additional points.

DISTRIBUTION OF RESPONSES BY STAKEHOLDER

	Number	%
Regional Employer	19	5
Commercial Interests	35	10
Trucking Companies	6	2
Tourism Related	67	19
Retail/Food Service	22	6
Individual/Student	200	57
Total	**349**	**99**

Summary of Responses

Returns have been summarized by region. Generally:

The local area is Digby and Annapolis Counties

Mid Valley is Kings County

South Shore is Queens and Shelburne Counties, but extended to include fishing interests up to and including Wedgeport.

Yarmouth is responses from the municipal area.

The Upper South Shore is Lunenburg County.

Halifax is effectively Halifax Regional Municipality.

Outside of Nova Scotia, returns are organized by:

Other Atlantic Canada

New Brunswick Coastal (Charlotte and Saint John Counties between border and Saint John)

Other New Brunswick

Upper Canada (Quebec and Ontario)

New England States (zipcodes beginning with zero)

Other USA (all other zip codes).

Survey responses are summarised in the table on the following page.

4.1 Overview

A number of themes can be developed, both from the click-on responses in the survey and comments made. Almost every response has some commentary reinforcing the message they wished to make and adding a context to the response.

- **The Ferry as Essential Infrastructure**

Although this question was not asked, a significant number of respondents felt that the ferry had to be considered as essential infrastructure. The comparison was made with bridges and roads, and it was pointed out that if the ferry goes, Nova Scotia then has only one all-season entry point – Amherst.

- **Ferry Service Attributes**

  This aspect will be developed more fully in section 6 of the report, but the expected comments regarding fares and service levels were received. Both from comments in the responses and from discussions with respondents it appears that the steep fare increases of 2006 drove many passengers away from the ferry[12]. Anecdotally, we heard that many non-booked passengers turned around at the Digby terminal when they found out what the fares were.

  A key issue is one of schedule and time of departure from Digby. It became very clear during discussions that the current departure time may suit commercial interests, but starves tourist dependent businesses in the region of passing trade. For SW Nova residents wishing to use the ferry to travel west or into New England, a morning departure is essential, otherwise they are forced to drive.

  Departures from Saint John are seen as being needed early to mid afternoon to accommodate travellers from New England, Ontario and Quebec. A morning departure does not encourage overnight stays in the Saint John area, as these travellers tend to stay overnight en-route. With a morning departure, travellers will continue from their overnight location and drive around, rather than wait for the ferry.

  There have been positive comments regarding the upgraded interior of the ferry from recent travellers, negative comments relative to its pre-2007 refit conditions.

  Interestingly there is strong support for more packages, which suggests there are revenue opportunities[13] being overlooked by Bay Ferries.

- **Impact of Loss of the Ferry**

  This aspect will be developed more fully in section 5 of the report. However, the impact is seen as being particularly serious on the Digby/Annapolis/French Shore area, although commercial interests in Shelburne and Liverpool have also identified negative business impacts.

  The fisheries in SW Nova Scotia have developed a market niche that depends on a just-in-time delivery service via the ferry. This is not achievable without the service. Mariport estimates as to losses in this market indicate that the industry would have to absorb about $11.5m in added trucking and distribution costs. Market value would be compromised, and a 5% loss would reduce net revenue by a further $12m, based on 2006 shipments. It should be noted that industry believes that losses in market value of 10% would be quite likely in being later into the market place. Thus the loss of value could be as high as $24m.

[12] It is entirely possible that ridership reaction to the 2006 fare increases actually drove the announcement by Bay Ferries concerning cancellation of service.

[13] Packages that roll ferry fare into vacation, entertainment and travel opportunities are critical to ferry service profitability. Clipper Vacations, which operates ferry service between Seattle WA and Victoria BC has an average sales per customer multiple of 2.5 on its ferry fares.

SURVEY RESPONSES BY REGION AND STAKEHOLDER GROUP

Region	Reg. Employer	Commercial	Trucker	Tourism	Retail/ Food Service	Individual	Total
Local area	12	14	0	39	17	112	194
Mid Valley	0	3	0	3	0	15	21
South Shore	4	11	3	13	3	15	49
Upper South Shore	0	0	0	2	2	1	5
Yarmouth	0	4	1	3	0	7	15
Halifax Area	1	1	0	0	0	7	9
New Brunswick Coastal	1	1	1	5	0	9	17
Other New Brunswick	1	0	0	2	0	12	15
Other Atlantic Canada	0	0	0	0	0	2	2
Upper Canada	0	0	0	0	0	7	7
New England States	0	0	1	0	0	8	9
Other USA	0	1	0	0	0	5	6
Total	**19**	**35**	**6**	**67**	**22**	**200**	**349**

For several regional retail businesses and accommodations, ferry traffic is such a high percentage of their business that they have predicted bankruptcy if the ferry service ceases. Food service establishments indicate serious negative financial consequences, but having more local trade, they may be able to survive. All sectors are already suffering from schedule changes and the impact of the 2006 fare increases. Cessation of service would push them over the edge.

There is a strong perception that SW Nova Scotia would become a totally isolated dead end if the ferry service were no longer available.

- **Impact of Keeping the Ferry Service**
  This aspect is considered more fully in Section 5 of the report, but by reference to lost development opportunities that occurred following announcement of closure of the ferry service, and ones that are on hold pending an announcement of continuation, it can be seen as an essential service in attracting employers.

  Regional tourism strategies would be seriously impacted without the ferry. For example the Diby Area Tourism Association strategy is not yet fully developed and its potential impact on Nova Scotia and New Brunswick is unknown, but it would add a unique touring attraction to the region. The ferry is also key to developments by the new Destination SW Nova Association.

4.2 Regional Employers

A regional employer was considered to be a company that had a presence in the survey region that was not in manufacturing or sales but could be affected through quality of life issues for their employees.

We received responses from nineteen regional employers representing about 1,525 FTE[14] positions, most of which were in SW Nova Scotia. Only three of the companies exceeded 300 employees and most were small businesses with less than 10 FTEs. Of interest is that one of the larger companies, based outside SW Nova in Upper Tantallon, expected that closure of the ferry would have a serious impact on their business. Relatively few of the respondents indicated that they used the ferry on a regular basis, but most considered that the impact on their businesses of the ferry ceasing to operate would be serious, and that quality of life for their employees would be affected. Most also felt that the absence of the ferry service would affect their ability to attract employees, but an enhanced service would not necessarily enable them to increase their level of employment.

As very few actually used the ferry as a part of their business, they were unable to comment on factors affecting use of the ferry, although where a comment was made, this was primarily relative to fare levels.

Several respondents commented that loss of the ferry would lead to increased isolation of the SW Nova Scotia region and a decline in the regional economy. One company, in a service-related area with 37 FTE's, observed that the current state of

[14] Full Time Equivalent position. It was apparent that several returns would have been more appropriate under Retail or Commercial interests.

the economy made it extremely difficult to keep operating and a further decline would cause them to close down.

An aspect of the significance of the ferry that has been focused on by healthcare[15] in SW Nova is the importance of the ferries as the only alternate escape hatch from the region. Without an air or rail link, and with long drives to Halifax or elsewhere, the ferries are a critical component of the regional "sell" to healthcare professionals.

Although the question was not asked, several respondents made the point that the ferry has to be considered as critical infrastructure.

4.3 Trucking Companies

We only received six trucking company responses, one of which came from New England and one from New Brunswick. The companies represented a total of 80 trucks. All used the ferry to some degree, with companies controlling about 40% of the trucks using it for most of their business; the New Brunswick company represented 60% of trucks in the sample. They only used the ferry for deliveries between Digby and Yarmouth, otherwise they felt direct trucking was more effective. Two companies would consider greater use of drop trailers and all were very concerned regarding the possible loss of service.

One company that trucks live crab and lobster both into the USA and back to processors in Nova Scotia, commented that loss of the ferry would lead to greater mortality in the product as well as higher cost. In an all-driven route, two drivers are needed to meet regulatory requirements; via the ferry only one driver is needed.

4.4 Commercial Interests

We received 35 responses from commercial interests of which seven were in fisheries, two in forestry, five in manufacturing, six in unspecified other, ten in service industries and one company that did not indicate a sector. Responses represented 1,055 FTEs. Over half the companies stated that they used the ferry, although based on the response to frequency of use, 90% actually used the ferry. Seventy percent felt that loss of the ferry would have a serious impact on their business and where they were able to quantify the results, it was felt that 45-50 FTEs would be lost, or about 5% of current workforce. It should be noted that comments made during requested interviews suggest that this number could be twice as high. Two companies believed they would be forced out of business.

Sixty percent of respondents indicated they would use the ferry more if there were service changes, although 30% did not see a need for change. Most respondents felt that changes needed were fare related (50%); frequency (40%) and crossing time (35%).

A comment from a company active in the fishery supported the trucking concern about higher costs and potentially lower net revenue. They noted that a lower net

[15] We did not specifically survey regional hospitals and medical services, but discussions with three persons associated with Yarmouth Health Services, and responsible for recruitment use the ferry services as an integral component of their "sell".

revenue on the product would reduce the amount that could be paid – all the way down the chain to boats and that, ultimately, people may move out of the industry because they could not afford to stay in it.

Although neither the trucking industry, nor the fisheries sector could put a dollar value on changes that would be forced on them with ferry service closure, Mariport has estimated that the net cost increase in trucking[16] would be about $11.5m.

Other comments supported the issue of regional economic activity made by regional employers, that with the slow down in the economy they had already had to cut back on employment, but a further reduction through loss of the ferry would force them to consider a continuation of the business.

Again, the issue of the ferry as essential infrastructure was raised.

4.5 Tourism Related

We received 67 tourism related responses, mainly from SW Nova Scotia, and seven came from New Brunswick. The mix was approximately:

Hotel/motel	23%	550 rooms
Resort	11%	227 rooms
B&B	33%	102 rooms
Entertainment	24%	not applicable
Park	3%	25 spaces
Campground[17]	4%	730 camp and RV spaces.

The responses represented a total 879 rooms.

The seven counties that make up SW Nova Scotia are reported[18] to have 4,146 fixed roof units[19] and 2,762 campground sites. Of the rooms and sites, 1,443 fixed roof units and 1,352 campsites are reported in Digby and Annapolis counties. Returns represented 46% of fixed roof accommodation and 54% of campground spaces.

All of the Nova Scotia responses came from the SW Nova region, and 80% indicated serious impacts from ferry service closure, 17% saw minor impacts and 3% did not offer an opinion. In New Brunswick, the situation was reversed with 71% indicating minor impacts and 29% serious[20].

Where answers were provided relative to the percentage of guests that used the ferry, 13% indicated greater than 70%; 13% between 50-69%; 51% between 25-49%; 23%

[16] 16,500 trucks, an average of 600km additional truck miles and $1.85/km, less savings of $420/truck on ferry fares.

[17] We reclassified two returns that indicated “Resort” to “Campground” based on the accommodation offered.

[18] 2006 Tourism Strategy for SW Nova Scotia – a work in progress.

[19] We have excluded rooms at Acadia University

[20] These represented two returns, both from Welshpool on Campobello Island. We are unsure how these operations would be impacted. Because of the small sample, such atypical responses can skew the analysis.

less than 24%. 70% indicated that the impact would be serious and that loss of the ferry service would affect their viability. Only 7% of those indicating a serious financial impact indicated that loss of ferry related business would not affect their viability, and 4% had no opinion. Of those indicating minor or no impact, 17% suggested that loss of the ferry service would affect their viability, 33% saw no impact and 50% had no opinion. One establishment, with whom discussions were held, indicated that they would be forced into bankruptcy as room occupancy was already down and further reductions were not supportable. They operate 22 rooms and seven employees would be made redundant. If this figure is scaled to the 26% of rooms where ferry traffic represented more than 50% of business, then 375 rooms and at least 100 jobs could be at risk.

The limited number of returns from New Brunswick indicated that the impact of ferry service closure there would be minor.

TOURISM OPINIONS REGARDING INCREASED FERRY USE

Better fares	88%
Increased frequency	51%
Faster crossing	45%
Better onboard services	28%
Separate trucks from autos	12%

90% indicated that service changes were critical to the future of tourism in the region.

Additional comments from this group of respondents identified loss of traffic of in excess of 20% following the 2006 fare increases and further losses due to the new Digby schedule.

The theme of increased isolation was also addressed and the fear that tourists, forced to enter Nova Scotia via Amherst, would remain at the east end of the province rather than touring to the south west.

The comment was made on many returns as well as in discussions that tourism - particularly accommodation - needs a morning departure from Digby to help drive overnight accommodation. This then has broader impacts on retail and food service with additional spending[21].

4.6 Retail and Food Service

We received 22 responses; all were in the SW Nova region and all but four were in the local area:

Gift stores	28%
Restaurants	36%
Other	36%

[21] A couple taking the ferry could well spend $200 between accommodation, dinner and a purchase from a gift store. (Mariport estimate.)

Level of business from ferry passengers varied between 5% and 75%, where an estimate was provided, and all but two companies identified the impact from loss of service as serious. One operation commented that they track where visitors are from, noting how many customers are off the CAT and the *Princess of Acadia*. This business stated that they would be forced to close if the ferry were no longer operated. They have already had to adjust their hours of operation to reflect the reduction in traffic caused by ferry schedule changes by both the CAT and the *Princess of Acadia.*

Most believed that changes to the ferry service could bring them increased service and that their customers would use it more often. As with other groups, fares were singled out as the biggest area of concern and comments were made regarding the drop in traffic after Bay Ferries increased fares in 2006.

One respondent stated that the ferry was critical for their business, as customers took items in their vehicles. They would not purchase if they were flying because of issues with carry on baggage and security.

RETAIL AND FOOD SERVICE OPINIONS REGARDING INCREASED FERRY USE

Better fares	68%
Increased frequency	68%
Faster crossing	55%
Better onboard services	32%
Separate trucks from autos	14%

A respondent from the French shore, who had been in operation in the same location for over 20 years, related that before Highway 101 was completed to Yarmouth, they received 3,500 visitors during the season; after the road was completed the number dropped to 1,500 and they would probably not see 500 a season if the ferry no longer existed. They did not feel they could survive on this amount of traffic.

4.7 Individual and Student

We received 200 individual responses; use is shown below.

PERSONAL USE OF FERRY

Solely personal	11%
Vacation	11%
Business	3%
Combined education	6%
Other combination	62%
Not answered	5%

Most returns were from SW Nova Scotia, but 21 were from New Brunswick, seven from other Canada (mainly Ontario) and eight from New England states and five from other USA. Only one person indicated no need to take the ferry, and of the ones using the service, 1% indicated weekly use; 8% indicated monthly; 32% indicated quarterly and 45% annual, the balance did not answer the question. 80% of respondents did not answer the question as to reasons not to use the ferry. Of the ones that did, 60% indicated cost as the primary reason and 40% schedule issues.

In comments, cost and schedule were singled out as the reasons people did not use the ferry more often and although some comments were made about poor or bad services[22], these seemed to be from trips that predated the makeover of the ship's interior. Persons who had travelled more recently commented favourably on the accommodation. Many indicted that more packages would encourage them to use the ferry more often, which suggests a business opportunity for Bay Ferries[23].

There appear to be a number (anecdotally 20-30) persons who live in Digby and work in Saint John. Their concern is that, as frequent users they get no break from tariff. Again, anecdotally, there are a considerable number of students who use the ferry to get to/from universities in New Brunswick. As noted in the use, only 2% of respondents indicated educational use, however Université Ste. Anne advises that they have 30-40 New Brunswick students during the September to April term, and then 10-15 bursary students in each of their spring and summer immersion sessions. Data from the Maritime Provinces Higher Education Commission web site indicates that in the 2005/06 year there were 182 Nova Scotia resident students in New Brunswick universities and 157 New Brunswick resident students in Nova Scotia. Thus there is potential for use of the ferry.

Another aspect addressed in comments was family connections that have been built up around the ferry link and its long history. Removal of the ferry would cause considerable hardship as the only way family members can meet regularly is by taking the ferry. The long drive would limit meetings to once per year.

Virtually all respondents - 90% - had an opinion as to what would encourage greater use:

REASONS TO MAKE MORE USE OF THE FERRY

Better fare structure	83%
Faster trip time	27%
Better onboard services	22%
Separation of trucks and autos	4%
More packages	36%

4.8 Other Responses

Another aspect of the ferry is the importance of the service to home buyers in the region and the perceived difficulty if the ferry were no longer available. This concern has come from real estate agents and lawyers who have commented that the region

[22] One comment was made regarding very poor booking services and lack of information regarding a weather cancellation.

[23] While Bay Ferries have recently announced two packages for specific attractions in Saint John, respondents have made comments about mid-week or weekend packages for mini vacations or shopping. Packages are sold in New Brunswick for golf breaks, but many more opportunities are felt by Mariport to exist on both sides of the Bay. A comment from a New Brunswick hotel trying to negotiate packages indicated that Bay Ferries were very inflexible relative to their tariff.

would become more isolated without the ferry and it would be much harder to attract buyers.

A feature of the residency in SW Nova Scotia is out of province seasonal residents who own property. These persons are not well identified in tourism data, but have a substantial impact on the regional economy through house upgrades and modernisation. We have only anecdotal information about numbers, but one respondent from Maine, who has had a home in Yarmouth for many years, knew of at least fifty US families in the area. We had Individual responses from twenty two out of province property owners, most of whom visit quarterly and all were concerned regarding the loss of access to SW Nova if the ferry was no longer available. Some felt they would be forced to sell their properties, because the long drive through New Brunswick was not acceptable.

This concern is reflected in comments from hardware stores and lumberyards that are dependent on renovation projects. The knock-on result would also affect trades and contractors, leading to a further decline in regional economic activity.

5. IMPORTANCE OF THE FERRY SERVICE

We have been unable to identify another ferry service (past or present) that comes close to matching the parameters of the Digby – Saint John service[24]. The only one that comes close is the Milwaukee (WI) to Muskegon (MI) service which crosses Lake Michigan at about mid point and connects I-94 with I-96, avoiding about 430km of driving, including through Chicago. This ferry service, which is run by a small high-speed passenger/vehicle ferry, is a re-introduction of an older service that terminated in 1970. This service is closest in attribution in that Milwaukee is a major urban, manufacturing centre, while Muskegan is a smaller vacation-oriented community. However, the interest in this service is primarily as an alternative link between Milwaukee and the major business centre of Grand Rapids. Operation is seasonal and the ferry draws about 135,000 passengers per year, and 30,000 automobiles. There is another ferry on Lake Michigan - the ***Badger*** - that carries a similar number of passengers seasonally but is between two vacation-oriented locations and avoids about 600km driving via the Mackinac Bridge. However, neither ferry has the commercial traffic base that the Digby – Saint John ferry offers. Comparative fares for 2007 and route information are given in Annex 8.8.

5.1 Characteristics of the Saint John Region

The Saint John CMA had a population of 122,680[25] as of 2001 and a further 167,981 persons living within a 45-minute driving distance. Of the commuter population, about 30,000 live in the region between Saint John and the US border at St. Stephen. The labour force in 2006 was about 67,000 persons and the unemployment rate was 6%.

In terms of tourism potential, in 2005 132,285 US auto passengers[26], intending to stay two nights or more, entered Canada through the St. Stephen/Calais crossing, and 150,097 US residents entering for a day trip or one night through the same crossing. No information is available on Canadian origin/destination tourist traffic on the Trans Canada Highway that may divert to Saint John after Fredericton. US arrivals via Woodstock/Houlton have not been considered. There is also significant Canadian traffic through the border that has been absent for 2 or more nights. See Annex 8.7 for statistics from 1996 onwards.

Tourism spending in the city of Saint John alone was estimated at $227m in 2006[27].

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[24] We asked the Executive Director of Interferry, of which Mariport is a member, and the Publisher of *Cruise and Ferry International,* who knows the European market well, and neither could come up with examples of similar services.

[25] *Saint John Demographic Overview,* Enterprise Saint John 2006.

[26] Statistics Canada, special data run for Mariport.

[27] Report by MacKallor, Cunningham & Associates.

5.2 Characteristics of SW Nova Scotia

Population in SW Nova Scotia was 202,575 persons in the 2001 census for Annapolis, Digby, Kings[28], Queens, Lunenburg, Shelburne and Yarmouth Counties. Employment information is not readily available for the region, but data indicates that the unemployment rate in the counties included in the population above ranged from 8.9% to 11.2% respectively in 2003 and 2004. Tourism spending in 2004 was estimated at $249m in SW Nova Scotia, of which $63m was in Digby/Annapolis.

5.3 Importance to the Fisheries

Annex 8.9 provides details of value of the fisheries for the three core counties of Digby, Yarmouth and Shelburne. The total value of all landings in 2005 was $402m, of which lobster and scallop was $329m[29], or 82%. The total value of all Nova Scotia fisheries exports in 2005 was $1,034m, thus the three counties of SW Nova contributed 40%. Live lobster and scallop exports from Nova Scotia to the USA were worth about $277m in 2005, and exports to fifty other countries were worth an additional $98m. Much of this additional market was routed through the USA because of better air cargo connections and needed ferry access to ensure product freshness prior to loading.

Ground fish and pelagics are also an important part of the fisheries, and while their value is overshadowed by Crustcean exports, they are equally dependent on the just in time market. They also offer hope for recovery in quantity and value, as management of the fishery on the Georges Bank is demonstrating a strong return in haddock and yellow tail flounder. The wild caught fishery has a market cachet compared with farmed fish that enables the SW Nova fisheries to survive and grow in a highly competitive market place.

Values from the same three-county area were estimated to be well in excess of $400m in 2006, with lobster representing $220m. The industry estimate that approximately 60% of this value was shipped via the ferry, or $250m. If market value were reduced by 5% as a result of being one day later in delivery, then $12.5m would be lost.

There is considerable exchange of fresh fisheries products between Nova Scotia, New Brunswick and New England that would not be feasible without the ferry. Comments under the trucking section of the survey results give one example, where outbound the truck carries lobster and scallop, inbound it carries crab. Another example is the ability of a regional processor to take advantage of the availability of fresh herring in New Brunswick, and bring in over thirty trailer loads via the ferry during a three-month period for early morning delivery.

SW Nova Scotia has built a premium just-in-time market for its fisheries with live and fresh produce delivered into the key Boston market within 24 hours of it being

[28] Kings and Lunenburg Counties represent 53% of SW Nova population. Although SW Nova is generally considered to be the seven counties identified, the greatest concern regarding the future of the ferry came from the five westerly counties that make up only 47% of the regional population.

[29] See footnote to table regarding a probable categorization error in 2005 data, which is reported as preliminary.

landed. Drops are made with customers from Bangor (ME) through to Newark (NJ), all predicated on the basis of fresh produce. This market sector is only accessible by use of the ferry. By using the ferry, with a late afternoon departure ex Digby, trucks can be in Boston with about 7-8 hours driving, including border delays. Added to which, the driver has a three-hour rest period onboard. The all-driven route takes 16-18 hours assuming a team approach – or 26-28 hours for a single driver with a rest period[30]. As the market is only open between about 05:00 to 10:00 hrs each day, this means that product is a day later into the market, with a much more limited shelf life and reduced market opportunity.

5.4 Importance to Tourism

As will be seen from the comparative aspects of SW Nova Scotia and SW New Brunswick including Saint John, although tourism spending appears to be roughly comparable, employment and general economic activity is very different.

Visitor data comparable to that for the Saint John/St. Stephen corridor is not available for Nova Scotia. A 2000 report on Nova Scotia visitor traffic flows[31] suggested that traffic flows in the Annapolis/Digby/Bridgetown area were in the region of 94-103,000 unique party visits, with an average party size of 2.2 persons. The same source indicated flows of 80,000 unique parties at Yarmouth and those numbers were consistent with South Shore destinations in SW Nova Scotia. Traveller numbers in the Annapolis Valley increased from Kentville eastwards, and on the South Shore increased from Lunenburg east.

In 2000, visitor arrivals from the ferries at Yarmouth and Digby combined were 115,062[32]. Total traffic over the two ferry entry points has declined to between 60-70,000 visitors on touring vacations and gives credence to the concerns of regional tourism-dependent operations regarding traffic declines and potential isolation with ferry service closure.

The St. Stephen/Saint John corridor had access to at least 250,000 travellers per year (2005 data). In 2000, the figure would have been in the order of 300,000 travellers.

What is alarming is that a comparison of SW Nova Scotia traveller numbers with ferry arrivals shows that in 2000 close to 50% probably originated at Yarmouth and Digby. While current traffic flow data is not available, the decline of ferry traffic to 60-70,000 in 2006 from 100,000 in 2000 supports the contention in the survey returns of serious overall drops, and loss of the Digby service could feasibly leave SW Nova Scotia with little more than half the traffic it had in 2000.

The operators of Digby Wharf Rat Rally have indicated that their very successful Labour Day weekend event would probably have to close without the ferry service.

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[30] Advice from the trucking industry is that they have not been able to use a team approach because of difficulty finding compatible drivers.

[31] 2000 Nova Scotia Visitor Traffic Flow Report.

[32] Combines Statistics Canada data for 2+ nights by US visitors at Yarmouth with provincial data for visitors to Nova Scotia at Digby. Actual arrivals in Yarmouth were higher, and included day trippers and one night stays.

The Rally has grown exponentially in interest, pumping an estimated $1.3m into the regional economy in 2006. The ferry, reportedly, carried a large number of bikers that came from New Brunswick and New England[33]. In order to continue to grow with this long weekend event, timely access to the US and Canadian market is critical.

SW Nova Scotia has benefited in the past from long stay visitors, but trends in travel all point to shorter and more frequent vacations[34]. A recent Harris Interactive poll[35] indicated that only 14% of Americans planned to take a two-week vacation in 2007. Increasingly Americans are planning multiple short vacations, typically around a long weekend. Without ferry access to key markets, this short vacation market is closed to the region, because additional travel time makes the region inaccessible.

5.5 Importance as Critical Infrastructure

The web survey, on which this report is based, did not ask a question regarding how respondents thought of the ferry. However, very many wrote in comments that the ferry service has to be considered as critical infrastructure and looked on as a road, or a bridge. This perception of the ferry as a highway into SW Nova Scotia is supported both by concerns of isolation if the ferry no longer operates, and the poor state of road access into the region. See Annex 8.10 for a discussion of the two primary highways from a common meeting point in Bedford.

Neither can be considered fast, safe arterial roads, although Hwy. 101 has fewer grade crossings and better alignments. Both highways are mainly two-lane, and both suffer from a lack of passing lanes. Another concern relative to existing infrastructure is the lack of adequate connector highways linking the two shores of SW Nova Scotia. Highway 12 is at the eastern extremity of the region, while Highways 8 and 10 offer difficult routes given the poor road conditions. There is no effective cross route west of Liverpool and Annapolis Royal.

In terms of comparing the ferry with essential infrastructure, the following offers some cost comparisons based on New Brunswick[36] data. Construction and other costs are for a two-lane highway[37].

	$ Costs 1993 base/km	**$ Estimated Costs/km 2007**
Maintenance	4,500	5,850
New construction	1,000.000	1,300,000
Reconstruction	775,000	1,075,000
Rehabilitation	225,000	292,500

[33] Mariport has been provided with a copy of the Economic Impact statement for the 2006 Wharf Rat Rally.

[34] There is a difference between a long stay vacationer in the tourism sense, and one who owns property and visits periodically. See 4.8 for a discussion.

[35] Reported in USA Today 10th June 2007

[36] *Highway Construction and Maintenance Costs,* Christian, J. & Newton, L. Published Canadian Journal of Civil Engineering 1999.

[37] The C.P.I. indicates that costs have risen 28% since 1995; we have increased costs by 30% from 1993 to provide a representative value for 2007.

Note that these costs are probably appropriate for a highway of similar characteristics to the existing Highways 101 and 103, but do not take into account adding passing lanes, construction of bridges and intersections. Information from the USA suggests that interstate level of construction is equivalent to about $1.3m/lane km, and diamond intersections in the order of $6m[38] each. Putting these values into the context of a level of infrastructure that would improve road access within SW Nova Scotia:

Rehabilitation of Highway 8[39]	$25-30m
Passing Lanes on Highway 101[40]	$15-20m
Upgrade of current five grade intersections on Highway 101[41]	$20-25m

In general, upgrade work on Highway 103, given the number of grade crossings, restricted zones through communities, areas with poor alignment and excessive grades is beyond the scope of this limited review. Based on the road conditions observed between Yarmouth and Liverpool (about half the distance to Halifax) costs in excess of $250m could be expected, just to bring the road up to the same standards as the 101.

Based on the costs developed, it could be argued that if the link between Digby and Saint John were a new two-lane highway, then the value is $83.2m, with $347,400p.a. in essential maintenance. A periodic rehabilitation of the marine highway, at estimated 2007 values would then be $18.72m. On a ten-year amortization, this would be worth about $2m p.a.

5.6 Importance to Regional Economic Development

Transportation infrastructure is recognized as a key attribute for economic development and is of critical importance for isolated rural regions such as SW Nova Scotia. The region has lost significant infrastructure and communication links over the last 20 years.

1990	Termination of rail service to Halifax
1994[42]	Bluenose service reduced to seasonal from year round; had been operated since 1955
1995	Canada Marine Act devolution process for ferries commences
1997	Bay Ferries awarded Digby-Saint John and Yarmouth-Bar Harbor services
1998	Bluenose replaced with seasonal high speed CAT service
2003	Termination of scheduled air service to Yarmouth
2005	*Scotia Prince* pulled out of Portland service due to terminal issues. Service had been run since 1970
2006	Bay Ferries announce termination of Digby-Saint John service.

38 Highway Construction Report, Washington State DOT, April 2002.

39 About 10km near Caledonia has recently been reconstructed.

40 Between Bridgetown and Coldbrook, assumes 1km passing lanes every 10km in each direction.

41 The reference is for a four-lane highway: costs have been assumed at 70% for a two-lane highway.

42 Approximate date.

As discussed under infrastructure, the road links between SW Nova Scotia and Halifax do not provide adequate alternatives, thus ferry service as a transportation route assumes greater importance.

The importance of the ferry service relative to investment decision and tourism in the region can be judged from the following:

- When Bay Ferries announced plans to shut down the Digby-Saint John service, three companies that had been in negotiations for new businesses in the Digby area pulled out. These businesses would have brought at least 120 full time jobs to the area.
- Motor coach[43] companies cancelled plans for ferry use with the resulting loss to one hotel in Saint John of eight coach visits and over 300 room nights. As coach tour operators plan two years ahead, this means that activity cannot be regained until after 2010.
- A US resident with extensive property interests in Sandy Cove had been planning a resort development. This is now on hold, and if the ferry service is terminated it will not proceed.
- The manager of a local hotel has an option to purchase the property and plans to re-develop. This option would not be implemented without the ferry.
- The Digby Clare CBCD averaged 19 loan requests per year between 2001-2005. They had three loan requests in during the first half of 2006, and then none until March 2007 when their first quarter business was in line with previous years, with seven applications.

5.7 Importance to Environmental Benefits

All transportation modes, routes and alternatives have social costs and benefits associated with their use. Typically, marine is the most efficient mode with the least impact, while automobiles are the least efficient although not necessarily with the highest impact. Social costs are assessed in terms of:

Environmental, such as greenhouse gases and pollution

Highway wear and tear

Tyre disposal costs

Accidents

Congestion costs

Noise costs.

Some of these costs are not readily quantifiable within the Canadian context, although other jurisdictions have assessed relative values. The non-quantifiable components are tyre disposal and congestion costs.

[43] Note that the tariff for motor coaches and passengers actively discourages such travel. The effective cost is in the order of $1,400 for a motor coach and 40 passengers. The comparable vehicle deck fee for a truck plus driver is $420.

The values used in this assessment are mainly taken[44] from a 2005 Transport Canada report *Towards Estimating the Social and Environmental Costs of Transportation in Canada.* Although this is the most consistent report, Mariport does have some concerns about the marine data that are discussed under the relevant heading. Reference should be made to Annex 8.11 for values for each mode.

Social & Environmental Costs

The following is based on available traffic data for the ferry for 2005 of about 140,000 passengers, 40,000 private vehicles and 16,500 commercial vehicles. However, the mix of private vehicles is not known (i.e. percentage of automobiles, RVs, motor coaches etc). The analysis will therefore be based on an assumption that all private vehicles were automobiles.

To carry this traffic, the ferry is estimated to have undertaken 685 round trips during the year. The driving distance from Digby to Saint John is 774km, however not all users of the ferry are origin/destination in the two ferry terminals. In the absence of origin/destination data, but assuming most users are from SW Nova, we will assume 600km as an average distance saved by the ferry.

Social and Environmental Benefit Calculation for 2005

	MARINE	**ROAD TRANSPORT**		
Element	***Ferry***	***Auto***	***Truck[45]***	**Total**
Air pollution	$106,918	73,920	697,158	
Greenhouse gases	15,219	50,316	75,538	
Accidents	217,379	3,426,240	1,510,447	
Noise	0	571,200	178,200	
Highway wear & tear	0	-nd-	495,000[46]	
Total	$339,516	$4,121,676	$2,956,343	$7,078,019

The analysis demonstrates that the environmental and social benefit of the ferry service is “worth” about $6.7m per annum. Ferry use has declined significantly, mainly due to users finding that ferry costs are too high and/or the schedule was too inconvenient. If users could be attracted from the highway back to the ferry service through better fares and/or service parameters, then the environmental and social benefit could increase considerably.

A calculation based on 1999 traffic of about 190,000 passengers, 54,300 private vehicles and 26,800 trucks and the same number of ferry trips, is used below as an example of the benefit of increasing traffic. Note that the ferry would not need to make more trips to carry this traffic level.

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44 Values for road wear and tear due to truck traffic have been developed by Mariport.

45 Assumes an average truck load of 14 tonnes.

46 Assumes 5¢/km.

Social and Environmental Benefit Calculation for 1999

	MARINE	ROAD TRANSPORT		
Element	***Ferry***	***Auto***	***Truck***[47]	**Total**
Air pollution	145,103	100,370	1,139,107	
Greenhouse gases	20,654	68,286	122,690	
Accidents	217,379	4,651,121	2,453,326	
Noise	0	775,200	289,440	
Highway wear & tear	0	- nd -	804,000	
Total	$383,136	$5,584,927	$4,808,563	$10,393,490

The social and economic benefit of the ferry increases to $10m per annum.

Greenhouse Gas Emissions

The following estimates are based on the quantity of fuel burned by the ferry, autos and trucks. The assumptions are:

One tonne of diesel or gasoline, on combustion, creates 2,500kg of CO_2

Auto average fuel efficiency	10km/litre
Truck fuel efficiency	2.73km/litre

Princess of Acadia running on 2 engines only burns 5.2 tonnes of light diesel per round trip[48]

2005 traffic

16,500 trucks	4,600 tonnes CO_2
40,000 automobiles	7,000 tonnes CO_2
Ferry 685 round trips	8,200 tonnes CO_2
Net benefit	3,400 tonnes CO_2

Note that the economic benefit of the CO_2 is captured in the calculation above. Based on the 1999 traffic levels, the green house gas benefit would have been 8,800 tonnes of CO_2.

[47] Assumes an average truck load of 14 tonnes.

[48] See Annex 8.1.

6. FERRY SERVICE PAST AND PRESENT

The material in this section of the report is based on a review of the 2005, 2006 and 2007 ferry schedules and passenger fares. Mariport does not have earlier material relative to the ferry. Information is in Annex 8.2.

6.1 Schedule

Scheduled departures have been materially changed in each of the three years reviewed. There have also been reductions in numbers of sailings: see below.

FERRY DEPARTURES[49]

Year	Actual schedule	Equivalent departures
2005	685	715
2006	686	686
2007	509	528

Currently the ferry leaves Saint John at 0900hrs as the morning sailing for most of the year. During the peak season there are three weekday sailings at 0045hrs which we understand is beneficial to the trucking industry. However, the 0900hrs departure does not appear to work for many visitors (unless they have overnighted in Saint John or in southern New Brunswick). We have been advised through the survey that an early afternoon sailing would be best for both Ontario and New England origins given the typical travel times.

With regard to departures from Digby, the preferred time is in the morning and many people have told us that they drive because the ferry does not leave until the afternoon and they can be well on their way by the time the ferry would, typically, put them into Saint John. Also, a morning departure is critical for regional accommodation. Without it, there is no incentive to stay overnight, eat and shop.

A late afternoon departure, however, is ideal for the fisheries shippers, who time the process from catch through landing and transportation, to have their product into the Boston market within 24 hours, ensuring peak conditions and low mortality for lobster and crab. Based on 750km from the Saint John terminal to Boston, and a three-hour crossing, the preferred departure would be about 1700hrs from Digby giving arrival in Boston in time for a 0500hrs market opening.

As noted, a late afternoon departure from Digby suits the fishing industry, given timing needs from catch through processing and into the Boston market and deliveries from Bangor south. Any earlier, insufficient catch can be processed; later, and they may not be able to make the deliveries when needed. Returning, a midnight sailing

[49] The equivalent number provides a comparison with 2006 by taking into account the number of sailings that would have occurred while the ship was in dry dock in 2005 and 2007. It does not take into account weather cancellations.

has been suggested as best in terms of trucks returning with or without product for processing or holding facilities in SW Nova and completing the cycle.

For personal travel, this schedule does not work as a morning Digby departure is essential if SW Nova travellers are to make a decision to travel on the ferry, or to drive around. Also, given travel times from New England, Ontario and Quebec, an afternoon departure from Saint John is needed. A morning departure creates a situation where people will drive rather than use the ferry, and accommodations in the Saint John area would not benefit.

The ferry, even operating at the current reduced speed, could meet all of these demands.

Digby Departure	**Saint John Arrival**
0800	1100
1600	1900

Saint John Departure	**Digby Arrival**
1200	1500
0000	0300

This gives crew layovers of four hours in Saint John and five hours in Digby in each 24 hours. It provides a steady schedule of two round trips per day at times that meet needs. Yield management techniques could be applied to the midnight sailing to encourage use. For peak periods, three round trips can be achieved within the same format[50]. However it delays the night departure from Saint John until 0400 hrs and this may not be workable with regard to deliveries in SW Nova Scotia and getting the truck into the cycle.

Digby Departure	**Saint John Arrival**
0800	1100
1600	1900
2400	0300

Saint John Departure	**Digby Arrival**
1200	1500
2000	2300
0400	0700

[50] We believe that with the roll through nature of the vehicle deck, a one-hour turnaround is achievable.

6.2 Ferry Fares

i) Passenger Related

Annex 8.3 provides comparative passenger-related fares in each of the three years analysed. There were extraordinary increases in fares in 2006 that would have resulted in a significant downturn in traffic. See below:

ONE-WAY OFF-PEAK TOTAL COST

	2005	2006	2007
Family with car	$135.24	$208.62	$210.05
Seniors with car	$105.80	$163.02	$165.30

ROUND TRIP OFF-PEAK TOTAL COST

	2005	2006	2007
Family with car	$252.08	$388.74	$391.59
Seniors with car	$230.00	$297.54	$302.10

The increases of close to 60% in 2006 gives context to very many comments that fares have gone beyond persons' willingness to pay. Peak fare comparisons are also given in Annex 8.3, and increases are in the order of 50%, because of the higher base, and the impact of fixed surcharges.

Most persons do not estimate the alternate cost on a fully built up basis and look at out of pocket expenses, i.e. a tank of gas and a night at a motel. At a ferry fare of $105.80 for two seniors in 2005, the comparison would have been about $200, thus there was an incentive, even on a cash basis, to take the ferry. However, increases and schedule changes have eroded that incentive.

A comparison of CAT fares between Yarmouth and Bar Harbour and Portland has also been undertaken, and this shows that the Portland fare for both peak and off peak periods is competitive with the *Princess of Acadia* once accommodation is included in total trip costs.

ii) Commercial

Commercial fares, as advised by Bay Ferries for the comparable period, are as follows:

COMMERCIAL YEAR ROUND TARIFF
INCLUSIVE OF PORT FEES & FUEL SURCHARGE

	41-50'	51-60'	61-70'
2004	$285	$310	$305
2005	310	335	334
2006	330	360	359
2007	355	395	405

Note that rates for 41-60' are drop trailers, 61-70' are typically tractor trailers.

A comparison of these fares shows that increases were in the 6-7% range.

6.3 Traffic

Analysis of traffic, passengers, private and commercial vehicles has shown considerable decline from a peak in 1998 of about 190,000 passengers, 53,000 private vehicles and 25,000 commercial vehicles, to 140,000, 40,000 and 16,500 respectively in 2005, although these numbers had recovered somewhat over the past three years. It is likely that passenger traffic declined still further in 2006 due to the fare increases.

Some analysis of type of traffic had been undertaken for 2005 and this showed about 6,000 units for the fishery; close to 7,000 units with forest products; about 2,700 general freight and close to 1,000 straight trucks where cargo type was not identified. It is likely that much of the fishery activity was destined to/from the USA, while other traffic was more general with the majority heading to/from Canadian origins/destinations.

The reasons for the declines, as well as seasonality are of considerable importance in determining the future of the service. While there are many structural factors associated with each market sector, there are some fundamental issues associated with all ferry operations. These include:-

- Tariff structure
- Yield management by time of day, day of the week and season
- Advertising in the ferry marketplace[51]
- Packages associated with the ferry

[51] Mariport has found, in other ferry related work, that there is a direct correlation between advertising spend and ferry ridership.

7. FERRY SERVICE FUTURE

The Digby to Saint John Ferry service has changed over the years to adapt to differing travel requirements, the biggest switch probably being with the move away from direct rail connection in 1971 and again with cessation of rail service in 1990. However, in the past there was time to plan and organize the attributes and delivery of the new service. In a sense the changes were proactive relative to needs.

The current situation is unique in that regional entities have been building tourism product and developing business opportunities with an assumption that ferry service would continue. Until the announcement by Bay Ferries in June 2006 regarding the service, there had been no indication of problems. Consequently planning for change has become reactive, with ongoing development that integrated the ferry into their promotion and marketing put on hold until the future of the service is known.

While there are a number of options that need to be evaluated relative to the future of the service some fundamental aspects are seen as being a maintenance of the federal government as holder of the assets, and a regionally agreed set of service standards regarding ferry operations and. The following approaches are essentially hypothetical, as data relative to users and their interest in taking the ferry at certain price points, and with different service options is unknown. Also, the potential for revenue from packages is unknown. Any new vessel would also need to be designed with a background of sea conditions on the route.

1. The *Princess of Acadia* could continue in service, but would need upgrades to meet new regulations relative to subdivision and stability. Also, the vessel would need to be re-engined to minimise operating costs. BC Ferries recently announced their intention of upgrading a slightly newer and somewhat larger ferry, the *Queen of Alberni* to give it an extra 20 years of life. The reported cost was $40m.

2. Another option would be to have a replacement built that would carry both commercial and passenger traffic, however, the cost of going this route is high. Some estimates have been made that it could be in the region of $80-100m.

3. A possible approach would be to acquire a suitable newer vessel offshore. Such an approach would involve paying duty at 25% on the purchase price plus upgrades to current international standards and possible modification to match ramp configurations. The resale market for ferries of this size, and newer than the *Princess of Acadia* is very limited, and most passenger/vehicle ships built in the 1970's are being sold for scrap. There is a market for truck ferries of the size and age of the *Princess of Acadia.*

4. A possible future for the service that would need to be investigated would see the *Princess of Acadia* continuing as a commercial ferry primarily carrying drop trailers[52]. If passenger accommodation is reduced to 12 or less persons,

[52] There was some support from industry that increased use of drop trailers could be considered.

then the vessel becomes a freight vessel and has to meet different and lesser criteria than it would as a passenger ship. Such an operation could undertake one round trip per day between Digby and Saint John, essentially running from about 1700hrs outbound with a return after midnight to be stood down for the rest of the day. This approach would materially reduce crew numbers and payroll, enabling the ship to at least stabilize and possibly reduce truck fares. A larger number of drop trailers increases revenue capacity by eliminating the tractor and releasing 25 feet of deck space.

5. If the *Princess of Acadia* is assigned to commercial service, then a new approach is needed to the equally important passenger and tourism market. Some suggestions have been made from the survey to introduce a CAT type vessel. This is probably not an economic option, given operational costs of such a high performance vessel. However, a medium speed catamaran operating in the 20-25kt range could well be considered. A recent order by Pentland Ferries in the UK for a large steel hulled catamaran with a capacity to handle rough water could well be the model ferry that could offer a transit time in the order of 2-2½ hours and increased frequency. See the artists impression the following page.

   Such a ferry would be capable of carrying all vehicle types for the personal travel market, including motor coaches. It could be designed to accommodate the ramp arrangements in both Digby and Saint John. With increased frequency, the ferry capacity need not be as high as the *Princess of Acadia* and with modern life saving equipment crew numbers could be materially reduced. The cost of such a vessel would be significantly less than that for a freight and passenger vessel on the model of the *Princess of Acadia.*

   Two round trips per day could be offered in a 10-hour day, three in a 15-hour day during peak season. Headway would be much reduced and more attractive to the impulse user.

61 Metre medium speed catamaran ferry by Sea Transport Solutions

8. ANNEXES

8.1 Ferry Description

***Princess of Acadia* vessel details (from Marine Atlantic Vessel Register 1985)**

Passenger capacity		650
Crew		39
Autos 18’	1	55
Trailers 55’		33[53]
Speed (4 engines economic operation)		18.5kts
Speed (2 engines)		14.8kts
Engines EMD 16-645ES		4 @ 2,875bhp
Auxiliary GM 645E2		3 @ 975bhp
Fuel used		Marine Diesel (light)[54]
Bunker tank capacity		240 net tons
Probable fuel consumption, 4 engines		1.6tph about 8.5 tonnes/round trip
Per round trip, 2 engines		.8tph about 5.2 tonnes/round trip

[53] Space for 22 autos with this number of commercial units

[54] Possibly Marine Gas Oil.

8.2 Scheduled Departures 2005-2007

DIGBY DEPARTURES 2005

MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	DATES*
Jan	0800 1630	1630	1630	1630	1630	1630	1630	Jan 2 to Jan 9 Jan 10 to
Feb	"	"	0800 1630 *Vessel*	" *in dry dock*	0800 1630 *Feb 14-Mar 5*	"	"	Feb 13
Mar	"	"	"	"	"	"	"	Mar 6
Apr	"	"	"	"	"	"	"	to
May	" "	" 0800 1630	" 0800 1630	" 0800 1630	" 0800 1630	" 0800 1630	" 0800 1630	May 8 May 9 to
Jun	" 1300 2045	" 0500 1300 2045	" 0500 1300 2045	" 0500 1300 2045	" 0500 1300 2045	" 0500 1300 2045	" 0500 1300 2045	Jun 25 Jun 26 to
Jul	"	"	"	"	"	"	"	
Aug	"	"	"	"	"	"	"	
Sep	" "	" 1300 2045	" "	" "	" "	" "	" "	Sep 5 Sep 6 to
Oct	" 0800 1630	" 1630	" 0800 1630	" 0800 1630	" 0800 1630	" 0800 1630	" 1430	Oct 8 Oct 9 to
Nov	"	"	"	"	"	"	"	
Dec	"	"	"	"	"	"	"	Dec 31

* DATES These are dates on which the schedule starts and finishes and when a new schedule commences.

DIGBY DEPARTURES 2006

MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	DATES
Jan	1530	1530	1530	1530	1530	1530	1530	Jan 2
Feb	1530	1530	1530	1530	1530	1530	1530	to
Mar	“ 0800 1630	“ 1630	“ 0800 1630	“ 1630	“ 0800 1630	“ 0800 1630	“ 1430	Mar 11 Mar 12 to
Apr	“	“	“	“	“	“	“	
May	“	0800 1630	0800 1630	0800 1630	0800 1630	0800 1630	0800 1630	May 13 May 14 to
Jun	“ 1300 2045	“ 0500 1300 2045	“ 0500 1300 2045	“ 0500 1300 2045	“ 0500 1300 2045	“ 0500 1300 2045	“ 0500 1300 2045	Jun 24 Jun 25 to
Jul	“	“	“	“	“	“	“	
Aug	“	“	“	“	“	“	“	
Sep	“ 1300 2045	“ 1300 2045	“ “	“ 1300 2045	“ “	“ 1300 2045	“ “	Sep 9 Sep 10 to
Oct	“ 0800 1630	“ 1630	“ 0800 1630	0800 1630	“ 0800 1630	“ 0800 1630	“ 0800 1630	Oct 9 Oct 10
Nov	“	“	“	“	“	“	“	to
Dec	“	“	“	“	“	“	“	Dec 31

DIGBY DEPARTURES 2007

MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	DATES
Jan	1530	1530	1530	1530	1530	1530	1530	Jan 2 to
Feb	“	“	“ *Vessel in*	“ *dry dock*	“ *approx*	“ *Feb 4 - 23*	“	Feb 3 Feb 24 to
Mar	“	“	“	“	“	“	“	
Apr	“	“	“	“	“	“	“	
May	“ “	“ “	“ 1300 2045	“ “	“ 1300 2045	“ 1300 2045	“	May 6 May 7 to
Jun	1300 2045	1300 2045	0500 1300 2045	1300 2045	0500 1300 2045	1300 2045	0500 1300 2045	Jun 23 Jun 24 to
Jul	“	“	“	“	“	“	“	
Aug	“	“	“	“	“	“	“	
Sep	“ “	“ “	“ 1300 2045	“ “	“ 1300 2045	“ “	“ 1300 2045	Sep 8 Sep 9 to
Oct	“ 1530	“ 1530	“ 1530	“ 1530	“ 1530	“ 1530	“ 1530	Oct 13 Oct 14
Nov	“	“	“	“	“	“	“	to
Dec	“	“	“	“	“	“	“	Dec 31

SAINT JOHN DEPARTURES 2005

MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	DATES*
Jan	1215	1215	1215	1215	1215	1215	1215	Jan 2 to Jan 9
Feb	1215	0900 2300	1215 2300 *Vessel*	2300 *in dry dock*	1215 2300 *Feb14-Mar5*	2300	1830	Jan 10 to Feb 14
Mar	“	“	“	“	“	“	“	Mar 6 to
Apr	“	“	“	“	“	“	“	
May	“ 1215 2300	“ 1215 2300	“ 1250 2300	“ 1215 2300	“ 1215 2300	“ 1215 2300	“ 1215 2300	May 7 May 8 to
Jun	“ 0900 1645	“ 0045 0900 1645	“ 0045 0900 1645	“ 0045 0900 1645	“ 0045 0900 1645	“ 0045 0900 1645	“ 0045 0900 1645	Jun 25 Jun 26 to
Jul	“	“	“	“	“	“	“	
Aug	“	“	“	“	“	“	“	
Sep	“	0900 1645	“	“	“	“	“	Sep 5 Sep 6 to
Oct	1215	0900 2300	1215 2300	1215 2300	1215 2300	1215 2300	1830	Oct 8 Oct 9 to
Nov	“	“	“	“	“	“	“	
Dec	“	“	“	“	“	“	“	Dec 31

* DATES These are the dates on which the schedule tarts and finishes ad when a new schedule commences.

SAINT JOHN DEPARTURES 2006

MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	DATES
Jan	0900	0900	0900	0900	0900	0900	0900	Jan 2
Feb	“	“	“	“	“	“	“	to
Mar	1215	0900 2300	1215 2300	2300	1215 2300	1215 2300	1830	Mar 11 Mar 12
Apr	“	“	“	“	“	“	“	to
May	“ 1215 2300	“ 1215 2300	“ 1215 2300	“ 1215 2300	“ 1215 2300	“ 1215 2300	“ 1215 2300	May 13 May 14 to
Jun	“ 0900 1645	“ 0045 0900 1645	“ 0045 0900 1645	“ 0045 0900 1645	“ 0045 0900 1645	“ 0045 0900 1645	“ 0045 0900 1645	Jun 24 Jun 25
Jul	“	“	“	“	“	“	“	to
Aug	“	“	“	“	“	“	“	
Sep	“ “	“ 0900 1645	“ “	“ 0900 1645	“ “	“ 0900 1645	“ “	Sep 9 Sep 10 to
Oct	“ 1215	“ 0900 2300	“ 1215 2300	“ 1215 2300	“ 1215 2300	“ 1215 2300	“ 1830	Oct 9 Oct 10
Nov	“	“	“	“	“	“	“	to
Dec	“	“	“	“	“	“	“	Dec 31

SAINT JOHN DEPARTURES 2007

MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	DATES
Jan	0900	0900	**0900**	0900	0900	0900	0900	Jan 2 to
Feb	“	“ *Vessel in*	“ *dry dock*	“ *approximately*	“ *Feb 4-23*	“	“	Feb 03 Feb 24 to
Mar	“	“	“	“	“	“	“	
Apr	“	“	“	“	“	“	“	
May	“ 0900	“ 0900	“ 0900 1645	“ 0900	“ 0900 1645	“ 0900 1645	“ 0900	May 6 May 7 to
Jun	“ 0900	“ 0900 1645	“ 0045 0900 1645	“ 0900 1645	“ 0045 0900 1645	“ 0900 1645	“ 0045 0900 1645	Jun 23 Jun 24 to
Jul	“	“	“	“	“	“	“	
Aug	“	“	“	“	“	“	“	
Sep	“ 0900 1645	“ 0900 1645	“ 0900 1645	“ 0900 1645	“ 0900 1645	“ 0900 1645	“ 0900 1645	Sep 8 Sep 9 to
Oct	0900	0900	0900	0900	0900	0900	0900	Oct 13 Oct 14 to
Nov	“	“	“	“	“	“	“	
Dec	“	“	“	“	“	“	“	Dec 31

8.3 Fare Comparisons 2005-2007

OFF-PEAK FARES COMPARISON

Fares from tariff	**2005**	**2006**	**2007**
Vehicle up to 20'	$60	$75	$75
Adult 14-59	16	25	30
Youth 6-13	12	15	20
Child 0-5	Free	Free	5
Senior 60+	14	20	25
Price paid			
Family[55]	47.60	68.00	89.25
Fare One way with car	107.60	143.00	164.25
Fare Round trip with car[56]	199.20	261.00	303.50
Security surcharge pp	2.00	4.00	Included?
Fuel surcharge	- nd -	$20.00	20.00
Total cost one way	**117.60**	**183.00**	**184.25**
Total cost round trip	**219.20**	**341.00**	**343.50**
Senior one fare way with car[57]	88.00	115.00	125.00
Senior round fare trip with car	160.00	205.00	225.00
Total cost one way	**92.00**	**143.00**	**145.00**
Total round trip	**168.00**	**261.00**	**265.00**

Total costs include surcharges.

	One Way	**Round Trip**
Family trip cost escalation 2006 over 2005	55.6%	55.6%
Senior trip cost escalation 2006 over 2005	55.4%	55.4%
Family trip cost escalation 2007 over 2005	56.7%	56.7%
Senior trip cost escalation 2007 over 2005	57.6%	57.7%

[55] 2 adults, 2 children over 5 years of age, 1 child under 5 year. The Tariff gives a 15% discount for families of five and over.

[56] Note vehicles get a round-trip price, as do walk-ons, but not auto passengers.

[57] Two seniors.

PEAK SEASON FARES COMPARISON

Fares from tariff	2005	2006[58]	2007
Vehicle up to 20’	$64.00	$80.00	$80.00
Adult 14-59	28.00	35.00	40.00
Youth 6-13	16.00	20.00	25.00
Child 0-5	Free	Free	5.00
Senior 60+	20.00	25.00	30.00
Price paid			
Family[59]	74.80	93.50	114.75
Fare One way with car	138.80	173.50	194.75
Fare Round trip with car[60]	257.60	322.00	364.50
Security surcharge pp	2.00	4.00	Included?
Fuel surcharge	- nd -	20.00	20.00
Total cost one way	**148.80**	**213.50**	**214.75**
Total cost round trip	**277.60**	**402.00**	**404.50**
Senior one fare way with car[61]	104.00	130.00	140.00
Senior round fare trip with car	188.00	235.00	255.00
Total cost one way	**108.00**	**158.00**	**160.00**
Total round trip	**196.00**	**291.00**	**295.00**

Total costs include surcharges.

	One Way	**Round Trip**
Family trip cost escalation 2006 over 2005	43.5%	44.8%
Senior trip cost escalation 2006 over 2005	46.3%	48.5%
Family trip cost escalation 2007 over 2005	44.3%	45.7%
Senior trip cost escalation 2007 over 2005	48.2%	50.5%

58 The 13:00 sailing from Digby carried a higher rate for each category.

59 2 adults, 2 children over 5 years of age, 1 child under 5 years.

60 Note vehicles get a round-trip price, as do walk-ons, but not auto passengers.

61 Two seniors.

COMPARISON OF 2006 FARES FOR CAT & PRINCESS OF ACADIA

BASIS TWO SENIORS WITH AUTO

THE CAT	**BAR HARBOR**		**PORTLAND**	
	Off Peak	**Peak**	**Off Peak**	**Peak**
Senior	48.00	58.00	75.00	85.00
Auto	95.00	105.00	129.00	149.00
Port security	10.00	10.00	10.00	10.00
Fuel surcharge	-	-	-	-
Cost	U$ 201.00	U$241.00	U$299.00	U$339.00
Exchange @ 1.135	C$239.50	C$272.40	C$339.37	C$384.77
Saved driving	282km		562km	
Value of gas saved	C$28.00		C$56.00	
Overnight accommodation and meal saved	0		C$150.00	
Net cost	C$211.50	C$244.50	C$133.37	C$178.77
PRINCESS OF ACADIA	C$143.00	C$158.00	C$143.00	C$158.00

Thus Portland was competitive in 2006 with *Princess of Acadia* once an extra night's accommodation was saved. The CAT season ran 26 May to October 16.

COMPARISON OF 2007 FARES FOR CAT & PRINCESS OF ACADIA

BASIS TWO SENIORS WITH AUTO[62]

THE CAT	**BAR HARBOR**	**PORTLAND**
Senior	58.00	85.00
Auto	105.00	149.00
Port security	10.00	10.00
Fuel surcharge	25.00	25.00
Cost	U$266.00	U$364.00
Exchange @ 1.053	C$280.00	C$383.00
Saved driving	282km	562km
Value of gas saved	C$28.00	C$56.00
Overnight accommodation and meal saved	0	C$150.00
Net cost	C$252.00	C$177.00
PRINCESS OF ACADIA	Off peak C$145.00 Peak C$160.00	

As with 2006, pricing for the Portland service was again competitive with the *Princess of Acadia,* assuming an extra night accommodation and a dinner were saved.

[62] Note simplified fare structure. No off-peak fares. However, reduced service 01 June to 09 October.

8.4 The Survey

FERRY SURVEY

As you know, the future of the Digby-Saint John Ferry is not assured beyond December 2008. The federal government has undertaken one study that helped justify the short-term assistance that enabled Bay Ferries to continue operation after October 2006. Further studies and consultations are being undertaken by the federal government, but the terms of reference for this additional work did not benefit from local input.

In preparing for further consultation on the ferry, a regional group (Bay of Fundy Transportation Coalition) has been created representing municipalities, economic development, commercial and tourism interests. In order to better understand local and regional issues relative to the ferry service, a short programme of consultation is being undertaken so that a well supported position paper on economic and social benefits of the ferry can be presented by the Transportation Coalition at the start of the federal government studies.

The survey work seeks input from six groups of stakeholders in continued ferry service. Please select the one that best meets your interest by clicking on the appropriate circle. If your interests cover more than one area, please complete separate surveys.

A survey should take no longer than 10 minutes to complete.

- Regional employer where ferry service may affect quality of life for your employees O
- Commercial interest where the ferry is now, has been, or could be used to service your markets, or bring in essential goods O
- Trucking company, providing Canadian or cross-border service to regional commercial operation O
- An hotel, B&B, resort, campground, entertainment, provincial or federal park for which tourism is an important revenue source O
- An individual that uses the ferry for business or vacation either as a walk-on passenger or with a vehicle O
- Retail and food service where customers, typically, are ferry users. O

SCREEN 2

Common question

Where are you based? (*pull down screen*)

New Brunswick
Nova Scotia
New England States
Other Canada
Other USA
Outside North America

Please provide your post code, zip or country if from outside North America _____

REGIONAL EMPLOYER SCREEN

1. Number of full time equivalent positions in your company _____
2. Does your company use the Digby-Saint John ferry for your day-to-day business? Yes ___ No ___
3. If you answered yes to the previous question, about how frequently does the company use the ferry? (Pull down screen)

   Daily __ Weekly __ Monthly __ Quarterly __ Annually __
4. Do you believe that loss of the ferry would have a negative financial impact on the company?

   Serious __ Minor __ None __
5. Do you believe that if there were changes to the ferry service your company would use it more often?

   Yes __ No __
6. If you answered yes to the previous question, what factors would encourage your company to use the ferry more often? Please click on all that apply.

   -Better fare structure -More frequent sailings -Shorter time crossing

   -Better onboard services -Separation of commercial and personal vehicles
7. Does the presence of the ferry have an influence on the quality of life for your employees?

   Yes __ No __ Don't know __
8. Would the absence of the ferry have a negative influence on your ability to attract and keep employees?

   Yes __ No __ Don't know
9. Would an enhanced service give you better leverage in attracting and keeping employees?
10. Thank you. Are there any other comments you would like to make? ***(Text box)***
11. Do you want to discuss the issues with a researcher? If so, please provide your name, phone number and a contact time.

    Name _________________
    Phone Number _________________
    Monday-Friday _________________
    Contact time _________________

COMMERCIAL INTERESTS

1. Please indicate in what area you operate (*pull down screen*)

   Fishery ___ Forestry ___ Manufacturing ___ Service ___ Other ___

2. Number of full time equivalent positions in your company ____

3. Does your company use the Digby-Saint John ferry for your day-to-day business? Yes ___ No ___

4. If you answered yes to the previous question, what percentage of your business: Uses the ferry? _____

   Is trucked direct via Amherst? _____

5. How frequently does your business use the ferry?

   Daily __ Weekly __ Monthly __ Quarterly __ Annually __

6. Why do you truck direct? Please check all that apply:

   Better market access ____ Ferry schedules don't work for us ___

   Lower cost ___ Other, please specify (*text box)*

7. Do you believe that loss of the ferry would have a negative financial impact on the company?

   Serious __ Minor __ None __

8. If there is an impact to your business if the ferry closes, can you estimate that impact?

   -Would no longer be able to operate ___

   -Would lose ___ full time equivalent positions

9. Do you believe that if there were changes to the ferry service your company would use it more often?

   Yes __ No __

10. If you answered yes to the previous question, what factors would encourage your company to use the ferry more often? Please click on all that apply.

    -Better fare structure -More frequent sailings -Shorter crossing time

    -Better onboard services -Separation of commercial and personal vehicles

11. Thank you. Are there any other comments you would like to make? ***(Text box)***

12. Do you want to discuss the issues with a researcher? If so, please provide your name, phone number and a contact time.

    Name __________________
    Phone Number __________________
    Monday-Friday __________________
    Contact time __________________

TRUCKING COMPANY

1. How many trucks do you manage?

   Owned ____ Owner/operator ____

2. Please indicate approximate percentage of business that is:

   Regional ___ Inter-provincial ___ Cross border ___

3. Number of full time equivalent positions in your company ____

4. Does your company use the Digby-Saint John ferry for your day-to-day business? Yes ___ No ___

5. If you answered yes to the previous question, what percentage of your business: Uses the ferry? _____

   Is trucked direct via Amherst? _____

6. How frequently does your business use the ferry?

   Daily __ Weekly __ Monthly __ Quarterly __ Annually __

7. Do you use the ferry primarily for:

   Tractor trailers ___ Drop trailers ___ Both ___

8. Could you consider greater use of drop trailers if this permitted the service to continue?

   Yes ___ No ___ Possibly ___

9. Thank you. Are there any other comments you would like to make?

(Text box)

10. Do you want to discuss the issues with a researcher? If so, please provide your name, phone number and a contact time.

    Name ________________

    Phone Number ________________

    Monday-Friday ________________

    Contact time ________________

TOURISM

1. Which best describes your type of operation? Please select one.

   Hotel ___ Bed & Breakfast ___ Resort ___ Campground ___

   Entertainment Activity ___ Provincial/Federal Park ___

2. Can you estimate the percentage of your guests/patrons that use the ferry? (Leave blank if you don't know) ____

3. Can you estimate the percentage origin of your guests/patrons? (Leave blank if you don't know)

Canada ___ USA ___ Europe/other ___

4. Do you know how the ferry is used by your guests/patrons? Please check one

   Mainly round trip ___ Mainly one-way ___ Half & half ___ Don't know ___

5. If you provided estimates in 2, 3 or 4 above, were these from memory ___ or records ___?

6. Are you a seasonal ___ or year-round operator ___?

7. If a hotel, resort or B&B, how many rooms do you have ___?

8. If a campground operator, how many spaces? Camping ___ RVs ___

9. Do you believe that loss of the ferry would have a negative financial impact on your operation?

   Serious ___ Minor ___ None ___

10. If the effect was serious would this affect the viability of your operation?

Yes ___ No ___

11. Do you believe that if there were changes to the ferry service your operation would use it more often?

    Yes __ No __

12. If you answered yes to the previous question, what factors would encourage your operation to use the ferry more often? Please click on all that apply.

    -Better fare structure -More frequent sailings -Shorter time crossing

    -Better onboard services -Separation of commercial and personal vehicles

13. Thank you. Are there any other comments you would like to make? *(Text box)*

14. Do you want to discuss the issues with a researcher? If so, please provide your name, phone number and a contact time.

    Name ________________

    Phone Number ________________

    Monday-Friday ________________

    Contact time ________________

INDIVIDUAL

1. Do you use the Digby-Saint John ferry for personal, vacation or business-related travel? Yes ___ No ___
2. If you answered no to use of the ferry, why don't you use the ferry? Please click on all that apply.

   -Don't need to go across the Bay -Too expensive -Schedule doesn't meet needs -Takes too long -Onboard facilities not attractive -Don't like trucks on the vehicle deck
3. If you answered yes to use of the ferry, how frequently do you use it?

   Daily ___ Weekly ___ Monthly ___ Quarterly ___ Annually
4. What factors would encourage you to use the ferry more often? Please click on all that apply.

   -Better fares -Shorter trip -Better onboard facilities -Put trucks on a different deck or different ferry -Provide more package deals for attractions and ferry
5. Thank you. Any other comments? (*text box)*

RETAIL OR FOOD SERVICE

1. Please give us the type of business you operate

   Gift store ___ Convenience store ___ Department store ___ Supermarket ___

   Restaurant ___

2. Are ferry passengers an important source of customers? Yes ___ No ___

3. Can you estimate the percentage of customers that use the ferry? Leave blank if you don't know ___

4. Are you a seasonal ___ or year round ___ operation?

5. Do you believe that loss of the ferry would have a negative financial impact on your operation?

   Serious ___ Minor ___ None ___

6. Do you believe if there were changes to the ferry service you would have more customers? Yes ___ No ___

7. Do you believe that if there were changes to the ferry service your customers would use it more often?

   Yes ___ No ___

9. If you answered yes to the previous question, what factors would encourage your operation to use the ferry more often? Please click on all that apply.

   -Better fare structure -More frequent sailings -Shorter time crossing

   -Better onboard services -Separation of commercial and personal vehicles

10. Thank you. Are there any other comments you would like to make? *(Text box)*

8.5 Circulation Data Base

Post Code directory for Ferry study

Post Code	Location	Prov.	Reg.	Com.	Truck	Tour.	Indiv.	Ret/FS	TOT
Total			20	39	7	72	229	24	389
1373	South Deerfield	MA					1		1
1907	Swampscott	MA					1		1
1949	Middleton	MA					1		1
2370	Rockland	MA					1		1
2471	Waterton	ME			1				1
2476	Arlington	ME					1		1
2889	Warwick	RI					1		1
3249	Gilford	NH					1		1
3773	Newport	NH					1		1
4106	South Portland	ME					1		1
4901	Waterville	ME					1		1
5855	Newport	VT					1		1
6281	Woodstock	CT					1		1
6457	Middletown	CT					1		1
12404	Accord	NY					1		1
20010	Washington	DC					1		1
21629	Denton	MD					1		1
22102	McLean	VA					1		1
32168	New Smyrna Beach	FL					1		1
33442	Deerfield Brook	FL					1		1
53226	Milwaukee	WI					1		1
53549	Jefferson	WI		1					1
A1E 3P7	St. John's	NL					1		1
A1N 2G2	Mount Pearl	NL					1		1
B0J 1J0	Chester	NS					1		1
B0J 1K0	Chester Basin	NS					1		1
B0J 2C0	Lunenburg	NS				3	1		4
B0J 2E0	Mahone Bay	NS						1	1
B0P 1C0	Aylesford	NS					1		1
B0P 1E0	Berwick	NS					2		2
B0P 1H0	Canning	NS					1		1
B0P 1J0	Centreville	NS		1					1
B0P 1M0	Grand Pre	NS				1			1
B0P 1N0	Greenwood	NS					2		2
B0P 1R0	Kingston	NS				2	7		9
B0S 1A0	Annapolis Royal	NS	2	1		6	14	6	29
B0S 1B0	Bear River	NS				1	3		4

Post Code directory for Ferry study

Post Code	Location	Prov.	Reg.	Com.	Truck	Tour.	Indiv.	Ret/FS	TOT
Total			**20**	**39**	**7**	**72**	**229**	**24**	**389**
B0S 1C0	Bridgetown	NS	2			3	10		**15**
B0S 1E0	Clementsport	NS				1	3		**4**
B0S 1G0	Clementsvale	NS					3		**3**
B0S 1H0	Cornwallis	NS	1	1			1		**3**
B0S 1J0	Deep Brook	NS				1	2		**3**
B0S 1K0	Granville Ferry	NS	2			5	7		**14**
B0S 1L0	Hampton	NS					2		**2**
B0S 1M0	Lawrencetown	NS					2		**2**
B0S 1P0	Middleton	NS					3		**3**
B0S 1S0	Smith's Cove	NS				3	4		**7**
B0T 1G0	Hunts Point	NS				1			**1**
B0T 1K0	Liverpool	NS	1	2			1		**4**
B0T 1L0	Lockeport	NS				2			**2**
B0T 1P0	Milton	NS				1			**1**
B0T 1V0	Sable River	NS		1					**1**
B0T 1W0	Shelburne	NS	1	1		7	8	1	**18**
B0V 1A0	Digby	NS	5	10		15	38	7	**75**
B0V 1B0	Freeport	NS	1			2	1		**4**
B0V 1E0	Sandy cove	NS		1			1		**2**
B0V 1G0	Tiverton	NS				1	1		**2**
B0V 1H0	Westport	NS		1		1	3		**5**
B0W 1B0	Arcadia	NS					1		**1**
B0W 1E0	Barrington	NS		1					**1**
B0W 1G0	Barrington Passage	NS		1					**1**
B0W 1H0	Barton	NS			1		2		**3**
B0W 1J0	Belliveau Cove	NS					1	1	**2**
B0W 1L0	Carlton	NS					1		
B0W 1M0	Church Point	NS				1	6	2	**9**
B0W 1P0	Clarks Harbour	NS	1	3					**4**
B0W 1W0	Glenwood	NS				1	1		**2**
B0W 1Z0	Little Brook	NS					1		**1**
B0W 2A0	Lower E. Pubnico	NS		1			1		**2**
B0W 2B0	Lower Wedgeport	NS		1	1		1		**3**
B0W 2C0	Lower W Pubnico	NS	1						**1**
B0W 2E0	Lower Woods Hbr	NS		1	1				**2**
B0W 2H0	Mavillette	NS					1		**1**
B0W 2J0	Meteghan	NS		1			1		**2**

Post Code directory for Ferry study

Post Code	Location	Prov.	Reg.	Com.	Truck	Tour.	Indiv.	Ret/FS	TOT
Total			20	39	7	72	229	24	389
B0W 2K0	Meteghan Centre	NS				1	2		3
B0W 2L0	Meteghan River	NS					2		2
B0W 2M0	Middle W. Pubnico	NS		1					1
B0W 2R0	Plymton	NS						1	1
B0W 2T0	Port la Tour	NS			1				1
B0W 2V0	Prt Maitland	NS						1	1
B0W 2Z0	Saulnierville	NS		1				2	3
B0W 3B0	Shag Harbour	NS				1			1
B0W 3M0	Tusket	NS					2		2
B0W 3T0	Weymouth	NS					9		9
B2G 2K9	Antigonish	NS					1		1
B2R 1V8	Waverley	NS					1		1
B3A 2L9	Dartmouth	NS					1		1
B3A 4T7	Dartmouth	NS					1		1
B3B 1X8	Dartmouth	NS		1					1
B3E 1G6	Porters Lake	NS					1		1
B3H 1K6	Halifax	NS					1		1
B3H 1N7	Halifax	NS					1		1
B3Z 4L2	Upper Tantallon	NS	1						1
B4A 3S7	Bedford	NS					1		1
B4N 3V7	Kentville	NS		1			1		2
B4N 3V9	Kentville	NS					1		1
B4N 4H8	Kentville	NS		1					1
B4P 1C2	Wolfville	NS					1		1
B4R 1A1	Coldbrook	NS					1		1
B4V 2V6	Bridgewater	NS					1		1
B4V 3B6	Bridgewater	NS						1	1
B5A 1C9	Yarmouth	NS						1	
B5A 1J6	Yarmouth	NS				1			1
B5A 1K2	Yarmouth	NS				1			1
B5A 2W9	Yarmouth	NS					1		1
B5A 4A5	Yarmouth	NS		2		2	2		6
B5A 4A6	Yarmouth	NS					1		1
B5A 4A7	Yarmouth	NS					1		1
B5A 4A8	Yarmouth	NS					1		1
B5A 4B2	Yarmouth	NS		1					1
B5A 4B3	Yarmouth	NS		1					1

Post Code directory for Ferry study

Post Code	Location	Prov.	Reg.	Com.	Truck	Tour.	Indiv.	Ret/FS	TOT
Total			20	39	7	72	229	24	389
B5A 4E3	Yarmouth	NS			1				1
B5A 4N2	Yarmouth	NS					1		1
E1A 3J9	Moncton	NB					1		1
E2K 5L8	Saint John	NB					1		1
E2L 4Z6	Saint John	NB				1			1
E2M 2R3	Saint John	NB				1			1
E3A 4V1	Fredericton	NB					1		1
E3B	Fredericton	NB					1		1
E3B 2L9	Fredericton	NB					1		1
E3B 2Z2	Fredericton	NB					1		1
E3B 3Y4	Fredericton	NB					1		1
E3B 7S3	Fredericton	NB					1		1
E3L 1G5	St Stephen	NB				1			1
E3L 1N8	St. Stephen	NB					1		1
E3L 1T3	St. Stephen	NB					1		1
E3L 1Y5	St. Stephen	NB					1		1
E3L 2J5	St. Stephen	NB					1		1
E3L 2W9	St. Stephen	NB		1					1
E3L 3A6	St. Stephen	NB	1		1				2
E3L 3Z3	Crocker Hill	NB					2		2
E4E 2P4	Sussex	NB					1		1
E4H 3A6	Hillsborough	NB	1						1
E4P3B7	Shediac Cape	NB					1		1
E5A 2N9	Tower Hill	NB					1		1
E5E 1C1	Welshpool	NB				1			1
E5E 1G3	Welshpool	NB				1			1
E5H 1E5	Blacks Harbour	NB				1			1
E5H 2B9	Pennfield	NB					1		1
E5J 1M5	Lepreau	NB					1		1
E5N 1W4	Kingston	NB				2			2
E5N 6L1	Hampton	NB					1		1
E6A 2A2	Boiestonw	NB					1		1
E6K 2X5	Harvey York Co.	NB					1		1
E7M 4Z5	Richmond Settlement	NB					1		1
G6E 3K2	Sainte Marie	QC					1		1
K1C 2A5	Orleans	ON					1		1
K1K 4M1	Ottawa	ON					1		1

Post Code directory for Ferry study

Post Code	Location	Prov.	Reg.	Com.	Truck	Tour.	Indiv.	Ret/FS	TOT
Total			**20**	**39**	**7**	**72**	**229**	**24**	**389**
K1S 0N5	Ottawa	ON					1		**1**
K8A 6Y6	Pembroke	ON					1		**1**
K8V 1X3	Trenton	ON					1		**1**
L3V 3V6	Pickering	ON					1		**1**
M9A 4N4	Etobicoke	ON					1		**1**
N6K 1L4	London	ON					1		**1**

8.6 Records and Results

REGIONAL EMPLOYER SURVEY RESPONSES

Factors affecting use of the ferry

Post Code	FTE's	Ferry use	Freq.	Impact	Service	fares	Freq.	crossing	onboard	trucks	Q of Life	Ability to Attract	Enhanced Service
B0S 1A0	2	no	quarterly	Serious	yes	yes	yes	yes	yes	yes	yes	yes	yes
B0S 1C0	9	no		Serious	yes	yes					yes	yes	yes
B0S 1C0	30	no		Serious	no						yes	yes	yes
B0S 1H0	500+	no			no						no	no	no
B0S 1K0	6	no		Serious	no						yes	yes	
B0S 1K0	4	yes	quarterly	Serious	yes	yes	yes	yes	yes		yes	yes	yes
B0T 1K0	3	yes	weekly	Serious	yes	yes	yes		yes		yes	yes	yes
B0T 1W0	5	no		Serious							yes	yes	yes
B0V 1A0	33	yes	weekly	Serious	yes	yes		yes			yes	yes	
B0V 1A0	4	no		Serious	no						yes	yes	
B0V 1A0	6	no		Minor	yes	yes		yes			yes	no	
B0V 1A0	37	no		Serious	no						yes	yes	no
B0V 1A0	2	no		Minor	yes	yes					yes	yes	yes
B0V 1B0	4	no		Serious	yes				yes		yes	yes	yes
B0W 1P0	45	yes	daily	Serious	yes	yes					yes		
B0W 2C0	52	yes	weekly	Serious	no						yes	no	
B3Z 4L2	460	no		Serious	no						yes	no	no
E3L 3A6	350	yes	weekly	Minor	yes	yes		yes				no	no
E4H 3A6	3	no		Serious	yes			yes					yes

TRUCKING COMPANY SURVEY RESPONSES

Trucks Managed			Percentage of Business					Percentage of Bus.			Equipment			
Post Code	**Owned**	**O/O**	**Reg.**	**Inter-Prov.**	**Cross border**	**FTE's**	**Use Ferry**	**Via Ferry**	**Amherst**	**Frequency**	**Tractor/T**	**Drop/T**	**Both**	**More drops**
024714?	2		100			25	yes	100		weekly	yes			no
B0W 1H0	2		100			5	yes	10	10	weekly			yes	yes
B0W 2B0	2		45	5	50	2	yes	50	0	weekly	yes	possibly		
B0W 2E0	2	1	1	1	98	2	yes	98	0	weekly	yes	possibly		
B0W 2T0	5	4	5	5	90	9	yes	100		daily	yes			yes
B5A 4B3	15		5	10	85	25	yes	90	1	daily	yes			yes
E3L 3A6	24	25		10	90	75	no			monthly	yes			

COMMERCIAL INTERESTS SURVEY RESPONSES

Direct Trucking Reasons															Reasons for greater use				
Post Code	Sector	FTE's	Ferry Use	% Ferry	% Amh.	Freq.	Market	Sched.	Cost	Other	Impact	Continue	Loss fte's	Svc. Change	Fares	Freq.	Crossing	On board	Trucks
B0V 1A0	Fishery	85	yes	90	10	Weekly				yes	Serious	yes		no				yes	
B0V 1H0	Fishery	100	yes	80	18	Weekly		yes		yes	Serious	yes		no					
B0W 1E0	Fishery	16	yes	30	2	Weekly		yes			Minor	Yes	1	no					
B0W 1G0	Fishery	25	yes	50	50	Weekly	yes				Serious	yes	0-5	no					
B0W 1P0	Fishery	50	yes	60	5	Weekly				yes	Serious	yes	5 to 10	yes			yes		
B0W 1P0	Fishery	30	yes	40	15	Weekly	yes		yes		Minor	yes	0	no					
B0W 1P0	Fishery	55	yes	40	5	Daily					Serious	yes		yes		yes			
B0W 2A0	Fishery	40	yes	75	25	Weekly		yes			Serious	Yes		Yes	yes	yes			
B0W 2B0	Fishery	9	yes	65	0	Daily					Serious	yes	0	no	yes		yes		
B0W 2E0	Fishery	10	yes	98	2	Daily				yes	Serious	yes		yes		yes			
B0W 2M0	Fishery	45	yes	80	5	Weekly					Serious	yes							
B0W 2Z0	Fishery	30	yes	60	15	Daily		yes			Serious	yes	5 to 8	yes	yes	yes		yes	
B5A 4B2	Fishery	80	no								Minor	yes		yes	yes	yes	yes		
B0T 1K0	Forestry	150	yes	7	1	Daily		yes		yes		yes	5 to 7	yes	yes				
B0W 2J0	Forestry	60	no			Monthly				yes	Serious	yes		yes	yes	yes	yes		
B0S 1A0	Mfctrg	3	yes	20	75	Weekly				yes	Serious	no	3	yes	yes	yes	yes		
B0S 1H0	Mfctrg	45	yes	15	85	Monthly				yes	Minor	yes		yes	yes	yes	yes		
B0V 1A0	Mfctrg	6	no			Quarterly	yes				Minor	yes		no					
B3B 1X8	Mfctrg	250	yes	30	10	Weekly		yes			Serious	yes	unknown	yes	yes	yes	yes		
B4N 4H8	Mfctrg	7	no			Annually	yes				Minor	yes		no					
53549	Other	2	no			Annually					Serious		2	yes		yes	yes		
B0S 1S0	Other	1	no			Monthly			yes		Minor	yes		no					
B0V 1A0	Other		yes	50	10	Weekly		yes	yes		Serious	yes		yes	yes	yes			
B0V 1A0	Other	4	no			Quarterly				yes			all	yes	yes	yes	yes		
B0V 1A0	Other	2	yes	50	50	Weekly		yes	yes		Serious	yes		yes	yes				
B0V 1A0	Other	6	no			Weekly					Serious	Yes		Yes	yes				

COMMERCIAL INTERESTS SURVEY RESPONSES

Direct Trucking Reasons															Reasons for greater use				
Post Code	Sector	FTE's	Ferry Use	% Ferry	% Amh.	Freq.	Market	Sched.	Cost	Other	Impact	Continue	Loss fte's	Svc. Change	Fares	Freq.	Crossing	On board	Trucks
B0V 1A0	Other	5	no								Minor	yes							yes
B5A 4A5	Other	2	no			Annually					Serious	yes		yes	yes				
B0P 1J0	Service	1	no			Annually	yes				Minor	yes	0	yes	yes	yes			
B0T 1K0	Service	4	no								Serious	yes	1						
B0T 1V0	Service	12	no			Weekly	yes				Serious	yes	2	yes	yes	yes	yes		yes
B0V 1A0	Service	50	yes	10	20	Monthly		yes	yes		Minor	yes		yes	yes	yes	yes		
B0V 1A0	Service	1	yes	10		Monthly					Serious	yes		no					
B0V 1A0	Service	15									Serious		4 to 5						
B0V 1E0	Service	2	yes	40	20	Monthly		yes	yes	yes	Serious	yes	2	yes	yes				
B4N 3V7	Service	12	no			Quarterly				yes	Minor	yes		no					
B5A 4A5	Service		no			Quarterly					Serious	no		yes	yes				
E3L 2W9	Service	4	no			Monthly	yes	no	yes										
B0T 1W0		3	no								Minor	yes							

TOURISM SURVEY ANALYSIS

Guest Origin													Service changes				
Post Code	Type	%use Ferry	Canada	USA	Other	Use of ferry	Source	Operat.	Rooms/Spaces	Impact	Viability	Svc. Change	Fares	Freq.	Crossing	Onboard	Trucks
B0J 2C0	Resort	20	50	50		one way	records	year	10	Serious	yes	yes		yes			
B0J 2C0	Resort	2	90	5	5			year	6	minor					yes		yes
B0J 2C0	B&B		45	40	15	half	memory	Seasonal	4	minor	yes		yes	yes		yes	
B0P 1M0	Ent		70	15	15	one way	records	year		minor		yes	yes	yes	yes		
B0P 1R0	Campground	5	99.04	0.06		round	records	Seasonal	230+210	Serious	no	yes	yes			yes	
B0P 1R0	Ent	25	60	38	2	round	memory	Seasonal		Serious	yes	yes	yes	yes	yes		
B0P 1R0	Ent	50	30	20		round	memory	year		Serious	yes	yes	yes	yes			
B0S 1A0	B&B	35%	60	30	10	round	memory	year	9	Serious	yes	yes	yes	yes	yes	yes	
B0S 1A0	B&B	15	40	40	20	one way	memory	Seasonal	13	Serious	yes	yes	yes	yes	yes		
B0S 1A0	Park		61	32	7	one way	records	Seasonal				yes	yes	yes		yes	
B0S 1A0	Hotel		50	35	15	half	records	Seasonal	21	Serious	yes	yes	yes				
B0S 1A0	B&B	65	30	30	5	half	memory	Seasonal	8	minor	no	yes	yes	yes		yes	
B0S 1A0	B&B	25	60	35	5	one way	records	year	4	Serious	yes	yes	yes	yes	yes	yes	
B0S 1B0	B&B	33	60	38	2	round	records	year	2	Serious	yes	yes	yes				
B0S 1C0	B&B	5	1	4	0	one way	memory	year	4	none	no	yes	yes	yes	yes	yes	
B0S 1C0	Ent	25	40	50	10	round	memory	year		Serious	yes	yes	yes	yes			
B0S 1C0	Ent		75	25		one way	memory	year		minor	no	yes	yes				
B0S 1E0	Resort					half			12	Serious	yes	yes	yes	yes	yes		yes
B0S 1J0	B&B	10	60	20	20		memory	Seasonal	1	Serious	yes	yes	yes	yes	yes	yes	
B0S 1K0	Ent		50	30	20	half	records	year		Serious	yes	yes	yes	yes	yes		
B0S 1K0	Campground	35	64	33	3	half	records	Seasonal	27+63	Serious	yes	yes	yes	yes		yes	
B0S 1K0	B&B		50	25	25	one way	records	year	2	Serious	yes	yes	yes		yes		yes
B0S 1K0	Campground	30-40	10	30		half	memory	Seasonal	8+40+160	Serious	yes	yes	yes	yes	yes		
B0S 1K0	B&B					half		Seasonal	2	Serious	no	yes	yes				
B0S 1S0	B&B		45	35	20	one way	memory	Seasonal	12	Serious	yes	yes	yes	yes	yes	yes	
B0S 1S0	Hotel	70	45	50	5	half	records	Seasonal	25	Serious	yes	yes	yes			yes	yes
B0S 1S0	Hotel	80	50	30	20	half	memory	Seasonal	8	Serious	yes	yes	yes	yes			

TOURISM SURVEY ANALYSIS

Guest Origin													Service changes				
Post Code	**Type**	**%use Ferry**	**Canada**	**USA**	**Other**	**Use of ferry**	**Source**	**Operat.**	**Rooms/Spaces**	**Impact**	**Viability**	**Svc. Change**	**Fares**	**Freq.**	**Crossing**	**Onboard**	**Trucks**
B0T 1G0	Park	30	80	10	10	half	memory	Seasonal	7+15	Serious	yes	no	yes	yes			
B0T 1L0	Ent					round	memory	year	na	Serious	yes	yes	yes	yes			
B0T 1L0	Resort		75	20	5	one way	records	year	6	minor	no	yes	yes				
B0T 1P0	B&B		60	30	10	round	records	year	7	Serious	yes	yes	yes	yes			
B0T 1W0	Ent	25	75	20	5	round	memory	year		Serious	yes	yes	yes	yes	yes		
B0T 1W0	B&B		50	30	20	round	memory	year	4	minor		yes	yes	yes			
B0T 1W0	Ent	25	60	20		one way	memory	Seasonal		Serious	yes	yes		yes	yes	yes	
B0T 1W0	B&B	40	55	35	10	round	memory	year	3	Serious	yes	yes	yes	yes	yes		
B0T 1W0	Ent	25-30				half	records	year		Serious	yes	yes	yes		yes		
B0T 1W0	B&B	25	20	70	10	one way	memory	Seasonal	8	Serious	no	yes	yes	yes	yes		
B0V 1A0	Hotel					half	memory	Seasonal	113	Serious	yes	yes	yes			yes	
B0V 1A0	Hotel	80	50	30	20	half	memory	year	22	Serious	yes	yes	yes		yes	yes	
B0V 1A0	Hotel	40	50	25	25	one way	memory	year	11	Serious	yes	yes	yes		yes		
B0V 1A0	Resort	5	60	35	5	one way	records	Seasonal	147	minor	yes	yes				yes	
B0V 1A0	Hotel							Seasonal	3 cottages	minor		yes	yes	yes	yes		
B0V 1A0	Hotel	50	30	20	10	half	memory	year	10	Serious	yes	yes	yes		yes		yes
B0V 1A0	B&B	20	50	40	10	one way	memory	Seasonal		minor		yes	yes	yes	yes		
B0V 1A0	Ent		60	30	10	one way	memory	year		Serious	yes	yes	yes	yes			
B0V 1A0	Hotel	50	50	30	20	one way	memory	year	15	Serious		yes	yes	yes	yes		
B0V 1A0	B&B	40	20	40	40	one way	memory	Seasonal	3	Serious	yes	yes	yes	yes	yes		
B0V 1A0	Hotel	75	68	25	7	half	memory	year		Serious	yes	yes	yes				
B0V 1A0	Motel	40	80	15	5	one way	memory	year	36	Serious	yes	yes					
B0V 1A0	Ent							Seasonal		Serious	yes	yes	yes	yes			
B0V 1A0	Resort					don't know		year	6	Serious	yes		yes	yes	yes	yes	
B0V 1B0	Ent	25	50	25	25	half	memory	Seasonal		Serious	yes	yes	yes			yes	
B0V 1B0	Ent	30	40	25	35	half	memory	Seasonal		Serious			yes			yes	
B0V 1G0	Ent	40	15	25			memory	Seasonal		Serious	yes	yes	yes				
B0V 1H0	Resort	40	40	55	5	round	records	Seasonal	40	Serious	yes	yes	yes		yes		yes

TOURISM SURVEY ANALYSIS

Guest Origin													Service changes				
Post Code	**Type**	**%use Ferry**	**Canada**	**USA**	**Other**	**Use of ferry**	**Source**	**Operat.**	**Rooms/Spaces**	**Impact**	**Viability**	**Svc. Change**	**Fares**	**Freq.**	**Crossing**	**Onboard**	**Trucks**
B0W 1M0	Ent	50	60	30	10	half	memory	Seasonal		Serious	yes	yes	yes	yes			
B0W 1M0	Ent	10	90	10		half	records			minor	yes	yes	yes	yes			
B0W 1W0	Resort					one way	memory	Seasonal	6	minor	yes	no					
B0W 2K0	B&B	75				half		Seasonal	2	Serious	yes	yes	yes		yes		
B0W 3B0	B&B							Seasonal	2	Serious	yes	yes	yes				
B5A 1J6	Hotel					half	memory	year	45	minor		yes	yes	yes		yes	
B5A 1K2	Hotel		60	35	5	one way	memory	Seasonal	30	Serious	yes	yes	yes		yes		yes
B5A 4A5	Hotel	10	30	65	5	one way	records	Seasonal	8	Serious	yes	yes	yes		yes		
B5A 4A5	Ent					round	memory	Seasonal		Serious	yes	yes	yes				
E2L 4Z6	Hotel		60	20	20	one way	records	year	200	minor	no						
E2M 2R3	Park		81	14	4	one way	records	Seasonal		minor	no						
E3L 1G5	Ent		75	23	2		records	Seasonal		Serious	yes	yes	yes				
E5E 1C1		40	20	75	5	half	memory	Seasonal		Serious	yes	yes	yes		yes	yes	
E5E 1GE	B&B	10	35	55	10	half	memory	Seasonal	9	Serious	yes	yes	yes			yes	yes
E5H 1E5	B&B	5 to 10	80	15	5	half	memory	year	3	minor	no	yes	yes			yes	
E5N 1W4	B&B					half		year	4	minor		yes	yes	yes	yes		
E5N 1W4	B&B	10	20	80		one way	memory	year	4	minor	no						

RETAIL/FOOD SERVICE SURVEY RESPONSES

								Factors affecting use				
Post Code	**Type**	**Ferry Cust**	**%Custom**	**Seasonal**	**Fin. Impact**	**More Customers**	**Greater Use**	**Fares**	**Freq.**	**crossing**	**onboard**	**Separation**
B0J 2E0	Other	yes		year	Serious	yes	yes	yes				
B0J 2E0	Restaurant	yes	15	Seasonal	Minor	yes	yes		yes		yes	
B0S 1A0	Gift	yes		year	Serious	yes	yes		yes	yes		
B0S 1A0	Gift	yes		year	Serious	yes	yes	yes	yes	yes	yes	yes
B0S 1A0	Other	yes	40	year	Serious	yes	yes		yes	yes		
B0S 1A0	Other	yes		year	Serious	yes	yes	yes	yes	yes	yes	
B0S 1A0	Restaurant	yes		year	Serious	yes	yes	yes			yes	
B0T 1W0	Restaurant	yes	5	Seasonal	Serious	yes	yes	yes	yes	yes		
B0T 1W0	Gift	yes		year	Serious	yes	yes	yes	yes	yes	yes	yes
B0V 1A0	Restaurant	yes	15	year	Serious	yes	yes	yes	yes	yes		yes
B0V 1A0	Other		50	year	Serious	yes	yes	yes	yes	yes	yes	
B0V 1A0	Restaurant	yes	10	year	Serious	yes	yes	yes	yes	yes		
B0V 1A0	Gift	yes	40	Seasonal	Serious	yes	yes	yes	yes	yes	yes	
B0V 1A0	Other	yes		year	Serious	yes	yes					
B0V 1A0	Restaurant	yes		year	Serious	yes	yes					
B0V 1A0	Other	yes		year	Serious	yes	yes			yes		
B0V 1A0	Gift	yes	75	Seasonal	Serious	yes	yes	yes	yes			
B0W 1J0	Other	yes		Seasonal	Serious	yes	yes					
B0W 2R0	Other	yes	60	year	Serious	yes	yes	yes	yes			
B0W 2V0	Restaurant	yes		Seasonal	Serious	yes	yes	yes				
B0W 2Z0	Gift	yes		Seasonal	Serious	yes	yes	yes	yes	yes		
B0W 2Z0	Gift	yes	40	Seasonal	Serious	yes	yes	yes	yes			

RETAIL/FOOD SERVICE SURVEY RESPONSES

Factors affecting use

Post Code	Type	Ferry Cust	%Custom	Seasonal	Fin. Impact	More Customers	Greater Use	Fares	Freq.	crossing	onboard	Separation
B4V 3B6	Restaurant	yes		year	Minor	no	yes	yes	yes			
B5A 1C9	Restaurant	yes		year	Minor	yes	yes	yes				

INDIVIDUAL/STUDENT SURVEY RESPONSES

Reason not to use									Greater use				
Post Code	**Use**	**No Need**	**Cost**	**Schedule**	**Too Long**	**Onboard**	**Trucks**	**Freq.**	**Fares**	**Trip Time**	**onboard**	**Trucks**	**Packages**
1373	P,V							Quarterly	yes				
1907	P,V E							Quarterly					yes
1949	P,V								yes				
2370	V							Annual	yes				
2476	P,V							Quarterly					
2889	P,V							Quarterly		yes			
3249	V							Quarterly	yes	yes			
3773	P,V							Quarterly					
4106	P							Annual				yes	
4901	P,V			yes				Monthly					
5885	V							Annual	yes				
6281	P,V							Quarterly	yes	yes			
6457	P,V							Annual					
12404	P,V							Monthly					yes
20010	P							Quarterly					
21629	P,V								yes				
22102	P							Annual					
32168	P,V							Annual	yes	yes			
33442	P,B							Quarterly					
53226	V							Annual		yes		yes	
A1E 3P7			yes						yes	yes			
A1N 2G2	P							Annual			yes		
B0H 1H0	P							Annual					

INDIVIDUAL/STUDENT SURVEY RESPONSES

Reason not to use									Greater use				
Post Code	**Use**	**No Need**	**Cost**	**Schedule**	**Too Long**	**Onboard**	**Trucks**	**Freq.**	**Fares**	**Trip Time**	**onboard**	**Trucks**	**Packages**
B0J 1J0	V							Annual					yes
B0J 1K0	P							Quarterly					yes
B0J 2C0	P,V,B							Quarterly	yes		yes	yes	
B0P 1C0	P,V		yes	yes		yes		Monthly	yes		yes		
B0P 1E0	V							Quarterly	yes				
B0P 1E0	P,E							Quarterly	yes	yes			
B0P 1H0	P							Annual					
B0P 1N0			yes	yes	yes	yes			yes	yes	yes		yes
B0P 1N0	P,V							Annual	yes			yes	yes
B0P 1R0	P		yes	yes					yes		yes		
B0P 1R0			yes	yes		yes		Quarterly	yes	yes	yes		yes
B0P 1R0			yes	yes					yes	yes			
B0P 1R0	P,V,B							Quarterly					
B0P 1R0	P,V							Annual	yes	yes	yes		yes
B0P 1R0	P,V		yes						yes				
B0S 1A0	V							Annual	yes				
B0S 1A0	P,V								yes				yes
B0S 1A0	P,V							Annual		yes	yes		
B0S 1A0			yes						yes		yes		
B0S 1A0	P,V,B							Quarterly	yes		yes		
B0S 1A0	P,V,E,B							Monthly	yes	yes			yes
B0S 1A0	P,B		yes					Annual	yes				
B0S 1A0	P,V							Annual	yes				
B0S 1A0	P,V								yes				

INDIVIDUAL/STUDENT SURVEY RESPONSES

Reason not to use									Greater use				
Post Code	**Use**	**No Need**	**Cost**	**Schedule**	**Too Long**	**Onboard**	**Trucks**	**Freq.**	**Fares**	**Trip Time**	**onboard**	**Trucks**	**Packages**
B0S 1A0	P,V							Quarterly	yes				yes
B0S 1A0	P,V,E								yes		yes		
B0S 1A0	P,V							Quarterly	yes	yes			
B0S 1A0								quarterly	yes	yes			
B0S 1A0	P,V							Annual	yes				
B0S 1A0	P							Quarterly	yes				
B0S 1B0	P,V							Annual	yes				
B0S 1B0	P,V	yes	yes					Annual	yes				
B0S 1B0	P,V,B							Annual	yes				yes
B0S 1C0	P,E,B							Annual	yes				
B0S 1C0			yes	yes					yes				yes
B0S 1C0	P,V,B		yes					Monthly	yes	yes	yes	yes	yes
B0S 1C0	P,V							Annual	yes	yes			
B0S 1C0	P,V,E,B							Quarterly	yes		yes		yes
B0S 1C0	P,V							Annual					yes
B0S 1C0	P							Annual	yes	yes	yes		yes
B0S 1C0	P,V		yes					Annual	yes				
B0S 1C0	P,V,B							Quarterly	yes				
B0S 1C0	P							Annual	yes	yes			
B0S 1E0	P,V							Annual	yes				yes
B0S 1E0	P,V							Annual	yes				yes
B0S 1E0	P,V							Annual					
B0S 1E0	P,V							weekly		yes			
B0S 1G0	P,V							Annual	yes		yes		yes

INDIVIDUAL/STUDENT SURVEY RESPONSES

Reason not to use									Greater use				
Post Code	**Use**	**No Need**	**Cost**	**Schedule**	**Too Long**	**Onboard**	**Trucks**	**Freq.**	**Fares**	**Trip Time**	**onboard**	**Trucks**	**Packages**
B0S 1G0	P,V					yes		Annual	yes	yes	yes		yes
B0S 1G0	V,B							Annual					yes
B0S 1H0	B			yes	yes			Quarterly	yes		yes		
B0S 1J0	P,V							Annual	yes				
B0S 1J0	V							Annual	yes				
B0S 1K0	P,V							Annual	yes				
B0S 1K0	V,B							Annual	yes				yes
B0S 1K0	P,V,B							Annual	yes	yes			yes
B0S 1K0	P,V							Quarterly					yes
B0S 1K0	P,V							Annual	yes				
B0S 1K0	P,V							Annual	yes		yes		yes
B0S 1K0	V							Annual	yes				yes
B0S 1K0	P,V							Annual	yes				
B0S 1L0	P,V							Annual	yes				yes
B0S 1M0	P,B							Quarterly	yes				
B0S 1M0	V	yes											yes
B0S 1P0	P,V							Quarterly	yes		yes	yes	yes
B0S 1P0	P				yes			Annual	yes				
B0S 1P0	V		yes						yes				
B0S 1S0	P							Annual	yes				yes
B0S 1S0	P,B							Quarterly	yes				
B0S 1S0	P,V							Quarterly					yes
B0S 1S0	V		yes			yes		Annual	yes		yes		yes
B0T 1K0	P							Monthly	yes	yes			

INDIVIDUAL/STUDENT SURVEY RESPONSES

Reason not to use									Greater use				
Post Code	**Use**	**No Need**	**Cost**	**Schedule**	**Too Long**	**Onboard**	**Trucks**	**Freq.**	**Fares**	**Trip Time**	**onboard**	**Trucks**	**Packages**
B0T 1W0	P,V,B							Annual	yes				
B0T 1W0	V							Quarterly	yes	yes			yes
B0T 1W0	P,V,B							Annual	yes	yes			
B0T 1W0	P,V							Annual	yes				
B0T 1W0	V,B							weekly					
B0T 1W0	V							Annual	yes				
B0T 1W0	P,V		yes					Quarterly	yes				
B0T 1W0	P							Quarterly	yes				
B0V 1A0	V								yes		yes		
B0V 1A0	P,V							Annual	yes	yes			
B0V 1A0	P,E							Monthly					
B0V 1A0	P,V,B							Annual	yes		yes		yes
B0V 1A0	P,V							Annual	yes			yes	
B0V 1A0	P,V							Annual					yes
B0V 1A0	P,E							Quarterly	yes	yes			
B0V 1A0	V								yes				yes
B0V 1A0	P,V,B							Quarterly	yes	yes	yes		
B0V 1A0	P,V		yes				yes						
B0V 1A0	P,V,E							Monthly	yes	yes			
B0V 1A0	V							Annual	yes				yes
B0V 1A0	P,V							Annual	yes	yes	yes		
B0V 1A0	P,V							Annual	yes		yes		yes
B0V 1A0	P,V							Quarterly					
B0V 1A0	P,V							Annual	yes		yes		

INDIVIDUAL/STUDENT SURVEY RESPONSES

Reason not to use									Greater use				
Post Code	**Use**	**No Need**	**Cost**	**Schedule**	**Too Long**	**Onboard**	**Trucks**	**Freq.**	**Fares**	**Trip Time**	**onboard**	**Trucks**	**Packages**
B0V 1A0	P,V,B							Weekly	yes				
B0V 1A0	P,V							Annual	yes				yes
B0V 1A0	P,V							Quarterly	yes				
B0V 1A0	P,V,B							Quarterly	yes		yes		yes
B0V 1A0	P,V,B							Quarterly	yes				yes
B0V 1A0	P,B							Annual			yes		yes
B0V 1A0	V,B							Annual	yes				yes
B0V 1A0	P,V							Annual		yes			
B0V 1A0	P,V							Quarterly	yes				yes
B0V 1A0	P,V							Annual	yes	yes			
B0V 1A0	V,B							Quarterly	yes				yes
B0V 1A0	P,V,B							weekly	yes				
B0V 1A0	P							Quarterly	yes				
B0V 1A0	P,V							Annual	yes	yes			yes
B0V 1A0	P,V,B								yes				
B0V 1A0	P							Annual	yes				yes
B0V 1A0	V,B							Quarterly	yes				
B0V 1A0	E			yes				Monthly	yes				
B0V 1A0	P,B		yes	yes				Monthly	yes	yes			
B0V 1A0	V							Annual	yes				yes
B0V 1A0	P,V							Annual		yes			
B0V 1A0	P							Annual	yes				
B0V 1B0	V							Annual			yes		
B0V 1B0	P,V,B		yes					monthly	yes				

INDIVIDUAL/STUDENT SURVEY RESPONSES

		Reason not to use							Greater use				
Post Code	**Use**	**No Need**	**Cost**	**Schedule**	**Too Long**	**Onboard**	**Trucks**	**Freq.**	**Fares**	**Trip Time**	**onboard**	**Trucks**	**Packages**
B0V 1E0	P,V							Quarterly	yes	yes	yes	yes	yes
B0V 1G0	P,B							Annual	yes				yes
B0V 1H0	P												
B0V 1H0	P,V,B							Quarterly	yes	yes	yes		
B0W 1B0	V							Annual			yes		
B0W 1H0	P		yes						yes				
B0W 1H0	V	yes						Annual	yes				
B0W 1J0	P,V		yes					Annual	yes				
B0W 1L0	P,V							Annual	yes	yes			
B0W 1M0	P,V			yes				Annual	yes				
B0W 1M0	V					yes		Annual			yes		
B0W 1M0	B							Monthly	yes				
B0W 1M0	P,V	yes	yes	yes	yes			quarterly	yes	yes			
B0W 1M0		yes											yes
B0W 1M0	P,V,E,B							Annual	yes				
B0W 1W0	P,V			yes				Annual					
B0W 1Z0	V,B							quarterly	yes	yes			
B0W 2A0	P							Quarterly	yes				
B0W 2B0	P,V,B							Quarterly					yes
B0W 2H0	P		yes						yes				
B0W 2J0	P,V,E,B	yes				yes				yes	yes		
B0W 2K0	V							Annual	yes		yes		
B0W 2K0	P							monthly					
B0W 2L0	P,V,B							Quarterly	yes				

INDIVIDUAL/STUDENT SURVEY RESPONSES

Reason not to use									Greater use				
Post Code	**Use**	**No Need**	**Cost**	**Schedule**	**Too Long**	**Onboard**	**Trucks**	**Freq.**	**Fares**	**Trip Time**	**onboard**	**Trucks**	**Packages**
B0W 2L0	P,V,B							Quarterly	yes		yes		
B0W 3M0	P,V,E	yes	yes	yes		yes		Annual	yes		yes		yes
B0W 3M0	B								yes				yes
B0W 3T0	P							Annual					yes
B0W 3T0	V												yes
B0W 3T0	P,V,E							Monthly	yes	yes	yes		
B0W 3T0	P,V							Annual	yes				
B0W 3T0	P,V							Annual	yes				yes
B0W 3T0	P,V							Annual		yes			
B0W 3T0	P,V,B							Annual	yes		yes		yes
B0W 3T0	P,V							Annual					
B0W 3T0	V							Annual					yes
B2G 2K9	P,V							Annual					
B2R 1V8	B							monthly		yes			
B3A 2L9				yes					yes				
B3A 4T7	P,V							Quarterly		yes	yes		
B3E 1G6	P,V							Annual	yes			yes	yes
B3H 1K6	P,E							Quarterly					yes
B3H 1N7	P							Annual	yes				
B4A 3S7	P							Quarterly	yes				yes
B4N 3V7	P,V							Annual	yes	yes		yes	
B4N 3V9	V		yes	yes				Annual	yes				
B4P 1C2	P,V,B							Quarterly	yes	yes			
B4R 1A1	P							Annual	yes	yes			

INDIVIDUAL/STUDENT SURVEY RESPONSES

Reason not to use									Greater use				
Post Code	**Use**	**No Need**	**Cost**	**Schedule**	**Too Long**	**Onboard**	**Trucks**	**Freq.**	**Fares**	**Trip Time**	**onboard**	**Trucks**	**Packages**
B4V 2V6	P,B							Quarterly	yes				
B5A 2W9	P,V							Quarterly	yes				yes
B5A 4A5	P,V							Quarterly	yes				
B5A 4A5	P,V,B							Quarterly	yes				
B5A 4A6	P,V,E,B							Quarterly					
B5A 4A7	P,V,B							Annual	yes				
B5A 4A8	P,V							quarterly	yes	yes			
B5A 4N2	P,V,E,B							Quarterly	yes		yes		
E1A 3J9	E							Quarterly					
E2K 5L8	P,V								yes				
E3A 4V1	P,V,B							Quarterly	yes	yes			
E3B	P,V,B							Monthly					
E3B 2L9	P							Annual	yes	yes			
E3B 2Z2	E							Quarterly	yes	yes			
E3B 3Y4	P,V.E							Quarterly					
E3B 7S3	P,V							Annual	yes				
E3L 1N8	P,V,B							Annual	yes				
E3L 1T3	P,V	yes							yes				
E3L 1Y5	P,V							Quarterly	yes				
E3L 2J5	P,V							Quarterly	yes				
E3L 3Z3	P,V,E							Monthly	yes				
E3L 3Z3	P,V							Monthly	yes				yes
E4B 3P7	B		yes		yes				yes	yes			
E4E 2P4	P,V,B							Monthly	yes	yes			

INDIVIDUAL/STUDENT SURVEY RESPONSES

Reason not to use									Greater use				
Post Code	**Use**	**No Need**	**Cost**	**Schedule**	**Too Long**	**Onboard**	**Trucks**	**Freq.**	**Fares**	**Trip Time**	**onboard**	**Trucks**	**Packages**
E5A 2N9	P							Annual	yes				
E5H 2B9	P,B							Annual	yes		yes		
E5J 1M5	P							Annual	yes				
E5N 6L1	P,V							Annual	yes				yes
E6A 2A2	B							Annual	yes	yes			
E6K 2X5	P,V							Quarterly					yes
E7M 4Z5	P,V							Quarterly	yes	yes			
G6E 3K2	V	yes						Annual	yes				
K1C 2A5	P,V							Annual	yes				
K1K 4M1			yes	yes					yes				
K1S 0N5	P,V							Quarterly					
K8A 6Y6	P,V							Quarterly					yes
K8V 1X3	P							Annual		yes			
LIV 3V6	P,V							Annual					yes
M9A 4N4	P,V							Quarterly			yes		yes
N6K 1L4	V							Annual	yes				

8.7 Selected Tourism Statistics

US VISITORS TO ATLANTIC CANADA

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Auto: 2 night +											
Woodstock	54,389	61,141	61,592	61,619	64,759	57,408	66,775	64,079	62,457	62,312	
St. Stephen	126,671	132,908	149,379	161,326	165,629	163,901	170,054	147,193	136,905	132,285	
Yarmouth	52,843	56,347	72,070	79,886	73,362	73,873	81,256	69,288	61,321	39,267	
Motor Coach:											
Woodstock	2,057	2,167	1,664	1,769	1,761	1,306	1,991	1,373	990	1,435	
St. Stephen	8,657	10,370	13,342	10,468	13,781	9,290	11,114	7,976	5,261	4,995	
Yarmouth	13,434	17,601	15,527	15,869	18,083	13,819	13,721	11,076	9,852	7,978	
Air: Halifax	50,161	51,175	66,302	67,581	71,227	56,753	57,913	66,296	77,486	74,228	73,349
Ship: Halifax	24,126	27,550	26,736	66,765	56,201	80,594	70,894	89,550	67,643	87,226	65,324
Totals	302,338	349,259	406,612	465,283	464,803	456,944	473,718	456,822	421,915	409,726	

CANADIAN RESIDENTS

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Auto: 2 night +											
Woodstock	82,722	88,453	63,217	62,195	65,614	55,302	65,156	66,198	73,794	81,481	
St. Stephen	168,890	164,459	121,330	133,302	136,202	130,487	119,505	120,307	136,033	146,503	
Yarmouth	11,575	10,625	12,390	13,773	11,811	9,171	9,369	9,872	9,243	8,522	
Motor Coach:											
Woodstock	6,097	6,073	4,857	3,929	3,959	3,298	2,342	2,437	3,729	4,219	
St. Stephen	5,843	4,781	4,615	6,330	5,657	5,712	4,625	5,700	7,445	8,653	
Yarmouth	1,125	1,389	1,089	750	543	570	296	377	263	158	
Totals	**276,252**	**275,720**	**207,498**	**220,279**	**223,786**	**204540**	**201,293**	**204,891**	**230,507**	**249,536**	

VISITORS ENTERING NOVA SCOTIA AT DIGBY & YARMOUTH

	2000	2001	2002	2003	2004	2005	2006
Yarmouth[63]	89,300	89,300	96,000	84,300	76,200	54,300	43,900
Digby[64]	41,700	40,600	40,500	34,600	35,200	31,500	28,700
Total	**131,000**	**129,900**	**136,500**	**118,900**	**111,400**	**85,800**	**72,600**

63 Statistics Canada data for 2+ night arrivals. Nova Scotia Tourism counts all arrivals, including day trippers

64 From Nova Scotia Tourism reports

8.8 Comparative Ferry Routes and Fares

COMPARISON OF FERRY ROUTES AND 2007 FARES

	PRINCESS OF ACADIA	LAKE EXPRESS	BADGER
Year built	1971	2004	1952
Ferry type Pax capacity Vehicle "	Ro Pax 650 155 or 33 trucks	High speed 248 46 + 12 motorcycles	Ro Pax 620
Crossing length Time	40 n miles 3-3.5hrs	75 n miles 2.5hrs	51 n miles 4hrs
Season Traffic, annually	Year round 140,000 pax 40,000 autos 16,500 trucks	Apr 27 – Oct 31 125-135,000 pax 28-35,000 autos -	May 11 – Oct 14 130-150,000 pax[65] 40,000 autos -
Peak season[66] Adult Youth Child Senior Automobile	 C$40 C$25 C$5 C$30 C$80	 U$62 U$34.50 Free U$59.50 U$72	 U$59 U$26 Free U$54 U$62
Surcharges Fuel	$25.00/vehicle	$6.50/passenger and vehicle	none[67]

65 Mariport estimate from anecdotal data

66 As the *Lake Express* and *Badger* only operate seasonally an off-peak rate is not available.

67 The *Badger* is coal fired.

8.9 Three County Fisheries Values

VALUE OF FISH & SHELL FISH LANDINGS[68]

DIGBY COUNTY

	Ground Fish	Pelagics	Crustaceans	Total All	Lobster &Scallop	%
2002	9,120	1,827	76,020	86,967	69,078	79
2003	8,439	3,955	78,481	90,875	76,037	84
2004	6,507	5,557	65,701	77,765	64,310	83
2005	7,438	1,923	65,214	74,575	63,610	85

YARMOUTH COUNTY

	Ground Fish	Pelagics	Crustaceans	Total All	Lobster &Scallop	%
2002	23,967	7,274	145,004	176,245	142,573	81
2003	23,772	6,846	139,894	170,512	138,208	81
2004	21,365	6,925	126,472	154,762	124,461	80
2005	25,006	5,466	136,301	166,773	86,864[69]	52

SHELBURNE COUNTY

	Ground Fish	Pelagics	Crustaceans	Total All	Lobster &Scallop	%
2002	26,604	10,424	110,003	188,829	103,018	55
2003	25,804	11,965	129,292	167,061	122,501	73
2004	18,227	9,843	121,284	149,354	113,727	76
2005	18,916	12,362	138,858	170,136	130,971	77

[68] Federal Department of Fisheries and Oceans.

[69] Data for 2005 is preliminary and may be anomalous in that squid has moved from a very minor position in previous years to a major portion of overall catch size and value at $47,645,000 value. This may be a categorization error. If this is added to the lobster and scallop values, which are uncharacteristically depressed relative to catch in other areas, the proportion of lobster and scallop catch value is in line with previous years.

8.10 Highway 101 and 103 Assessment

HIGHWAY 101 Halifax to Yarmouth 333km

From Junction with 102 outside Bedford

Approximately	40km are divided highway mainly posted at 110km/hr
The next	11km are two-lane, controlled access posted at 100km/hr
	10km[70] are two-lane posted at 90km/hr
The next[71]	41km are controlled access with adequate passing lanes
The next	72km are two-lane, controlled access, but without any passing lanes
The next	59km are two-lane, controlled access with adequate passing lanes. About 8km west of Bridgetown was rebuilt in 2006.
The next[72]	24km are two-lane, uncontrolled access posted at 90km/hr
The final[45]	73km are technically controlled access and posted at 100km/hr. However, there are five grade crossings and only two bridge crossings. There are some passing lanes and about 15km between the exit to Saulnierville and exit 31 has recently been repaved.

70 This section includes the barrage across the Avon River and is not readily expandable.

71 Extensive sections are being converted to divided highway status.

72 Based on physical observation 02 July 2007.

HIGHWAY 103 Halifax to Yarmouth 300km[73]

From Junction of 102 with 101 outside Bedford

14km Highway 102 to start of 103, divided highway mainly posted at 100km/hr.

7km From junction 102 and 103, divided highway.

18km Two-lane restricted access highway.

14km Two-lane primary highway, probably posted at 90km/hr or less.

8km Two-lane restricted access highway.

50km Mix of two-lane primary road, two-lane restricted highway and 5km of divided highway at Bridgewater.

43km Two-lane primary highway to Liverpool, probably containing several restricted sections through communities. There are no over passes for controlled access in this portion of the road.

101km Two-lane primary highway, very few passing lanes, all road junctions at grade. Mainly signed at 100km/hr, but about 25km with speed reduction to 60km, steep grades and tight bends. This area would have to be bypassed to improve alignment to the same condition as the 101. Short lengths have been resurfaced or rebuilt, older sections exhibit rutting in higher speed areas.

8km New bypass between Oak Park and Barrington. Map shows completion late 2007, but in use as of footnote date. Signage has not been updated.

49km Into Yarmouth signed as controlled access highway, but all crossings are at grade from the Barrington bypass junction to the end of the 103. Many crossings are offset and there are few passing lanes. Some short lengths have been resurfaced, but mainly older road bed with rutting and rough areas.

[73] The highway notes from Halifax to Liverpool are from available mapping. From Liverpool to Yarmouth are from observation 02 July, 2007. The best map for indicative road status is MapArt Atlantic Canada Back Road Atlas. The official Nova Scotia Road Atlas published by Formac Publishing shows both the 103 and the 101 all at the same status of controlled access highway, except for the divided highway sections. It does not indicate the bypass around Barrington despite being the 2006 edition.

8.11 Transportation Social & Environmental Costs

The tables and information in this Annex are derived from the 2005 Transport Canada report *Towards Estimating the Social and Environmental Costs of Transportation in Canada.* As noted, Mariport has reservations regarding some of the data in this report. Values for Highway Wear and Tear have been developed independently by Mariport.

Air Pollution

AIR POLLUTION - PASSENGER TRANSPORTATION
2002 C$/passenger km

Mode	Interurban	Urban
Private vehicle	.00088	.00842
Bus	.00100	.00375
Train	.00471	- nd -
Ferry	.01091	- nd -

AIR POLLUTION - FREIGHT TRANSPORTATION
2002 C$/tonne km

Mode	Cost	Factor Relative To Marine
Truck	.00503	6.8
Rail	.00173	2.3
Marine	.00074	1.0

Greenhouse Gases

GREEN HOUSE GASES - PASSENGER TRANSPORTATION
2002 C$/passenger km

Mode	Interurban	Urban
Private vehicle	.000599	.001172
Bus	.000142	.000420
Train	.000670	- nd -
Ferry	.001553	- nd -

GREENHOUSE GASES - FREIGHT TRANSPORTATION
2002 C$/tonne km

Mode	Cost	Factor Relative To Marine
Truck	.000545	6.6
Rail	.000109	1.3
Marine	.000082	1.0

Accidents

Vehicle	$/1,000 km
Urban/inter-urban vehicle	$142.76
Urban/inter-urban bus	$446.02
Urban/inter-urban truck	$152.57
Urban/inter-urban freight rail	$3,561.00[74]

The ferry and marine freight data are suspect, being based on a single year of data and appearing to include fishing vessels. The data is also provided on a per trip basis and is thus incompatible with data for other modes, which are distance based[75]. Excluding fishery related incidents from marine freight, and accepting (with reservations) the report, gives costs of marine incidents at $158.67/trip for ferries[76], and $635.83/trip for marine freight[77].

Noise Costs

Values from the source document are interpreted[78] as follows:

Automobile	$.0068/passenger kilometre travelled (pkt)
Truck	$.018/truck kilometre travelled (tkt)
Bus	$.0044/passenger kilometre travelled (pkt)

[74] The presentation has been given in similar units to other modes, but data is presented as $5.73m/million main-track train miles. The figure appears to be high by at least an order of magnitude and out of step with generally accepted relative cost of different modes.

[75] The problem with using a trip basis for assessing marine incidents, particularly ferries, is that ferry routes can range from less than one mile to over 100 miles (the Digby to Saint John Ferry is 40 miles). Thus to be reasonably accurate an approximation is needed of total ferry distance in the target year. This would then put the presentation on the same basis as other modes.

[76] Technically, the data used in the report is not for ferries as all the fatalities in 2002 were for tour boats. No fatalities were reported for ferries.

[77] This is lower than the figures in the source document, which takes 50% of the combined costs of marine freight and fishery.

[78] The units are not defined in the report, but appear to be as interpreted. The auto units assume 1.5 persons per vehicle. There is no definition of number of persons per bus.

Highway Wear and Tear

Highways in Canada, together with road transportation, are primarily a provincial responsibility. Provinces charge road users a fixed annual fee, although for trucks there is some minor variation dependent on distance and weight. Based on an analysis by the Ontario CO_2 Collaborative in 1996, and calculations undertaken by Mariport comparing fees charges by the Highway 407 toll road in Ontario with Ontario annual truck licence fees, Mariport has suggested that there is a difference between truck fees and costs for road use of 5-6¢/km. No data is available as to whether automobiles pay an appropriate road use fee versus the cost of wear and tear.

Non-Quantifiable Costs

i) Tyre Disposal Costs

Some jurisdictions assess a levy per kilogram of tyre sold which then goes onto a recycling programme. Unlike in the USA, where there is a specific Tire Tax, very little cost is assessed against road users for tyre disposal.

ii) Congestion Costs

To an extent, this depends on how time is valued, which becomes somewhat subjective for an automobile driver. For a truck a hypothetical figure can be developed based on the cost per km for trucking. Assuming a figure of \$1.85/km and a typical average speed of 80km/hr, a one-hour delay would be worth \$152.80.

8.12 Out of Province Property Owners

IMPORTANCE OF OUT OF PROVINCE PROPERTY OWNERS

Digby County has 9,018 properties on its tax roll, of which 1,593 are out of province, and 183 owned by a single company. Thus of the remaining 8,835 properties, 1,410 are owned out of province – or 16%. From the 2001 census there are 8,075 dwellings in the county, of which 6,585 are owned and 1,455 are rented. Thus there is good correlation between the balance of Digby County properties on the tax roll and actual dwelling numbers. This shows that there are probably only 760 lots on the tax roll without dwellings.

Taking the 16% out of province and, as a conservative assumption applying it to only the 6,585 owned dwellings from the 2001 census, suggests there are 1,054 families, or at 2.2 persons per party[79], about 2,319 persons who are long term seasonal residents.

If we were to take this approach relative to all of SW Nova Scotia, then properties are as follows (county basis only):

Dwellings by SW Nova Scotia County

2001 Census

	Total	**Owned**	**Rented**
Annapolis	9,055	7,275	1,780
Digby	8,075	6,585	1,455
Queens	4,775	3,990	760
Shelburne	6,515	5,460	1,050
Yarmouth	10,630	8,030	2565
SW Nova 5	**39,050**	**31,340**	**7,610**
Kings	22,095	16,430	6,425
Lunenburg	19,465	15,910	3,535
SW Nova 2	**41,560**	**32,340**	**9,960**

As can be seen, the two easterly counties of the region, commonly considered to be part of SW Nova Scotia, exceed the size of the other five counties combined in terms of potential tax roll.

While Kings and Lunenburg will most likely have some out of province ownership, the survey evidence that we have is from persons – mainly Americans – who own property in the five counties.

Taking the Digby County assumption and scaling it to just the 31,340 owned dwellings in the five counties, suggests there could be some 5,000 families, or 11,000 persons who travel regularly to the region. Unlike tourists, these property owners use local contractors, spend money in local hardware stores, purchase food at local supermarkets as well as dining out and buying local crafts, thus the

[79] Tourism Nova Scotia data for New England travellers.

per party expenditure of $1,218 measured in 2004[80] may under represent the importance of these persons to the SW Nova Scotia economy.

Tourism data presumes one trip per party, and both in discussions with Tourism Nova Scotia and studying the 2004 Exit Survey report and data tables strongly suggests that this aspect of "Tourism" is inadequately researched. However, if we presume that the spending is per party per trip, then on the basis that US visitors did 3.3 trips per year (versus 3.6 per year weighted average for all individual returns[81]), the probable contribution of these visitors is in the order of $20m.

The consistent comment that we have received from the US individual returns is that without ferry access, they will have to reconsider ownership, as the trip through New Brunswick and back down into the region would be too arduous. Also, at least to some of these visitors, the international crossing from Portland or Bar Harbor is not an option because of hassles at both entry points, compared with the ease of the land crossing at St. Stephen/Calais. Thus loss of the ferry could put a good number of these visits in jeopardy.

It is interesting to note that the estimated number of persons with property in the five county region equates to a ferry ridership of 36,300, if all of them drove and took the ferry. This is not far off the provincial visitor number counted for the ferry.

80 Based on 4,289 surveys conducted at Halifax airport, N. Sydney, Digby, Yarmouth ferry exits. No cross-tabbing between exit points and response. No additional information regarding internet responses from travellers who received business reply cards at the Cobequid toll plaza and Amherst/Tidnish.

81 The number of trips by "Other Canada" was 2.3, but we have very few returns on which to base this figure. There were enough US returns to be reasonably confident of the results)