HORSESHOE BAY ANALYSIS AND DESIGN PROPOSAL

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ABSTRACT

Horseshoe Bay is located in West Vancouver, British Columbia. It is a residential community, a tourist attraction with business activity, and it serves as a transportation node for B.C. Ferries Corporation. These different activities create a complex situation.

This study deals with the problems resulting from conflicts between the different interest groups in Horseshoe Bay: the residents, the ferry users, the business community and the visitors to the Bay Area.

The investigative study contains four main elements:

- A. A comparison and study of other ferry terminals in Europe.
- B. A comparison between two similar communities:
 Horseshoe Bay and Deep Cove.
- C. A pilot survey used as an indicator of the level of activity in the Bay Area.
- D. Personal observation, interviews and discussions.

The results of this research conclude with suggestions for design development implementations which demonstrate that through physical changes it is possible to achieve resolutions for the existing problems in Horseshoe Bay.

It was learned that elimination of the problem is not necessarily the best solution. In spite of much criticism towards the B.C. Ferries Corporation, it was learned that this operation, after all, does contribute to the economic activities of the Bay Area and has an enormous potential for further benefit there.

Collaboration of the various interest groups in Horseshoe Bay will contribute towards a better comprehensive plan for the Bay Area and will benefit each one of them.

W.W. Wood

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Vancouver

1980

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CHAPTER 1. INTRODUCTION

1. General Background

Horseshoe Bay is located in West Vancouver, British Columbia. It is a residential community which attracts many visitors with its beautiful scenery and which serves as a transportation node for B.C. Ferries Corporation.

(See Photograph 1.)

The three different activities: residential, recreational and a transportation node for B.C. Ferries' users, create a tense, complex situation. On the one hand, the growth of the B.C. Ferries' operation requires more concentrated land use. On the other hand, the residents of Horseshoe Bay resent the encroaching presence of the terminal in their community.

It seems very likely that the B.C. Ferries' operation will remain in Horseshoe Bay. The intention of this study, therefore, is to provide a comprehensive plan for Horseshoe Bay that will take into consideration the legitimate concerns of the different parties: the residents, the business sector, the ferry operation, the visitors and the ferry users. Accounting for the diverse factors which exist and incorporating them in a comprehensive plan will

Photograph 1. View of Horseshoe Bay



contribute to create a better place to live, to visit and to travel through.

General Problems

The problems of Horseshoe Bay result directly from two indisputable factors. First, there is not much land for expansion because of the site topography. Second, of the four different major activities that occur in the Bay area, two are overwhelming in their quantity and quality: one is the ferry operation and the other is the group of visitors to Horseshoe Bay. Both factors create a situation which results in residents' objections, land speculation and the deterioration of residential areas.



CHAPTER 2. THE CONCEPTUAL FRAMEWORK

2.1 Hypothesis

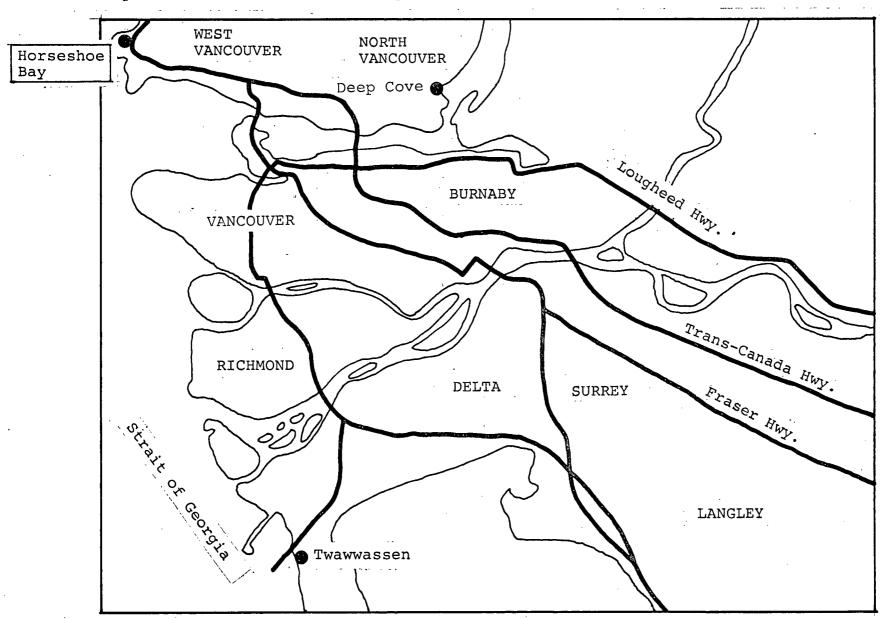
This study began with the notion of improving and upgrading the existing B.C. Ferries operation and its terminals. Because of the large scale of that operation, it was decided to limit the study to only one site at an existing ferry terminal or to propose a new one depending on research results.

The decision fell on Horseshoe Bay's ferry terminal for the following reasons:

- A. It is conveniently located. (See Map 1)
- B. An attempt to find solutions for this beautiful place with its intriguing problems was most appealing.

During the course of the study it became apparent that it would be impossible to tackle the problems of Horseshoe Bay solely from the point of view of the ferry operation. As the study evolved, it became clearer that the different forces at work in the Bay Area are bound together and must be treated with equal consideration and attention. From the initial idea to design a ferry terminal, this work has become a study which embodies the

Map 1. Greater Vancouver Regional District, Including Horseshoe Bay



SOURCE: Greater Vancouver Regional District

traditional components and structure of an urban development project.

When Horseshoe Bay was chosen as the site for this study, the following issues had to be discussed:

- A. Is the Government of British Columbia considering a new ferry route between the Mainland and Vancouver Island and, if so, where will the new site for a terminal be?
- B. Should Horseshoe Bay continue to be a location for a ferry terminal or not?
- C. What impact has the ferry operation in Horseshoe

 Bay on the local residential and business

 community?

When it became clear that the Government would maintain the ferry operation in Horseshoe Bay, the question of its impact on the existing neighborhood and environment (issue C) became more important for study. Since Horseshoe Bay is the most difficult and complex site of all the four existing ferry terminals on the Mainland and Vancouver Island, it is, therefore, the site most in need of design solutions.

Hypothesis: It is possible for Horseshoe Bay to prosper as a total community without sacrificing the needs of the disparate elements which constitute it: the residents, the business sector, the

visitor/recreational sector, the B.C.
Ferries operation, - given a new,
comprehensive design to provide a
physical solution.

It is the purpose of this study to investigate the different elements involved in the community and apply its research findings to design policies and to design development for Horseshoe Bay. It concludes with a set of recommendations.

2.2 Objectives

The objectives are divided into two major parts. The first part is an investigative process: to identify and assess needs as background for policy and planning. The second part applies this information about the needs of the different populations using Horseshoe Bay to the goals proposed for changes in the physical environment.

The objectives of the first part are:

- A. Identify the problems that exist in Horseshoe Bay.
- B. Identify and analyze the different activities that occur in the Bay Area.
- C. Apply the research findings to a design policy and finally to a development plan for Horseshoe Bay.

The second part deals with the specific goals for Horseshoe Bay.

- A. Create a better place in which to live for
 Horseshoe Bay's residents by reducing the
 pressures of traffic congestion brought on by
 the ferry operation and the presence of
 visitors.
- B. Improve and upgrade the terminal facilities and its operation.
- C. Improve the recreational facilities for the local community and for the visitors of Horseshoe Bay.
- D. Increase the business activity in the existing commercial core, thereby providing more local employment opportunities for Horseshoe Bay's residents.



CHAPTER 3. HISTORY AND CONTEXT OF HORSESHOE BAY

3.1 Introduction

The following sections introduce Horseshoe Bay's historical background in the light of its environmental context. This chapter will deal with the history of the major components that made Horseshoe Bay the way it is today, the history of water transportation, the tourist-recreation activity, the residential community, and the business sector. (See Photographs 2, 3)

3.2 The Historical Background

It is probable that the first people to reach
Horseshoe Bay and to recognize its recreational qualities
were the West Coast Indians. They were the first visitors
to the Bay Area. For a few days they would come and fish,
meet with other Indian tribes and then leave for their
homes. No evidence has yet been found to indicate that a
permanent settlement was established there.

The next group of people to arrive in Horseshoe Bay, in 1895, were the loggers. They were the first developers of Horseshoe Bay by establishing a logging community.

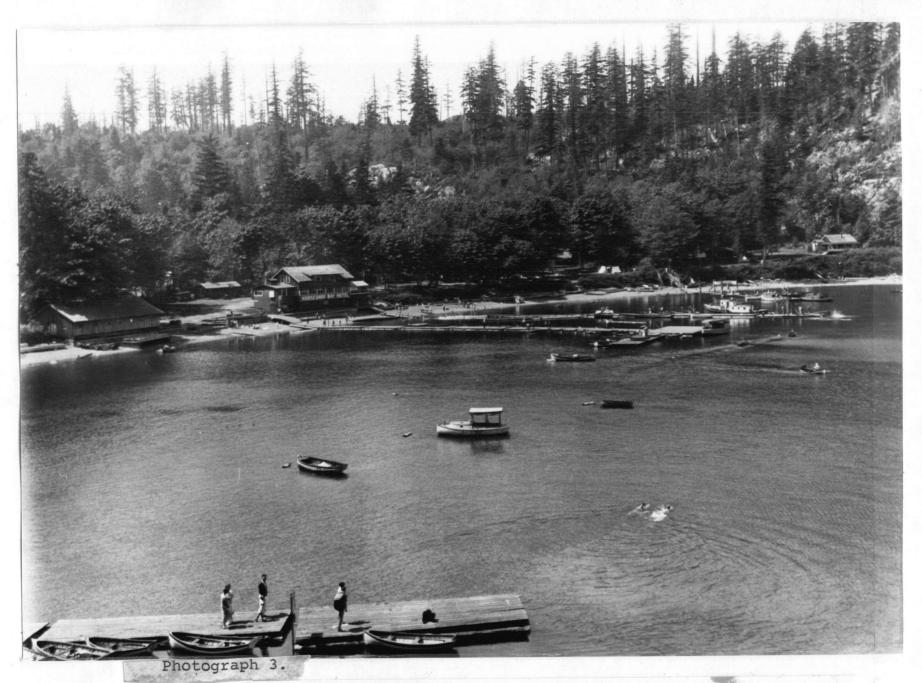


Horseshoe Bay West Vancouver August 1916.

Photo presented, Feb. 1962, by Mis Dorothy R. Gibbeson, 6355 Dumfries St. Vancouver. 15.

Photograph 2. Horseshoe Bay, West Vancouver, August 1916.

SOURCE: Vancouver City Archives.



Panorama view showing Horseshoe Bay Hotel, 1936, by Leonard Frank.

Before the beginning of this century and until 1912, Horseshoe Bay was approachable only by water. The community changed very little until the construction of the Pacific Great Eastern Railroad line from North Vancouver was completed in 1912. Then in 1918, a road was built to Horseshoe Bay and the area changed from a logging community to a summer fishing resort. The opening of access to Horseshoe Bay overland permanently changed its development. The new modes of transportation access helped Horseshoe Bay to grow into a larger community. Residential activity continued to be temporary, but the reasons for coming to Horseshoe Bay started to be oriented towards the recreational activities that the area offered to its residents and visitors. Very soon there was a dance hall, a hotel, and summer cottages built in order to accomodate the summer vacationers.

This second character of Horseshoe Bay continued peacefully until 1953 when the Black Ball Ferry started its service to Nanaimo. Looking carefully at the history of water transportation in Horseshoe Bay, there were indications long before 1953 that Horseshoe Bay was becomming an important springboard for passengers on their way to other destinations along the coast. In 1921, a ferry service was established between Horseshoe Bay and Bowen Island, and then in 1951, service was initiated to Gibsons and the Sunshine Coast. For the first time, Horseshoe Bay was introduced to a different visitor who did not come

especially to stay or vacation in the Bay Area. This visitor only stayed for a few hours or, at most, up to one day, waiting for the ferry service.

The change that took place in Horseshoe Bay between the 1920s and the 1950s, regarding its development as a major transportation node and tourist-recreation centre, brought commercial business into the Bay Area. This helped change Horseshoe Bay into a permanent community. The businesses that were first established in Horseshoe Bay existed to service the visitor group. With the expansion of the tourist-recreation activities and the ferry service, the community developed more and more commercial business activity.

Dissatisfaction with the ferry operation was noticeable for the first time in the 1950s when the Black Ball Ferries started to operate out of Horseshoe Bay. The most noticeable complaints came from Tom Sewell, a marina owner in Horseshoe Bay. His complaints concerned the danger to smaller boats as a result of the speed of the ferries coming into the Bay Area, and he imparted an overall negative feeling about the ferry operation. This is easily understood, because Horseshoe Bay is small, with little room for expanding the existing marina given the current usage mix.

The 1960s brought a change to Horseshoe Bay which has lasted until the present day. The growing operation of the ferries demanded upgraded facilities in Horseshoe Bay

which the Black Ball Ferries refused to supply. Government of British Columbia took over the operation and, since then, has invested millions of dollars in order to Expanding the meet the growing demand for ferry services. facilities of the terminal created resentment within the residential community. With the expansion, additional changes began to occur. Those people who could afford it and wanted to leave Horseshoe Bay moved to other communities Those who remained in the Bay Area like West Vancouver. were the older people and young families who found the housing suitable to their budgets and life style. survey conducted by the Municipality of West Vancouver in 1974,* it was found that out of 642 residents, 38% did not own the property that they lived on. Of the residents who were property owners (62% of the whole), only 32% actually lived in Horseshoe Bay. Thus, 68% of the landlordproperty owning group lived outside the Bay Area. majority of the residents are described by the local social worker as transients with a length of residence of between two to four years.

A factor which did not change through the years in the history of Horseshoe Bay is that a large proportion of the people who lived in the Bay Area also obtained their income from activities there. Like the loggers in the

^{*}Municipality of West Vancouver, Planning Department, unpublished survey, 1974.

past who cut timber from local sources, people today work on the ferries, in the marinas, and commercial establishments, such as restaurants, the pub, stores and garages.

This connection of residency and work has been maintained.

3.3 Horseshoe Bay in the Context of its Environment

3.3.1 Introduction

The following section deals with the significance of Vancouver, the North Shore, and the immediate surroundings of the Bay Area in relation to Horseshoe Bay.

3.3.2 Vancouver

Metropolitan Vancouver is the third largest urban area in Canada with a population (reported in 1973) of one million two hundred thousand persons. The distance from Horseshoe Bay to downtown Vancouver is 13 miles or a 25-minute car drive along the "upper level highway". By bus along Marine Drive the travel time from downtown Vancouver to Horseshoe Bay is 45 minutes.

Horseshoe Bay attracts most of its visitors from the Greater Vancouver Regional District (GVRD) because: the drive along Marine Drive is attractive; it is a short distance to a different world; from the busy city, it is an escape to a pleasant, old-fashioned town. Vancouver attracts residents of Horseshoe Bay with its entertainment

and cultural activities, shopping facilities and work opportunities.

The link between Vancouver and Horseshoe Bay has a very important significance:

- A. Most of the visitors group originates from the GVRD;
- B. Eight months of the year visitors from the GVRD provide one of the main sources of income to local business in Horseshoe Bay;
- C. If in the future the major ferry route to Vancouver Island should be discontinued, these visitors from the GVRD will be the remaining, major source of income for local business.

3.3.3 The North Shore

The area of the North Shore includes within itself the two districts of North Vancouver and West Vancouver. Horseshoe Bay is under the jurisdiction of the District of West Vancouver.

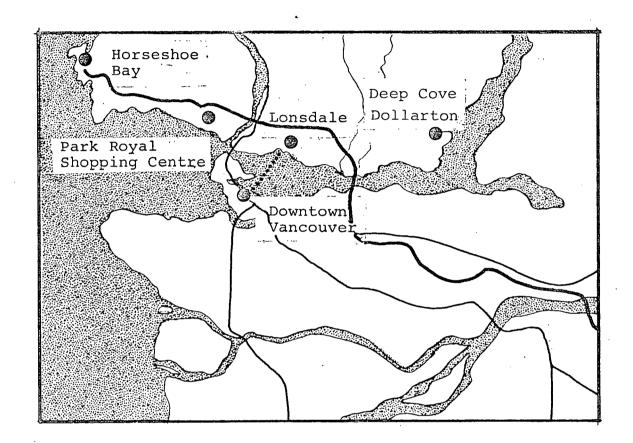
The North Shore has an important role in the future design policies for Horseshoe Bay including its commercial, residential and recreational activities.

The commercial context

The North Shore has few shopping centres: (See Map 2)

Supermarkets are located in Park Royal in West

Map 2. Shopping Centres and Major Transportation Routes in the Region



Vancouver, Stong's outlet in Dundarave, supermarkets on Lonsdale.

- Department stores on the North Shore include:

Park Royal in West Vancouver, Capilano Mall in North

Vancouver and Zellers at West Lynn.

From a study conducted by the District of North
Vancouver in 1976,* it was found that 48% of 400 respondents shopped in Park Royal and only one-fifth of these 400 people had recently shopped in downtown Vancouver. The rest shopped at Capilano Mall and Zellers at West Lynn in North Vancouver.

In the case of West Vancouver residents, the assumption is that they are attracted to the Park Royal Shopping Centre too, since it is their only choice and it is considered one of the main commercial centres on the North Shore.

Another factor that plays an important part in attracting shoppers is the growing core of the city of North Vancouver, i.e., Lonsdale. Lonsdale is connected to downtown Vancouver by a ferry and continues the concept of the core of downtown Vancouver. According to a real estate analysis,** it is predicted that Lonsdale will grow as a shopping centre and will attract residents from all over the North Shore.

North Vancouver District, Planning and Property Department, "Community Facilities, Seymour 8," 1976.

Analysis conducted by Duan Nagi of Block Brothers.

The residential context

According to GVRD plans, the North Shore should take part in solving the housing problems for the growing population. Even though Horseshoe Bay is included in the West Vancouver Municipality which agreed to take part in the GVRD plan, Horseshoe Bay, because of its small size, was excluded. But there are growing residential neighborhoods only a short distance from Horseshoe Bay which influence planning considerations, such as, Lion's Bay, Bowen Island, and the nearby higher-income neighborhood of West Vancouver. (See Map 3)

Lion's Bay

Population figures for Lion's Bay, according to B.C. Statistics,* have grown as follows:

1971 - 396 people

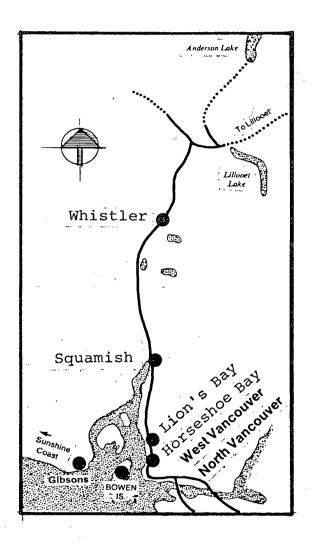
1976 - 785 people

1978 - 1,200 people

The master plan for Lion's Bay limits population growth to about 2,500 people. The residents concur with this growth limit. Local and community services in Lion's Bay are comparable to those available in Horseshoe Bay. Lion's Bay's population growth (98% in five years) puts some pressure on Horseshoe Bay to provide services, unless

^{*}B.C. Statistics, Census of Population, 1971, 1976. 1978 statistic estimated by local architect.

Map 3. Communities Surrounding Horseshoe Bay



local services keep pace, but it does not seem likely that Horseshoe Bay will become the most important shopping centre for Lion's Bay residents.

Bowen Island (See Map 3)

Population on Bowen Island has grown as follows:*

1971 - 350 people

1974 - 705 people

1978 - an estimated 1,000 people

Recently the Ministry of the Environment has been giving serious consideration towards expanding the recreational facilities and settlement lands on Bowen Island. The reason given is that "with the increasing demand by the residents of southwest B.C. for more recreation and settlement land use opportunities, the pressures on Bowen Island can only grow."

Today most of the working residents commute through
Horseshoe Bay to Vancouver. There are about 55 cars,
owned by Bowen Island residents, parked in the Bay Area:

25 cars at a rental residential lot

30 cars at the ferry terminal lot (about 20% of the parking capacity of 150 cars)

There are also private arrangements between Bowen Island commuters and Horseshoe Bay residents for parking space,

^{*1971} source: B.C. Statistics, Census of Population; 1974 source: B.C. Ministry of the Environment, Resource Analysis Branch, Bowen Island: A Resource Analysis for Land Use Planning, Vol. 1 & 2 (The Islands Trust, Ministry of Municipal Affairs & Housing: Victoria, B.C.) April, 1978. 1978 source: Estimate from interviews with Bowen Island residents.

the number of which is not known. The result is that a significant number of cars parked in Horseshoe Bay belong to Bowen Island commuters. Even though the lack of parking space in Horseshoe Bay is taken into consideration by the Ministry of Environment's plan for Bowen Island, it would be quite impossible to stop visitors from taking their cars to Bowen Island unless there were a policy of restricting vehicle traffic for visitors to the Island.

Bowen Island residents shop in Horseshoe Bay and are dependent on it as a link between the Island and Vancouver.

West Vancouver

Compared with the residents of Horseshoe Bay proper, this area of the community is composed of people with a much higher income level. It comprises the area of West Vancouver ringing the Horseshoe Bay community. People living in this area do not identify themselves with the residents of the Horseshoe Bay area. Being surrounded by a higher income group is a source of frustration for Horseshoe Bay's younger and less affluent people. However, this group is a potential source of capital for business investments and clientele for new commercial enterprises in Horseshoe Bay due to the proximity.

The recreational context

Even though the North Shore offers plenty of other recreational sites, Horseshoe Bay remains a unique place

that has no comparison on the North Shore.

Residents from the GVRD and beyond its boundaries are attracted by the combination of the beautiful site, a popular restaurant, and a dynamic focal element, i.e. the ferries, all of which provide a convenient spot for taking a break from other activities.

As well, there are recreational sites, such as Gleneagles Golf Course and Whytecliff Underwater Park in the immediate surroundings of Horseshoe Bay, and Horseshoe Bay is on the route to Whistler Mountain. These sites should be considered part of the Area's resources.

Gleneagles Golf Course (See Map 4, area 7)

Gleneagles is a club with 250 members, about twelve of whom are from the Bay Area. It covers 46.21 acres and serves 30,000 people a year, most of them on a regular basis. For the most part it attracts golfers from the North Shore who are inclined to stop in Horseshoe Bay for a break, a meal or a beer.

Whytecliffe Underwater Park (See Map 4, area 6)

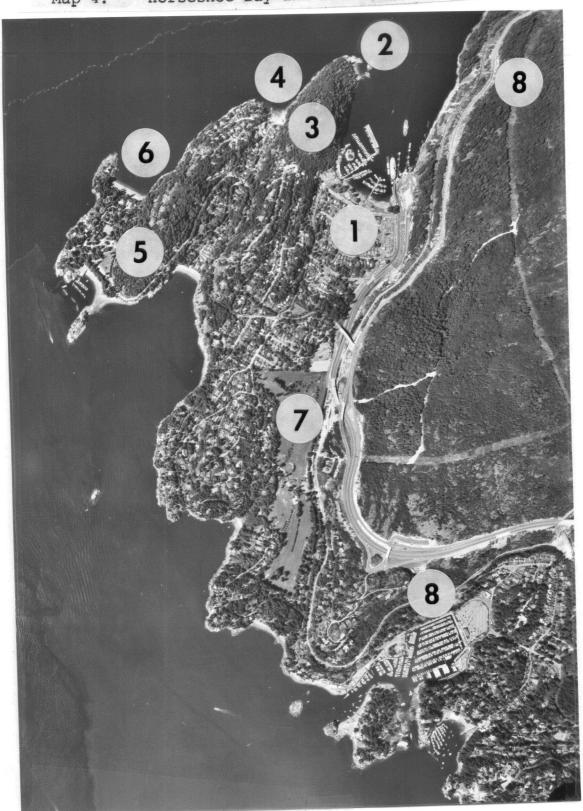
Whytecliff attracts diving clubs and visitors who might also visit Horseshoe Bay's restaurants or pub.

Whistler Mountain (See Map 4, area 3)

Whistler Mountain is an expanding ski resort.

48,000 skiers visiter Whistler in the winter of 1977-78;

Map 4. Horseshoe Bay and Surrounding Area



Legend

- Horseshoe Bay, Study Area 1.
- Tyee Point, Privately Owned B.C. Telephone Property 2.
- 3.
- 4. Copper Cove
- 5. Whytecliff Park
- Underwater Park Gleneagles Golf Course 7.
- B.C. Rail 8.

when the season is good, an increase of 8-10% is not unusual. It is estimated that 10,000 skiers a day will use Whistler in the future.

Skiers returning to Vancouver often stop in Horseshoe
Bay to dine at one of the popular spots. As plans for
Whistler's ski resort take shape, the numbers of skiers
visiting Horseshoe Bay will increase.

- 3.3.4 The Immediate Surroundings of Horseshoe Bay

 There are two major elements within the immediate
 surroundings of Horseshoe Bay:
 - 1. B.C. Telephone Company property on the west side of the Bay, and
 - 2. B.C. Railway line on the east side of the Bay.
- 1. B.C. Telephone Company property

B.C. Telephone owns 19 acres which is zoned RS4 (residential single-family dwellings) on the west side of the Bay. This holding could play a role as a future site for recreational development. Today the site is not being used. It is kept by B.C. Telephone as a good alternative in case there is need for an elevated, isolated site for ratio communication equipment.

The site is not for sale. B.C. Telephone has an exchange policy for the properties it holds. The real estate department reported that the company is not in the development business; therefore, B.C. Telephone has no

intention of developing the site. They are currently abiding by the planning policy of the West Vancouver Municipality and leaving the property in its natural state.

B.C. Telephone has expressed its willingness to exchange this property if it is possible to obtain a similar property within the city, i.e., the West Vancouver Municipality, of comparable value and communications location potential. According to B.C. Telephone, the property attracts the attention of many developers and architects wishing to take part in developing it. A Vancouver real estate source estimates the value of the 19 acres of property, when fully developed, at about \$5.7 million, and in its natural state at \$300,000 to \$350,000.

2. B.C. Railway (See Map 4, area 8)

The B.C. Railway line was established in 1912 to connect North Vancouver with Squamish. The subsequent development of the highways in the 1950s reduced the need for rail passenger service.

In 1952 the election of the Social Credit government ushered in the era of highway construction. This move was a blow to the train passenger service. More recently, the Report of the Royal Commission on the British Columbia Railway,* recommended that the B.C. Rail system be reduced

^{*}Mr. Justice Lloyd G. McKenzie, Chairman, Report of the Royal Commission on the British Columbia Railway, Vol. 2 (Royal Commission on the British Columbia Railway: Vancouver) 1978.

by abandoning the passenger service from North Vancouver to Lilloet and the thrice-weekly service to Prince George. The Commission was aware of the important service the railway could contribute to the tourist industry:

"The introduction of a tourist service on any portion of the line is a matter to be decided by the provincial department responsible, in concert with interested municipalities which might take part in its funding. We do not see that the potential for such a service is sufficient for B.C.R. to consider participation except on a contractual basis which guarantees the railway recovery of its costs."*

3.4 Conclusions

In this chapter there are a number of conclusions that were arrived at from examining the history and context of Horseshoe Bay:

- 1. The history of Horseshoe Bay shows that the different activities of the residential community, the visitors, the ferry terminal and its users, and the local business community impinge on one another. The interaction is such that any change aimed at one of these groups would have an impact on the others.
- 2. Horseshoe Bay should not attempt to compete commercially with existing shopping centres on the North Shore. Its commercial focus should be small-scale, emphasizing goods and services compatible with its resort setting.

^{*}Ibid., p. 145.

- 3. Recreational development is the commercial strength of Horseshoe Bay which should be maintained and encouraged because its unique combination of elements is its main attraction.
- 4. A link between the train service and the ferry terminal is a possibility. Since the closure of the Squamish subdivision (a portion of the rail service from Vancouver to Lilloet) has been considered, passenger service could be introduced from North Vancouver to Whistler Mountain. A fast train could operate on seasonal demand. ter, the train would serve skiers wishing to travel to Whistler. In summer, it could provide service for ferry users who would prefer to leave their cars behind. study should be conducted to analyze the possibilities of usage during the different seasons and the potential market for such services. Train service would be a public transportation alternative which would help to alleviate the congestion of car traffic in the Bay Area.
- The role of the B.C. Telephone Company property is somewhat complicated. On the one hand, there is very little land for development in Horseshoe Bay and the B.C.

 Telephone property is undeveloped. On the other hand, the site is topographically very steep and rocky and it would be very expensive to develop and provide services there. In addition, the Municipality of West Vancouver wishes to keep the property in its natural state.

The property may be too valuable to leave completely in its natural state. It could be developed for recreational purposes, and thus contribute to better land use in Horseshoe Bay.



CHAPTER 4. METHODOLOGY

4.1 Introduction (See Diagram 1)

In order to put the development of Horseshoe Bay into perspective, an investigation was carried out on four different levels. The methodology consisted of comparative studies, a pilot survey and personal observation, as follows:

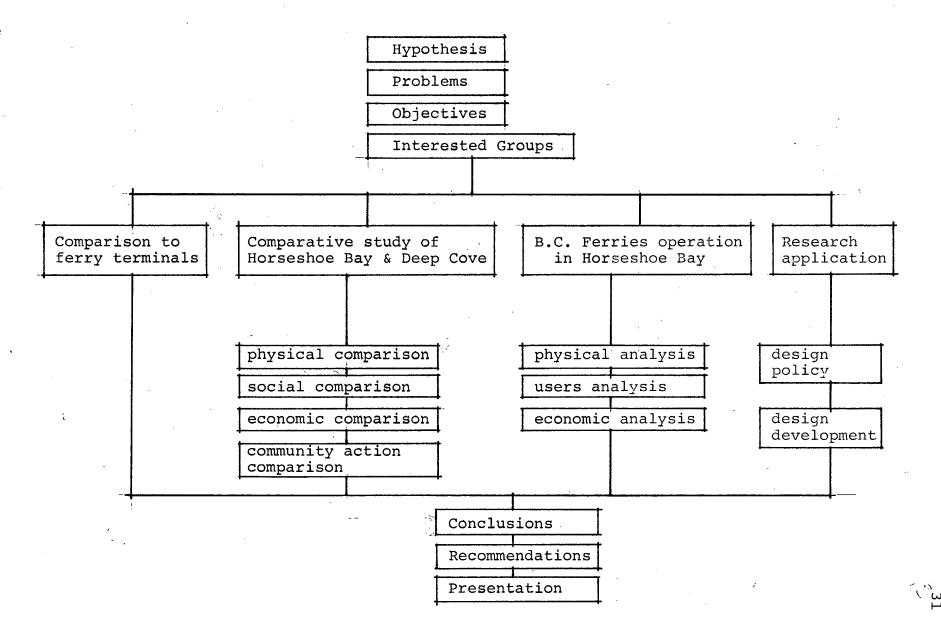
- A. A comparison and study of other ferry terminals in Europe.
- B. A comparison between two similar communities:
 Horseshoe Bay and Deep Cove.
- C. A pilot survey used as an indicator of the level of activity in the Bay Area.
- D. Personal observation.

Element A

- 4.2 Comparison and Study of Other Ferry Terminals in Europe
 - 4.2.1 Technical limitations of the comparison study

To compare Horseshoe Bay's ferry terminal to other terminals in the world by direct observation would have been ideal. However, limitations of time and money intervene.

Diagram 1. Schematic Flow Pattern of Methodology



The next source of information is the literature published about the subject. However, a search of the literature proved that little information was available and its quality was very poor. As a result, the last source of information consisted in writing to the different ferry authorities that were known to operate in a similar way to B.C. Ferries Corporation. This last method has an obvious limitation since it is based on other people's observations and experiences and is dependent on their kindness in providing sufficient information.

4.2.2 The correspondence*

Letters were sent to the following countries in Europe:

BELGIUM (See Map 5)

- Ministry of Communications
- Ministry of Traffic and Waterways
- A. Sealink Ostend-Dover/Folkestone lines
- B. Provincial Stoombootdiensten in Zeeland (2 ferry terminals)

ITALY

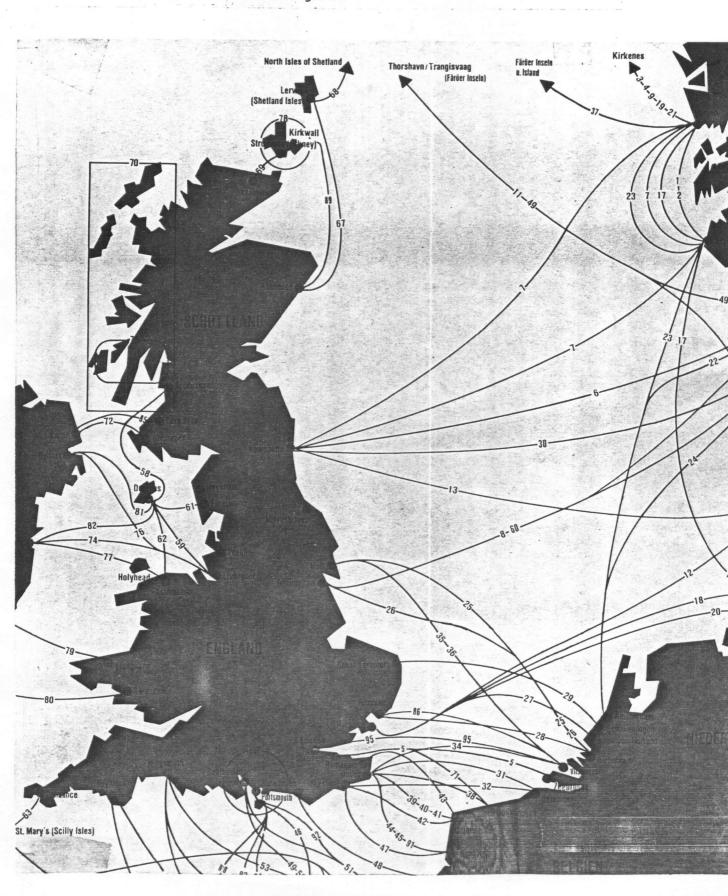
- Societa Finanziaria Marittima

GERMANY

- Der Bundesminister für Verkehr

^{*}Explanatory Note: The letters A, B, C, D, E, F, G, H designate routes associated with ferry systems within particular countries. These designations reappear in Table 1 for comparison purposes.

Map 5. Ferry Routes between Scandinavia, Western Europe and the United Kingdom



FINLAND (See Map 6)

- The National Board of Public Roads and Waterways Helsinki
- A. The city of Naantali Port Authority
- B. Port Authority of Turku
- C. Port of Helsinki Authority

NORWAY - Ferry Terminals (See Map 5)

- A. Finnmark Eylkesredere og Ruteselskap Administration (12 terminals)
- B. Møre og Romsdal Fylkesbåtar (100 terminals)
- C. Det Stavangerske Dampokibsselskab (10 terminals)
- D. Fylkesbaatane I Sogn og Fjordane (40 terminals)

SCOTLAND (See Map 7)

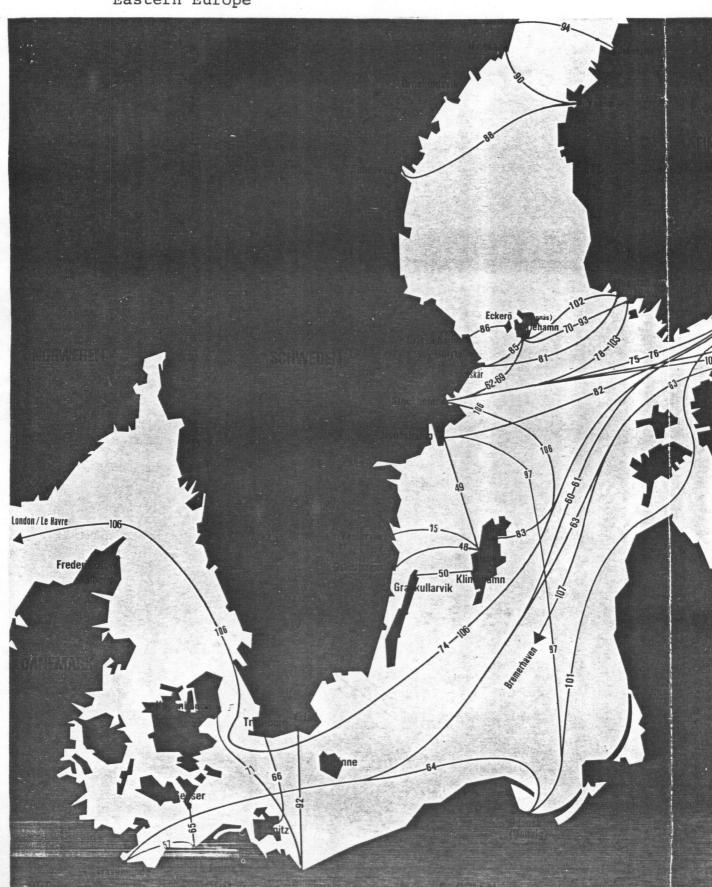
- A. Highland's Department of Roads and Transport
 (3 terminals)
- B. Caledonian MacBrayne Limited (few terminals number not known) (The Pier Gourock)
- C. Shetland Islands Ferry Terminals: Whalsay, Bressay, Unst, Yell
- D. Strathclyde Region, Department of Roads
- E. Abendeen Harbour Board

SWEDEN (See Map 8)

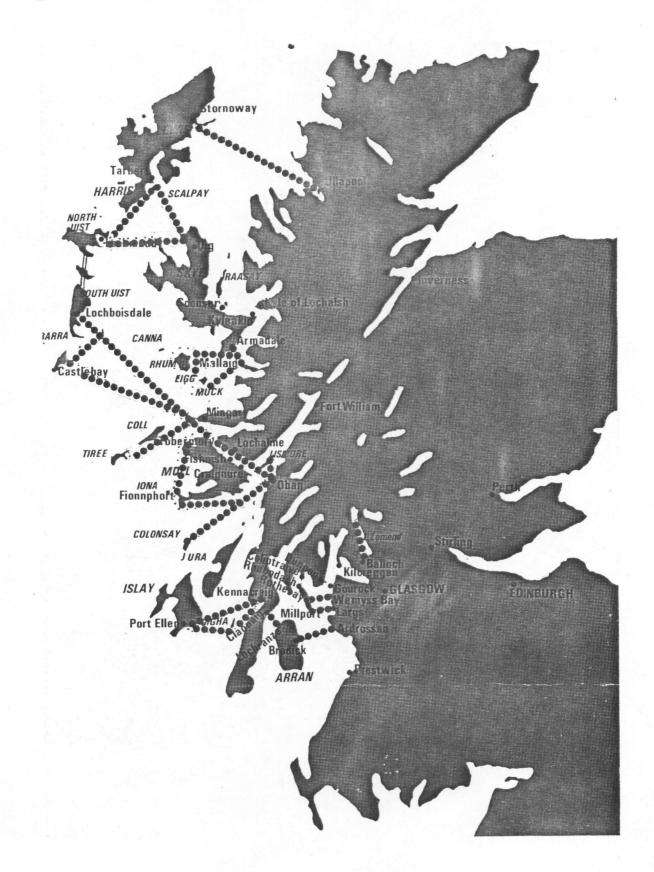
- Lion Ferry Ab:

- A. Varberg (Sweden)
- B. Helsingborg (Sweden)
- C. Grenaa (Denmark)
- D. Malmö (Sweden)

Map 6. Ferry Routes Linking Scandinavia with Eastern Europe



Map 7. Ferry Routes in Scotland



Map 8. Ferry Routes Linking Countries of Scandinavia



- E. Travemunde (Germany)
- F. Hamburg (Germany)
- G. Bremerhaven (Germany)
- H. Harwich (Great Britain)

Substantive answers were received from all the locations letters were sent to with the exception of the ferry operation in Italy which claimed that they do not operate in a manner similar to B.C. Ferries Corporation.

The following questions were addressed to the ferry authorities:

- A. How many people and motor vehicles go through your operation in one year?
- B. Is your ferry terminal located away from a residential area, nearby, or within a residential community?
- C. If located near a residential area, or within, how is the terminal accepted by the residents?
- D. Are the residents involved in your ferry operation?
- E. What kind of an image would you say the terminal(s) in your area or country has (have): Is it a commercial image or industrial?

4.2.3. The results (See Table 1.)

Table 1. Summary of Responses Received from Authorities Operating Ferry Terminals in Europe, Compared with Information about Horseshoe Bay

Country/ Ferry	Number of Passengers 1977-1978	Number of Vehicles 1977-1978	Situated near Community	Accepted by Community	Involvement of Residents	Image: Commercial/ Industrial
Belgium A B(2)	2,783,914 8,400,000	697,856 2,760,000	yes yes	yes yes	yes yes	commercial both
Finland A B C	1,000,000 1,300,000 1,325,000	250,000 214,000 1,550,000	yes yes yes	yes yes yes	yes yes yes	commercial commercial both
Norway A(12) B(100) C(10) D(40)	826,225 11,311,281 1,304,969 2,800,000	373,693 3,563,428 3,073,788 1,000,000	both both no both	yes yes - yes	yes yes - yes	commercial none none
Scotland A(3) B C(Yell) D E	n.a. 100,000 73,000 n.a. 36,000	n.a. 20,000 (May-Sept) 34,700 n.a. n.a.	yes yes no yes no	yes yes - yes -	yes yes not known no	none commericla none not known commercial
Sweden C	525,000	165,000	no	yes	yes	commercial
Canada/ Horseshoe Bay	2,261,812	872,685	yes	both	yes	commercial

NOTE: See route designations (A, B, C, D, E) in text above.

Question A. Numbers of Passengers and Vehicles. Most of the terminals in Europe are smaller, with the exception of ferry terminals in Belgium and Finland. These two terminals, in Belgium - the port of Ostend, and in Finland - the port of Helsinki, are considered to be important city ports in Europe. When compared with Horseshoe Bay's ferry terminal, B.C. Ferries serves an equal number of passengers and vehicles but is situated in a very small town of only 700 people.

Question B. Location of the Ferry Terminal.

from the letters:

Most of the terminals are situated right in the centre of the towns. The answers received indicated that, if the terminal is not located within a residential community, then the nearest residential property is located about one-half to one and one-half miles away. (This is considered a long distance from the terminal.)

Question C. Resident Acceptance of the Ferry Operation.

Without exception, all answered that the ferry is accepted and even welcomed by the residents. Below are some quotes

from the Sealink Ostend-Dover/Folkestone lines
 in BELGIUM

"... These questions can best be answeres as follows: The Sealink lines Ostend-Dover/Folkestone are of great importance for the economy of Ostend in particular and the whole province of West Flanders as they employ ±3,000 people directly. It stands to reason that the prosperity of the seaside resorts and in particular of Ostend, is favorably influenced by the number of British tourists who arrive there, and that they constitute an important source of revenue for hotels, shops, pubs etc. in these areas...."

- from the Provinciale Stoombootdiensten in Zeeland in BELGIUM
- "... Both ferries form an important link for the non-residential traffic in the southwestern part of our country. They also have a commercial and industrial significance, even Belgium and North France. ..."
- from the Port Authority, city of Naantali in FINLAND
- "... no problems at all..."
- from the Port Authority, city of Turku in FINLAND
- "... employees of the terminal and ferry companies are living in the city..."
- from the Port Authority, city of Helsinki in FINLAND
- "...The Port of Helsinki is situated in the capital of Finland and it serves the most densely populated area. The emphasis of the structure of the economic life is in the trade and service. ..."
- from the Finnmark Fylkesrederi og Ruteselskap in NORWAY

" There forms stations are accepted as no

- "... These ferry stations are accepted as part of the areas facilities of urban development. ..."
- from Møre og Romsdal Fylkesbåtar in NORWAY
- "... The residents accept ferry communications, and thus the terminals, as a necessity for the function of our society. Of course there may be some traffic problems involved when the terminals are located close to the community centers, so we try to avoid that now when new terminals are planned. ..."
- from the Caledonian MacBrayne Limited in Mallaig,

Invesness-shire in SCOTLAND

- "...The terminal is accepted very well by the residents since tourism contributes greatly to the economy of the village. ..."
- "... Local acceptance is good terminals generate business for local shops. ..."

- from the Shetland Islands Council in SCOTLAND
- "... The terminals are regarded as essential parts of the islands economy, and provide a valuable commercial, industrial and social service. ..."
- from Lion Ferry AB in SWEDEN
- "... We have not noticed any negative reactions from residents to our terminals, not even in Hamburg where the distance from the nearest residential area to the terminal is less than 1/4 mile. It should be borne in mind, however, that all terminals are located in cities where shipping and activities relative to shipping have been taken for granted for centuries."

Question D. Resident involvement. In a few of the terminals the ferry operation generates direct employment with the ferry companies.

Question E. Image. (See Photographs 4, 5, 6, 7)

Most of the answers indicated the terminals had a commercial image. However, those terminals which were considered essential for the local urban structure are looked upon as more of an extension of the local roads and highways, a form of basic transportation.

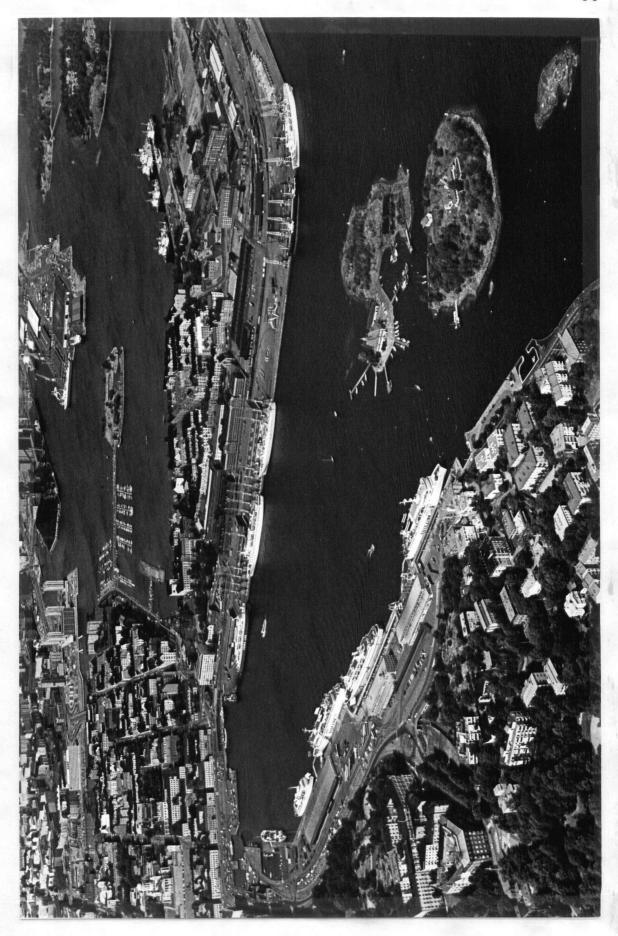
4.2.4 Conclusions

- 1. B.C. Ferries' patrons are capable of supporting a larger business community. With an improved business mix, appealing to ferry users, this patronage could benefit the local economy.
- 2. Horseshoe Bay's residential community is far younger than the residential communities around the ferry terminals in Europe. With time the residents in Horseshoe Bay who resent the ferry operation may

Photographs 4, 5. Ferry Terminal at Turku, Finland









Photograph 7. Ferry Terminal at City of Naantali, Finland (View 2)

change their attitude and see the ferry terminal as part of the community structure.

Element B

4.3 Comparative Study of Horseshoe Bay and Deep Cove (See Maps 9, 10)

4.3.1 Introduction

A comparison of two communities serves as a check list helping to provide a better understanding of different developments. Deep Cove was chosen for the comparison with Horseshoe Bay because of the similarities in their physical features and history.

4.3.2 Physical Comparisons

- Both sites are located in sheltered bays
- Both have similar topography with a mixture of gentle and very steep slopes
- Both climates have more annual precipitation than Vancouver: Mean total precipitation* -

Horseshoe Bay

74.38 inches

Deep Cove

70.49 inches

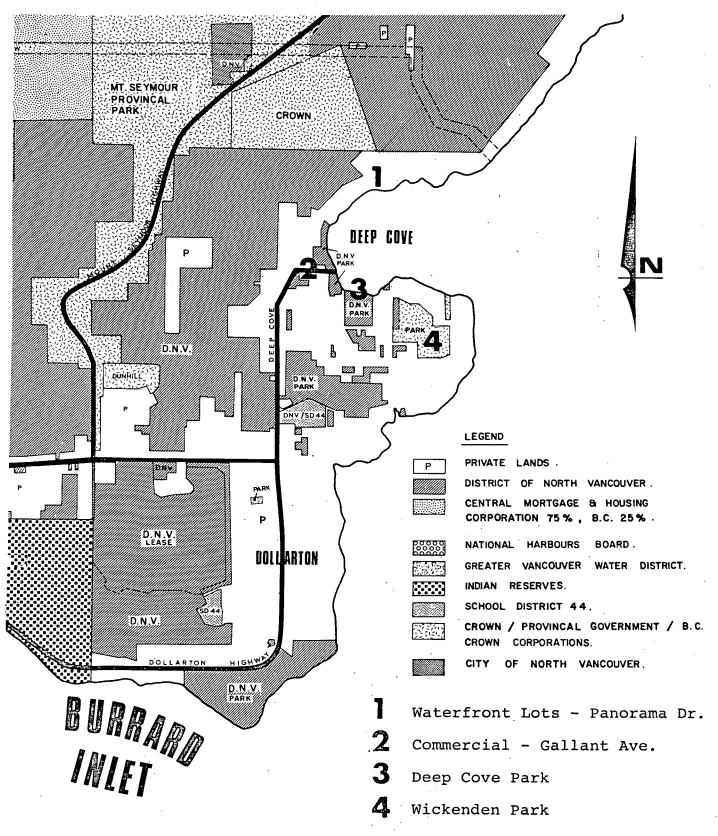
Vancouver

60.51 inches

- Both have difficulties with sun exposure because

Atmospheric Environment Service, Department of the Environment, Canada, Temperature and Precipitation, 1941-1970, British Columbia.

Map 9. Deep Cove



Map 10. Horseshoe Bay



of the orientation and adjacent terrain: Horseshoe Bay has a northern exposure; Deep Cove has an eastern exposure.

4.3.3 Historical and Social Comparisons

- Both communities were settled around the beginning of this century
- The development of both places was initiated by logging operations
- Expansion of building developments and population came with eventual road construction and improved access
- The Depression era of the 1930s brought an influx of new residents to both communities. People were attracted by the lower land values, rents and taxes
- Both communities developed along parallel paths until the Black Ball Ferries operation was introduced to Horseshoe Bay in 1951.

Today, however, the two communities differ in their social, economic and political makeup. The following table (Table 2) contrasts the two communities according to some basic characteristics.

The social comparison table shows that Deep Cove has a higher percentage of residents with university degrees and a higher income level than residents of Horseshoe Bay.

About 34% of Horseshoe Bay's residents work within their

Table 2 Social Comparison of Horseshoe Bay and Deep Cove

Characteristics	Horseshoe Bay	Deep Cove				
Population	635	1,975				
% without university degree	95.2 %	65.3 %				
Average family income	\$ 10,345.	\$ 12,395.				
Aggregate income \$	1,769,785.	\$ 6,609,978.				
Location of employment	35 % out of town	most out of town				
Residence: 1974*						
% owner occupied 38%	75 %	82 %				
% rental 62%	25 %	17 %				
Length of residence (%)						
under one year	27 %	12.5 %				
1-4 years	24 %	34.4 %				
5-10 years	21 %	28.1 %				
10-20 years	18 %	12.5 %				
over 20 years	10 %	12.5 %				
% Aged 65 years and over	11.8 %	5.5 %				

SOURCE: B.C. Statistics, Census of Population, 1971

^{*}Information supplied by the Municipality of West Vancouver.

own community while the majority of the labour force in Deep Cove is employed outside their community.

In addition to these figures, information from interviews and local community papers suggests the residents of Horseshoe Bay would like to see more local work opportunities available for them, while the residents of Deep Cove would like to discourage commercial development, the result of which would be fewer work opportunities within their community.

Horseshoe Bay has a higher percentage of rental dwellings than Deep Cove. This fact, plus the social difficulties Horseshoe Bay's residential community experiences, indicate the basic differences in the social makeup of the two communities today.

Almost half of Horseshoe Bay's residents do not live in the Bay Area longer than two to four years. In Deep Cove, however, the proportion of long-term residents is larger. This factor contributed to the greater stability and continuity of Deep Cove's community.

4.3.4 Economic Comparisons

4.3.4.1 Introduction

A description of comparative land values, ownership patterns and a profile of commercial services follows.

First, we shall consider values of commercial and residential properties which have been separately assessed by

a real estate source and the Assessment Authority of B.C.

4.3.4.2 Comparative Land Values

Commercial properties

The cost of commercial land is directly related to the volume of business and subsequent commercial income.

According to real estate sources the value of commercial properties is higher by 50 - 63 per cent in Horseshoe Bay than in Deep Cove. An exception is the case of the Savory Restaurant in Deep Cove, compared with Troll's Restaurant in Horseshoe Bay. Troll's is valued only about 28 per cent higher than the Savory.

No values were obtained from the Assessment Authority because of the reluctance of people there to cooperate.

Residential properties

The residential properties are divided into three categories: land on the waterfront; land with a view but not on the waterfront; land not on the waterfront and without a view.

No waterfront lot in Horseshoe Bay was available for comparison. Instead, a lot from Copper Cove - an adjacent area - was selected for comparison. Copper Cove is situated on the western peninsula of Horseshoe Bay, between Horseshoe Bay and Whytecliff Park.

A. Waterfront lots

- according to the real estate source, waterfront lots

are valued 17% higher per front foot in Deep Cove than in Copper Cove.

- according to the Assessment Authority, some lots in Deep Cove are valued 50% higher per front foot than in Copper Cove.
- B. No waterfront, with view
 - according to the real estate source, lots in Deep Cove are valued 25% higher than in Horseshoe Bay.
 - the Assessment Authority valued Deep Cove lots at only 0.6% higher than lots in Horseshoe Bay.
- C. No waterfront, no view
 - real estate sources valued Deep Cove lots about 3% higher than lots in the Bay Area.
 - the Assessment Authority surprisingly valued lots in the Bay Area 25% higher than in Deep Cove.

The conflict between the values given by real estate sources and the Assessment Authority of B.C. can be explained by the fact that the Assessment Authority's valuations are usually lower than the current market value which real estate sources quote.

Analysis

The results of the land values comparison were not surprising. It was expected that commercial land values in Horseshoe Bay would be much higher than Deep Cove since the volume of people coming to the Bay is much greater than in Deep Cove. Because of the greater commercial potential in

Horseshoe Bay, business speculation contributes to increase land values, while commercial development in Deep Cove is restricted almost completely to residential services. In addition, the local residents' deep antipathy towards commercial speculation and development is an obvious deterrent to expansion of this sector.

The combination of high potential for commercial development in Horseshoe Bay and the current restrictions of the Municipality of West Vancouver on such development has prompted residents with property holdings near the business area in Horseshoe Bay to hold on to these properties until zoning changes allow them to develop commercially. Meanwhile, these held-back properties are neglected and are used as parking lots, junkyards or rented out to transients who are attracted by the low rents. The relatively high values placed on these properties do not make them feasible for residential development, and certainly they are not available to the lower-income group of people who come to the Bay Area. The only prospects who can afford to buy these properties are business people who would like to develop them in the event of changes to commercial zoning.

To resolve the phenomena of speculation and help the community of Horseshoe Bay to remain a residential community, it is important to recognize the existing commercial pressure there. West Vancouver Municipality must rethink the status of Horseshoe Bay. The Horseshoe Bay of yesterday is

not the Horseshoe Bay of today, and in order to make the Horseshoe Bay of today an attractive resource for the residents, visitors and ferry users, it is important to consider the future development possibilities.

4.3.4.3 Ownership Patterns

In both communities, most of the land is privately owned. In both communities, it is desirable to leave as much of the waterfront open to the public as possible. In Horseshoe Bay, part of the waterfront is a public park under the authority of the West Vancouver Municipality. In Deep Cove, as well, part of the waterfront remains under the authority of the District of North Vancouver for public park land.

An important distinction lies in the number of different authorities which control water access and waterfront land in Horseshoe Bay, none of which operate in Deep Cove. Following is a list of these controlling authorities:

Under provincial government jurisdiction:

- B.C. Railway
- B.C. Ferries Corporation
- B.C. Telephone Company

Under federal government jurisdiction:

The harbour area, under the National Harbour Act.

Analysis

As a result of the many different authorities involved in Horseshoe Bay, the situation becomes more complex and sensitive regarding potential changes or decisionmaking by any one of the authorities listed.

In Deep Cove, there is a direct connection between the residents and the governing authority, i.e., the District of North Vancouver. Therefore, negotiations are simpler, the route of action more direct and more effective. Citizen action can be effectively focussed in Deep Cove.

On the other hand, in Horseshoe Bay local residents are removed from direct contact with higher authorities and have to use the West Vancouver Municipality as a go-between adding another bureaucratic layer to filter local opinion. This appears to be an additional problem because, for the present, relations between the Municipality of West Vancouver and the local residents of Horseshoe Bay are strained. This situation will be discussed in a later section.

4.3.4.4 Profile of Community Services

This profile is divided into five categories:

commercial services, professional services, government

services; recreational facilities; and community services.

(See Table 3.)

The results of the comparison of different services between Horseshoe Bay and Deep Cove are surprising, since one would expect to see more services in Horseshoe Bay, particularly more commercial services. (See Table 4.)

Instead, Horseshoe Bay keeps a relatively low profile of

Table 3 Commercial Services

Horseshoe Bay	Deep Cove		
1 food market	1 grocery		
l bakery	l butcher		
l sundries store	l variety store		
1 laundromat	l laundromat		
l gift shop	l drugstore		
l book store	l beauty parlour		
2 antique stores	l dog parlour		
2 restaurants	1 coffee-tea shop		
l pub	l restaurant		
l motel	l fast food store		
l bank	l health food store		
l travel agent	l insurance office		
l real estate agent	l gas station		
2 garages	•		

NOTE: There are two new commercial buildings under construction in Horseshoe Bay which will add about 21,000 square feet of commercial space.

commercial services. This low profile is due to the reluctance of the West Vancouver Municipality to allow an expansion of the existing commercial core.

4.3.4.5 Conclusions

The two communities started out on similar paths but have developed different characteristics. One became a bedroom community, while the other became a transportation

Table 4 Professional, Government, Recreational and Community Services

Horseshoe Bay

Deep Cove

Professional Services

2 architectural offices

1 dentist

1 doctor

1 lawyer

Government Services

fisheries and marine service none

B.C. Ferries Corporation

Recreational Facilities

public beach

Panorama Park swimming beach

private marina

Deep Cove yacht and

Horseshoe Bay boat rentals

sports club

Deep Cove canoe rentals

Deep Cove marina - moorage, gas, repairs

Community Services

community hall

community hall

Deep Cove library

3 churches

node, an important tourist attraction with the potential for a growing business sector.

4.3.5 Comparisons of community groups

4.3.5.1 Introduction

This section looks at Horseshoe Bay and Deep Cove in the area of community action. The different community organizations and interest groups are identified, their attitudes towards development are discussed, and finally, the processes of change taking place in each community are considered.

4.3.5.2 Local Community Organizations: Horseshoe Bay and Deep Cove

Horseshoe Bay's Community Association

Horseshoe Bay elects five representatives to its Community Association and seven representatives to the Merchants' Association.

On the average, about thirty Horseshoe Bay residents take active part in the Community Association, but they do not appear to represent a true cross-section of the residential community. The people who support development oriented towards attracting visitors and tourists to Horseshoe Bay apparently do not participate in these meetings.

The Community Association supports development, not necessarily only commercial development, - in a general
way as long as the members are given an opportunity to express an opinion and provide input into the projects built
within the community.

The Association is aware of the commercial pressure for development in the Bay Area and would like to restrict it.

The residents of Horseshoe Bay do not have faith in the Community Association and, in turn, the Community Association is aware that it has lost its credibility. The reason for this is that the Community Association has not been effective in its dealings with the West Vancouver Municipality.

Residents of Horseshoe Bay complain that they are neglected by the Municipality. In turn, a planner for the West Vancouver Municipality states that Horseshoe Bay is the only community where so many plans and studies have been conducted. He blames the residents for not "getting their act together." There is no clear consensus of community opinion. The Municipality's Planning Department recognizes the fact that Horseshoe Bay is a difficult area to deal with because of the involvement of the Federal and Provincial Governments' interests there.

West Vancouver Municipality is powerless to effect a good solution in Horseshoe Bay. In a sense it has a negative influence on the development of Horseshoe Bay because it appears not to have adhered to an overall plan. In various studies, the Municipality recognized the relatively high volume of business activity in the Bay Area, but the official policy has limited commercial development

to local residential needs only. This appears to be a contradiction.

Two new developments are under construction in Horseshoe Bay. Both are commercial and contain about 21,000 sq. ft. of space. In certain cases it appears the Municipality will issue a development permit. The justification for granting a development permit in this instance was that Horseshoe Bay is growing and serving a larger area now, - Lion's Bay and the western end of West Vancouver.

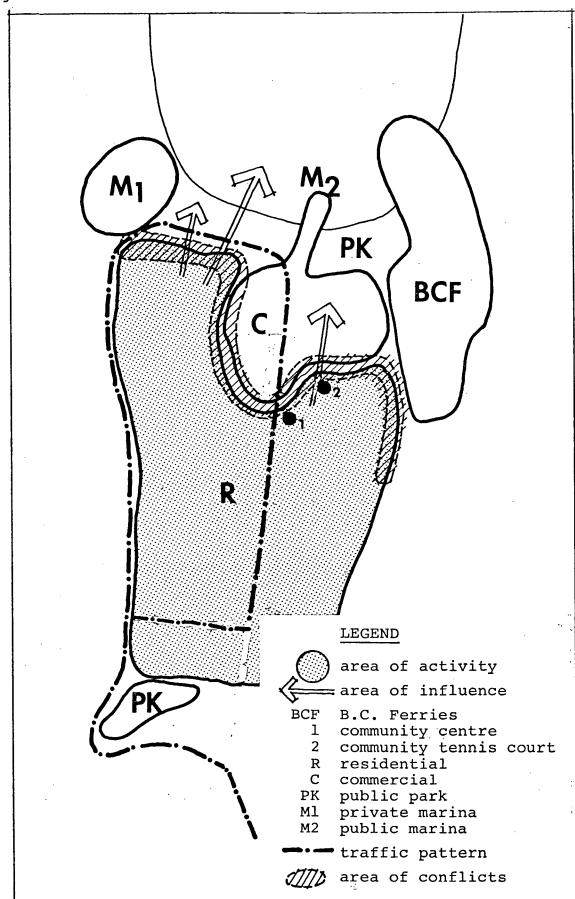
While the Municipality is relatively strict with commercial development, it appears to look the other way when residential lots are turned into parking lots and junkyards for old cars. When it came to the development of the Senior Citizen's project, the West Vancouver Municipality did not appear to follow its guidelines. The building does not appear to conform esthetically either to the local architecture or the village atmosphere which the Municipality has emphasized numerous times in its planning studies. In short, the design policy taken by the West Vancouver Municipality towards Horseshoe Bay is confused.

The Community Association would like to cooperate and interact with the Merchants' Association to a greater extent, but so far this has not happened because of residents' suspicions about potential conflicts of interest.

Horseshoe Bay's Merchants Association (See Drawing 1)

The local Merchants Association is considered a weak

Drawing 1. Residential Activities



organization. The most successful merchant, the owner of Troll's Restaurant, does not participate in its activities because of the wide gap between the scale of his operation and that of the rest of the merchants. However, he is ready to support the Merchants Association in matters where it serves the same interests.

The merchants support commercial growth and would like to see the tourists and visitors encouraged to come to Horseshoe Bay, since their livelihood depends on it.

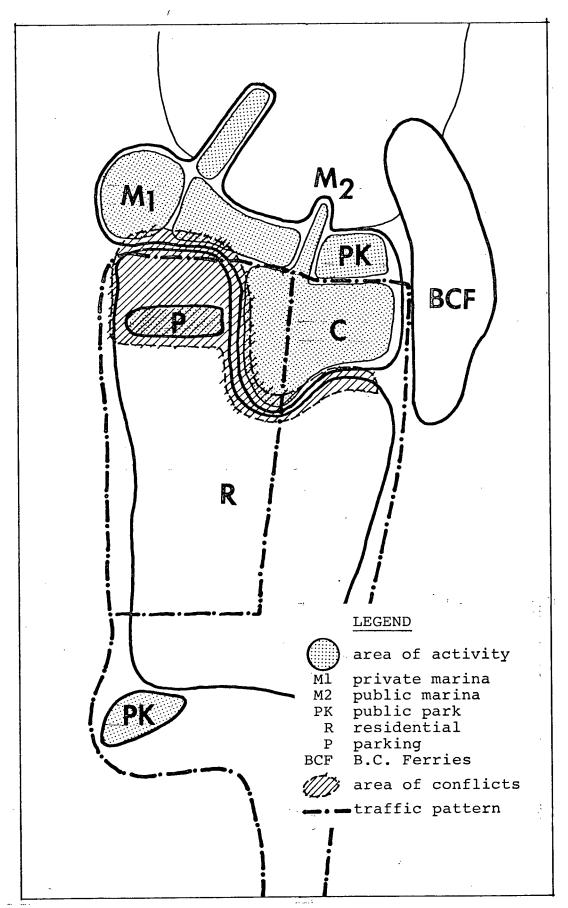
4.3.5.3 Various interest groups of Horseshoe Bay

The various groups in Horseshoe Bay are: the local residents (See Drawing 1), the visitors (See Drawing 2), the ferry users (See Drawing 3) and the local business community (See Drawing 4). These groups differ in their interests and their range of activities, but they do all share one common interest, which is shopping and dining in the commercial core of Horseshoe Bay.

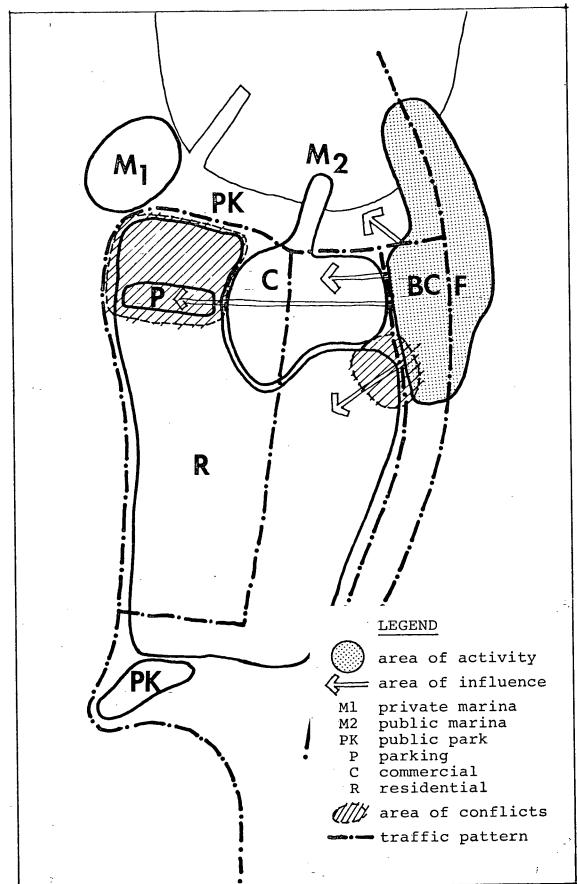
The local residents would like:

- A. to keep the image of their community and
- B. fight any expansion of B.C. Ferries' land use.
- C. They are divided in their opinion about commerical development; some would like to see commercial expansion and some not.
- D. They express resentment towards the invasion of ferry users and visitors into the privacy of their community.

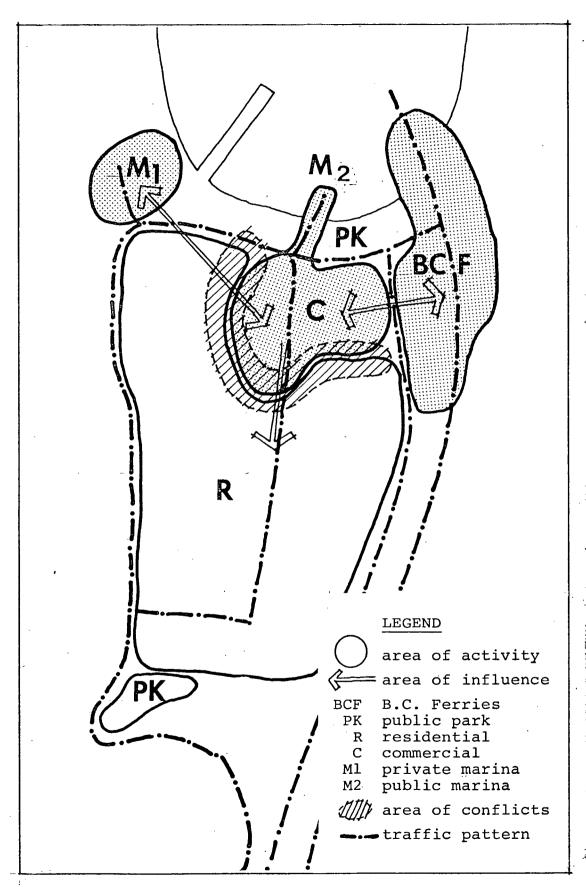
Drawing 2. Visitors' Activities



Drawing 3. Ferry users' Activities



Drawing 4. Commercial Activity



The visitors to Horseshoe Bay are the fishermen, the neighbours and those who are attracted to the beautiful scenery and good food. All of them enjoy the vehicle access to the commercial area and would object to any changes that discouraged them from using their cars as a means of transportation.

The ferry users differ in their range of activities.

This is influenced by the time they can spend in Horseshoe

Bay. Since the time ranges from a few minutes to several hours, they would like fast food service, some entertainment or even an accomodation when waiting hours are long and the last ship was just missed. This is a group who would make use of an attractive commercial core.

Workers as an Interest Group

According to the 1971 Census,* there are about 310 people in the labour force who also live in Horseshoe Bay. About 50 Horseshoe Bay residents work for different stores in the area; about 60 residents work for the B.C. Ferries. About 35.6 per cent of the labour force in Horseshoe Bay works within the community.

From the "Troll's" Survey (see Section 4.4), there were at least 50 people working in Horseshoe Bay who lived outside the area.

Ôp. cit.

Most of the workers who work and live in Horseshoe
Bay are dependent on seasonal demand. They would like to
see more stability in the source of their income. Some of
them have a conflict between their wishes to see Horseshoe
Bay remain a pleasant place to live and their desire to increase their income as workers. For a steadily growing income, more people would need to be attracted to visit the
Bay Area.

From interviews with workers who live and work in Horseshoe Bay for short periods and are considered transients, there is no attachment to Horseshoe Bay as a community. They consider it strictly a source of income. The other type of worker sees Horseshoe Bay as his home and by working there, he feels he contributes to the community.

Professionals in Horseshoe Bay.

There is a medical office in Horseshoe Bay with a doctor who does not reside there. Two architects live in Horseshoe Bay. One has an active office which is supported by local projects and commissions for work on the smaller islands like Saltspring and Bowen Island. The other architect is retired but remains very active as a developer and owns some land in Horseshoe Bay.

Two two architects represent the two extreme attitudes towards development in Horseshoe Bay. The retired architect would like to see the area grow and become an important tourist and recreation attraction in B.C. In his opinion,

Horseshoe Bay is no longer simply a suburb of the West Vancouver Municipality but an important transportation node for B.C. He believes a small community of only 675 people should understand that the place they live in belongs not only to them but also to a much larger community, that of the Province of B.C. In his view, the priorities of planning should be approached from this larger perspective. He sees great potential for the volumes of people traveling through Horseshoe Bay as a good income source which would benefit the local residents. He states that those who do not want to face the reality of Horseshoe Bay's potential should leave and make room for those who would like to be part of the Bay Area's future.

The other architect who has a practice in the Bay Area is one of the most outstanding leaders of the community. He is known for his activities in the past to prevent any development that would contribute to expand either the commercial district or B.C. Ferries' services. (Today, however, he is the designer of a project sponsored by one of the most important businessmen in Horseshoe Bay which will add 17,000 sq. ft. of commercial space.) Basically, his main intention is to protect the village atmosphere of Horseshoe Bay.

Deep Cove

In Deep Cove the situation is simpler than that of
Horseshoe Bay and not so fraught with complications. The
elected representatives are supported strongly by the local

community. The Community Association has the strength to influence the District of North Vancouver and has better control over matters related to its area.

The community in Deep Cove is working together effectively to react against the North Vancouver District's plans for their neighbourhood. The Deep Cove community, represented by the "Seymour Planning Association", presented a plan of its own to the North Vancouver District, which contributed greatly to make clear to the District Planning Department the desires and requirements which Deep Cove residents feel are important. The District of North Vancouver took the Association's recommendations into consideration and few planning changes were initiated, especially in zoning. The Community Association is supported by the local businessmen who do not see any conflict between the community interests and their own.

The most important business attraction in Deep Cove is the Savory Restaurant. Its owner lives in Deep Cove and describes his restaurant in an intimate way which shows the restaurant to be very much a part of the local scene. The owner of the Savory has a steady clientele, year-round, with a small increase of people coming in the summertime. In his words, "People come to me because they've heard of the restaurant's reputation, not from the road."

The local marina is, in fact, a yacht club, most of whose members are families living in Deep Cove. This situation contrasts with Horseshoe Bay, where very few residents

use the local marina.

The number of visitors to Deep Cove can easily be absorbed by the community. Most of the labour force of Deep Cove work outside their community; it is essentially a bedroom community.

The only contentious situation in Deep Cove is created by a new group of people who are considered to be among the highest income group in Vancouver. They buy properties along Panorama Drive near the waterfront. The fear is that they will disturb the social and economic balance which the community has enjoyed until now. Deep Cove, unlike Horseshoe Bay, attracts residents from higher income levels to its community.

4.3.6 Conclusions (See Diagram 2)

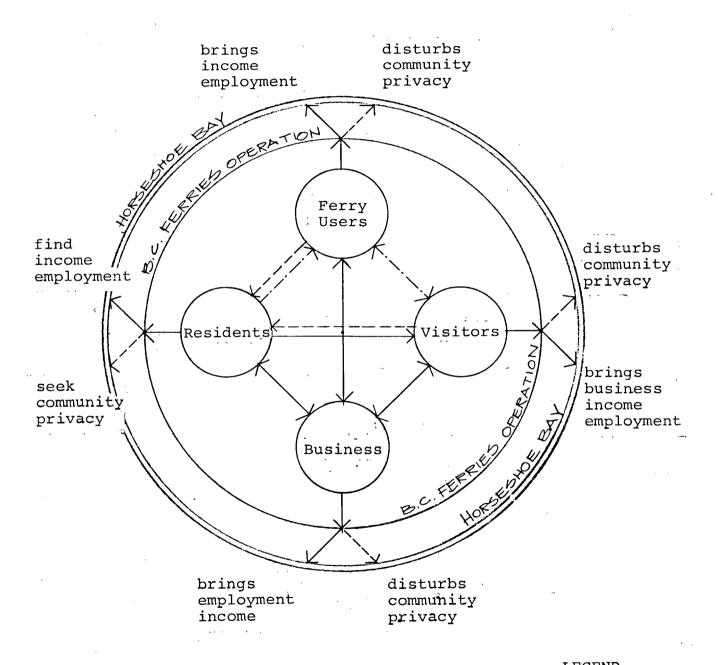
The above comparisons contribute to the understanding of Horseshoe Bay as a unique place in a unique situation.

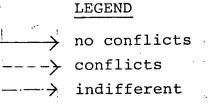
The question that continues to be asked is: why did Horseshoe Bay develop so differently from Deep Cove?

The primary answer lies in the geographical location of both communities. Horseshoe Bay is located strategically at a most convenient site. It is the shortest route between Vancouver Island and the Lower Mainland; it is also protected and sheltered from the ocean.

The timing of other developments on the North Shore diverted the focal interest for water transportation developments to Horseshoe Bay. Any other option to develop a

Diagram 2. Interactions of the Various Interest Groups within the Environment of Horseshoe Bay





ferry terminal on the Lower Mainland failed mostly because of social and technical problems, such as: no natural sheltered water.

Among the other options for a terminal, Tsawwassen was not yet connected by the tunnel. Steveston is a fishing community, and any operation on such a scale as the ferry system would have destroyed its life style. Since Horseshoe Bay was already engaged in water transportation, it was very convenient for the different developers to simply expand its terminal.

Deep Cove, on the other hand, is located on the Fraser River on Indian Arm. It is not located on any major highways and is considered by many people to be the end of the road, - a place to hide in nature. If any development were to take place on Indian Arm in the future, Deep Cove has the potential to become a springboard for those who would need to use water transportation. But it is very hard to foresee another ferry operation on a scale as large as that in Horseshoe Bay.

Element C

4.4 The Pilot Survey Conducted at "Troll's"

4.4.1 Introduction

Since there were no prior studies which could provide information about the different groups of people coming into Horseshoe Bay and their reasons for doing so, it was necessary to conduct an interview survey in Horseshoe Bay. There

was no convenient stopping place in the traffic flow where it would be possible to interview people before they split into different areas and functions in the Bay Area. It appeared best to approach people gathered in a major attraction centre such as Troll's Restaurant.

Questionnaires were distributed to people who came into the restaurant. The information was gathered during two typical non-summer days. During the summer season, presumably there would be a higher percentage of respondents for each group of outsiders.

The first day of questioning was Thursday, December 14, 1978, from 9 a.m. until 5 p.m. The second day was Sunday, December 17, 1978, between 11 a.m. and 4 p.m. Since the restaurant closes every day, including the weekend, by 8 p.m., these hours seemed optimal for interviewing. The majority of people come into the restaurant during the daytime. Thursday was chosen because it is a typical mid-week working day; Sunday, because it is a day on the weekend. People who come in and out of Horseshoe Bay during the week do so for different reasons than those who come on the weekend. It was therefore advantageous to conduct surveys on both days. In addition, Thursday is approaching and Sunday is on the weekend, when traffic through Horseshoe Bay to and from the Islands increases.

4.4.2 The Objectives

The objectives of the survey were to discover who

comes to Horseshoe Bay and why. Specifically:

- A. Who are the people that come to Horseshoe Bay?

 How many?
- B. For what reason?
- C. Where do they come from?
- D. How long do they stay or intend to stay?

4.4.3 Limitations of the survey

There are certain limitations to conducting a survey: an inadequate budget, the number of people available to ask questions, and the variability in sample size because of the time of the year. This survey should be considered a pilot and used primarily as an indicator.

4.4.4 The Questionnaire

642 questionnaires were given to various people and 638 were returned with answers. Four people did not wish to participate. Appendix I is a copy of the questionnaire.

For the participant it was possible to provide more than one answer to each question; for example, the combination of shopping in Horseshoe Bay and using the ferries might be possible answers to the same question.

4.4.5 The Results

The results of the survey questions are as follows:

- 1. Why are you in Horseshoe Bay?
 - a. 167 people were using the ferry.

- b. 452 people were categorized as visitors.
- Where do you live?
 - a. 449 people live in the Lower Mainland.
 - b. 61 people live in Horseshoe Bay.
 - c. 49 people live on Vancouver Island.
 - d. 29 people live outside of Canada.
 - e. 18 people live in the Interior of British Columbia.
 - f. 15 people live in another Province of Canada.
- 3. How long will you stay in Horseshoe Bay?
 - a. 495 people were staying for a few hours or less.
 - b. 9 people were staying for one day.
 - c. 1 person was staying for one day and one night.
 - d. 1 person was staying for five days.
- 4. What do you like in Horseshoe Bay?
 - a. 380 people liked the scenery/view (mountains, ships,
 - ocean, sea smell, ferries and sea gulls, etc.).
 - b. 223 liked the food (Troll's Restaurant).
 - its atmosphere (small shops, old-fashioned, quaint).
 - d. 70 people liked the recreational facilities (fishing, diving, marina, boating).
 - e. 49 people liked the friendly people of Horseshoe Bay (hospitality).
 - f. 42 people liked the quiet and peacefulness of the area (an escape from the city).
 - g. 29 people liked the local pub.
 - h. 24 people liked the convenient location of Horseshoe

Bay to the ferries, highway and their homes.

- i. 21 people liked the waitresses at Troll's Restaurant.
- j. 16 people liked everything in Horseshoe Bay.
- k. 13 people did not like a thing in Horseshoe Bay (of these, 10 people lived in Horseshoe Bay and 3 people worked there).
- 1. 7 people liked the drive to Horseshoe Bay.
- m. 5 people liked the ferry service.
- n. 3 people liked the public services (park and water access).

As mentioned earlier, people could give more than one answer to a question; therefore, the total number of answers to a question do not necessarily match the number of questionnaires returned.

4.4.6 Applications of the Data

Calculation of the number of ferry users that dine at Troll's Restaurant annually

In order to calculate the above, it was necessary to obtain from B.C. Ferries Corporation statistical data for the year 1978 that indicate the total number of ferry passengers leaving Horseshoe Bay and the monthly breakdown of the total number of ferry passengers. The two sources of information made it possible to estimate the percentage of summery ferry passengers that come to Troll's Restaurant.

However, it does not permit an accurate estimation of the number of people who do not patronize Troll's Restaurant but still visit the business area, particularly in the summer when the weather allows more outdoor activities. The overall estimate, therefore, is an approximation. (Table 5.)

In the following calculations, the month of December is used as an indicator since it was the month in which the survey was conducted. The other months of the year have higher or lower percentages of ferry users. The increase or decrease in the percentage of the total number of ferry passengers each month leaving from Horseshoe Bay approximates the number of ferry passengers that might come into the business area monthly. From this, one can obtain an annual figure for the total number of ferry passengers that come into the business area. Accordingly, it is assumed that the visitors to Horseshoe Bay would follow the same pattern.

Following are the data and calculations:

167 people in the survey at Troll's Restaurant were ferry users. They composed 26% of the total number of customers at Troll's Restaurant per day.

2,261,812 people left Horseshoe Bay by ferry in 1973 for Vancouver Island, Bowen Island and the Sunshine Coast.

Out of 68,073 estimated ferry users that patronized Troll's Restaurant, 31,219 people traveled during the summer season (June-September). This number constitutes about 45% of the total number of ferry users that came to Troll's

Table 5 Estimated number of ferry passengers that dine at Troll's Restaurant, 1978

Month	Number of Ferry Users Leaving Horseshoe Bay	% of Growth Base: 1978- December	Estimated # of Ferry Users at Troll's by Mo.	Estimated # of Ferry Users at Troll's ea.Day	Estimated # Patrons (all sources)
Jan.	111,841	- 32.7	3,372	113	
Feb.	114,451	- 31.2	3,447	105	
Mar.	171,680	+ 3.1	5,165	172	
Apr.	157,220	- 5.5	4,735	158	
May	182,704	+ 9.7	5,495	183	
June	214,448	+ 28,8	6,452	215	
July	308,918	+ 85.6	9,298.	309	
Aug.	317,583	+ 90.8	9,559	318	
Sept.	196,325	+ 17.9	5,906	196	
Oct.	179,740	+ 7.9	5,405	180	
Nov.	140,474	- 15.6	4,229	141	
Dec.	166,428	0.0	5,010	167	
TOTALS	2,261,812	+ 13.2 (monthly average)	68,073	188 (daily average)	287,985

SOURCE: "Troll's" survey.

Restaurant in 1978. An estimated 36,854 people were using Troll's Restaurant during the rest of 1978 (January-May, October-December) or about 55% of the total number of ferry users who were also Troll's patrons. The summer season (four months) brought to Horseshoe Bay roughly the same amount of people which came during the rest of the year (eight months).

According to B.C. Ferries' information, in 1978, 2,261,812 ferry passengers left Horseshoe Bay on the way to Departure Bay, Bowen Island or the Sunshine Coast. That means that only 3% of the ferry passengers were dining at Troll's Restaurant and walking around the Bay Area.

Visitors: Those who Came to Horseshoe Bay Not for the Purpose of Using the Ferry

- 452 visitors at Troll's during the survey
- 13,560 visitors a month (during December, 1978)
- 108,480 visitors over eight-month period, 1978
- 108,000 visitors during four-month summer season
- 216,480 total number of visitors in 1978 who patronized
 Troll's Restaurant
 - 601 visitors on the average per day
 - 188 ferry users on the average per day
 - 789 total number of people per day on the average at

 Troll's Restaurant. This number comes very close to
 the number of customers Mr. Troll reported that he
 served each day

Visitors: Those Who Came to Horseshoe Bay from the Interior of B.C., another Province of Canada or Outside Canada

This group is included in the overall group of visitors. However, it is important to isolate their number from the rest for purposes of planning, because this group would potentially seek temporary accommodations in Horseshoe Bay.

outside visitors were surveyed at Troll's

1,800 visited during the month of December, 1978

14,880 visited during the eight-month period, 1978

14,880 visited during the four-month summer season, 1978

29,760 visited during the year 1978. This is an important estimate which might influence the availability of tourist accommodations in Horseshoe Bay. This group constitutes 9.1% of the total number of visitors coming to Horseshoe Bay.

The Total Number of Visitors that were Attracted to Horseshoe Bay in 1978

According to interviews with the owner, Sewell's marina attracts about 25,000 people a year, the majority of whom come during the summer. Horseshoe Bay boat rentals attracts about 5,000 people; these too are generally summer patrons. According to the owner, Troll's Restaurant attracts about 287,985 customers a year with about half visiting in the summer. The estimated total number of people that come into the Bay Area to use the recreational facilities and community services is 318,000, including the group of ferry users. Only 21.4% of

the people coming into the Bay Area are also ferry users; the majority of them are leaving Horseshoe Bay on the ferry.

4.5 Summary

The survey was used as an indicator. It helps to estimate the number of people that come into Horseshoe Bay and identify their different interests in the Bay Area.

Consequently, it provides a basis for estimating the number of ferry users that come into Horseshoe Bay to use its services and, therefore, provides some information about the impact of the ferry operation on Horseshoe Bay's commercial core.

4.6 Conclusions

The results were surprising. It was expected that a much higher percentage of the ferry users' group would use the facilities of Horseshoe Bay. Instead, this group is only 21.4% of the total number of visitors to Horseshoe Bay. This group has a significant impact on the local business economy; however, it is not as important as the group of visitors which does not use the ferry system. The latter are the majority of people that come into the business core for pleasure and recreational activities. Since only 3% of the total number of ferry users came into the Bay Area in 1978 to use services such as the restaurant, the future business potential could be enormous.

The majority of visitors to Horseshoe Bay spend from less than one hour to up to several hours. This is because most of

the people live short distances from Horseshoe Bay or are on their way to another destination.

The people who come from outside Canada, the Interior of B.C. or another Province in Canada possible provide a potential for planning future tourist accommodation in Horseshoe Bay. The business area attracts about 29,760 such people per year, or 13.7% of the total number of visitors that come into the Bay Area. (This percentage might be bigger since this estimation is based only on those who were using Troll's Restaurant.) Perhaps more residents of B.C. would also take advantage of overnight accommodations if they were available.

From people's answers to the question: "What do you like in Horseshoe Bay?", it was clear that the kind of image the visitors and ferry users had in mind was different from the image of those who live or work there. The image shared by visitors and ferry users was that of an old-fashioned, small town; a friendly, beautiful and peaceful place; a place to find an escape from the crowded city.

The majority of people who live or work in Horseshoe
Bay agreed with the visitors about the friendly atmosphere and
the attractive scenery. However, they see negative aspects
like noise, lack of privacy, too many outsiders, lack of housing
and permanent jobs. It should be mentioned that many of Horseshoe Bay's residents were attracted to this community because
of the kind of image that is projected to every visitor, but
reality is somewhat different when the transition is made from
visitor to resident.

With better, sensitive planning, Horseshoe Bay might be able to regain some privacy as a community, as well as privacy for its individuals. At the same time, the qualities and the images that Horseshoe Bay presents should be preserved and be emphasized in any realistic planning. That brings one to another possibility: that Horseshoe Bay could attract many people with or without the ferry operation. It is true that the "upper levels highway" brought many people into the Horseshoe Bay area, providing quick and easy access to the water. It should not be forgotten, however, that Horseshoe Bay, after the logging era at the beginning of this century, evolved into a recreation centre famous for its fishing, as well as a summer resort.

The fame of Horseshoe Bay attracted people from distant places to enjoy the recreation facilities the Bay offered. The long and difficult road did not prevent people from approaching Horseshoe Bay by boat and train. Clearly, Horseshoe Bay has the potential to become an important place for recreation in British Columbia.



CHAPTER 5. RESEARCH APPLICATION

5.1 Introduction

This chapter is divided into two sections. The first deals with the proposed design policy and its implications on the existing use patterns in Horseshoe Bay. The second section concentrates on the proposed plans for the Bay Area, implementing the design.

5.2 Design Policy: Its implications and recommended resolutions

5.2.1 Introduction

The following section deals with the four major factors in Horseshoe Bay:

- A. B.C. Ferries Corporation
- B. The residential community
- C. The business community
- D. The recreational facilities

Their problems are identified, the objectives are set and their implications are analyzed and evaluated. Recommendations are made for resolutions.

5.2.2 B.C. Ferries operation

The problems

- 1. As the ferries transport more people and cars, pressure grows to expand the operation.
- 2. There is a lack of developable land for expansion.

Data

The following tables (Tables 6, 7, 8) and graphs (Graphs 1, 2) show the pattern of growth of the B.C. Ferries operation in Horseshoe Bay. The information was obtained from the B.C. Ferries Corporation and covers the years from 1969 to 1979.

Projections

Table 9, immediately following the earlier mentioned tables and graphs, projects the estimated growth of Horseshoe Bay's ferry users by the year 2000, projecting recent average annual growth rates. The data is broken down for the three routes deaprting from Horseshoe Bay and shows the number of passengers and wehicles expected to depart from Horseshoe Bay's ferry terminal. The predicted growth was confirmed by Mr. Len Roueche, forcast analyst for the B.C. Ferries Corporation. (See Graph 3.)

Table	e 6 Horseshoe Bay - Departure Bay, One Way, 1969-1979						
	Year	Pa	assengers	% Growth	Vehicles	% Growth	
	1969		784,154	0.0	296,128	0.0	
	1970		873,524	11.3	327,248	10.5	
	1971		909,736	4.1	344,246	5.1	
	1972	. 1	,027,894	12.9	380,736	10.5	
	1973	1	,132,808	10.2	426,402	11.9	
	1974	1	,288,776	13.7	492,397	15.4	
	1975	1	,321,872	2.5	508,604	3.2	
	1976	1	,141,311	- 13.6	430,666	- 15.3	
	1977	1	,161,577	1.7	432,905	0.5	
	1978	1	,364,566	17.4	507,445	17.2	
	1979	1	,539,727	12.8	588,035	15.8	
Average growth per year		owth		7.3	•	7.4	

SOURCE: B.C. Ferries Corporation.

Graph 1. Growth Rate of Passengers and Vehicles,
Departure Bay - Horseshoe Bay, 1962-1979 (Both Ways)

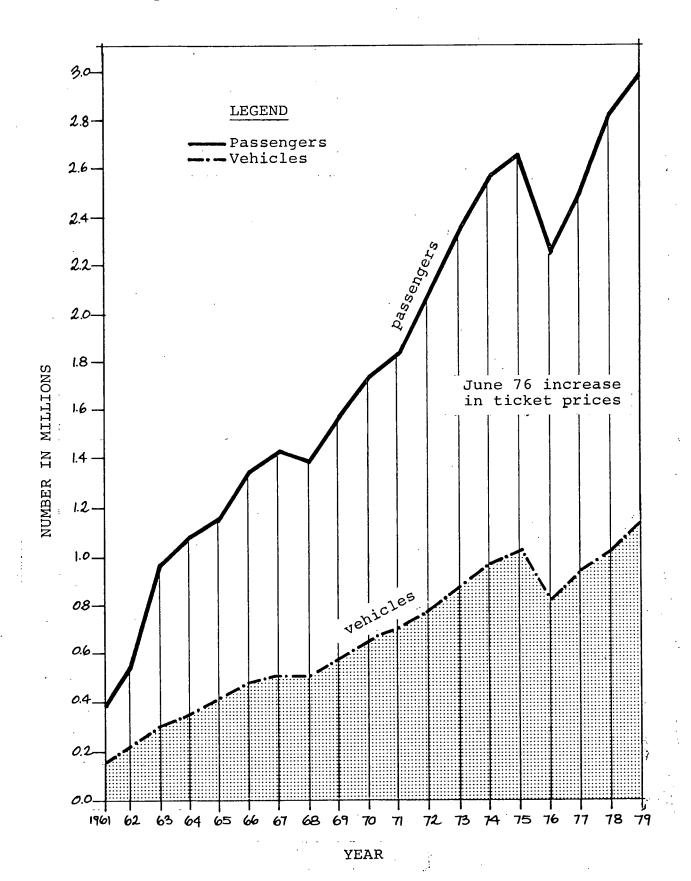


Table	7	Horseshoe Bay - Bowen Island, One Way, 1969-19					
	Year	Pa	ssengers	s % Growth	Vehicles	% Growth	
	1969		80,316	0.0	26,411	0.0	
	1970		96,079	19.6	34,044	28.9	
	1971		98,145	2.1	36,078	5.9	
	1972	1	18,991	21.2	42,412	2 17.5	
	1973	1	21,087	1.7	44,683	5.3	
	1974	1	40,445	15.9	54,28]	21.4	
	1975	1	53,832	9.5	62,652	2 15.4	
	1976	1	51,206	- 1.7	60,850	- 2.8	
	1977	1	52,012	0.5	64,448	5.9	
	19.78	.1	74,343	17.0	72,269	13.0	
	1979	1	.98,037	13,5	85,924	18.8	
Avera per y		owth		9.9		12.9	

SOURCE: B.C. Ferries Corporation.

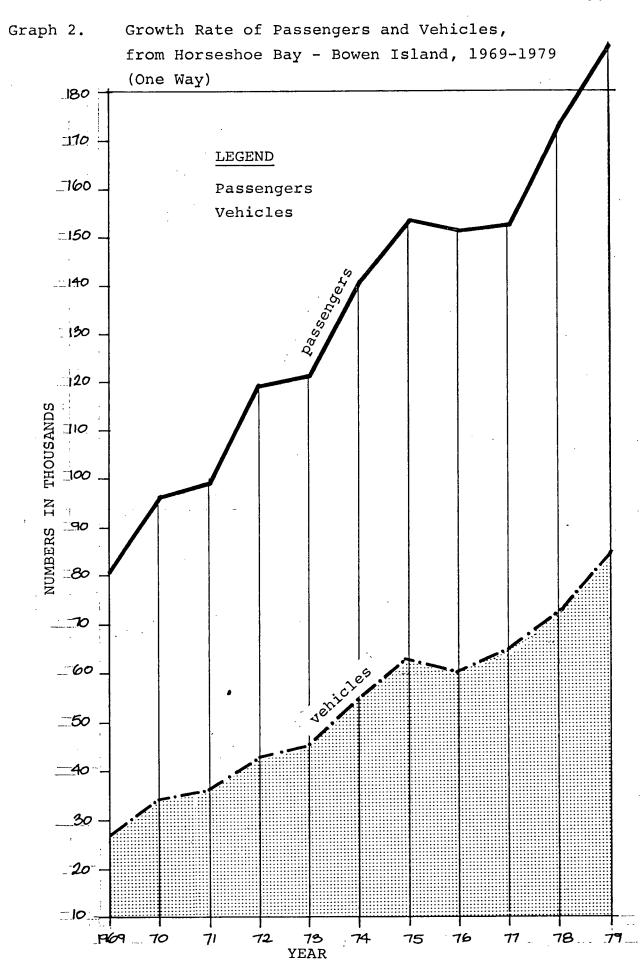


Table 8	Horseshoe Bay - Lan	gdale, One	Way, 1969-	1979
Year	Passengers	% Growth	Vehicles	% Growth
1969	378,699	0.0	152,273	0.0
1970	426,070	12.5	172,627	13.3
1971	450,143	5.6	186,074	7.7
1972	512,170	13.7	205,668	10.5
1973	563,879	10.0	231,426	12.5
1974	639,516	13.4	267,487	15.5
1975	681,626	6.5	291,560	8.9
1976	611,480	- 10.2	260,305	- 10.7
1977	612,591	0.1	255,746	- 1.7
1978	722,903	18.1	295,971	15.7
1979	789,008	9.1	, 333,202	12.5
Average gro	owth	7.8	•	8.4

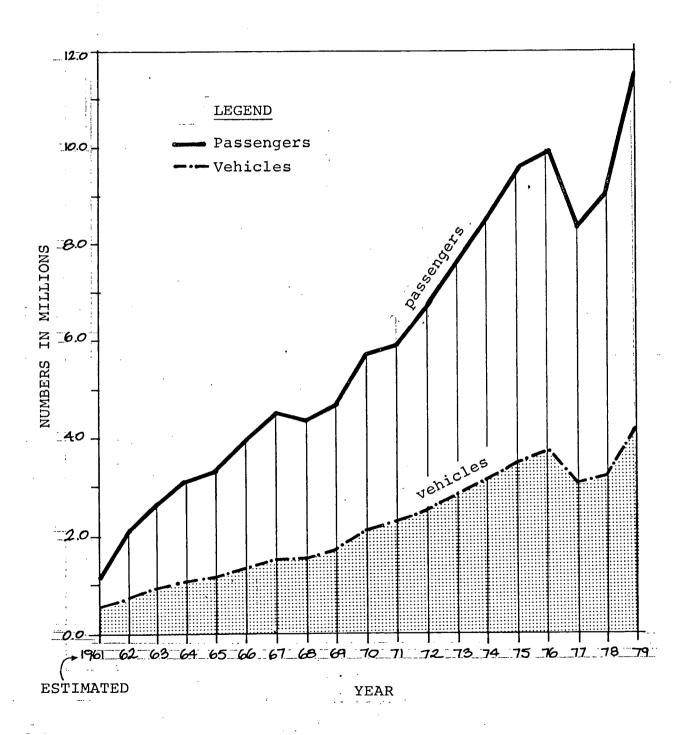
SOURCE: B.C. Ferries Corporation.

Table 9 Estimated growth of B.C. Ferries users by the year 2000

	number of passengers			number of vehicles		
Route	1979	average growth in % *	estimated 2000	1979	average growth in % *	estimated 2000
Horseshoe Bay - Departure Bay	1,539,727	7.3	3,900,128	588,035	7.4	1,501,841
Horseshoe Bay - Bowen Island	198,037	9.9	609,755	85,924	12.9	318,692
Horseshoe Bay - Langdale	789,008	7.8	2,081,403	333,202	8.4	920,970
TOTAL	2,526,772	8.3	6,930,935	1,007161	9.5	3,016,447

^{*}Average annual growth measured from 1969-1979.

Graph 3. Growth Rate of Passengers and Vehicles Using B.C. Ferries, 1962-1979



The goals

- A. Reduce traffic congestion, particularly during peak seasons.
 - Reduce the waiting periods for vehicles boarding the ferries, particularly during peak seasons.
- B. Discourage the number of cars boarding the ferries.

 Stabilize the number of vehicles in the parking lot.

 Provide a backup system in the form of other transportation modes.
- C. Accomodate the need for more parking spaces in the future for the growing number of ferry users and ferry employees.

Limit the demand for land consumption.

- D. Reduce congestion and confusion.

 Limit ferry users vehicles from encroaching on residential and commercial areas.
- E. Increase the loading capacity.

The resolutions

- A. Change to a reservation system.
- B. Encourage the use of public transportation. Provide an alternate, convenient transportation mode.
- C. Expand the existing parking lot.
- D. Separate traffic flows by activity, permitting limited access from ferry terminal to commercial area.
- E. Increase number of ships and their capacity. Increase sailing runs.

The physical implications of the resolutions

A. Reservation system:

- lanes for reserved cars
- lanes for 'standby' cars
- waiting space for one full boat-load of cars per sailing within the terminal area.

Horseshoe Bay's ferry terminal has a waiting-lane capacity for 610 cars inside the terminal and 600 cars outside the terminal. The largest capacity needed, if three boats were loading at once, is 590 car spaces. This means that there are sufficient car spaces for one sailing per route plus 610 more spaces outside the terminal in case of delays or emergency needs.

B. Public transportation

- convenient bus stops for the ferry users
- convenient baggage service for foot passengers, similar to Tsawwassen's ferry terminal or some air lines' service
- a possible link between the ferry terminal and train service from North Vancouver.

C. B.C. Ferries parking lot

- the existing parking lot is about 148,800 sq. ft. It contains 240 parking spaces, of which 100 spaces are reserved for B.C. Ferries employees, leaving only 140 spaces for the public
- the current parking area is inefficient in its layout and insufficient in the number of spaces

- In order to accomodate future need for parking by the year 2000 (see Table 9, Graph 3), it will be necessary to provide three times the amount of space existing today. However, the limited land available for parking and possible drastic future changes in transportation patterns should be taken into the design consideration.
- be times, particularly during the summer season, when the parking lot will not be able to accommodate the demand. In this case it is recommended that parking information be broadcast by the media (and on site), providing the public with the necessary warning as similar information is broadcast when parking lots are full along the beaches during the summer. This information will allow passengers the options of leaving the car behind and using public transportation, postponing travel, or diverting the travel route through Tsawwassen if possible.
- There are about 200 more parking spaces scattered around the Bay Area, including private residential parking lots and street parking.
- The standard space required for one car is 184 sq. ft.*
- The standard space required for one car + circulation space is 320-336 sq. ft.**

^{*}The Community Builders Handbook, Urban Land Institute, Washington, D.C., 1968.
**Ibid.

- Total area required for 1320 cars is 422,400 sq. ft.
- Since there are already 148,800 sq. ft. in the B.C. Ferries parking lot, there is need for an additional 273,600 sq. ft.
- The lack of developable land suggests the use of multilevel parking. But only 324,000 sq. ft. are recommended
 for this use in order not to overpower the Bay Area
 with a parking structure. According to the projections,
 this size will be sufficient for about 10 years, if
 existing conditions are unchanged. Other elements to
 be considered include: landscaping, pedestrian walks
 and access to the ferry waiting area.
- D. Separate traffic flows by activity, permitting limited access from ferry terminal to commercial area. More efficient use of existing land for terminal facilities.
 - There is a need to gather the different administrative activities in one building. Today offices are spread over the commercial core of Horseshoe Bay and all over the terminal. This is an inefficient use of space.

 According to B.C. Ferries, there is need for an additional 12,000 sq. ft. of office space today without taking into account space for expansion over the next 20 years. The expansion of office space for B.C. Ferries should be taken into consideration in the master plan.
 - In case the change to a reservation system is adopted, there should be room for a computer system.
 - There is a need to separate foot passenger activities

from traffic flow.

- There should be safe access for public observation.
- The existing restaurant, which is located in an inconvenient place and is very poorly designed, should be moved to a location which will be open to the public and provide a view of the water and approaching ships.
- The image of the terminal should be upgraded esthetically and incorporated into the overall design for Horseshoe Bay.
- E. Increase the number of ships and their capacity.

 Increase sailing runs.

The implications of these issues are concerned more with the modifications of sailing schedules and the purchase of additional ships. These changes have no significant implications for land use in Horseshoe Bay. However, in case of additional sailings, there will be need for more berthing facilities. There are alternative sites along the coast, other than Horseshoe Bay, which should be investigated.

5.2.3 The residential community

The problems

- Lack of community privacy
- Lack of developable residential land
- Increased demand for rental and housing units
- 4. A high percentage of turnover of residents
- 5. Noise of traffic and ships

6. Vandalism by visitors from outside the Horseshoe Bay community.

The goals

To recreate a well-defined and functional residential community: a place where its residents would be proud to live.

The resolutions

- A. Rebuild a sense of a residential community
- B. Develop housing and rental units.

The physical and social implications of the resolutions

- A. A sense of residential community
 - Redefine the boundaries of the residential community
 - Provide arterial streets sufficiently wide to facilitate a traffic bypass, instead of allowing traffic to pass through the community
 - Discourage visitors and ferry users from visiting the residential area through use of design elements.
- B. Housing and rental units

Dell State Comment

- In 1971 there were 635 people living in Horseshoe Bay:
 - 75% of the houses were owner-occupied
 - 25% of the houses were rented.
- In 1974 there were 675 people living in Horseshoe Bay:
 - 62% of the houses were owner-occupied

The population grew by 6.2% and the rental housing by 13%.

Today there are about 60 B.C. Ferries employees living in Horseshoe Bay. Some are management personnel, others are crew members. It was impossible to obtain any more explicit information about exact numbers for each group. Therefore, it was difficult to make any estimates for future demand for housing by B.C. Ferries employees. For planning purposes, a very rough estimate might support a growth of between 30-100 new employees who might seek housing accommodation in Horseshoe Bay. Among them would be families and single people. To accommodate this growth, it is assumed that rental units are preferred by singles, while families would choose both rental and owned housing.

The density in Horseshoe Bay varies from 8 housing units per acre to 16 units per acre. The 8 units per acre are single family houses on 50×122 ft. lots, while the 16 units per acre are duplexes, i.e., two housing units per lot (50×122) . The current policy of the West Vancouver Municipality is to maintain the existing densities in Horseshoe Bay.

In an information bulletin published by the Municipality of West Vancouver,* it was stated that the Municipality is aware of future population; growth and various economic and social needs. The population policy of West Vancouver Municipality is in line with the GVRD's policy of an estimated increase of 500 people per year. Today West Vancouver is below

^{*}Municipality of West Vancouver, <u>Information Bulletin</u>, Vol. 2 No. 4, October 1978.

this 500 per year increase.

Few of the statements that were published supported the intent of the study,

"... In remaining large undeveloped areas, encourage housing forms such as single family, cluster, town-houses, duplexes, cooperative and garden apartments, etc., which blend with surrounding green space, cause minimal drainage problems and are suitable for families.... The hardest hit are the young people who wish to start a family in the community in which they were raised...."*

Another intent of this study is to reintroduce residency in the commercial area, providing accommodations for singles and for those who would like to be close to the centre of activities. Since commercial activities are concentrated usually on the ground floor, other levels can be used for professional services and residency. This plan follows the zoning by-laws of West Vancouver Municipality which permit residency above commercial activities. The only contradiction might appear if the plan does not follow the 1-2 floor level which would restrict any developments exceeding that limit.

It is difficult to predict future population growth for Horseshoe Bay by analyzing the population growth in the past; the most important observation is that whatever housing accomodation was offered in the area was always filled. Today there are no empty houses and no vacancies for rent. The pressure for growth shows up in the increased number of households per house unit and the ongoing zoning changes from single family houses to duplexes. From interviews with residents and

^{*}Ibid.

officials of B.C. Ferries, it was learned that, if housing were available, more people would have settled in Horseshoe Bay. The type of people who would like to live in Horseshoe Bay are singles, young couples, and young families with one or two children. Their income level would range between \$10,000 and \$48,000 per year, which is considered the lower middle class. With today's housing prices and this low income, it would be almost impossible for a young couple to afford even a \$70,000 house without going deeply into debt.

Therefore, the estimation for the next 20 years for housing is as follows: maximum of about 60 dwelling units of differing size will be needed to accomodate B.C. Ferries employees. This number is based on additional ships that may be added during the period in order to accomodate the growth.

Each ship has a crew of about 34 people, of which only a certain percentage will choose to live in Horseshoe Bay. There will also be related growth in management personnel and terminal maintenance crews. The need for 60 dwellings is a very rough estimate. As mentioned before, there was no statistical information available on this matter from B.C. Ferries.

For non-employees of B.C. Ferries, future growth can be accomodated by building over the highway lanes as an extension of the fourth level of the B.C. Ferries parking lot and waiting lanes. Historically the highway of today and the B.C. Ferries parking lot are built on former residential land and this land use can be reclaimed by adding residential living units on the fourth level, thereby increasing the housing stock.

Neighbourhood Services

When developing a new neighbourhood, there are some criteria that have to be taken into account such as: elementary school, recreation, shopping centres, convenience shopping, medical centres, office buildings, civic facilities, fire station and hospital.

Within the area the following facilities are available:

- 1) The Gleneagles School, which accommodates children from all over the area, from kindergarten to grade 7, has a capacity of 500 children and an enrollment of 300. It can accommodate population growth easily.
- The development will enjoy open space for recreational activities. The area is surrounded by parks, such as Whytecliff Park, the waterfront park in Horseshoe Bay, the underwater park and a public golf course.
- 3) Shopping centres are provided at the Park Royal Shopping Centre.
- 4) Convenience shopping can be accommodated by the grocery store in Horseshoe Bay which can support a much larger community.
- 5) Horseshoe Bay now has under construction a new medical facility. A pharmacy plus medical services will be provided for the area.
- 6) Horseshoe Bay has about 108,585 sq. ft. of commercial land (excluding parking spaces), which is about 2.4 acres.

According to planning criteria,* this space could support a population of between 4,500 - 24,000 people as opposed to the current population of 675 and a possible addition of 700. Within the context of Horseshoe Bay and its visitor population, however, planners would not exceed the lower limits of this range. The commercial land is not fully developed and can support future demand for office buildings.

- 7) Civic facilities are concentrated at Park Royal Centre, which provides services to the District of West Vancouver.
- 8) A fire station is located at Horseshoe Bay.
- 9) Lion's Gate Hospital in North Vancouver provides services to all of the North Shore area.

5.2.4 The business community

The problems

- 1) The business community in Horseshoe Bay supports about 318,000 visitors and ferry users according to the pilot survey conducted in December, 1978. (See section 4.4)
- 2) The business community would like to expand its activities while part of the residential community objects.
- 3) Lack of parking space to support commercial development is a problem. There is a clash with the existing by-laws of the West Vancouver Municipality.

^{*}The Community Builders Handbook, Urban Land Institute, Washington, D.C., 1968

The goals

- A. Reduce speculative activities which contribute to the deterioration of the residential community.
 - Increase local sources of income.
 - Encourage year-round tourist activity which will support year-round sources of income.
 - Add attractive services to the Bay Area.
- B. Define the boundaries of each function.

 Take steps to resolve the existing tension between the residential community and the business community.

 Address the need for privacy for the local residents.
- C. Resolve the parking problem.

 Provide safe pedestrian zone, free from traffic flow.

 Provide unrestricted view of the waterfront and convenient pedestrian access to the water.
- D. Release residential and commercial land which is now used for parking.

 Resolve the identity problem of each zone while emphasizing man, rather than car storage.

The resolutions

- A. Increase business activities in Horseshoe Bay.
- B. Provide a buffer zone between the business core and the residential zone.
- C. Restrict the business core for pedestrians only (allow access for emergency and service vehicles).

D. Provide parking space outside the business core and locate it where the B.C. Ferries' parking lot stands for long-term parking; restrict parking in designated areas for short-term parking.

The physical implications of the resolutions

A. Commercial space

Today there are about 108,585 sq. ft. of commercial land in Horseshoe Bay, or about 2.4 acres. A commercial core in the usual sense (containing department stores) of this size would be sufficient to support a community of between 4,500 - 24,000 people. From the existing square footage of commercial land in Horseshoe Bay, it is obvious that it is not in proportion to the size of the local community which has about 675 residents. As noted earlier, Horseshoe Bay attracts about 318,000 visitors and ferry users a year (1978), half of this number during the summer season. As a result of this large volume of people passing through, sales activities increase, but are still inadequate to support the growing demand.

Usually when making a market analysis for shopping facilities, the following factors are taken into consideration: population, income, purchasing power, competitive facilities and access to the site. But in Horseshoe Bay's case there are different factors involved which do not exactly follow the usual pattern of market analysis. This has to do more with the location of Horseshoe Bay near a ferry terminal, recreational facilities, and attractive scenery. The customers supporting the

business core are looking for specific activities which emphasize the village spirit and a place to take a break from recreational activities that are in the area. Since Horseshoe Bay's business activities are vulnerable to seasonal change, its commercial activities should not grow proportionally to the population of visitors, but according to the ability of business to maintain its activity year-round. When the peak season arrives, additional business activities can be added, such as kiosks and open stands. This will provide an opportunity for local residents to add to their level of income by seasonal work.

The business community should continue its development towards eating and drinking places, arts and crafts shops, galleries, sports supply shops and seasonal stands.

Current plans of local businessmen include:

Restaurant. Mr. Sewell is planning to add a restaurant on his property and near the marina, replacing his old restaurant which burned down a few years ago.

Ice cream parlor. Mr. Troll is planning to add an ice cream parlor right beside his popular restaurant.

Also, there are plans to open a restaurant in one of the new developments under construction. These plans will take care of the present demand for more food and drinking places in the Bay Area.

For the next 20 years it is recommended that land which is now used for parking lots for commercial activities be released, adding an additional 58,125 sq. ft. of commercial space

or 1.3 acres. The release of the parking lots will help achieve a tighter plan and a well-defined commercial zone. In general, Horseshoe Bay's commercial area will increase to occupy a total of 3.7 acres.

B. Buffer zone

It is necessary to design an area to avoid identity and privacy conflicts between the residential and the commercial zones. This can be resolved by a range of alternatives: plant beds, hedges, trees and choice of surface treatment.

C. Business zone - pedestrian zone

It is possible to restrict parking and traffic flow through use of physical elements. The visitors will be directed to the main parking lot or to the short-term parking around the commercial core. Pedestrian walks will be provided from the main lot to the commercial core.

D. Parking space

More parking will be added for short-term visitors by closing streets, changing the traffic pattern and using the available space more efficiently. The details of the design will make this clear.

5.2.5 Recreational facilities

Horseshoe Bay fulfills an important role in providing services which support recreational activities, such as a

coffee place, a beer parlor, restaurants and meeting spots during breaks in recreational activities. Horseshoe Bay is a convenient stopping place for divers, golfers, skiers, hikers and so on. Therefore, the same facilities that are recommended to be developed for the visitors to Horseshoe Bay will serve those who frequent the recreational facilities of the surrounding area.

One of the most important attractions of Horseshoe Bay is the waterfront public park. When the warm season approaches, the park is filled with people who come to watch the ferries, the birds and the water.

The only recreational facilities lacking are more community oriented ones, for instance, more tennis courts or a swimming pool.

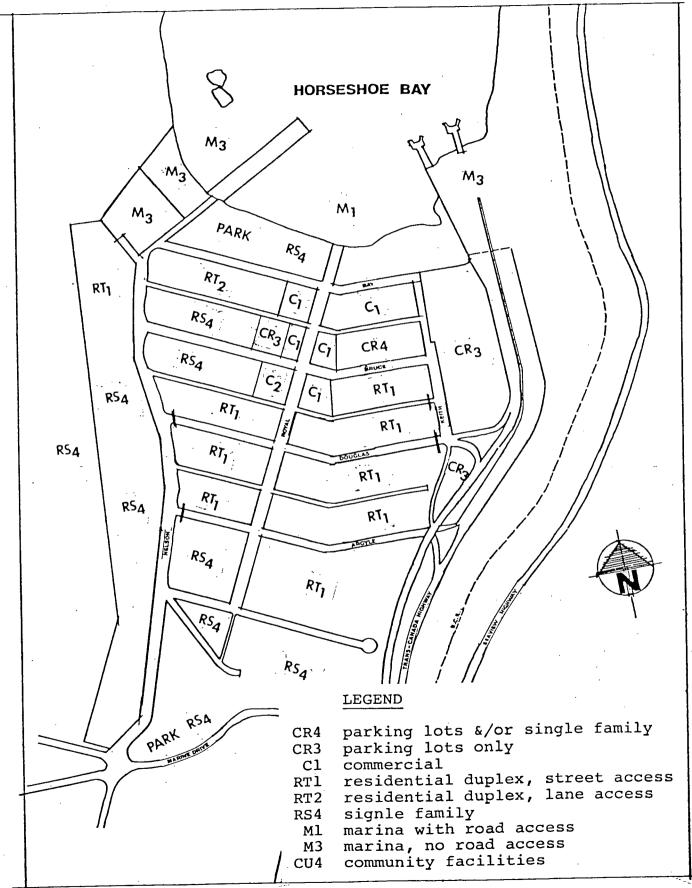
5.2.6 Changes in Zoning and Residential Density (See Drawings 5, 6)

The following changes would occur following the design for the commercial and residential areas.

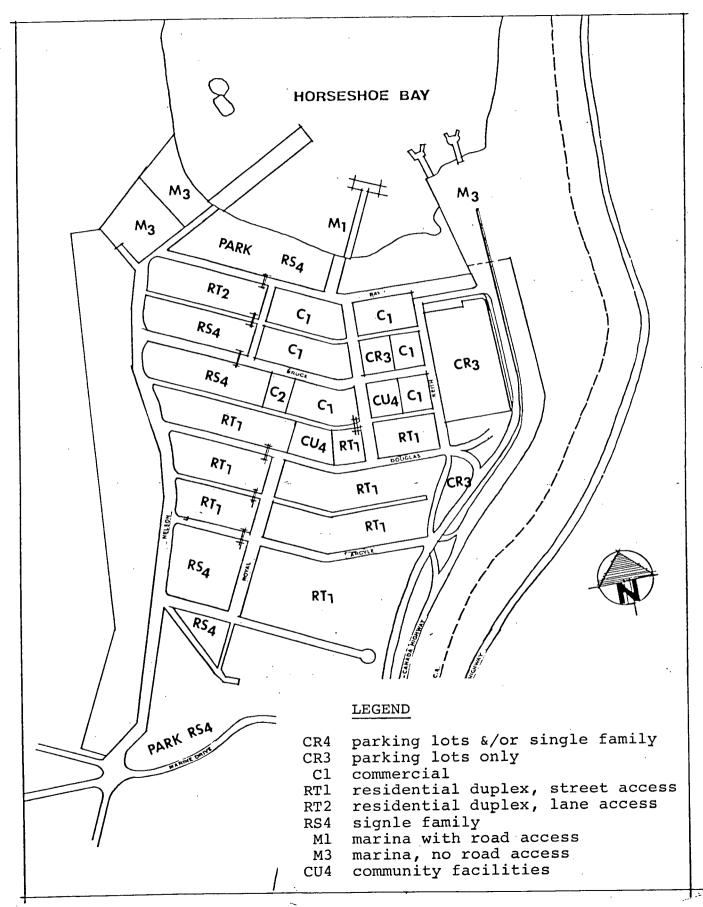
- A. Change zoning to commercial (C1):

 - 2 lots zoned RT1 residential duplex, street access
 part of Royal Avenue 100' x 50'
- B. Change zoning for community facility (CU4):

Drawing 5. Existing Zoning



Drawing 6. Proposed Zoning



- C. Change zoning for proposed Horseshoe Bay Avenue and the traffic commercial loop:
 - 1 lot zoned RT1 residential duplex, street access
 - 1 lot zoned commercial
 - 1 lot zoned RT2 residential duplex, lane access
 - 1 lot zoned DR3 parking lots only
 - 2 lots zoned RT1 residential duplex, street access

Residential Density

The new residential development on the top of the B.C. Ferries' parking lot and over the highway will provide a higher density of living units per acre. The existing density is 8-16 housing units per acre (8 = single family dwellings; 16 = duplexes). The proposed density for Level 4 residential development is 180 units on 3.4 acres. Therefore, the density is 52.9 units per acre.

The proposed mix of residential within the commercial area is as follows. There are 108,585 sq. ft. of existing commercial land (2.4 acres) to which will be added 58,125 sq. ft. (1.3 acres). All together there are 3.7 acres of commercial land and 60 living units are recommended for the commercial-residential area. Therefore the density would be 16.2 units per acre, which is roughly comparable to the current zoning limits for duplexes.

5.2.7 Economic CImplications

A. Introduction

The following analysis addresses the various elements of benefit and cost that result from the proposed design development. The major groups that are affected in Horseshoe Bay are: the B.C. Ferries Corporation, the Municipality of West Vancouver, composed of the residential community and the business community, and, finally, the visitors. The general hypothesis is that the major economic elements are linked to the impacts incurred or generated by each of the groups from the implementation of the design proposal. The following discussion provides cost estimates for proposed design changes and development in Horseshoe Bay. It is not the purpose of this study to develop a traditional cost/benefit analysis in an economic sense.

B. The B.C. Ferries Corporation

The proposed alterations and additions to the B.C.

Ferries Corporation operation in Horseshoe Bay will generate the major economic impact. The direct and indirect benefits and costs are discussed below.

1. Benefits

The initial benefit to B.C. Ferries Corporation is the savings realized by improving the existing ferry terminal rather than constructing a new terminal in another location.

The need to purchase waterfront property and the expense of

access highways and terminal facilities do not exist. This terminal utilizes the existing highways, parking areas and vessel berths in its accommodation towards future growth. The project provides the potential for additional employment; - from the design phase, through construction, during operation and maintenance, and for future additions. This will encourage more people to work or live in the Bay Area, thus increasing revenues for the other groups, such as the business and residential community.

In this design, the administrative activities of B.C. Ferries are gathered together in one building. Sited adjacent to the berths at the water's edge, the design provides direct visual harbour surveillance as well as automobile passenger buildup. This improves administrative efficiency.

Presently, the foot passenger connection to the ferries from the various activities in the Bay Area is poor. The proposed design provides safe and attractive pedestrian routes that are separated from the traffic flow. By attempting to attract foot passengers, and by a reduction in the length of waiting lanes, ferry capacity and fewer delays may be obtained. In conjunction with these ideas is a vehicle reservation system proposal designed to obtain greater efficiency in the operation of B.C. Ferries Corporation. Increased efficiency leads to greater savings.

The Corporation's severe automobile parking problem and poor terminal traffic circulation are also addressed in this proposal. With improved parking facilities, it is possible that

more ferry passengers may leave their cars behind and travel as foot passengers. A relatively secure parking structure can charge a nominal fee and generate some revenue.

Provisions have been made for future parking level additions on the proposed structure as well as residential units above the parking and waiting lanes. This would make available potential revenues from rentals and sales.

The only additional cost would be for road access improvements to and from the terminal and parking structures.

This cost can be shared with the Municipality of West Vancouver.

2. Costs

The acquisition of land for development is usually one of the major costs. In this proposal, this element does not exist since the property to be developed for the proposed terminal and parking structure design is already owned by B.C. Ferries Corporation.

The major cost is therefore reduced to the actual construction implementation of the proposed design, including services and utility costs. The estimated cost of construction for the proposed alteration of B.C. Ferries Corporation's operation is broken down into the cost of the parking structure, the administrative building, and provisions for pedestrian access. These costs are listed in Table 10.

The additional costs of administration, operation and maintenance are to be considered. However, these costs are present in the operation today. With the utilization of innovative design and technological improvements, the cost of these

elements can be substantially reduced in the proposed development.

The demand for improved ferry transportation is great. One has only to see the long lineups of cars waiting to get onto a ferry; or review the government's ideas of providing a permanent link to Vancouver Island via tunnels and bridges, or the Corporation's proposal for increasing the capacity of each ferry by providing an additional deck, or stretching the ferries even longer.

This design proposal for Horseshoe Bay is merely for improving one of B.C. Ferries Corporation's terminals. There are many to be dealt with. Most of the ideas can be applied to the other terminals as well. The major difference with other terminals is that they do not have an immediately adjacent residential and business community.

C. The Residential Community

The impact of the proposed development on the residential community generally is that there will be more people living in the Bay Area. With a population increase, there are both benefits and costs which are discussed in the following.

1. Benefits

The proposed development should provide more employment for the local residents with both the B.C. Ferries Corporation and the business community. Most of the Bay Area residents are transients that rent housing and have a low or seasonal

income. The generation of employment could increase their income, provide job stability and encourage a greater sense of permanence in the community.

With the greater density of development and subsequent population growth, there should be an increase in the value of real estate for both the residential and commercial areas.

The development of an improved community and recreation centre; public park facilities along the water, open spaces and commercial development will assist in attracting more residents to the Bay Area, thereby raising property values. In addition, with the increase in multi-family residential development, there should be a reduction in the Municipality of West Vancouver's utilities service cost per unit.

For the Municipality, the improvements in the residential sector development can set the basis for increased taxation which can, again, be returned to the community for improvements.

Upgraded vehicular circulation patterns and parking facilities would assist in establishing a greater sense of privacy from the B.C. Ferries operation and the business sector.

Costs

The major initial costs, again, are land acquisition and construction. The only major land acquisition cost is that for the community and recreational centre. Most of the land costs for the community and recreation centre will be municipal costs. This in part would be subsidized by the Municipality of West Vancouver. However, more people than just the residents of

Horseshoe Bay will be able to use these facilities.

For the residential development, no additional land purchases are required. Most of the proposed units are above commercial businesses or over the B.C. Ferries Corporation parking structure and waiting lanes. The estimated cost for constructing these units is listed in Table 10.

In order to build the units, only the cooperation of the present land owners is required. With the potential return on investment, this would not appear to be too great a problem.

The higher density also brings the cost of additional garbage collection and to a lesser extent physical restriction. Both of these factors can be limited through the use of design elements.

With improvements, municipal taxation would be increased. However, these costs may be offset by the services provided.

D. The Business Community

The number of ferry passengers and visitors that frequent the Bay Area can support a larger business community. Investigations with the business owners indicate that an expansion of their services is desirable. The initiation of private investment for the proposed commercial development is not a problem.

1. Benefits

The business revenue generated would be the major benefit from the proposed design. Increased business activity will assist in providing jobs for local residents as well as for those

from other parts of West Vancouver. The improved vehicular circulation routes and parking facilities will even increase the frequency of visitors and, in turn, the business revenue.

The value of commercial real estate would rise with increased development and activity. Most of the commercial buildings have residential units on the second level which provide rental income.

Tied with the business activity is also recreational attractions to bring people into the Bay Area. These elements have also been addressed and hopefully will attract people into the area and increase business revenue.

The medical clinic has been included in the business community for it is both service and revenue oriented. The presence of a clinic would be of great benefit for the Bay Area and would also attract more people to live there.

2. Costs

Again, the cost of land acquisition is not major. Most of the commercially zoned properties have businesses established on them. Only five lots, three zoned CR4 and two zoned RT1, require rezoning for commercial purposes. Within the proposed design, rezoning of some of the land is required. The cost of rezoning could be financed by the prospective businesses to be developed.

Construction would be the major cost. This is a cost that businesses might be willing to undertake. For the pier and restaurant on the water, there would be additional Federal Harbours Board permit fees to consider above construction costs.

Increased and improved business development would raise the municipal taxation for these properties. Again, however, services would be better, some of the tax dollars would be returned to the business community in the form of municipal developments such as open spaces and parks which would attract more business.

The only other major costs would be maintenance. The commercial area should be kept clean and boundaries to residential areas aesthetically pleasing. Clean, environmentally oriented design generates good business.

D. Visitors to Horseshoe Bay

The proposed design and, in particular, the commercial area is visitor oriented. For the visitor, benefits, measured in monetary terms, are few. Perhaps as little as less travel distances for parking and better service. But the benefits, in terms of increased efficiency and enhanced aesthetics, are significant and should not be overlooked.

The costs also would not be greater than for any other tourist oriented area. The benefit and cost analysis for the visitor is mainly an aesthetic one. However, visitors' contributions to the economic implications of the Horseshoe Bay area can be major.

```
Cost Estimate for Land and Construction
       1.0
Table
       B.C. Ferries
1.
       Land acquisition:
   a)
                           Nil.
       - already owned.
       Buildings; structures; landscaping
   b)
            Parking structure
        i)
            Level 1 = 115,200 \text{ sq. ft.}
            Level 2 = 108,100 \text{ sq. ft.}
            Level 3 = 101,200 \text{ sq. ft.}
              Total = 324,500 sq. ft. x $12.00/sq. ft. = $ 3,900,000.
        ii) Pedestrian walk (exterior)
                                                                    50,000.
                        14.400 sq. ft. x $ 3.50/sq. ft. =
              Administration building
        iii)
                                                                    800,000.
                        12,100 sq. ft. x $65.00/sq. ft. =
             Landscaping (parking structure)
        iv)
                                                                     60,000.
                          4,000 \text{ sq. ft. } x \$ 4.00/\text{sq. ft.} = .
                                                                     50,000.
            Landscaping exterior
             Highway and access improvements
        vi)
                                                                    150,000.
                (to and from parking structure)
                                                                    170,000.
        vii) Access to residential
        viii) Covered pedestrian walk to ferries
                                                                    350,000.
                          6,600 \text{ sq. ft. } x $53.00 \text{ sq. ft.} =
        ix) Renovations to passenger waiting area
                                                                    130,000.
                          4,400 \text{ sq. ft. } x $30.00/\text{sq. ft.} =
            Additional parking and waiting lanes
        x)
                       41,200 \text{ sq. ft. } x $20.00/\text{sq. ft.} =
                                                                     35,000.
              Landscaping and parking for towers
```

xi)

on Level 4.

100,000 sq. ft. x \$14.00/sq. ft. = 1,400,000.

Table	10 Cost Estimate for Land and Construction	(cont	cinu ed)
	xii) Towers 240,000 sq. ft. x \$50.00/sq. f	t. =	\$12,000,000.
	Subtotal		\$19,145,000.
2.	Municipal		
a)	Residential/community		,
	i) Housing 60,000 sq. ft. x \$55.00/sq. f	t. =	3,300,000.
	ii) Community centre and recreation		·
	Land acquisition	=	200,000.
	Building		
	12,000 sq. ft. x \$75.00/sq. f	Et. =	900,000.
	Tennis	=	60.000
	a to company to	=	540,000.
	·	=	60,000.
	iv) Landscaping	=	100,000.
-	v) Concrete sidewalks	. =	200,000.
	vi) Floats		100,000.
	vii) Park improvements		
	Subtotal		\$ 5,460,000.
ь)	Business		•
•	i) Land acquisition	=	= 800,000.
	ii) Building 64,000 sq. ft. x \$75.00/sq.	ft.	5,000,000.
•	iii) Paving stones		100,000.
	iv) Landscaping	:	= 200,000.
		:	= 250,000.
•	•		= 200,000.
	vi) Pier		
	Subtotal		\$ 6,550,000.

Table 10 Cost Estimate for Land and Construction (continued)

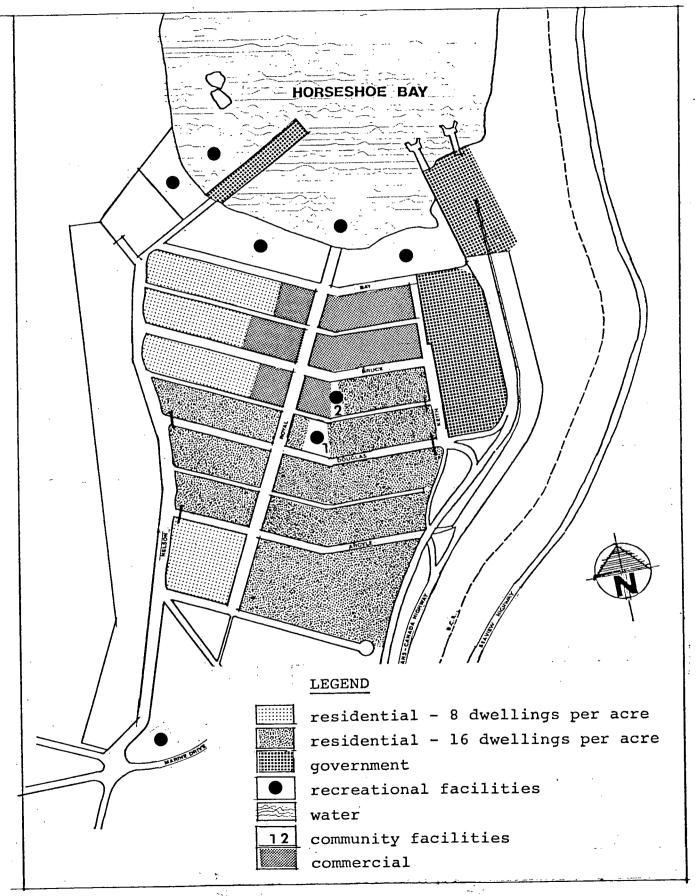
Subtotals:	\$ 19,145,000. 5,460,000. 6,550,000.
Total Contingency	31,550,000. 3,155,000.
Grand Total ±	\$ 34,310,500.

SOURCE: Current cost estimates (1980) supplied by registered architect, Mineo Tanaka.

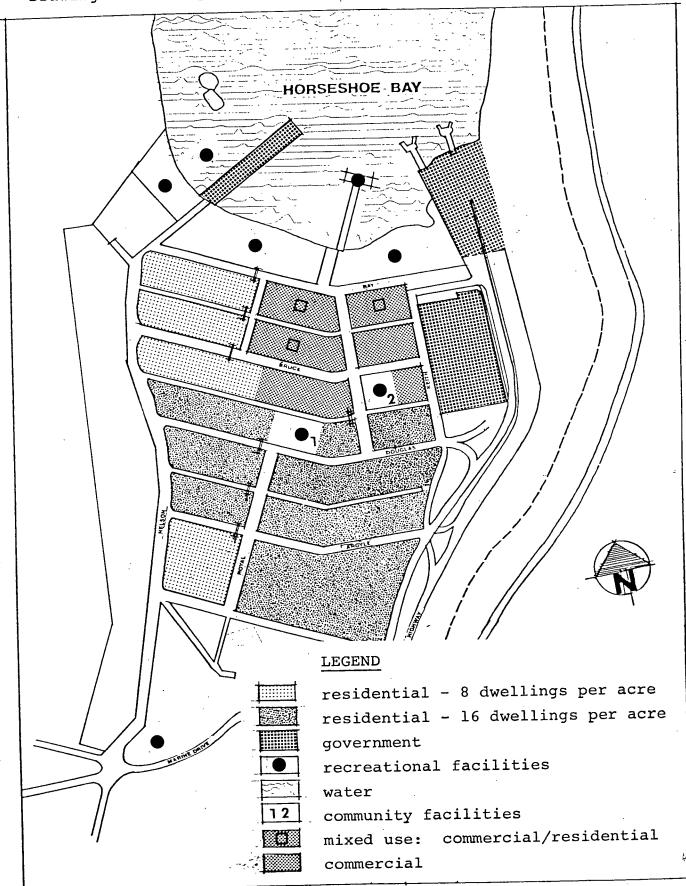
5.3 Design Development Implementation

The following section is a graphic description of the implementation of the design policy and its recommendations. It illustrates existing and proposed land use patterns, site plans, elevations, sections, perspectives and sketches of Horseshoe Bay.

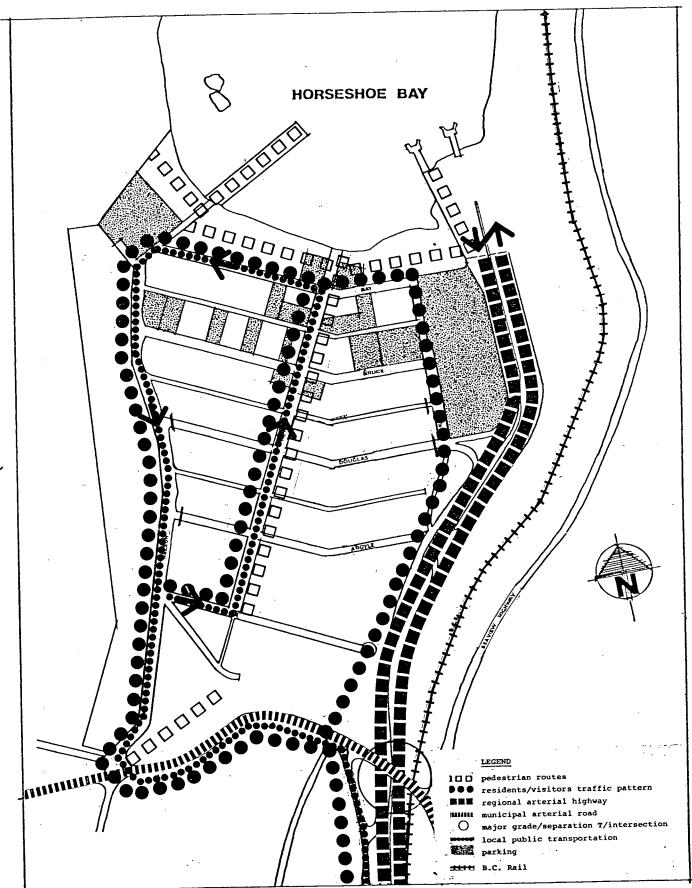
Drawing 7. Existing Land Use



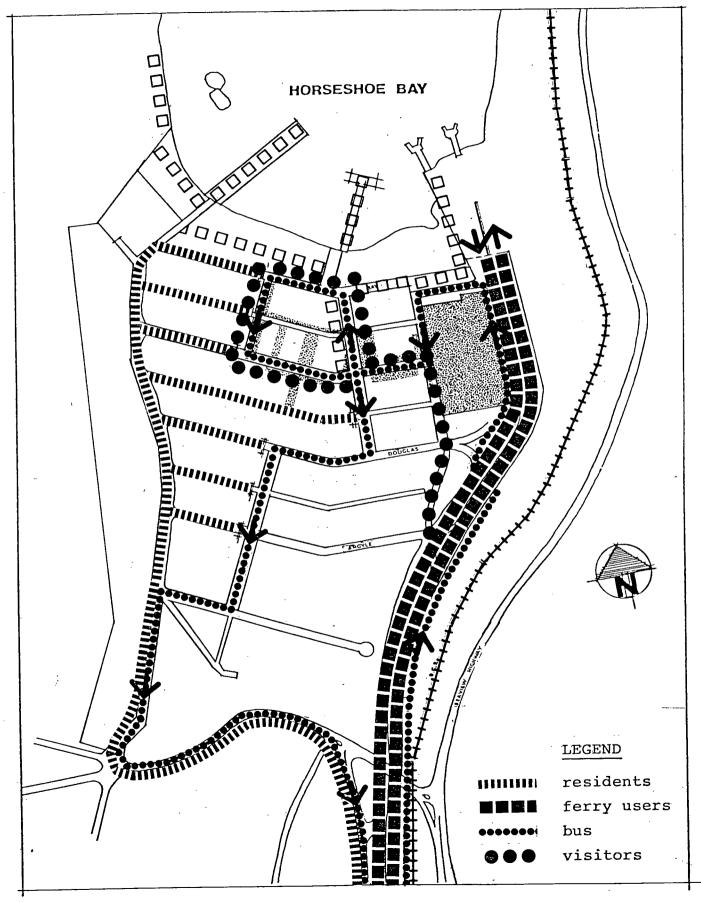
Drawing 8. Proposed Land Use



Drawing 9. Existing Transportation Patterns.



Drawing 10. Proposed Transportation Patterns.





CHAPTER 6. STRATEGY FOR THE DEVELOPMENT'S IMPLEMENTATION

This chapter deals with two major issues: the planning guidelines and the process of development.

6.1 Planning guidelines

This section deals with the process of organizing the various interested groups in Horseshoe Bay towards implementing a comprehensive plan for the Bay Area.

In order to bring the different groups into a meaningful framework, a committee should be established. This committee would be composed of representatives of each of the interested groups. The committee is only a convenient tool in the process of decision-making; it should not reach any decisions for implementation without consulting its constituencies. This restriction is designed particularly to protect the residents of Horseshoe Bay who are politically less powerful than the other groups.

The members of the committee represent:

- A. the residents of Horseshoe Bay
- B the business sector of Horseshoe Bay
- C. the B.C. Ferries Corporation

- D. the Department of Tourism of the B.C. Government
- E. West Vancouver Municipality.

A. The residents of Horshoe Bay

The residents should elect representatives from a cross-section of their community. Like the community of Horseshoe Bay, the representatives do not have to agree upon each issue and reach a consensus among themselves prior to their election. The different points of view are important for the evaluation process and the stage prior to decision—making. Perhaps, for the first time, those residents who have a different point of view about the ferry operation and visitors to their community would have an opportunity to raise their voices.

The representatives should be trusted and supported by the community; they should be intimately familiar with Horseshoe Bay and have concern for its future. Temporary residents like seasonal workers could elect a representative of their own. This is a specific group with specific problems which should be taken into account since it represents a significant group of residents in the Bay Area.

The issues that should be discussed in the community meetings prior to the elections should concern a change of attitude which will come to grips with the reality of Horseshoe Bay. The fact that the B.C. Ferries operation will continue in the Bay Area should be presented to the residents through a series of lectures by specialists who are credible and

objective. In order to reach a meaningful plan for Horseshoe Bay, it is very important to help the residents understand that it is not any more a question of eliminating the ferry operation but rather how to reap the benefits from its presence there.

The elected representatives will convey their community decisions to the other interested groups when meetings take place and the comittee's thoughts and decisions will be conveyed to the residents through their representatives. There should be an efficient flow of information to all concerned.

B. The business sector

The business sector of Horseshoe Bay should come to understand that it will be to its benefit to organize and select representatives which reflect the various business activities in the Bay Area, including restaurants, retail and recreational services.

The business sector should be able to represent its three major interest constituencies: the local residents who work in Horseshoe Bay, the business people who work in Horseshoe Bay but do not live there, and present and future owners-investors.

If this is possible, then the business community will more comprehensively represent its own interests.

C. B.C. Ferries Corporation

B.C. Ferries Corporation, which is responsible for

the terminal and facilities has a key role in resolving the problems in Horseshoe Bay and therefore has a significant part in planning guidelines for the Bay Area. The outcome is based on B.C. Ferries' future development policy and its unofficial, non-public policy to maintain the ferry operation in Horseshoe Bay.

In order to design valid guidelines for Horseshoe Bay, B.C. Ferries will have to adopt an open policy which will earn the trust of the other interested groups. Even though it is a government operation, its secrecy suggests that of a private one.

Sharing responsibility for the development of Horseshoe
Bay will necessitate a comprehensive plan that will benefit
each of the interested groups.

D. The Department of Tourism of the B.C. Government

As a result of the pilot survey and personal observation, it was learned that Horseshoe Bay is a very popular site
for local tourists as well as tourists from elsewhere. This
department should have a part in the committee's processes
for its own information.

E. The Municipality of West Vancouver

West Vancouver Municipality, which is responsible for local roads, street parking, and community facilities, has an important role in resolving the problems regarding the residents of Horseshoe Bay.

The Municipality is responsible for the comprehensive plan for Horseshoe Bay and therefore should take an active, if qualified, role. The Municipality should encourage new view-points from the committee of interested groups. It should be open to new ideas and new attitudes. It might change zoning regulations, but it should be open to the possibility of change in the overall attitudes of people and planners. Once the committee recognizes the fact that Horseshoe Bay is a unique place with specific problems, the resolutions should result from their interaction.

All the groups involved will have to discuss their own and each other's responsibilities for development, including budget considerations. Then decisions on policy for the development process can proceed. This study should be considered a resource for such a committee.

6.2 The process of development

Following is a list of priorities for development in the order in which they should be undertaken.

- 1. Adopt a reservation system.
- 2. Modify the B.C. Ferries parking lot.
- 3. Add roads and short-term parking modifications.
- 4. Relocate gas station to its new location.
- 5. Change commercial developments along Bay Street and renovate motel.

- 6. Add residential development above the commercial area.
- 7. Build pier and restaurant development.
- 8. Introduce community centre and medical building developments.
- 9. Add residential development on the Level 4 parking lot and over the Trans-Canada Highway.

CHAPTER 7. CONCLUSIONS AND RECOMMENDATIONS

This chapter consists of two main sections. The major conclusions of the study are presented first, followed by recommendations for further research.

- 7.1 A Summary of Major Conclusions

 The major conclusions of this study follow the issues that were raised throughout this work:
- A. Should Horseshoe Bay continue to be a location for a ferry terminal or not?
- B. What impact has the ferry operation in Horseshoe Bay on the local residential and business community?
- C. How do ferry terminals in Europe coexist with residential communities nearby?
- D. Why has Horseshoe Bay developed into the community it is today?
- E. What are the different activities in Horseshoe Bay, who are the people attracted to the Bay Area, why do they come, how long do they stay?
- F. What conclusions can be derived from personal observation?

And, finally, the last major issue of the study:

G. How is it possible to resolve the problems of: lack of residential privacy, constant traffic congestion, lack of parking space, shortage of housing, the influx of visitors to the Bay Area, -- especially during the summer season, -- and the overwhelming presence of the ferry terminal and its parking lot?

The conclusions of this study can be divided into two categories. One refers to the research conclusions (Issues A, B, C, D, E, F) while the other deals with design conclusions, i.e., the physical solutions of the study (Issue G).

7.2 Research Conclusions

- A. HORSESHOE BAY'S FERRY TERMINAL IS CAPABLE OF ABSORBING FUTURE GROWTH AND, THEREFORE, THE OPERATION SHOULD BE MAINTAINED IN THE BAY AREA.
- If B.C. Ferries Corporation adopts a reservation system, the Horseshoe Bay ferry terminal will be able to handle future growth without basic changes in the layout of its terminal.

According to current population projections for Bowen Island and the Sunshine Coast, within fifteen to twenty years the number of travelers to these destinations will equal the current total of travelers to all destinations through Horseshoe Bay. Even if new terminal facilities are required for travel to Vancouver Island, Horseshoe

Bay's ferries would be needed to serve Bowen Island and the Sunshine Coast. In light of these projections, the question of removing the ferry terminal from Horseshoe Bay is no longer an issue.

This conclusion was reinforced by discussions and interviews with people at the B.C. Ferries Corporation, by the findings of an unpublished study conducted by an engineering consulting firm in Vancouver, and by discussions with experts in the transportation field.

- B.C. Ferries' patrons could become an important source of income to the local business community. The results of the "Troll's" survey indicated that only a small percentage of ferry users visit the business area of Horseshoe Bay and use its services. With better planning, Horseshoe Bay could attract more ferry users, consequently strengthening the local economy and defusing some of the local residents complaints.
- B. THE FERRY OPERATION IN HORSESHOE BAY HAS NEGATIVE AS WELL AS POSITIVE EFFECTS ON THE LOCAL RESIDENTIAL COMMUNITY.

The negative impact on the residential community occurred initially in the sixties when the B.C. Government took over the ferry operation from the Black Ball Company and acquired residential lots for its right of way. As a result, the residential area closer to the ferry terminal and its roads deteriorated and land speculation spread.

Another negative effect is the unesthetic appearance of the terminal facilities. Its overwhelming size is apparent from every corner of the residential area. The problems of appearance and size can be minimized through design and planning.

The positive attributes seem to be more important, especially if the negative aspects are resolvable. The positive attributes are mostly economic. Local residents find employment with the ferry operation as well as with the local businesses that provide services to the ferry users. The B.C. Ferries enterprise, as a source of income, has an enormous potential to strengthen local business activities in Horseshoe Bay which today do not live up to this potential.

C. FERRY TERMINALS CAN OPERATE BESIDE RESIDENTIAL

COMMUNITIES AND MAINTAIN GOOD RELATIONS WITH THEM.

This conclusion was derived from the correspondence with ferry terminals in Europe. Those terminals which are located near a residential community responded positively and even warmly about good relations with residential communities.

The ferry system in Europe is accepted as an essential transportation mode by the local economy, and an integral part of Europe's history of water transportation and human settlements.

D. HORSESHOE BAY IS AN IMPORTANT LINK IN THE TOTAL TRANS-PORTATION SYSTEM OF BRITISH COLUMBIA.

This conclusion was derived from the comparison study between Horseshoe Bay and Deep Cove. Even though the two communities started out in a similar way, Horseshoe Bay became a port town with a high turnover of its population and a business core which is growing in response to the demand for tourist and recreational services.

Deep Cove became a bedroom community for a higher income group of residents who resist any increase in commercial development beyond what is needed to serve the local community. Residents are proud of their neighbourhood and have control over local issues in dealings with their municipality.

Horseshoe Bay is located strategically at a most convenient site. It is the shortest route between Vancouver Island and the Lower Mainland; it is also protected and sheltered from the ocean.

The timing of other developments on the North Shore diverted the focal interest for water transportation developments to Horseshoe Bay. Any other option to develop a ferry terminal on the Lower Mainland failed mostly because of social and technical problems, such as: no natural sheltered water.

Deep Cove, on the other hand, is located on the Fraser River on Indian Arm. It is not located on any major highways and is considered by many people to be the end of the road, -

a place to hide in nature. If any development were to take place on Indian Arm in the future, Deep Cove has the potential to become a springboard for those who would need to use water transportation. But it is very hard to foresee another ferry operation on a scale as large as that in Horseshoe Bay.

E.1. MAINTAINING THE BALANCE BETWEEN THE DIFFERENT

ACTIVITIES IN HORSESHOE BAY IS VERY IMPORTANT FOR

RETAINING THE SPECIAL IMAGE OF HORSESHOE BAY AND

ITS PEOPLE.

Since the beginning Horseshoe Bay was a resort area, a springboard to other destinations, a pleasant place to live and visit. Side by side, these activities grew in scale and size, changed over the years and influenced each other. Elimination of any one of these elements would upset or even destroy the unique combination of Horseshoe Bay's attractions.

E.2. RECREATIONAL DEVELOPMENT IS THE COMMERCIAL STRENGTH OF HORSESHOE BAY.

Horseshoe Bay should not attempt to compete commercially with existing shopping centres on the North Shore.

Its commercial focus should be small-scale, emphasizing goods and services compatible with its resort setting.

People are attracted to Horseshoe Bay because of its beautiful scenery, local recreational facilities, and the fascination of its constant waterfront activity. Visitors stay for a short time to relax and soon they return home

which is, in most cases, a short distance from Horseshoe Bay.

F.1. HORSESHOE BAY WAS ALWAYS AN IMPORTANT LINK IN WATER
TRANSPORATION FOR BRITISH COLUMBIA.

This observation flows from the history of Horseshoe
Bay though some local residents would prefer it to be an
exclusively residential community.

In earlier days Horseshoe Bay was approachable only by water since no roads connected it with Vancouver. Later, loggers used the harbour to transport their logs and, more recently, with the introduction of ferry service, it became an important link to Vancouver Island.

F.2. THE MOST VOCAL RESIDENTS OF HORSESHOE BAY DO NOT REPRESENT THE ENTIRE RESIDENTIAL COMMUNITY.

This observation was reached after many interviews with local residents and their elected representatives.

It seems that the majority of the people leave local matters to their representatives, while those who oppose the general attitude of the leaders prefer not to put up a fight to defend their opinions which usually favor tourists and commercial developments.

- 7.3 Major Design Conclusions
- G. HOWERS IT POSSIBLE TO RESOLVE THE PROBLEMS OF: LACK
 OF RESIDENTIAL PRIVACY, CONSTANT TRAFFIC CONGESTION,
 LACK OF PARKING SPACE, SHORTAGE OF HOUSING, THE INFLUX
 OF VISITORS TO THE BAY AREA, AND THE OVERWHELMING
 PRESENCE OF THE FERRY TERMINAL AND ITS PARKING LOT?

Each design recommendation serves as the resolution of a specific problem.

The problem: lack of residential privacy

The design conclusions:

- Separate traffic circulation for local residents.

 from the pattern for ferry users and visitors.
- Block residential streets and prevent through traffic.
- Design a buffer zone between the ferry terminal and the residential area.

The problem: constant traffic congestion

The design conclusions:

- Improve traffic circulation by separating the visitors and ferry users traffic from the local residents traffic.
- Reroute the existing bus route to provide more convenient stops for ferry users and visitors to Horseshoe Bay.

The problem: lack of parking space

The design conclusions:

- Expand the B.C. Ferries parking lot to accomodate some future growth.

- Provide more parking space around the business area.

The problem: shortage of housing units

The design conclusions:

- Add about 200 living units designed to accommodate part of the demand. The living units will house people who would like to live near the business area. Units will vary in square feet to meet the demand for various apartment sizes.
- Upgrade a rundown block and strengthen the mix of the residential area by creating an urban renewal project on the seven residential lots zoned RS4 west of Bruce Street.

The problem: influx of visitors to the Bay Area
The design conclusions:

- Provide more commercial activities in the Bay Area.
- Add seasonal attractions to the waterfront.
- Provide more street parking near the commercial area and thereby reduce parking on residential streets.
- Protect residential privacy by buffer zones.
- Separate traffic circulation.

The problem: the overwhelming size of the ferry terminal, its parking lot and feeder roads

The design conclusions:

- While it would be difficult to disguise the terminal structure, the harsh look of the terminal can be softhened through design elements like colour and vegetation.

- Design a new parking structure which should be low to offset the size of the terminal and which should incorporate more pleasing design elements.
- Build housing units over the ferry waiting lanes which will cover the scar the roads leave on the mountainside.

These conclusions are not final and are not the only answer to the problems in Horseshoe Bay. But these design solutions have the potential to contribute to Horseshoe Bay's becoming a more attractive place to live, visit and travel through.

The design implementation demonstrates that through physical changes it is possible to achieve resolutions for the existing problems in Horseshoe Bay. It was learned that elimination of the problem is not necessarily the best solution. In spite of much criticism towards the B.C. Ferries Corporation, it was learned that this operation, after all, does contribute to the economic activities of the Bay Area and has an enormous potential for further benefit there.

Collaboration of the various interest groups in Horseshoe Bay will contribute towards a better comprehensive plan for the Bay Area and will benefit each one of them.

- 7.4 Recommendations for further research
- 1. A LINK BETWEEN THE TRAINSSERVICE AND THE TERRY TERMINAL IS A POSSIBILITY.

A study should be conducted to analyze the possibilities of train service during busy seasons and the potential market for such services. Train service would offer a public transportation alternative which would help to alleviate the congestion of car traffic in Horseshoe Bay.

Since the closure of the Squamish subdivision (a portion of the rail service from Vancouver to Lilloet) has been considered, passenger service should be introduced from North Vancouver to Whistler Mountain that would operate on seasonal demand.

2. FUTURE NEED FOR MORE BERTHING FACILITIES SHOULD BE INVESTIGATED.

In the future it is possible that B.C. Ferries

Corporation will need to increase the number of ships and sailing runs on the routes from Horseshoe Bay. If more berthing facilities are necessary, a serious study should be undertaken to investigate alternative sites along the Coast. While Horseshoe Bay may be the ideal terminal site, acceptable alternatives for berthing facilities may not be as difficult to secure.

BTBLIOGRAPHY

- Acres Western, Ltd., Summary Report: Market Analysis and
 Economic Feasibility Downtown-Inner Harbour Urban Renewal
 Scheme: A Preliminary Investigation, prepared for the
 City of Victoria (Vancouver: 1968)
- Bartholomew (Harland) and Associates, <u>Master Plan for Balboa</u>

 Park, San Diego, California, prepared for the City of

 San Diego (San Diego: 1960)
- Bowen Island Advisory Planning Commission, The Official Community Plan for Bowen Island (Bowen Island: 1976)
- British Columbia, Province of, Department of Municipal Affairs, Bureau of Transit Services, Vancouver Waterfront Terminals and Transit Functions (Vancouver: 1974)
- Analysis Branch, Bowen Island: A Resource Analysis for Land Use Planning, Vols. 1 & 2 (The Islands Trust: Victoria, B.C., 1978)
- Candeub, Fleissig and Associates, Comprehensive Plan for the Town of Palm Beach, 1970 (Miami, Fla., 1970)
- Clack, Roderick, Victoria Inner Harbour Development Recommendations, prepared for the Environment and Land Use Commission, Province of British Columbia (National Capital Commission: Ottawa, 1974)
- Centre for Transportation Studies, University of British
 Columbia, A Study of 1977 Summer Traffic Between Vancouver
 Island and the Lower Mainland, prepared for the British
 Columbia Ferries Corporation under the direction of
 W.G. Waters II (Centre for Transportation Studies:
 Vancouver, 1978)
- DeChiara, Joseph and Lee Koppelman, Manual of Housing/Planning and Design Criteria (Prentice-Hall, Inc.: Englewood Cliffs, N.J., 1975)

- Erickson (Arthur) Architects, <u>Inner Harbour Study</u> (Victoria: 1973)
- Fox, M., and A. Mikeoun, <u>Cha-hai</u> (Gleneagles PTA: Horseshoe Bay, 1971)
- Goodman, William I, and Eric C. Freund, <u>Principles and Practice of Urban Planning</u>, prepared for the Institute for <u>Training and Municipal Administration</u> (International City Managers' Association: Washington, D.C., 1968)
- Gottlieb-Tanaka, Dalia; Heise, Patrick; Meyer, Guenter and Alfonso Tejada, "Formats for the Approval Process: An Aid to Discuss and Judge the Impact of Architectural Proposals on Man and his Environment," unpublished paper submitted in partial fulfillment of requirements for Architecture 500. 1978
- Hurst, Michael E. Eliot (Ed.), <u>Transportation Geography</u>, <u>Comments and Readings</u> (McGraw-Hill Book Co.: New York, 1974)
- Milwaukee River Technical Study Committee, The Milwaukee River: An Inventory of its Problems, An Appraisal of its Potential, (Milwaukee, Wisc., 1968)
- Ministry of Transport, Public Harbours Regulations, 15 August 1971 (Ministry of Transport: Ottawa, 1971)
- Mitchell, James K., Community Response to Coastal Erosion:
 Individual and Collective Adjustments to Hazard on the
 Atlantic Shore, Research Paper No. 156, The University
 of Chicago, Department of Geography (Chicago, 1974)
- New South Wales, The State Planning Authority, Planning Control of Residential Development, Technical Bulletin No. 3 (New South Wales, 1972)
- North Vancouver District, Planning & Property Department, Urban Redevelopment 1967
- City in the Suburbs, 1971
- ----- Seymour Planning Association, Interim Report, November 1972 May 1973
- tee, General Influences, Special Influences (Feedback Report) 1973
- Cove Study, 1973

- North Vancouver District, Planning & Property Department, The Natural Environment, Seymour 1, 1975
- hoods, Seymour 2, 1975
- Region, Seymour 3, 1975
- Lea (N.D.) and Associates Ltd. for the North Vancouver District, 1976
- Population, Seymour 7, 1975
- Seymour 8, 1976
- Seymour 9, 1976
- North Vancouver District Council, The Development of Seymour, 1977
- Real Estate Board of Greater Vancouver, Real Estate and Business Trends in Metropolitan Vancouver and British Columbia (Vancouver, 1959)
- couver 1966 1978, Statistical Survey Committee, Real Estate Board (Vancouver, 1978)
- Rick, William B., Planning and Developing Waterfront Property, Technical Bulletin No. 49 (Urban Land Institute: Washington, D.C., 1967)
- Schwilgin, F.A., <u>Town Planning Guidelines</u> (Department of Public Works: Ottawa, 1973)
- Smith, Edward K., A Guide to Economic Base Studies for Local Communities, Bureau of Business and Economic Research, Northeastern University (Boston, 1955)
- Stringer, Peter & H. Wenzel, <u>Transportation Planning for a Better Environment</u> (Plenum Press: New York, 1976)
- Transport Canada, Government Harbours and Piers Act, Government Wharves Regulations (Ottawa, 1977)
- Ward (Joseph B.) and Associates (International) Ltd., Commercial Requirements, Seymour 5, prepared for North Vancouver District (Vancouver, 1975)

LIST OF INTERVIEWS

- Hins Berger, West Vancouver Municipality, Parks and Recreation November 1978
- Peter Cotten, teacher, Gleneagles School, Horseshoe Bay, November 1978
- Ray Eagle, community leader, resident of Deep Cove, November 1978
- Gordon Halinsky, architect, resident of Horseshoe Bay, October 1978
- Leona Jahnes, social planner, District of North Vancouver, November 1978
- Miss Jarvis, social worker, Ministry of Human Resources, West Vancouver, November 1978
- Peter Kafka, architect, resident of Horseshoe Bay, November 1978
- Mr. and Mrs. McKee, owners of Horseshoe Bay's boat rentals, November 1978
- Vic Morgan, Planning Department, West Vancouver Municipality October 1978
- Tom Sewell, marina owner in Horseshoe Bay, November 1978
- Joe Troll, restaurant owner in Horseshoe Bay, November 1978
- David Weisser, architect, resident of Horseshoe Bay, October 1978

APPENDIX

Graduate Studies, School of Architecture, University of British Columbia, Vancouver, B.C.

Survey of Horseshoe Eay		
I am a student at U.B.C., School of thesis. The thesis deals with the impact of community of Horseshoe Bay.		- · · · · · · · · · · · · · · · · · · ·
would answer the following five (5) question the questions are very general.	It would s. You	i be deeply appreciated if you name is not necessary and
Please mark the box that applies to	you. Yo	ou may mark more than one box.
1. Why are you in Horseshoe Bay?	•	
a. Visiting friends or relatives.	d.	Shopping.
b. Using the ferry.	□e.	Working in Horseshoe Bay
c. Using the marinas.	□f.	Other (please say)
2. Where do you live?		
a. Outside of Canada.	∐d.	Vancouver Island.
b. Another Province in Canada.	e.	The Interior of B.C.
c. The Lower Mainland of B.C.		
3. (This question is only for those who work in Horseshoe Bay). If you work in Horseshoe Bay, where do you live?		
a. Horseshoe Bay.	c.	Elsewhere.
b. West Vancouver.	d.	Not applicable.
4. How long will you stay in Horseshoe Bay?		
a. A few hours.	d.	A week.
b. One day.	e.	Other (please say)
c. One day and one night.		
. What do you like in Horseshoe Bay?		
a. (Please say)	**************************************	
		• 1

Thank you very much for your help. Please return at the easkier.