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Boston-Halifax Ferry Service: Capturing an Existing Market

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BOSTON-HALIFAX FERRY SERVICE

CAPTURING AN EXISTING MARKET

by

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ABSTRACT

The viability of a Boston to Halifax ferry service is examined in light of the existing vehicle traffic entering that Province from the United States. The current cruise ship industry is outlined and the role which the Port of Boston plays in this market describes the Port's incentive for instituting such a ferry service. Statistics provided by the Nova Scotia Department of Tourism show that a significant volume of vehicle traffic which enters Nova Scotia originates at points in the United States which are to the south and west of Boston. The existence of this traffic supports the assumption that such a ferry system is feasible.

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CHAPTER I

INTRODUCTION

Direct ferry service between the United States and Nova Scotia, a popular vacation spot, has been offered for over twenty years by two separate companies which operate ferries between Portland, Maine and Yarmouth, Nova Scotia and Bar Harbor, Maine and Yarmouth, Nova Scotia. Over the years there has been a steady demand for these services, and the two ferries currently operate at well over 80% capacity during the peak months of summer. Statistics show that a significant portion of vehicle traffic which utilizes either of the two Maine/Nova Scotia ferries originates in the United States from areas which lie to the south and west of Boston. It is this existing traffic which suggests the feasibility of a Boston to Nova Scotia ferry service, as Boston is geographically situated in an ideal position to intercept a portion of these vehicles.

As urban roadways and highways are becoming increasingly congested, the concept of ferry travel is once

again on the rebound. Commuter ferry service has become quite popular both for commuter and vacation purposes in many cities bordering the water. Boston has recently begun commuter ferry service between the downtown area and several of the suburbs on the south shore. New York operates commuter ferry services between Long Island and Manhattan, as well as between Connecticut and Long Island. And, in Seattle regular ferry service permits commuters to live on the outlying islands and travel quickly and efficiently to and from their downtown offices.

As vessels have become faster and more sophisticated, the atmosphere on board is being altered from the once empty, starkly decorated lounge areas to rooms which are comfortably furnished and offer food, games or other sorts of activities. Today, ferry services are providing attractive alternatives to over the road traffic, and in doing so they are helping to ease some of the many traffic problems which face urban roadways.

In May of 1986, the Port of Boston dedicated and opened for service its newly refurbished Black Falcon Cruise Terminal. Completion of this project enables the port to efficiently handle the embarkation and debarkation of cruise passengers and vessels. The modern terminal, which can simultaneously handle both a 1,200 and 600 passenger vessel signals the Massachusetts Port Authority's

(Massport) commitment to the promotion of cruise shipping in New England.

As the cruise market expands, it is expected that a growing number of cruise vessels will use the new terminal both as a port of call and a point at which to commence and terminate cruises. Marketing efforts are underway designed to inform travel professionals and the public as to the merits of cruising out of Boston. Port managers, are actively soliciting cruise lines and presenting them with attractive itineraries for cruises in the region. Some of these destinations include Bermuda, Montreal, Nova Scotia, and Newfoundland. These efforts are but part of a strategy by which Massport hopes to reach its goal for optimal use of the new cruise terminal.

Consistent with these efforts is the contemplated institution of a combined ferry/cruise service operating between Boston, Massachusetts and Halifax, Nova Scotia. This proposed service will be the focus of this thesis.

In order to fully understand the significance of this study, a brief history, and description of the cruise industry today is provided. This is followed by an examination of the positions which U.S. ports occupy in the cruise market, highlighting the roles played by New England and more specifically the Port of Boston. This information rationalizes the Port of Boston's investment in its $5 million cruise terminal, while providing support for the

proposed Boston Halifax ferry/cruise service. A detailed evaluation of passenger demand and of existing ferry and transportation services to Nova Scotia is used to support the hypothesis that such a ferry/cruise service would be viable.

The conclusions and recommendations made in this study do not attempt to deal with the economic operating details of the proposed ferry/cruise service. What the research will highlight is the potential for such a service in terms of vehicle and passenger volumes. This will provide essential information for prospective operators of the service. Costs which will be incurred by the operator will depend on the actual vessel used, labor contracts and docking arrangements in both Halifax and Boston. This research emphasizes that Boston has the potential to support a ferry/cruise service. The decision to invest in the service will depend on further studies and more specific economic analysis.

The History of Cruising

It has been some twenty years since the Norwegians introduced the first fleet of purpose-built cruise vessels. Prior to this, cruising took place primarily onboard passenger liners which were shifted seasonally during periods of slack demand. Cruising, as it exists today, is a

relatively new phenomenon. Dating back to the early 1960s, it evolved after the collapse of transatlantic passenger liner travel. Defined by Kendall (1986) as the "transportation of pleasure seeking passengers on ocean voyages offering one or more glamorous ports of call", cruising differs from passenger traffic in that it is a leisure activity, rather than a transportation service. On a cruise, passengers typically embark and disembark at the same port. They spend the holiday aboard their 'floating hotel' while being exposed to various exotic ports and cultures. Passenger liners, on the other hand, were primarily responsible for all of the essential transportation for persons travelling between continents, islands or along coasts (Miller, W., 1985).

The notion of a sea bound vacation is not, however, entirely novel. Evidence of occasional cruise holidays can be traced back for over a century. As early as 1844, the P&O Steam Navigation Company offered its British customers a tour of the Mediterranean. In 1891, Hamburg-America Lines sent its Augusta Victoria on a Mediterranean cruise to avoid sailing through the winter at less than full capacity (Kendall, 1986). At least two ships were built exclusively for cruising prior to World War I, these being the 400 passenger Prinzessin Victoria Luise, launched in 1900 by Hamburg-America Lines, and P&Os ship, Vectis, launched in 1904. These vessels cruised primarily between the

Mediterranean, England, the Canary Islands and the Baltic Sea. Seasonal relocation of vessels came to be common up to and through the two World Wars, with shifts from the North Atlantic transoceanic routes to the Caribbean, and from European routes to the Mediterranean in the winter. At this point, cruising was, for the most part, confined to an effort by liner companies to earn additional revenues during the off peak season.

Between 1960 and 1973, the volume of persons travelling by sea dropped dramatically. Introduction of the first commercial trans-Atlantic air service in the late 1950s, and its maturation through the 1960s led to the rapid phase out of the stately trans-Atlantic passenger liners. The great speed and economy of air service soon eclipsed the once essential transportation service provided by these vessels.

During the 1960s, the service of many of the ocean liners was discontinued, and the ships were either retired or shifted permanently to cruise service. By the late 1960s, a number of enterprising new companies as well as several existing shipping firms had taken advantage of these available vessels, thus committing themselves to the concept of a shipboard vacation (Miller, R., 1985). The Caribbean and the Mediterranean became established as the focal centers for cruise travel, and the cruise experience came to be associated with tropical climates and exotic

ports of call. In the early days, cruises typically ran from seven to ten days on the short end, to much longer cruises of three months and more on the long end. Passengers at this point tended to be older or retired and they could therefore afford lengthy periods of travel.

The transition from passenger to cruise service involved extensive refits of the old passenger ships in order to meet the different demands of cruise passengers. The original large liners were poorly suited for tropical cruising. Designed as they were for the colder and less predictable weather of the North Atlantic, these vessels lacked air conditioning, open strolling decks and outdoor swimming pools. The transition to permanent cruise service required the breakdown of the traditional three class cabin system (deluxe, cabin and tourist) into a single or 'hotel' class. Private baths were installed in each cabin, and large common public rooms replaced the many smaller exclusive lounge areas common to the passenger liners. Air conditioning was necessary throughout the vessel for operation in tropical climates, and, outdoor strolling decks, swimming pools and game areas became the requisite features for passengers enjoying a cruise holiday.

As the idea of cruising became entrenched in peoples minds, a steady demand for this type of a vacation commenced. As ships filled up, new orders for these floating resorts were placed to meet a growing demand for

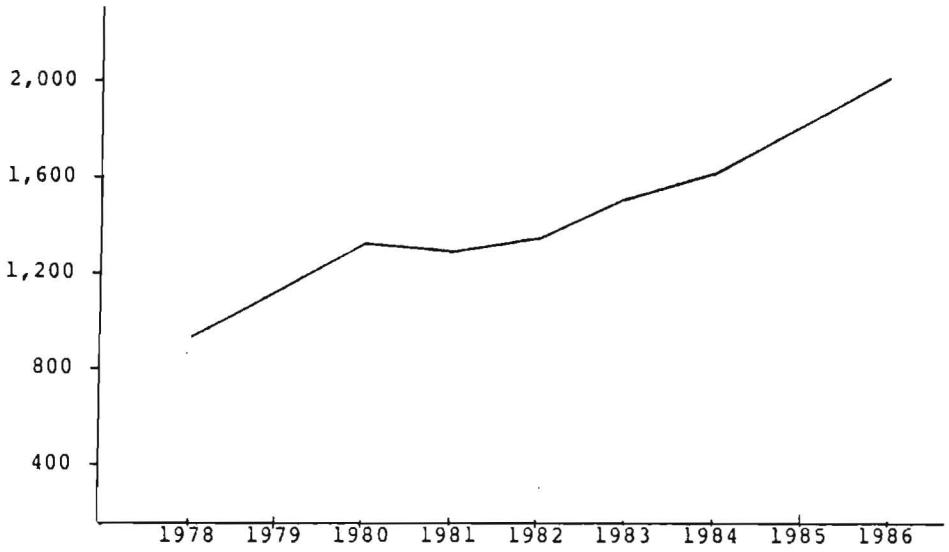
additional berths and to replace vessels which were sadly out of date. By the 1970s, many well designed, purpose-built cruise vessels emerged on the scene, custom tailored to the cruising lifestyle. Some of these included Norwegian Cruise Lines' Vistafjord, Royal Viking Cruise Lines' Royal Viking Sky and Royal Viking Sea, and Royal Caribbeans' Sun Viking and Nordic Prince. These first vessels were designed to carry between 600 and 800 passengers, and generally weighed under 25,000 tons (Hader, 1986). They featured elaborate entertainment areas, retail outlets, recreational facilities and emphasized an abundant gourmet cuisine.

Cruising Today

During the 1970s, the North American cruise business expanded and developed. By 1980, the industry was recruiting some 100,000 new passengers a year (Miller, R., 1985). Since the start of this decade, passenger demand has exhibited a steady growth of nearly 15 percent or approximately 200,000 new persons annually (Davis, 1986) (see Figure 1). Despite this impressive growth rate, it is estimated that only about 5 percent of the American adult population has ever taken a cruise, and well over half are repeat travellers. Today, cruise line operators are clearly committed to the belief that a vast untapped market exists (Gilles, 1986).

FIGURE 1

GROWTH IN CRUISE INDUSTRY PASSENGERS
(North American cruise passengers in thousands)



Source: Cruise Lines International Association;
Arthur D. Little, Inc. from Tatzin, D.
Address before Seatrade Cruise Shipping Conference,
April, 1986.

The spontaneous acceptance of cruising as a legitimate holiday alternative through the 1970s, resulted in a period of excessive demand, with many passengers having to wait months before they could book a berth. As a result, cruise lines were able to raise prices rapidly, increasing their revenues and hence the capital available for newbuildings. Surplus demand stimulated the ordering of a host of new vessels as both existing operators and new investors rushed to cash in on the profits to be had. As the new ships were delivered in the early 1980s, the high demand pressures were gradually relieved (Tatzin, 1986), as shipboard capacity rapidly caught up with and surpassed demand. By the early to mid-1980s, nine new vessels had been built adding some 10,940 new berths to the existing fleet (Hader, 1986). During this same period, extensive remodelling of many existing vessels further contributed to the surplus in shipboard capacity.

In early 1981, growth in demand dropped from 15 percent to 1 percent and the bottom fell from the market. Due to the energy crisis, fuel prices increased and operating costs and ticket prices rose accordingly. Additionally, run away inflation left less disposable income for the American public to spend on vacations (Hader, 1986). In response, cruise operators found that the only way to keep ticket prices low was to shorten the length of their cruise offerings, a move which they found

has worked to their advantage. Fourteen day cruises were reduced to ten, ten day cruises to seven and seven day cruises were shortened to three and four days.

Cruises of shorter duration have proven to be very successful, clearly fitting well into the American lifestyle. Three and four day trips are ideal for persons taking their first cruise, since it gives passengers the unique opportunity to sample a cruise without using up their vacation on an experience which they are not certain they will enjoy. Three day cruises also afford a convenient and relaxing weekend getaway, departing Friday and returning on Sunday evening. By providing an opportunity to try a cruise, it is believed that many non-cruisers will be enticed to sample this holiday alternative, and that these people will be so satisfied that they will become the 'repeaters' for longer trips (Hader, 1986). Changes such as these, and a recovery from the 1981 recession, soon set demand back at its previous levels, where it has continued to grow unchecked through the present.

Cruise Passengers

Cruise line operators are clearly optimistic about the future of cruising and the potential of an 'untapped' market. As cruising has matured, the profile of the typical cruise passenger has changed. Once, cruises were the

pastime for the wealthy and retired, individuals who had the time and money to spend months on deck, under blankets, roaming the world. This stereotype is, however, no longer the norm. Cruise passengers today represent all walks of life, age and income levels. Nearly half of all cruise travellers now earn less than $25,000 a year and are under 45 years of age, with 10% under 25 years. Over 35 million Americans fit into this category, of whom 80% have never taken a cruise, with 60% not even aware of a cruise as a vacation alternative (Miller, R., 1985).

Several factors underlie the belief among cruise operators in sustained long-term growth in the cruise market. Speaking before a Seatrade Conference in March of 1986, Donald Tatzin reported that, based on research, the fundamentals underlying long term demand growth in the business were good. He described three primary factors which supported this assumption, all of which point to the growth in income qualified markets, those individuals in possession of the discretionary income permitting them to contemplate a cruise or other type of vacation.

The first factor is the entrance into the work force of over sixteen million women in the past twenty years. This factor alone increases the number of individuals and families with the available income to spend on travel holidays and has had a decided effect on growth in the cruise industry. Secondly, the 'baby boom generation'

(those born between 1945 and 1959) are just now reaching the peak of their earning power. Cruise operators look upon this generation as the hope of today, and even greater yet, the hope of tomorrow as they begin to reach retirement age. Finally, cruise operators look to the retirement sector. This sector, composed of citizens over 65 years of age, are leading more healthy and active lives today than ever before. This segment of society possesses 30% of all discretionary income (Hart, 1985). Taken together, these three factors point to a growth in the income qualified market of from 79 to 105 million persons by 1995 (Tatzin, 1986).

For cruise operators, this is enough evidence to support their belief in sustained growth in demand, as well as the existence of a sizeable 'untapped' market. Their conviction in a bright future is so great that over $100 million has recently been invested in the refitting of older cruise vessels. Present contracts for new ships will deliver some 18,327 additional berths by 1989 (see Table 1). For the most part, these berths are located on vessels which have two to three times the capacity of the first purpose-built cruise ships, they are mega-ships, huge floating resorts, designed to accommodate 1,500 passengers or more.

Growth in shipboard capacity, today exceeds passenger demand. Until supply and demand come into alignment, which

TABLE 1

CRUISE VESSEL NEWBUILDINGS

DEBUT	CRUISE LINE	SHIP	PASSENGERS	
5/86	Home Lines	HOMERIC	1035	*
7/86	Birka Lines	BIRKA PRINCESS	1500	
7/86	Carnival Cruises	JUBILEE	1500	*
3/87	Carnival Cruises	CELEBRATION	1680	*
7/86	Exploration	EXPLORER STARSHIP	250	*
12/86	Windstar Cruises	WIND STAR	150	*
1987	Windstar Cruises	WIND SONG	150	*
1988	Windstar Cruises	WIND SPIRIT	150	*
1989	Windstar Cruises	WIND SURF	150	*
1987	RCCL	SOVEREIGN OF SEAS	1287	*
1989	RCCL	UNNAMED	2276	*
1987	Royal Columbus	ISABEL	600	
1988	Royal Columbus	FERDINAND	600	
1987	Regency Cruises	REGENT STAR	830	*
1988	Royal Cruise Line	CROWN ODYSSEY	990	*
1989	Royal Cruise Line	UNNAMED	990	*
1989	Sitmar	UNNAMED	1600	*
1989	Sitmar	UNNAMED	1600	*
		TOTAL	18,327	

* Lines serving the U.S. market

Source: Cruise Industry News, Vol 2:14. July 1986.

is not expected for several years, the cruise traveller stands to benefit greatly from price competition, and other incentive offers.

In light of this situation, cruise operators are forced to reexamine the history and philosophy of the industry. Their response has been to greatly expand and diversify the cruise product. It is believed that the key to attracting a new and greater range of passengers is through the provision of a wider range of cruise offerings, financially, geographically, and though a variety of new on board experiences. Today, there are cruises which satisfy almost every taste and pocketbook (Miller, R., 1985), with offerings ranging from non-traditional cruising grounds to on board gimmick and theme cruises. As more vessels come on line, a wider variety of these options will be made available, as lines strive to differentiate their product and offer a service which is unique in an increasingly competitive environment.

Cruise Vessel Deployment

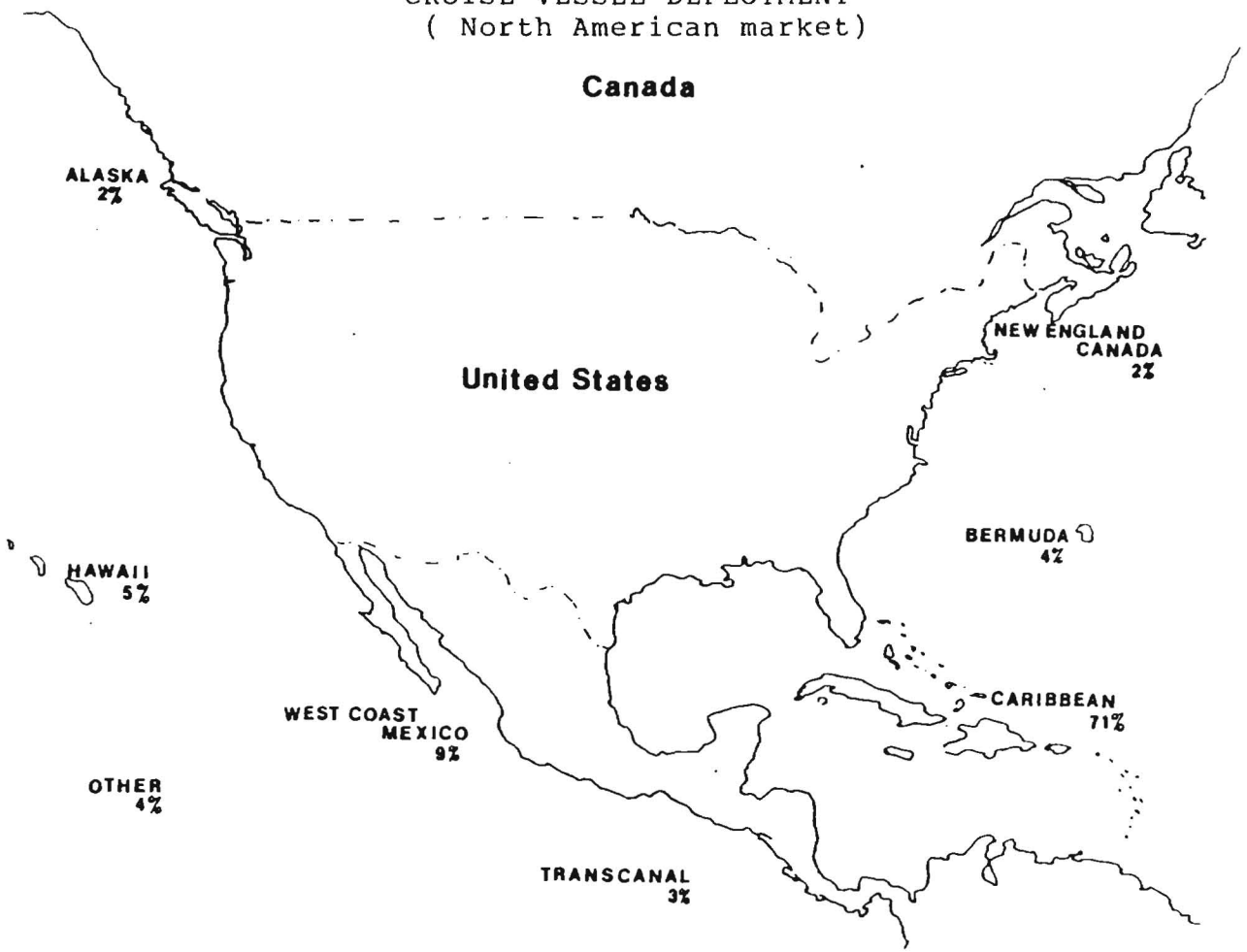
To gain a better understanding of the geography of cruising, it is helpful to look at the deployment of the present cruise fleet. In his 1985 article entitled The U.S. Cruise Ship Industry, Willis Miller identifies eleven major cruise regions which host cruises embarking from U.S. ports

(see Figure 2). His conclusions, which are based on 1,862 cruises ranging from three to ninety one days in 1982-1983 are as follows:

1) The Caribbean and Bahamas hosted 71% of all cruise offerings with 1,327 sailings. Nearly one third of this activity were three and four day cruises to the Bahamas from Miami.
2) The West Coast of Mexico had 179 cruises or 9% of all voyages. These trips to the so called "Mexican Riviera" were principally three and four day cruises (104 cruises) to Ensenada from Los Angeles.
3) Hawaii was the third most active cruise region with 5% or 98 cruises.
4) Bermuda which hosted 89 cruises represented 4% of the cruise traffic. Voyages to Bermuda originated largely from the Northeast ports, New York, Philadelphia, Boston and Baltimore. Due to its location, most Bermuda cruises were seven day trips.
5) Transcanal cruises represented 3% of cruise activity. These cruises, operating between Los Angeles and Miami or San Juan, generally run two weeks or more, and are associated with seasonal shifts of vessels from summer to winter itineraries.

FIGURE 2

CRUISE VESSEL DEPLOYMENT
(North American market)



Source: Miller, W.(1985), in The Journal Of Geography

6) Alaska had 2% of the total annual cruises from American ports. Most of these cruises ran between ten and fourteen days and were commenced at ports in California, primarily San Francisco. Cruises to Alaska from Vancouver, Canada were far more abundant with over 122 offered of generally seven days.
7) New England and Canada hosted 32 cruises or roughly 2%. Most of this service between the New England coast and the Canadian Maritime region and New England and Bermuda ran about seven days.
8) The final four cruise regions, around South America, South and Circle Pacific, Transatlantic, and around the world, were of considerably longer duration and generally hosted less than 15 cruises for the period.

With more tonnage coming on line, and much of it scheduled for service in the Caribbean, the 'cruise capital of the world', cruise operators are beginning to explore new cruise regions, where they feel the potential lies for successful cruise itineraries. They are looking to regions which presently host only a small fraction of the cruise traffic. These regions include the U.S. and Canadian Atlantic coasts, the Gulf Coast of Mexico, Alaska, the Pacific Coast and Southeast Asia. The search for new cruise regions is yet another strategy by which cruise operators

hope to differentiate their product over that offered by other lines, and thereby expand their market shares.

New Philosophies of Cruise Product

As competition heats up on the traditional cruise routes, operators have sought to diversify their offerings through theme or specialty cruises, and, through cruises into new geographical locations. The cruise business is presently in a period of rapid diversification. It is no longer sufficient for cruise lines to simply market a cruise, rather, operators are being encouraged by industry analysts to target a particular market, identify a niche and specialize in it (McRoberts, 1986). The successful cruise lines will be those which are able to provide a unique and competitive cruise experience.

Many cruise lines today are offering theme holidays which range from on board 'whodunits' to music festivals, wine appreciation, archeology, art and naturalist tours. Cunard Lines, Queen Elizabeth 2, is currently planning a five day cruise for opera enthusiasts featuring singers from the Metropolitan Opera on board. Reebok, USA Ltd., offers a series of seven day fitness cruises on the M/V Stardancer, the vessel has been completely fitted out with the latest in fitness and health equipment (Billout, 1987).

Norwegian Caribbean Lines, while continuing to sail in the Caribbean, will be directing its service towards a family oriented experience. Carnival Cruises has targeted the young and newly affluent in its marketing campaign. The line is advertising a series of short duration 'fun cruises' and hopes to attract an under 35 single or newly married crowd (McRoberts, 1986).

Other cruise lines have sought to increase their market share through the expansion of service into non-traditional cruising waters. Statistics show that nearly half of all cruise passengers are repeat cruisers, and that often in their choice of a cruise they look geographically for a different cruise experience, rather than repeatedly plying the same waters (Cohen and Woodward, 1984). In addition, there is the feeling that many people who have never cruised would be more likely to try a cruise from their home port first, both for its convenience and a sense of local pride, than to travel hundreds of miles by air to join a cruise which they are not certain they will even enjoy (Deems, 1986). It is for these reasons that cruise operators are convinced that expanding their service geographically will lead to an expansion of market shares.

Today, while the Bahamas and the Caribbean are still the largest cruising areas in the world (Miller, W., 1985), the demand for new itineraries has brought many new ports and possible destinations into the playing field.

The Port Factor

With this buzz of excitement in the cruise industry, many ports find themselves in the position of wanting to promote local cruising. While cruise ship derived benefits are extremely difficult for a port to quantify, Nelson (1985) maintains that the 'economic spinoff' to the port community is, or can be quite substantial. Consequently, many port communities, anxious to promote local tourism, have put pressure on their port authorities to get into the cruise business.

As a result, ports which have not previously been thought of as 'cruise ports' are scrambling to get into the action (Nelson, 1985). Tampa, for instance, has announced a $225 million project for the redevelopment of its waterfront including the construction of three cruise ship terminals. Seattle is currently considering a waterfront redevelopment project which will include a two berth cruise ship terminal, a waterfront park, several new office buildings and a small hotel. On the East Coast, Philadelphia doubled its cruise business in 1986 following the completion of a $10 million facility. Boston has opened a $5 million terminal, and hopes to serve as a 'gateway' to the increasingly popular Eastern Canadian cruise grounds (Nelson, 1985).

While this list is by no means exhaustive, it serves to illustrate the response by port authorities to growth in the cruise industry. The overcapacity situation in the Caribbean works strongly to the advantage of these non-traditional cruise ports.

Custom cruise facilities have become a dominant component in the delivery of the overall cruise product. As cruising has become more prolific, cruise lines are concerned with delivering a total experience. This includes every aspect of the cruise itself, from entrance into the terminal building to the cruise and back again. Operators are no longer simply concerned with the shipboard portion of the experience. They seek rather, a clean, safe and flexible port terminal and management staff, one which will complement the cruise product (Fairplay, 1986). Passengers, too, have become more conscious of their comforts. They expect that their bags will be handled quickly and efficiently, and they will be able to move through an attractive, comfortable facility without delay until they reach their ultimate destination, the ship (Deems, 1986).

Ports are finding that it is no longer enough to serve the cruise industry through the temporary conversion of a cargo pier. This was standard fare for many years in ports which received only casual cruise ship callings during the warm weather months. Philadelphia, Boston, and even Port Canaveral hosted their first cruise ships at

temporarily converted cargo terminals. Today, however, if a port desires to woo the cruise business, some level of investment in either remodelled or newly constructed facilities is essential.

Port authorities have, therefore, been forced to reexamine their traditional roles in the cruise market. As cruise lines respond to growth through product differentiation, which includes the development of new and varied itineraries, many new ports are being offered the unique opportunity of getting into the action.

For ports, construction of a cruise ship terminal remains a risky business. While cruise lines are able to operate with a reasonable degree of flexibility in response to market changes, ie. they can relocate their ships in response to shifting demand, ports are not afforded this opportunity. Without updated terminals which cruise lines have come to expect, a port is at a disadvantage in its attempts to attract a portion of the cruise business. However, construction of facilities is in no way a guarantee that cruise lines will call.

Speaking before the American Association of Port Authorities (AAPA) in September 1986, cruise consultant Larry Dressler urged that ports seeking to enter and serve the industry do so using "sound market principles and techniques." It is not enough for a port to simply build facilities and expect to be discovered, rather, port

managers must go out and actively solicit cruise companies. Dressler advised that ports should work in coordination with cruise operators, local tourist interests and other ports, in presenting the cruise lines with a complete packaged itinerary. No matter how much investment an individual port makes on a custom terminal, it has slight hopes of success unless it can work well within the itinerary of the various cruise lines, and aid in the promotion of their business and interests (Fairplay, 1986).

In contemplating the promotion of cruising through the construction of a custom terminal, it is important for the port to consider the level of activity which it hopes to support. It makes no sense, for example, for a port in the North Atlantic, which at best could only support cruising for a six month season, to invest excessive millions in a facility which will lay idle for half of the year. It is essential that the level of investment be tantamount with the degree of activity which the port hopes to sponsor. This point is best illustrated in a number of specific examples.

On the West Coast, the Port of Los Angeles has begun work on a $7 million conversion of an existing cargo pier into a brand new cruise ship terminal, in addition to a $2 million modernization of its existing passenger facility. Scheduled for completion in 1987, two new berths will be added to the existing facilities (Fairplay, 1986). The Port

of Los Angeles handled over 400,000 passengers in 1985, and estimates point to a growth of at least 100,000 by the end of 1987. Los Angeles serves as an important West Coast port for cruises south to Mexico, and west to the Pacific and Orient.

Seattle, hoping to capitalize on the growing Alaska cruise market, has plans for a new development which, as mentioned, combines a two berth cruise terminal, waterfront park, hotel and office complex (Fairplay, 1986). Because cruising from Seattle will only be on a seasonal basis, the port has counterbalanced its expenditure through the incorporation of multiple uses for the facility. Rather than being the primary function of the new complex, cruise callings will be viewed as an added bonus, complementing and enhancing other functions.

Ports located in the South and Gulf Regions, not limited by seasonal weather, have invested considerably more in their facilities, as they can justify the expenditure through the support of more cruise traffic. Port Canaveral, capitalizing on its proximity to both Cape Canaveral and Disneyworld, began promoting cruising in 1971. In 1980, only 5,518 cruise passengers visited the port (Nelson, 1985). The port began with a low initial investment, converting an existing warehouse into a cruise terminal. However, cruise lines found the proximity of the other tourist attractions greatly enhanced their business,

and were eager to operate from that location. Since that date, Port Canaveral has constructed four cruise terminals, and is currently undertaking a ten year $110 million expansion project which will provide five to seven new cruise berths. The port clearly responded in its level of investment to the volume of cruise passengers and activity which it expects to support.

In conclusion, the position which ports occupy in regard to the expanding cruise market, depends highly upon their commitment to the promotion of cruising, and their ability to accommodate and support vessels. Construction of a cruise terminal is only the first step in the process of serving the industry. The real test comes in the marketing of port assets as well as those of the port community. A city with a strong local tourism base has a built in populous from which to draw, and has a host of sightseeing attractions which it may feature in its courtship of cruise lines. With these considerations in mind, a closer look at the nature of cruising in New England, and more importantly between the Port of Boston and the Atlantic Coast of Canada is necessary.

Cruising in New England

Traditionally, New York functioned as the 'cruise port' servicing the Northeast Coast of the United States.

However, banking on industry growth, many other North Atlantic ports have constructed facilities and hope to capture a share of the market. Baltimore, Philadelphia and Boston are the principal new cruise port entrants from the North and Central East Coast of the U.S.

With the shift of passenger liners to permanent cruise service, New York lost her once prominent position as leading cruise port to Miami, and other Florida ports (Nelson, 1985). At one time, the finger piers in Manhattan were lined with vessels bound for Europe, the Caribbean, and South and Central America. However, the advent of trans-oceanic air travel, the proliferation of shorter length cruises, and the incentive of fly/cruise travel packages gradually drove the base of cruise operation south to the all season ports of Florida, primarily Miami.

Florida had the advantage over New York of being one full day closer by sea to the ultimate cruise destination, the Caribbean. For vacationers, attracted to a shorter length cruise this meant one additional day in the sun, or, one less day steaming to the destination. In addition, fly/cruise packages, negotiated between the cruise lines and airlines, allowed passengers to fly free or at discounted rates to their cruise destination from almost anywhere in the country.

Today, while New York's cruise business is very much alive, it has lost most of its Caribbean bound vessels.

Although New York still serves over 400,000 passengers a year (Nelson, 1985), most embarkations and debarkations are bound to and from Bermuda, New England, and the Canadian Maritime Region (Miller, W., 1985).

In 1974, the Port of New York completed a modern passenger terminal between 48th and 52nd street on the Hudson River. This facility has remained the base for all cruise ship operations. Cruising is said to once again be on the increase in the area. In 1985, New York was homeport for Home Lines seven day cruises to Bermuda and the Caribbean. The Bermuda Star offered regular sailings to Bermuda, Chandris Fantasy Cruises' Brittanis and Galileo ran 'cruises to nowhere', cruises to Nova Scotia and Canada, Sun Lines Stella Maris sailed regularly to Bermuda and Royal Viking conducted cruises to Nova Scotia, Quebec, and Montreal (Nelson, 1985).

A spokesman for Sun Lines reported that passengers sailing from New York during the 1986 season were primarily from the Northeast Region of the U.S. (Cruise Industry News, July 9, 1986). This fact tends to support the assumption that many first time cruisers are inclined to sail from their local port for its convenience.

To the south of New York, Baltimore and Philadelphia have both constructed terminals and have received a favorable response by cruise lines. Ocean Cruise Lines shifted its Ocean Princess to Philadelphia from its

traditional base in the Mediterranean for the 1986 season, due to terrorist activities in that region. After two months the line reported having sold over 5,000 berths on its seven day cruises between Philadelphia and Montreal, and Philadelphia and Bermuda. Rick Williams, President of the line, reported that 85% of the passengers were first time cruisers who resided between Princeton, New Jersey, Baltimore, Maryland and Pittsburgh, Pennsylvania. Cruises to Canada attracted a significant amount of Californians and Floridians (Cruise Industry News, July 9, 1986).

It is reported by port officials that cruise passengers alone brought close to $2.5 million dollars to Philadelphia. The port accommodates cruise passengers and vessels at its Penn's Landing Facility. This modern terminal has space for two vessels, luggage storage, customs and check in facilities, and a $10 million grand piazza. The airport is located fifteen minutes away, facilitating the arrangement of air/sea packages and the attraction of non-local clientele.

The Port of Baltimore receives cruise vessels at its Dundalk Marine Terminal. Besides serving as a point to embark and disembark cruise vessels, the Dundalk facility also operates as a container terminal. Opened in 1975, the $2 million passenger building features a large open air lounge, and a 6,200 square foot viewing gallery which provides a scenic vista of Baltimore Harbor (Nelson, 1985).

Cruise passengers may drive directly up to the building and unload their baggage on a covered conveyer belt. Parking facilities are conveniently located nearby. General cargo activity, which is also conducted at Dundalk, continues uninterrupted by the presence of cruise vessels. Cruise ship activity from Baltimore has increased from five vessels in 1985 to eight vessels in 1986 (Nelson, 1985).

By combining both cruise and general cargo functions in the same facility, Baltimore is able to operate the Dundalk facility year round. This creative solution to the problem of a seasonal cruise business may help make the cruise terminal economically viable. Seattle's combined usage plans for office, hotel and retail space in addition to cruise terminal follows the same rationale.

In considering the construction of custom cruise facilities, it is crucial that ports consider their ability to draw and accommodate visitors and potential passengers. The primary marketing factor in selling a cruise to clients is the ships itinerary (Post Buckley, Schuh and Jernigan, 1985). It is therefore not surprising that the Caribbean is as popular as it is, given the many diverse yet accessible destinations. Speaking before the AAPA in September of 1986, cruise consultant Larry Dressler mentioned some of the fundamental necessities, aside from a terminal building which would enhance cruising from a given port. A strong local base of tourism, with nearby air connections to most

major cities are powerful assets for cities trying to break into the business (Fairplay, 1986). Today, the extent to which cruise lines depend on fly/cruise incentives to sell cruises makes the proximity of an airport, with good connections to most major cities both domestic and abroad, an important factor for all ports wishing to participate in the market. A city with a developed local tourist base has an advantage in that much of the required infrastructure is already in place.

Introduction and accommodation of cruise passengers can be easily handled by the travel coordinators already at work within the city (Fairplay, 1986). Bringing cruising to a city provides these tourist and travel professionals added opportunities, as they are able to package local tours and promote the cities sights all of which brings a general overall benefit to local restaurants, ground transportation, retail outlets and the city in general (Ports and Harbors, 1985).

Baltimore, Boston, Philadelphia, and New York all fit these catagories. They each have newly remodeled waterfronts, and have sought to promote tourism through the capitalizing on their sense of history. Promoting cruising to these areas can be very successful, however, this success depends on the strength of marketing and promotional efforts, as well as the coordination of port

officials, tourist interests, and cruise lines (Fairplay, 1986).

In conclusion, the expansion of cruise lines to non-traditional areas, and the enthusiasm among ports and port cities to participate in the action, has resulted in the teaming up of both cruise and port operators in the promotion of cruising in the North East Coast of the U.S. and Canada. The Port of Boston is no exception. With the completion of its $5 million facility, Boston is actively soliciting cruise lines, and is currently promoting its terminal as the 'cruise gateway' to New England.

CHAPTER II

THE POSITION OF BOSTON IN THE CRUISE INDUSTRY

Boston: Cruise History and Cruising Today

In the days of the great passenger liners, Boston enjoyed a steady stream of passenger traffic. By sea, the port lies one full day closer to Europe than any other North American port, a factor which enhanced the ability of the port to attract business. In the 1950s and 1960s however, trans-atlantic passengers took their business to the air and ocean liner services consequently declined. Thus, Boston was forced to adapt itself to the leisure oriented cruise business.

Over the past fifteen years cruise ships have called at Boston on a limited but regular basis. Each year 15 to 20 ships have brought between 7,000 and 25,000 persons through the port (Boston: Port and Shipping Handbook Sea and Air 1985, 1985) (see Figure 3). Cruise vessels call at Boston during the summer and autumn months and generally

FIGURE 3

ACTUAL CRUISE PASSENGER ACTIVITY AT MASSPORT
(Passengers in thousands)

Source: Massport Cruise Study.

sail to such destinations as Bermuda, Montreal, Nova Scotia and other spots along the East Coast of Canada. Occasionally ships depart from Boston bound for the Caribbean, Bahamas or other southern destinations, but this is rare, as it is preferable to reach these destinations through the combination fly/cruise package. Cruises offered to this area from Boston would take between ten to fifteen days.

During the early years of cruising, Boston used the Commonwealth Pier, a general cargo facility, as a point from which to commence and terminate cruises. Little port initiative in the promotion of cruising in the region was taken, rather, Boston simply provided the facility and essential services required. The lack of a defined market position, with respect to the cruise industry during these years, prevented the port from capitalizing on the tendency of cruise vessels to include Boston in their itineraries (Post, Buckley, Schuh and Jernigan, 1985). In 1981, the Massachusetts Port Authority (Massport), with a team of private developers, began the conversion of the under utilized Commonwealth Pier to a new function, the World Trade Center, a center for international business and commerce. With this new use for Commonwealth Pier, the port has reexamined its position with regards to the cruise industry (Razdan, 1986).

Considering the overcapacity situation in the southern cruise regions and the branching out of cruise lines to new destinations, Massport recognized the potential for a dynamic cruise region between the U.S. and Canada. If the Port of Boston was, however, to play a leading role in the promotion of cruising in the North East, construction of a modern express purpose terminal was essential. Conversion of a general cargo pier for the occasional ship calling is no longer suitable for the cruise business of the 1980s and the future. Plans for a new and modern cruise terminal were drawn up, and the facility, The Black Falcon Cruise Terminal was officially dedicated on May 29, 1986.

The $5 million year round facility is located on the property commonly referred to as the Boston Army Base. Its final design combined the knowhow of Post, Buckley, Schuh & Jernigan, Inc., one of the most experienced designers of cruise terminals in the country (Deems, 1986) with the expertise of local architectural and engineering firms. The 54,000 square foot building can simultaneously handle a 600 and 1,200 passenger vessel (Boston: Port and Shipping Handbook, 1985). A modern telescoping enclosed gangway, connects the terminal building with the ship, and is skillfully engineered to accommodate the tide in Boston Harbor. Facilities in the terminal include a snack bar, lounge and ticketing areas, a customs area, baggage and ship storage, and additional commercial space. Passenger

drop off areas are located under cover at the terminal, and there are long-term parking facilities conveniently located nearby.

In its first season of operation, the Black Falcon Cruise Terminal hosted 19 cruise callings. Prior to the completion of the facility, none had been scheduled for the 1986 season. Nineteen vessels are already scheduled for 1987. Estimates suggest that the 20,000 passengers which were handled, injected nearly $10 million into the local economy (Fairplay, 1986).

In 1986, tourism ranked as the second largest industry in the Commonwealth of Massachusetts. Over twenty million travellers were expected in 1986, with the potential of generating over $7 billion to area businesses. Major beneficiaries include hotels, restaurants, sightseeing services, tour operators, attractions and retail outlets (Razdan, 1986). Boston is clearly a major tourist attraction in itself. The popularity of Boston as a destination, the growing popularity of cruising as a form of travel and vacation and the expansion of cruise offerings into the Northeast are the primary factors which underlay Massport's commitment to the promotion of cruising in New England.

Determined to see through with this conviction, Massport retained the consulting group of Post, Buckley, Schuh, and Jernigan Inc. in 1984 to "determine the

potential for continued and increased cruise ship activity in its new passenger terminal as a means to increase the economic impact these operations have on the Boston economy" (Post, Buckley, Schuh and Jernigan, 1985).

The Massport Cruise Study

In its final form, the Massport Cruise Study addresses cruise industry factors, comparative port costs, and cruise passenger demographics, to determine the viability of increased cruise service in Boston, and also to develop future projections. In addition, an evaluation of all cruise lines operating worldwide highlights which cruise lines and ships would be most likely to operate vessels from the Massport facility. This information enables Massport to target particular lines in its planned promotional programs. Following is a summary of the major PBSJ conclusions and recommendations.

Major Conclusions

1. Massport revenue passenger throughput could increase from the present 20,000 passenger per year range to 65,000 per year by 1990. In terms of revenue based on wharfage and dockage alone, this represents an increase of $233,000 per year.

2. The economic impact of cruise operations will increase from the present $7,000,000 to $30,800,000 by 1990.

3. Ten cruise lines and 15 vessels are high priority candidates for calling at Massport. An additional seven cruise lines and ten vessels are possible candidates.

4. The northeastern coast of Canada provides a promising cruise route that could originate in Boston and rival the volume of business now generated by Alaskan cruises on the West Coast of the United States.

5. The proximity of the cruise port to Logan Airport is a valuable asset which opens great potential for air/sea cruise packages.

(Post, Buckley, Schuh and Jernigan, 1985)

Major Recommendations

Based on the above conclusions, PBSJ recommended that the subsequent strategies be followed by Massport to develop and maximize its cruise passenger potential.

1. Complete the planned cruise terminal and protect the adjacent pier space to allow simultaneous docking of two cruise vessels.

2. Develop and implement an intensive marketing program that stresses the advantages of sailing from Boston as follows:

a) highlight new Massport terminal facilities;

b) highlight the viable passenger base available in the New England area;

c) indicate the positive travel aspects of departing from Boston such as the air capacity available and the proximity of the airport to the seaport;

d) initiate a joint effort with cruise lines and airlines to develop attractive air/sea packages;

e) combine these air/sea packages with tours of the greater Boston area and the region;

f) work together with the Chamber of Commerce and other civic and business groups to promote local activities available to cruise passengers as well as the area's hotels and other facilities; and

g) develop a joint marketing program with Canadian officials to highlight their ports of call as a cruise itinerary.

(Post, Buckley, Schuh and Jernigan, 1985)

In its determination of the feasibility of continued and increased service from Boston, the Massport Cruise Study makes the following assumptions. The cruise industry is still underdeveloped, many major customer markets remain untapped, thus cruise lines are currently taking steps to remove the barriers which limit growth. Based on this assumption, it is felt that opportunities exist for growth in non-traditional as well as traditional cruising grounds. Cities which avail themselves to this tendency will be in the best position to receive the positive impact of industry growth.

In order to determine the possible market for cruise passengers in the Boston area, the Massport Cruise Study contains an analysis of the dynamics of the cruise industry itself. Assuming that the main objective of the cruise industry is to maximize profits, lines will be driven by market forces. These market conditions are impacted by the following factors:

1) demographics and availability of passengers;
2) ships;
3) availability of ports of call;
4) air capacity;
5) ground transportation;
6) terminal facilities;
7) cost of operation; and
8) rate structure.

Demographics and availability of passengers (Note: most of these statistics are from research conducted in 1978, nearly ten years ago. This will account for some of the discrepancies between the figures cited here and those mentioned at other points in the study).

The U.S. cruise industry has grown at an annual rate of 15% over the past ten years. As U.S. consumers have discovered cruising is an economical vacation option, cruise lines have been prompted to increase their carrying capacity. The result is a surplus of cruise ships, resulting in an overcapacity situation.

Industry statistics show that historically, 50% of passengers embark on seven day cruises, 25% on three to four day cruises, and 25% on cruises which are longer than a week. Over 30% of all cruise passengers are repeat passengers, and 85% express the desire to take another cruise within two years.

Tables 2 and 3 contain information from a cruise survey conducted in 1978 by Travel Pulse Research Service. Table 2 reports that only 7% of the U.S. total population has ever taken a cruise leaving a large untouched market. Table 3 describes the profile of the typical cruise passenger as an equal amount of men and women who are married, predominantly middle aged, well educated and relatively affluent.

TABLE 2

INCIDENCE OF CRUISE TRAVEL

ITEM	HISTORICAL STATISTICAL TOTAL POPULATION USA (percent)	1977 STATISTICAL TOTAL CRUISE TRAVELLERS USA (percent)
Out of every 100 persons in the U.S.,the percent of persons who:		
Have Taken a cruise	7	12
Have not taken a cruise	93	88
Of the group that has taken a cruise, the percent of persons who took the cruise:		
Within the past year	8	11
A year ago	10	6
2-3 years ago	15	19
4-5 years ago	34	16
More than 5 years ago	1	-

Source: Travel Pulse Research Service, based on cruise survey, 1978, in Massport Cruise Study.

TABLE 3

DEMOGRAPHIC PROFILE OF CRUISE TRAVELLERS

CATEGORY	TOTAL CRUISE TRAVELLERS (percent)
Total	100
Sex	
Male	50
Female	50
Age	
18-24 years	10
25-39 years	25
40-54 years	31
55-64 years	18
65 or more years	16
Marital Status	
Married	71
Single	19
Divorced/Separated/Widowed	10
Education of Respondent	
Did not graduate from high school	9
Graduated from high/technical school	32
Attended college	26
Graduated from college	20
Attended graduate/professional school	13
Total Annual Household Income	
Less than $15,000	18
$15,000-$19,999	22
$20,000-$24,999	17
$25,000 or more	43

Source: Travel Pulse Research Service, cruise survey, 1978. In Massport Cruise Study.

The geographic distribution of cruise passengers is considered in the demographic profile in Table 4. This table indicates that almost 80% of passengers departing from U.S. ports in 1979 were from the Middle Atlantic, Pacific and South Atlantic states. The majority of passengers were from either California or Florida, with Floridians dominating the shorter three and four day market. The small portion of passengers coming from the remaining regions of the country confirm the existence of a major untapped passenger market (Post, Buckley, Schuh and Jernigan, 1985).

Post, Buckley, Schuh and Jernigan take the above analysis and conclusions and applies them to the particular demographics of Boston and the New England area. Based on 1980 census data, "a theoretical computation of the potential local, regional and national cruise passenger for the Port of Boston" is made (see Table 5). This table reflects the speculative passenger base as being in excess of fifteen million persons. "Boston is in an excellent position for potential passenger increase due to the large population that supports it" (Post, Buckley, Schuh and Jernigan, 1985).

Ships

Figure 4 depicts the deployment of the world cruise fleet. The largest percentage of the fleet is located in the Caribbean during the fall and winter months. Many of

TABLE 4

GEOGRAPHIC DISTRIBUTION OF CRUISE PASSENGERS IN 1979

REGION	PERCENT OF PASSENGERS
Middle Atlantic	30
Pacific	25
South Atlantic	24
East Coast Central	6
New England	3
East South Central	2
West South Central	2
West North Central	2
Mountain	1
Outside U.S.	5
TOTAL	100

Source: Massport Cruise Study

TABLE 5

AVAILABILITY OF POTENTIAL PASSENGERS
(1980)[a]

TYPE OF MARKET	NUMBER OF PERSONS	POTENTIAL PASSENGERS[b]
Local: Boston	562,994	39,000
Regional: New England	12,238,493	856,000
National: United States	226,545,805	15,853,000

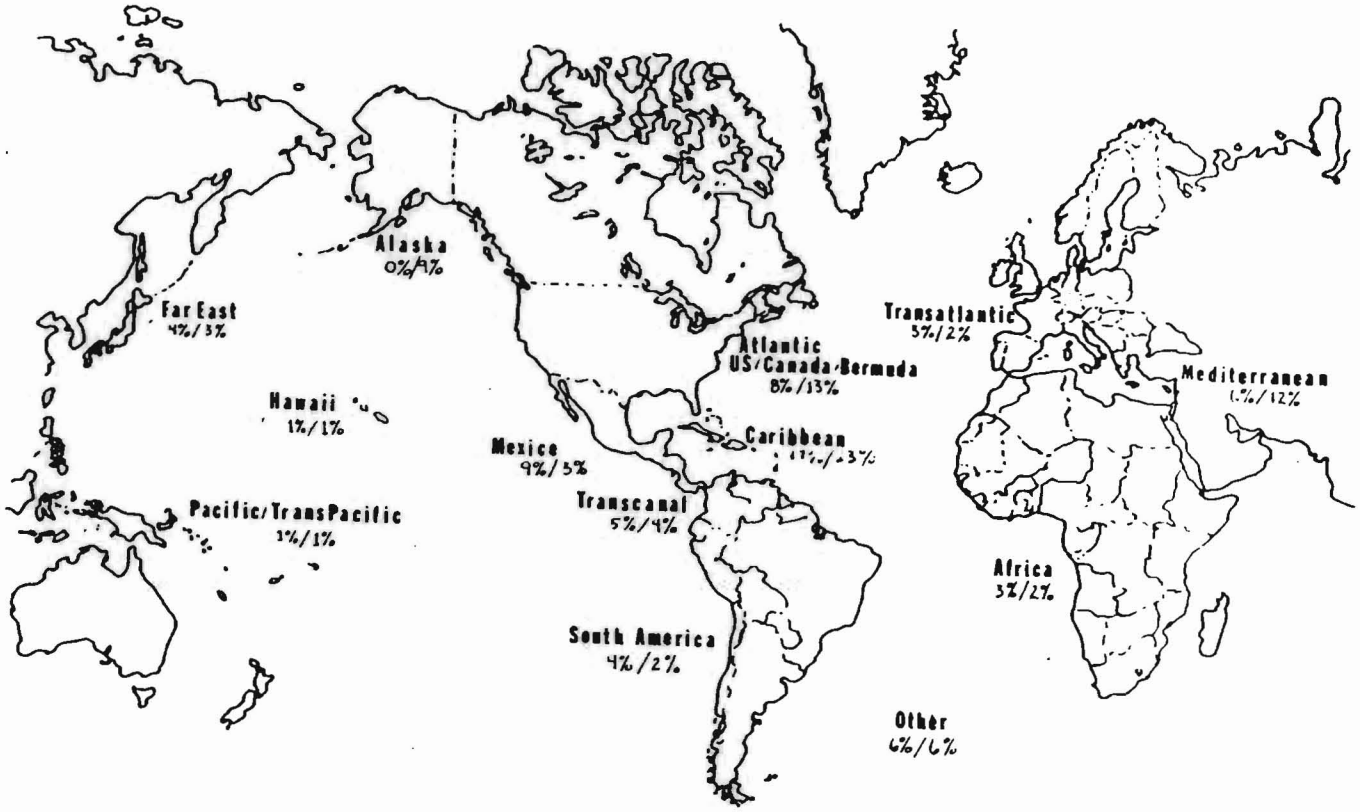
[a] Based on U.S. Census Reports

[b] Based on 7% of population as potential passengers.

Source: Massport Cruise Study.

FIGURE 4

PRESENT DEPLOYMENT VESSELS
(world cruise fleet)



Fall winter/spring summer

Source: Massport cruise Study

these vessels are shifted during the spring and summer, and the tonnage becomes split between the Alaska route, the Caribbean and the U.S. and Canadian Atlantic Coast.

Of the new vessels arriving on the market in the near future, only a few smaller vessels are destined for the East Coast. A large majority are intended for use in either the Caribbean or split between the Caribbean and Alaskan route. The Alaskan market, however, has a limited capacity to absorb additional cruise traffic. Due to the fragility of the ecosystem, Alaskan officials have limited the number of ships permitted to cruise there annually. It appears therefore, "that some vessels now deployed in the Caribbean will find it more profitable to split operations for summer runs in other non-traditional markets. Ports such as Boston, interested in attracting vessels to their new facility, should start courting these cruise lines before pressure is created to relocate to new markets." (Post, Buckley, Schuh and Jernigan, 1985).

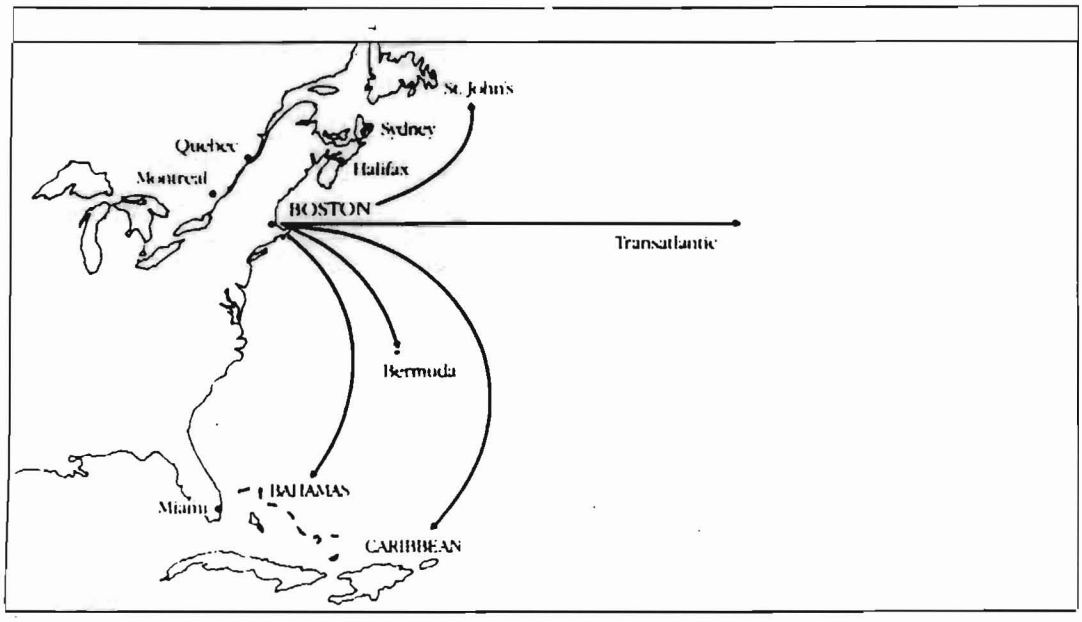
Availability of ports of call

Currently, cruise packages offered from Boston consist primarily of seven day cruises to Montreal, Nova Scotia or the St Lawrence Seaway to Quebec. Cruises to 'nowhere' are also common ranging generally between one and two nights (see Figure 5).

The constraints imposed by the Passenger Vessel Act of 1886, whereby the carriage of passengers and their baggage

FIGURE 5

POTENTIAL CRUISE PACKAGES AND PORTS OF CALL



Source: Massachusetts Port Authority.

between domestic ports is forbidden on a foreign-flag vessel, makes Boston's proximity to the Canadian coast particularly attractive. Considering that the majority of cruise vessels are of foreign-flag registration, direct cruises between U.S. cities is prohibited. The proximity of ports such as Halifax, Sydney and Montreal, provide prime future cruise markets waiting to be discovered. The types of cruise packages which are today being successfully offered in Alaska "could have a parallel operation on the Northeast Coast of Canada.....Massport should take the initiative in directing the interest of cruise lines towards this area" (Post, Buckley, Schuh and Jernigan, 1985).

Air capacity

The cruise industry is a major ally of the airline companies. Air/sea packages, whereby surplus seats are bought by the cruise companies at discount prices and incorporated into the cruise package, benefits both the cruise and airline companies. This form of incentive travel is so successful that it draws passengers from all over the continental U.S., Europe and South America. An average of two thirds of all today's cruise passengers make use of this convenience (Post, Buckley, Schuh and Jernigan, 1985).

Air capacity is essential if a city hopes to host a successful cruise operation. With regular service to most

major cities, "Boston's air service is more than adequate to meet the requirements of potential air/sea packages" (Post, Buckley, Schuh and Jernigan, 1985). Although Boston presently has no air/sea programs, the benefits to be realized from such service would be felt among area hotels, ground transportation and overall tourist attractions. The study recommends close cooperation between airlines, cruise lines, travel industry and Massport to initiate these sort of programs.

Ground transportation

Ground transportation is adequate to serve the requirements of the cruise industry.

Terminal facilities

The Black Falcon Cruise Terminal, as described in the preceding section, was planned with thorough consideration for the demands of the cruise industry and its current and future passengers. The Post, Buckley, Schuh and Jernigan study finds these facilities to be more than adequate for the level of service which the Port hopes to support.

The Massport Cruise Study deals with the projected economic impact of cruise activities on the Port of Boston. The true value of cruise activities, it is concluded, come not from the actual associated port costs such as wharfage and dockage, accrued by the vessel, but rather from the large amounts of money spent by cruise lines in the storing

of vessels, moving passengers, service companies and other maritime operators. The benefit, therefore, spreads widely into the community and is not confined to the port.

Several studies were performed in an attempt to quantify this cruise related economic impact on the port community. Based on these studies, Post, Buckley, Schuh and Jernigan determined that "the direct economic impact on the Boston area of present Massport cruise operators is approximately $140 per passenger or $2,800,000 per year. This impact is expected to increase to $190 per passenger by 1990." Direct and indirect economic impacts of cruise operators are estimated to be $7,000,000 rising to $30,800,000 by 1990 (Post, Buckley, Schuh and Jernigan, 1985).

The final section of the Post, Buckley, Schuh and Jernigan study identifies potential cruise ship operators who would be likely to use the new Massport cruise terminal. This determination is based on evaluations of worldwide cruise service and their historical patterns of activity. By this method, 'high priority' cruise lines are identified so that Massport could identify particular operators which could be targeted in its promotional programs.

CHAPTER III

HYPOTHESIS AND METHODOLOGY

Statement of Purpose

Based on the conclusions and recommendations of the cruise study, Massport has launched an active promotional program to fully develop the cruise potential of the city and region. The 1986 season saw the test marketing of three sailings by Bahama Cruise Lines Vera Cruz, which sailed between Boston and Montreal on July 7th, August 3rd and August 31st (Deems, 1986). On July 29th and 30th of this same year, Massport hosted a luncheon reception for area travel, tour and Department of Commerce interests. Its purpose was to introduce these people to the Black Falcon Terminal and describe the crucial role which they play promoting cruising in the region and at the port. On September 18th, the Greater Boston Convention and Visitors Bureau teamed up with Royal Viking Lines in sponsoring an educational seminar. The seminar, entitled Cruise Shipping: It Means Business was held aboard the Royal Viking Sky while docked at the Black Falcon Terminal (Razdan, 1986).

Again, the purpose of the seminar was to instruct travel and tourism industries about the vital position which they occupy in promoting cruising.

With the cruise study conclusions in mind, and with an eye on full utilization of the Black Falcon Cruise Terminal, Massport has taken a closer look at the promising Canadian market. The institution of a combined ferry/cruise service, operating between Boston and Halifax, Nova Scotia, is a current promotional consideration. As conceived, the service would provide regular seasonal employment for the Black Falcon Terminal, while being consistent with identified Canadian and U.S. demand. The following chapters describe the viability of this proposed service including a methodology used to arrive at the conclusions.

Hypothesis

It is hypothesized that sufficient demand exists among U.S. travellers to support a ferry/cruise service which would operate between Boston, Massachusetts, and Halifax, Nova Scotia. It is theorized that such a service, through the capture of a portion of the existing passenger flow, and a creation of new demand, will be profitable for the ferry operator, the Port of Boston and for the Port of Halifax.

Currently, ferry services which operate between the United States and Nova Scotia (there exist two separate services departing from Maine), operate at over 80% capacity during the peak summer months. A substantial portion of the motor vehicle volume which utilizes these ferry services originates at points in the U.S. which are either south or west of Boston. It is these vehicles which Boston potentially could capture if it offered direct ferry service to Nova Scotia.

Methodology

To substantiate the viability of the proposed Boston Halifax ferry/cruise service, three principal pieces of information are examined. The analysis begins with a description of the existing ferry services operating between North America and Nova Scotia. This includes a discussion of rates, schedules and annual passenger volumes. Available air service between Boston and Halifax are also examined, with rates and service schedules provided. Finally, the Statistical Review 1985 Nova Scotia Tourism Season (See Appendix A) is utilized to detail the number of visitors who travelled to Nova Scotia during 1985. Included in this analysis is an explanation of the proposed ferry/cruise service, the vessel requirements, and

a rationale for favoring Halifax as the proposed destination.

An examination of ferry services currently operating between North America and Nova Scotia is useful for several reasons. Current ferry schedules, can be used to gauge variations in the volume of passengers during the operating season. More frequent service tends to reflect a period of high demand. Conversely, limited service during the off season marks lower expected demand. From this information, the 'two ends' of the season, spring and fall, can be delimited enabling the identification of an optimum demand period during which the Boston Halifax ferry could operate, thereby avoiding revenue losses due to low passenger volumes.

A knowledge of the rates charged by the other services aids in determining a reasonable fare schedule for the Boston Halifax service. Although this depends to a greater extent on the actual operating costs of the vessel, it is crucial to know what other ferries are charging, since the proposed service will be competing in the same market. One of the principal ferries currently operating between the U.S. and Nova Scotia uses Portland, Maine as a base of operation. Considering that Portland is only a two hour drive from Boston, fares charged from Boston must not exceed the cost of driving to Portland to connect with the ferry. The record of passenger volumes over the past

several years identifies the demand which currently exists for ferry service to Nova Scotia from the U.S.

Since the proposed ferry service intends to provide direct service between Boston and Halifax, a mention of air connections, the only other form of direct travel to Halifax, is made. Rates and schedules are included, as well as a statement by airline officials regarding whom they feel are their principal clientele. This information is useful in making fare related decisions which effect the competitiveness of the Boston ferry.

A detailed look at the statistics from the Nova Scotia Department of Tourism completes the analysis of existing demand. These figures provide an accurate record of the number of motor vehicles which enter Nova Scotia during the official tourist season, May 15th through October 31st. There are seven possible points of entry into Nova Scotia, four of which are ferry terminals. This auspicious geography permits an accurate tally of all motor vehicle traffic entering the Province. Vehicles from outside of Nova Scotia are counted and recorded by either Province or State of origin (see Appendix C of the Nova Scotia Report for the methodology used to arrive at an accurate count).

The statistics from Nova Scotia document that significant motor vehicle traffic arrives in Nova Scotia from points in the U.S. A majority of these vehicles arrive directly from the U.S. via one of the operating ferry

lines. While a large majority of automobiles which visit Nova Scotia are of New England origin, an equally significant volume of motor coach and recreational vehicle traffic originates in Mid- and South Atlantic regions.

Existing volumes of traffic originating at points south and west of Boston provide the strongest support for ferry service out of Boston. These motor vehicles must either connect with ferry service at one of the two Maine points, or must drive the long 800 miles north through New Brunswick and south into the Province. In either case, Boston, by virtue of its geographic location, lies directly in the path of much of the traffic and has an opportunity to intercept a portion of it. While these statistics describe the existing demand for a Nova Scotia bound service, they fail to account for the untapped market potential. Local residents and tourists, who have balked at the inconvenience of travelling to Maine to make a ferry connection, are but one potential source. One may assume that substantial additional passenger volumes exist.

In addition to the motor vehicle volumes entering Nova Scotia, the statistical review also includes in the Accommodation Summary for 1985, a breakdown of all the rooms sold in Nova Scotia and the associated occupancy rates by area. These numbers highlight the areas where visitors tend to stay while in the Province. An exceptionally high occupancy rate in Halifax, when compared

to the other areas, would lead to the conclusion that when in Nova Scotia, tourists tend to visit Halifax. Such a conclusion would strongly support the need for a direct service to that city from the U.S. The following Chapter presents this information, and from it draws conclusions.

CHAPTER IV

ANALYSIS

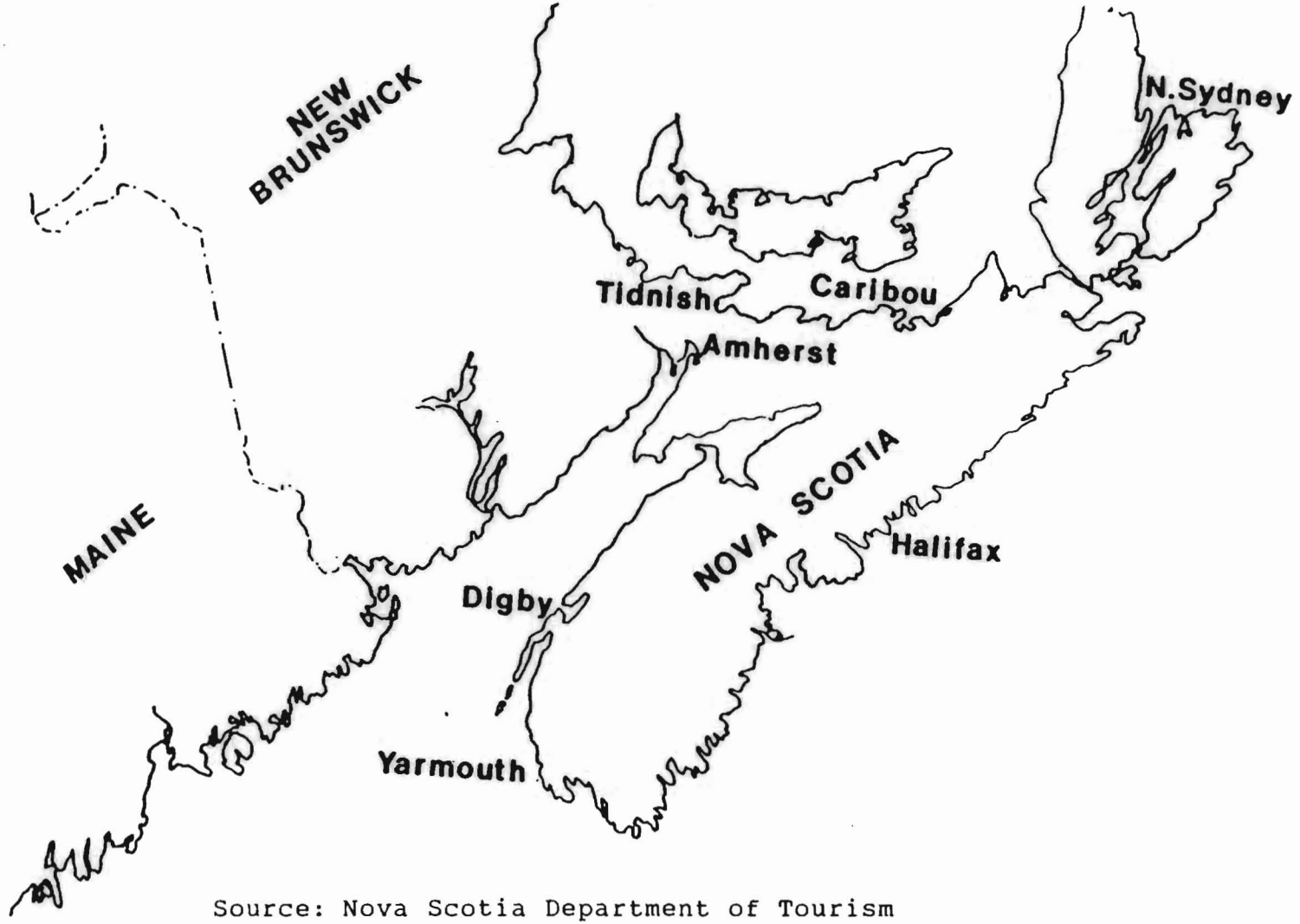
Present Service

As mentioned, access to Nova Scotia is limited to seven possible points of entry, four of which are ferry terminals (see Figure 6). Ferry terminals are located in Caribou, Digby, North Sydney and Yarmouth. Amherst and Tidnish are directly accessible by land, and air service is available through either Halifax or Sydney.

Direct ferry service to Nova Scotia from the U.S. is offered by two separate ferry lines. One, Prince of Fundy Cruises Ltd., operates its M/V Scotia Prince out of Portland, Maine, and the other, Marine Atlantic (formerly CN Marine) runs the M/V Bluenose from Bar Harbor Maine. Both ferries disembark passengers in Yarmouth, Nova Scotia. The remaining option for persons wishing to travel to Nova Scotia from the U.S. is either direct air service to Halifax, or, an 800 mile drive north through New Brunswick and south into Nova Scotia.

FIGURE 6

NOVA SCOTIA POINTS OF ENTRY



Source: Nova Scotia Department of Tourism

M/V Scotia Prince

Ferry service from Portland, Maine to Yarmouth Nova Scotia is operated by Prince of Fundy Cruises Ltd. aboard the M/V Scotia Prince. The Scotia Prince makes the passage from Portland to Yarmouth in roughly eleven hours, covering a distance of 240 nautical miles. Service is offered from May through October, with tri-weekly service in May and October, and daily service from June through September. The Scotia Prince has been operating on this route for seventeen years.

Due to the length of the trip, the ferry offers service from Portland in the evenings, departing at 9:30 PM and arriving at 8:30 the following morning. The Scotia Prince has combined its ferry service with the amenities of a cruise ship. Passengers sleep in individual cabins, and are provided with entertainment such as floor shows, movies, dancing and gambling. Dining on board can be enjoyed in either a formal restaurant, or a casual cafeteria. In addition, the vessel has a duty free shop where passengers may browse during their trip.

While the Scotia Prince is principally a ferry service, Prince of Fundy Cruises offers several other vacation packages which incorporate the use of the ferry. For

example, a round trip cruise to Yarmouth with a brief stopover and return the same day presents an enjoyable two day cruise option, or, a cruise to Yarmouth with a two day stopover allows time to tour the Province by either motor coach, private or rented auto.

Prince of Fundy Cruises feel that their M/V Scotia Prince is primarily a tourist ferry as it handles very little commercial business. Passengers are drawn from all over the continental U.S. and Canada, and are not simply from the immediate Portland nor New England area (Lee, 1986). Unfortunately, a more detailed breakdown of passenger points of origin is not available.

Table 6 provides a complete breakdown of rates, sailing schedule and on board amenities for the 1986 season.

Table 7 shows the record of both passenger and auto volumes of the Scotia Prince for the 1985 sailing season. Volumes have been included for the previous years to give an idea of the amount of growth the operation has experienced in the past nine years. With approximately 158 sailings during the 1985 season, it can be concluded from these figures, that the Scotia Prince operated at an overall 80% capacity.

TABLE 6

M/V SCOTIA PRINCE RATES AND SCHEDULE
(1987)

Ship	M/V Scotia Prince	
Dimensions	LWL	413 Feet
	Displ.	6,500 Tons
	H.P.	18,000 RPM
	Speed	19 Knots
Carrying Capacity	Passengers	1200
	Vehicles	250
	Cabins	254
On Board Amenities	Casino Restaurant/Lounge Floor Shows Duty Free Shopping Cafeteria/Pub Movies Dancing	

Sailing Schedule	Fr. Portland	Fr. Yarmouth
May 7-June 18	9:30 PM	11:00 AM
June 19-Sept 22	9:00 PM	10:00 AM
Sept 23-Oct 24	9:30 PM	11:00 AM

Rate Schedule	Peak	Off Peak
One Way		
Adults	$ 58.00	$ 40.00
Children	$ 29.00	$ 20.00
Motor Coach	$ 48.15 per person	
Autos/Vans	$ 82.00	$ 65.00
Motor Coach	$161.00	$100.00
Motorcycles	$ 28.00	$ 20.00
Bicycles	$ 9.00	$ 7.00

Source: Prince of Fundy Cruises Limited.

TABLE 7

M/V SCOTIA PRINCE YEARLY PASSENGER/AUTO VOLUMES

YEAR END	PASSENGERS	AUTOS
1985	149,000	24,000
1984	142,000	22,900
1983	141,300	22,400
1977	129,900	23,500

Source: Prince of Fundy Cruises Limited.

Based on the above rates and passenger volumes the following calculations were performed to provide an estimate of the revenue generating potential of this type of an operation (see Table 8). The numbers used represent the actual passenger volumes and rates for the Scotia Prince for 1985. The ratios used regarding peak and off-peak travellers, children to adult and vehicles to bicycles have been selected by the author. The numbers have been kept deliberately conservative in the absence of a more detailed passenger breakdown.

M/V Bluenose

The other direct ferry service from the U.S. to Nova Scotia, is operated by the Canadian based Marine Atlantic. The Bluenose provides regular service between Bar Harbor, Maine and Yarmouth, Nova Scotia. Unlike the Scotia Prince, the Bluenose is operated year round, and handles a substantial volume of commercial traffic. Passenger volumes which are strong in the summer, fall off dramatically during the off season, however, the commercial volume remains steady all year round. Marine Atlantic feels that the year round service provides a vital commercial link to all of New England, particularly for such commodities as christmas trees and fresh fish (Mclean, 1986).

TABLE 8

M/V SCOTIA PRINCE ESTIMATED REVENUES

	149,000 Passengers 24,000 Automobiles	
60 % Passengers Travel at Peak Rate 75% are Adults		
67,050 Adults at $ 58.00		$ 3,888,900
22,350 Child at $ 29.00		$ 648,150
		$ 4,537,050
40% Passengers Travel at Off Season Rate		
44,700 Adults at $ 40.00		$ 1,788,000
14,900 Child at $ 20.00		$ 298,000
		$ 2,086,000
60% Autos Travel at Peak Rate 85% Cars, 15% Bicycles		
12,240 Autos at $ 82.00		$ 1,003,680
2,160 Bikes at $ 14.00		$ 30,240
		$ 1,033,920
40% Autos travel at off season rate		
8,160 Autos at $65.00		$ 530,400
1,540 Bikes at $12.00		$ 18,480
		548,880
PASSENGER FARES SUB TOTAL		$ 8,205,850
Estimated revenues on concessions/ meals paid for on board		
Average price range $ 2.50-5.00 Breakfast $ 3.00-6.00 Lunch entree $ 8.95-13.95 Dinner Entree		
Casino and Full Bar Average $ 25.00 per person adult $ 10.00 per person child		
CONCESSIONS SUB TOTAL		$ 3,166,250
TOTAL		$11,372,100

Source: Authors calculations.

Marine Atlantic operates an entire network of ferry and coastal shipping services the length of the East Coast of Canada. These services provide a critical link to communities in both Labrador and Newfoundland, while providing vital transportation links between the U.S and Canada. All of the Marine Atlantic ferry services are operated under contract to the Federal Government of Canada, which supports the services and determines the rates and frequency of operation. The government is responsible for the differences between revenues collected from passengers, and the actual cost of operation (Mclean,1986).

Marine Atlantic has a fleet of seventeen vessels which operate between the following locations: Borden, Prince Edward Island, and Cape Tormentine, New Brunswick; Saint John, New Brunswick, and Digby, Nova Scotia; Yarmouth, Nova Scotia and Bar Harbor, Maine; North Sydney, Nova Scotia and Port aux Basques, Newfoundland; North Sydney, Nova Scotia and Argentia, Newfoundland; and Lewisporte, Newfoundland and Goose Bay, Labrador (Marine Atlantic, 1986).

Ferry service from Bar Harbor on the Bluenose operates at load factors of between 90% and 95% for two months of the year. The remainder of the year the vessel operates at only between 5% and 25% capacity. Consequently, the government compensates 40%, or about $6 million of Marine Atlantic's $15 million annual operating costs.

Approximately $9 million is generated from passengers. Of this, roughly 30% comes from passenger ticket sales, 21% from vehicle ticket sales, 7% from commercial truck ticket sales, 27% from on board services, 12% from currency exchange and 3% from miscellaneous sources (Mclean, 1986). Marine Atlantic also operated a ferry from Portland to Yarmouth until May 1982, at which time it was discontinued in order to concentrate on the Bar Harbor route.

Passage from Bar Harbor to Nova Scotia takes only six hours covering a distance of 114 nautical miles. Tables 9 and 10 provide information on rates, schedule and passenger volumes for the Bluenose operation. Given the proximity of Bar Harbor to Yarmouth, the relatively short duration of the passage offers an entirely different experience than the type of overnight service being proposed out of Boston. For this reason, the Scotia Prince and the service, volumes and estimated revenues it supports better approximates the Boston Halifax ferry being proposed here.

Like the Prince of Fundy Cruises Ltd., Marine Atlantic offers a whole range of combination ferry tour cruises. These 'Sea N Road' excursions, as they are called, combine the ocean bound thrill of a cruise, with the convenience of travelling through Nova Scotia in your own car. Ferry crossings from Bar Harbor are in the daytime and feature a grand buffet breakfast, duty free shopping and a casino.

TABLE 9

M/V BLUENOSE YEARLY PASSENGER/AUTO VOLUMES

YEAR END	PASSENGERS	AUTOS	COMMERCIAL
1985	120,969	34,815	5,100
1984	122,069	35,638	6,117
1983	127,500	38,077	4,661

Source: Marine Atlantic.

TABLE 10

M/V BLUENOSE RATES AND SCHEDULE

Ship	M/V Bluenose	
Dimensions	LWL	410 Feet
	Displ.	8,000 Tons
	Regist.	5,005 Tons
	Speed	18 Knots
Carrying Capacity	Passengers	1100
	Vehicles	265
	Cabins	51
On Board Amenities	Casino	
	Private dining room	
	Duty Free Shopping	
	Cafeteria/Pub	
	Children's room	

Sailing Schedule	Fr. Bar Harbor	Fr.Yarmouth
May 15-June 20 Sept 22-Dec 6 (tri weekly)	11:00 AM (mon,wed,fri)	3:00 PM (sun,tues,thur)
Dec and April (bi weekly)	11:00 AM (mon,wed)	3:00 PM (sun,tues)
June 20-Sept 21	8:00 AM	4:30 PM

Rate Schedule One way		Peak	Off Peak
	Adults	$ 29.00	$ 22.00
	Children	$ 14.50	$ 11.00
	Autos/Vans	$ 60.00	$ 45.00
	Trailers	$ 5.50/ft	$4.60/ft
	Motorcycles	$ 30.00	$ 22.50
	Bicycles	$ 15.00	$ 11.25

Source: Marine Atlantic

Air Travel

To gain a complete picture of the passenger volumes travelling to Nova Scotia, it is important to look not only at the motor vehicle and ferry traffic, but also to get an idea of the number of visitors travelling to Nova Scotia by air.Currently, Air Canada is the only carrier offering non-stop service between Boston and Nova Scotia. Direct flights to Halifax are available two times a day year round with a third flight added to the schedule from June 21st through September 1st, the months of peak travel. This third flight runs only on Thursdays, Fridays, Sundays and Mondays. The aircraft used on all Nova Scotia bound flights are DC 9s, capable of holding roughly one hundred persons. This permits the transport of a maximum of 300 persons a day from Boston to Nova Scotia. There is no direct non-stop service to Sydney, rather, these flights make an initial stop in Halifax before continuing on to their final destination. Other carriers which offer service to the Province from Boston, make circuitous routes through either Toronto or Montreal.

A spokesman for Air Canada stated that the airline operates at about 85% capacity during the summer months, falling off to about 50% of capacity the rest of the year

(Air Canada, 1985). The majority of people who fly Air Canada have friends, relatives or family in Nova Scotia, and are not considered tourists. Passengers travelling by air tend to be a bit older and favor this mode of travel for its convenience. Business interests compose the other large volume of air travel to Nova Scotia, primarily the fishing and oil and gas industries. It is generally felt that most of the tourist traffic travels to Nova Scotia via automobile, motor coach or recreational vehicle.

While exact figures on the volume of passengers flying Air Canada to Nova Scotia are unavailable, a unnamed representative for the airline did supply the following information. It is estimated that an average of 2,500 persons fly outbound from Boston monthly. This figure, however, varies with the season and may not accurately reflect the actual volume of passengers flying during the summer months, those months with which we are most concerned. Assuming, however, that flights do operate at 85% capacity during the summer months, and with 1,800 seats available weekly, it would be safe to estimate that between 5,500 and 6,000 travel by air each month during the peak season.

The Halifax airport is located 25 miles from the downtown area. While shuttle busses are available to most of the major downtown hotels, this distance may serve as somewhat of an inconvenience to many travellers.

Air fares as of February, 1987 for Air Canada from Boston to Halifax and Sydney are found in Table 11.

The Luxury Ferry Concept

The concept of luxury ferry travel, whereby ferry service between two destinations is combined with the atmosphere and experience of a cruise ship, is familiar in most Scandinavian countries. In 1981, Johnson Line A/B, a Swedish company operating under the name of Silja Lines, put the first luxury ferry into service. The response to the idea has been overwhelming. Has Christner, President of Silja Lines, feels that a new and profitable market has only just begun to be explored. Presently, the Line operates ferries between Stockholm and Helsinki, and Stockholm and Turku.

Over the past year, Silja Line carried over 1,800,000 passengers between Sweden and Finland, up from 1,601,507 in 1984. Total autos rose from 104,584 in 1984, to 182,692 in 1985. Silja Lines contends that ferry travel is no longer just a means of transportation, but a 'mini vacation' in itself, where the vessel has become every bit as important as the ultimate destination.

The four cruise ferries currently in operation, Finlandia, Silvia Regina, Sveas and Wellamos, each carry up

TABLE 11

AIR CANADA: BOSTON-NOVA SCOTIA AIR FARES

Boston Halifax..	$121.00 One way No restrictions
	$165.00 round trip 14 day advance Partial refund
	$ 92.00 round trip 30 day advance No refund
Boston Sydney..... (through Halifax)	$191.00 One way No restrictions
	$250.00 Round trip 14 day advance Partial refund
	$122.00 Round trip 30 Day advance No refund

Source: Air Canada

to 400 passenger cars. There are six catagories of cabins on board, each with its own private bathroom. For entertainment, the cruise ferries feature three restaurants, saunas, an indoor swimming pool, live entertainment, a beauty salon, a children's disco and extensive conference facilities. For many Scandinavians, these ferries have become the only way to experience a luxury cruise short of travelling all the way to the Caribbean (Cruise Industry News, June, 1986).

At least 50% of the customers who travel on Silja Lines are leisure travellers, and over 50% of these are repeat travellers. The Swedes and Finns compose the largest market for Silja Lines, followed by the Norwegians and the Danish. In 1985, over 15,000 North Americans travelled with Silja, followed by the Japanese who booked roughly 5,000 berths (Cruise Industry News, June, 1986). One of the most successful markets which Silja now serves is the business and incentive market. On each ship, an entire deck is devoted to business interests, and the ferries are booked for these purposes almost every day. There are generally from four to six conference rooms, group study rooms and an auditorium with the capacity for 360 persons.

The ferry/cruise concept has been so successful in Scandinavia, that Johnson Lines is now looking to the potential of this type of service in North America. Currently,the Lines offers such a service in Alaska, and

plans to add one more vessel in this area in the near future. The Line feels that there is a definite demand for this type of combination service in the American market (Cruise Industry News, June, 1986).

Cruises to 'Nowhere'

Cruises to 'nowhere' have been in existence since prohibition days, with vessels sailing outside of territorial waters and thus enabling their passengers to drink (Ferretti, 1981). Today, while the purpose has changed, cruises to 'nowhere' are once again on the rebound. In an effort to maximize their revenues, cruise lines today have begun filling in available days between longer cruises with brief holiday sailings to 'nowhere'.

As cruising has grown over the past decade, the focus of the voyage has been gradually shifted away from the ports of call and is becoming increasingly oriented around the vessel itself. To accommodate this tendency, the newer cruise ships are simply huge floating resorts offering a multitude of on board activities, retail and dining opportunities. Consequently, as cruise vessels have become increasingly self sufficient, the ports of call have become more a sidelight rather than the traditional highlight of the voyage (Glenton, 1986). Cruises to 'nowhere' today range anywhere from one day to three and four days.

Cruises to 'nowhere' offer a profitable alternative to cruises which have fixed scheduled ports of call. With no itinerary to be adhered to, engine speed can be cut way back resulting in considerable fuel and operational savings.

SeaEscape is currently the leading cruise line offering one day cruises to 'nowhere'. It offers such cruises out of three Florida locations, Miami, Port Canaveral and Tampa. Passengers who are unsure about cruising, or who lack the time for a longer cruise, can avail themselves to these one day excursions offering all the features of a longer cruise. Departing at 8:30 each day, passengers are treated to three full meals, swimming, a host of varied activities and a Broadway type review. The fares are reasonable, ranging from $79 to $99 a day with all meals and entertainment included (Showker, 1986). These vessels return before midnight.

SeaEscape has carried over one million passengers since it began four years ago. Capitalizing on the success of this type of cruise offering, a second company, Crown Cruise Lines, has begun offering similar one day cruises to 'nowhere' from Palm Beach. A third company, Venus Cruise Lines offers services from Ft. Lauderdale.

The one day cruises to 'nowhere' are simply an alternative attraction, likened to excursions to Disney

World, Virginia's Busch Gardens or other tourist draws. These cruises emphasize a fun filled twelve hours on board. SeaEscape states that about 50% of their passengers are from the local population base, with the remaining half representing visitors and tourists to the area. Thirty million people are estimated to fall within the above two catagories, from which the line needs to attract only 800,000 to operate at full capacity (Wade, 1986).

Research conducted on passenger spending habits on seven day cruises, reflects that on board spending peaks within the first twenty-four hours at sea. A one day cruise, therefore, takes advantage of this tendency, as each departure captures passengers within their first twenty-four hours (Wade, 1986). Chandris Fantasy Cruises offers two and three day cruises to 'nowhere' from several East Coast ports, including Boston, New York and Philadelphia. Their rationale is that the experience is an inexpensive way to sample cruising life, or simply get away for the weekend.

Like Florida, Massport feels that Boston has an adequate tourist base and local population to support a one day operation such as SeaEscape. There are presently a number of different cruise packages which operate successfully in the Boston area. These include, jazz cruises, comedy cruises, dinner/theatre cruises, whale watches and more. Bay State Cruises for example offers

regular service to Provincetown and daily lunch and dinner cruises in and around the islands in Boston Harbor. A.C. Cruise Lines similarly offers daily cruise tours of Boston Harbor. These and other cruises have been very popular indicating that there is interest and demand for such water related excursions. Proper marketing and an adequately informed public could make a one day cruise to 'nowhere' in the Boston area very successful.

Proposed Service

The proposed ferry/cruise service from Boston would operate on a seasonal basis, May through September, and combine two uses of the vessel. Two times a week the vessel would transport passengers, with or without their vehicles, between Boston and Halifax. Fridays and Saturdays the vessel would depart from Boston for a one day (12 hour) cruise to 'nowhere', departing between 10:00 and 12:00 each morning and returning between 10:00 and 12:00 the same evening. On Sundays, the vessel would remain in port all day for services and/or provisioning before beginning again on Monday morning.

The cruise to 'nowhere' would afford tourists and residents in the Boston area all the fun and luxury of an actual cruise, including two meals, gambling, dancing and a day and evening on the water. By offering this package at

an affordable price, the one day cruise to 'nowhere' presents a very attractive excursion option for visitors and residents in the vicinity.

The cruise/ferry service would depart two times a week from Boston for Halifax, and conversely provide two departures a week from Halifax to Boston. At a distance of 365 nautical miles, a one way trip would take approximately 20 hours at an average speed of eighteen knots. The trip from Boston would provide a unique type of holiday experience. The overnight journey would combine the facility and utility of a ferry service with the ambience of an overnight cruise. Dinner, dancing, gambling and movies are but some of the entertainment possibilities (see Figure 7).

Like Prince of Fundy Cruises and the Bluenose, many combination package tours from Boston are possible. A three day cruise from Boston with a port of call in Halifax, or, a trip to Halifax, with two days and two nights there before returning to Boston are but some of the possibilities, many combinations exist. A hypothetical itinerary for the vessel is shown in Table 12.

Vessel Requirements

Selection of an appropriate vessel for the Boston to Halifax route, as well as a cruise to 'nowhere', requires

FIGURE 7

PRESENT AND PROPOSED FERRY ROUTES

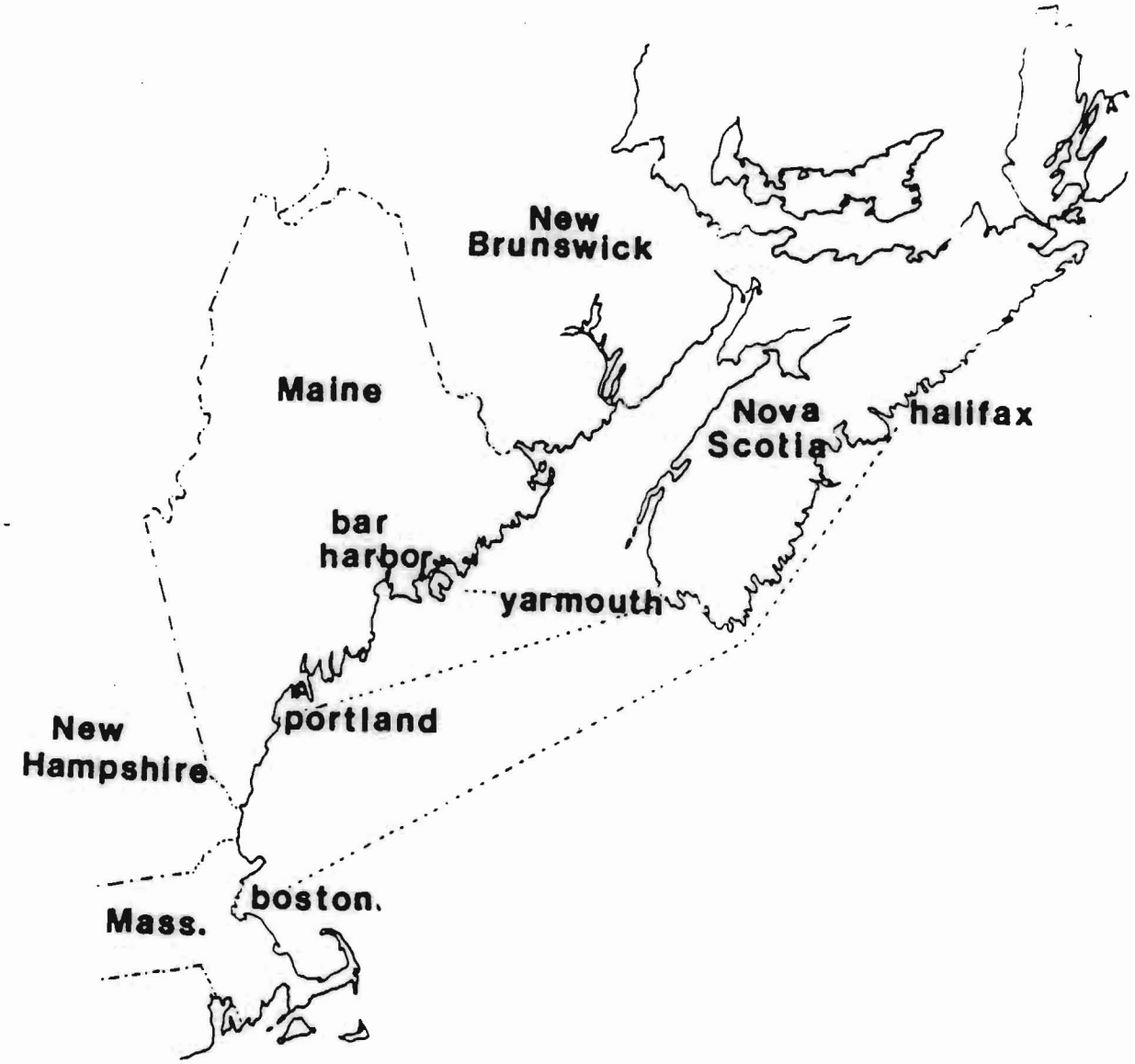


TABLE 12

PROPOSED WEEKLY ITINERARY
BOSTON/HALIFAX FERRY SERVICE

Monday	Depart from Boston	12:00 PM
Tuesday	Arrive in Halifax	8:00 AM
	Depart from Halifax	12:00 PM
Wednesday	Arrive in Boston	8:00 AM
	Depart from Boston	12:00 PM
Thursday	Arrive in Halifax	8:00 AM
	Depart from Halifax	12:00 PM
Friday	Arrive in Boston	8:00 AM
	Depart one day to "nowhere	12:00 PM
	Return to Boston	10:00 PM
Saturday	Depart one day to "nowhere"	10:00 PM
	Return to Boston	10:00 PM
Sunday	Vessel in Boston all day for stores and/or servicing.	

Source: Authors calculation

that several factors be taken into consideration. The first and foremost requirement is that the vessel have motor vehicle carrying capability. While several cruise lines presently offer service to, or include Halifax in their itineraries out of Boston, none of them offer ferry service. It is this ability to transport not only passengers, but their automobiles, which will make this service out of Boston unique. Statistics compiled from the Scotia Prince and the Bluenose indicate that demand for such a service already exists.

The second vessel requirement is that it possess adequate sleeping accommodations. A trip length of 20 hours, and hence the necessary overnight sailing, makes this essential. Finally, the proposed cruise to 'nowhere' as well as service to Nova Scotia warrants a full complement of cruise ship amenities, including movies, dancing, gambling, shows and duty free shopping.

Ideally, the vessel should be around 600 feet in length. As the Black Falcon Cruise Terminal was designed to simultaneously accommodate both a 1,200 and 600 passenger vessel, this size ferry/cruise ship would allow scheduled service to be carried on uninterrupted by the calling of larger cruise ships. Drawing upon the statistics of the other two ferries currently operating, the ability to carry up to 300 vehicles and between 1,000 and 1,500 passengers is the optimal situation.

For loading and unloading automobiles, the best vessel should have a side loading ramp. This arrangement would best fit the design of the current terminal building. Should the vessel, however, have a stern ramp for handling vehicles, the problem could be addressed by means of a floating barge. In such instance, autos are initially unloaded from ferry to barge, and then from barge to the apron by means of a specially designed ramp, which automatically adjusts to extremes in water height.

This method of unloading and loading is currently being successfully used in Portland, Oregon at its auto import facility. This method of discharging vehicles eliminates the problem of steep inclines at low tides (Economic Research Associates, 1976). In Boston, such an arrangement would enable the ship to lay right along side the terminal building and disembark passengers directly into the terminal building via the mobile gangway.

Why Halifax

There are many advantages in providing direct service to Halifax rather than to Yarmouth. The most obvious is that there is no regular service currently being offered from North Atlantic ports. While Yarmouth was considered as a possible destination, it was rejected as it makes no sense to duplicate a service which is already offered and

iterated within six hours of Boston. Furthermore, rather than serving as a destination in itself, Yarmouth tends to be more of a jumping off point, with little in the way of accommodations or sights readily accessible by foot. Halifax, on the other hand, has both the sights and accommodations available for visitors with or without a motor vehicle presenting many easily accessible alternatives.

Endowed with both charm and history, Halifax, as the statistics reveal, is a major attraction in itself. A recently completed facelift has turned the city into a current and sophisticated metropolis. Waterfront warehouses have been artfully restored into complexes of fine shops, restaurants, galleries and office space. Beautiful tree lined pathways wind along the waters edge connecting the city's many sights. A variety of fine restaurants and quality hotels are available to satisfy almost any budget. For the more adventurous, Halifax provides a central hub from which to provision and embark on camping, bicycle and even auto tours.

Halifax harbor is said to be one of the world's safest and deepest. With a long maritime tradition, the waterfront continues to dominate the city's activities. Many daytime excursions are available, from rides aboard the Bluenose II, a replica of the famous racing schooner, to a shuttle ferry across the harbor to Dartmouth the twin city of

Halifax (Maynard, 1986). All of Nova Scotia is graced by a favorable maritime climate, temperatures during the summer months are neither too hot nor too cold, averaging in the low to middle 70s from June through September.

The statistics on accommodations which are reviewed in the following pages suggest that a substantial portion of the passengers presently using the ferry service to Yarmouth, make Halifax a stopping point in the course of their travels. Considering that this is a destination, or at least a stopping point during their stay, it would seem natural that direct service to the city would be well received.

Statistical Analysis

The Statistical Review 1985 Nova Scotia Tourism Season (SRNSTS), published by the Nova Scotia Department of Tourism, provides a detailed description of the number of tourists visiting Nova Scotia during the 1985 season, the mode of travel (auto, motor coach or recreational vehicle), point of origin, as well as a mention of which areas in the Province were most heavily travelled. This review is included in its entirety in Appendix A. For the purpose of this study, several pieces of information have been extracted and condensed. Specifically, these statistics describe the point of origin of all motor vehicle traffic,

including volumes, which arrive in Nova Scotia. The other pertinent piece of information included is a detailed accommodation summary for the 1985 season. These figures describe the number of rooms sold in Nova Scotia by region.

In order to obtain an accurate count, tourists are counted only if they are non-residents and they remain in Nova Scotia overnight. By this means, persons from New Brunswick who visit only for the day, or, enter the Province as a commuter are not included in the tally.

Table 13 gives a breakdown of visitor volumes to Nova Scotia by mode of transportation. Visitor volumes are based on the following: 1.6 persons per automobile, 2.7 persons per recreational vehicle and 38.7 persons per motor coach. Since tallies are kept at all entry points by volume of vehicle traffic, these multipliers are necessary in order to arrive at accurate estimates of persons who visited the Province. These figures are important in determining the total tourist revenues generated in Nova Scotia, and the approximate amount expended per person. These multipliers are concluded from a series of surveys conducted by the Nova Scotia Department of Tourism (See Appendix C of SRNSTS).

In viewing the following tables, it is important to keep in mind the following two points. First, tallies of visitor volumes are based on overnight non-resident travellers only. This is important since it is these non-

TABLE 13

TOTAL TRAVELLERS

MODE	1984	1985	% TOTAL
Auto	703,900	730,636	65%
Air	241,000	239,500	21%
Motor coach	51,800	54,399	5%
Rec/vehicle	100,600	103,215	9%

Source: Statistical Review 1985 Nova Scotia Tourism Season.

Note: Since air travel is not of primary concern at this point in the study we have eliminated it and rewritten the table using only motor vehicle traffic. Table 14 shows a revised count of visitor volume, this time basing the tally on 100% of motor vehicle visitation.

TABLE 14

TOTAL TRAVELLERS

LESS AIR TRAVEL

MODE	1984	1985	% TOTAL
Auto	703,900	730,636	82%
Motor coach	51,800	54,399	6%
Rec/vehicle	100,600	103,215	11%

Source: Statistical Review 1985 Nova Scotia Tourism Season.

resident travellers, ostensibly from the United States, that a ferry service would be most interested in attracting. The second point is that these volumes only account for 'rubber tire' traffic from the U.S. and Canada. An account of the number of persons entering the province by foot is unavailable.

These tables show that out of over one million visitors to Nova Scotia, nearly 900,000 arrive by some form of motor vehicle. Since Nova Scotia can conveniently monitor each of its six entry points (air has been omitted), table 15 provides a breakdown of vehicle share by points of entry. One may assume that a majority of the traffic entering through Yarmouth consist of American registered vehicles as opposed to Canadian vehicles.

These figures are important for they detail the large volume of traffic which enters Nova Scotia through Yarmouth. Automobile traffic, while not that significant in relation to total auto traffic entering Nova Scotia, nevertheless represents over 57,000 visitors by automobile. Motor coach traffic entering Nova Scotia through Yarmouth is by far the most impressive. Nearly one quarter of all motor coaches which enter Nova Scotia do so through Yarmouth. Finally, roughly 5,470 persons enter Nova Scotia on recreational vehicles through Yarmouth. Considering that the only ferries which offer service through Yarmouth are the Scotia Prince and the Bluenose, it would be safe to

TABLE 15

VEHICLE SHARE BY ENTRY POINT

ENTRY POINT	AUTO	MOTOR COACH	REC VEHICLE
Amherst	63.3%	35.5%	64.1%
Tidnish	7.8%	.8%	3.0%
* Caribou	11.5%	10.7%	12.6%
* North Sydney	3.6%	2.2%	5.4%
* Yarmouth	7.9%	37.6%	5.3%
* Digby	5.9%	13.2%	9.6%
TOTAL	730,635	54,399	103,215

(Star indicates a ferry terminal)

Source: Statistical Review 1985 Nova Scotia Tourism Season.

assume that a good deal of these passengers originate at some point in the U.S.

Table 16 provides a further breakdown of auto traffic by country and region of origin. These regions are based on state of registration of individual vehicles (see Figure 8). A closer look at Table 16 reveals that of the 166,039 autos travelling to Nova Scotia from the United States, 45% originated in New England, 22% in the Mid-Atlantic region, 15% in the South Atlantic and 8% in the East North Central part of the country.

While vehicles from New England clearly contribute the greatest portion of this volume, substantial numbers of autos travel from the Mid- and South Atlantic region of the country. Assuming that a portion of these vehicles are intending to connect with ferries at either Portland or Bar Harbor, ferry service from Boston would be geographically closer for Mid- and South Atlantic vehicles. By virtue of its location, Boston stands a good chance of intercepting a portion of this traffic.

In attempting to prove that adequate volumes of travellers exist to support a ferry service from Boston to Halifax, it is assumed that Boston is in an auspicious position to intercept any traffic originating at points which lie to its south and west. These regions include the Mid- and South Atlantic, South, East North and West North

TABLE 16

AUTO VISITATION BY REGION

	1985	% Total
Atlantic Canada	366,315	50%
Quebec	45,780	6%
Ontario	135,917	19%
Western Canada	16,548	2%
New England	74,913	10%
Mid Atlantic	36,713	5%
South Atlantic	25,518	4%
South Central	4,377	.6%
East North Central	14,904	2%
West North Central	3,663	.5%
Mountain	1,867	.3%
Pacific	4,066	.6%
TOTAL	730,635	100%
TOTAL AMERICAN AUTOS	166,039	23%
TOTAL CANADIAN AUTOS	564,569	77%

Source: Statistical Review 1985 Nova Scotia Tourism Season.

FIGURE 8

UNITED STATES REGIONS OF ORIGIN

Source: Massport Cruise Study

Central, Mountain and Pacific. While it would probably be safe to assume that New England represents a large market for Boston as well, due to the lack of more specific information as to the exact point of origin within New England, it is assumed that the two existing ferries provide just as attractive an alternative as would a Boston ferry.

Tables 17 and 18 give a similar regional breakdown for motor coaches and recreational vehicles. The volume of motor coach and recreational vehicle traffic to Nova Scotia from the U.S. is quite impressive. More than half of all the motor coaches originate in areas which lie to the south and west of Boston, and one third of these are from the Mid- Atlantic region. Again, given that Boston lies right in the path of these bus routes, it would seem quite plausible that if properly marketed, a Boston to Nova Scotia ferry could intercept a portion of this existing traffic.

In their analysis, the SRNSTS notes a general trend which suggests that persons who travel a greater distance to reach Nova Scotia are less likely to travel by automobile. These persons tend to favor travel by either tour bus or recreational vehicle. Proper marketing is the key to the success of any venture of this type. The volume of motor coach traffic travelling to Nova Scotia indicates that many tour packages are presently being offered which

TABLE 17

MOTOR COACH VISITATION BY REGION

REGIONS	1985	% TOTAL
Atlantic Canada	9,133	17%
Quebec	2,786	5%
Ontario	5,575	10%
Western Canada	1,161	2%
New England	7,198	13%
Mid Atlantic	12,345	23%
South Atlantic	7,353	14%
South Central	1,316	2%
East North Central	3,276	6%
West North Central	2,012	4%
Mountain	1,316	2%
Pacific	929	.2%
TOTAL	54,399	100%
TOTAL AMERICAN MOTOR COACHES	35,745	65%
TOTAL CANADIAN MOTOR COACHES	18,654	35%

Source: Statistical Review 1985 Nova Scotia Tourism Season.

TABLE 18

RECREATIONAL VEHICLE VISITATION BY REGION

REGION	1985	% TOTAL
Atlantic Canada	25,816	25%
Quebec	5,968	6%
Ontario	21,970	21%
Western Canada	6,965	7%
New England	9,889	10%
Mid Atlantic	7,590	7%
South Atlantic	9,519	9%
South Central	2,584	3%
East North Central	6,193	6%
West North Central	1,849	2%
Mountain	1,340	1%
Pacific	3,532	.3%
TOTAL	103,215	100%
TOTAL AMERICAN R/Vs	42,496	41%
TOTAL CANADIAN R/Vs	60,719	59%

Source: Statistical Review 1985 Nova Scotia Tourism Season.

incorporate ferry travel to Nova Scotia. This fact alone emphasizes the importance of good communication with travel agents and other group coordinators.

The Nova Scotia Department of Tourism also provides a detailed breakdown of all the rooms sold in Nova Scotia by area tourist association (see Table 19). In 1985, of the total 1,841,000 rooms sold in Nova Scotia, 617,000 were located in Halifax, representing 34% of all Nova Scotia room sales. This number represents a 69% occupancy rate. Several conclusions can be drawn from this information. One is that Halifax would appear to be a center of tourist and vacationing and business travel. The high rate of room sales in Halifax, over the 1985 season, reflects the desire of persons who travel to Nova Scotia to visit the city. Secondly, with 30% of all the available rooms unsold, additional tourist traffic brought directly to the city would most certainly be welcomed by the Nova Scotia Tourist Associations. The apparent position which Halifax occupies as a major attraction strongly encourages direct service from the U.S. via the proposed ferry service.

Looking closely at these figures, it is evident that although Yarmouth had over 50% occupancy for the 1985 season, the relatively low number of rooms indicate that accommodations are limited. This suggests that following their arrival people are not likely to stay in Yarmouth.

TABLE 19

NOVA SCOTIA AREA ASSOCIATION OCCUPANCY REPORT

	1984 ROOMS SOLD	1985 ROOMS SOLD	1985 OCCUPANCY
Aesta	102,000	114,000	65%
Etta	195,000	188,000	49%
Cape Breton	302,000	314,000	52%
Central NS	139,000	132,000	53%
Dartmouth	193,000	189,000	69%
Halifax	608,000	617,000	69%
Pictou	59,000	62,000	60%
South Shore	126,000	131,000	47%
Yarmouth	86,000	94,000	56%
Nova Scotia	1,810,000	1,841,000	59%

Source: Statistical Review 1985 Nova Scotia Tourism Season.

Travel and Tourism Professionals

Travel agents and tourism professionals play a crucial role in the success of a venture such as that proposed here. In order for ferry service to reach optimal utilization, travel agency expertise in both ticketing and marketing must be utilized. Familiarization programs to provide travel agents with an understanding of both the Massport Black Falcon facility, as well as the many possible tour and vacation options must be arranged. As mentioned, several of these programs have already been successfully conducted by Massport. Beyond this, marketing of the ferry cruise service should be developed in a sophisticated and comprehensive manner, as public awareness is the cornerstone of its viability. An educated public, aware that this new and unique ferry/cruise service is available, would most certainly be receptive.

Informal telephone surveys conducted with several local travel representatives returned favorable results. All agents questioned felt that adequate demand exists both locally and nationally to make such a venture successful. Their responses were based primarily on inquiries by travellers interested in vacationing in Nova Scotia. They did mention that, due to the direct reservation lines offered by both Prince of Fundy Cruises and Marine Atlantic, the actual demand for service to Nova Scotia was

probably considerably greater than that which they were able to surmise.

An agent for Cleveland Circle travel who had lived in the Portland, Maine area, said that the M/V Scotia Prince was generally booked well in advance for the peak of the summer season (Anon, 1986). Given the documented volume and geographic origin of the traffic, additional tonnage from the U.S. to Nova Scotia could easily absorb some of the existing demand. A final comment by several agents related to the revenue generating potential of packaging tours which could take advantage of the proposed ferry/cruise service. Local travel agents have a vested interest in the presence of such a service. Travel and tourism agencies stand to earn substantial revenues through the packaging of additional tours and sightseeing excursions.

In an address before the Seatrade Conference Joseph Hallissey (1986) remarked that the travel agent had a significant influence over the clients choice of vacation destinations. According to recent polls, over 50% of the decision making process is influenced by the agents suggestion of products, events or destinations. It is therefore essential for the success in Boston of both the proposed ferry/cruise service and the cruise market in general that travel agents and Massport work intimately with each other as well as with the cruise lines.

CHAPTER V

SUMMARY AND CONCLUSIONS

The cruise market is clearly growing. As nearly 200,000 persons are recruited annually to this holiday alternative, continued growth seems likely. Response by cruise operators to this explosive demand has resulted in an oversupply situation, and available shipboard berths now outstrip passenger demand. This oversupply has resulted in a great expansion of cruise offerings, as operators seek to fill empty berths by reaching out to a wider range of potential passengers. New cruise offerings today range from a diverse range of onboard experiences to cruises which operate in non-traditional geographic regions.

As new regions are incorporated into cruise itineraries, many ports, which have not previously played host to cruise business, are interested in hosting cruises. These ports are courting cruise lines, as promoting cruising not only provides a favorable boost to local tourism but also injects additional dollars into the local economy. New England and the Northeast Coast of Canada are

among the new regions currently being explored by cruise operators. It is felt that there exists tremendous potential for cruise itineraries in this area. Ideally situated to accommodate this expansion, Boston has recently constructed a cruise terminal and is actively encouraging cruise lines to take advantage of the facility in their exploration of the Canadian Region.

Following specific recommendations from Post, Buckley, Schuh and Jernigan Inc.'s Massport Cruise Study (1985), Boston is currently looking to the potential of the Eastern Canadian cruise grounds, and hopes to become the 'gateway' to cruising in the area. Consistent with this commitment is the current consideration of a Boston-Halifax ferry/cruise service. For the port, should this service be successful, several critical objectives would be achieved. First, the cruise terminal would be employed on a regular basis during the cruising season, thus it would be able to generate its own source of revenue. Additionlly, the port would have made a successful contribution to the promotion of cruising in the New England Region and the Eastern Coast of Canada.

The success of such a ferry/cruise service to the East Coast of Canada depends on both the existing and potential demand. Potential demand is difficult to accurately predict. Therefore, in considering the viability of a Boston-Halifax ferry, it is essential to consider what the

existing demand is, and from there draw conclusions and project the ability of the service to succeed.

Reflecting, therefore on the traffic which travels from the United States to Nova Scotia during the summer season, it seems that ample volumes exist to support the proposed ferry/cruise service. In 1985, there were 91,108 persons visiting Nova Scotia by automobile who came from areas in the country which lie to the south and west of Boston. This number represents 56,942 automobiles (1.6 persons/auto). There were 28,547 persons who travelled by motor coach from these regions representing 737 vehicles (38.7 persons/coach), and there were 32,607 persons who travelled by recreational vehicle representing 12,076 vehicles (2.7 persons/R/V). Taken together, over 69,000 vehicles travel to Nova Scotia from the south and west of Boston. It is therefore clear, that in connecting with ferries in Portland or Bar Harbor, or driving to Nova Scotia via New Brunswick, most of these travellers travel right by Boston. It is this existing traffic which a Boston based ferry/cruise service stands a strong chance of intercepting.

Assuming that the ideal vessel is acquired for the ferry/cruise purpose, it would be possible to transport up to 300 automobiles to Nova Scotia on each sailing from Boston. If the vessel operates for 22 weeks, from May through September, and, offers two sailings a week, a

possible 13,200 vehicles would be required to operate the vessel at 100% capacity. With at least 69,000 vehicles known to have travelled by way of Boston in a single year (1985), it is evident that demand for such a service exists, and that the task of filling the ferry is well within reach.

As has been noted, the numbers used in this evaluation represent existing 'rubber tire' traffic and fail to account for persons travelling by foot. In addition, no mention is made of the new demand that could be generated by such a service, locally, regionally and nationally. Boston has an additional advantage over the Portland and Bar Harbor ferry terminals in that it already has a substantial tourist base and thus has the proven ability to attract tourists and visitors to the area. This base represents an additional source of potential passengers for the proposed ferry/cruise service.

Through the accommodation summaries, Halifax has demonstrated its own ability to attract a strong tourist contingent. The high occupancy rates, relative to the rest of Nova Scotia illustrate this fact. The ability of Halifax to attract a significant portion of the visiting tourist population again argues favorably for direct service to this city.

APPENDIX A

STATISTICAL REVIEW
1985 NOVA SCOTIA
TOURISM SEASON

EXECUTIVE SUMMARY

In 1985, the flow of American, Canadian and foreign motor vehicle traffic into the Province showed a 5% increase over the previous year. This is the best performance in this major index in five years.

A more detailed analysis for 1985 is achieved by including overnight tour bus and airline visitors and excluding from the motor vehicle counts those New Brunswickers who came only for the day. Taking this perspective, the number of non-resident overnight tourists visiting Nova Scotia was up by 2.8%, or 30,600 in 1985. Auto, recreational vehicles and motor coach traffic were all up, while air volumes dropped off slightly in 1985. The number of auto visitors was up by 26,700 and the number of motor coach visitors increased by 2,800 or 5.4%.

Non-resident overnight tourists spent $234 million in Nova Scotia during the 1985 tourist season. This was up 3.9% over 1984.

The number of rooms sold in Nova Scotia was up in 1985 by over 1%. Three of the Area Associations showed a decrease in room sales with the remaining six posting increases. The Antigonish Eastern Shore Association had the strongest showing in 1985 with a 12% increase in the number of rooms sold. In contrast, room sales in Central Nova Scotia fell by 5%.

After a number of years of decline, campground registrations in Nova Scotia rose in 1985 by 2%.

Although the number of serviced campground sites has been very stable over the past five years, the supply of unserviced sites dropped by 15% between 1981 and 1985.

Nova Scotia
Department of Tourism

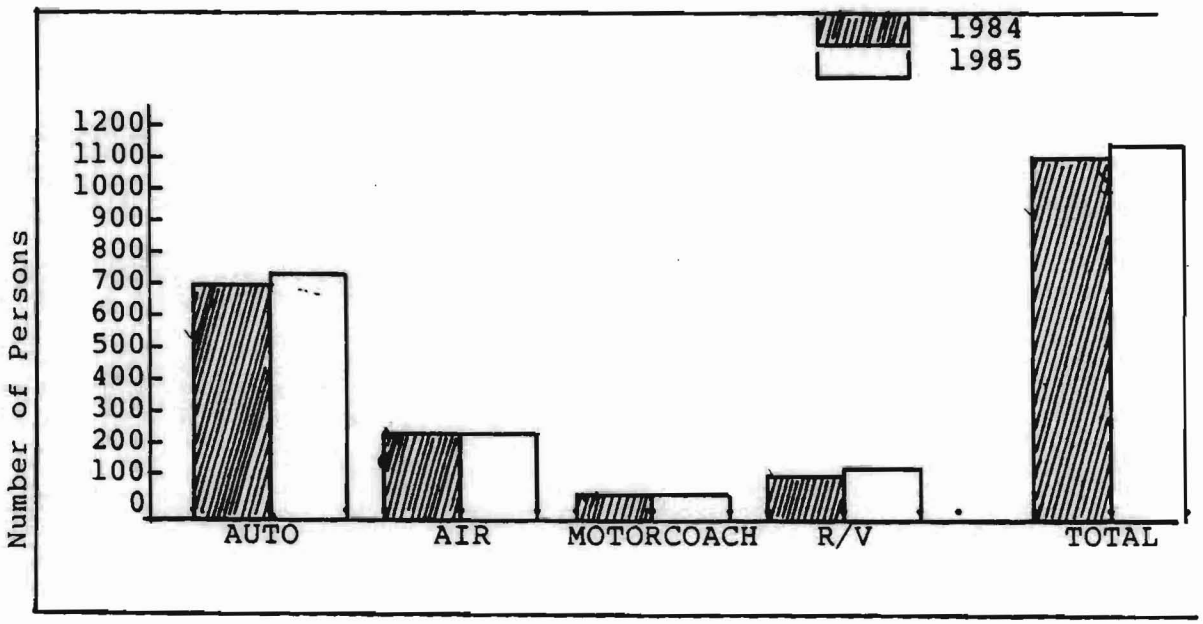
March 1986
Research Section
Marketing Division

1985 VISITOR VOLUMES AND EXPENDITURES

As indicated in Figure 1, the number of non resident, overnight tourists visiting Nova Scotia by all modes during the 1985 season was up by 2.5% or 30,600 visitors. Auto, recreational vehicles and motor coach traffic were all up while air volumes dropped off slightly from 1985. The number of auto visitors was up by 26,700, and the number of motor coach visitors was up by 2,800 or 5.4%.

FIGURE 1

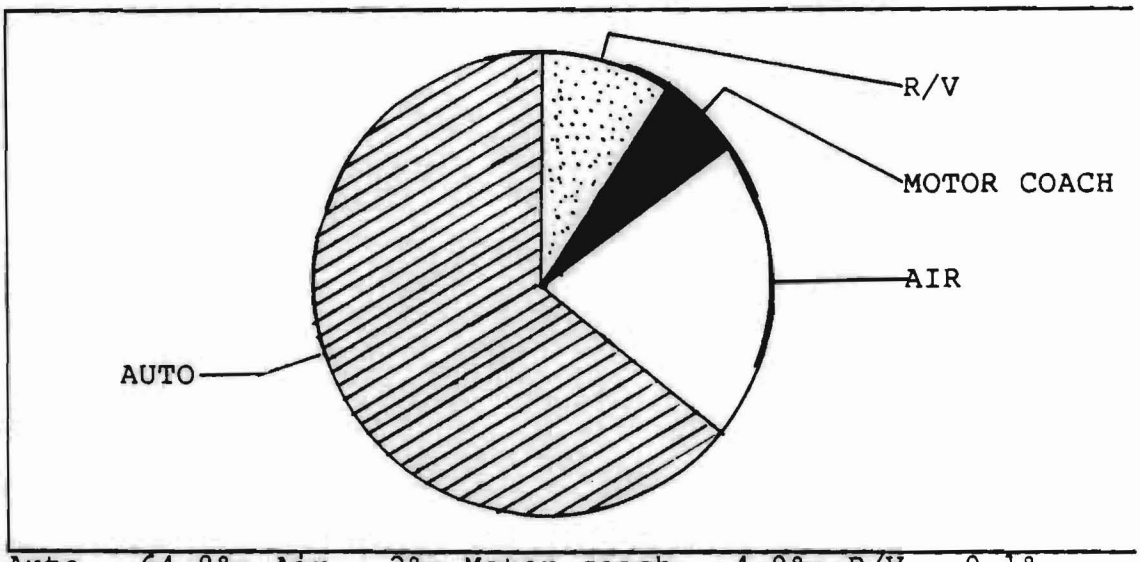
PERSON VOLUME VISITATION TO NOVA SCOTIA
BY MODE OF TRANSPORTATION
1984/85



Auto travellers continued to be Nova Scotia's largest non-resident market during the tourist season. This segment accounted for 65% of the visitor volume to Nova Scotia in 1985. The air market was second at 21%, the R/V market third at 9% and the motor coach market had a 5% share of the total visitor volume.

FIGURE 2

VISITOR VOLUME SHARES BY MODE OF TRANSPORTATION
FOR 1985



Auto - 64.8%; Air - 2%; Motor coach - 4.9%; R/V - 9.1%

RUBBER TIRE TRAFFIC - ORIGIN ANALYSIS 1981-1985

Although the number of motor coach visits has declined since 1981, there has been a net increase of 71% over the past decade. The top five markets did not change during this time. They are the mid Atlantic States, New England, Ontario, South Atlantic and Atlantic Canada.

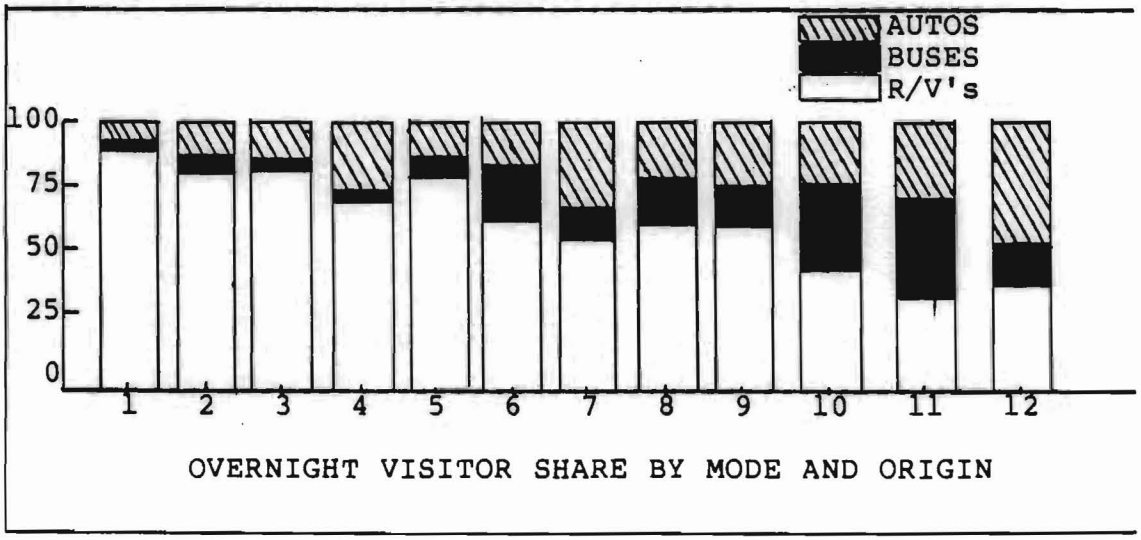
The major markets for overnight auto travellers have stayed virtually the same during the last five years in terms of ranking. The top five auto markets have been Atlantic Canada, Ontario, New England, Quebec and the mid-Atlantic States.

The Canadian market represents the largest share of R/Vs to Nova Scotia with 59% of all R/Vs originating in Canada in 1985. U.S. traffic accounts for the remaining 41%. Over the past five years, there has been a shift towards the States. The U.S. market share has increased from 31.6% in 1981 to 41.2% in 1985.

Although there were some exceptions, it was the general trend that the further someone travels to Nova Scotia, the more likely they are to travel by tour bus od R/V and the less likely they are to travel by automobile. For example, autos accounted for 92% of the New Brunswick visitor volume while only 42% of the visitors from the mountain region came by car. R/Vs accounted for 41% of the Pacific region visitor volume, while under 4% of the visitors from PEI travelled by R/V.

FIGURE 3

MODE OF TRANSPORTATION (% VISITOR VOLUME)
BY REGION OF ORIGIN, OVERNIGHT TRAVELLERS ONLY
1985



OVERNIGHT VISITOR SHARE BY MODE AND ORIGIN

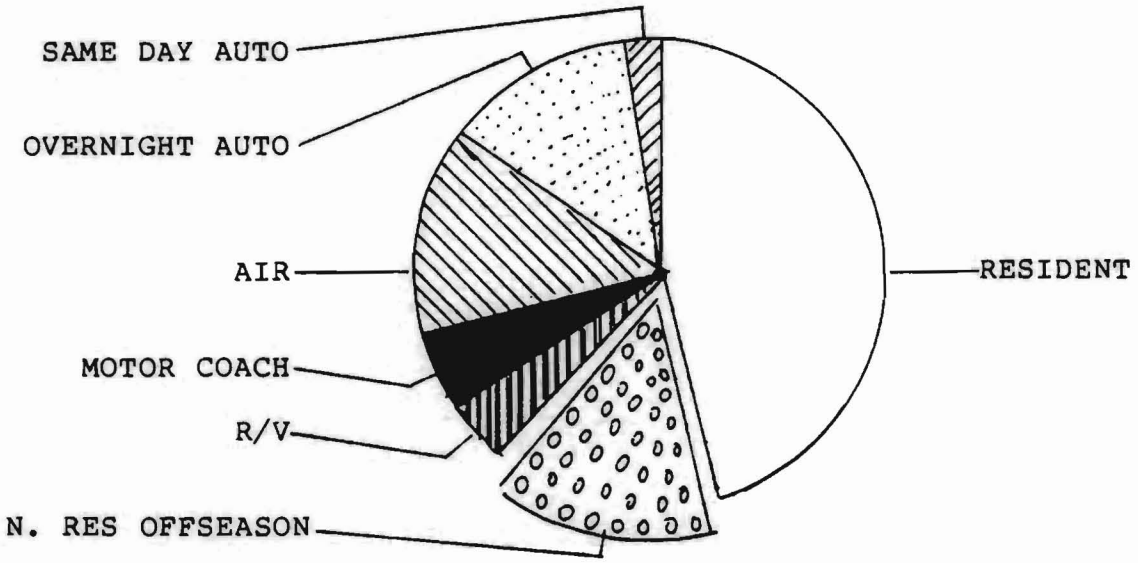
1) Atlantic Canada 4) Western Canada 7) South Central 10) W.N. Central

2) Quebec 5) New England 8) South Atlantic 11) Mountain

3) Ontario 6) Mid Atlantic 9) E.N. Central 12) Pacific

FIGURE 4

NOVA SCOTIA'S 1985 TRAVEL REVENUES BY SOURCE



Same Day Auto-1.56% Motor Coach-5.4% Non-resident-16.55% (off season)

Overnight Auto-14.45% R/V-2.71% Resident-43.71%

Air-15.6%

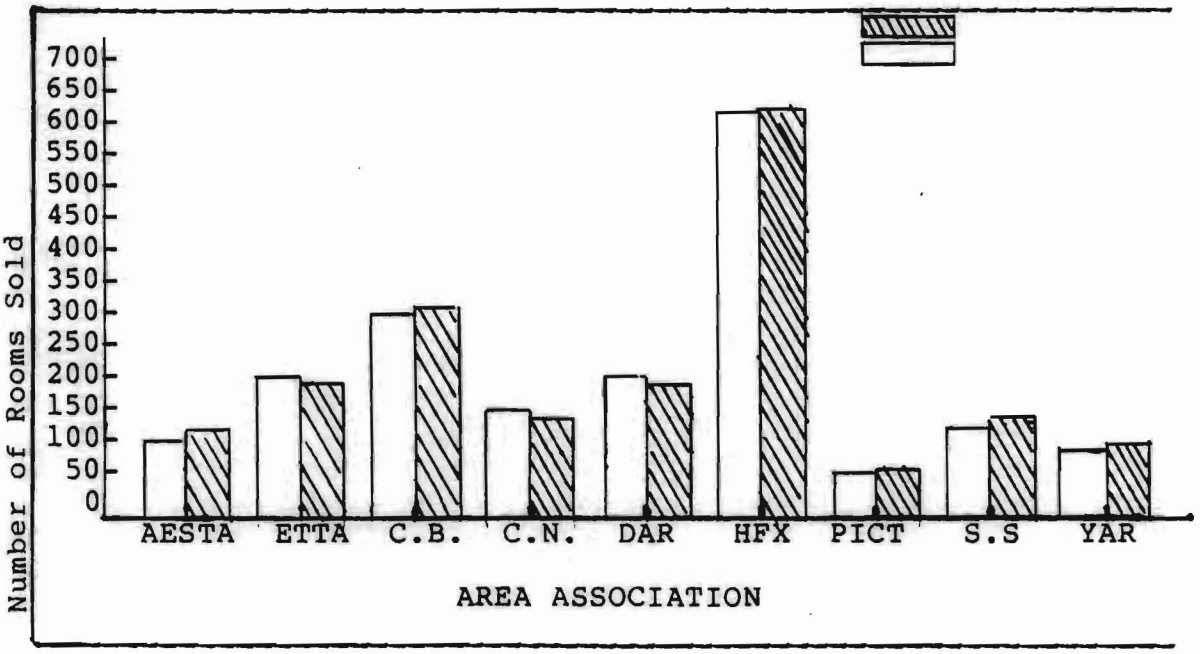
The total revenue generated by tourism in Nova Scotia during 1985 is estimated to be $600 million.

The EXPORT or non-resident component is $337.7 million or 56% of the $600 million. NOVA SCOTIAN expenditures are estimated to be $262.3 million.

ACCOMMODATION SUMMARY FOR 1985

Halifax continues to lead all the area associations. In 1985, over 617,000 rooms were sold in Halifax. This represents 34% of all Nova Scotia rooms sales.

FIGURE 5
ROOMS SOLD BY AREA ASSOCIATION 1984/1985 (000s)



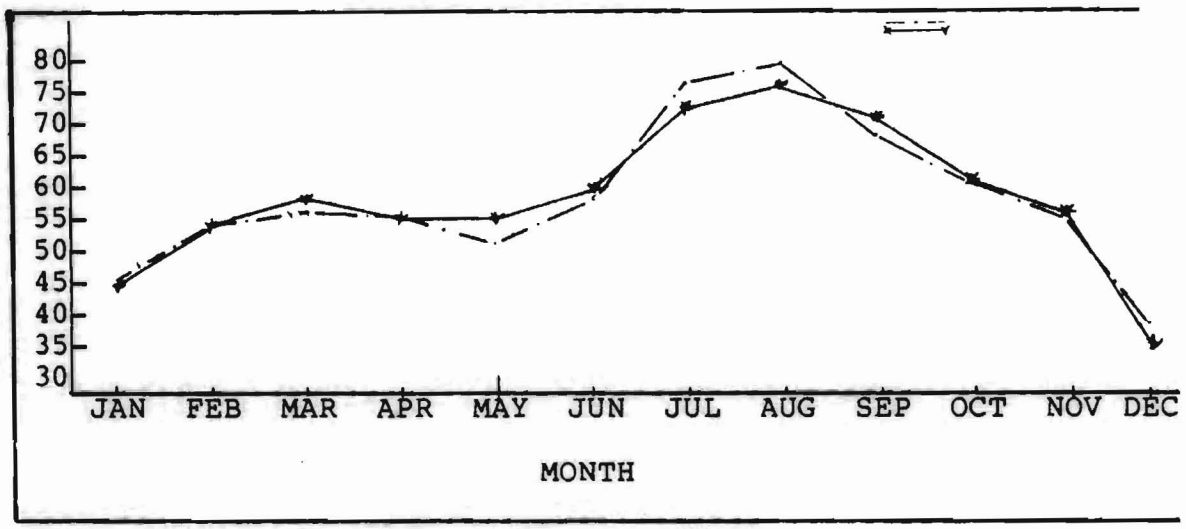
Overall, the number of rooms sold in Nova Scotia was up marginally in 1985 by 1.7%. Three of the area associations showed a decrease with the remaining six posting increases. The Antigonish Eastern Shore association had a very strong year in 1985 with a 12% increase in the number of rooms sold. In contrast, room sales in Central Nova Scotia fell by 5%

It should be noted that although room sales increased in Nova Scotia, guest days decreased by 1%. Therefore, the average number of occupants per room was down slightly in 1985.

The yearly occupancy rates remained at 59% in 1985, while the seasonal rates showed little change from 1984. The 1985 occupancy rates increased between January and March, as well as between June and August. September through December showed a steady drop.

FIGURE 6

1985 MONTHLY OCCUPAMCY REPORT



In both 1985 and 1984, the rates peaked in August. A comparison of monthly rates indicate that the Nova scotia accommodation sector had a better start in 1985. May and June were up; however, July and August did not peak as high as 1984.

The number of licensed rooms and establishments followed similar trends in the period between 1981 and 1985. With the exception of 1983, there was a continual increase in the rooms and establishments over the previous year.

The number of licensed accommodation establishments increased markedly by 25 establishments or 6% in 1985. Much of this is the result of the opening of smaller operations (3-10 rooms) such as bed and breakfast accommodations. The number of establishments leveled off in 1985, with a net increase of one new business.

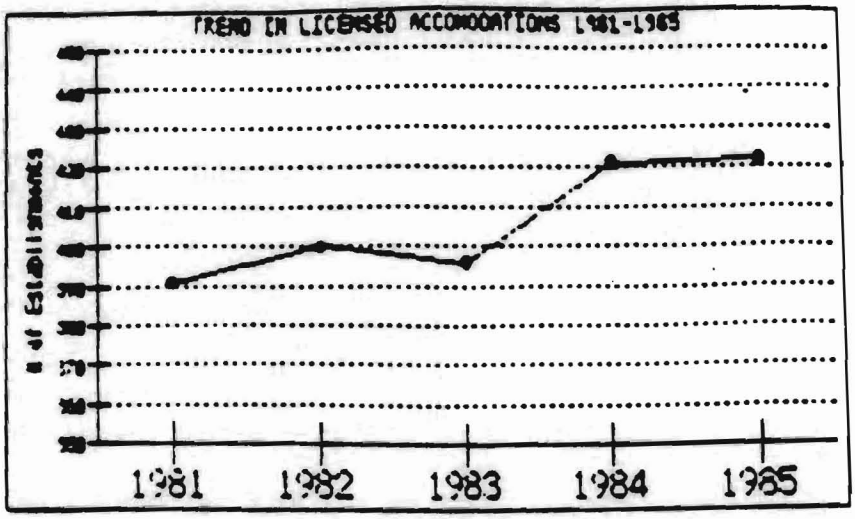
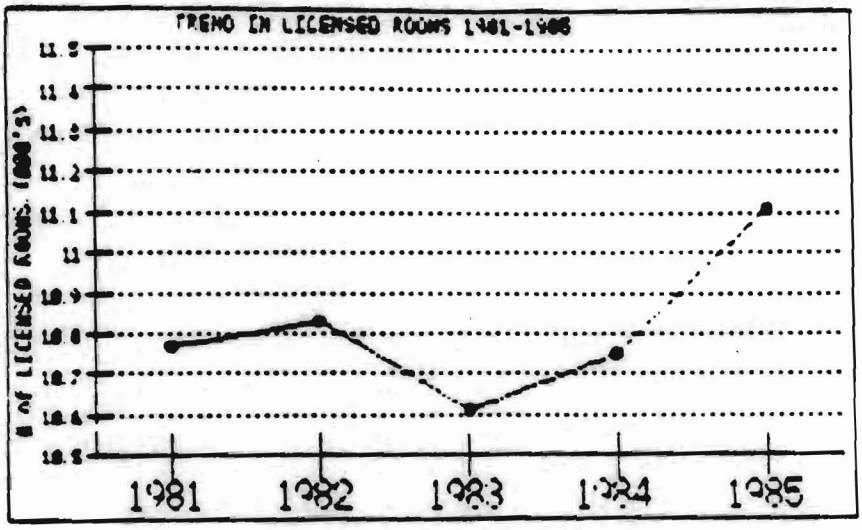


FIGURE 8



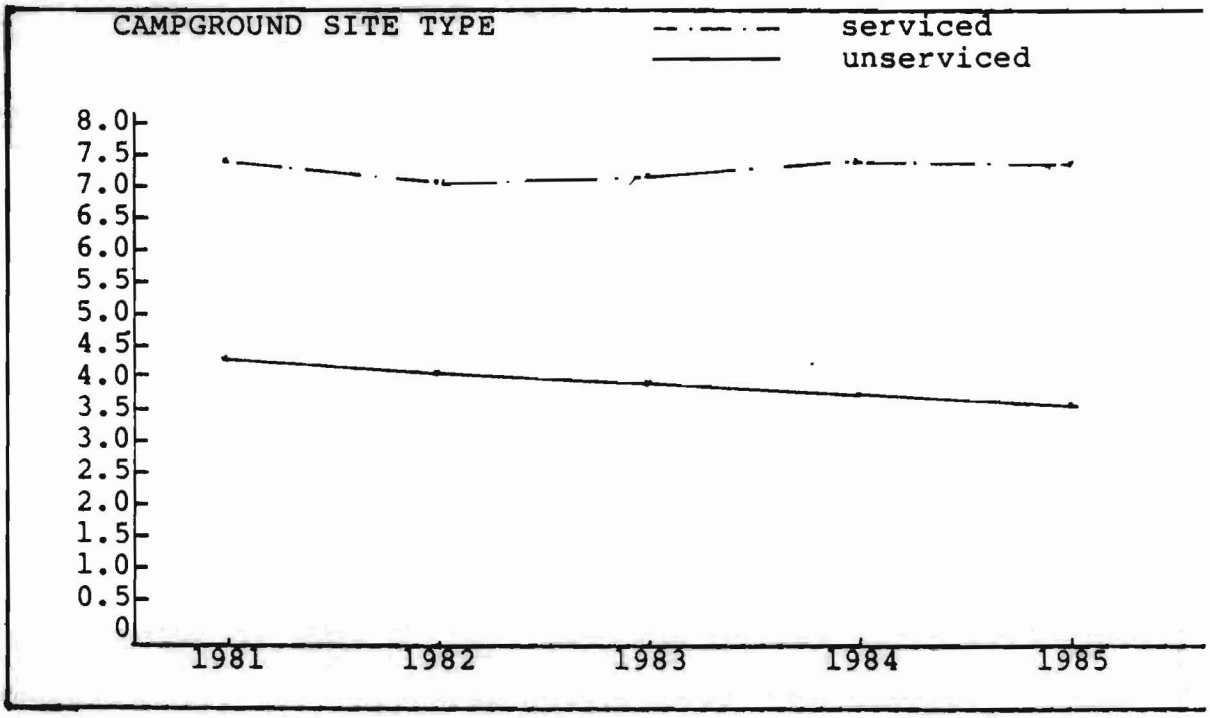
By contrast, the number of rooms increased by 1% in 1984 and 3% in 1985. Since 1976, the number of establishments has increased marginally by less than 1%, and the number of rooms has increased by 6%.

CAMPGROUND SUMMARY FOR 1985

The number of serviced campground sights in Nova Scotia has been very stable over the past five years (see Figure 9). There was a decrease of less than 1% between 1981 and 1985. On the other hand, the number of unserviced sites has dropped steadily since 1981 - the average annual decrease has bee 4%. The total number of campground sights in Nova Scotia has dropped by 5% since 1981.

FIGURE 9

CAMPGROUND INVENTORY
1981-1985



As indicated in Table 1, Nova Scotian, American and recreational vehicle campers contributed to the first increase in campground registrations since 1980. Recorded separately are seasonal registrations which increased by 17% over 1984. This represents an additional 40,000 site nights.

FIGURE 10

CAMPGROUND REGISTRATIONS BY ORIGIN
1981-1985

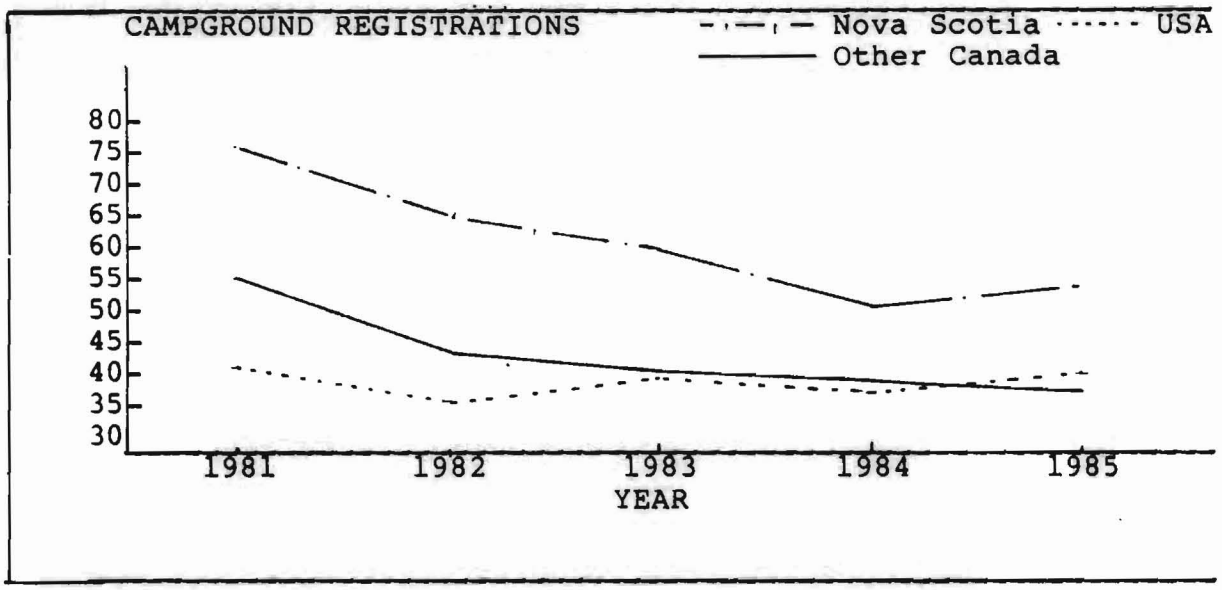


Figure 10 shows increases in the number of Nova Scotian and American camper registrations in 1985. Because of these two markets, there was a slight reverse in the downward trend in registrations in Nova Scotia's private and municipal campgrounds. Although total registrations dropped by 25% between 1981 and 1985, there was a 2% increase over the past year. Nova Scotian and American registrations were up by 3% and 8% respectively in 1985, while numbers from other provinces and other countries fell by 5% and 30%.

Although tent registrations continued to drop off, R/V registrations showed a favorable turnaround with a 10% increase over 1984 (see Figure 11). However, compared with 1981, R/V registrations were still down by 26%. Tent registrations fell by 13% over the past year and 23% since 1981.

TABLE 1

REGISTRATIONS AND SITE NIGHTS AT MUNICIPAL AND PRIVATE CAMPGROUNDS IN NOVA SCOTIA BY RAILWAY

Trailway	N.S. Camper Parties	Other Can. Camper Parties	USA Camper Parties	Other Camper Parties	Total Camper Parties	Tents	RV's	Site Nights	Seasonal
Evangeline	11,213	4,116	5,619	54	21,003	6,578	14,425	31,236	3,394
Glooscap	8,424	2,811	4,184	56	15,469	2,966	12,473	23,566	1,433
Sunrise	7,857	7,666	7,261	130	23,014	6,821	16,193	30,636	880
Cape Breton	14,672	11,565	9,320	270	35,859	11,316	24,543	50,813	1,627
Marine	1,620	1,216	1,679	67	4,582	1,394	3,188	5,465	242
Halifax/Dart	2,315	4,141	2,882	91	9,429	2,777	6,652	17,064	1,738
Lighthouse	6,201	5,443	9,032	187	20,863	7,404	13,459	29,054	1,738
Total	52,302	36,958	39,977	855	130,219	39,286	90,933	187,824	9,354
	3%	5%	8%	30%	2%	13%	10%	1%	17%

A seasonal camper is defined as one who remains registered at a campsight for a month or more. This column shows the number of months that seasonal campers occupied campsights.

TABLE 2
AUTO VISITATION BY REGION
(overnight only)

SHARE %	1981	1982	1983	1984	1985
Atlantic Canada	48.9%	51.1%	49.5%	49.5%	50.1%
Quebec	6.6	6.5	5.8	6.0	6.3
Ontario	19.7	18.7	18.6	18.5	18.6
Western Canada	2.4	2.6	2.5	2.5	2.3
New England	10.2	9.6	10.7	10.5	10.2
Mid Atlantic	5.8	5.3	5.9	5.3	5.0
South Atlantic	2.8	2.7	3.2	3.6	3.5
South Central	0.4	0.5	0.5	0.6	0.6
East North Central	2.1	1.9	2.1	2.1	2.0
West North Central	0.4	0.4	0.5	0.5	0.5
Mountain	0.2	0.2	0.2	0.3	0.3
Pacific	0.5	0.5	0.5	0.6	0.6
Total Overnight Auto (Visitors (000's)	629.4	633.7	609.2	703.9	730.6

Excludes RV's and same day New Brunswick travellers. During 1984 and 1985, the counts were conducted between may 15 and October 31. Prior to this, it was June 1 to October 31.

Source: Nova Scotia Tourism Motor vehicle Tallies.

TABLE 3
MOTOR COACH VISITATION BY REGION

Share %	1981	1982	1983	1984	1985
Atlantic Canada	11.6%	9.6%	14.6%	15.0%	17.0%
Quebec	5.9	6.1	8.0	6.0	5.0
Ontario	15.8	16.8	12.8	9.0	10.0
Western Canada	2.8	3.1	1.5	2.0	2.0
New England	16.3	15.1	12.8	16.0	13.0
Mid Atlantic	22.7	21.8	23.7	21.0	23.0
South Atlantic	11.5	12.6	9.8	12.0	14.0
South Central	0.9	2.3	3.2	4.0	2.0
East North Central	5.3	5.3	5.3	7.0	6.0
West North Central	3.4	1.9	3.8	4.0	4.0
Mountain	1.1	2.0	2.2	2.0	2.0
Pacific	2.7	3.4	2.3	2.0	2.0
TOTAL TRAVELLERS (motor coach 000's)	61.1	49.3	61.4	51.8	54.6

1984/1985 figures cover May 15-October 31
Before 1984: June 1 - October 31

Source: N.S. Department of Tourism motor Vehicle Tallies.

TABLE 4
RECREATIONAL VEHICLE VISITATION BY REGION

Share %	1981	1982	1983	1984	1985
Atlantic Canada	29.6%	28.4%	26.5%	26.8%	25.0%
Quebec	6.7	6.3	5.3	5.3	5.8
Ontario	24.7	24.0	22.9	22.3	21.3
Western Canada	7.4	7.7	6.6	7.4	6.7
New England	9.5	9.8	9.7	8.8	9.6
Mid Atlantic	6.9	6.9	7.7	6.7	7.4
South Atlantic	5.5	6.1	7.6	8.6	9.2
South Central	1.1	1.4	1.8	2.3	2.5
East North Central	4.4	4.4	5.5	5.6	6.0
West North Central	0.9	1.1	1.5	1.6	1.8
Mountain	0.7	0.9	1.2	1.2	1.3
Pacific	2.6	3.0	3.7	3.4	3.4
TOTAL TRAVELLERS (R/V 000's)	123.1	113.7	92.9	100.6	103.2

Source: N.S. Department of Tourism Motor Vehicle Tallies.

TABLE 5
MODE OF TRANSPORTATION (% VISITOR VOLUME)
BY REGION OF ORIGIN
1985

REGION	AUTOS		TOUR BUSES		R/V		
	Volume	%	Volume	%	Volume	%	Total
N.B.	267,025	91.6	7,701	2.6	16,830	5.8	291,556
P.E.I	72,464	96.0	271	0.4	2,734	3.6	75,469
NFLD.	26,826	78.3	1,161	3.4	6,252	18.3	34,239
Quebec	45,780	83.9	2,786	5.1	5,968	11.0	54,534
Ontario	135,917	83.2	5,574	3.4	21,970	13.4	163,461
West Canada	16,584	67.1	1,161	4.7	6,965	28.2	24,710
New Eng.	74,913	81.4	7,198	7.8	9,889	10.8	92,000
Mid. Atl.	36,731	64.8	12,345	21.8	7,590	13.4	56,666
South Atl.	25,518	60.2	7,353	17.3	9,519	22.5	42,390
S. Central	4,377	52.9	1,316	15.9	2,584	31.2	8,277
W.N. Central	3,663	48.7	2,012	26.7	1,849	24.6	7,524
Mountain	1,867	41.3	1,316	29.1	1,340	29.6	4,523
Pacific	4,066	47.7	929	10.9	3,532	41.4	8,527
Total	730,635		64,567		103,215		

Overnight travellers only

TABLE 6

NOVA SCOTIA TRAVEL REVENUES

	Total Revenue $600,000,000
Non-resident Tourist Season Expenditures ($ Millions)	
Same Day Auto	$ 9.4
Overnight Auto	$ 86.7
Air	$ 93.6
Motor Coach	$ 32.4
R/V	$ 16.3
Total	$238.4
Resident Travel Expenditures ($ Millions)	$262.2
Non-resident Off Season Expenditures ($ Millions)	$ 99.3
Total	$600.0

TABLE 7 A

MOTOR VEHICLES ENTERING NOVA SCOTIA

BY ENTRY POINT 1983

Entry Point	1982	Share of Total	1983	Share of Total
Amherst	300,248	74.9%	266,454	70.5%
Caribou	34,825	8.7%	36,489	7.9%
Digby	16,219	4.0%	17,106	4.5%
North Sydney	11,363	2.8%	12,845	3.4%
Tidnish	16,027	4.0%	18,264	4.8%
Yarmouth	22,376	5.6%	26,557	7.1%
TOTAL	401,058	100.0%	377,715	100.0%

TABLE 7 B

MOTOR VEHICLES ENTERING NOVA SCOTIA

BY MONTH 1983

Entry Point	June	July	August	September	October	Total
Amherst	45,068	72,005	62,103	47,355	39,923	266,454
Caribou	4,562	12,122	9,665	6,231	3,909	36,489
Digby	2,407	5,476	4,829	2,878	1,516	17,106
North Sydney	1,919	4,816	3,818	1,413	879	12,845
Tidnish	3,296	5,371	4,743	2,827	2,027	18,264
Yarmouth	3,295	8,478	8,543	4,778	1,463	26,557
TOTAL	60,547	108,268	93,701	65,482	49,717	377,715

TABLE 8

PERCENTAGES OF CANADIAN AND AMERICAN MOTOR VEHICLES

ENTERING NOVA SCOTIA BY

ENTRY POINT 1983

Place	Canadian	American	All Motor Vehicles
Amherst	76%	46%	70.5%
Caribou	9%	11%	7.9%
Digby	4%	9%	4.5%
North Sydney	4%	N/A	3.4%
Tidnish	6%	1%	4.8%
Yarmouth	1%	33%	7.1%
TOTAL	100%	100%	100.0%

TABLE 10 A

MOTOR COACHES ENTERING NOVA SCOTIA

BY ENTRY POINT 1983

Entry Point	1982	Share of Total	1983	Share of Total
Amherst	331	26.8%	514	32.4%
Caribou	212	17.1%	249	15.7%
Digby	195	15.8%	222	14.0%
North Sydney	2	0.2%	19	1.2%
Tidnish	5	0.4%	7	0.5%
Yarmouth	491	39.7%	574	36.2%
TOTAL	1,236	100.0%	1,585	100.0%

TABLE 10 B

MOTOR COACHES ENTERING NOVA SCOTIA

BY MONTH 1983

Entry Point	June	July	August	September	October	Total
Amherst	86	112	138	103	75	514
Caribou	28	58	56	76	31	249
Digby	21	65	57	58	21	222
North Sydney	3	7	5	2	2	19
Tidnish	1	3	2	1	0	7
Yarmouth	53	168	170	145	38	574
TOTAL	192	413	428	385	167	1,585

TABLE 10 C

MOTOR COACHES ENTERING NOVA SCOTIA

BY ENTRY POINT MONTH AND ORIGIN

Entry Point		Amherst	Caribou	Digby	N. Sydney	Tidnish	Yarmouth
June	Canadian	63	19	14	3	1	4
	American	23	9	7		0	49
	Total	86	28	21	3	1	53
July	Canadian	76	31	36	7	3	3
	American	36	27	29		0	165
	Total	112	58	64	7	3	168
August	Canadian	81	25	18	5	2	5
	American	57	31	39		0	165
	Total	138	56	57	5	2	170
Sept.	Canadian	46	46	19	2	1	6
	American	57	30	39		0	139
	Total	103	76	58	2	1	145
Oct.	Canadian	38	11	7	2	0	2
	American	37	20	14		0	36
	Total	75	31	21	2	0	38
Total	Canadian	304	132	94	19	7	20
	American	210	117	128		0	554
	Total	514	249	222	19	7	574

TABLE 11 A

RECREATIONAL VEHICLES ENTERING NOVA SCOTIA

BY ENTRY POINT 1983

Entry Point	1982	Share of Total	1983	Share of Total
Amherst	28,617	67.4%	20,328	58.7%
Caribou	5,032	11.9%	4,318	12.5%
Digby	3,122	7.4%	3,191	9.2%
North Sydney	1,314	3.0%	2,621	7.6%
Tidnish	1,868	4.4%	1,209	3.5%
Yarmouth	2,516	5.9%	2,983	8.5%
TOTAL	42,469	100.0%	34,650	100.0%

TABLE 11 B

RECREATIONAL VEHICLES ENTERING NOVA SCOTIA

BY MONTH 1983

Entry Point	June	July	August	September	October	Total
Amherst	2,508	8,429	5,177	2,985	1,229	20,328
Caribou	387	2,007	1,261	535	128	4,318
Digby	452	1,105	939	493	202	3,191
North Sydney	373	1,119	771	229	129	2,621
Tidnish	181	440	380	158	50	1,209
Yarmouth	401	1,125	952	402	103	2,983
TOTAL	4,302	14,225	9,480	4,802	1,841	34,650

TABLE 11 C

RECREATIONAL VEHICLES ENTERING NOVA SCOTIA

BY ENTRY POINT MONTH AND ORIGIN

Entry Point		Amherst	Caribou	Digby	N. Sydney	Tidnish	Yarmouth
June	Canadian	1,555	245	217	373	166	38
	American	953	142	235		15	363
	Total	2,508	387	452	373	181	401
July	Canadian	5,654	1,401	640	1,119	378	178
	American	2,775	606	465		62	947
	Total	8,429	2,007	1,105	1,119	440	1,125
August	Canadian	3,265	783	507	771	318	105
	American	1,912	478	432		62	847
	Total	5,177	1,261	939	771	380	952
Sept.	Canadian	1,621	213	220	229	133	30
	American	1,364	322	273		25	372
	Total	2,985	535	493	229	158	402
Oct.	Canadian	737	53	109	129	50	5
	American	492	75	93		0	98
	Total	1,229	128	202	129	50	103
Total	Canadian	12,832	2,695	1,693	2,621	1,045	356
	American	7,496	1,623	1,498		164	2,627
	Total	20,328	4,318	3,191	2,621	1,209	2,983

MOTOR VEHICLE SHARE

BY ENTRY POINT AND MONTH 1985

Entry Point	May	June	July	Aug.	Sept.	Oct.	Total
Amherst	4.4%	10.1%	16.9%	14.6%	9.3%	8.0%	63.3%
Tidnish	0.6%	1.3%	1.9%	2.0%	1.1%	0.9%	7.8%
Caribou	0.5%	1.4%	3.2%	3.5%	1.8%	1.1%	11.5%
North Sydney	0.1%	0.7%	1.3%	1.0%	0.3%	0.2%	3.6%
Yarmouth	0.2%	1.0%	2.5%	2.3%	1.4%	0.5%	7.9%
Digby	0.2%	0.7%	1.7%	2.1%	0.8%	0.4%	5.9%
TOTAL	6.0%	15.2%	27.5%	25.5%	14.7%	11.1%	833,900

Includes Auto and recreational Vehicles.
Sameday Travellers excluded.

Please Note: Row and column percentages add up to 100%.

MOTOR COACH SHARE

BY ENTRY POINT AND MONTH, 1985

Entry Point	May	June	July	Aug.	Sept.	Oct.	Total
Amherst	1.4%	4.4%	6.6%	9.4%	8.9%	4.8%	35.5%
Tidnish	0.0%	0.1%	0.0%	0.6%	0.1%	0.0%	0.8%
Caribou	0.1%	0.8%	2.6%	2.7%	3.1%	1.4%	10.7%
North Sydney	0.1%	0.1%	0.4%	1.0%	0.5%	0.1%	2.2%
Yarmouth	0.6%	2.8%	10.8%	10.7%	9.1%	3.6%	37.6%
Digby	0.1%	1.1%	4.5%	3.1%	3.1%	1.3%	13.2%
TOTAL	2.3%	9.3%	24.9%	27.5%	24.8%	11.2%	54,600

Toyal number of overnight visitors.

RECREATIONAL VEHICLE SHARE

BY ENTRY POINT AND MONTH, 1985

Entry Point	May	June	July	Aug.	Sept.	Oct.	Total
Amherst	2.6%	10.0%	23.6%	16.6%	8.1%	3.2%	64.1%
Tidnish	0.1%	0.4%	0.9%	1.2%	0.3%	0.1%	3.0%
Caribou	0.4%	0.8%	5.2%	4.6%	1.3%	0.3%	12.6%
North Sydney	0.1%	1.1%	2.1%	1.4%	0.5%	0.2%	5.4%
Yarmouth	0.1%	0.8%	2.1%	1.3%	0.8%	0.2%	5.3%
Digby	0.3%	1.1%	2.6%	3.3%	1.5%	0.8%	9.6%
TOTAL	3.6%	14.2%	36.5%	28.4%	12.5%	4.8%	103,215

Total number of overnight visitors.

APPENDIX A - VISITOR VOLUME

TABLE 1

Person Volume Visitation to Nova Scotia by Mode of Transportation for 1984 and 1985.

Auto	703,900	730,600
Air	241,000	239,500
Motor coach	51,800	54,600
Recreational Vehicle	100,600	103,215
	1,097,300	1,127,900

APPENDIX B - FIXED ROOF ACCOMMODATION STATISTICS

TABLE 1

NOVA SCOTIA AREA ASSOCIATION OCCUPANCY REPORT

1984 and 1985

Area Association	1984 Occupancy Rate	1985 Occupancy Rate	1984 Rooms Sold (000's)	1985 Rooms Sold (000's)
AESTA	58%	65%	102	114
ETTA	51%	49%	195	188
CAPE BRETON	50%	52%	302	314
CENTRAL NOVA	56%	53%	139	132
DARTMOUTH	74%	69%	193	189
HALIFAX	70%	69%	608	617
PICTOU	57%	60%	59	62
SOUTH SHORE	45%	47%	126	131
YARMOUTH	51%	56%	86	94
NOVA SCOTIA	59%	59%	1,810	1,841

APPENDIX C

METHODOLOGY FOR NOVA SCOTIA TALLY OF MOTOR VEHICLES

Each year, the Department of Tourism records the number of motor vehicles that enter Nova Scotia during the official tourist season (May 15 to October 31). By means of a visual check at each Nova Scotia entry point which includes Caribou, Digby, Fort Lawrence (Amherst), North Sydney, Tidnish and Yarmouth, out-of-province vehicles are counted and recorded by Province or State of origin. Nova Scotia's favorable geographic location enables such a count to be kept since there are only six possible entry points. Four of these six entry points are ferry terminals.

Several important precautions are taken to ensure an accurate tally. The Fort Lawrence entry point accounts for the largest share on non-resident motor vehicles entering Nova Scotia during the tourist season. Consequently, enumerators work in four hour shifts and are never allowed to work two consecutive shifts. Vehicles entering Nova Scotia are counted at the New Brunswick/Nova Scotia border locations at Fort Lawrence and Tidnish, and as they disembark from their ferries at the remaining entry points.

One problem lies with New Brunswick traffic which accounts for a large percentage of the visitor entries at the Amherst entry point. A significant portion of the New Brunswick traffic has always consisted of commuter traffic, people who work in or around Amherst or simply come over to Nova Scotia for shopping or business reasons every working day. This same problem exists at Tidnish entry point which also has a high volume of New Brunswick traffic.

Not until 1958, when a reduction factor of 50% was used, was any account taken of the New Brunswick "commuter" at Fort Lawrence. In 1959, when the visitor traffic count was expanded to a twenty-four hour count, the same reduction factor of 50% of the New Brunswick motor vehicle traffic was used to arrive at a more realistic tourist count. From 1960 to 1966, as a result of a survey carried out in 1960, a reduction factor of 30% of New Brunswick traffic has been used. As a result of the auto exit surveys carried out since 1966, it has been determined that a reduction factor of 25% of New Brunswick traffic should be used.

In 1984, there was a change in the factor. New Brunswick traffic is now discounted by 11% with "commuter" now being redefined to mean only those New Brunswickers going to work

and not those taking a day trip. In the bulk of the reports, these day trippers from New Brunswick, estimated in 1984 to be about 140,000 to 150,000 are also excluded so that only overnight visitors are reviewed.

Another problem in arriving at a reliable count of "visitor entries" arises with motor vehicles of Newfoundland origin. At the North Sydney entry point, only Newfoundland motor vehicles are counted since they must originally been counted at North Sydney.

In addition to the tally of motor vehicle data, information is also received from all the public transportation companies serving Nova Scotia.Figures are supplied for the number of passengers brought to Nova Scotia during the tourist season. Reductions are applied to all public transportation data to account for returning Nova Scotia residents.

The statistics derived for tourists entering Nova Scotia by plane are based on figures supplied by Air Canada and Eastern Provincial Airways. Arriving at an accurate count of visitors is a problem with planes as well as motor vehicles. A certain percentage of passengers must necessarily be returning residents of the Province. This percentage is calculated by carrying out sample interviews (i.e., on a few selected days of each summer all passengers leaving Halifax International Airport were interviewed, and it was determined that approximately x% were returning residents). In 1973, an air exit survey was carried out and a reduction factor of 40% was applied to passengers arriving by plane. The 1978 Air Exit Survey showed a reduction factor of 65%. In 1984, the reduction factor was again 30-40%.

In 1972, an actual tally of tour buses was started at the entry points. IN 1975 and 1976, tour bus surveys resulted in the number of tour buses being multiplied by 33.1 people/bus to arrive at person volume. This figure was revised for 1981 and 38.7 people/bus was used for person volume calculations (Tour Bus Survey, 1981).

Generally , all expenditures are based upon the following formulae:

Average $ expenditure per party per trip x parties x August CPI or

Average $ expenditure per person per trip x people x August CPI

The expenditures apply survey averages to years following the survey year and are used to readjust the year preceding

the survey year. The following formulae are used for 1985:

Auto: Auto parties x 1984 average auto party expenditure trip x August 84/85 CPI;

Air: 1985 Air passengers - 1984 average air party size x 1984 average air party expenditure/trip x August 84/85 CPI;

Tour Bus: Tour buses x average number of people per tour bus (28.7) x average 1981 Tour Bus traveller expenditure/trip x August 81/85 CPI.

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