

YARMOUTH-MAINE FERRY

Traffic projection and viability analysis

Prepared for:
Yarmouth Area Industrial Commission

Prepared by:
Gardner Pinfold

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**Gardner
Pinfold**
Consultants Inc.
www.gardnerpinfold.ca

Nova Scotia
1331 Brenton St.
Halifax, NS
Canada, B3J 2K5
Ph: 902-421-1720
Fax: 902-422-5343
mgardner@gardnerpinfold.ca

New Brunswick
46 Weldon Street
Sackville, NB
Canada, E4L 4N4
Ph/Fax: 506-939-2261
gregmacaskill@gardnerpinfold.ca

British Columbia
6150 Baillie Rd.
Sechelt, BC
Canada, V0N 3A7
Ph: 604-740-2703
Fax: 604-885-9450
tpinfold@gardnerpinfold.ca

SUMMARY

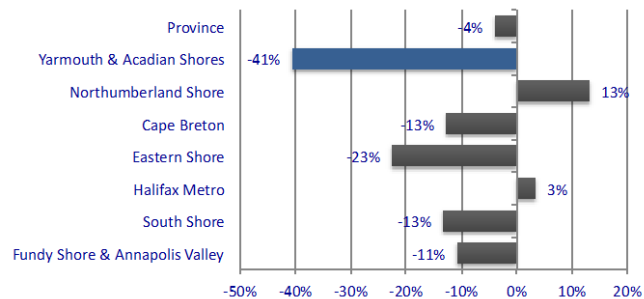
Background

The ferry service between Yarmouth and Maine (specifically, between Yarmouth and the ports of Bar Harbor and Portland) was terminated in December 2009. Declining U.S. visitation to Nova Scotia and falling ridership on the Maine-Yarmouth ferry route led to a decision by the Government of Nova Scotia to terminate its \$6 million annual subsidy to the service operator. Without the subsidy, the operator decided not to operate from the 2010 season onwards, which resulted in the loss of an important U.S. visitor gateway to the province.

The termination of the ferry service raises several issues affecting a broad range of interests.

- **Local community:** the loss of the ferry service has been felt acutely by the Yarmouth area economy through a drop in spending by the ferry on goods and services and also arising from a sharp decline in tourism activity.
- **Regional economy:** the ferry service also supported the economies of the south shore and Acadian shore, largely through tourism spending.
- **Provincial economy:** beyond the obvious decline in economic activity at the local and regional levels, the adverse impact of the termination of the ferry is evident also at the provincial level. This not only affects the many businesses dependent on tourism expenditures, but also reduces the tax revenues at the provincial and municipal levels.
- **US and Canadian travellers:** the loss of a direct ferry route between Maine and Nova Scotia causes some travellers to decide not to travel at all, or not to travel as frequently, because of the time and cost implications of driving the full distance.
- **Commercial traffic:** commercial traffic has not used the Yarmouth ferry for many years due to capacity limitations. So, while the termination does not impose a major burden on industry, it does not follow that the right ferry service would not offer shippers an option they could use when circumstances warrant.

Percentage Change in Room Nights Sold
by Tourism Region
2002 to 2010



The specific objectives of this study are to:

- Prepare an assessment of the market for private and commercial ferry transportation from Yarmouth to Maine, identifying preferred options for operating scenarios and developing pro forma financial statements
- Identify and measure regional benefits of the ferry service.

Ferry traffic past and future

As recently as 2002, Nova Scotia attracted some 230,000 U.S. overnight visitors. About 40% of these visitors – 90,000 – arrived by ferry via Yarmouth. In addition, about 55,000 U.S. visitors arrived in Yarmouth as walk-on passengers, bringing the total to 145,000 who arrived by ferry. Allowing for some adjustments for those heading back to the U.S. by another route, and for those arriving at another entry point and heading back via the ferry, the visitor number can reasonably be converted to passengers by doubling it. Adding in Canadians and international visitors using the Yarmouth ferry brings the total number of passengers to a peak of about 320,000 in 2002.

The decline in ferry traffic that began after 2002 is attributable to several factors:

- **9/11, 2001:** the terrorist attacks created a general reluctance among Americans to travel abroad. This worsened a slow-down in travel that began in early 2001 as the U.S. economy slipped into recession following the collapse of the dot.com bubble.
- **SARS, 2003:** the Severe Acute Respiratory Syndrome outbreak caused many in the U.S. to avoid travel.
- **Border security requirements:** regulations and inspections became more stringent immediately following 9/11, culminating in the need for U.S. citizens to carry passports or other approved documents when travelling to and from Canada.
- **Exchange rates:** the value of the U.S. dollar began to decline in 2002, following several years of attractive valuations in relation to the Canadian dollar. U.S. purchasing power dropped by 40% between 2002 and 2008, causing the effective cost of travel in Canada to become that much more expensive.
- **Rising fuel costs:** gasoline prices rose steadily between 2002 and mid-2008, reflecting the declining value of the U.S. dollar as well as rising global demand.
- **Termination of the *Scotia Prince*:** ending the Yarmouth-Portland service in 2005 reduced the overall trip capacity of the ferry services from 2,100 passengers daily on two routes to just 900 on a single route. This contributed greatly to the abrupt drop in traffic in 2005.
- **U.S. recession, 2007-2009:** the financial crisis plunged the U.S. economy into what is now referred to as the Great Recession. It had, and continues to have, a profoundly depressive impact on production, employment and incomes. Though the recession officially ended in late 2009, the U.S. economy has been slow to show signs of sustained recovery. An upturn in tourism travel to Nova Scotia, and to Canada more generally, depends on this recovery.

Developing a traffic projection for a renewed Yarmouth ferry service is complicated by the on-going influence these factors have on the decision by Americans to travel, not just to Nova Scotia, but also to any destination in Canada. Two of these factors stand out, providing a source of optimism about a recovery of travel to Nova Scotia via Yarmouth:

- **The economy will improve:** so much of decline in travel can be explained by economic conditions in the U.S. and Canada. The U.S. economy will begin to improve in the next year or two. As it does, we expect three things to happen:
 - The U.S. dollar will begin to appreciate against most currencies, including the Canadian dollar. This will make travel to Canada more affordable.

- Crude oil and petroleum product prices will decline in response to the strengthening U.S. dollar (this will reverse the pattern of the past few years when much of the increase in petroleum prices was due to the fall in the value of the dollar). As fuel prices decline in absolute and relative terms, Americans will return to the roads.
- Incomes in the U.S. will begin to rise, promoting consumer confidence and greater discretionary spending.
- **The right ferry will re-build traffic:** the collapse in ferry traffic was not due just to the economic climate, but also to the ferry itself. That the drop in traffic on the ferry was much steeper than the general decline in U.S. tourism to Atlantic Canada and Nova Scotia provides evidence that visitors were avoiding *The Cat*. A service featuring a cruise ferry offering a facilities and amenities comparable to those found on cruise ships would provide an attraction in itself, as well as a more comfortable transportation mode to Nova Scotia. Part of the reason for optimism that a cruise ferry would re-build traffic lies in the growth in cruise travel from the U.S. to Canada over the past decade. It is the fastest growing segment, with U.S. passenger numbers on routes from New York and Boston to Halifax rising from 170,000 in 2006 to 261,000 in 2010.

As the economy recovers, an effective marketing campaign combined with creative tour packaging could see a recovery of U.S. traffic exceeding 100,000 passengers (50,000 visitors) in the first year of a renewed Yarmouth-Portland cruise ferry service. To put this into perspective, considering just overnight visitors, this represents just 35% of U.S. visitors to Nova Scotia in 2010. Adding Canadian and international passengers would bring the first year forecast to 120,000 (Table S.1).

Table S.1

Yarmouth-Portland ferry passenger and vehicle forecast

Year	Walk On	Motor Coach		Auto Overnight		Other Traffic passengers	Commercial trucks	Total passengers
		passengers	coaches (1)	passengers	vehicles (2)			
Year 1	50,000	2,400	50	65,500	26,200	2,100	1,000	120,000
Year 2	46,000	3,400	70	58,700	23,480	1,900	1,000	110,000
Year 3	46,600	4,500	94	59,500	23,800	1,930	1,000	112,530
Year 4	47,200	4,550	95	60,110	24,044	1,950	1,000	113,810
Year 5	47,720	4,600	96	60,720	24,288	1,970	1,000	115,010
Year 6	48,250	4,650	97	61,440	24,576	1,990	1,000	116,330
Year 7	48,780	4,700	98	62,150	24,860	2,010	1,000	117,640
Year 8	49,300	4,750	99	62,860	25,144	2,030	1,000	118,940
Year 9	49,840	4,800	100	63,470	25,388	2,050	1,000	120,160
Year 10	50,400	4,850	101	64,180	25,672	2,070	1,000	121,500

Notes

1. Assumes 48 passengers per coach
2. Assumes 2.5 passengers per private vehicle

The forecast, shown in Table S.1, is not fixed in a particular year, though we believe achieving 120,000 passengers could be achievable in 2013. But to reiterate, achieving this (and building from there) is contingent on a combination of:

- **Economic recovery leading to renewed consumer confidence**
- **A ferry that is an attraction in its own right**
- **Effective marketing**

Ferry options

A Yarmouth-Maine ferry should:

- Respond to the needs of the tourism industry
- Be safe and reliable
- Have a convenient schedule and suitable frequency
- Be comfortable with modern amenities
- Be competitively priced and affordable
- Provide a transportation option for commercial interests including the fishing industry
- Be commercially viable

In descending order, three ferry types offer potential to meet the criteria:

- **Cruise ferry:** this vessel combines the features of a cruise ship and a ferry capable of accommodating large numbers of passengers and cars, as well as large commercial trucks.
- **Fast ferry:** this vessel is capable of handling large numbers of passengers and cars, but offers a limited range of amenities and is usually deployed on short routes (under two hours) featuring relatively calm sea states.
- **Ropax:** this vessel is designed to carry commercial vehicles (both trucks and drop trailers) as well as the potential for hundreds of passengers and cars.

The case for the Cruise Ferry rests on its ability to pitch itself in the strongest growth market – cruise travel. The right vessel, if well marketed and managed, offers considerable potential to approach the high traffic years of the late 1990s and early 2000s.

Route options

Yarmouth-Portland and Yarmouth-Bar Harbor would both be candidates for a revived ferry service.

- **Infrastructure and facilities:** both ports offer infrastructure and facilities suitable for a cruise ferry and both have a lengthy, recent and successful history as terminals for a Yarmouth-Maine service.
- **Distance and crossing time:** Bar Harbor would appear to have an advantage because it is just 90 nautical miles from Yarmouth. The crossing is 5-6 hours using a conventional vessel. This offers some flexibility with schedules and allows ample time for return crossings within a 24-hour period. Portland is double the distance, with a crossing time in the 10-11 hour range (the lower end of the range is within reach for vessels operating at 20 kn). This would allow daily return crossings, though scheduling and turn-around times in port would be somewhat constrained. For passengers interested in the cruise experience, the longer crossing time may be preferred.
- **Cost of service:** twice the sailing distance between Yarmouth and Portland means higher fuel costs, with correspondingly higher maintenance expenses. It would also likely mean sailings on six rather than seven days per week, since a day would be needed to carry out routine cleaning, maintenance and provisioning. Operating on a 24-hour rather than a 12-14 hour schedule would also likely result in higher crew costs. Of course, the absolute level of costs is not the issue, but rather costs in relation to revenues. A higher cost service may be the preferred alternative if it generates higher net revenues.

- Schedule:** early morning (0800-0900 hr) arrivals/departures from Yarmouth and evening arrivals/departures from Portland (2000-2100 hr) worked well for the Scotia Prince when it operated on this service. This would suit the SWNS tourism industry, since many passengers would spend the night in the area before departing. Also, this schedule would avoid conflict with cruise ships in Portland that enter port by mid- morning and depart in late afternoon. With a shorter crossing time, the Bar Harbor service could offer more flexibility, though scheduling around cruise ships would also be an issue there. If night crossings were to be avoided, this could mean early morning departures from Bar Harbor and late evening arrivals back in Bar Harbor, with the vessel overnighing there (this was similar to The Cat schedule for both Portland and bar Harbor). With Yarmouth arrivals and departures in the afternoon, this would not work as well for the local tourism industry.
- Revenues:** where is the traffic likely to be higher: this would tend to favour Portland, since it is within a six-hour drive of a population base of some 30 million including most of the major cities in New England and of New York. This is ideal for motor coaches. Bar Harbor adds an additional 3-4 hours driving time. Nonetheless, though it is more distant from major population centres, Bar Harbor is a popular tourist destination (near Acadia National Park). During the 1990s, when ferries operated between Yarmouth and both Portland and Bar Harbor, passenger numbers via Portland tended to be about 50% higher. The balance settled at 50:50 in the early 2000s when The Cat was introduced, a response to the novelty of the vessel and the relatively short duration of the trip.
- Advantage for commercial interests:** neither route would offer much advantage over the existing Digby-Saint John service as far as time to major markets in the U.S. is concerned. All routes would place a tractor-trailer in Boston in about 12-13 hours. By virtue of a late afternoon departure from Yarmouth, a Bar Harbor service would allow trucks carrying fish and seafood to arrive in Boston within 24 hours and in time to meet market requirements (5 am). A Portland service, with its morning departure from Yarmouth, would not meet these conditions. The other disadvantage of a Yarmouth service (both Portland and Bar Harbor) compared with Digby is that it would be seasonal. The fishing industry needs the year-round service.

Against these considerations – proximity to major population centers in particular – Portland would appear to be the stronger candidate. Accordingly, it is a Yarmouth-Portland service that is assessed in detail.

Revenues and costs

Given the traffic, fare structure and operating cost estimates, the service could expect to break even or even generate a modest positive net return. Applying a competitive fare structure to the traffic forecast produces an annual revenue stream in the \$24-26 million range (Table S.2).

Table S.2

Yarmouth-Portland ferry: pro forma operating revenues (\$000)

Year	Passengers			Passenger vehicles			Commercial vehicles			Ancillary revenues (5)	Total revenue
	#	Fare (1)	Revenue	PRV (2)	Fare (3)	PRV revenue	#	Fare (4)	Revenue		
1	120,000	115	13,800	26,200	225	5,895	1,000	1,000	1,000	6,000	26,695
2	110,000	115	12,650	23,480	225	5,283	1,000	1,000	1,000	5,500	24,433
3	112,530	115	12,941	23,800	225	5,355	1,000	1,000	1,000	5,627	24,922
4	113,810	115	13,088	24,044	225	5,410	1,000	1,000	1,000	5,691	25,189
5	115,010	115	13,226	24,288	225	5,465	1,000	1,000	1,000	5,750	25,441
6	116,330	115	13,378	24,576	225	5,530	1,000	1,000	1,000	5,817	25,724
7	117,640	115	13,529	24,860	225	5,594	1,000	1,000	1,000	5,882	26,004
8	118,940	115	13,678	25,144	225	5,657	1,000	1,000	1,000	5,947	26,283
9	120,160	115	13,818	25,388	225	5,712	1,000	1,000	1,000	6,008	26,539
10	121,500	115	13,973	25,672	225	5,776	1,000	1,000	1,000	6,075	26,824

The cost analysis assumes the ferry operator would charter a vessel. Current bare-boat rates for vessels of this type have been settling in the US\$21,000/day range. The vessel is charged to the Yarmouth-Portland service for 180 days. Underlying these figures is the assumptions the vessel would be used on another service for the balance of the year. Total vessel operating costs, including administration and overhead, are estimated at about \$24.0 million annually (Table S.3).

Table S.3

Yarmouth-Portland pro forma operating costs

Vessel	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Charter fee (1)	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Fuel (2)	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300
Crew (3)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Maintenance (4)	1,000	1,000	1,000	1,100	1,200	1,300	1,400	1,400	1,500	1,500
Consumables (5)	2,000	1,850	1,900	1,950	1,950	2,000	2,000	2,050	2,100	2,100
Management & other	500	500	500	500	500	500	500	500	500	500
Subtotal	18,600	18,450	18,500	18,650	18,750	18,900	19,000	19,050	19,200	19,200
Administration & overhead										
Labour	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Maintenance (6)	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150
Marketing	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Administration & other	1,750	1,750	1,750	1,750	1,750	1,750	1,750	1,750	1,750	1,750
Subtotal	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400
Total	24,000	23,850	23,900	24,050	24,150	24,300	24,400	24,450	24,600	24,600

Economic impact

A revived cruise ferry service operating between Yarmouth and Maine would reverse the negative economic impact the region has suffered over the past decade due to declining U.S. tourism. The positive impact would be felt throughout the region as soon as the service begins, and would gradually grow, as tour packages are developed to take advantage of emerging service offerings.

Based on the traffic forecast and relying on average spending amounts, we estimate that the revived Yarmouth ferry would account for \$16.3 million in annual gross tourism spending throughout the province. Of this, \$3.5 million (about 21%) would be spent annually in the Yarmouth/Acadian Shores and South Shore impact regions.

The \$16.3 million in total tourism spending results in overall impacts (direct and spin-off) of:

- **GDP:** a contribution to GDP of \$12.0 million for the province as a whole. Spending in Yarmouth/Acadian Shores and South Shore generates GDP of \$2.0 and \$0.9 million, respectively.
- **Employment:** the creation of about 260 full-time equivalent (FTE) jobs in the province as a whole. Spending in Yarmouth/Acadian Shores and South Shore generates about 60 and 20 FTE, respectively.
- **Labour income:** the creation of \$8.0 million of labour income in the province as a whole. Spending in Yarmouth/Acadian Shores and South Shore generates \$1.3 and \$0.4 million of labour income, respectively.
- **Taxes:** federal and provincial taxes (income and HST) fall in the \$2.9 million range annually over the 10-year simulation period.