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ABSTRACT

In recent years, the mobile home has emerged as an inexpensive, alternative form of housing. Its increasing popularity has resulted in the development of numerous mobile home parks of both good and poor quality, but usually situated in poorly planned urban fringe areas. Mobile home parks are essentially residential neighbourhoods, therefore, careful attention must be paid to physical and community factors in their development. In this study an attempt is made to analyze location criteria and to recommend suitable locations for mobile home parks designed in harmony with conventional housing.

Data and information were obtained through a questionnaire survey of the mobile home park managers in Greater Victoria, and by interviewing the planning officials and people concerned with the mobile home industry. Government regulations, municipal zoning by-laws and local newspapers also were consulted as sources of information.

The early chapters deal with the advantages of this new form of accommodation and explain the government regulations and their influence on the present condition and distribution of mobile home parks in Greater Victoria. A following chapter analyzes the important physical and community factors which should be considered for proper location of mobile home parks. A technique for objective evaluation is proposed, using rating

indexes for each factor. The computed average value at a particular site indicates its potentiality for mobile home park development. In the next chapter the technique is applied and eight potential mobile home park sites are identified and ranked. Finally, it is recommended that, in view of the present demand for mobile homes and mobile home parks, and in order to offer equality of opportunity in the use of public services, government regulations should be revised and municipalities should not only accept mobile home parks, but also, through careful planning, should incorporate mobile home parks into existing residential areas.

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CHAPTER 1

INTRODUCTION

The mobile home is an integral part of the North American housing scene. In spite of its tarnished image, this form of housing is acceptable to some groups in society, just as the high-rise apartment, the condominium, or even the commune is favoured by certain groups. There exist different preferences among groups in society with different values and vested interests, insofar as the type and location of dwelling is concerned. But there is hardly any difference in opinion that a residential neighbourhood must be located in an area acceptable both from geographical and social points of view. It is believed by the planners and the experts related to the housing industry that the mobile home is acceptable as a form of accommodation, and should be integrated into a conventional residential community. The problem remains where and by what methods suitable locations can be found for developing mobile home parks and how they can be fitted into the present residential environment.

The mobile home's ancestry can be traced to the gypsy caravans of early European and American history. "Merchants, travellers and civilizers in Europe and America brought the fruits of civilization to backward areas in the same kind of conveyance towed by horseflesh rather than horsepower."¹ Even

Napoleon Bonaparte travelled in "a coach that served as living quarters, office and staff headquarters."² Today's mobile home is the sophisticated, shiny, streamlined development of those old-fashioned houses on wheels. The mobile home has brought about a "revolution in housing"³ by combining freedom of mobility with permanent home stability. Though the travel trailer concept started to blossom only in the late 1920's, today "one out of every two single family housing starts in the United States is a mobile home; and better than one in every five in Canada (actually 21.3 percent in 1974), with the trend continuing upwards."⁴

Objectives of the Study

The mobile home has emerged as a significant feature of the Canadian urban landscape. This form of housing has been recognized by both the Canadian⁵ and British Columbia⁶ governments which have stated that mobile home residents should enjoy a residential type of environment similar to that enjoyed by those living in site-built homes. If the mobile home is to be a truly viable alternative to the conventional home it must be accorded a similar status. Essentially, it provides accommodation to people with limited resources whose residential requirements are not very different from those of people living in site-built homes. In the past mobile home owners often have been forced into unsuitable neighbourhoods by being compelled to live in areas set aside for trade, commerce, and industry, or in unorganized areas where there is a lack of community facilities.

This can only result in poor quality mobile home parks and a second-rate environment. The lessons of the past should be learned, and new mobile home parks should be constructed in areas where site and community facilities are suitable for any other form of residential development. In the words of Mr. R. Nourse, Regional Vice-President of Canadian Mobile Home and Travel Trailer Association for British Columbia:

The greatest need...at the present time is not directly concerned with the mobile home but with places to put them...Cities, municipalities and regional districts need to take immediate action to allow more mobile home parks and subdivisions if the mobile home is to continue to provide adequate housing within the means available to a large portion of population.⁷

In recognition of the obvious need for environmental improvement of mobile home areas and for greater availability of better quality sites, it is important to determine why this need has been unfulfilled and how a planning solution can be applied. This aim will be pursued by way of a case study of Greater Victoria. Firstly, the results of a survey of mobile home park locations and characteristics will be presented and analyzed in order to determine and explain the present status of this accommodation form. Secondly, criteria for development of good quality mobile home park sites will be introduced, and finally, prospective new locations for mobile home parks in Greater Victoria will be identified and evaluated. It is hoped that the results of this study will be of specific value for planning purposes in Greater Victoria and of more general application in other areas.

Historical Background

North America has a long history of migratory populations, and this experience has persisted into modern times, in particular that of the westward movement of the settlers and the seasonal migration of harvest workers.⁸ Over the years people have lived in tents, lean-to-shelters, covered wagons, bunk cars, and other portable makeshift housing used mainly by migratory peoples, military personnel, and construction workers. These forms of shelter were plain, simple, crude accommodations, invariably harsh and possessing none of the amenities and facilities of a home in the real sense of the term.⁹ Naturally, these shelters were "neither regarded nor intended by their occupants as a permanent type of dwelling."¹⁰

Necessity is said to be the mother of invention, and a new life on wheels was created in the 1920's when pioneers developed automobile trailers for dwelling purposes.¹¹ Trailers were formally introduced on the market in 1930 by the Covered Wagon Company, which until 1936 was the industry's largest producer.¹² The depression years of the 1930's and the accompanying social migrations are said to be directly responsible for the growth and development of this housing type and industry.¹³ Around this time there were 100,000 units in use and an estimated demand for another 300,000.¹⁴ According to a report published in Time magazine in 1936, the mobile home industry in the United States at that time became "one of the fastest growing industries in the nation."¹⁵ Business Week magazine in the same year noted, "the trailer coach industry appears on its way toward becoming

a big time enterprise."¹⁶

However, it was not until World War II that mobile homes came into their own as a major form of housing. A housing shortage brought on by the war resulted in a great demand for housing in remote areas near defence plants and installations. Consequently, trailer homes began to attract attention for the first time as a true alternative to permanent dwellings. The United States Atomic Energy Commission was among the first such agency to set up communities of trailers, and since then their popularity has increased rapidly.¹⁷ This increase was accompanied by the trend toward larger house trailers, which provided better living conditions. Concurrently, the trailers became heavier and, naturally, less mobile because of their weight.

Although trailers developed into a viable alternative to fixed dwellings, the populace generally looked upon the trailer residents as "migrants whose contribution to the community was small and of a temporary nature."¹⁸ This sullied image did not allow the trailers to flourish as a form of housing acceptable to the general public. Therefore, the mobile home experts felt that a change in the image might bring about the necessary acceptability and popularity. In an attempt to create a new image, Mr. Elmer Frey, founder of Marshfield Homes of Marshfield, Wisconsin changed the name from 'trailer' to 'mobile home' in 1946.¹⁹

With the passage of time, the mobile home also became a

*Not true
On fact
restrictions
grew out of
size cost
weight and
vehicle size
restrictions
for movement*

more comfortable form of accommodation than ever before. Initially, the trailers or mobile homes were only eight feet wide. In 1954, ten-foot wide units were introduced and the sales increased nearly sixty-eight percent in a single year.²⁰ Since then, even wider single units of twelve feet and double-wide units with more amenities have been introduced. The maximum length of mobile homes also increased from thirty to sixty-eight feet during this time. It was after 1961, as inflation pushed conventional housing costs ever higher, that mobile home production increased to its present high level in both the United States and Canada (Table 1).²¹

Around 1960 the mobile home manufacturers started to use assembly line techniques and pay more attention to the comfort to be provided by this new lifestyle. Gradually the public image of mobile home living improved, further accelerating demand. But the acceptance of this new form of housing has been slower in Canada than in the United States. A report entitled, The Mobile Home in Canada, stated that this trend was mainly because "the shortage of low-cost housing has not been as severe in Canada as in the United States."²² Table 2 shows the gradual development of mobile homes as an alternative mode of housing in Canada. Approximately 550,000 people in Canada live in 179,762 mobile homes (December 1974), more than three times as many as did so in 1968.²³ The recognition of mobile homes as an alternative form of accommodation and the financial backing of the Central Mortgage and Housing Corporation were largely responsible for the great increase in mobile home numbers in

TABLE 1

MOBILE HOME PRODUCTION IN THE UNITED STATES AND CANADA

Year	United States	Canada ¹
1961	90,200	1,225
1962	118,000	1,450
1963	150,000	1,562
1964	191,320	2,152
1965	216,470	3,093
1966	217,300	3,215
1967	240,360	4,362
1968	317,950	6,302
1969	412,700	9,151
1970	402,200	9,324
1971	485,000	15,019
1972	489,370	20,334
1973	479,000	25,636
1974	502,400	28,680

¹Figures include units used for residential purposes only.

Sources:

Mobile Home Manufacturers Association.
Annual Industry Report. Chicago, 1975, p. 32
 and

Canadian Mobile Home Association. The Mobile
 Home in Canada. Toronto, 1975, p. 12.

TABLE 2

NUMBER OF MOBILE HOMES AND MOBILE HOME PARKS IN CANADA BY PROVINCE, 1968 AND 1974

Province	Mobile Homes			Mobile Home Parks		
	1968	1974	Percentage Change	1968	1974	Percentage Change
Newfoundland	1,238	4,852	+ 292	8	14	+ 75
Prince Edward Island	607	1,788	+ 195	7	13	+ 86
Nova Scotia	3,199	15,433	+ 382	47	77	+ 64
New Brunswick	4,300	11,693	+ 172	31	78	+ 152
Quebec	7,000	28,319	+ 305	60	155	+ 158
Ontario	12,000	30,648	+ 155	81	134	+ 65
Manitoba	5,000	9,650	+ 93	20	37	+ 85
Saskatchewan	4,700	10,038	+ 114	132	167	+ 27
Alberta	8,239	22,911	+ 178	105	279	+ 166
British Columbia	8,150	44,420	+ 445	230	620	+ 170
Canada	54,433	179,762	+ 230	721	1,574	+ 118

Sources: Canada: Department of Industry, Trade and Commerce. The Mobile Home in Canada. Ottawa, 1970, p. 10, and

Canadian Mobile Home Association. The Mobile Home in Canada. Toronto, 1975, p. 10.

Note: The statistics in these publications originated from Statistics Canada data and reflect its definition of a mobile home.

Canada,²⁴ Mobile home parks for the accommodation of the units also increased. At present there are 1,574 mobile home parks in Canada, as compared to 721 in 1968.

Definition of a Mobile Home

With such a long history and varying levels of acceptance or hostility, many definitions of mobile homes have emerged. Various institutions have advanced different definitions to serve their own specific purposes. Hence, there is at present no universally accepted definition of a mobile home. This situation causes difficulties in developing this housing form, since it hinders the application of building codes, financing techniques, and zoning regulations for mobile home parks.

Statistics Canada, for example, defines the mobile home as "any dwelling designed and actually moveable, such as a trailer, railway car or boat, if occupied by persons with no other usual residence on census date."²⁵ This definition encompasses far more than the standard mobile home, implying that all forms of accommodation, other than site-built ones, are mobile homes. Thus, by applying this definition, Statistics Canada presents an exaggerated figure of mobile homes in Canadian census reports.

The Canadian Standards Association defines a mobile home as "a dwelling for year-round living, towable on its own chassis for use with or without permanent foundation and for connection

to utilities."²⁶ Although this definition of the mobile home is a more accurate description than the one provided by Statistics Canada and considers mobile homes as year-round dwelling units, it does not express explicitly what facilities must be available in a mobile home.

Another definition has been put forward by the Health Act (1967) of British Columbia. It states:

Mobile home means a structure manufactured as a unit, intended to be occupied in a place other than that of its manufacture, and designed for dwelling purposes.²⁷

This Act further differentiates between an 'independent' and a 'dependent' mobile home — one with a toilet and bath or shower and one without these facilities. It is clear from this definition that 'dependent' mobile homes are not suitable for year-round occupation, as they lack the basic utilities, whereas the 'independent' units are suitable as permanent dwellings. In other words, a 'dependent' mobile home is, for all practical purposes, a 'travel-trailer' used for vacationing and week-ends.

The Mobile Home Manufacturers Association, Chicago, provides a more explicit definition that has been adopted for the present study:

A mobile home is a portable unit designed and built to be towed on its own chassis, comprised of frame and wheels, connectable to utilities, and designed without a permanent foundation for year-round living. A unit may contain parts that may be folded, collapsed or telescoped when being towed and expanded later to provide additional cubic capacity as well as two or more separately towable components designed to be joined into one integral unit capable of being again separated

into the components for repeated towing.²⁸

Definition of a Mobile Home Park

Mobile home parks also have been defined by various institutions to serve their own purposes. These divergent and on the whole unsatisfactory definitions make it difficult to maintain uniformity in defining a mobile home park for zoning, development and taxation purposes or distinguishing it from a trailer-court.

The Health Act (1967) of British Columbia defines a mobile home park as "any parcel of land on which are located two or more mobile homes."²⁹ This brief definition does not distinguish between locations of temporary 'dependent' mobile homes and those of more permanent 'independent' units.

The Canadian Standards Association takes the permanency of occupancy into consideration and defines a mobile home park as "a parcel of land with lots for lease or rent specifically intended for the placement of mobile homes for non-transient use."³⁰ This definition omits reference to amenities considered to be desirable in a mobile home park and the system of management.

The definition put forward by the Planning Department, Burnaby, British Columbia, also lacks such references, but it is more specific in nature. A mobile home park is defined as:

Any parcel of land on which two or more mobile homes are intentionally installed for permanent occupancy (except for a parcel of land on which any mobile home is more than one hundred feet from any parcel boundary or highway, and more than five hundred feet from any

other mobile home); permanent, relating to the fact that the owner uses the trailer as his permanent dwelling unit, and intends to remain on a site for a period of more than three months.³¹

The Central Mortgage and Housing Corporation defines a mobile home park as:

A mobile home development under single ownership, and managed by a mobile home park operator, but not having a registered subdivision plan of lots. Lots, or lots with individual mobile homes, may be rented. Ownership and responsibility for the maintenance of the internal roads, underground services, communal areas and building, together with general park management including snow clearance, garbage collection etc., rest with the management.³²

This definition is the most comprehensive of those presented, except that the important reference to permanent occupancy of units is omitted. It has been adopted for the present study, along with the concept of permanency of occupance as stated in the definition of the Canadian Standards Association and the Burnaby Planning Department.

The Study Area

The Victoria Census Metropolitan Area (1971) as defined by Statistics Canada has been adopted as the study area (Figure 1). It falls within the Capital Regional District of British Columbia and includes the city of Victoria, the municipalities of Oak Bay, Esquimalt, Saanich, Central Saanich, North Saanich, and Sidney and the unorganized territories of View Royal, Colwood, Langford, Metchosin, Discovery Island and Chatham Island. It covers a total area of 188.63 square miles. Each of the municipalities has its own local government for basic planning and development activities.

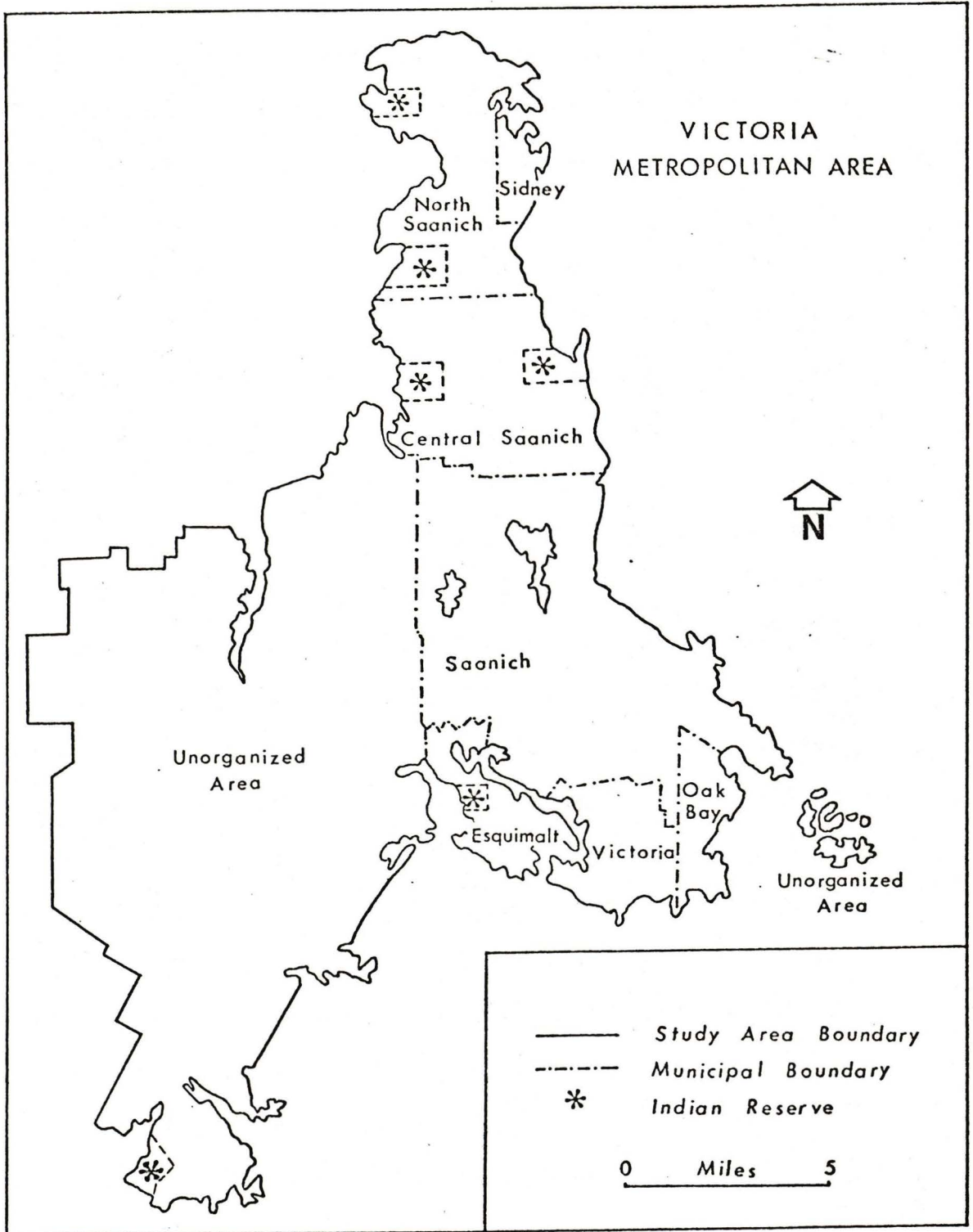


Fig. 1. The Study Area

Unorganized areas, on the other hand, lack this apparatus and depend upon the Capital Regional District for policy formulation and implementation of the plans related to development.

Greater Victoria was selected as an appropriate laboratory for a study of mobile home siting problems for several reasons. It is a region where a housing crisis poses one of the most acute social problems. According to the latest Central Mortgage and Housing Corporation records, the overall vacancy rate in Victoria is 0.3 percent, making this area one of the four lowest in Canada.³³ It has a substantial latent demand for mobile home accommodation. Victoria has a reputation of being an area of "newly weds and nearly deads"³⁴ who form the potential buyers of the mobile homes. The 1971 Census of Canada indicated that, although the percentage of young married couples is not significantly different from the provincial or national average, the percentage of senior citizens in this area is far greater than the provincial or national figure. Only 18 percent of married persons living in Greater Victoria are under thirty years of age, against 21.4 percent in British Columbia and 22 percent in Canada. However, 19.8 percent of the people living in that area are over sixty years of age, in contrast to 13.2 percent in British Columbia and 11.7 percent in Canada.³⁵ A final reason for the study area choice was its accessibility from the University of Victoria, facilitating the conduct of field surveys.

Methodology

In order to accomplish the research objectives, it was necessary first to collect information relating to the present conditions of mobile home parks in Greater Victoria. A total of nineteen mobile home parks were in operation at the time of the survey in 1975. To gather information from mobile home park managers on park design a questionnaire was prepared. Three park managers refused to respond; therefore, the sample size was sixteen. The questionnaire, in its final form (Appendix A) was designed to seek information on three aspects of mobile home park development and operation in Greater Victoria. The first part requested data regarding the present condition and the facilities available in the park, and information relating to its growth and development. The second part was related to the park's future development. The final part dealt with the rules and regulations that govern the operation of mobile home parks in Greater Victoria.

The acquisition of complete information on local government zoning by-laws regulating the use of mobile homes and the operation of mobile home parks was considered essential to the study. To achieve this goal the existing zoning by-laws were studied and personal interviews conducted with local planners. An outline of the planner interviews is given in Appendix B. The interviews were based on open-ended questions and the responses were recorded on tape. This procedure was followed in order to maintain consistency in the interviews.

Personal interviews with Mr. D. Caul, Vice-President of Western Mobile Home Dealers' Association, and Mr. V. Tiffin, President of Active Mobile Home Owners' Association were conducted in order to determine the demand and supply aspects of mobile homes and their parks in Greater Victoria. These men also made comments and suggestions regarding mobile home environmental problems and prospects in the study area.

Throughout the study an attempt has been made to use the information, statistics and maps already collected and compiled by the local governments and planning authorities. The aim has been to synthesize the existing information and to add new data. Hopefully, this will provide a basis for future mobile home site planning policies.

REFERENCES

¹G. Borgeson and L. Borgeson, Mobile Homes and Travel Trailers, (New York: Arco Publishing Co., undated), p. 11.

²Ibid.

³M. J. Drury, Mobile Homes: The Unrecognized Revolution in American Housing. (New York: Praeger Publishers, 1972), p. 158.

⁴Canadian Mobile Home Association, The Mobile Home in Canada, (Toronto: Canadian Mobile Home Association, 1975), p. 3.

⁵Canada: Department of Industry, Trade and Commerce, The Mobile Home in Canada, (Ottawa: Information Canada, 1970), p. 29.

⁶British Columbia: Department of Industrial Development, Trade and Commerce, Mobile Homes in British Columbia. Victoria, 1971, p. 19.

⁷R. Nourse, "Report on Mobile Homes in British Columbia." Proceedings of Lifestyle for Tomorrow Conference, (Toronto: Canadian Mobile Home and Travel Trailer Association, 1973), p. 5.

⁸Canada: Department of Industry, Trade and Commerce, Ibid., p. 8.

⁹B. Hodes and G. G. Roberson, The Law of Mobile Homes, (New York: Commerce Clearing House, 1964), p. 1.

¹⁰Ibid.

¹¹Ibid.

¹²M. G. Fleishman, "Mobile Homes: A Plan for Housing Low Income Families", M.B.A. Thesis, (Berkeley: University of California, June 1968), p. 17.

¹³British Columbia: Department of Industrial Development, Trade and Commerce, Ibid., p. 9.

¹⁴M. G. Fleishman, Ibid.

¹⁵Time, As quoted by M. G. Fleishman, date not given, Ibid.

¹⁶Business Week, "Where are the Trailers Going?", September 19, 1936, p. 14.

¹⁷W. J. Randall and C. W. McCready, "The Appraisal of Trailer Courts", Appraisal Journal, Vol. 27, January 1959, p. 95

- ¹⁸Canada: Department of Industry, Trade and Commerce, Ibid.
- ¹⁹L. McDonnell, Mobile Homes: The Low-Cost Housing Hoax, (New York: Grossman Publishers, 1975), p. 8.
- ²⁰Mobile Home Manufacturers Association, Flash Facts: Pocket Reference to the Mobile Home Industry, (Chicago: Mobile Homes Manufacturers Association, 1973), p. 3.
- ²¹Housing, April 1973, p. 12.
- ²²Canada: Department of Industry, Trade and Commerce, Ibid., p. 8.
- ²³Canadian Mobile Homes Association, Ibid., p. 11.
- ²⁴J. Nankivell, "All Roads Lead to Home", The Globe and Mail, (Weekend Magazine), June 16, 1973, p. 16.
- ²⁵Statistics Canada, 1971 Census of Canada, Vol. II, Part 3, Bulletin 2.3-2, June 1973, p. ii
- ²⁶Canadian Standards Association, Mobile Home Parks: CSA Standard Z 240.7.1--1972, (Rexdale, Ontario: Canadian Standards Association, 1972), p. 7.
- ²⁷British Columbia: Department of Health, Health Act, British Columbia Regulation 239/67, Order-in-Council No. 3130, (Victoria: 1967), p. 1.
- ²⁸Mobile Home Manufacturers Association, Mobile Home -- A Complete Guide to Mobile Home Living, (Chicago: Mobile Home Manufacturers Association, 1969), p. 1.
- ²⁹British Columbia: Department of Health, Ibid.
- ³⁰Canadian Standards Association, Ibid.
- ³¹Burnaby: British Columbia, Mobile Home Study, (Burnaby: Planning Department, 1969), p. 7.
- ³²Central Mortgage and Housing Corporation, Site Planning for Mobile Homes: A supplement to the Site Planning Handbook, (Ottawa: Central Mortgage and Housing Corporation, 1972), p. 5.
- ³³Housing Statistics, (Victoria: Central Mortgage and Housing Corporation, 1975), p. 1.
- ³⁴The Victorian, October 22, 1975, p. 17.
- ³⁵Statistics Canada, Ibid., Vol. I, Part 4, Bulletin 1.4-2, April 1973, pp. 1-1 and 1-2; 2-5 and 2-6; 3-15 and 3-16.

CHAPTER II

RELATED RESEARCH AND LITERATURE

Most of the literature on mobile homes has appeared during the past thirty years. The most recent and varied literature falls logically into several distinct categories that are discussed separately. This survey is an attempt to integrate the theoretical with the empirical research which has been conducted to date, and to establish a case for the present study.

Although people have lived in 'trailers' since the 1920's, it was not until World War II that any serious study was conducted on this form of living. Relatively few studies were carried out before 1955, but the findings of these earlier studies present contradictions which make generalizations difficult. They fall into two categories: those that find mobile homes and their occupants objectionable and those that look favourably on them. The first group, in effect, reinforce the stereotyped public image of mobile home residents as educationally, economically and occupationally inferior to the people living in conventional homes.

One of the earlier studies of mobile homes was published by Alexander C. Wellington in 1951. He conducted a survey of high density mobile home parks across the United States and found

that "trailer slums" possessed a "neighbour-in-your-yard" mode of living that "robs a family of any sense or actual practice of privacy, of any opportunity for real withdrawal into itself, so essential to healthy family life."¹ Wellington did not consider trailers to be an adequate form of housing, nor conducive to a satisfactory style of living. But Whyte, a contemporary researcher, found that the mobile home style of living met the "basic requirements of life", especially since he observed the trailer dwellers' link with mobility. In 1953, he reported in Fortune magazine: "Profound as the consequences of mobility have been, the most expected has not come about. The transients are not plagued by instability and loneliness."²

This more positive view was substantiated very clearly in the findings of Hager³ and Schorr⁴. Hager investigated a group of construction workers in Bucks county, Pennsylvania in 1954 and concluded:

They possess characteristics that are generally prized by communities -- sobriety, skilled and reliable workers, family stability, and a genuine interest in contributing to and improving upon the community in which they live. They have had wide travel experience and are familiar with community customs, school, services, and taxes ... They take considerable pride in the important and necessary role they play in industrial development. They view themselves as community assets and, therefore, are extremely sensitive to charges that they are irresponsible.⁵

Schorr conducted a study of the construction workers at a new atomic plant in Ohio and did not find social problems like divorce, juvenile delinquency, crime and mental illness among the mobile home residents. His findings were quite different

from his expectations. He commented that "they were not different in either kind or amount of social problems from any other community."⁶

In reviewing the major finding of these studies, it is evident that there are some inconsistencies. The Wellington conclusions were related to high-density and poorly maintained trailer courts, but such generalizations have been applied very frequently to other mobile home parks where the living conditions were far better. In contrast, both Hager and Schorr investigated well planned and operated construction site mobile home parks.

Empirical studies on mobile homes conducted since 1955 are more numerous, and have attempted more comprehensive examinations of mobile home living. The year 1955 is something of a landmark in the history of mobile homes. That was the first year in which more than 100,000 mobile homes were sold, most of them being ten-foot wide units.⁷ Financial institutions by that time were showing more interest in extending loans for longer periods than the usual three years. That was the first year when down payments as low as twenty-five percent for new mobile home purchases were introduced. Formerly total payment commonly was required at time of purchase.⁸ In the opinion of housing experts, the post-war housing shortage was over by 1955 and people could select housing by preference rather than necessity. As the United States Congress and the Federal Housing Authority recognized the mobile home as a form of housing in early 1956, it entered into direct competition with single family dwellings.⁹

Due to the greater volume and variety of research into mobile home living after 1955, the literature since that date is divided into a number of sections, each dealing with a specific aspect of the topic.

The Mobile Home Industry

The growth of the mobile home sector is directly related to the growth of the mobile home industry. Studies dealing with the development of the industry attributed growth mainly to government and social acceptance. However, they made no mention as to whether or not the newer parks were being established in attractive residential locations. They seemed to overlook this aspect of urban residential planning.

Drury found that, following its recognition as a form of housing in early 1956, the American mobile home industry more than tripled its output from 111,900 units in 1955 to 401,200 in 1970 (Table 1).¹⁰ The retail sales value jumped from \$462 million in 1955 to \$3 billion in 1970 and the number of mobile home parks increased from approximately 5,000 to 25,000 during this period.¹¹ Drury stated:

This increase in production has been possible because of the development of the larger, more versatile unit that is produced by a competitive industry at a lower cost than other industrialized housing. The development of many new and better parks during this time has also facilitated growth. Easy financing for the unit and the change in public and official attitude due to the development of industry-wide standards, better parks, and the industry's efforts to raise the status of the unit facilitated the growth of the industry.¹²

The growth and development of the mobile home industry was further described by Drury as "the unrecognized revolution in American housing."¹³ In her attempt to "determine its potential for completely revolutionizing the housing industry",¹⁴ Drury seemed to have presented an optimistic proposal when she held the opinion that, "when there is a limited housing supply and limited resources and when reuse of urban residential land seems inevitable, as is the situation in the urbanizing areas ... it appears that a mobile industrialized housing unit is a sound solution. Certainly it is a solution that should be explored."¹⁵ It seems unrealistic to attempt to insert mobile homes into urban renewal areas on a large scale.

The same trend was noticeable in Canada. The federal Department of Industry, Trade and Commerce accepted the mobile home as "the most adaptable housing form"¹⁶ in 1970. Since then production increased sharply from 12,753 units in 1969 to 33,090 in 1974.¹⁷ The number of mobile home parks also jumped from 721 in 1968 to 1,574 in 1974.¹⁸ This study also presented the view that the evolution of better parks, the introduction of more convenient and improved models, and the official acceptance by government led to the rapid growth of the industry.

While both the Drury and the Central Mortgage and Housing Corporation studies cited public acceptance, the introduction of sophisticated units and the development of better parks as contributing factors to the growth of the industry, they did not mention the importance of park location as a factor.

Mobile Home Communities

Every mobile home park forms its own community, and the pattern of development of any residential neighbourhood is dependent upon the nature of its communities. People with similar housing in close proximity to others develop strong community ties. This is definitely applicable in mobile home community development. In the words of Duke, who studied mobility as an aspect of community life,

...trailers form a community, perhaps it is best to first study the occupants of trailers, just as you study a permanent community -- their backgrounds, their income, their occupations, their family life. Before we can determine how to improve the situation, we must decide their needs.¹⁹

This community concept has been reflected in the studies conducted by the United States Bureau of Census,²⁰ the Canadian Mobile Home Association,²¹ Carnevale,²² Contractor,²³ and Gillies.²⁴ All of these studies investigated a wide variety of aspects of mobile home living, but their findings were inconsistent.

An analysis of the United States Bureau of Census data by McDonnell indicated that the social and economic characteristics of mobile home dwellers were different from those of conventional home dwellers. It showed that mobile home residents were younger and earned less than conventional home residents. Forty percent of all mobile home household heads were younger than thirty-five, whereas only twenty-five percent of all American households were headed by members in that age group.²⁵

The average income for a mobile home family in 1970 was \$7,000, far less than the national average of \$9,590 in that year.²⁶

Few mobile home owners were members of high income groups: only six of every 100 persons in the working population as a whole. Mobile homes attracted a high percentage of married couples: eighty-three percent of the owners of new mobile homes were married couples, compared with seventy percent of all American households.²⁸ Nearly sixty percent of all mobile home owners were blue-collar workers, whereas only thirty-three percent of the American work force held jobs in this class. Conversely, twenty-five percent of the mobile home population held white-collar jobs, compared with nearly fifty percent of the American work force.²⁹

The Canadian Mobile Home Association conducted a nationwide survey in 1970 to examine the demographic characteristics of mobile home residents. It showed that fifty percent of mobile household heads were under thirty-five years of age, whereas thirty-nine percent of all Canadian household heads belonged to this age group. In both categories thirty-six percent of the family heads belonged to the forty-five years and older age group. Twenty-three percent of mobile home family heads had only public school education, as compared to sixteen percent of all Canadian household heads. The difference between the two groups was minimal, however, in percentage of family heads possessing high school, technical or business college education, being sixty-nine and seventy percent, respectively. Similarly, occupational characteristics of male heads of mobile home families were, in certain cases, different from their

counterparts living in conventional homes. Twelve percent of male heads of mobile home families held executive or professional positions, and fifty percent skilled or unskilled positions, as compared to twenty-one and forty-three percent, respectively, of those of conventional home families (Table 3).

It has been reported that there is great unity and co-operation among the mobile home dwellers. Carnevale found that they consider the mobile home park as more of a 'social unit' than the fixed-home neighbourhoods.³⁰ He noticed a high degree of mutual aid among the mobile home families and that the people were "oriented to the satisfaction derived in the present rather than in some future goal; and in cooperating rather than competition."³¹ This trait was further substantiated by Contractor who pointed out that distance from other neighbourhoods, distance from community facilities, general unfriendliness of other people toward mobile home park dwellers, and the feeling that friendships made within the park were sufficient were the main reasons accounting for the development of interdependence and social unity among mobile home dwellers.³²

According to Gillies mobile home residents possess certain other social characteristics that are highly prized by most communities. They are "more extroverted and neighbourly than any other group,"³³ because they have closer social contact within a park. Gillies concluded:

As a general rule, mobile home residents are very much aware of the need to respect their neighbours and they are less prejudiced with regard to one's neighbour's foibles. This combination of respect as well as under-

TABLE 3

DEMOGRAPHIC CHARACTERISTICS OF MOBILE AND CONVENTIONAL
HOUSEHOLDS IN CANADA, 1970

Characteristics	Mobile Households (percent)	All Canadian Households (percent)
<u>Age of family head</u>		
Under 24 years	19	12
25 - 34 years	31	27
35 - 44 years	14	25
45 years and over	36	36
<u>Education of family head</u>		
Public school	23	16
High school, technical or business college.	69	70
University.	8	14
<u>Occupation of male family head</u>		
Executive, professional	12	21
Sales, clerical	12	16
Skilled, unskilled labour.	50	43
Retired.	10	5
All other occupations	10	11
No male family head	6	4
<u>Family composition</u>		
Families with children.	52	67
Families without children.	48	33
<u>Family size</u>		
One or two persons	35	23
Three or four persons	44	42
Five or more persons	11	35

SOURCE: Canadian Mobile Home Association. The Mobile Home in Canada. Toronto, Ontario, 1975, p. 11.

standing and tolerance for neighbours is one of their strongest characteristics.³⁴

Hence, the findings of Carnevale, Contractor and Gillies indicate that the mobile home environment generally creates a positive social atmosphere.

Durability of Mobile Units

The durability of the mobile home unit is an important factor in considering its viability as an alternative form of accommodation. Dwellings of any kind are a major investment. Studies concerning durability present only sketchy information on the life of mobile homes. Although accelerated aging-tests have been made on some of the mobile home's different components, no study has been found on the durability of the mobile home as a total integrated unit. Therefore, it is difficult to assign definite durability rates to mobile homes. Mobile home residents may find that "while their sidewalls are solid enough to last thirty years, the floors begin bucking and the plumbing fixtures need replacing in less than one year."³⁵ This would appear to be an extreme and rare case of faulty design and sloppy workmanship. However, a rough indication of mobile home durability was given by Shiefman, Webra and Associates when they conducted a study of the market and resale prices of mobile homes:

A sampling of resale prices...shows that the value of major brand mobile homes depreciates an average of ten percent in the first year, five percent in the following year, and a total of forty-five percent in eight years. Even after fifteen years, when most units will be discarded as year-round housing, mobile homes still retain

considerable value--between twenty percent and thirty-five percent of original cost.³⁶

The resale value of any commodity is dependent upon its use and degree of maintenance, This certainly is applicable in the case of mobile homes. The Shiefman, Webra and Associates study implies that mobile homes have an effective life expectancy of fifteen years as year-round accommodation. The findings of this study correspond with those of Drickey who noted that the average life of well-maintained, new units is approximately sixteen years.³⁷

Economic Aspects of Mobile Home Living

Past studies of mobile home purchasing have shown that it is considered to be an inexpensive form of accommodation. The Mobile Home Manufacturers Association reported that a person with limited income buys a mobile home as it "combines the advantages of the low money tie-up, as in apartment living, with the convenience, pride of ownership, and freedom of living enjoyed in a site-built home."³⁸ The same rationale was reflected in the findings of the British Columbia study in 1971 which mentioned that low purchase cost, mobility, and ease of maintenance were the prime factors in selecting mobile homes by young married couples and senior citizens.³⁹

In a recent survey entitled, Mobile Homes: Problems and Prospects, Audain presented a comparative cost analysis of mobile homes and single family dwellings. He stated that at time of purchase an unfurnished mobile home had a minimum eight dollars per square foot cost advantage for the purchaser over a con-

ventional detached house.⁴⁰ Audain further elaborated that,

New single mobile homes set up in a park are presently retailing at between seventeen dollars and twenty-five dollars per square foot depending on their grade and style. Double wide units retail at between sixteen dollars and twenty per square foot. By way of comparison, the per square foot costs of detached houses (exclusive of land) are in the order of twenty-seven dollars to thirty dollars...⁴¹

These figures clearly indicate that the mobile home undoubtedly is a good bargain compared with any conventional home, at least at the time of purchase. The mobile home usually comes completely equipped with furniture, major appliances and draperies, which are included at a per square foot cost of approximately seventy-five cents; whereas purchase of these items for a conventional home usually requires \$1.50 per square foot.⁴² Audain explained that mobile homes can command this cost advantage through mass purchase of materials, employment of non-union labour (thereby comparatively cheaper), unskilled and semi-skilled labour, and in-plant assembly line manufacturing techniques.

Planning and Development of Mobile Home Parks

With the increase in the number of mobile homes and mobile home parks, urban planners became interested in studying the planning and development aspects of mobile home parks. They realized that "the role of the mobile home in the present housing situation is presented as that of a young and rapidly growing giant; an attempt must be made now to understand and try to control it before it develops to a point at which its energies can become detrimental to society."⁴³

*Nb. Disregard Change Agency
by McDonald in Low Cost
Housing Plan*

One of the early studies was carried out by Bartley and Bair.⁴⁴ They believed that in a comprehensive plan the mobile home park would play an essential and useful role. Such parks might well benefit established residential areas by providing an appropriate transitional use between commercial or high density residential districts and single family homes. Bartley and Bair suggested:

...it can sometimes be made to provide a practical and desirable buffer between commercial and residential districts, making logical and constructive use of land which frequently lies idle or develops slowly between the two districts. This is a transitional use in terms of space. The mobile home parks may also perform as a transitional function in terms of time, and intelligent interim use of land which will later be needed for other purposes.⁴⁵

A review of the literature also demonstrates the existence of a gap between what planners think and practice regarding this form of accommodation. In an authoritative report in 1956, the American Society of Planning Officials admitted that mobile homes are "primarily a part of the permanent housing supply."⁴⁶ This organization further indicated that the acceptance of mobile homes as an alternative form of housing and the passing of municipal zoning by-laws to accept the mobile home parks were necessary to upgrade and maintain the quality of environment in the mobile home parks. But even today a majority of municipalities in both the United States and Canada still do not have such zoning by-laws and do not permit the establishment of mobile home parks.

Among the municipalities and regional districts in Canada that have passed zoning by-laws some have published noteworthy studies. These are Saanich,⁴⁷ Burnaby⁴⁸ and Surrey⁴⁹ municipalities in British Columbia, the City of Calgary,⁵⁰ the Edmonton Regional Planning Commission,⁵¹ the City of Winnipeg,⁵² the St. Clair Region Development Council, Ontario,⁵³ and the City of Saint John, New Brunswick.⁵⁴ Generally, these studies agree on four basic points. Firstly, the poor planning of mobile home parks has resulted partly from parks being forced through zoning to areas where there are insufficient controls. Secondly, mobile home parks are exactly what local governments make them. If they are treated as legitimate housing areas by their municipalities and their tenants are treated as first class citizens they become good residential areas. Thirdly, the reluctance of municipalities to zone land for mobile home parks is indicative of negative community attitudes toward this form of housing. Such attitudes are based on the image of mobile home parks as poorly planned, grossly over-crowded and ill-maintained neighbourhoods. Finally, there is an urgent need for the creation of a better living atmosphere in mobile home parks, which can only be brought about by changing the existing zoning by-laws. Though several municipalities in Canada have zoning by-laws regulating the operation of mobile homes and mobile home parks within their jurisdictions, none of the existing park by-laws goes very far toward promoting desirable living conditions in mobile home parks. This is because they provide only minimal control

over factors such as site selection, privacy, visual and audio separation between mobile homes, recreation spaces, proper drainage and surfacing of roads, landscaping and park layouts. The ultimate result of such a situation leads to the development and operation of slum-type mobile home parks.

In 1965, the Planning Department of the City of Calgary surveyed all twelve mobile home parks in operation at that time in its area and reported that all of them were situated in commercial or industrial zones with poor residential environments.⁵⁵ The Edmonton Mobile Home Court Study also pointed out that mobile home parks, as a 'bona fide' residential land use, were far removed from residential amenities and services, such as shopping, schools and parks.⁵⁶ The report concluded: "Thus the situation has evolved where legislation unwittingly forces blight on a residential use by confining it to an unattractive commercial environment."⁵⁷ Such an undesirable situation should be avoided by modifying defective local government legislation, and adopting a sound development plan based on well thought out, clearly stated and consistently followed policies which accept mobile home parks as an integral part of the residential community.⁵⁸

National building codes regulating the construction of mobile homes and mobile home parks have greatly influenced development. The National Research Council of Canada,⁵⁹ The Canadian Standards Association⁶⁰ and the Central Mortgage and Housing Corporation⁶¹ have developed building codes which set minimum construction requirements and the specific materials

permitted. They inhibit new building methods and the use of new materials. These types of codes are restrictive in comparison to performance types, which place the emphasis on the objectives to be met, for example, the amount of load to be supported, rather than the specific materials to be used. A consequence of the specification building codes is the development of mobile homes and mobile home parks that are homogeneous in nature, with limited variation in design and development pattern. Since mobile home living is a new way of life, and inventiveness and ingenuity are two essential characteristics of the mobile home industry, there exists an urgent need for the development of the performance type of code in Canada.

Summary

Although mobile homes have been in existence since the 1920's, they have received serious research attention only since World War II. Most of the early studies attempted to find out the living conditions and characteristics of mobile homes and mobile home parks. The studies conducted after 1955 were more varied in nature. They focused on the growth and development of the mobile home industry, the durability of the units, various social aspects of the mobile home residents, and the planning and development of mobile home parks.

Mobile home living presents a lifestyle which is still in the process of evolution and the existing literature forms a basis for understanding the nature and complexity of this new form of accommodation involving great conflicts of interests and

sentiments deeply rooted in society. However, it is apparent that there is a major gap in the literature dealing with site selection. Most of the studies related to legislation, planning and development have been carried out in the absence of much needed information on site development. A thorough search of the literature failed to uncover any study which examines the geographical factors conducive to the development of functional and attractive mobile home parks.

REFERENCES

- ¹A. C. Wellington, "Trailer Camp Slums, A New Kind of Slums," Survey, October 1951, p. 421.
- ²A. C. Whyte, "The Transients," Fortune, June 1953, p. 129.
- ³D. J. Hager, "The Construction Workers and Trailer Living in Bucks County, Pennsylvania," Housing Research, April 1954, pp. 225-231.
- ⁴A. L. Schorr, "Mobile Family Living," Social Casework, April 1956, pp. 175-180.
- ⁵D. J. Hager, *Ibid.*, p. 230.
- ⁶A. L. Schorr, "Families on Wheels," Harper's, January 1958, p. 72.
- ⁷M. J. Drury, *Ibid.*, p. 93.
- ⁸*Ibid.*, p. 94.
- ⁹N. Willat, "Trailer Parks: They Mushroom into a Thriving Business Across the Nation," Barron's, September 1955, p. 15
- ¹⁰M. J. Drury, *Ibid.*, p. 6.
- ¹¹*Ibid.*
- ¹²*Ibid.*
- ¹³*Ibid.*
- ¹⁴*Ibid.*
- ¹⁵*Ibid.*, p. 158.
- ¹⁶Canada: Department of Industry, Trade and Commerce, *Ibid.*, p. 29.
- ¹⁷Canadian Mobile Home Association, *Ibid.*, p. 12.
- ¹⁸*Ibid.*, p. 10.
- ¹⁹R. D. Duke, "Mobility--A New Aspect of Community Life," Urban Land, July-August 1953, p. 3

²⁰United States Bureau of Census, Mobile Homes, Current Housing Subjects Reports, Series HC (7)-6; and a United States Bureau of the Census Study, "Survey of the Owners of New Mobile Homes", conducted for the Department of Housing and Urban Development, 1970.

²¹Canadian Mobile Home Association, *Ibid.*, p. 11.

²²J. B. Carnevale, "A Comparative Study of Neighbouring in a Mobile Home Neighbourhood and Fixed Home Neighbourhood, (Master's Thesis, Tucson, Arizona, University of Arizona, 1961).

²³R. Contractor, "Attitudes of Mobile Home Owners Toward Mobile Home Parks", (Master's Thesis, Vancouver: University of British Columbia, 1972).

²⁴J. M. Gilles, An Appraisal of Mobile Home Living, the Parks and the Residents, (Los Angeles: Trailer Coach Association, undated.)

²⁵L. McDonnell, *Ibid.*, p. 16.

²⁶United States Bureau of Census, *Ibid.*, p. 23.

²⁷*loc. cit.*

²⁸*loc. cit.*

²⁹United States Bureau of Census, Statistical Abstract of The United States - 1972, (Washington, D. C.: 93rd Edition, 1972) p. 230.

³⁰J. B. Carnevale, *Ibid.*, p. 89.

³¹*Ibid.*, p. 90.

³²R. Contractor, *Ibid.*, p. 75.

³³J. M. Gillies, *Ibid.*, p. 8.

³⁴*loc. cit.*

³⁵L. McDonnell, *Ibid.*, p. 106.

³⁶Shiefman, Webra and Associates, "The Mobile Home Market," The Appraisal Journal, Vol. 40, No. 3, July 1972, p. 391.

³⁷R. A. Drickey, Mobile Home Replacement Rates and Surviving Inventory, (Michigan: Whirlpool Corporation, 1971) p. 4.

³⁸Mobile Home Manufacturers Association, Ibid., p. 10.

³⁹British Columbia: Department of Industrial Development, Trade and Commerce, Ibid., p. 25.

⁴⁰M. J. Audain, Mobile Homes: Problems and Prospects, (Victoria: Queen's Printer, 1975) p. 141.

⁴¹Ibid., pp. 141-142.

⁴²Ibid., p. 142.

⁴³R. L. Knight, "Planners and Mobile Home Research", Socio-Economic Planning Review, Vol. 5. June 1971, p. 219.

⁴⁴E. R. Bartley and F. H. Bair Jr., Mobile Home Parks and Comprehensive Community Planning, (Gainesville: University of Florida, 1960.)

⁴⁵Ibid., pp. 14-15.

⁴⁶American Society of Planning Officials, The Changing Functions of Trailer Parks, (New York: American Society of Planning Officials, 1956), p. 17.

⁴⁷District of Saanich, British Columbia, By-law No. 1541: Mobile Home and Trailer Parks Regulation By-Law, 1959, and By-Law No. 3366: Mobile Home Parks District (RH-1), 1972.

⁴⁸Burnaby, British Columbia, Ibid.

⁴⁹District of Surrey, British Columbia, Mobile Home By-Laws, (Burnaby: Planning Department, 1968).

⁵⁰City of Calgary, A Report on Mobile Home Parks, (Calgary: May, 1971).

⁵¹Edmonton Regional Planning Commission, Mobile Home Court Study, (Edmonton: Edmonton Regional Planning Commission, 1969).

⁵²City of Winnipeg, Mobile Homes in Metropolitan Winnipeg, (Winnipeg: Planning Division, 1970).

⁵³St. Clair Region Development Council, The Mobile Home From a Planning Standpoint, (Chatham: St. Clair Region Development Council, 1971.)

⁵⁴City of Saint John, New Brunswick, Mobile Homes and Parks Survey, (Saint John: Planning Commission, 1970.)

⁵⁵City of Calgary, Examination of Mobile Home Development, (Calgary: Planning Department, 1965).

⁵⁶Edmonton Regional Planning Commission, Ibid.

⁵⁷Ibid., p. 5.

⁵⁸District of Saanich, British Columbia, The Mobile Home, (Saanich: Planning Department, 1970.), p. 22.

⁵⁹National Research Council of Canada, National Building Code of Canada: 1975, (Ottawa: National Research Council of Canada, 1975).

⁶⁰Canadian Standards Association, Ibid.

⁶¹Central Mortgage and Housing Corporation, Ibid.

CHAPTER III

THE CASE FOR MOBILE HOMES IN THE PRESENT

BRITISH COLUMBIA ENVIRONMENT

The mobile home is gaining popularity by offering an inexpensive lifestyle with most of the amenities of modern living. Although it has been mentioned frequently that "a lot of people cannot afford conventional homes and mobile homes are their only hope of owning their own accommodation",¹ the possibilities of this new form of housing have not yet been fully explored in British Columbia. This may be attributed chiefly to adverse public opinion regarding mobile homes. This chapter examines the viability of mobile homes in the light of economic aspects and public opinion.

Certain economic advantages attract people toward mobile homes. In British Columbia a standard three bedroom mobile home of single width cost \$16,000 in 1975, whereas the average price of a comparable single family dwelling or a condominium town-house was \$40,000 to \$50,000.² A new, furnished, double-wide mobile home installed in a park could be bought for \$25,000.³ Under the present system of financing, mobile homes require a twenty-five percent down payment, against the customary ten percent for

conventional units. The maximum amortization period for a mobile home is twelve years. The equivalent period for a standard house is usually between twenty-five and thirty years. In addition, the interest rate for a mobile home is generally higher, 13.5 percent versus 12 percent. Notwithstanding, the monthly payment for a mobile home is lower than that for a comparable condominium apartment or detached house. Several specific examples are presented in Table 4. This short term economic advantage makes the mobile home an attractive form of housing to people with limited resources.

A number of researchers, several writing on British Columbia, have identified specific qualities of mobile home dwellers. Mobile home residents are more satisfied with short term benefits than long term advantages.⁴ Due to their limited capacity for investment,⁵ lack of motivation in investing a large amount of money for a longer period of time,⁶ limited ability to plan for the future⁷, and the desire to own a home as early as possible,⁸ mobile home buyers are attracted by short term benefits, such as low monthly payments and living in a comparatively inexpensive home with most of the facilities of a conventional unit. Long term considerations, such as capital appreciation in a conventional unit, ownership of a more comfortable home, and depreciation in a mobile home are largely ignored. Audain remarked:

"...long term is not such a relevant consideration to many...mobile home buyers, a good number of whom are of

TABLE 4

MONTHLY PAYMENT FOR DIFFERENT FORMS OF HOUSING
IN SOUTHWESTERN BRITISH COLUMBIA, 1975

Location	Single Wide Mobile	Double Wide Mobile	Two Bedroom Condominium Apartment	Three Bedroom Condominium Townhouse	Three Bedroom Detached House
Lower Mainland	\$ 337.76	\$ 426.80	\$ 384.36	\$ 494.16	\$ 603.88
Central Vancouver Island Area	\$ 242.08	\$ 344.12	\$ 299.52	\$ 369.40	\$ 394.28

Monthly payment figures include mortgage payment, municipal taxes, and pad rent, as well as strata fee where applicable.

SOURCE: M. Audain. Mobile Homes: Problems and Prospects. Report of an Inquiry on Mobile Homes in British Columbia, Victoria, British Columbia, November 1975, pp. 146-147.

moderate income with little capacity to invest, or senior citizens who largely lack the motivation to do so. What most mobile home purchasers are looking for is an economical way of attaining a good standard of shelter at the lowest possible cost." ⁹

The social class of the mobile home owners and their position in the life cycle ¹⁰ attract them to this form of housing. Both young married couples and retired senior citizens, who are the major mobile home buyers, give greater priority to short term advantages than to long term benefits in selecting their desired form of housing.

The general image attached to mobile homes plays a significant role in their acceptability and location in the urban scene. Audain observed this tendency during public hearings throughout British Columbia in 1975. He mentioned a woman complaining with reference to mobile homes in Chilliwack that, "I don't have any figures on this, but there must be a lot of juvenile delinquents in those places." ¹¹ An alderman in Prince George remarked, "The school principal tells me that he has nothing but trouble from the mobile home kids." ¹² A high proportion of the general public holds the opinion that mobile home residents are basically transients and that they are economically, occupationally and educationally inferior to conventional home residents. ¹³ Furthermore, the mobile home residents are seen as not paying their fair share of local taxes. ¹⁴ It is also believed that the establishment of a mobile home park in a residential neighbourhood causes depression of land values and helps to make such areas second rate. This

attitude is similar to that in parts of the United States concerning the effect on real estate when a black family moves into a white neighbourhood.¹⁵

Whether or not mobile home residents in general are transients has not been well documented, but the figures for British Columbia show that mobile home residents in that province can hardly be considered transients when compared to those living in single attached dwellings and apartments. Table 5 shows that sixty-eight percent of mobile home residents in British Columbia moved once during the last two years, whereas comparable percentages were sixty-four and sixty-five in the case of residents in single attached and apartment households, respectively. The use of the term 'mobile home' is becoming a misnomer in British Columbia, since almost all such homes are non-mobile now. With reference to British Columbia, Audain remarked, "the likelihood of a mobile home being moved a second time is diminishing--especially with the trend to double-wide units."¹⁶

It is a traditional belief that mobile home residents are found predominantly in the lower income brackets and are poorly educated. Although several studies have reported that the average income of the mobile home family is less than that of the conventional home family, the difference is not substantial.¹⁷ For example, in British Columbia, the average income of the mobile home family was \$6,959 in 1971, as compared with \$7,343 in the case of families living in conventional homes.¹⁸ It should be noted that 30 percent of mobile home owners in British Columbia are over sixty years of age, as compared to 13.2 percent

TABLE 5

PERCENTAGE OF PEOPLE LIVING IN DIFFERENT FORMS OF ACCOMMODATION
WHO RECORDED AT LEAST ONE MOVE IN THE LAST TWO YEARS,
AS REPORTED IN 1971

Type of Household	Canada	British Columbia	Greater Victoria
Single Attached	40.20	64.13	63.17
Single Detached	22.50	29.56	27.54
Apartment	56.24	64.69	62.87
Mobile Home	--	68.00	--
All Households	34.42	40.81	40.11

SOURCES: Statistics Canada. 1971 Census of Canada. Vol. II, Part 4, Bulletin 2.4-5, June 1975, p. 29-1. The figure for mobile homes is from, British Columbia: Department of Industry, Trade and Commerce. Mobile Homes in British Columbia, Victoria, 1971, p. 64.

of owners living in conventional homes.¹⁹ These senior citizens usually depend on pensions or 'Mincome', and generally fall in the lower income brackets. Hence, the average annual income of mobile home owners is lowered by this sizable retired group. It can be concluded from these findings that the mobile home does not provide shelter only for the poor. Neither are mobile home residents academically much inferior to those of conventional houses. A total of sixty-nine percent of heads of mobile home households attended high school, technical or business college, compared to seventy percent of heads of all Canadian households (Table 3).

There is a widespread feeling that mobile home owners are municipal parasites, and do not pay their fair share of the local taxes.²⁰ This is based on the argument that mobile homes usually are classified as personal property rather than real estate and, as a result, their owners pay low property taxes. Yet, mobile home residents receive their full share of community facilities--schools, libraries, hospitals, police and fire protection, streets, utilities and recreation facilities. Such a situation prevailed in the past and caused widespread dissatisfaction among the conventional home residents. In 1973, the British Columbia Mobile Home Tax Act was passed, making mobiles stand on the same tax footing as permanent dwellings.²¹ Thus, there is no longer any basis for the prejudice against mobile home owners on the grounds that they do not pay a fair share of the local taxes, and there are signs that the attitude of the

general public is becoming more favourable to this mode of housing.²²

The fear of neighbourhood depreciation is another notable factor contributing to a negative public attitude toward mobile homes. Historically, mobile home parks have suffered from a lack of proper planning, community facilities and municipal services. Park operators were interested in maximizing their incomes and minimizing their services. Mobile home owners, too, had little motivation to upgrade the small lots they rented. As a result, mobile home neighbourhoods deteriorated. Naturally, people living in conventional homes developed the opinion that the establishment of a mobile home park in their neighbourhood would depress the market value of their property.²³ This attitude also has changed in recent years. The imposition of CSA Standards in the development of mobile home parks, better layout in the arrangement of the units within the parks and the addition of communal facilities, such as recreation halls, swimming pools and service buildings, have revolutionized the mobile home environment. It is now realized that a properly designed, well equipped, beautifully landscaped and decorously buffered mobile home park "can be a great credit to a community-- as well as a supplier of reasonably priced housing accommodation."²⁴ If this progressive housing concept is fully developed, British Columbia undoubtedly will become "The Land of Mobile Home Opportunity."²⁵

Public opinion is an influential factor in the decision-making process at the local government level. As reported by the Central Mortgage and Housing Corporation,

"...general acceptance of the mobile home is greatly hampered by widespread public opinion that supports municipal regulations and zoning practices which prohibit the use of mobile homes for permanent residency or ban them to less desirable sites. This is the primary challenge to the mobile home as a form of permanent shelter..."²⁶

The same tendency can be observed in the Victoria area where "backward-looking attitudes of governments...are seriously crippling the mobile home industry."²⁷ This has resulted in a virtual ruling out of mobile home parks from the municipalities which, in turn, has created a barrier to the growth of this housing type before it has been given a chance to demonstrate its potentiality. Necessary steps, such as public education through mass media, should be undertaken to create a positive attitude regarding mobile homes in British Columbia, and the municipalities should help to create a favourable attitude through the acceptance of properly planned mobile home parks.

One of the causes of the present housing crisis is the high price of conventional homes, and prices are rising in virtually every city in Canada. Conventional housing already is beyond the reach of many people with limited resources. Although mobile home prices also have escalated, the rate of increase has been somewhat lower than that of conventional housing. The mobile home offers an attractive and inexpensive form of accommodation that may help to solve the housing

problem. The mobile home industry, therefore, "deserves encouragement in its determination to continue to supply sensibly priced single family homes to those very large sections of each of our communities that cannot otherwise obtain it."²⁸

Summary

The foregoing discussion indicates that the mobile home is a preferred form of accommodation to a significant percentage of people with limited resources and short term goals. But the adverse public attitude created in the past now stands in the way of its development as a viable form of housing in British Columbia. Recent studies have shown that the popular myths attached to mobile homes are no longer valid in this province. The time has arrived to take steps to change the mobile home image, and to accept them as a normal form of housing in residential neighbourhoods.

REFERENCES

- ¹The Victorian, February 23, 1976, p. 1
- ² M. J. Audain, *Ibid.* p. 147.
- ³loc. cit.
- ⁴R. Contractor, *Ibid.*, p. 73.
- ⁵M. J. Audain, *Ibid.*, p. 151.
- ⁶*Ibid.*
- ⁷R. C. Hall, The Evolution of Mobile Home Parks in Santa Clara County, (M. A. Thesis, Berkeley: University of California, 1968), p. 18.
- ⁸R. Contractor, *Ibid.*
- ⁹M. J. Audain, *Ibid.*
- ¹⁰McDonnell termed them the "Blue-Collar Americans: Young and Old." for details see, L. McDonnell, *Ibid.*, pp. 14-22.
- ¹¹M. J. Audain, *Ibid.*, p. 86
- ¹²loc. cit.
- ¹³E. R. Bartley and F. H. Bair Jr., *Ibid.*, pp. 7 - 8.
- ¹⁴loc. cit.
- ¹⁵Many studies have shown that when a Negro family moves into a white neighbourhood, prices of property fall under panic selling, a phenomenon called the "self-fulfilling prophecy". Believing that real estate values in the neighbourhood will fall, the owner panics and sells, thus creating a depression in market values. For details see, E.P. Wolf, "The Invasion--Succession Sequence as a Self-Fulfilling Prophecy." Journal of Social Issues, Vol. 13, January 1957, pp. 7-20.
- ¹⁶District of Saanich, *Ibid.*, p. 13.
- ¹⁷M. J. Audain, *Ibid.*, p. 14.
- ¹⁸British Columbia: Department of Industry, Trade and Commerce, *Ibid.*, p. 28, and Statistics Canada, *Ibid.*, Vol. II, Part 1, April 1975, p. 66-1.

¹⁹British Columbia: Department of Industry, Trade and Commerce, *Ibid.*, p. 27 and Statistics Canada, *Ibid.*, Vol. I, Part 2, April 1973, pp. 7-9 and 7-10

²⁰E. R. Bartley and F. H. Bair Jr., *Ibid.*

²¹British Columbia: Department of Finance, Mobile Home Tax Act, (Victoria: Department of Finance, 1973), p. 1.

²²V. R. Tiffin, President, Active Mobile Home Owners Association, Personal Interview, Victoria, November 19, 1975.

²³E. R. Bartley and F. H. Bair Jr., *Ibid.*, p. 9.

²⁴M. J. Audain, *Ibid.*, p. 88.

²⁵R. Nourse, Proceedings of Lifestyle for Tomorrow Conference. *Ibid.*, p. 5.

²⁶Central Mortgage and Housing Corporation, The National Housing Act and Mobile Homes, (Ottawa: Central Mortgage and Housing Corporation, 1973), p. 1

²⁷The Victorian, February 23, 1976. p. 1.

²⁸B. D. Towers, Proceedings of Lifestyle for Tomorrow Conference, *Ibid.*, p. 6.

CHAPTER IV

THE ROLE OF GOVERNMENT IN THE DESIGN AND LOCATION OF MOBILE HOME PARKS

The provincial government, through the Health Act (1967)¹, is a major regulator of mobile home park operations. The Act specifically states that the written approval of plans and specifications by the Medical Health Officer is a prerequisite for the establishment, construction, alteration, or subdivision of a mobile home park. Most of the municipalities also require the specifications of the National Building Code of Canada (1975)² and the CSA Standard Z 240.7.1 -- 1972: Mobile Home Parks³ to be met. Regarding the location of mobile home parks within the study area, local governments have relied mainly on their zoning by-laws for control. Because most of the municipalities do not permit the operation of mobile home parks within their boundaries, the vast majority are situated in the unorganized areas. Hence, the present system of regulating mobile home parks in Greater Victoria is a complex one, due to the simultaneous imposition of several codes, regulations and zoning by-laws.

Design

While the Health Act has a legal basis, neither the

National Building Code nor the CSA Standard has any such foundation. Therefore, the latter two sets of provisions can be regarded as guides to good practice in setting up and administering mobile home parks.

Health Act

The Health Act is applicable to the design of all mobile home parks established since October 26, 1967. Where a municipality or regional district has no by-law, these regulations become applicable as the regulations for that municipality or regional district. The main intention of this Act is to ensure a healthy and safe living environment in the mobile home park. It was amended twice--by Order-in-Council No. 134 on January 16, 1968, and by Order-in-Council No. 3686 on October 12, 1971. These amendments were necessary for proper codification of plans and specifications for mobile home parks. The amended Act controls the design of mobile home parks insofar as the placement of units, permissible additions, service building, water supply, sewer systems, garbage disposal systems and supervision are concerned.

It was the first provincial act instituted with the aim of maintaining a uniform standard of mobile home parks through-out the province. It is considered to have been successful in achieving this purpose. Wright,⁴ Brown,⁵ and Audain⁶ have agreed that the mobile home parks developed since October, 1967 are superior to the older parks in terms of their residential environment because of their strict adherence to the Health Act requirements.

But this Act has limitations. It is essentially a specification type of legislation calling for the fulfillment of certain requirements only, rather than setting a minimum level of performance. Because the mobile home is subject to frequent design changes, it is difficult to keep pace with developments with this type of regulation. Although the Health Act was revised in 1968 and 1971, it seems to be obsolete insofar as the toilet and sanitary requirements are concerned. The table showing sanitary facilities to be made available by operators needs revision urgently because it makes no provision for wash-basins and showers in a mobile home park that houses less than fifteen 'dependent' mobile homes. Moreover, this Act should provide guidelines regarding the minimum site requirements for a mobile home park.

National Building Code

The National Building Code of Canada essentially is a set of minimum regulations respecting the safety of buildings, with reference to public health, fire protection and structural sufficiency. The main purpose of this code is the promotion of public safety through the application of appropriate uniform building standards throughout Canada. It is drafted in such a manner that it may be adopted or enacted for legal use by any jurisdictional authority in Canada.

Throughout the entire code the mobile home design requirements are stated as similar to those in small buildings, but it is very specific regarding the sanitary facilities for

mobile home parks. It states:

Where mobile homes do not have individual sanitary facilities connected to a central water supply and drainage system, a service building shall be provided for public use and shall contain at least one water closet for each sex where the facilities serve not more than ten mobile homes; and where the facilities serve more than ten mobile homes, an additional water closet for each sex shall be provided for each additional mobile home.⁷

According to this code, sufficient laundry facilities, also, should be provided for mobile homes.

CSA Standard

The development of the CSA Standard specifications based on the National Research Council construction standards, and their adoption by the Canadian Mobile Home and Travel Trailer Association can be regarded as a significant commitment by the park operators to the tenants. Like the National Building Code, the CSA Standard is written in such a fashion that it may be adopted by any jurisdictional authority in Canada. It applies to mobile home parks intended for permanent and semi-permanent (longer than one month) use. It specifies that in combined parks the mobile home section must be separate from the recreational vehicle section, and the latter must comply with CSA Standard Z 240.7.2 - 1972: Recreational Vehicle Parks.⁸ The design criteria for mobile home parks, with reference to site planning and improvements, and the facilities to be provided to the residents of the parks by the operators are dealt with. It also makes recommendations for inspection, landlord-tenant responsibilities, and permits to be issued by the local administrative authority for site construction and extensions.

Location

The strongest locational constraints on mobile home parks have been placed by local governments which have full control of land use policies within their jurisdictions. As a result, the influence of the provincial government in this regard has been indirect and minimal. It is clearly mentioned in the Health Act that, in the case of a jurisdictional conflict concerning "a provision of a regulation under the Local Services Act or a municipal by-law, the latter provision applies."⁹ Through a review of zoning by-laws and interviews with local government planning officials the locational constraints pertaining to mobile home parks have been catalogued.

Mobile home parks are not considered desirable in several municipalities due to their poor housing image. Oak Bay generally is a high status residential area and its land use policies are designed to perpetuate this high value residential atmosphere. Therefore, Oak Bay "does not have any mobile home parks and it is very unlikely that it ever will have."¹⁰ The municipalities of Esquimalt, Central Saanich and North Saanich have quite varied residential environments, but mobile home parks have been excluded because they are not considered in line with the desired residential development.¹¹

Although the City of Victoria has no provision in its zoning by-law or other by-laws for mobile home parks, it may allow single mobile homes on individual lots within its boundaries. According to the view of the Department of Community

Development:

"Strictly speaking a mobile home could be erected on any city lot zoned for residential use if it complies with the siting and bulk provisions of the zoning by-law and meets the requirements of the National Building Code."¹²

Only two municipalities, Sidney and Saanich, approve of the operation of mobile home parks through their existing zoning by-laws. The construction and operation of 'trailer parks' in Sidney is regulated by By-Law No. 105, adopted July 14, 1959. The siting of wider mobile homes and the operation of modern mobile home parks are also governed by this zoning by-law.¹³ Additionally, it makes provisions for minimum requirements of a mobile home park with respect to site and sanitary facilities.

The situation in Saanich is somewhat different. In that municipality, By-law No. 1541 regulates the construction and operation of mobile homes and mobile home parks.¹⁴ It was passed in 1959 and since then it has not been revised. Another by-law, No. 3366, was passed in April, 1972 to regulate mobile home park districts (RH-1).¹⁵ Both of these by-laws are now in effect and some of their provisions overlap. Provision 4 of by-law 1541 states that each mobile home space should consist of a minimum area of 1,200 square feet, and that there should be a maximum of twelve mobile homes per gross acre.¹⁶ But by-law 3366 specifies 3,000 square feet as the minimum mobile home space and a maximum density of nine mobile homes per acre.¹⁷ This has led to confusion as to which by-law should be followed in developing new mobile home parks. However, the planning officials of Saanich Municipality prefer the provision

of the more recent by-law, as it tends to ensure a better residential atmosphere in mobile home parks.

Although Sidney and Saanich each have one mobile home park, there is no area zoned specifically for mobile home parks in either municipality. In Sidney the mobile home park is situated in an area zoned for motel development, and in Saanich it is situated in a commercial zone, neither of which is attractive for residential use. Even with favourable zoning by-laws, those municipalities do not seem to attract mobile home park development.

The quality of the zoning by-laws deserves special mention. By-law No. 1541 of Saanich and By-law No. 105 of Sidney were adopted in 1959. Since then no revisions or modifications have been carried out to fit the changes that mobile homes and mobile home parks have experienced. For example, when these by-laws were passed mobile homes were smaller and individual mobile home spaces were correspondingly smaller. But today, with the introduction of the larger units on the smaller lots the space between mobile homes has become smaller and smaller, and in some cases units abut the space boundary, creating undesirable crowding. In terms of safety and sanitary standards these old zoning by-laws are not even comparable to the Health Act. Yet, as local provisions, they take precedence over the Health Act. By using these antiquated zoning by-laws municipalities are permitting the operation of substandard mobile home parks within their boundaries.

The zoning by-laws are not sufficiently comprehensive. They are concerned with certain requirements only, specifically safety measures, sanitary facilities, lot sizes, and the services to be provided by the operators to the residents of the park. The Sidney zoning by-law fails to specify or even suggest desired density of mobile homes per gross acre. None of these by-laws specifies desirable site requirements for mobile home parks. It appears that a revision of the zoning by-laws is essential to eliminate overlap and to ensure that the mobile home park will take its rightful place as a viable residential land use.

The Capital Regional District, which has jurisdiction in unorganized areas of Greater Victoria, does not have any stringent set of regulations for the control of mobile homes and mobile home parks. The installation and operation of mobile home parks is allowed in the unorganized territories of View Royal, Colwood, Langford, Metchosin, Discovery Island and Chatham Island, and seventeen of the nineteen in Greater Victoria are situated in unorganized areas, mainly in View Royal, Colwood and Langford. In all unorganized territories mobile homes can be installed in any mobile home park or on any private property that is zoned for single family dwelling occupancy.¹⁸ Mobile homes that have been certified as complying with CSA Standard must carry a permit issued by the Senior Building Inspector of the Capital Regional District Board. Mobile home parks also are supposed to comply with the provisions of the Health Act. As a majority of the parks were

established before October, 1967, when the provisions of the Health Act became effective, they did not have to upgrade their standards of operation. This situation has led to a high concentration of poorly managed mobile home parks in unorganized areas.

Summary

The provisions of the Health Act of 1967 have brought about standard criteria for mobile home park design. The rigid adherence to these regulations does not ensure the creation of a high quality or luxury park, but it does ensure the establishment of new parks with a favourable environmental quality. Mobile home parks developed according to the requirements of this act have proven superior in residential environment to those which were developed before the act came into effect. In addition to the Health Act, the design criteria set out in the National Building Code of Canada and the CSA Standard are applied by the municipal and regional authorities permitting mobile home parks.

The main locational criteria applying to mobile home parks are those of municipal zoning by-laws and the Health Act. Only two municipalities, out of a total of seven in Greater Victoria, have zoning by-laws regulating mobile homes and mobile home parks. It is difficult to compare the provisions of each of the municipalities and the Health Act, as the standards

are inconsistent. Moreover, the outdated and ambiguous character of these by-laws and their application make the decision-making process quite difficult.

A net result of the local government zoning by-laws is the overwhelming predominance of mobile home parks in unorganized areas where planning and regulation are minimal. The operators feel that mobile home parks should be accepted within the municipal areas of Greater Victoria, with certain restrictions so that a desirable residential atmosphere can be developed within the parks. They further believe that the present concentration of mobile home parks in unorganized territories has been due mainly to non-acceptance by the core municipalities, rather than to operators' choices of sites with less rigid regulations.

REFERENCES

- ¹British Columbia: Department of Health, Ibid.
- ²National Research Council of Canada, Ibid.
- ³Canadian Standards Association, Ibid.
- ⁴R. Wright, "Design and Location Criteria for Mobile Home Parks in British Columbia" (Victoria: Department of Housing, Government of the Province of British Columbia, 1974).
- ⁵C. Brown, "Mobile Home Parks in Greater Victoria: A Comparative Study," (Victoria: University of Victoria, Department of Geography, 1975,) p. 7.
- ⁶M. J. Audain, Ibid., p. 92.
- ⁷National Research Council of Canada, Ibid., p. 140.
- ⁸Canadian Standards Association, CSA Standard Z 240.7.2--1972: Recreational Vehicle Park, (Rexdale, Ontario: Canadian Standards Association, 1972.)
- ⁹British Columbia: Department of Health, Ibid., p. 1.
- ¹⁰Letter from G.O. White, Municipal Engineer and Planner, Oak Bay, July 17, 1975.
- ¹¹Letter from M. H. Campbell, Municipal Engineer, Esquimalt, July 17, 1975.
- ¹²Letter from K. VanWesten, Planning Officer, Department of Community Development, Victoria, July 18, 1975.
- ¹³Sidney, British Columbia, By-Law No. 105: Trailer Parks, (Sidney: 1959), and letter from E.T. LeClair, Deputy Clerk, Town of Sidney, July 22, 1975.
- ¹⁴District of Saanich, By-Law No. 1541: Mobile Home and Trailer Parks Regulation By-Law, Ibid.
- ¹⁵_____. By-Law No. 3366: Mobile Home Parks District (RH-1), Ibid.
- ¹⁶_____. By-Law No. 1541: Mobile Home and Trailer Parks Regulation By-Law, Ibid., p. 2

¹⁷-----, By-Law No. 3366: Mobile Home Park District (RH-1), Ibid., p. 39.

¹⁸Capital Regional District, Procedure for Building Permit, Revised Edition, (Victoria: Capital Regional District, 1975), p. 1.

CHAPTER V

CHARACTERISTICS OF MOBILE HOME PARKS IN GREATER VICTORIA

With the growth in number of mobile homes, mobile home parks became a reality in Greater Victoria and have been part of the urban landscape for over twenty years. The considerable growth of mobile homes since 1961 in Greater Victoria is shown in Table 6. The table also presents a comparative picture of the mobile home's share as a form of housing, and its growth rate since 1961 in Canada, British Columbia and Greater Victoria. It indicates that, although Greater Victoria has experienced a higher growth rate than either British Columbia or Canada since 1961, the percentage that mobile homes constitute of total dwellings is lower than the national or provincial figure.

A questionnaire survey was conducted to evaluate the present characteristics of mobile home parks in Greater Victoria (Appendix A). Although a total of nineteen mobile home parks were in operation within the study area at the time of the survey (Figure 2), three mobile home park managers refused to respond. Therefore, sixteen mobile home parks were surveyed, which represented eighty-four percent of mobile home parks and eighty-three percent of mobile home spaces within parks

TABLE 6

GROWTH RATE OF MOBILE HOME PARKS IN CANADA, BRITISH COLUMBIA
AND GREATER VICTORIA, 1961-1971

Location	Year	Total Dwellings	Total Mobile Homes	Mobile Homes as a Percentage of Total	Mobile Homes Percentage Change since 1961
Canada	1961	4,554,493	19,961	0.44	--
	1966	5,180,473	28,177	0.54	+ 41
	1971	6,034,505	64,100	1.06	+221
British Columbia	1961	459,532	3,660	0.80	--
	1966	543,075	7,158	1.32	+ 96
	1971	667,545	19,240	2.88	+426
Greater Victoria	1961	47,485	113	0.24	--
	1966	55,098	242	0.44	+114
	1971	66,365	630	0.95	+458

- SOURCE: (i) Dominion Bureau of Statistics. 1961 Census of Canada. Vol. 11, Part 2, Bulletin 2.2-1, January 1963, pp. 5-1 and 8-1.
- (ii) Dominion Bureau of Statistics. 1966 Census of Canada, Vol. 11, Bulletin 2.2 April 1968, pp. 3-1, 3-2, and 6-1; and
- (iii) Statistics Canada. 1971 Census of Canada. Vol. ii, Part 3, Bulletin 2.3-2, June 1973, pp. 1-1 and 7-4.

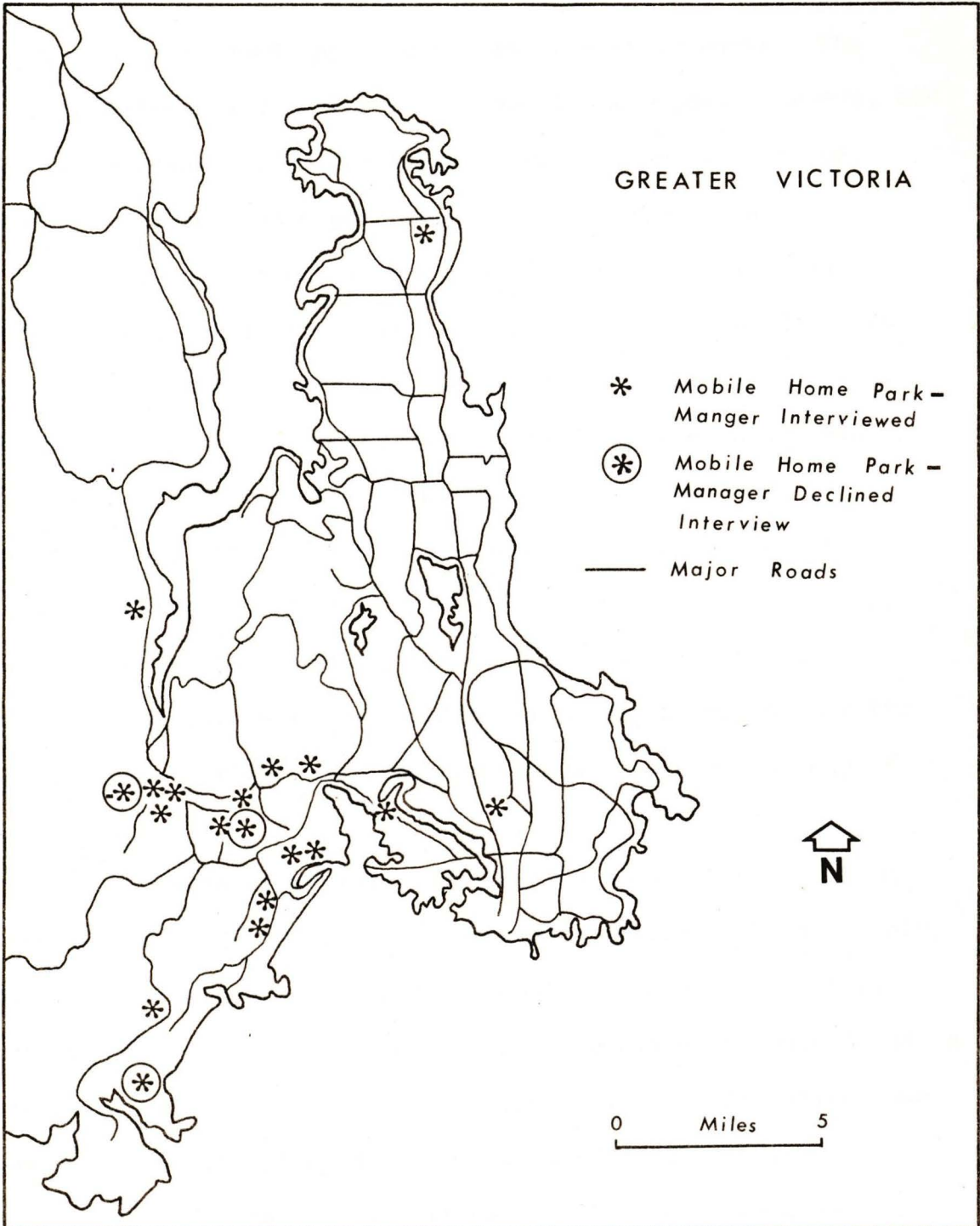


Fig. 2. Locations of Existing Mobile Home Parks

(510 out of 604). All statistics quoted in the following discussion are based upon the survey of sixteen parks. The questionnaire was directed to the mobile home park managers, and they were assured that the findings of the survey would be used only for academic purposes in an anonymous fashion.

Most of the mobile home parks in Greater Victoria were built prior to the Health Act (1967). Those older parks are unattractive, cramped and inconveniently laid out. The six that have been constructed since the Health Act was introduced conform to all requirements of the act and, consequently, offer a better living environment. However, only two of the mobile home parks are of exceptional quality, with extensive landscaping, large lots, standard recreation areas and quality service buildings. It may be noted that the three parks that were omitted from the survey were old and of poor quality.

The size of an individual mobile home lot varies from park to park. Even within a single park it varies considerably, in order to cater to the needs of mobile home owners. It is notable that more spacious mobile home lots are commonly found in the newer parks. The number and size of individual mobile home spaces within the study area are indicated in Table 7.

The CSA Standard specifies that "the minimum area provided on each lot shall be 3,500 square feet."¹ In Greater Victoria fifty-four percent (275 units) of mobile home spaces do not meet this requirement, while the remaining forty-six

(235 units) exceed the standard. The thirty units that have an average of 5,400 square feet can be termed as luxury lots. It is a characteristic feature of the smaller spaces that they are associated with motels or older parks.

TABLE 7
SIZE AND NUMBER OF MOBILE HOME SPACES

Size ¹	Area per space	Number	Percent
20 x 50 feet	1,000 sq. ft.	85	16.67
30 x 40 feet	1,200 sq. ft.	190	37.25
40 x 90 feet	3,600 sq. ft.	205	40.20
60 x 90 feet	5,400 sq. ft.	30	5.88
		Total 510	100.00

¹As reported by mobile home park managers.

The older parks rent spaces for temporary occupancy, especially by travel trailers, but they are registered with the local governments as mobile home parks, and pay taxes accordingly. Travel trailers are smaller in size than permanent mobile homes and can be accommodated in smaller spaces, usually around 1,000 square feet. Since the people living in travel trailers rent the space temporarily, they do not expect high standards in the parks. The number of spaces allocated to travel trailers varies from one park to another. The most extreme example is a mobile home park offering thirty-five of its total forty spaces to travel trailers. The small size of spaces and the lack of high quality facilities are the main reasons for the allotment of such a high percentage of spaces to travel trailers.

The sizes of the mobile home parks themselves vary

considerably. Although the average size is 8.75 acres (Table 8), they range from one to sixteen acres. In neither the Health Act nor the CSA Standard is the desirable size of a mobile home park specifically mentioned. However, it has been pointed out by Central Mortgage and Housing Corporation that "developments should be sufficiently large as to be economically viable and to provide communal facilities, yet not so large as to affect their integration into the surrounding community and present difficulties of adequate control and community relations."² That institution suggests a minimum size of twenty-five lots (three acres) and a maximum size of 150-200 lots (twenty acres).³ From this standpoint, most of the mobile home parks in Greater Victoria are of reasonable size. Only two parks, of one and two acres, respectively, fall below this desired minimum size.

TABLE 8
SIZE OF MOBILE HOME PARKS

Acres	Number
1-5	3
6-10	7
11-15	5
Over 15	1
Average 8.75	Total 16

Services offered to the residents vary from one park to another. Essential services, such as water, electricity and

cablevision connections, garbage collection, and car parking space, are provided by all the parks. Some of the older parks have common service buildings with shower and toilet facilities. The number and quality of services offered are better in the newer parks. In addition to the essential services listed above, they provide such things as better landscaping, recreational centres, laundry facilities, patios and swimming pools.

Gillies noted that service-orientation and housing-orientation are the two important specializations that mobile home parks may possess.⁴ Service-oriented parks are those which accept adults only. By offering minimum responsibility in terms of maintenance and care of the unit, and encouraging certain patterns of social activity, these parks attract the retired people. Housing-oriented parks, on the other hand, provide accommodation for working people who spend most of their time away from the park. Such parks are usually situated near job locations. Working people prefer this type of park for two main reasons: economy and proximity to employment. Evaluating the mobile home parks of Greater Victoria from this standpoint, it is evident that they are essentially housing-oriented. They provide accommodation mainly for working people who spend most of their time away from their parks. Although retired senior

citizens form a significant proportion of mobile home dwellers, ten of the sixteen parks surveyed do not provide any social or recreational facilities within the parks. The rent for individual mobile home spaces varies with the age and location of the park, size of the lot, nature of the park, and the facilities offered to the residents. The monthly rent varies from thirty dollars for a small space in an older park to eighty five dollars for a large space in a modern one. On a square foot basis, the lowest housing price is obtained by occupying the largest lots (Table 9). This is mainly because the number

TABLE 9
AVERAGE MONTHLY RENT OF MOBILE HOME SPACES

Size of Space in square feet	Total Monthly Rent in dollars	Rent per square foot in cents
1,000	30.00	3.00
1,200	35.00	2.91
3,600	70.00	1.94
5,400	85.00	1.57

and cost of essential services do not increase proportionately with the size of the space.

There exists a great demand for mobile home spaces in Greater Victoria. In the opinion of David Caul, Vice-President of Western Mobile Home Dealers' Association, "...at least 500 new mobile home rental pads were needed here this year."⁶

Caul's opinion was reinforced by the comment of Victor Tiffin,

President of the Active Mobile Home Owners Association of British Columbia, who mentioned the name of a particular mobile home park in the Victoria area and said that its manager has "four to ten people coming in every day asking him whether any space is available."⁷ In a recent report, The Victorian indicated that the demand for mobile homes in the area would increase by about fifty percent by 1978.⁸ Most of the mobile home parks have not been expanded since inception. The survey revealed that only one park was expanded, and that was by merely one acre which provided additional space for five mobile homes. In the absence of any new mobile home park developments, the supply of spaces in Greater Victoria falls far behind the demand. All of the managers who cooperated in the survey reported that the vacancy rate in their individual parks was zero, and there is always a waiting list.

Summary

The mobile home is gaining popularity as a major form of low cost housing in Greater Victoria. Although the number of mobile homes in the region has increased considerably, and the growth rate since 1961 has surpassed the national and provincial rates, the mobile home proportion of total dwellings remains low in Greater Victoria. Most of the mobile home parks were built before the Health Act was put into effect. Because those older parks do not have to comply with the requirements of the Health Act, their quality of operation, services and

maintenance is poor. But the six parks that were developed according to the requirements of the Act have comparatively better residential environments within the parks. There is a large unfilled demand for mobile homes and mobile home parks in the Victoria region, and this demand is likely to increase in the near future. It seems essential that more mobile home parks be developed to fulfill the housing demand of a section of the community which desires home ownership but cannot achieve the goal because of limited resources.

REFERENCES

¹Canadian Standards Association, CSA Standard Z 240.7.1 - 1972: Mobile Home Parks, Ibid., p. 9.

²Central Mortgage and Housing Corporation, Ibid., p. 7

³Ibid.

⁴J. M. Gillies, An Appraisal of Mobile Home Living: The Parks and the Residents, (Los Angeles: Trailer Coach Association, undated), p. 6.

⁵V. R. Tiffin, Proposals from the Active Mobile Home Owners Association, (Victoria: Active Mobile Home Owners Association, 1975), p. 5.

⁶David Caul, as quoted in The Victorian, October 24, 1975.

⁷V. R. Tiffin, Recorded Interview on November 19, 1975 by the author.

⁸The Victorian, February 23, 1976, p. 1.

CHAPTER VI

MOBILE HOME PARK LOCATION CRITERIA

Although British Columbia has been called the "mobile home heartland of Canada",¹ it is commonly agreed by the mobile home residents, the businessmen dealing with mobile homes and the community planners that the greatest need at the present time is to select appropriate places to put mobile home parks. Audain's study² and the present survey show that the modern trend in mobile home park development is to create a pleasant living environment comparable to that of a high quality single family dwelling area. This requires a careful examination of proposed sites and community facilities before final selection of sites.

The portability of the mobile home units, the relationship between the units and the ground on which they are installed, the access to community facilities, the proximity to work places, and the local community acceptance of mobile home parks are some of the factors which deserve special attention in this connection. Because site data are potentially infinite, careful evaluation must be conducted to select those which have most widespread application. Lynch recommends that one confine an initial survey to essential aspects only, "and gather special data later

in the design process as new questions arise."³ Keeping this view in mind, attention has been directed to physical factors, such as slope type, surface soil erodibility, and susceptibility to ponding and flooding; and community factors, such as potable water supply, location of elementary schools, access to employment, and availability of fire and police protection. Those factors that vary from site to site have been broken down into five sub-classes ranked in order of preference for mobile home parks and assigned a specific value of five to one, five being the most preferred value.

Physical Factors

Physical characteristics fundamentally determine the suitability of any site for mobile home park development. Among the many characteristics of land, water and atmosphere that could be investigated, certain ones have been isolated as the most important site controls. These are: slope, surface soil erodibility, sub-surface soil stability, and susceptibility to ponding and flooding.

Slope

The gradient of paths, the flow of sewage and water, the use of areas, the disposition of mobile home units and service buildings, and the visual aspects are all affected by slope. For example, if the slope is very steep, the site may not be suitable for a mobile home park, although most other physical and

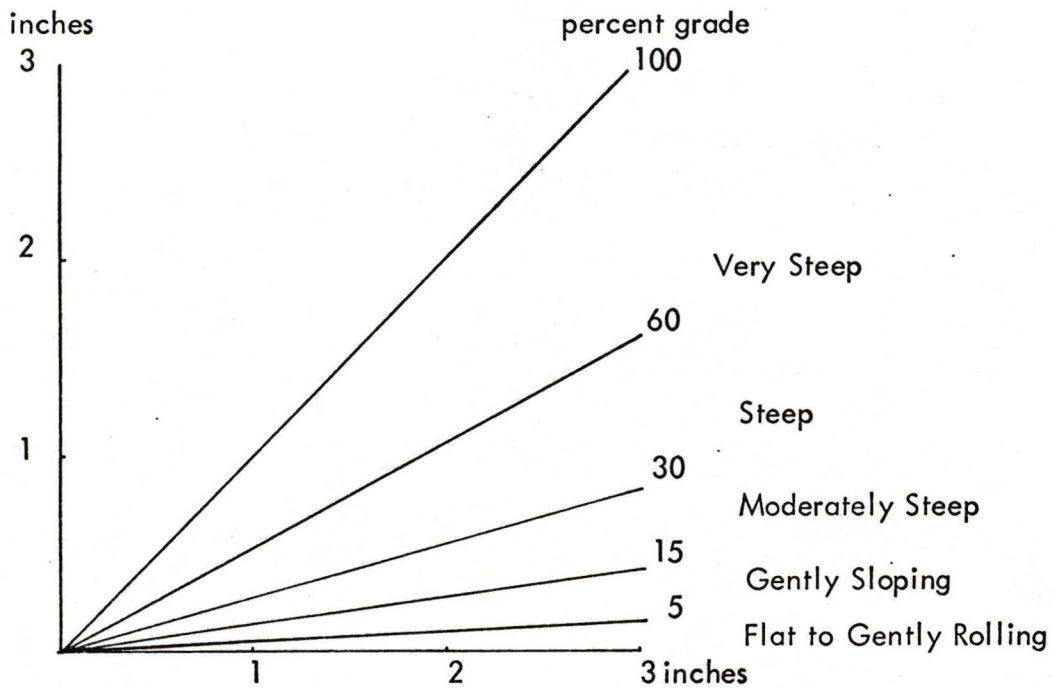
community factors may be favourable.

Figure 3 illustrates the derivation of five slope classes which constitute the legend of the map of slope types in Greater Victoria (Figure 4). Flat to gently sloping land is favourable for mobile home park development, as the land can be conveniently shaped to accommodate the long, narrow mobile home units.⁴ The cost of development and maintenance increases noticeably with increasing steepness of terrain. Therefore, moderately steep slopes should be considered only when most other physical and community characteristics are favourable for mobile home park development. But steep and very steep slopes should never be used for such development. Figure 4 indicates that most areas of Greater Victoria range from flat to moderately steep; only a few areas along the western and southwestern margins are of steep to very steep slope.

Surface Soil Erodibility

Surface soil erodibility is a combined function of soil structure and texture; the length and gradient of the slope; the climate, mainly rainfall and wind, surface cover; and the effects of human use. Figure 5 demonstrates that most areas in the region have very low to low surface soil erodibility, and only a few patches in the southwest, north, northwest and east have a higher degree of erodibility.

In Greater Victoria, areas with very low and low surface



SOURCE: J.I. Sneedon, N. Kukor and L. Farstad. "A Technique for Rapidly Determining Topographic Class from Topographic Maps", Canadian Journal of Science, Vol. 52, 1972, p. 518.

Fig. 3. Slope Classes

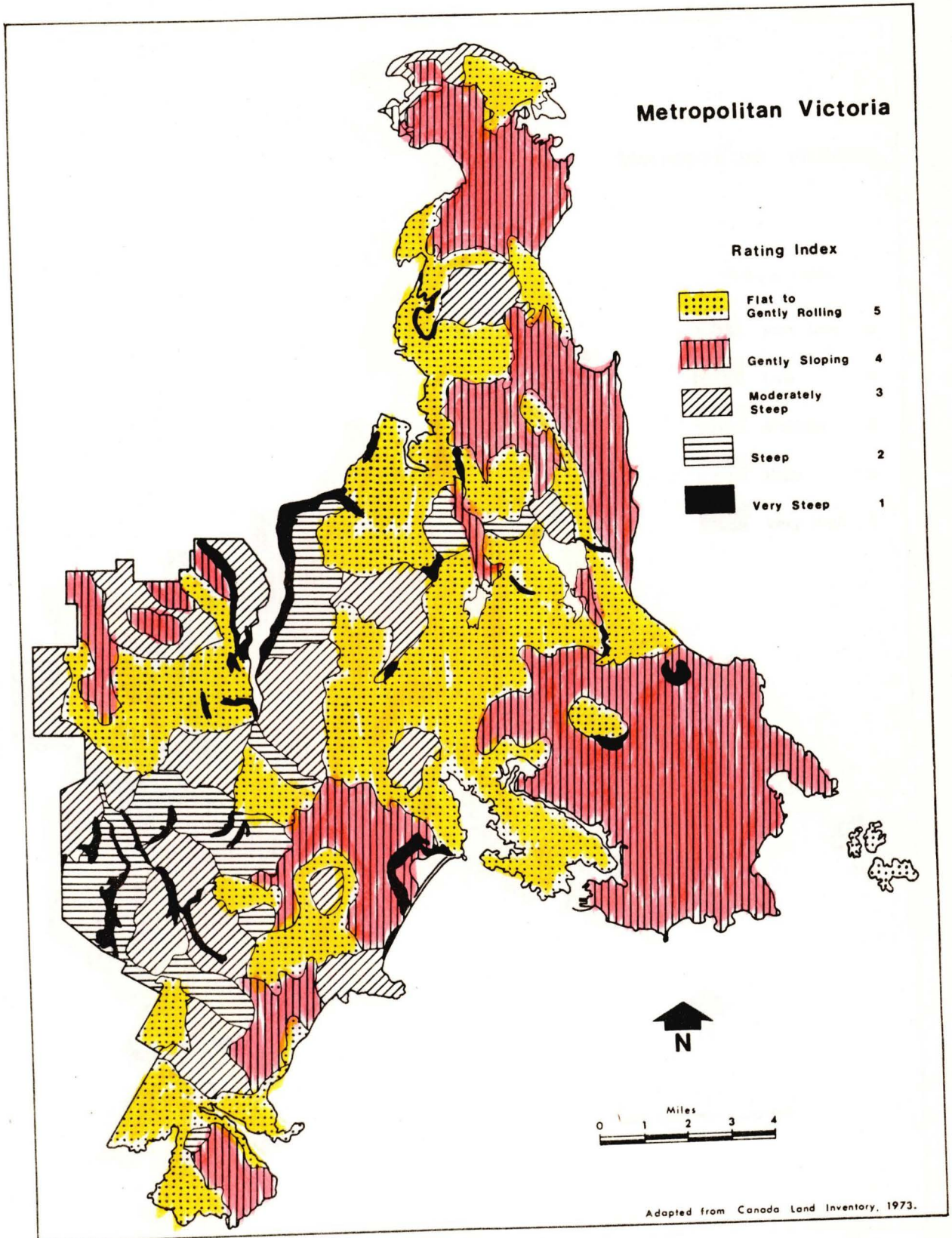


Fig. 4. Slope Types

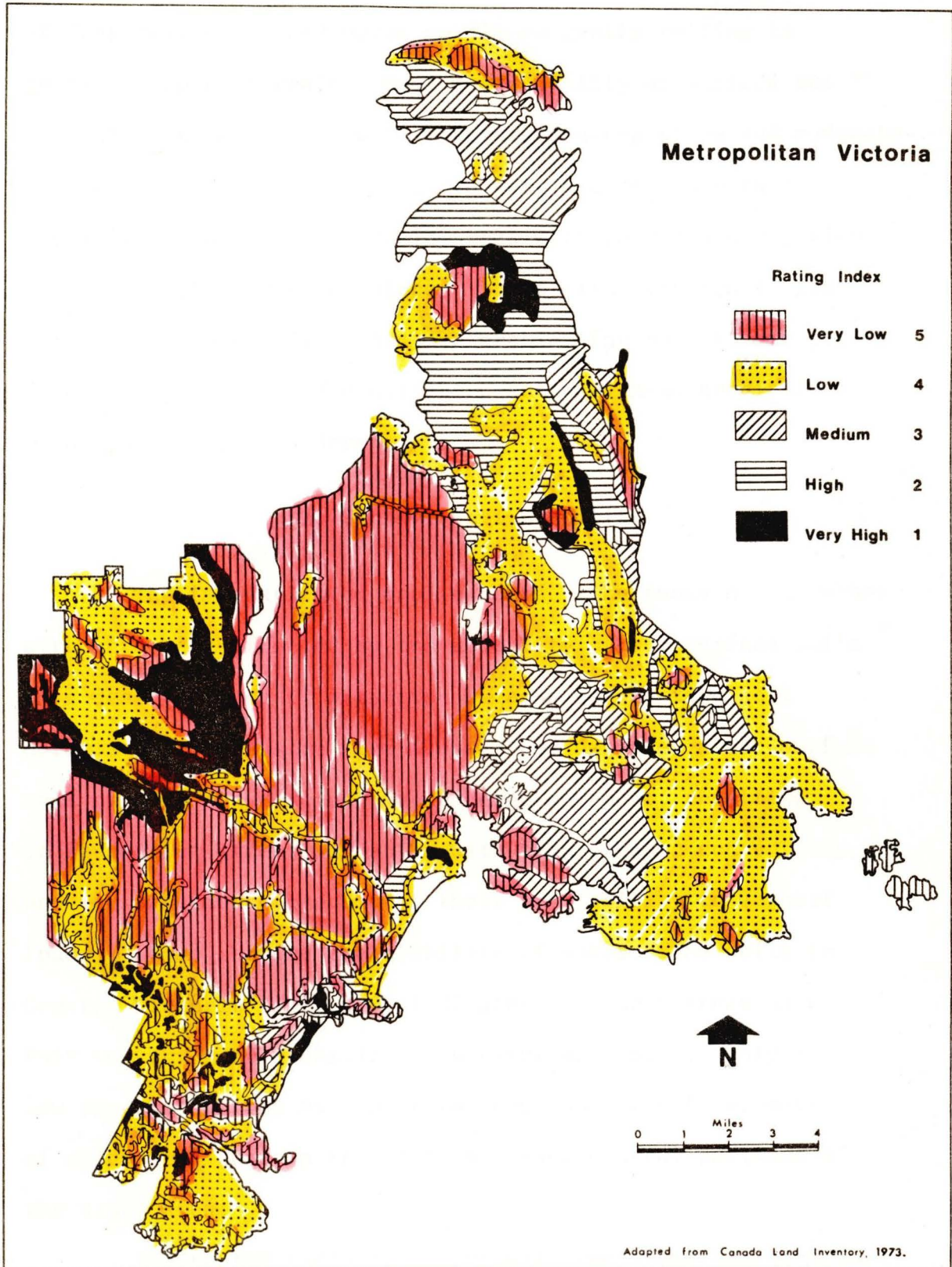


Fig. 5. Surface Soil Erodibility

soil erodibility usually are well to moderately drained, are of deep soil cover and occur mostly on gently rolling to gently sloping terrain. Medium erodibility of surface soil generally is associated with moderately steep slope and moderately drained soils, whereas high to very high surface soil erodibility can be observed in areas with poor drainage, fine textured soils and steep slope. Areas with very low to low surface soil erodibility are preferable for mobile home park development, while those with high and very high erodibility should never be considered.


Sub-Surface Soil Stability

The foundations of mobile homes, like those of any other structure, are affected by the stability of sub-surface soils.⁵ This deserves special attention because sub-surface soil deforms under pressure from above. For example, a sub-surface soil of high clay content may undergo movement, resulting in foundation stress, or soils with high organic content may undergo subsidence because of their poor ability to support loads. A map showing the stability of sub-surface soils in Greater Victoria (Figure 6) indicates that most areas have fair to very good stability of sub-surface soils. Only a few parcels of land have poor to very poor stability, most of which are found in the north and east-central portions of the study area.

In Greater Victoria, sites with very good and good sub-

Metropolitan Victoria

Rating Index

	Very Good	5
	Good	4
	Fair	3
	Poor	2
	Very Poor	1

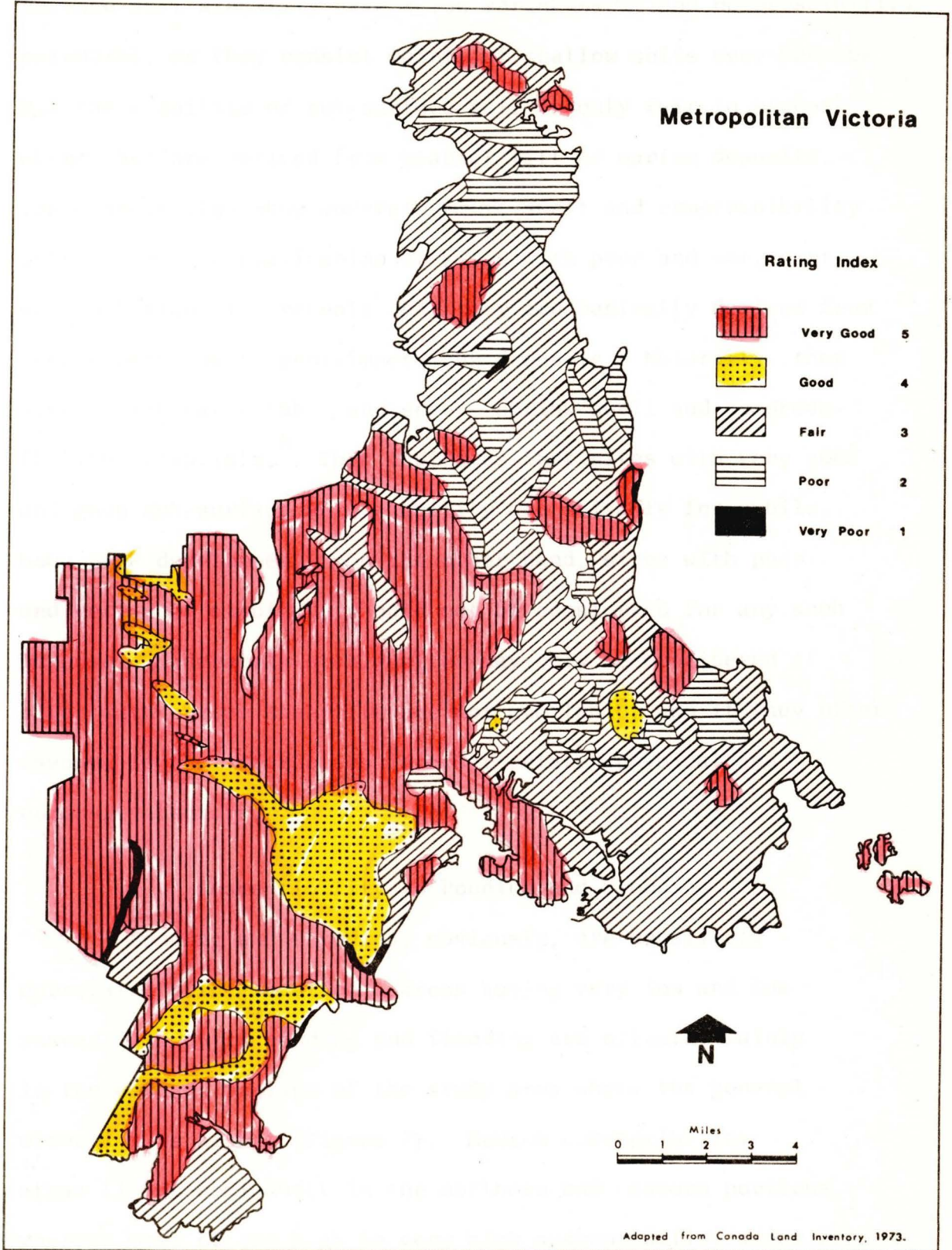


Fig. 6. Sub-Surface Soil Stability

surface soil stability have a low shrink-swell and compressibility potential, as they consist mainly of shallow soils over bedrock. But the stability of sub-surface soil is only fair in places where they are derived from glacial till or marine deposits. These areas also show moderate shrink-swell and compressibility potentials. An examination of sites with poor and very poor sub-soil stability reveals that they are basically derived from deep impervious to semi-impervious deposits. Naturally, they have a high water table and severe shrink-swell and compressibility potentials.⁶ This indicates that sites with very good and good sub-surface soil stability are suitable for mobile home park development. On the other hand, sites with poor and very poor stability should not be considered for any such purpose. Moderately stable sites may only be considered if sites with better stability are not available, and if they offer favourable characteristics in other related physical and community factors.

Susceptibility to Ponding and Flooding

Ponding and flooding, obviously, are negatively correlated with elevation. Areas having very low and low susceptibility to ponding and flooding are situated mainly in the western portion of the study area where the general elevation is higher (Figure 7). Medium susceptibility areas lie predominantly in the northern and eastern portions, whereas most of the high to very high susceptibility areas are confined to small parcels near channels and depressions that

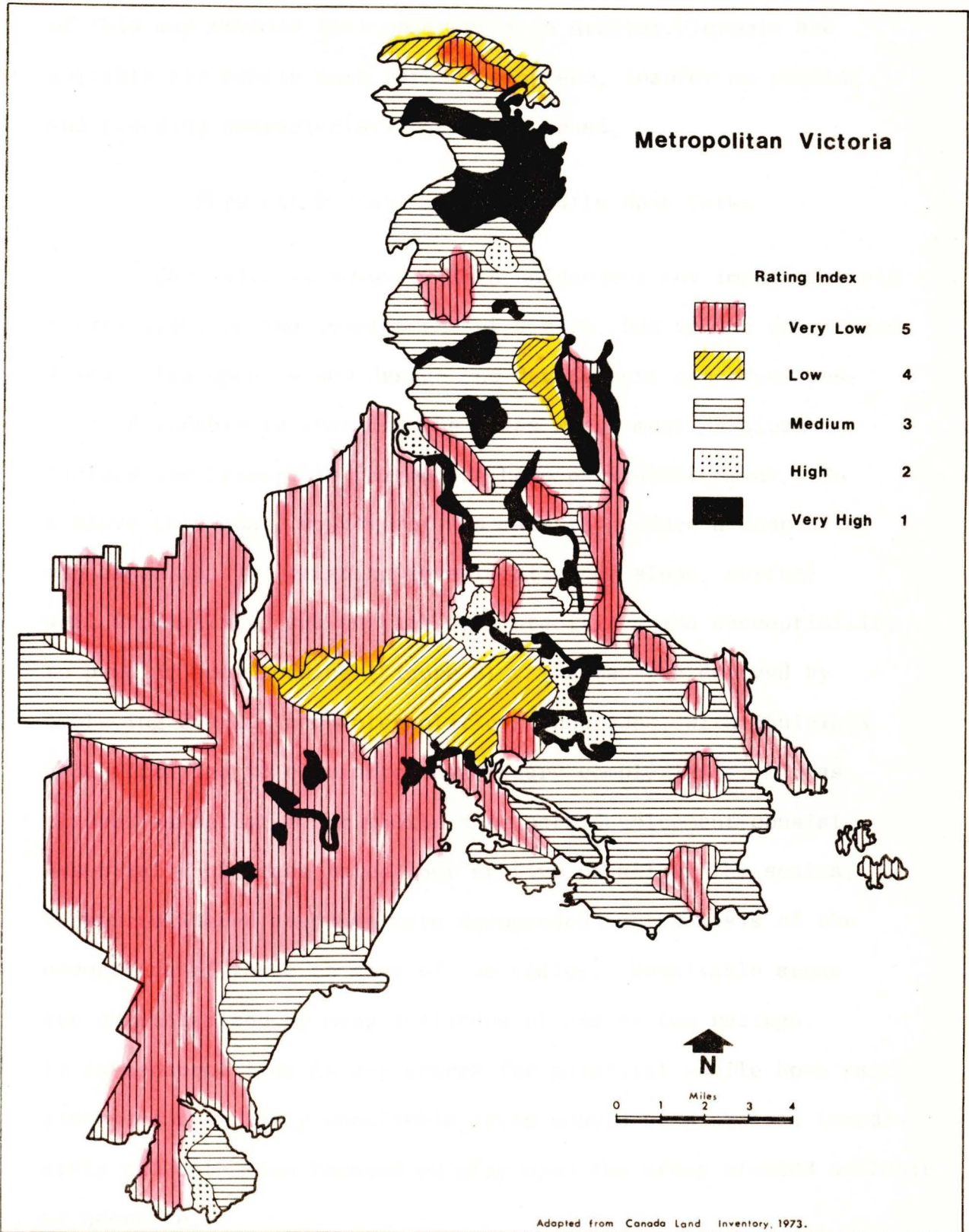


Fig. 7. Susceptibility to Ponding and Flooding

are collection basins for seepage and runoff waters. A study of this map reveals that most areas in Greater Victoria are suitable for mobile home park development, insofar as ponding and flooding characteristics are concerned.

Physical Suitability for Mobile Home Parks

Each site is unique. This uniqueness may impose certain restrictions on the development of a site, but on the other hand, it may also open up new design and development opportunities. It is desirable to identify the areas where most physical factors are favourable for mobile home park development. To achieve this goal, an attempt was made to produce a composite map based on the preceding investigation of slope, surface soil erodibility, sub-surface soil stability, and susceptibility to ponding and flooding (Figure 8). The map was derived by employing overlay and interpolation techniques, with judicious generalization to eliminate unnecessary complexities. Areas classed as suitable for mobile home park development consist essentially of areas rated four or five on all of the scales. Those considered adequate were downgraded on the basis of the occurrence of three on most of the scales. Unsuitable areas are characterized by many instances of one or two ratings. It is apparent that in any search for potential mobile home park sites the physically unsuitable areas should be dismissed immediately and attention focused chiefly upon the areas classed suitable or adequate.

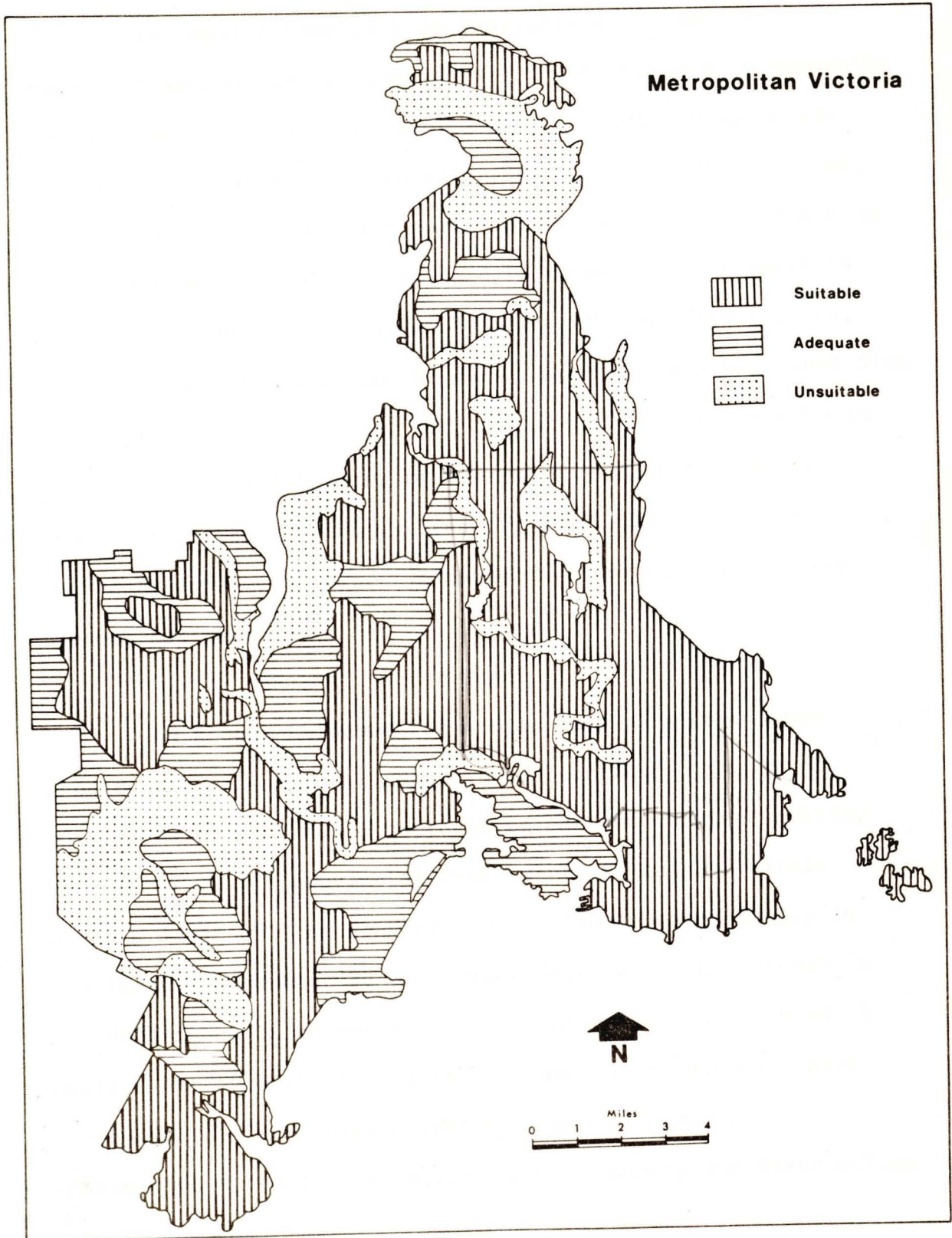


Fig. 8. Physical Suitability for Mobile Home Park Development

Community Factors

The mobile home park is basically a residential community wherein proper consideration must be paid to community facilities, especially the availability of potable water and sanitary sewer services, elementary schools, shopping centres, job locations, and fire and police protection. From a planning point of view it is desirable to develop mobile home parks in areas that combine favourable physical and community factors. It should be noted that in the case of certain factors, including fire and police protection, and location of elementary schools and parks, it is difficult to make an objective evaluation because these facilities are readily available throughout the study area. Therefore, a subjective evaluation of these factors has been made.

Water Supply

An area considered for mobile home park development should have access to an adequate and continuing supply of potable water that has a bacteriological and chemical quality acceptable to the provincial Department of Health. Within certain areas of Greater Victoria a reliable water supply is provided through the use of surface reservoirs, but elsewhere the dependence is on ground water supplies that are tapped by wells. Although there is a large, pure water catchment area nearby in the Sooke Lake-Goldstream Lake watershed, the entire study area is not served by water supply and distribution

systems (Figure 9). A significant area in the western section has no water supply system. Residents there, as well as any prospective mobile home park developers, must dig their own wells. To evaluate the advantage of a potential site relative to potable water supply, a rating scale has been adopted, with advice from municipal engineering personnel.

TABLE 10

WATER SUPPLY RATING

Distance of potential site from water service of sufficient capacity for an additional one hundred families, in yards	Rating Index
0 - 400	5
400 - 800	4
800 - 1,200	3
1,200 - 1,600	2
1,600 - 2,000	1

Sewage Disposal

Although sanitary sewerage service is confined to a few limited areas of Greater Victoria (Figure 10), it serves the majority of the population. People living in areas not served by sanitary sewage disposal systems have to depend upon private disposal systems, mainly septic tanks. A well-designed, properly constructed and adequately maintained septic tank system in a suitable soil can serve a house as satisfactorily as a city sewer. However, many areas in Greater Victoria are un-

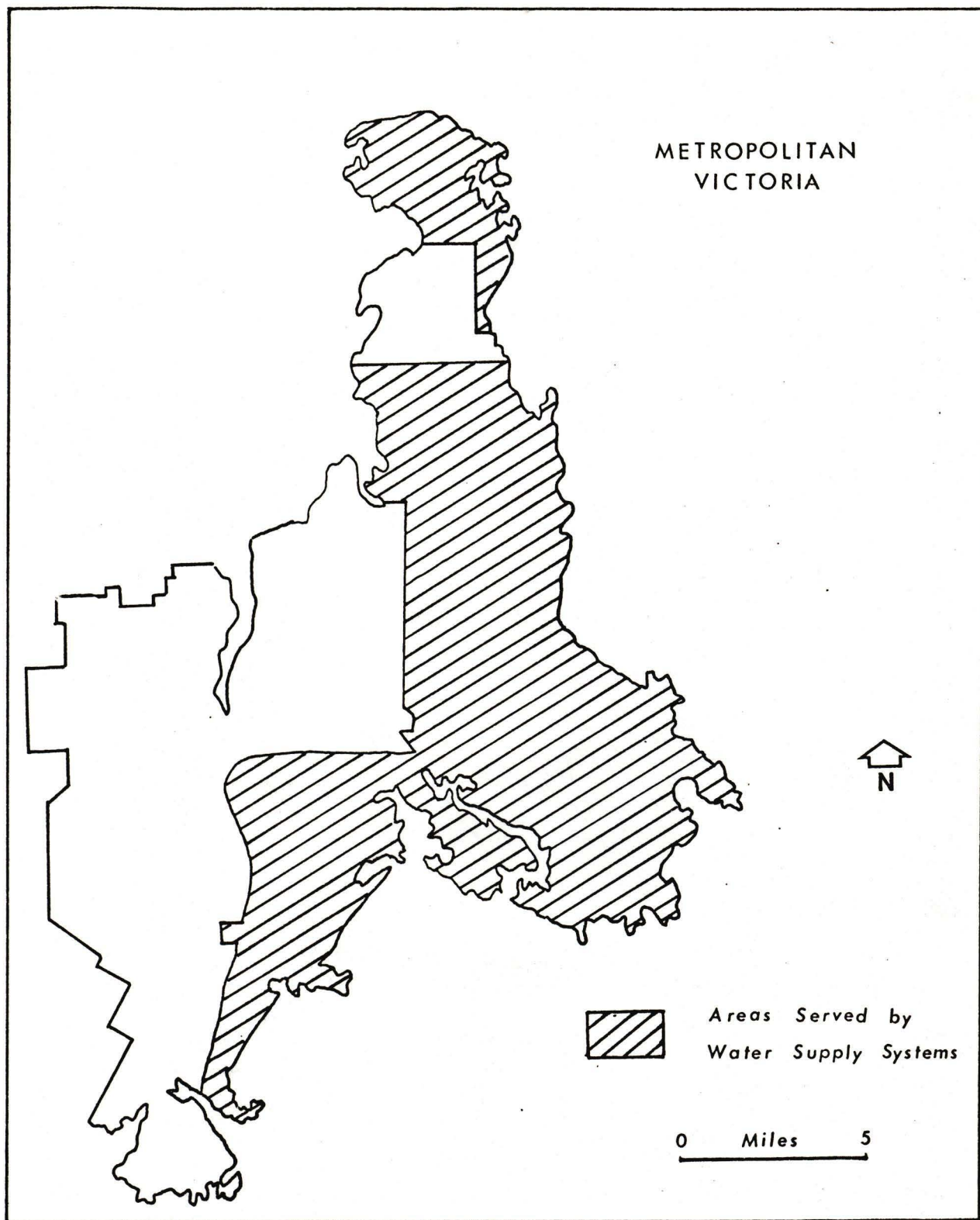


Fig. 9. Water Supply

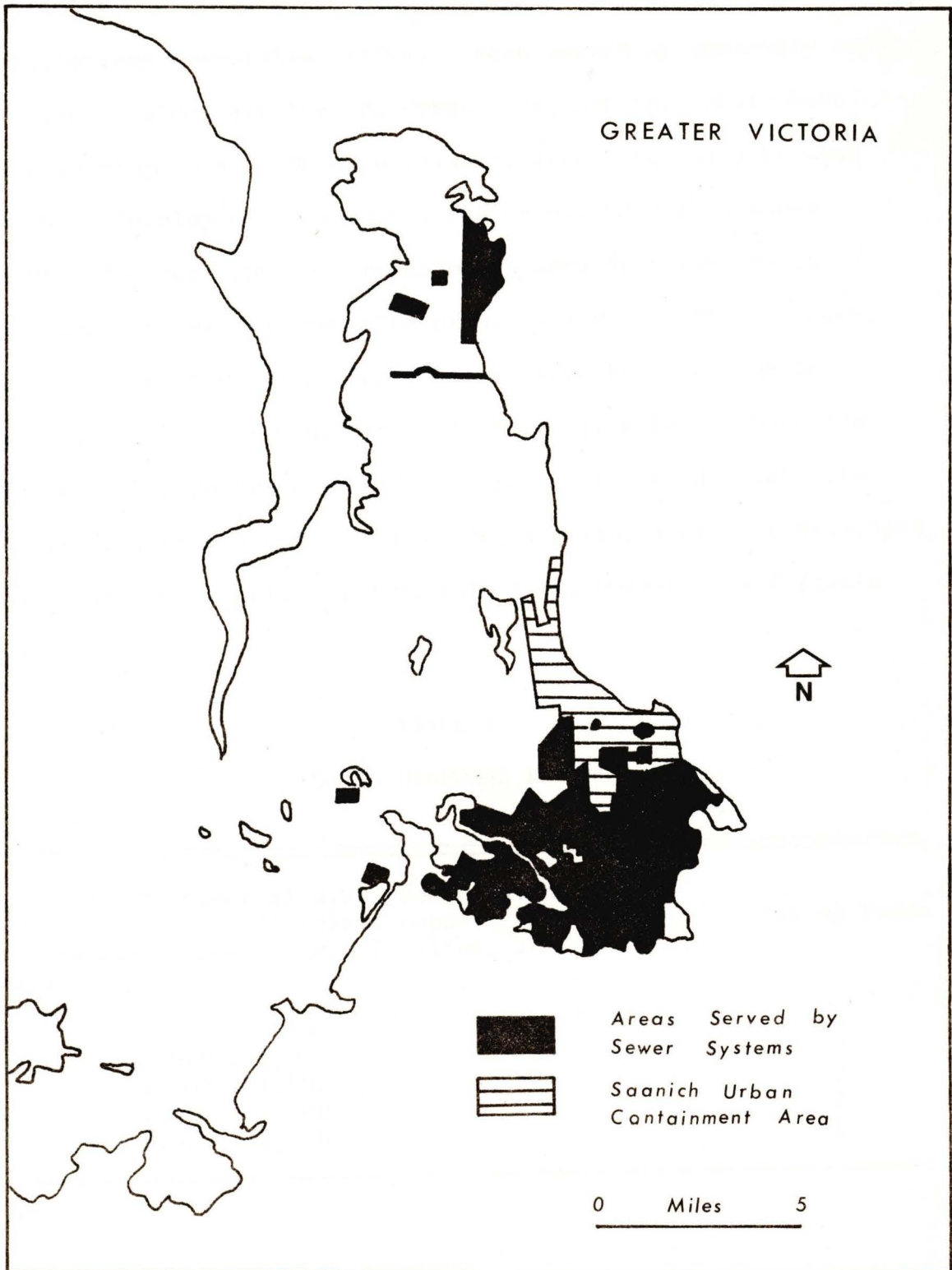


Fig. 10. Sewage Disposal

suiting to septic tank systems, owing to heavy soils of unsatisfactory percolation rates. Areas served by community sewage disposal systems are the preferred locations for mobile home park developments. Urban containment areas⁷ may also be used for such development, as sewers can be extended into those areas. However, the preference of an area decreases as it is situated farther away from the existing service area boundary, because of high construction costs of sewerage pipeline to serve the distant communities. In order to make an objective evaluation of potential sites in relation to the availability of sanitary sewage disposal service, a rating index was developed, again, in consultation with municipal engineering staff (Table 11).

TABLE 11
SEWAGE DISPOSAL RATING

Distance of potential site from existing sewer service of sufficient capacity for an additional one hundred families, in yards	Rating Index
0 - 500	5
500 - 1,000	4
1,000 - 1,500	3
1,500 - 2,000	2
2,000 - 2,500	1

Fire and Police Protection

Fire and police protection are essential requirements in any residential development. Fire protection is especially important for mobile home parks, as the mobile home units are made of flammable materials and placed in close proximity to each other. The CSA Standard Z 240.7.1-1972 requires that each mobile home park unit carry a portable fire extinguisher.⁸ It also implies that each mobile home park operator must make provisions for using the services of the local fire department.⁹ Fire protection is readily available throughout the entire study area. However, areas close to the fire halls can be regarded as preferred locations for mobile home parks.

Police protection is provided by the City of Victoria and the municipalities of Oak Bay, Esquimalt, Saanich and Central Saanich to their residents through their own police departments. This service is offered by the Royal Canadian Mounted Police in the municipalities of North Saanich and Sidney, and in the unorganized territories. All areas in Greater Victoria, therefore, have a blanket coverage of police protection, but it is thinly spread in the suburban and unorganized areas where most of the mobile home parks are situated. Nevertheless, people living in those areas do not seem to feel insecure, especially in view of the low crime rate in Greater Victoria, as compared with other metropolitan centres of Canada.¹⁰

Elementary Schools

Proximity to schools, especially elementary schools, is an important consideration in the development of mobile home parks. In British Columbia, while only thirty-nine percent of the mobile home residents have children, fifty-eight percent of those children are of school attending age.¹¹ The nature of the traffic flow along the route between the nearest elementary school and a mobile home park also deserves attention in this connection. Since mobile home parks usually are situated along major arterial roads and highways to facilitate transportation of the mobile home units, this poses a traffic hazard for the young children attending elementary school. It is desirable that prospective mobile home park sites offer easy and safe accessibility to schools. The provision of school facilities is the responsibility of public authorities and in Greater Victoria elementary schools already are conveniently situated relative to established residential areas. Transportation of pupils in outlying areas also is arranged by the public authorities. Accordingly, it was considered unnecessary to devise a rating index based on distance to elementary schools in order to evaluate potential sites.

Parks

Parks are a recreational and aesthetic resource. They provide opportunities for recreational activities, such as walking, driving or bicycling for pleasure, fishing, boating,

picnicking, sightseeing, camping and beachcombing. Although parks may differ in terms of use and activities provided for, they all offer pleasant environments for the urban population. Therefore proximity to parks enhances an area for residential development.

In Greater Victoria, many levels of parks are represented, from extensive provincial and regional parks, such as John Dean and Elk-Beaver Lake, to smaller municipal and neighbourhood parks, such as Beacon Hill and Wildflower. Within the study area are situated 145 parks of various levels of which twenty-six are over fifty acres in area.¹² Quite a few parks are situated along the coastline and offer sandy beaches. In a report published by the Capital Region Planning Board in 1969 it was stated that the relationship of park locations to population distribution was 'good' at that time, and it would improve in future as suburban developments tended to move towards the parks.¹³ It was stated further that "no one living within the Census Metro Area is more than one hour's drive from any regional park"¹⁴ This presents a satisfactory picture of accessibility to parks from residential areas, including mobile home parks.

Other Factors

Locations of employment, shopping centres, and medical, financial, recreational and cultural facilities are among other

factors that should be discussed in this connection. Nearness and ease of accessibility to these facilities are desirable attributes for mobile home parks.

Most of the employment within the study area is centred in and around downtown Victoria. Other important centres of employment are the naval base at Esquimalt and the University of Victoria. No part of the study area is situated beyond forty-five minutes driving time from downtown, even during the rush hours. This maximum driving time between home and job locations seems reasonable, compared with other cities of similar size. Approximately ninety-five percent of people living in mobile homes in Greater Victoria have motor vehicles of their own.¹⁵ Moreover, the study area is served by an extensive network of roads and highways (Figure 2). Those who cannot afford cars must depend on bus services for reaching job locations. Unorganized and suburban areas are served by bus routes, but what is needed are schedules that provide frequent trips during peak hours.

The availability of a wide range of shopping facilities is desirable. Convenience goods outlets, such as grocery stores, small supermarkets and variety stores, are especially important to residential neighbourhoods, as they provide items of day to day use. At a higher level are found the community shopping centres and the central business district, offering a wide variety of goods and services. Consumers usually visit shopping

centres of a higher level for shopping goods of a specialized nature. In Greater Victoria convenience goods outlets can be found in almost every residential neighbourhood, whereas the regional shopping centres, as well as the central business district, are situated in the core municipalities.

Medical, financial, recreational and cultural facilities also are centrally located in Greater Victoria. Most of the important hospitals are in Victoria city. Efficient ambulance service to meet emergency needs is available, however, throughout the entire region. Most of the doctors' and dentists' offices, as well as the medical-dental buildings, are situated in and around downtown Victoria. The principal offices of banks, mortgage companies, and other financial institutions are in downtown Victoria, and recreational and cultural facilities, including movie houses, theatres, museums, sports stadiums, fraternal and service clubs, and restaurants tend to be centralized as well.

The general concentration of these miscellaneous facilities in the downtown area and, secondarily, within the core municipalities implies that distance from the central business district is an important location factor for mobile home parks. As most facilities are situated within a four-mile radius of downtown Victoria, a rating scale based on four-mile zones has been adopted.

TABLE 12
 EMPLOYMENT, SHOPPING, MEDICAL, FINANCIAL,
 RECREATIONAL AND CULTURAL RATING

Distance of the site from downtown Victoria, in miles	Rating Index
0 - 4	5
4 - 8	4
8 - 12	3
12 - 16	2
16 - 20	1

Average Rating Index

In order to derive an overall rating for individual sites, the total score for each site can be divided by the number of characteristics to produce an average score. It is important to note that the critical value, that is, the value above which sites are acceptable, must be determined according to the demand and supply characteristics of the mobile home market. In other words, the critical value may be lowered when there exists a great demand for mobile homes and mobile home parks in an area with a limited supply of suitable sites, and vice versa. The median value of three was chosen in this study as the critical level of acceptability for a site. A site of that value was termed a potential location, while sites of value four or higher were considered preferred locations. By the use of this method of evaluation, it was hoped that subjective inferences would be minimized and an objective assessment

site suitability would be achieved. The technique also produces a useful ranking of sites that is invaluable for development planning.

Summary

In order to create a pleasant living environment in mobile home parks, proper attention must be paid to both physical and community factors. Most of the physical characteristics vary from one site to another, as does the availability of community facilities. Therefore, a compromise between the essential physical and community factors must be sought, and a site that combines many favourable physical and community elements should be considered eligible for mobile home park development.

In this discussion, attention has been focused on steepness of surface, soil erodibility, sub-surface soil stability and susceptibility to ponding and flooding, among physical factors. Community factors included water supply and sewage disposal systems, fire and police protection, nearness to elementary schools, parks, job locations, hospitals, and financial, recreational and cultural facilities.

To provide an objective evaluation of sites, rating indices were developed for those factors which vary from one site to another. In the case of services which are provided with some uniformity throughout the study area, such as fire and police protection and schooling, one must rely on subjective

judgements concerning specific mobile home park sites. An overall rating for a particular site can be achieved by averaging the individual rating indices and this can be used for ranking a number of sites.

REFERENCES

- ¹M. J. Audain, *Ibid.*, p. 4.
- ²*Ibid.*, *passim*.
- ³K. Lynch, Site Planning, (Cambridge, Massachusetts: M. I. T. Press, 1971), p. 3.
- ⁴R. W. Slater, "Mobile Home Park Development," Proceedings of Lifestyle for Tomorrow Conference, *Ibid.*, p. 2.
- ⁵For engineering purposes, stability of sub-surface soil is determined at a depth of approximately six feet from the surface. For details see K. Lynch, *Ibid.*
- ⁶C. V. Stanley-Jones and W. A. Benson, An Inventory of Land Resources and Resource potentials in the Capital Region District, (Victoria: Capital Region District, 1973), pp. 100-101.
- ⁷Urban containment areas are those where the sewer system is not yet established, but which are slated for extension of the facility in future, as it is both physically and economically permissible.
- ⁸Canadian Standards Association, *Ibid.*, pp. 20-21.
- ⁹*Ibid.*
- ¹⁰The Victorian, October 22, 1975. p. 17.
- ¹¹British Columbia: Department of Industrial Development Trade and Commerce, *Ibid.*, pp. 26-27.
- ¹²Capital Region Planning Board, Regional Parks, (Victoria: Capital Region Planning Board, 1969), pp. 7 and 13.
- ¹³*Ibid.*, p. 24.
- ¹⁴*Ibid.*, pp. 24-25.
- ¹⁵This was stated by V. R. Tiffin, President, Active Mobile Home Owners Association, Victoria, in a recorded interview on November 19, 1975.

CHAPTER VII

POTENTIAL SITES FOR MOBILE HOME PARKS

The identification of potential sites for mobile home park development in Greater Victoria is a practical task facing developers and planners. In this study such an exercise was carried out as an example of how the technique proposed can be applied and to suggest the types of sites that might appropriately be developed to meet the foreseeable demand of the next few years. It is estimated that seven or eight sites containing 800-1,000 spaces should be developed in the near future. The proposed sites (Figure 11) are by no means the only suitable ones available, but this exercise serves to demonstrate a desirable development strategy for the area.

The sites were selected on the basis of certain general considerations. Firstly, all of the sites are situated in physically suitable areas where community facilities are also available. Secondly, there are no buildings on the sites, thereby making it easier for proposed development. Thirdly, all are situated outside the agricultural land reserve areas.¹ Finally, each of the sites is large enough to accommodate the minimum number of spaces needed for an economically viable operation according to Audain,² at least 100, as well as main-

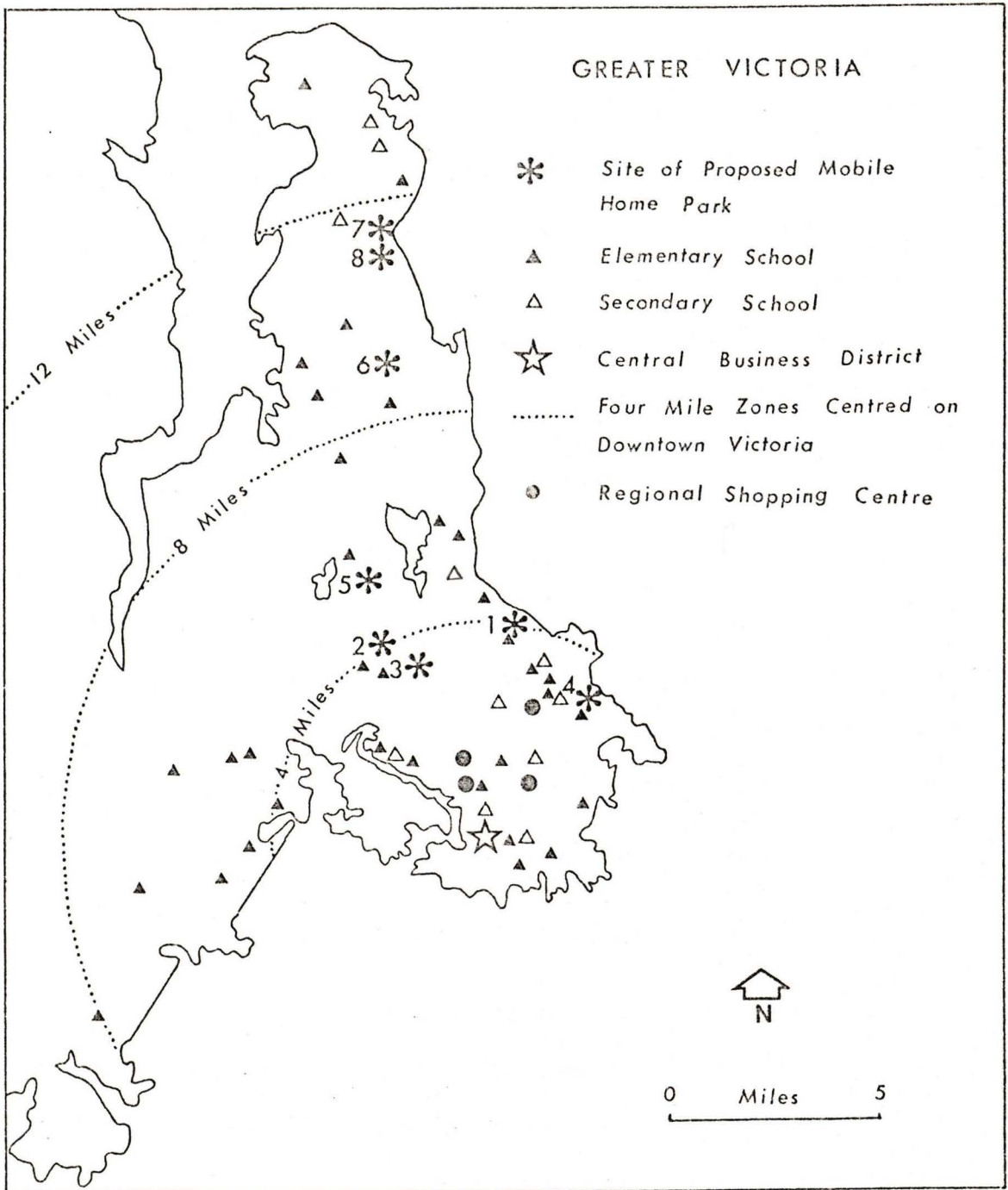


Fig. 11. Sites of Proposed Mobile Home Parks and Selected Services

taining lot size as prescribed by the Canadian Standards Association.³ In addition to meeting low cost housing needs in Greater Victoria, the development of mobile home parks in the proposed sites would serve two other purposes. Such developments within municipal boundaries in proximity to residential neighbourhoods should help to eradicate the unfavourable image of mobile home parks. Moreover, it would reduce the present concentration of mobile home parks in the unorganized territories. Although the sites selected are considered suitable for mobile home parks, a detailed feasibility study of each site should be undertaken before development takes place. Whether or not they can be developed as mobile home parks depends mainly on the land use policies of the local governments, on the attitudes and intentions of the land owners and, to some extent, on the public opinion regarding that type of land use. In the following pages, the proposed sites will be introduced in order of merit and their potentialities will be evaluated.

Site 1 - Cordova Bay

Situated east of Miramar Drive and south of Cordova Bay Road in Saanich municipality (Figure 12), the Cordova Bay site comprises an area of 16.6 acres. It is the best site for a mobile home park among the eight identified, having secured a rating of 4.57 (Table 13).

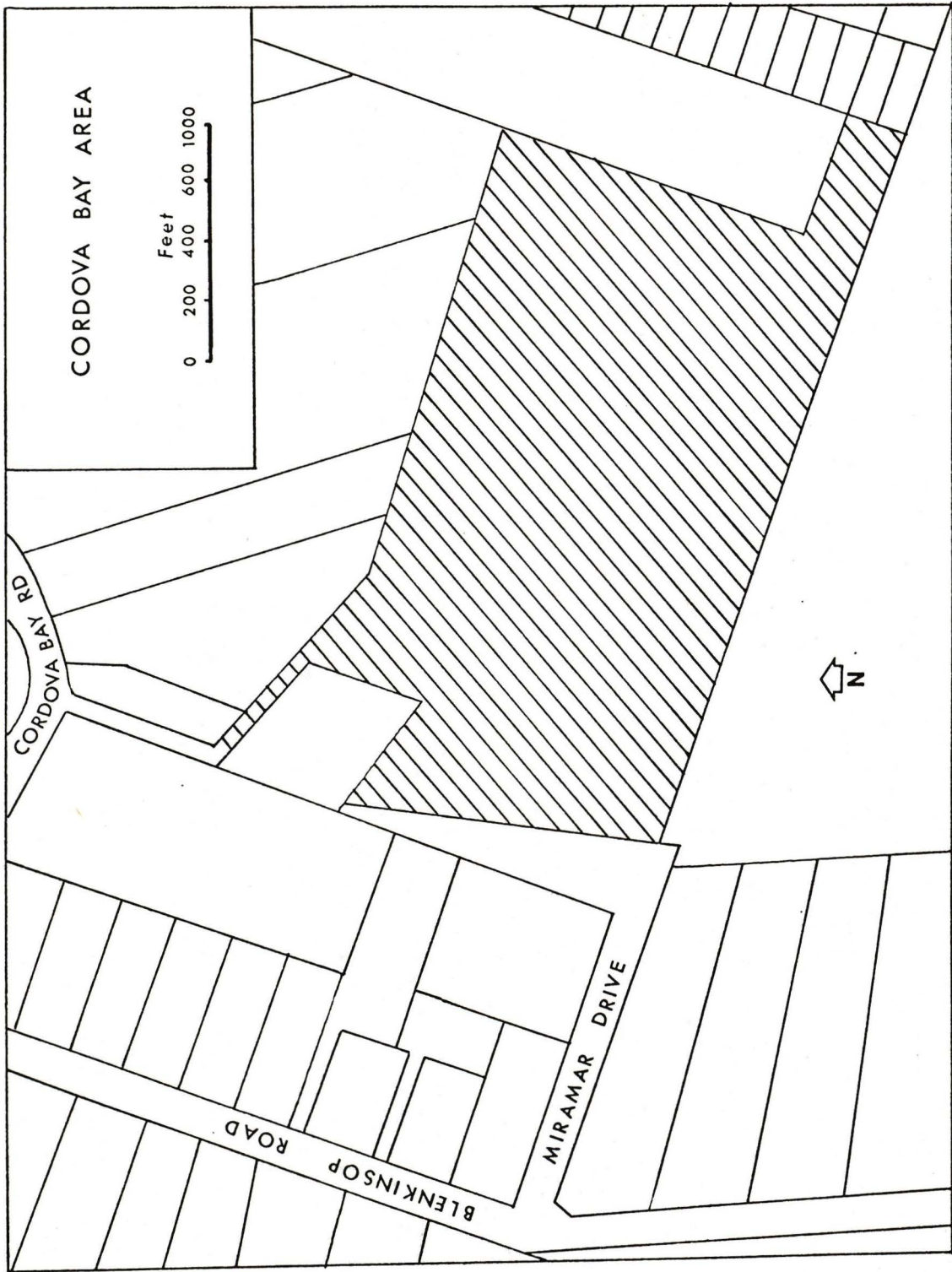


Fig. 12. Site 1 - Cordova Bay

TABLE 13

RATING INDICES FOR PROPOSED MOBILE HOME PARK SITES

Characteristics	Site Numbers							
	1	2	3	4	5	6	7	8
Slope Type	5	5	5	4	5	4	5	5
Surface Soil Erodibility .	4	4	3	4	4	3	2	2
Sub-Surface Soil Stability.	5	3	3	3	3	3	3	3
Susceptibility to Ponding of Flooding. . .	5	4	4	3	3	4	3	3
Water Supply	5	5	5	5	5	5	5	5
Sewage Disposal	3	5	5	5	5	5	5	5
Other Factors	5	5	5	5	5	3	3	3
Rating Index	4.57	4.43	4.29	4.14	4.14	3.86	3.71	3.71

Both physical and community factors are highly favourable. The general relief of the site is flat to gently rolling. The surface soil has low erodibility, and the sub-surface soil stability is very good. The site has a low susceptibility to ponding and flooding. The area already is served by the water distribution system, and as this site is within the Saanich urban containment area, the sewage disposal system can be extended in response to residential development and likely would prove economically feasible. Lochside Elementary School lies within one-quarter of a mile. There are a few corner grocery stores within a radius of one-half mile supplying convenience goods. Cordova Bay beach and Mount Douglas Park offer nearby recreational opportunities. The site is only four miles from downtown Victoria where a wide range of commercial, cultural and recreational services are available. The land use pattern in the vicinity is homogeneous, mostly low density residential. In the Canada Land Inventory of 1973 this site was classed as immature forest land, while Saanich municipality in its official zoning map of 1976 classed it as a detached housing area.

Although Saanich has zoning by-laws permitting the operation of mobile home parks, an evaluation of public opinion would be desirable before any such development were initiated. Conversations with people representing the Cordova Bay Citizens Group indicated that many local residents are in favour of planned

development of low cost housing in that area. Hopefully, development of a good quality mobile home park might be acceptable at that site.

Site 2 - Royal Oak

This site, with an average rating of 4.43, is situated southwest of the Mann Avenue-Glanford Avenue intersection (Figure 13) and falls within the jurisdiction of Saanich municipality. It covers an area of 21.44 acres.

The terrain at Site 2 and its surroundings is flat to gently rolling. The surface soil has low erodibility, and the sub-surface soil is fairly stable. There is low susceptibility to ponding and flooding. Besides the availability of water and sewer systems, Royal Oak Elementary School is situated about one-quarter of a mile away. Two more elementary schools, Northridge and Glanford, and a junior secondary school, Royal Oak, are within a radius of one-half mile. There are a few convenience goods outlets in that area and the Royal Oak Shopping Centre, providing specialized goods and services, is approximately one-half mile away. The proximity of the site to Parkridge Copley Park may be considered another locational advantage. Moreover, downtown Victoria is only four miles away.

The nature of land use in the surrounding areas is heterogeneous, with improved pasture, low density residential, institutional and recreational areas predominating. The site in question presently is unimproved pasture. On the municipal

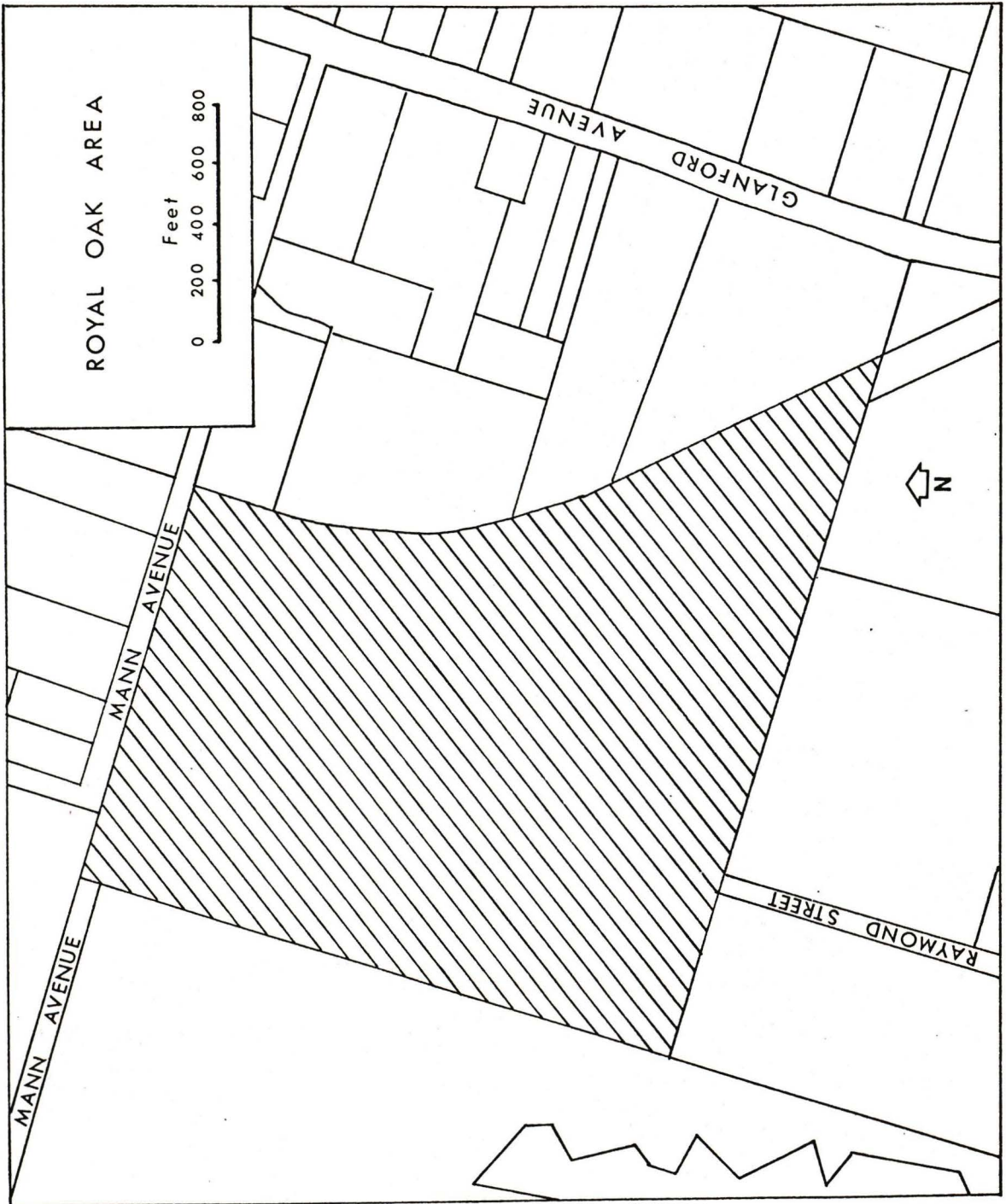


Fig. 13. Site 2 - Royal Oak

zoning map it falls within a high-density attached housing area. It is thought by the local planning and development officials that the establishment of a mobile home park at this site may be acceptable to local residents.

Site 3 - Lake Hill

This piece of property of 28.60 acres is situated in Saanich east of Douglas Street and south of Rogers Avenue (Figure 14). Its average rating is 4.29 (Table 13).

The terrain is mostly flat to gently rolling and other physical characteristics are favourable. Community water and sewer systems are already installed. Two elementary schools, Lake Hill and Glanford, are situated within a radius of three-quarters of a mile. A private school, Calvin Christian, is situated only a few hundred yards to the southwest across Douglas Street, a busy thoroughfare. This would not pose a traffic hazard because there is already a pedestrian overpass at that point. Convenience goods are readily available in a small shopping centre approximately one mile away, Lake Hill Village, situated southeast of the Quadra Street-McKenzie Avenue intersection. Proximity to downtown Victoria is another locational advantage of this site which is only three miles north of the city centre.

The land use pattern in the vicinity is mixed, with both low and high density residential and agricultural uses predominating. At present the site is used for hay production, but it has been zoned for detached housing by the municipality.

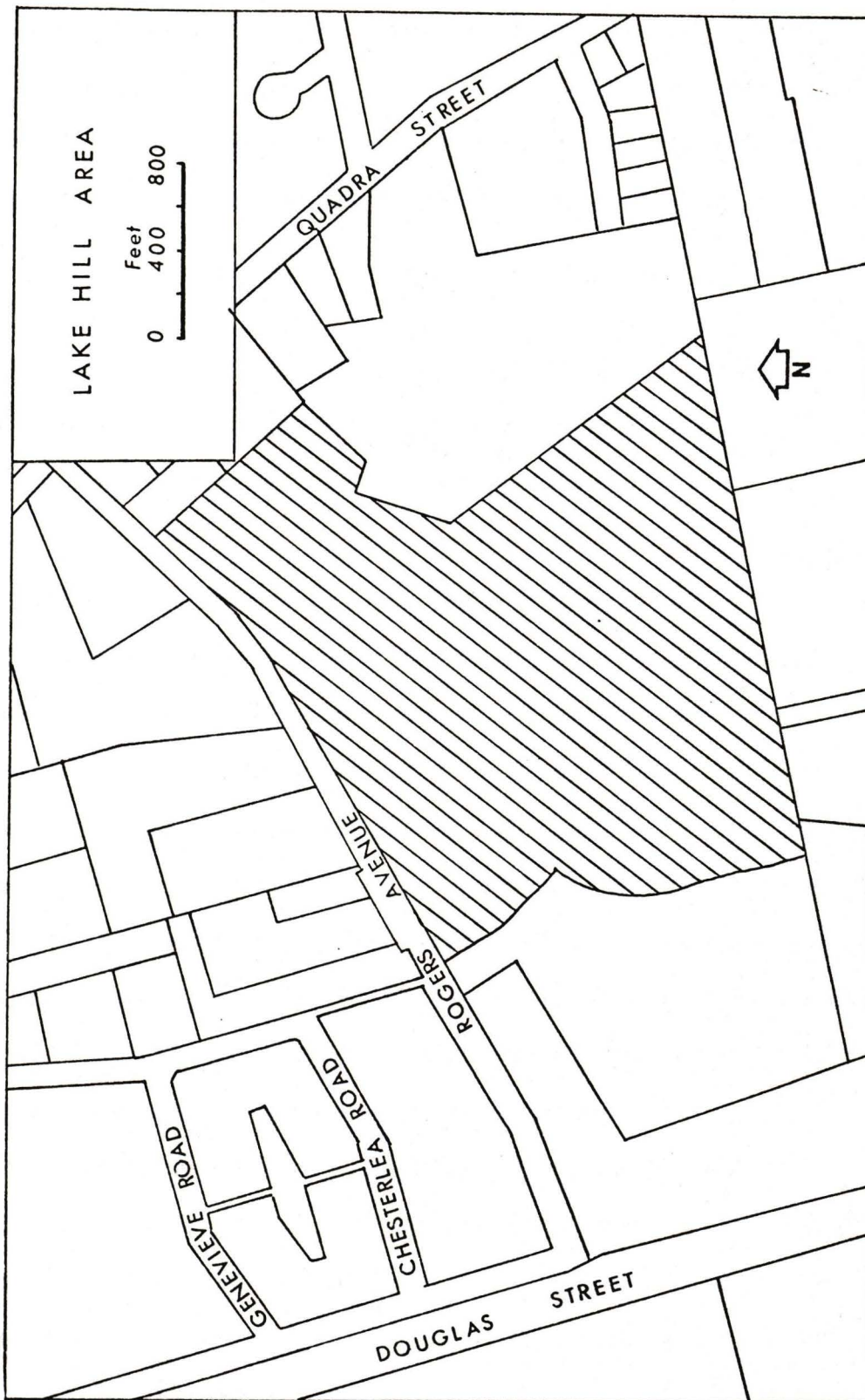


Fig. 14. Site 3 - Lake Hill

One of the municipal planners⁴ was of the opinion that the people living in that locality might accept a mobile home park of good standards in their neighbourhood, but a study of public opinion would be essential before development.

Site 4 - Gordon Head

Also situated in Saanich, Site 4 is southeast of the Gordon Head Road-Feltham Road intersection (Figure 15). It has an area of 9.02 acres and an average rating of 4.00 (Table 13).

Physical and community factors are favourable. The area already is served by water and sewer systems. There is an elementary school, Fairburn, about one-half mile southeast of the site. Within one mile are three more elementary and two secondary schools. Convenience goods are available in a small shopping area at Cadboro Bay. University Heights, a regional shopping centre offering a wide variety of convenience and shopping goods and specialized services, is only three-quarters of a mile away. Other regional shopping centres, as well as the central business district, are situated within a radius of approximately four miles. An attractive sandy beach and recreational boat launching facilities are found at Cadboro Bay. The Racquet Club of Victoria and Gordon Head Community Centre, offering sports and cultural activities, are situated within walking distance. Downtown Victoria is only three miles away.

Medium to high density residential units, especially



Fig. 15. Site 4 - Gordon Head

condominiums and townhouses, and educational institutions are the major types of land use in this locality, and the area in which the site falls is zoned for detached housing. The property belongs to St. Andrew's Roman Catholic Cathedral of Victoria and has been leased to the British Columbia Land Commission until December 31, 1984. Through the provincial Department of Agriculture, the Land Commission is using the property for allotment gardens during the summer months. According to the agreement signed between the Roman Catholic Diocese of Victoria and the British Columbia Land Commission, the former retains the right to take the land back from the latter if the diocese thinks that the site might be better used. Development of a mobile home park at this site would likely be acceptable to the diocese if the local residents approved.⁵ In a recent report, The Daily Colonist of Victoria indicated that the Gordon Head Taxpayers Association was in favour of the establishment of such high density developments as mobile home parks, townhouses and apartment blocks close to community facilities in an attempt to provide equality of opportunity in the use of public services.⁶ Hence it seems likely that a mobile home park at this site would be acceptable to local residents.

Site 5 - Beaver Lake

Situated west of Beaver Lake and between West Saanich Road and Old West Saanich Road, this site lies only a short distance north of the intersection of those two roads (Figure

16). It is in Saanich municipality and comprises an area of 18.9 acres. Its average rating is 4.14.

The physical features are favourable and community facilities are readily available. The site is served by water and sewer systems and it is barely one-half mile away from the nearest elementary school, Beaver Lake. Convenience goods are available in several grocery stores situated within a radius of one-half mile. It is close to Elk-Beaver Lake Regional Park and Prospect Lake Park, but is approximately six miles from the downtown area.

At present the site is designated as unimproved pasture in the Canada Land Inventory and zoned as "A-2 Rural"⁷ by Saanich. In an unpublished paper prepared by the Capital Region Planning Board in 1968 the development of a trailer park at this location was suggested.⁸ Such a development for transients might be unpopular, but the establishment of a permanent and high quality mobile home park probably would not face much public criticism.⁹ The possibility of a mobile home park at this site, therefore, should be explored.

Site 6 - Saanichton

Site 6, rated at 3.86, is situated within Central Saanich municipality southeast of the East Saanich Road-Mount Newton Cross Road intersection (Figure 17). Its total area is 49.12 acres, although the whole piece of property is double this size. For its size and accessibility to roads, the northern

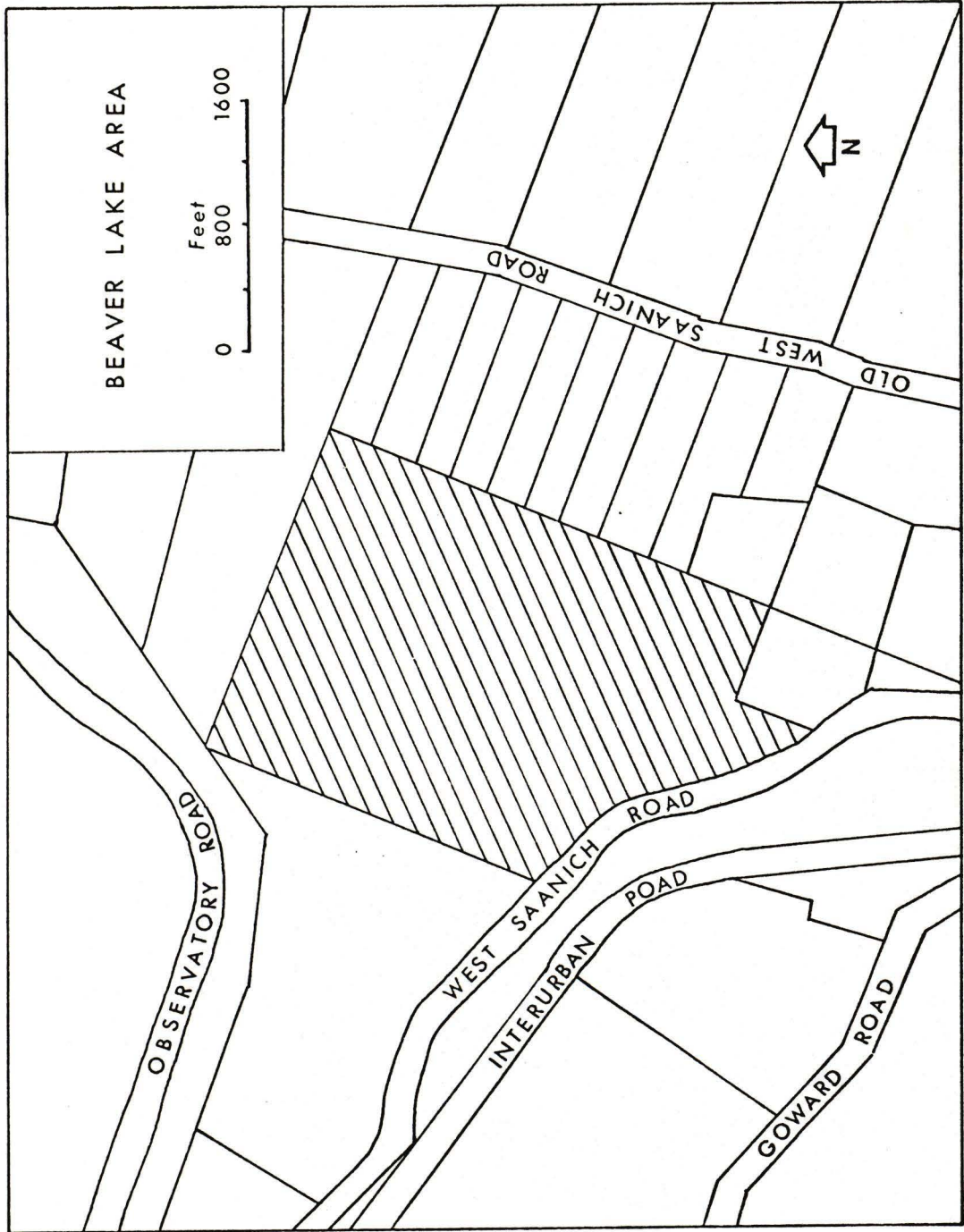


Fig. 16. Site 5 - Beaver Lake



Fig. 17. Site 6 - Saanichton

half of this property is considered sufficient for mobile home park development.

Both physical and community factors are favourable for the present purpose. Whereas water supply and sewage disposal systems are installed on McTavish Road, the distance between the site and the nearest grocery store, approximately one mile, is a disadvantage. Some convenience goods outlets, however, might be established in the vicinity with the increasing residential development of the area. Proximity to Saanichton Post Office, Saanich Peninsula Hospital and Centennial Park are other locational advantages of the site.

The general area is characterized by considerable woodland, horticulture, and some low density residential land. The site in question was classed as improved pasture by the Canada Land Inventory, while the local government zoned it as "A-2 Rural". Conversations with municipal officials indicated that the development of a mobile home park probably would be acceptable to local residents.

Site 7 - Bazan Bay South

Situated within North Saanich municipality north of the intersection of the Patricia Bay Highway and Bazan Bay Road, this site comprises an area of 19.8 acres (Figure 18) and is rated at 3.71 (Table 13).

The general relief of the site is flat to gently rolling. Other physical features also are suitable. In

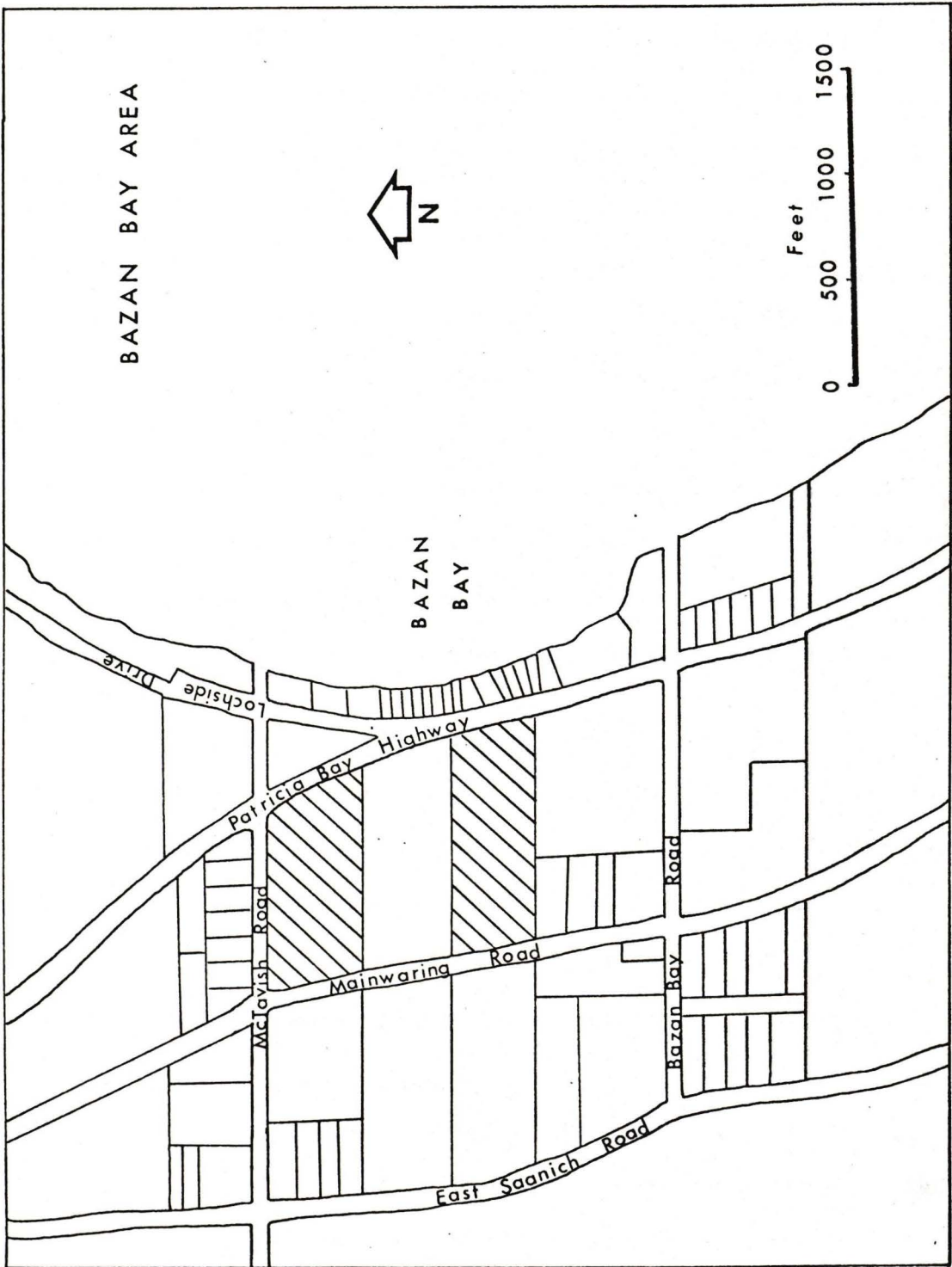


Fig. 18. Sites 7 and 8 - Bazan Bay South and North

addition to the availability of community water and sanitary sewage disposal facilities, the site has an elementary school and convenience goods outlets within a radius of one-half mile. Its proximity to Bazan Bay, John Dean Park, and Glen Meadows and Ardmore golf courses is another notable locational advantage. Although situated approximately eleven miles away from the cultural and recreational facilities of downtown Victoria, the site is relatively close to several marinas and beverage rooms.

Residential and agricultural uses predominate in a mixed land use pattern. While the site itself is classed as unimproved pasture in the Canada Land Inventory, North Saanich municipality has zoned this site as "A-2 Rural". In the opinion of several municipal personnel, the people of this locality do not have a negative attitude toward mobile park development.

Site 8 - Bazan Bay North

This site is a few hundred yards north of Site 7 at the intersection of Patricia Bay Highway and McTavish Road (Figure 18). It covers an area of 15.8 acres and has an average rating of 3.71 (Table 13).

The physical features are similar to those of Site 7 and equally favourable. So, also, are most of the community facilities. However, the nearest elementary school is a little farther away and the site, being bounded by three busy roads, might pose a safety hazard to children on their way to school. On these grounds it was ranked in eighth place, although it rated

equally with Site 7. Like Site 7 it is zoned as "A-2 Rural", although classed as unimproved pasture by the Canada Land Inventory. It is likely that its use for a mobile home park would prove publicly acceptable.

Summary

It has been demonstrated that a number of suitable sites are available and that, by using the techniques proposed, additional sites could be selected. The eight sites were chosen on the basis of those physical and community factors that are considered to have general application for the development of mobile home parks. Selected sites are all north of Victoria, rather than west of it where existing mobile home parks are situated, in order to counteract the present distributional imbalance within the metropolitan area. Many sites rated well on both physical and community criteria, resulting in balanced, if not perfect scores.

Social acceptance of mobile home parks in close proximity to or in the midst of established residential neighbourhoods is an important consideration. Much of the viability of this new form of housing depends on its social acceptance or rejection. Initiative by the public authorities in making the general public more aware of recent changes in mobile homes and mobile home parks may be a stepping stone toward their acceptance in established residential neighbourhoods.

REFERENCES

¹Agricultural Land Reserves were instituted by Act of the Legislative Assembly in 1973. For details see British Columbia: Land Commission Act, Bill No. 42, 1973.

²M. J. Audain, *Ibid.*, p. 78.

³Canadian Standards Association, *Ibid.*, p. 9.

⁴This opinion was given by Thomas W. Loney, Planner, Saanich Municipality in an interview on July 11, 1975.

⁵This view was expressed by the Secretary, St. Andrew's Roman Catholic Cathedral of Victoria in a telephone interview on August 31, 1975.

⁶The Daily Colonist, Victoria, May 28, 1976, p. 11.

⁷"A-2 Rural" is relatively low quality agricultural land that is normally used for hay and pasture, while "A-1 Rural" is of better quality and mostly cultivated.

⁸Capital Region Planning Board. "Trailer Parks", (Victoria: Capital Regional District, 1968), p. 9.

⁹The Daily Colonist, Victoria, April 10, 1976.

CHAPTER VIII

CONCLUSION

The introduction of mobile homes has made a significant contribution to the North American housing inventory. Once specially designed for transient workers, mobile homes have emerged as an alternative form of permanent housing, especially for the low to medium income groups. Currently, there are approximately 550,000 people in Canada living in 179,762 mobile homes which represent 2.98 percent of all dwellings in this country.¹

The introduction of the mobile home was followed by the development of a distinctive type of residential setting-- the mobile home park. These specially designed sites were built and managed mainly by private developers who viewed the operation as a business and, therefore, concentrated on maximizing profits by providing as few services as possible in exchange for rent. Consequently, mobile home parks developed a sullied image of high density, poorly serviced areas where transient blue-collar workers and low income people sought shelter. The general public formed an impression that the mobile home residents were socially inferior to those living in conventional homes.

Where a slum environment prevailed, the parks generally

had been built at a time when there were no regulations governing their development, and when smaller eight-foot-wide units were common. Because the park operators were accepting the wider units without changing the size of the individual lots, the space between mobile homes became less and less, leading to congestion and inconvenience in utility and service provisions. The adoption of regulations and zoning by-laws by some local governments has improved the situation. The new mobile home parks, by conforming to these new requirements, provide a more wholesome residential atmosphere and have established themselves as a more acceptable alternative to regular housing, both from the point of view of park residents and outsiders.

Another popular notion concerning mobile homes and their residents is that they do not pay their fair share of local taxes. Such a situation existed in the past when municipalities or local governments classified mobile homes as 'personal property' rather than 'real property', and taxed the units at a lower rate than conventional single family dwellings. But the assessment authorities in Canada have changed their taxation policies² and now tax mobile homes as 'real property'. The complaint that mobile home residents do not pay their legitimate share of taxes has lost its validity, and the public should be made aware of this.

Initially, the chief advantage of buying a mobile home was its mobility. Today, the attractions are largely economic. Young married couples are attracted by the package

deal whereby one monthly payment covers the home, major appliances, furniture and draperies, plus a low maintenance cost. Senior citizens are attracted by the easy housekeeping, the limited yard care, the compact size, and the lower price. The total monthly payment for a mobile home also is lower than for any comparable form of site-built home, although the mortgage rate is higher and the amortization period is much shorter. Apart from the economic factors, Hall³ and Audain⁴ noted two other reasons why mobile homes are chosen by people with limited resources. Hall observed that the limited ability of these people to think and plan for the future is a prime factor in the selection of mobile homes as their preferred type of housing.⁵ Since they focus on present and short term advantages, the long range real estate appreciation of a conventional home does not appeal to them. Audain considered that they feel restricted to inexpensive mobile homes because they have such limited resources for investment.⁶

Mobile homes are here to stay and provisions for them in the urban community must be made. The question is not whether mobile homes and their parks belong, but where they belong, and how their quality and acceptability can be improved. In every part of Canada, the number of mobile homes and mobile home parks is increasing. Notwithstanding, there has been a tendency to underestimate this form of housing, to use makeshift regulations, or to ignore it completely by attempting to exclude mobile homes and their parks from the urban scene. Mobile home parks can

be well maintained and highly desirable additions to the housing supply. Whether they become contributions to the supply of slum housing or good housing depends to a considerable extent upon the actions taken by public officials and developers. Good site characteristics and access to community facilities are prime considerations to be kept in mind by the developing agencies in order to ensure that mobile home parks are an asset to the community and a viable housing alternative.

In Greater Victoria only two municipalities have zoning by-laws regarding the operation of mobile home parks within their boundaries, while the other five without zoning by-laws, in effect, rule out mobile home parks. The Capital Regional Board regulates the operation of mobile home parks in the unorganized territories, mainly through the provincial Health Act. The reluctance of the core municipalities to accept mobile home parks has relegated them to the unorganized territories where a general lack of community facilities exists. Moreover, most of the mobile home parks in Greater Victoria were established before the Health Act came into effect in October, 1967, and they do not comply with the minimum standards prescribed. This widespread incidence of inferior quality parks in Greater Victoria tends to perpetuate the adverse image of the mobile home park environment.

In order to provide a wholesome residential atmosphere in the mobile home parks, and thereby improve the image of this housing alternative, an upgrading of the quality of mobile home

parks is urgently needed. This can be accomplished by giving careful attention to site and neighbourhood considerations in the establishment of new parks. Potential locations for mobile home parks should be selected objectively through comprehensive surveys. The use of a rating scale to assess the potentiality of sites and provide a basis for ranking them has been demonstrated. The critical values in the scale can be determined by the decision makers according to the demand for mobile home park sites and the supply of land suitable for such purposes. There exists an unfulfilled demand for mobile homes and mobile home spaces in Greater Victoria and it is likely to increase in the near future. Fortunately, a number of suitable sites are available in the region for development. The present study introduced eight such sites and assigned a priority ranking.

Recommendations

In view of the current shortage of low cost housing, the need to accommodate people with limited resources, and the need to improve the mobile home environment, the following recommendations are made.

1. Since mobile home parks are essentially residential neighbourhoods, and the people living in mobile homes require the same utility and service provisions as their counterparts living in conventional homes, the municipalities or local governments should provide equal opportunity for mobile home residents.

to use public services. This necessitates the acceptance of mobile home parks within municipal boundaries by adopting proper zoning by-laws. The zoning by-laws should be specific enough to distinguish between the districts to be used for permanent mobile home parks and those for transitory recreational vehicle camps. Moreover, development controls should be designed to encourage the integration of mobile home parks into the residential communities. This would ensure orderly development of municipalities and "provide for a variety of residential opportunities, differing in character, location and density of population, so that people have an effective choice of environments for living."⁷

2. The present zoning by-laws regulating the operation of mobile home parks are not fully effective in ensuring a wholesome residential environment. One of the problems that should be eliminated is the needless duplication or ambiguity in the provisions of zoning by-laws. The two zoning by-laws in effect simultaneously in Saanich is a case in point. Another failing is that no direction of guidance is given in existing by-laws regarding suitable locations for mobile home parks. For the benefit of prospective developers or owners the existing zoning by-laws should be amended to provide guidance on locational aspects.

3. There exists an urgent need to revise the provincial Health Act of 1967 which is used to regulate mobile home parks throughout British Columbia in the absence of any direct local government regulations. The Act provides no direction

concerning location of mobile home parks. The table showing the sanitary facilities to be provided by the park operator is incomplete because the provision of washbasins and showers in a mobile home park where the number of 'dependent' mobile homes is below fifteen is not specified. The Act should be revised to include specific sections dealing with locational aspects and sanitary facilities for 'dependent' mobile home residents.

4. The building codes developed by the National Research Council of Canada, the Canadian Standards Association and the Central Mortgage and Housing Corporation are unsatisfactory because they deal only with the minimum requirements to be met in developing mobile home parks. None of these codes has any reference to site and situation considerations which are so important in developing residential neighbourhoods, including mobile home parks. These codes should be amalgamated into a single, more effective performance type of code that would include specifications on site and situation, as discussed in the present study.

5. The 1966 and 1971 Census of Canada reports present a very broad definition of a mobile home that includes even trailers, railway cars and boats.⁸ This results in an exaggerated total number of mobile homes in Canada. Also, the census does not include socio-economic data concerning mobile home residents. This makes it difficult to compare and contrast the statistics for mobile home residents with those for conventional home dwellers. Statistics Canada should use a

more precise definition of a mobile home and should report statistics on mobile home residents in exactly the same manner as it does for the occupants of apartments, single family dwellings and condominiums.

6. The prospects for mobile homes cannot blossom completely unless they become socially acceptable as an alternative form of housing. To achieve this goal, a public education programme that presents mobile homes and mobile home parks in a positive manner should be initiated.

A number of potential sites for mobile home parks have been identified. If these sites were imaginatively developed the mobile home image would be greatly improved and mobile home living would be better integrated with conventional housing. The reluctance of municipalities to accept mobile home parks remains the principal obstacle to be surmounted.

REFERENCES

¹Statistics Canada, Ibid., Vol. II, Part 3, Bulletin 2.3-2, June 1973, p. 4-1.

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G. R. Parker and V. Parker, Ibid., p. 90.

³R. C. Hall, Ibid.

⁴M. J. Audain, Ibid.

⁵R. C. Hall, Ibid.

⁶M. J. Audain, Ibid., p. 151.

⁷Capital Regional District, Victoria Metropolitan Area Official Regional Plan, (Victoria: Capital Regional District, 1974), p. 2.

⁸

Statistics Canada, Ibid., Vol. II, Part 3, Bulletin 2.3-2, June 1973, p. ii.

BIBLIOGRAPHY

- Abrams, C. "The Role of Mobile Homes in American Housing." Prospects, Premonitions and Prophecies. New York: American Institute of Planners, 1961, pp. 231-241.
- Alberta Housing Corporation. Mobile Home Report. Edmonton: Alberta Housing Corporation, 1964.
- Alberta Department of Municipal Affairs. Mobile Homes in Alberta. Edmonton: Alberta Department of Municipal Affairs, 1973.
- Alschuler, K. B., and Betts, R. S. Mobile Home. Berkeley: University of California, Institute of Urban and Regional Development, 1970.
- American Institute of Real Estate Appraisers. Guidelines for Mobile Home Parks. Chicago: American Institute of Real Estate Appraisers, 1971.
- American Society of Planning Officials. The Changing Function of Trailer Parks. Chicago: American Society of Planning Officials, Planning Advisory Service Information Report No. 84, 1956.
- Audain, M. J. Mobile Homes: Problems and Prospects. Victoria: Queen's Printer, 1975.
- Bair, F. H. Jr. Local Regulation of Mobile Home Parks, Travel Trailer Parks and Related Facilities. Chicago: Mobile Homes Manufacturers Association, 1965.
- Baldwin, W. M. "Mobile Home Parks: Design, Construction and Costs." Proceedings of International Symposium on Low Cost Housing Problems Related to Urban Renewal and Development. Rolla, Missouri: University of Missouri, Department of Civil Engineering, 1970, pp. 66-70.
- Bartley, E. R., and Bair, F. H. Jr. Mobile Home Parks and Comprehensive Community Planning. Gainesville, Florida: University of Florida, 1960.

- Batty, M. et al. "Generating Physical Plans for Urban Growth: Some Related Design Methods." Bulletin of Urban and Environmental Affairs, Vol. 7, No. 2, April 1975, pp. 1-14.
- Berney, R. E. and Larson, A. J. "Micro-Analysis of Mobile Home Characteristics with Implications for Tax Policy." Land Economics, Vol. 42, November 1966, pp. 453-463.
- Bestor, G. C. "The Challenge of Residential Land Planning." Journal of the Urban Planning and Development Division. June 1967.
- Boise Cascade Corporation. Planning Mobile Home Parks. Atlanta: Boise Cascade Corporation, 1969.
- Borgeson, G., and Borgeson, L. Mobile Homes and Travel Trailers. New York: Arco Publishing, 1959.
- British Columbia: Department of Health. Health Act. British Columbia Regulation 239/67, Order-in-Council No. 3130, Victoria, 1967.
- British Columbia: Department of Industrial Development, Trade and Commerce. Mobile Homes in British Columbia. Victoria, 1971.
- Brown, C. "Mobile Home Parks in Greater Victoria: A Comparative Survey." Unpublished manuscript, Victoria: University of Victoria, Department of Geography, 1975.
- Burnaby, British Columbia. Mobile Home Study. Burnaby: Planning Department, 1969.
- Burns, F. A. "Struggle and Rise of the Mobile Home." Design for Modern Living. Los Angeles: Trailer Coach Association, 1967.
- Canada: Department of Industry, Trade and Commerce, The Mobile Home in Canada. Ottawa: Information Canada, 1970.
- Canada: Department of National Defence. Standard Mobile Home Park. Ottawa: Department of National Defence, 1971.
- Canadian Mobile Home Association. The Mobile Home in Canada. Toronto: Canadian Mobile Home Association, 1975.
- Canadian Standard Association. Mobile Home Parks — C.S.A. Standard Z240.7.1 - 1972. Rexdale, Ontario: Canadian Standard Association, 1972.

Capital Regional District. Victoria Metropolitan Area: Official Regional Plan. Victoria: Capital Regional District, 1974.

Capital Region Planning Board. The Capital Regional Plan. Victoria: Capital Region Planning Board, 1959.

_____. "Trailer Parks". Victoria: Capital Region Planning Board, 1968.

_____. Regional Parks. Victoria: Capital Region Planning Board, 1969.

Carnevale, J. B. "A Comparative Study of Neighbouring in a Mobile Home Neighbourhood and Fixed Home Neighbourhood," Master's Thesis, Tucson, Arizona: University of Arizona, 1961.

Cassidy, R. "The Needed Revolution in Mobile Homes." Planning, December 1973, pp. 12-18.

Central Mortgage and Housing Corporation. The National Housing Act and Mobile Homes. Ottawa: Central Mortgage and Housing Corporation, 1973.

_____. Site Planning for Mobile Homes: A Supplement to the Site Planning Handbook. Ottawa: Central Mortgage and Housing Corporation, 1972.

City of Calgary, Alberta. Examination of Mobile Home Development. Calgary: Planning Department, 1965.

_____. Mobile Home Parks: Their Present Inadequacies and Recommended Solutions. Calgary: Planning Department, 1971.

City of Edmonton, Alberta. Mobile Home Parks in the Urban Environment. Edmonton: Planning Department, 1968.

City of London, Ontario. The Development of Mobile Home Parks in the City of London. London, Ontario: Planning Department, 1970.

City of Saint John, New Brunswick. Mobile Homes and Parks Survey. Saint John: Planning Commission, 1970.

City of Vancouver, British Columbia. Mobile Homes: Characteristics, Problems and Potentials. Vancouver: Department of Planning and Civic Government, 1972.

City of Winnipeg, Manitoba. Mobile Homes in Metropolitan Winnipeg. Winnipeg: Planning Division, 1970.

- Contractor, R. "Attitudes of Mobile Home Owners Toward Mobile Home Parks." Master's Thesis, Vancouver: University of British Columbia, School of Community and Regional Planning, 1972.
- Cornett, R. R. A Study of Mobile Home Parks, Spaces and Residents in Humboldt County. Arcata, California: Humboldt State College, Division of Business, 1966.
- Council of Planning Librarians. The Illusion of Mobile Homes as Supplemental Housing for Low Income Families. Exchange Bibliography No. 349, Monticello, Illinois: Council of Planning Librarians, 1972.
- District of Saanich, British Columbia. By-Law No. 2542: Mobile Home and Trailer Parks Regulation By-Law. Saanich: Planning Department, 1959.
- _____. The Mobile Home. Saanich: Planning Department, 1970.
- _____. By-Law No. 3366: Mobile Home Parks District (RH-1). Saanich: Planning Department, 1972.
- District of Surrey, British Columbia. Mobile Home By-Laws. Surrey: Planning Department, 1968.
- Dittmer, D. W., and Martini, C. E. Mobile Homes and Residential Land Use. Washington, D. C.: National Association of Real Estate Boards, 1960.
- Drickey, R. A. Mobile Home Replacement Rates and Surveying Inventory. Michigan: Whirlpool Corporation, 1971.
- Drury, M. J. Mobile Homes: The Unrecognized Revolution in American Housing. New York: Praeger Publishers, 1972.
- Duke, R. D. "Mobility -- A New Aspect of Community Life." Urban Land. July-August, 1953.
- Edmonton Regional Planning Commission. Mobile Home Court Study. Edmonton: Edmonton Regional Planning Commission, 1969.
- Edwards, C. M. "Consumer Survey," Mobile Home Journal. New York: Davis Publications, 1963.
- _____. "Mobile Life Consumer Survey," Mobile Home Journal. New York: Davis Publications, 1966.
- Engstorm, R. E. "Mobile Homes in Transition ." Urban Land. May, 1972, pp. 3-7.

- First National City Bank of New York. Mobile Home Market.
New York: First National City Bank of New York, 1972.
- Fly, E. J. "Reactions of Homemakers to their Mobile Home
Kitchens in Midwest City, Oklahoma." Master's Thesis
Stillwater, Oklahoma: Oklahoma State University, 1965.
- Forward, C. N. Land Use of the Victoria Area. Ottawa: Department
of Energy, Mines and Resources, 1969.
- French, R. M., and Hadden, J. K. "Mobile Homes: Instant
Suburbia of Portable Slums." Social Problems.
Vol. 16, No. 2, pp. 219-226.
- Friedman, J., and Alonso, W. Regional Development and Planning:
A Reader. Cambridge, Massachusetts: The M. I. T. Press.
1969.
- Gartner, J. All About Trailers. New York: Henry Holt, 1954.
- Gibson, C. B. Policy Alternatives for Mobile Homes. New Brunswick,
New Jersey: Rutgers University, Centre for Urban Policy
Research, 1972.
- Gillies, J. M. "The Mobile Home Community". Paper Presented at
a Panel of Planning, Los Angeles: The Governor's Con-
ference on Housing, June 15, 1965.
- Hager, D. J. "The Construction Workers and Trailer Living
in Bucks County, Pennsylvania." Housing Research.
April 1954.
- Hodes, B., and Roberson, G. G. The Law of Mobile Homes. New
York: Commerce Clearing House, 1964.
- Knight, R. L. "Mobile and Conventional Home Owners: A Comparative
Examination of Socio-Economic Characteristics and Housing
Related Preferences of Young Families in Chicago." Ph.D.
Dissertation, Evanston, Illinois: Northwestern University,
1971.
- _____. "Planners and Mobile Home Research." Socio-Economic
Planning Sciences, June 1971, pp. 213-220.
- Lakehead Planning Board. Lakehead Mobile Home Parks Study.
Thunder Bay, Ontario: Lakehead Planning Board, 1973.
- Lithwick, N. H., and Paquet, G., eds. Urban Studies: A Canadian
Perspective. Toronto: Methuen, 1968.

- Lower Mainland Regional Planning Board. "Draft Report on Mobile Home Development." Vancouver: Lower Mainland Regional Planning Board, 1968. (Mimeographed.)
- Lynch, K. Site Planning. Cambridge, Massachusetts: The M. I. T. Press, 1971.
- Lynes, R. The Domesticated American. New York: Harper & Row, 1963.
- McDonnell, L. Mobile Homes: The Low Cost Housing Hoax. New York: Grossman Publishers, 1975.
- McLoan, T. W. Mobile Homes. Homewood, Illinois: Richard D. Irwin Inc., 1954.
- Manitoba Department of Urban Development and Municipal Affairs. Guidelines for Locating and Designing Mobile Home Parks. Winnipeg: Manitoba Department of Urban Development and Municipal Affairs, The Municipal Planning Branch, 1970.
- Mayers, J. B. "Social Solidarity in a Mobile Home Park: The Effects of Discrimination," Master's Thesis, Ithaca, New York: Cornell University, 1971
- Mays, A. H. "Zoning for Mobile Homes -- A Legal Analysis" Journal of the American Institute of Planners. Vol. 27, No. 3, August 1967, pp. 204-211.
- Metropolitan Corporation of Greater Winnipeg. Mobile Homes in Metropolitan Winnipeg and the Additional Zone. Winnipeg: Metropolitan Corporation of Greater Winnipeg, 1970.
- Michelson, L. C. How to Build and Operate a Mobile Home Park. Chicago: Mobile Home Manufacturers Association, 1964.
- Michigan State University. A Survey of the Mobile Home Consumer. East Lansing, Michigan: Michigan State University, 1959.
- Missouri Municipal League. Regulations of Mobile Home and Trailer Parks in Missouri Municipalities. Jefferson, Missouri: Missouri Municipal League, 1972.
- "Mobile Homes" Ontario Planning. March-April (entire issue).
- "Mobile Homes are Here to Stay." Building Official. January 1969, pp. 6-8.
- Mobile Home Manufacturers Association. Mobile Home Survey. Chantilly, Virginia: Mobile Home Manufacturers Association, 1952.

- _____. Today's Mobile Home Park. Chicago: Mobile Home Manufacturers Association, 1957.
- _____. "Study of a Proposed Mobile Home Park." The Appraisal Journal. Vol. 39, No. 1, January 1971, pp. 52-56.
- _____. Standard for Mobile Home Parks. Chicago: Mobile Home Manufacturers Association, 1971.
- _____. Flash Facts: Pocket Reference to the Mobile Home Industry. Chicago: Mobile Home Manufacturers Association, 1973.
- _____. Mobile Homes: Complete Guide to the Mobile Home Lifestyle. Chantilly, Virginia: Mobile Home Manufacturers Association.
- Moore, D. G. Life Styles in Mobile Suburbia. Ithaca, New York: Cornell University Press, 1964.
- Morris, E. W., and Woods, M. Housing Crisis and Response: The Place of Mobile Homes in American Life. Ithaca, New York: Cornell University Press, The Department of Consumer Economics and Public Policy, 1971.
- National Research Council of Canada. National Building Code of Canada: 1975 Ottawa: National Research Council of Canada, 1975.
- Newcomb, R. Mobile Home Parks: Part I -- An Analysis of Characteristics. Washington, D. C.: Urban Land Institute, 1971.
- New York State Office of Planning Services. Facts on Mobile Homes. New York: New York State Office of Planning Services, 1971.
- Nova Scotia Housing Commission. Mobile Home Parks--Trends and Standards. Halifax: Nova Scotia Housing Commission, 1970.
- Nulsen, R. H. All About Parks for Mobile Homes and Trailers. Beverly Hills, California: Trail-R-Club of America, 1968.
- Ocean County, New Jersey. Mobile Homes and Parks in the Community Planning Process. Ocean County: Planning Board, 1952.
- Olofin, E. A. "Classification of Slope Angles for Land Planning Purposes". The Journal of Tropical Geography. Vol. 39, December 1974, pp. 72-77.

Ontario Ministry of Treasury, Economics and Intergovernmental Affairs. Municipalities with Mobile Homes. Toronto: Community Planning Branch, Department of Municipal Affairs, 1971.

_____. Mobile Homes in Ontario. Toronto: Ontario Government Bookstore, 1973.

_____. Mobile Home Park Survey. Toronto: Ontario Government Bookstore, 1973.

Osman, M. E. "Mobile Homes: The Third Alternative." American Institute of Architects. December 1971.

Parker, G. R. and Parker, V. The Mobile Home in Nova Scotia: Myth and Reality. Halifax: College of Art and Design, 1974.

Peterson, D. S. Mobile Homes Research and Conclusions. New York: New York State Senate Finance Committee, March 1957.

Randall, W. J. and McCready, C. W. "The Appraisal of Trailer Courts." The Appraisal Journal. Vol. 27, January 1959, pp. 95-102.

Ring, A. A. The Mobile Home. Gainesville, Florida: University of Florida, Bureau of Economic and Business Research, April 1966.

Saskatchewan Community Planning Branch. Trailer Courts and Mobile Home Parks In Saskatchewan. Saskatchewan: Saskatchewan Community Planning Branch, 1971.

Schorr, A. R. "Families on Wheels". Harper's. January 1958.

_____. "Mobile Family Living". Social Casework. April 1965.

Shiefman, Webra and Associates. "The Mobile Home Market." The Appraisal Journal. Vol. 40, No. 3, July 1972. pp. 391-411.

Sidney, British Columbia. By-Law No. 105: Trailer Parks. Sidney, 1959.

St. Clair Region Development Council. The Mobile Home From a Planning Standpoint. Chatham, Ontario: St. Clair Region Development Council, 1971.

Stanley-Jones, C. V., and Benson, W. A. An Inventory of Land Resources and Resource Potentials in the Capital Regional District. Victoria: Capital Region District, 1973.

Starr, J. O. "Guidelines for Mobile Home Park Development." The Appraisal Journal. Vol. 39, No. 1, January 1971. pp. 41-51.

Sykes, R. "Mobile Homes in Calgary." Proceedings of Lifestyle for Tomorrow Conference. Toronto: Canadian Mobile Home and Travel Trailer Association, December 5-6, 1973.

Tiffin, V. R. Proposals From the Active Mobile Home Owners Association. Victoria: Active Mobile Home Owners Association, 1975.

United Community Services of the Greater Vancouver Area. Mobile Home Living in the Lower Mainland. Vancouver: Social Policy and Research Department, 1971.

United States Bureau of Census. "Survey of the Owners of New Mobile Homes." Washington, D. C.: United States Bureau of Census, 1970.

_____. Mobile Homes: Current Housing Subject Reports. Series HC (7)-6, Washington, D. C.: United States Bureau of Census, 1970.

_____. Statistical Abstract of the United States -- 1972. 93rd Edition, Washington, D. C.: United States Bureau of Census, 1972.

United States Department of Housing and Urban Development. Housing Surveys: Parts I and II. Washington, D. C.: United States Government Printing Office, 1968.

_____. Mobile Home Court Development Guide. HUD Guide, No. PHAG 4200.7, Washington, D. C.: United States Government Printing Office, 1970.

University of Oregon. Relocatable Housing: Siting Options for Mobile Homes. Eugene, Oregon: University of Oregon, Bureau of Governmental Research and Service, 1970.

Urban Land Institute. Practicalities of Mobile Home Park Development. Washington, D. C.: Urban Land Institute, 1960.

_____. Mobile Home Parks. Washington, D. C.: Urban Land Institute, 1972.

Vance, M. Mobile Home Parks. Monticello, Illinois: Council of Planning Librarians, 1961.

- Wade, M. The International Megolopolis. Toronto: University of Toronto Press, 1969.
- Weberly, M. S. "The Evolution of House Trailer." Urban Land. No. 3, March 1967, pp. 1-12.
- Wellington, A. C. "Trailer Camp Slums: A New Kind of Slums." Survey. October 1951
- Western Mobile Home Association. Establishing a Mobile Home Park in California. Los Angeles, California: Western Mobile Home Association, 1966.
- Wheeler, J. O. "Locational Factors in the Growth of Mobile Home Manufacturing in the Southeastern United States." Southeastern Geographer. Vol. 13, No. 2, November 1973, pp. 92-104.
- Whyte, W. H. Jr. "Thr Transients". Fortune. June, 1953.
- Willat, N. "Trailer Parks: They Mushroom into a Thriving Business Across the Nation." Barron's. September 1955.
- Woodall, Woodall's Mobile Home Park Directory. Highland Park Illinois: Woodall Publishing Co., (published annually).
- Wright, R. "Occupancy and Maintainance Standards for Mobile Home Parks in British Columbia." Unpublished Report, Victoria: Department of Housing, The Government of the Province of British Columbia, 1974.
- _____. "Design and Location Criteria for Mobile Home Parks in British Columbia." Unpublished Report, Victoria: Department of Housing, The Government of the Province of British Columbia, 1974.
- _____. "Economics of Mobile Home Park Development". Unpublished Report, Toronto: University of Toronto, Department of Urban and Regional Planning, 1975.

APPENDIX A

Outline of Interview with the Mobile Home Park Managers:

I am from the Department of Geography, University of Victoria, and working on a research project examining the potential locations for mobile home parks in Greater Victoria.

I am now in the process of collecting information relating to the condition of mobile home parks in Greater Victoria, and I shall be very grateful if you could assist me in this research by answering the following questions.

Please rest assured that the information you give will be treated in the strictest of confidence and in an anonymous fashion. Findings will be used for academic purposes only and the study has no connection with any government agency, but it is hoped that this indepth study can be of use in the future planning of mobile home parks in Greater Victoria.

Name of the park.....
Location.....
Date of interview.....

a. Park characteristics:

- 1. How long has this park been in operation? _____ years.
- 2. What is the present area of this park? _____ acres.
- 3. What is the total number of trailer spaces available at this park? _____ spaces.
- 4. What factors led to the development of this mobile home park on the present site?

5. What are the numbers and sizes of individual spaces in your park?

<u>No.</u>	<u>Size</u>
_____	_____ ft. X _____
_____	_____ ft. X _____
_____	_____ ft. X _____

6. What services are offered to the residents of your park at present?

- a. Concrete foundation for mobile home
- b. Sewer
- c. Water connection
- d. Electricity connection
- e. Garbage collection
- f. Cablevision
- g. Septic tank
- h. Telephone
- i. Car parking space
- j. Others (please specify below)

7. Has the park been expanded since its inception? Yes No

(b) If yes, what were the changes? Please explain.

8. How many trailers are there in this park at present? _____

9. What is the present vacancy rate at your park? _____ percent.

10. How many people reside in this park now? _____

11. (a) Does this park provide spaces for tourists or temporary accommodation? (e.g. for campers) Yes No

(b) If yes, how many spaces? _____

b. Park's Future:

12. (a) Is there any plan to expand the park in the future? Yes No

(b) If yes, can you please estimate how many extra spaces would be available?

(c) If no, please explain why not?

13. (a) Is there any plan to expand the present services to the park residents? Yes No

(b) If yes, what are the services?

- i. _____
- ii. _____
- iii. _____

c. Park Legislation:

14. What is your opinion regarding zoning by-laws and the location of mobile home parks in Greater Victoria?

15. What is your opinion regarding the regulations governing the minimum standard of mobile homes that can be accepted within the municipal limits?

16. What other areas in Greater Victoria do you see as possible mobile home park locations?

17 a. Did you participate in the hearings on mobile homes conducted by the British Columbia Government Mobile Home Enquiry Commission?

Yes No

17 b. If yes, what did you do?

APPENDIX B

Outline of Interview with the Municipal Planners:

I am from the Department of Geography, University of Victoria, and working on a thesis concerning the potential locations for the mobile home parks in Greater Victoria.

I would appreciate it if you would please answer some questions related to the topic. This will assist me to understand the present legal and planning situation in your municipality, and will help me to develop a comprehensive picture of the situation.

Person interviewed.....

Position.....

Municipality.....

Date of interview.....

1. Do you allow the operation of mobile home parks in your municipality?

Yes	No
-----	----
2. If not, could you please explain the reasons for the policy?

7. What are the major sources of opposition to the presence of mobile homes within your municipality?

VITA

Surname: SARKER Given Names: PIJUSH KANTI

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