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# Industrial Development Subsidiary Agreement

REGIONAL DISTRICT OF  
NORTH OKANAGAN MEDIUM-HEAVY  
INDUSTRIAL PARK STUDY

JANUARY 1982

## Research Report



Province of  
British Columbia

Ministry of  
Industry and Small  
Business Development



Government  
of Canada

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NORTH OKANAGAN MEDIUM-HEAVY  
INDUSTRIAL PARK STUDY

JANUARY 1982

Prepared for:

NORTH OKANAGAN COMMERCE INC.

Prepared by:

PRICE WATERHOUSE ASSOCIATES  
#720 - 880 Douglas Street  
Victoria, B.C. V8W 2B7

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REGIONAL DISTRICT OF NORTH OKANAGAN

MEDIUM-HEAVY INDUSTRIAL PARK STUDY

TABLE OF CONTENTS

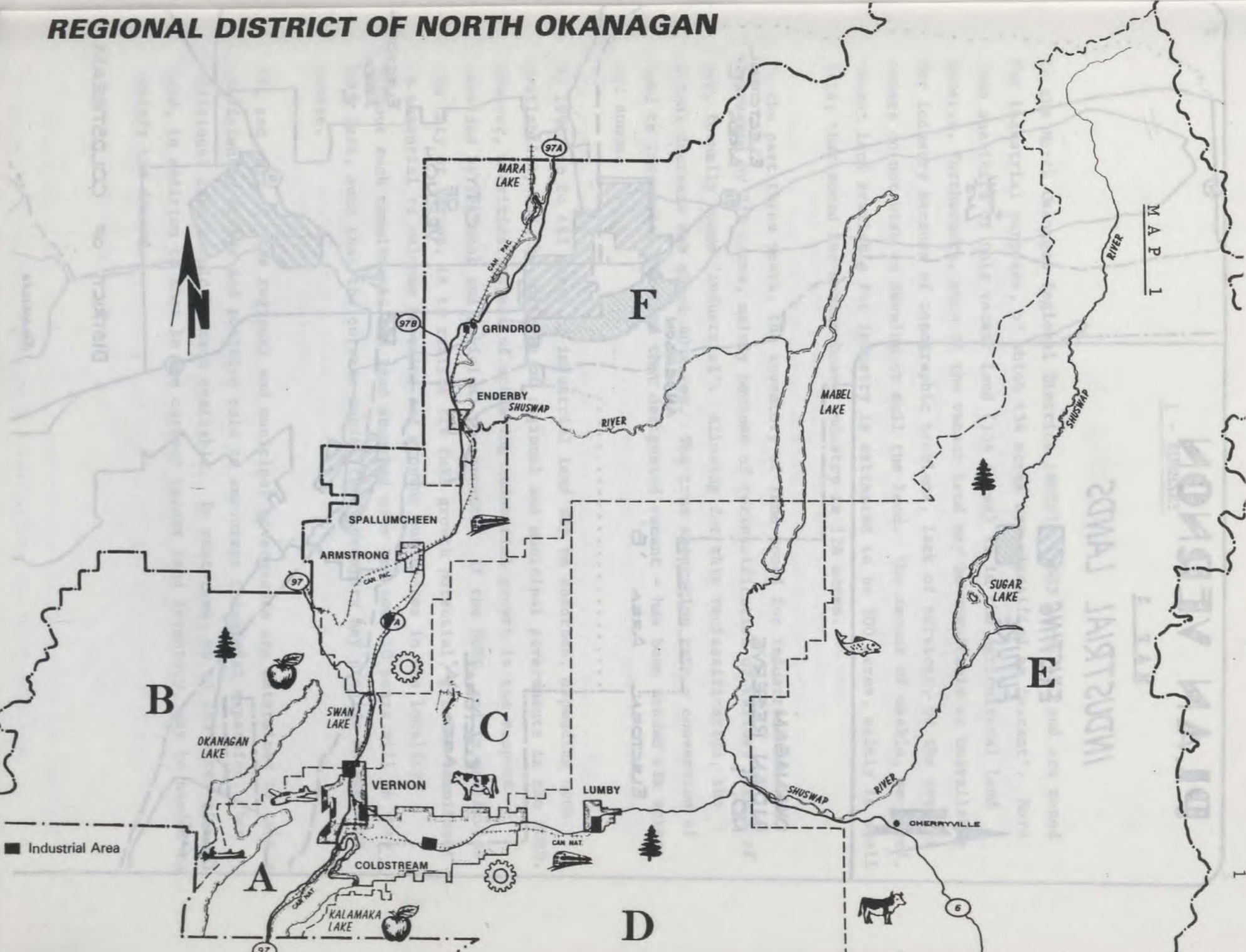
	<u>Page</u>
MAPS 1 & 2	1 and 2
I - SUMMARY	3
II - INTRODUCTION	5
III - INDUSTRIAL LAND USAGE IN THE NORTH OKANAGAN REGIONAL DISTRICT (NORD)	6
A. CURRENT LAND INVENTORY	6
B. HISTORIC DEMAND AND ABSORPTION	7
C. INDUSTRIAL USE IN THE VERNON SUB-REGION	7
D. VACANT LAND	8
E. PRICES	9
F. COMPARISON WITH NEIGHBOURING DISTRICTS	9
IV - POTENTIAL FOR INDUSTRIAL GROWTH IN NORD	11
A. INDUSTRY NEEDS IN CENTRAL B.C.	11
B. INFRASTRUCTURE	12
1. Labour	13
2. Transportation	15
3. General Communications	15
4. Services	16
C. ATTITUDES OF THE LOCAL COMMUNITIES	16
D. RECENT GROWTH	18
E. SUMMARY OF POTENTIAL	19
V - FUTURE DEMAND FOR INDUSTRIAL LAND	20
A. LABOUR LAND USAGE PROJECTIONS	21
B. POTENTIAL OCCUPANTS	22
1. Local Businesses to be Re-Located	22
2. Expanding Local Businesses	23
3. Incoming Industry	24
C. ADDITIONAL LAND NEEDS	25
VI - THE REQUIREMENT FOR AN INDUSTRIAL PARK	28
A. THE SUPPORT FOR INDUSTRIAL DEVELOPMENT	28
B. THE OPTIONS TO BE CONSIDERED	29
C. THE ANDERSON INDUSTRIAL PARK	30
1. Application of the Zoning By-Law	31
2. Lot Sizes	31
3. Services	32
4. Land Prices	32

APPENDICES

- A - LAND INVENTORY, HISTORIC DEMAND AND ABSORPTION
- B - ZONING BY-LAW NUMBER 2458
- C - PROJECTION OF FUTURE LAND ABSORPTION
- D - PRELIMINARY PROPOSAL - ANDERSON INDUSTRIAL PARK
- E - CONTACT LIST



# REGIONAL DISTRICT OF NORTH OKANAGAN







# PLAN VERNON

MAP 2

## INDUSTRIAL LANDS

EXISTING 

FUTURE 



OKANAGAN  
INDIAN RESERVE  
NO. 1

ELECTORAL  
AREA 'B'

ELECTORAL  
AREA 'A'

OKANAGAN  
LAKE

ANDERSON

SWAN  
LAKE

ELECTORAL  
AREA 'B'

CITY  
OF  
VERNON

ELECTORAL  
AREA  
'C'

DISTRICT OF COLDSTREAM

KALAMALKA

I - SUMMARY

In the North Okanagan Regional District (NORD), 1,683 acres of land are zoned for industrial purposes, of which 454 acres are classified as 'vacant'. More than one-third of this vacant land (164 acres) is in the Agricultural Land Reserve. Furthermore, much of the vacant land may be unsuitable or unavailable for industry because of topographic problems, lack of services, or the present owners do not wish to develop or sell the land. The amount of usable, serviced, vacant land available for industry is estimated to be 200 acres, mainly in small lots; that zoned for medium-heavy industry is 124 acres.

In the past three years, the inventory of land zoned for industrial use has decreased by 216 acres, mainly because of reclassification of railway rights of way, formally zoned 'industrial'. Allowing for this reclassification, the actual decrease was about 40 acres. The true absorption rate - conversion of land to industrial use from that designated vacant - has been around six acres per annum.

By 1991, up to 483 acres of industrial land may be absorbed, depending upon availability and the policies of regional and municipal governments in the NORD. However, a critical aspect of achieving industrial growth is the support provided by regional and municipal governments. If the NORD, and in particular the City of Vernon, is to realize its full growth potential, greater commitment is essential to welcome incoming and growing businesses in the locality. Without such commitment, the land absorbed over the next 10 years will be very much less, such that the current vacant land inventory may provide an adequate source.

If, and only if, the regional and municipal governments are determined to take a consistently active and positive role to encourage industrial expansion, then additional land should be made available. In that case, up to 283 acres of land, in addition to that in the current vacant land inventory, may be needed to satisfy the demand.



Potential occupants of these 283 acres are of three types:

- local businesses to be relocated in the City of Vernon, requiring in total up to 20 acres;
- expanding local businesses requiring an estimated further 20 to 40 acres;
- incoming industry comprising a mixture of sectors, including manufacturing, livestock, agriculture, food and services. These industries would absorb the balance.

If additional land is to be provided, the best means would be by an industrial park development. In this case, subject to the results of a thorough economic analysis, 85 acres in the Anderson Subdivision should be developed immediately, thus providing some 69 acres for industrial use. Subsequent expansion would depend on the absorption rates experienced.

## II - INTRODUCTION

The purpose of this study was to assess the market demand and feasibility of developing an industrial park for medium-heavy industry in the Regional District of North Okanagan (see map on page 1). The study was commissioned by North Okanagan Commerce Inc. (NOCI) and funded jointly by the Governments of Canada and British Columbia under the Research Program of the Canada-B.C. Industrial Development Subsidiary Agreement.

The study was limited to a market analysis, including the current industrial land usage in the North Okanagan, as well as an appraisal of key factors influencing the location of industry in the area, and the projection of future supply and demand. The need and requirements for an industrial park in the area were examined, together with other factors required to enhance the economic expansion of the region.

The methodology employed to assess future demand for medium-heavy industrial land incorporated two components:

- A projection of historic land usage levels based upon the number of employees per acre; population and workforce projections are used to apply these same levels for three types of industrial development;
- An analysis of the comparative benefits of the North Okanagan to incoming/expanding industry in relation to nearby regions; this analysis was based principally upon interviews with industrialists and planners. It provided an estimate both of the immediate needs of expanding local businesses as well as of the overall growth potential of the NORD, given active promotion and support by government.

The inventory of zoned and designated industrial land is not a true reflection of the extent of industrial land usage in the region. Significant areas of land are zoned for industrial purposes, yet are within the Agricultural Land Reserve. Accordingly, calculations of historic absorption rates are approximate, and comparisons on a year-to-year basis cannot be used to establish trends where only small differences occur.

Throughout the study, we have drawn heavily upon the experience and views of business and government organizations resident in the North Okanagan.

TABLE 1  
INDUSTRIAL LAND INVENTORY 1981 - NORD

INDUSTRIAL LAND (ACRES)

Municipality Electoral Area	Land Zoned Indus- trial	Indus- trial Used	Vacant Land			Total Land in ALR
			Total	Outside ALR	In ALR	
City of Armstrong	19.94	13.15	6.79	6.79	-	-
District of Coldstream	264.34	150.53	118.77	4.23	114.54	202.41
City of Enderby	26.41	12.53	11.00	11.00	-	-
Village of Lumby	226.60	190.98	34.78	20.25	14.53	14.53
Township of Spallumcheen	586.02	390.78	136.68	110.30	25.78	219.65
City of Vernon	258.52	131.85	93.08	93.08	-	-
Electoral Area "A"	49.06	49.06	-	-	-	49.06
Electoral Area "B"	74.06	34.27	23.10	22.60	0.50	-
Electoral Area "C"	-	-	-	-	-	-
Electoral Area "D"	100.80	100.80	-	-	-	8.80
Electoral Area "E"	-	-	-	-	-	-
Electoral Area "F"	76.97	39.41	30.02	21.40	8.62	28.88
Vernon Sub-Region	646.52	365.71	234.95	225.83	9.12	251.47
Regional District of North Okanagan	1,683.26	1,113.36	454.22	290.25	163.97	523.33

The table shows the area of land zoned for industrial use, and the portions which are being used for industry or are vacant. The difference between 'Land Zoned Industrial' and 'Industrial Used' is made up of 'Vacant Land' and land occupied by non-industrial uses (non-conforming).

Source: NORD Planning Officer

Note: Vernon Sub-Region comprises Vernon, Coldstream and Electoral Areas A, B & C

(2.47 acres = 1 hectare)



### III - INDUSTRIAL LAND USAGE IN THE NORTH OKANAGAN REGIONAL DISTRICT

In analysing the industrial land usage in the North Okanagan Regional District (NORD), the following classifications of industrially zoned land are used:

- . Industrial used - land used for industrial purposes;
- . Vacant - land not in use or in low intensity agricultural use such as grazing;
- . Non-conforming - land in any non-industrial use other than low intensity agricultural, which is usually residential;
- . Vacant non-subdividable - land which is vacant and which may not be subdivided, under the current zoning and subdivision regulations, from a non-conforming use of the same land;
- . ALR - land within the Agricultural Land Reserve and the use of which is restricted under the Agricultural Land Commission Act and administered by the Provincial Agricultural Land Commission.

#### A. CURRENT LAND INVENTORY

In the whole of the NORD, the amount of land currently zoned for industrial use is estimated at 1,683 acres, of which some 523 acres is in the Agricultural Land Reserve (ALR). Land which is currently used industrially is estimated at 1,113 acres, including 359 acres in the ALR.

Vacant land zoned industrial is estimated at 454 acres, including 164 acres in the ALR. Table 1 provides a breakdown by Municipality and Electoral Area.

**TABLE 2**  
**HISTORIC USAGE OF INDUSTRIAL LAND - NORD**

1978-81

Municipality or Electoral Area	Land Zoned Industrial (Acres)					Land Used Industrial (Acres)				
	1978	1979	1980	1981	Change 1978-81	1978	1979	1980	1981	Change 1978-81
Armstrong	19.93	19.93	19.94	19.94	-	13.14	12.97	13.15	13.15	-
Coldstream	386.96	386.96	247.95	264.34	- 122.62	258.19	258.19	117.09	150.53	- 107.66
Enderby	20.60	25.42	25.42	26.41	+ 5.85	6.11	10.57	12.94	12.53	+ 6.42
Lumby	240.67	240.67	226.69	226.60	- 14.07	199.15	204.07	191.04	190.98	- 8.17
Spallumcheen	651.59	651.59	617.21	586.02	- 65.57	406.60	406.60	393.01	390.78	- 15.82
Vernon	261.51	241.87	254.69	258.52	- 2.99	115.40	123.68	128.39	131.85	+ 16.45
"A"	52.31	52.31	49.06	49.06	- 3.25	52.31	52.31	49.06	49.06	- 3.25
"B"	74.37	74.37	74.38	74.06	- 0.31	39.32	40.04	34.09	34.27	- 5.05
"D"	98.51	98.51	98.51	100.80	+ 2.29	83.24	83.24	85.59	100.80	+ 17.56
"F"	92.68	92.68	72.43	76.97	- 15.71	80.45	83.45	46.08	39.41	- 41.04
Vernon Sub-Region	775.15	755.51	625.88	646.52	- 128.63	465.22	474.22	328.63	365.71	- 99.51
Regional District	1,899.13	1,884.31	1,686.08	1,683.26	- 215.87	1,253.91	1,275.12	1,072.84	1,113.36	- 140.55

Source: Regional District Planning Office

In inventories previous to 1980, those railway rights-of-way that were zoned industrially by a municipality were included as industrial land in the inventory, while those rights-of-way not zoned were not included.

In this inventory, for reasons of consistency, and railway rights-of-way that are industrially zoned and in use as a transportation facility have been excluded.

## B. HISTORIC DEMAND AND ABSORPTION

Table 2 shows, for the years 1978-81, the acreage zoned/used for industrial purposes by individual municipality or electoral area in the NORD. Overall in the NORD, zoned industrial land declined by 216 acres and used industrial land decreased by 141 acres. These figures do not indicate a decline in industrial activity, but result mainly from zoning reclassification in preparing the inventory. Increases in industrial use of land not zoned for industry have kept the overall absorption rate positive (conversion of land to industrial use from that designated vacant). During the last three years (1978-80), the net absorption in the NORD is estimated at around 19 acres, of which over 17 was in the Vernon sub-region - a rate of some 6 acres per annum.

Appendix A contains details of the land inventory, historic demand and absorption by individual district.

## C. INDUSTRIAL USE IN THE NORD

The Industrial Land Inventory compiled by the NORD in June 1980 sets out industrial use of land by site, size and sub-region (Table 3). Of a total of 172 users, 99 were located in the Vernon sub-region and occupied 330 of the 1,072 acres in the Region. About 65% of the users occupied lots of less than 2.5 acres in size, in total some 110 acres. Twelve users occupied lots individually exceeding 20 acres and amounting to nearly 618 acres.



TABLE 3  
INDUSTRIAL USE BY SITE, SIZE AND LOCATION

<u>Sub-Region</u>	<u>Less Than Approx.</u> <u>1.0 acres</u>		<u>1.0-2.5 acres</u>		<u>2.5-5.0 acres</u>		<u>5.0-20.0 acres</u>		<u>More Than</u> <u>20.0 acres</u>		<u>Total</u>	
	<u>Total</u>		<u>Total</u>		<u>Total</u>		<u>Total</u>		<u>Total</u>		<u>Total</u>	
	<u>No. of Area</u> <u>Users</u>	<u>Occupied</u>	<u>No. of Area</u> <u>Users</u>	<u>Occupied</u>	<u>No. of Area</u> <u>Users</u>	<u>Occupied</u>	<u>No. of Area</u> <u>Users</u>	<u>Occupied</u>	<u>No. of Area</u> <u>Users</u>	<u>Occupied</u>	<u>No. of Area</u> <u>Users</u>	<u>Occupied</u>
Vernon	48	25.7	25	41.0	13	46.4	10	93.4	3	123.2	99	330.2
Armstrong	7	3.7	13	22.0	6	28.2	8	70.6	4	281.6	38	406.0
Enderby	9	3.9	6	11.4	2	8.1	4	35.8	0	0.0	21	59.3
Lumby	3	1.2	1	1.0	1	3.7	4	57.8	5	212.9	14	276.4
<b>Total</b>	<b>67</b>	<b>34.6</b>	<b>45</b>	<b>75.3</b>	<b>22</b>	<b>86.4</b>	<b>26</b>	<b>258.1</b>	<b>12</b>	<b>617.7</b>	<b>172</b>	<b>1,072.2</b>

Source: Industrial Land Inventory  
Regional District of North Okanagan  
June 1980

#### D. VACANT LAND

Of the 454 acres of industrial land designated vacant, it is not known precisely how much is 'available' land - obtainable by any prospective business at fair market value from the present owner and free from insurmountable problems or restrictions to development for industrial use.

164 acres of the 'vacant' land in the NORD is in the Agricultural Land Reserve and therefore very difficult to develop. Also, a significant amount of vacant land, in a few large parcels, is held by a small number of private owners (especially in Coldstream and Spallumcheen). If these owners are unwilling to sell, and if land cannot be released from the ALR, then substantially less industrial land would be 'available'.

Even if the vacant land is available for sale, it may be inappropriate for most industrial uses because the land is sloping, swampy, or not adequately serviced. In general, only the industrial land in Vernon is well serviced. There is a serious shortage of adequately serviced land in other areas of the NORD. Yet, the industrial land in Vernon is expensive and the lots are primarily very small and suitable only for light industry.

The restrictiveness of the zoning by-laws also is a barrier to industrial growth. Appendix B contains zoning by-law 2458 which defines the uses permitted for the various categories of industrial land. Except for Heavy Industry (M2), the wording is such that any type of business could face contravention problems. Medium-heavy industry cannot be accommodated in any zone other than that for heavy industry.

Most industrialists seeking expansion or relocation in the NORD conclude that a large portion of the 454 acres currently designated 'vacant' cannot be considered available and usable.

Examination of each parcel of vacant land, by individual district as recorded in Appendix A, provides a broad estimate of 200 acres, which may be considered available and usable, but not necessarily desirable. This is shown in Table 4.

TABLE 4  
SUMMARY OF VACANT LAND - NORD 1981

District	Vacant Lots No.	Vacant Land Area				
		Total acres	In ALR acres	M <sub>2</sub> zoned acres	Assumed Usable	
					Total acres	M <sub>2</sub> zoned acres
Armstrong	2	6.79	-	6.61	6	6
Coldstream	6	118.77	114.54	118.77	2	2
Enderby	7	11.00	-	0.35	10	-
Lumby	4	34.78	14.53	33.77	20	20
Spallumcheen	14	136.68	25.78	110.68	90	61
Vernon	99	93.08	-	10.77	50	15
Electoral "B"	8	23.10	0.50	-	2	-
Electoral "F"	7	30.02	8.62	30.02	20	20
NORD	147	454.22	163.97	310.97	200	124

Vacant land assumed to be 'available' and 'usable' is outside the ALR and has at least a water supply.



In estimating the amount of vacant land which may be assumed available and usable, only parcels outside the ALR were considered. Where the land was known to be unserviced or unlikely to be sold, it was also excluded. Of the 200 acres which may be assumed usable, 124 acres are zoned for heavy industry. Analysis of the 200 acres of usable land by lot size shows that 82 vacant lots are less than 1 acre; 28 are between 1 and 3 acres; 8 are between 3 and 10 acres; and only 4 lots over 10 acres are vacant.

#### E. PRICES

Because of the shortage of suitable serviced, industrially zoned land in the Region, there have been relatively few transactions on which to assess current price levels. Discussions with realtors produced the following estimates:

- Vernon	\$65,000 - \$100,000 per acre
- Kelowna	\$100,000 - \$180,000 per acre
- Kamloops	\$120,000 - \$150,000 per acre

The ranges indicate the variation in price between choice parcels centrally located, and less convenient locations. Out of the urban centres, prices may be considerably lower.

#### F. COMPARISON WITH NEIGHBOURING DISTRICTS

The following comments on the adjacent region of Central Okanagan and the cities of Kelowna and Penticton provide some perspective on industrial land usage in the North Okanagan.

Penticton and Kelowna have experienced a continuing increase in the amount of land acquired for industrial purposes, and these communities are beginning to be concerned about the availability of land because of zoning and ALR problems. In 1979, the amount of available and usable, vacant land was as follows:

	<u>1979</u>	<u>1980</u>
- City of Kelowna	206 acres	204 acres
- City of Penticton	155 acres	120 acres
- City of Vernon	60 acres	55 acres

(Definitions of 'available and usable, vacant land' may differ between the sources of information, and accordingly, these figures provide only a rough comparison of vacant land in neighbouring communities).

In 1980, the vacant available land in the two regional districts to the south of NORD was:

- Central Okanagan	274 acres
- Okanagan-Similkameen	286 acres

(Source: Central Okanagan Regional District Industrial Land Study, May 1981; 1980 Industrial Land Study for the Okanagan-Similkameen).

The inventory of industrial land in the municipalities of the Okanagan-Similkameen shows that most of the industrial land in the Regional District is owned by various private interests and, although the land is zoned for industrial use and currently vacant, many parcels are not for sale.

The City of Penticton has a very serious shortage of industrial land, particularly that with adequate services. Acreages that may be suitable for industrial use are either privately owned and unavailable, valuable for agricultural use, or lie within the boundaries of the Penticton Indian Reserve. In June 1981, the Penticton Industrial Park had available 120 acres of land zoned for heavy industry for sale or lease.

In Kelowna, in 1979, there was a shortage of supply and high demand for small parcels. In June 1981, the Kelowna Millstream Industrial Park had two lots for sale, one of 4 acres and one of 70 acres, both zoned for heavy manufacturing. In the Kelowna Millstream Industrial Park, a further 10 acres were available in lot sizes from 2.5 to 5 acres, zoned for heavy industry.

#### IV - POTENTIAL FOR INDUSTRIAL GROWTH IN NORD

This chapter describes the potential for industrial growth in the NORD, taking into consideration the general demand for industry in central British Columbia, the infrastructure and facilities which the NORD offers and, lastly, the attitudes of the local communities towards industrial expansion.

##### A. INDUSTRY NEEDS IN CENTRAL B.C.

The Ministry of Industry and Small Business Development provided information on the expansion of industry in central British Columbia and on the selection process undertaken by most companies moving into the Province. In addition, information was obtained from a study currently being completed for the Ministry, which examined the most important considerations for businesses choosing a location for their operations. In order of importance, the study concluded these to be:

- transportation facilities;
- existence of local markets;
- availability of labour;
- stability of labour force;
- energy availability;
- transportation costs;
- availability of skilled labour.

Foreign companies, when considering Canada as a place in which to establish an operating base, usually consider the country as a whole, rather than any particular province. British Columbia is not usually a company's first choice of province as it represents a smaller market, related to its smaller population base. Ontario usually ranks more highly. However, resource-related industries may look first at British Columbia.

The particular attractions of British Columbia to foreign based companies are:

- quality of life;
- proximity of western U.S.A. and Japanese markets;
- excellent transportation facilities for import/export business;
- substantial market in the Lower Mainland, supported by a good supply of skilled and unskilled labour.

On the other hand, British Columbia is less attractive than some other provinces because:

- it has a poor labour image and history of disputes;
- housing costs are higher than elsewhere in Canada;
- the western Canadian market is small in comparison with eastern Canada.

High technology companies and companies related to resource-based industries - mining, smelters, foundries and mining machinery - find British Columbia an attractive locational choice.

Companies attracted to British Columbia originate largely from the U.S.A. and Europe, particularly Germany and England. When looking within British Columbia, such companies consider first the local marketplace and whether this represents a sufficiently large base to provide labour and local sales. Less important is the availability of financial assistance and the life style of a particular community.

Accordingly, the Lower Mainland suits the requirements of most incoming companies but many are encouraged to look elsewhere because of expensive land and labour, and the poor labour relations record. There has been a trend towards locating in central British Columbia; Kamloops, Kelowna and nearby centres have good facilities and a reasonable population base.

Companies that have located or relocated in central British Columbia give the quality of life and local contacts as being the predominant reasons for choosing their location.

## B. INFRASTRUCTURE

It is against the above background that the infrastructure of central British Columbia, and particularly the North Okanagan, was examined by discussion with local employers and businesses which had relocated to the NORD. The degree to which the NORD satisfies the needs of incoming companies was evaluated by analysis of statistical information obtained from the Department of Employment and Immigration, and Statistics Canada, as well as from the many contacts made with local employers, planners and government officials.

### 1. Labour

Out of an estimated 54,150 population in 1981 in the NORD, approximately 22,135 were employed. In 1981, 12.7% of the labour force was estimated to have been involved in manufacturing. The breakdown by individual industry is as follows:

	<u>1981</u> (estimate)	<u>1980</u> (estimate)	<u>1976</u> (estimate)	<u>1971</u> (estimate)
Agriculture	1,100	1,100	1,100	1,110
Forestry	765	750	700	520
Mining	50	50	50	55
Manufacturing	2,820	2,775	2,600	1,910
Construction	1,795	1,775	1,700	1,015
Service-oriented industries	13,045	12,825	11,950	7,370
Unclassified workers	<u>2,560</u>	<u>2,525</u>	<u>2,395</u>	<u>1,435</u>
Total	<u>22,135</u>	<u>21,800</u>	<u>20,495</u>	<u>13,415</u>

(Source: Department of Employment & Immigration, Kamloops, B.C.)

The most rapidly growing sectors in the period 1971-1981 have been service-oriented industries and construction companies. More recently, manufacturing subsectors, particularly smaller companies, have grown at similar rates. It is considered that industrial growth will continue in the direction of service-oriented firms and small manufacturers producing mainly for local markets. In turn will follow the establishment of construction companies and smaller contractors, food processing companies, machine shops, together with other service industries. Employment will grow in these sectors, as opposed to sawmills, canneries and large export-oriented firms.

TABLE 5  
NORTH OKANAGAN REGIONAL DISTRICT  
POPULATION AND LABOUR FORCE BY SUB-DISTRICT  
 1976

Area	Total Population 1976	Population 15 +		Labour Force, June, 1976			
		Total No.	% of Total	Employed	Unempl.	Total No.	% of Total
<u>North Okanagan R.D.</u>							
Armstrong	2,260	1,700	(76.1)	755	85	845	(49.13)
Coldstream	4,995	3,680	(73.7)	2,055	165	2,215	(60.19)
Enderby	1,482	1,135	(76.5)	435	70	510	(44.93)
Lumby	1,081	765	(70.8)	425	70	490	(64.05)
Spallumcheen	3,378	2,435	(72.1)	1,510	110	1,605	(65.91)
Vernon	17,546	13,523	(77.0)	6,285	900	7,585	(56.10)
Subdivision A*	3,020	2,170	(72.1)	1,125	130	1,255	(57.83)
Subdivision B*	12,428	8,840	(71.0)	5,105	605	5,740	(64.93)
Indian Reserves	670	445	(71.1)	200	30	230	(51.69)
<b>Total North Okanagan</b>	<b>46,860</b>	<b>34,710</b>	<b>(77.1)</b>	<b>18,305</b>	<b>2,165</b>	<b>20,475</b>	<b>(58.99)</b>

Source: 1976 Census

\* Census Division classifications



Population growth and projections for the years 1966-2001 are given for the City of Vernon and the Vernon sub-region, compared with British Columbia as a whole in Figures 1 and 2. Industries in Vernon and the North Okanagan were initially centred around agriculture and forestry and, to a lesser extent, mining, as the resources of arable land, trees and minerals were utilized or extracted, processed and exported. Mining has since diminished, agriculture and forestry remained constant and other industries, including manufacturing and service industries, have since increased. The most recent breakdown for labour force employment by sub-district is given in Table 5. This is based upon the 1976 Census.

General opinions on the availability and quality of labour provided by local employers are mixed. It is generally agreed by local employers that people in the NORD are more concerned about enjoying the quality of life than they are about working hard. Accordingly, productivity is considered to be low. On the other hand, the work force is stable with little turnover, and little or no militancy.

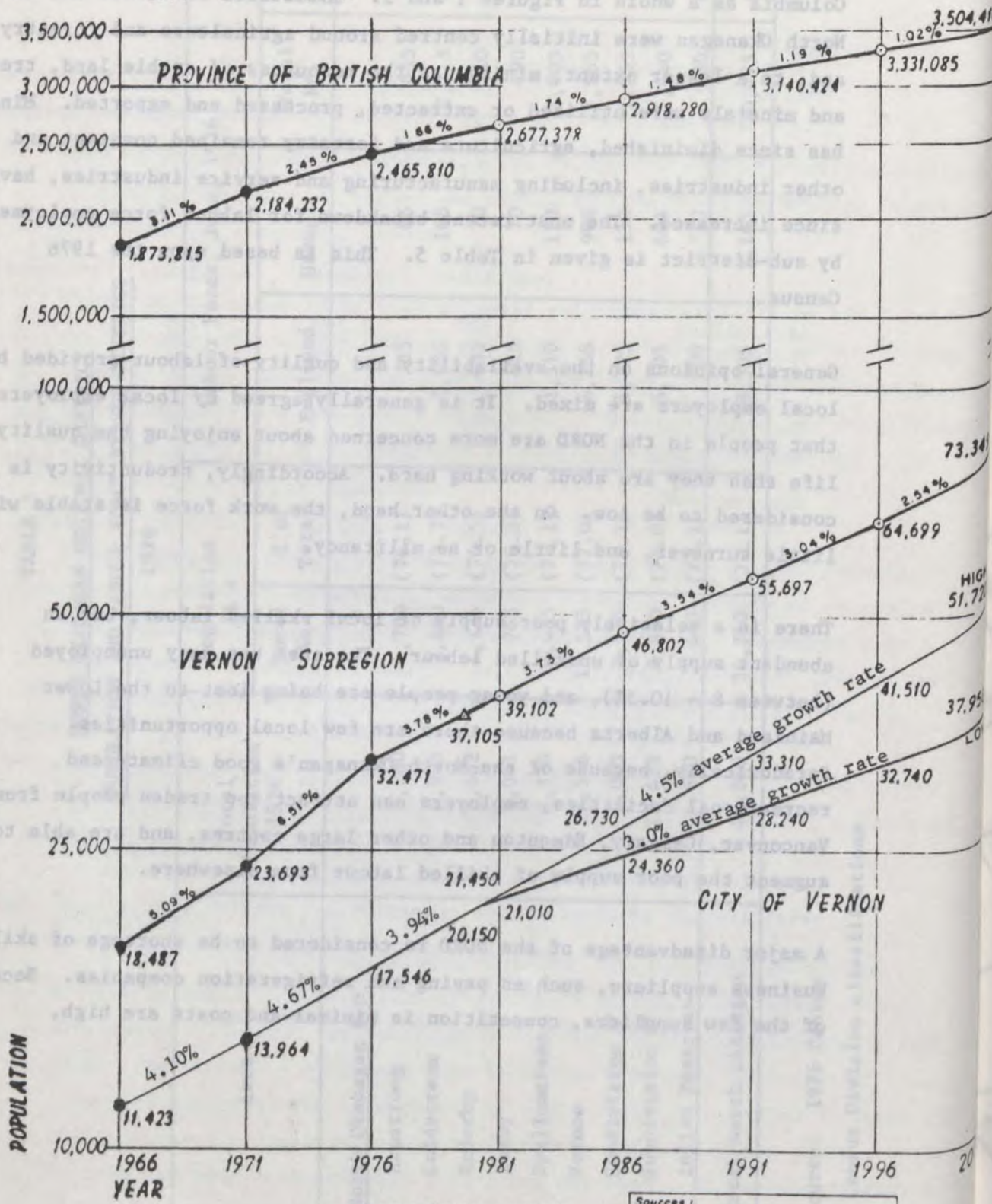
There is a relatively poor supply of local skilled labour, but an abundant supply of unskilled labour. The area has many unemployed (between 8 - 10.5%), and young people are being lost to the Lower Mainland and Alberta because there are few local opportunities. Paradoxically, because of the North Okanagan's good climate and recreational facilities, employers can attract top trades people from Vancouver, Calgary, Edmonton and other large centres, and are able to augment the poor supply of skilled labour from elsewhere.

A major disadvantage of the NORD is considered to be shortage of skilled business suppliers, such as paving and refrigeration companies. Because of the few suppliers, competition is minimal and costs are high.

# POPULATION GROWTH & PROJECTIONS

FIGURE 1

- BRITISH COLUMBIA (1966 - 2001)
- VERNON SUBREGION
- CITY OF VERNON



● CENSUS FIGURE - JUNE 1  
 ▲ ESTIMATE - JAN. 1, 1980

Sources:  
 B. C. Research Population Model  
 Statistics Canada Census Data  
 B. C. Division of Vital Statistics

14a

## 2. Transportation

While acknowledging the general convenience of the North Okanagan in relation to its centrality between Alberta, the B.C. Mainland and north-west United States, local employers feel that Vernon is not on the major highway, air, bus and train routes and, in particular, Vernon is lacking a rail terminal with off or side loading ramps.

Truck transportation services have been excellent and a consolidation of trucking firms has occurred throughout the Okanagan, with some small local companies being purchased by large American subsidiaries. Unfortunately, this has brought about some minor difficulties, such as scheduling requirements and delays, and a failure to respond to local needs at competitive prices.

Local bus services are also criticized, and busing is not available to the labour pool of Vernon wishing to work in the rest of NORD.

Generally, businessmen consider they have to contend with poor delivery for any equipment, supplies and goods.

The local airport is in need of expansion in order to meet demand for use by executive jets and other feeder aircraft. However, the proximity to the airport at Kelowna - less than half an hour by road - provides reasonable access via scheduled services to Vancouver, Northern B.C. and Alberta.

## 3. General Communications

The centrality of Vernon, in relation to Kamloops, Revelstoke, Kelowna and Penticton, is one of its strongest advantages. Companies wishing to service the Kamloops-Kelowna-Penticton market areas frequently prefer Vernon as a base of operations, particularly for sales and service. Local road communication between these centres is reasonably good.

Communication by telephone and mail is severely criticized. The telephone service is currently being modernized and is expected to improve considerably in the near future. However, local opinion is that it is "somewhat of a joke". "Less than one third of our calls go through". WATS lines are unavailable in some districts within the NORD.

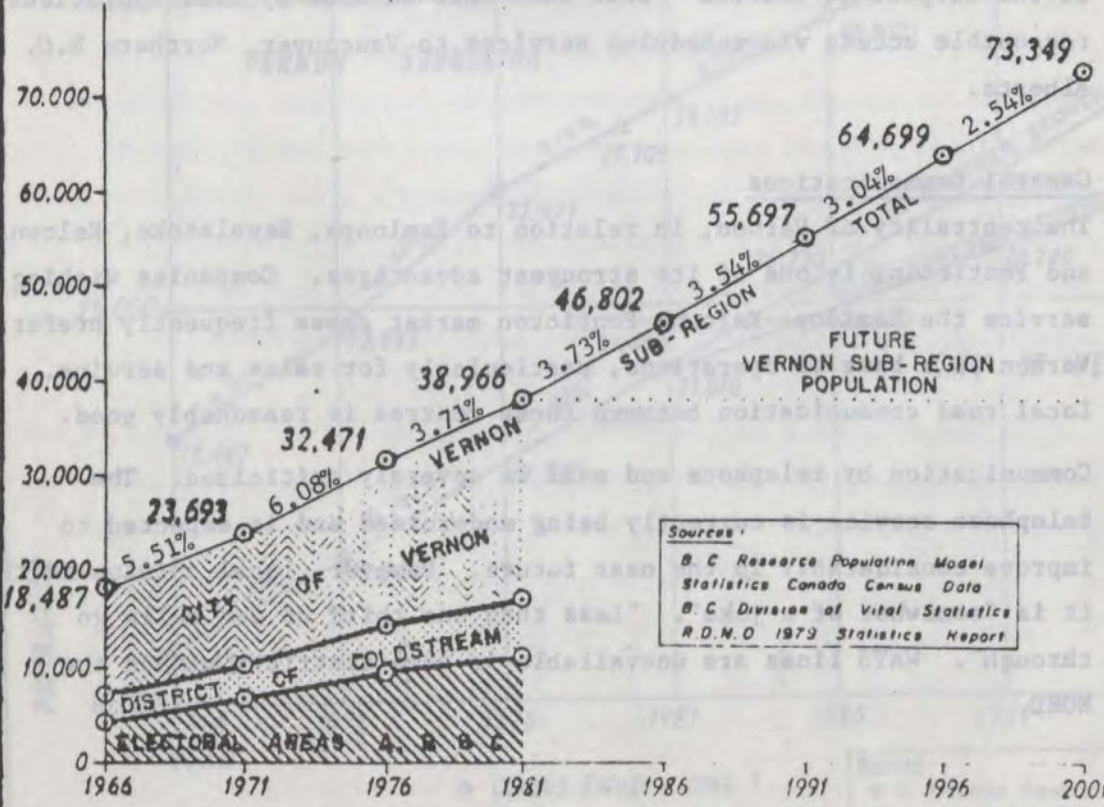
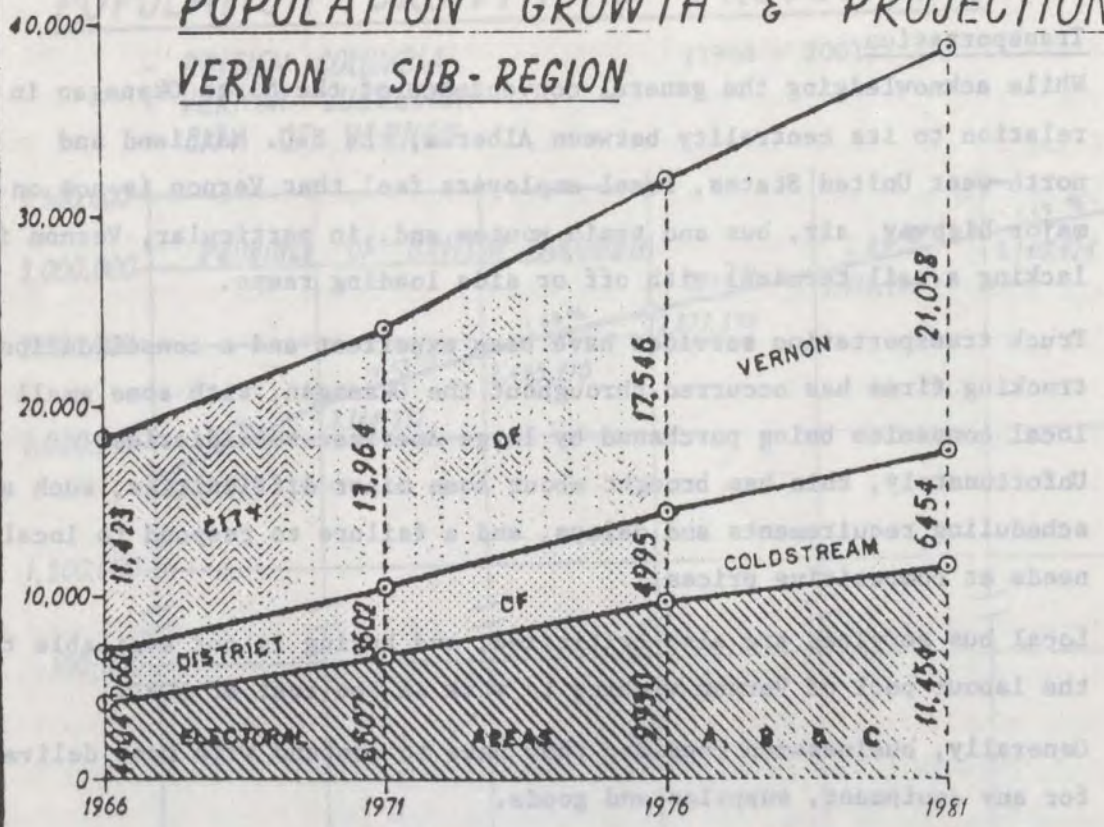


FIGURE 2

# POPULATION GROWTH & PROJECTIONS

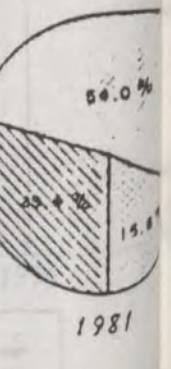
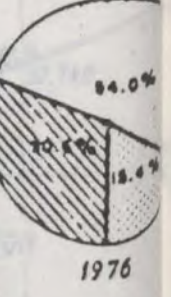
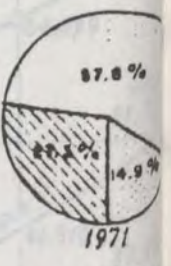
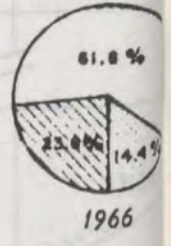
## VERNON SUB-REGION

15(a)



Sources:  
 B. C. Resource Population Model  
 Statistics Canada Census Data  
 B. C. Division of Vital Statistics  
 R.D.M.O 1979 Statistics Report

### POPULATION BY JURISDICTION (IN PERCENT)



#### 4. Services

A five year capital expenditure forecast (1978-1982) prepared by the three regional districts in the Okanagan Valley indicates that 80% of the total five year allocation of \$103.4 million in the area will be spent in Kelowna and Penticton. Only \$14.3 million will be spent in the NORD, or 13.9% of the total. Yet, in population terms, the NORD represents 27.6% of the Okanagan area (CORD 42%, OSRD 30.4%).

Of NORD's \$14.3 million, \$2.25 million is allocated for water supply, and \$4.36 million for sewers. Sewage is treated by a spray irrigation system, with a holding tank for winter storage. Currently, some 3 million gallons per day are treated compared with a theoretical capacity of 4.5 million gallons per day. However, it is considered that the sewage treatment and sewerage facilities would be unable to handle a moderate size, food processing plant disposing of say, 100,000 gallons per day concentrated effluent. The Anderson District has no sewers and, due to its low lying nature, would require a pumping station for transmission of sewage to the treatment works.

A water supply of 9 million gallons per day is available, with a current annual consumption averaging 2.9 million gallons per day.

#### C. ATTITUDES OF THE LOCAL COMMUNITIES

Predictably, local businessmen are supportive of economic expansion of the area and the provision of additional industrial land, services and facilities of which, ultimately, they will be the beneficiaries. Almost without exception, local employers feel that the NORD has not fared as well as its nearby neighbours in receiving encouragement through its locally elected representatives.

There is a significant amount of criticism of the reception given to enquiries from potential incoming businesses. The application of planning restrictions and the variability of the welcome provided by local government are the most often cited examples.

There is clearly a conflict between the desire to retain the natural beauty of the area and to resist any form of change in lifestyle, and the need to widen the taxation base to offset the ever increasing burden of public services on local taxpayers. Elected representatives attempt to balance these opposing influences but, by not appearing sufficiently positive in supporting incoming industry, the effect has been to discourage a number of potential companies from locating in the area. Accordingly, they have located elsewhere where comparable facilities were available and where there has been a greater welcome offered.

The following quotations are representative of the views expressed on this issue:

- "Council members are not supportive of developing the land for industrial use";
- "Councils traditionally like to maintain the status quo";
- "Council doesn't encourage business - businesses which have wanted to locate in the NORD have left in frustration due to lack of support";
- "Vernon and the NORD is supportive of incoming industry";
- "Spallumcheen Council has been helpful in developing land";
- "Enderby Council is supportive of industry";
- "The general attitude (in Council) towards further industrial development is poor";
- "The City of Vernon has wishy-washy objectives for growth, services, etc. It's unwilling to make concrete, detailed commitments";
- "Not enough people are selling the NORD. We need to push industry, and developed industrial land should be set aside and promoted to attract prospective firms".



#### D. RECENT GROWTH

The majority of the comments made by city planners, city council, local manufacturers and businessmen indicate that, traditionally, there has not been very much demand for industry in the NORD. It is also generally agreed that Vernon has had slower industrial growth than either Kamloops or Kelowna.

Businesses largely dependent on local markets prefer to locate in Kelowna or Kamloops because of a larger population base. Kamloops is regarded as the mining centre of the Interior, whereas Lumby and Enderby attract businesses which relate closely to the lumber and dairy industries, respectively.

The District of Vernon is perceived more as an agricultural community, which may have a negative influence on the demand for industrial land.

There do not appear to be any conclusive upward trends in either building permits or the value of industrial construction. Information on the number of manufacturing establishments, production and related workers, and value of shipments is incomplete and therefore inconclusive.

On the other hand, loans approved by B.C.D.C. to further economic development in the NORD have increased considerably from \$745,000 over the five year period 1974-77 to \$3.5 millions in 1980 alone.

The recent study stated that "...the Regional District of North Okanagan is expected to experience continued economic expansion but not at the high rate experienced during the past fifteen years". (Source: 'Managing Commercial Development and Stengthening Downtown, Cumberland Realty Group Limited, April 1980).

#### E. SUMMARY OF POTENTIAL

Based on the continuing economic expansion of the Province of British Columbia, the requirements of incoming and existing businesses, and the particular facilities offered by the NORD, we conclude that there is an opportunity to encourage the growth of industry at a faster rate than that which has been achieved during the past few years. Furthermore, the NORD should be able to improve its comparative performance in relation to other parts of central British Columbia. In addition, increased industrial activity will create more employment opportunities and should reduce the migration of younger people from the area.

If the achievement of this potential is considered desirable, it will require the provision of more suitably serviced industrial land. It will also necessitate the easing of planning restrictions, and a more consistent and positive attitude by local governments in encouraging the expansion and settlement of businesses in their communities. This change in attitude, as perceived by incoming and expanding businesses, would assist considerably the efforts of NOCI to promote economic growth.

## V - FUTURE DEMAND FOR INDUSTRIAL LAND

As indicated in Chapter III, historic absorption rates during the past three years have been negligible. For example, in the City of Vernon, the largest centre of population, only 17 acres of additional land have been absorbed between 1978-1980. Future demand projections based solely upon past absorption rates or forecasts related to population growth would fail to take into account the stimulation of demand which would result from the provision of additional industrial land and changing attitudes towards industrial development by municipal government.

Therefore, in assessing the future demand for industrial land in the NORD, and its rate of absorption over the next ten year period, greater reliance should be placed on the potential for industrial growth which was assessed in chapter IV. Unfortunately, this assessment does not quantify the likely demand; it only confirms its existence and that historic absorption rates understate the potential.

Accordingly, it is necessary to resort to statistical methods based on population growth forecasts to derive overall future land usage demand levels in the NORD. By relating these levels to the known, currently unsatisfied demand by expanding and relocating businesses in the City of Vernon, an estimate can be made of potential land absorption by incoming businesses. The method and results of this approach are set out in the following paragraphs.

Firstly, the projection of overall future demand of industrial land was based upon expected increases of labour derived from population growth forecasts. Such forecasts are readily available and, by relating labour force to overall population and to the historic density ratio of the number of workers per acre, the overall requirement for industrial land can be estimated. In this way, the future demand in the NORD by 1991 was projected.

Secondly, the potential occupants of an industrial park, should it be developed in the NORD, were considered. This review included both the requirements of specific industries in the region, and the criteria applied generally by industry when considering a central British Columbia location. By this means, the amount of land required by relocating and expanding Vernon businesses was estimated. By deduction from the overall figure for the NORD, the balance required by NORD expanding and incoming businesses, excluding Vernon, was calculated.

It is emphasized that these statistical projections to derive levels of future demand are based on a number of assumptions which are very sensitive to general economic conditions as well as to local shifts in industrial employment and political influences. Also, absorption rates vary according to the amount of vacant land readily available. Industry is much more likely to expand or locate in an area where good sites are readily available, than where they are few and difficult to develop. Accordingly, it is important not to attribute too much precision to the figures derived by these projections. They should be regarded as complementary to forecasts based on the experience and beliefs of the incoming and expanding businesses, discussed in the previous chapter. Furthermore, the attitudes of municipal and regional government can have a strongly positive or negative influence on absorption rates, making them significantly different from projections derived from statistics alone.

#### A. LABOUR/LAND USAGE PROJECTIONS

The 1976 census estimated the population of the NORD at 46,860 with a total labour force of 20,475. Population growth projections for the NORD by B.C. Research forecasts a range between 2.1 - 4.0% per annum for the period 1981-1986, compared with 3.9% for the preceding five years. Annual population growth therefore appears to be slowing.

According to the Federal Department of Employment and Immigration office in Kamloops, the annual growth rate of the total labour force in the Region between 1976 and 1980 was 1.5%, and for the manufacturing sector 1.7%.

Future labour growth projections, for the period 1981 - 1986, range from 1.5% (Department of Employment, Kamloops) to 2.7% (B.C. Research). With such a broad range of growth projections and with the more extreme projection apparently in conflict with recent historic figures, any forecast of future land requirements, based on population growth, will be very approximate. To forecast future land requirements, the B.C. Research population growth figures of 2.1-4.0% per annum were chosen and assumed to apply to the forecast period 1981 - 1991.

These growth rates of 2.1-4.0% per annum, together with existing land usage calculated separately for three sectors of industry in the NORD in terms of the average number of employees per acre, were used to predict future land requirements. The three broad categories of firms to which this method was applied were:

- Manufacturing companies with more than 50 employees;
- Manufacturing companies with less than 50 employees;
- Utilities, service and construction companies.

By comparing the forecast labour force to 1991 with the existing land available, it was estimated that an additional 229 - 483 acres of industrial land will be required in the NORD by the year 1991. This range directly relates to the range of labour force and population growth. Further details of the methodology and analysis are contained in Appendix C.

## B. POTENTIAL OCCUPANTS

The potential occupants of the additional land forecast above fall within three categories.

### 1. Local Businesses to be Re-Located

A number of local businesses require alternative facilities in the Vernon locality. These are:

- Oil bulk storage stations operated by three separate companies, and currently located near a multiple housing development in Vernon. These businesses need to be re-located both because of their situation in the midst of a residential neighborhood and also because they have no additional space for expansion in the future. Currently, they have no real wish to move and would seek substantial compensation should this be imposed upon them by the local planning authorities. They require adjacency to railway trackage for off-loading of supplies, and need to be centrally located in the Vernon district. Currently, there are no suitable vacant lots, zoned industrially in the area.
  
- Concrete and asphalt plants which require local re-location for similar reasons.

The projected combined requirements of these existing businesses for additional land are in the range of 10 - 20 acres, including allowance for future expansion. Lot sizes required would be fairly small, around 4 acres or less.

## 2. Expanding Local Businesses

There are a number of local businesses concentrated in the City of Vernon which, due to their expansion, require additional land immediately or in the near future. Typical examples are manufacturers of:

- Monuments;
- Travel trailers;
- Steel fabrications;
- Pre-cast concrete;
- Bath tubs and showers;
- Automotive, mining and logging parts.



Most of these businesses are 2 to 4 man operations, but a few employ between 25 and 50 people. Originally they were attracted to the area because of the climate, recreational facilities, and general quality and style of living. They experience little competition and benefit from the centrality of the City of Vernon for distribution in central British Columbia. They have also found it easy to attract skilled labour from the Lower Mainland and outside British Columbia, such that they have no wish to change their base of operations.

Overall, they consider that there is no land available at a reasonable price suitable for their expansion in Greater Vernon. In total, their requirements are estimated at some 20-40 acres, in small size lots of around 2-5 acres.

### 3. Incoming Industry

The potential for industrial growth in the NORD, discussed in the previous chapter, provided indicators for the types of industry which could be encouraged to establish operations in the North Okanagan. A number of broad classifications are suggested:

- Secondary lumber manufacturing and/or related industry, such as furniture manufacturing, trucking and machinery repair;
- Livestock raising/processing or dairy related industry;
- Agriculture and food processing industries, including bottling and canning plants;

- Manufacturers attracted to the area because of the climate, recreational facilities and general style of living, coupled with the centrality of the location and growth opportunities. Such businesses generally come from larger centres in Alberta, the Lower Mainland or Europe, and seem to be successful because they are well organized and bring in quality, skilled labour from Alberta and British Columbia. From their North Okanagan base, they typically distribute to markets in the B.C. Interior, British Columbia in general, Alberta and the U.S.A. Because of the small size of the local market in central B.C., manufacturing companies either will make use of local raw material supplies, or produce high-cost products where the cost of distribution to distant markets is relatively small. Clearly, there is an opportunity for technologically orientated companies where transportation costs are not an issue;
  
- Small, family operations seeking to relocate to a more pleasant, relaxed, sunny living environment. These may be classified as 'cottage industries'.

#### C. ADDITIONAL LAND NEEDS

When estimating the need for additional land, it is important to bear in mind that the greater the pool of available, serviced vacant land, the greater will be the absorption rate. Conversely, no matter how big the demand, there will always remain a minimum amount of unused available land in any community.

Based on labour force growth, the additional land required by the year 1991 has been forecast in the range of 229 - 483 acres. Theoretically this may come from the current vacant land inventory of 454 acres. In practice, for the reasons referred to in Chapter III.D, only 200 acres of this surplus may be available and usable. Accordingly, between 29 and 283 acres of additional serviced land, appropriately located, is required over the ten year period, at a maximum average rate of 28 acres per annum.

The potential for industrial growth in the NORD is dependent upon the support and active promotion by the local communities and their elected representatives. The higher growth rate may be realized if the North Okanagan actively seeks industrial expansion and is seen to be interested in attracting incoming employers. In which case, the full amount of 483 acres of industrial land could be required to satisfy the expectations of new and expanding businesses.

Fulfilment of the growth projections of both labour force and industrial land demand will happen only if the Regional District and member municipal governments and their officers are committed and dedicated to the support of industrial development. If such support is not present, then the demand for extra land will not arise, such that future needs for expanding and incoming industry will be satisfied from the current vacant land inventory.

In the City of Vernon, independent of any potential growth, there is an immediate need for 10 to 20 acres of suitable land divided into two acre lots, for the relocation of existing industry.

In addition there are expanding businesses which could absorb 20-40 acres in 2-5 acre lots at reasonable prices, adequately serviced and positioned centrally. A total of 20 acres are likely to suffice over the next five years, and perhaps a further 20 acres by 1991.

Accordingly, irrespective of the attitudes and policies of local government towards industrial growth, some 30-60 acres of land are needed in Vernon to satisfy the demand by local businesses.

Beyond these specific Vernon needs, the balance of the 229 - 483 acres to be absorbed by 1991 will be required by businesses expanding elsewhere in the NORD and by incoming industry throughout the Region. The size of lots required would fall within the same distribution pattern as for other locations in the Province - smaller lots up to five acres, with fewer larger lots, in more or less the same ratio as occupied by existing businesses in the NORD.

The requirement for larger parcels is unsubstantiated. The argument for providing them is that potential incoming industry, with large parcel requirements, is more likely to consider the North Okanagan as a preferred location if serviced parcels of the required size are already assembled.

In summary, the requirements for additional land are tabulated below:

	<u>Range (acres)</u>
Vernon business relocations	10 - 20
Vernon expanding businesses	20 - 40
NORD expanding and incoming businesses	<u>199 - 423</u>
Total NORD land needs to 1991	229 - 483
Less: Estimated land absorbed from current land inventory	<u>200</u>
Net additional land required	<u><u>29 - 283 acres</u></u>

This broad range may be thought of as reflecting the degree of encouragement offered to businesses seeking to establish operations in the region. Without active promotion and commitment to industrial expansion, the NORD is unlikely to require additional land, except to satisfy local relocation and expansion needs in the City of Vernon.

## VI - THE REQUIREMENT FOR AN INDUSTRIAL PARK

The requirement for a new Industrial Park in the NORD is influenced both by the policies of local government as well as by the demand for suitable land for incoming and expanding businesses. If the NORD and member municipalities are committed to industrial growth, then additional land will be needed. Before considering how and where this additional land might be provided, we comment below on the support for industrial expansion and an associated industrial park, as indicated by local residents.

### A. THE SUPPORT FOR INDUSTRIAL DEVELOPMENT

A detailed survey of public opinion regarding the support for industrial development was outside the scope of the study. However, extensive contact with businessmen, planners and elected representatives has provided many views of the desirability of developing the Anderson Industrial Park (see map on page 2). Overall, there appears to be broad support for such a development, although some reservations were expressed.

The following comments are representative of those favouring the proposed development:

- "Anderson Industrial Park should attract new industry and will be convenient for the Vernon Labour Pool which would have to drive several miles if alternative areas are developed instead";
- "Anderson will provide more jobs for the community and a broader tax base";
- "Anderson would provide the only real alternative site for the bulk oil storage plants".

Other comments received, although supportive, added qualifying statements such as:

- "Anderson Subdivision needs much better road access. This should have been completed long ago, but after eight years there has been no change";
- "Anderson will be a white elephant for a while as most of the land will be left in cold storage until the need arises".

In summary, it would appear that public opinion generally approves of the Anderson Subdivision development.

#### B. THE OPTIONS TO BE CONSIDERED

Currently, proposals to provide land for industrial development in the NORD include four industrial parks. These are:

- Enderby (10 acres):
- Lumby (25 acres);
- Anderson (84-148 acres);
- Spallumcheen (private sector - 57 acres).

The majority of the land set aside for these parks forms part of the current vacant land inventory of 454 acres.

In total, the acreage provided would be 176-240 gross acres, compared with the additional 229-483 acres potentially required over the next ten years. Each of these projects can reasonably be regarded as supporting and satisfying local needs, rather than competing for the same expansion requirements, and together, if developed, they may still leave a shortfall of supply if the higher growth potential is achieved.

There are several other major parcels of land which appear in the Community Plan as future industrial zoning:

- 144 acres in Vernon, development of which may be delayed as the owner of the largest single lot of 60 acres hopes to obtain residential zoning status;
- 96 acres in south-east Vernon, currently in ALR;
- 84 acres in Electoral Area "B", located north of Anderson and possible for simultaneous development with the Industrial Park.



After considering the above options and other detailed information set out in Appendix A, we recommend the inclusion of the Anderson Industrial Park in immediate development plans because of its superior location in relation to Vernon and its adjacency to highway and railway. Clearly, many of the factors of an engineering nature must be evaluated before any final commitment. If no unforeseen problems emerge, we believe the Anderson Industrial Park merits immediate development as a focal point for industrial expansion in the NORD. If additional land is needed beyond that provided by the four industrial parks, future zoning options as designated in the Community Plan must be considered.

#### C. THE ANDERSON INDUSTRIAL PARK

The preliminary proposal prepared by North Okanagan Commerce Inc. in January 1980 for the Anderson Industrial Park is attached as Appendix D. The financial information contained therein requires revision but, otherwise, the data presented is relevant.

The original proposal to develop 148 acres was modified subsequently to 85 gross acres, which would realize 69 net acres of additional land for industrial use. This 69 acres would fall under different zoning classifications - industrial and commercial - such that the amount available for expanding Vernon businesses and companies requiring relocation would total approximately 40 acres, with a modest surplus to be absorbed as a result of active promotion by NOCI and the NORD. The second-phase development of the other 63 acres should be conditional on the absorption of the initial phase.

In proceeding with the Anderson Park, the following issues must be resolved:

1. Application of the Zoning By-Law:

The prospective tenants include 'commercial', 'light industrial' and 'medium-heavy industrial'. A balance of office, warehousing and service activities is desirable to complement manufacturing and processing activities. Accordingly, each classification should be provided for equally, including industry which may introduce minor, local pollution through noise or smoke emission. Such industry would normally be classified as 'medium' rather than 'heavy' and could include, for example, food processing, machine shops and 24-hour trucking operations.

It would be unrealistic to expect the Park to be tenanted by 'clean, high-technology research establishments'. Such businesses are made welcome almost anywhere, to the point where they can select from a choice of attractive sites remote from normal industrial activity. It is to be expected, therefore, that most industrial parks will contain less desirable tenants, which should be their prime targets.

Clear definitions should be provided of the industrial use allowed in the Park. The Industrial Park M-3 definition (Appendix B) alone is inadequate as this refers specifically to 'light' industry. Elements of the M-2 zoning applicable to heavy industry should be included which are appropriate to the Anderson Subdivision.

2. Lot Sizes

Industrial parks in British Columbia generally provide lots of 1-2 acres, with a few larger lots of 5 acres. Purchasers requiring greater acreage are accommodated by grouping together an appropriate number of lots. Proper control over the sale of the individual lots ensures a larger parcel can be assembled as needed. This approach should be considered for the Anderson Subdivision.

### 3. Services

The provision of adequate roads, drainage, water, gas, sewage, hydro and telephone services is essential. Total capacity should be calculated to cater for 'average' users, but expansion potential is highly desirable. Food processing companies, for example, place heavy demands on water supply and waste treatment, such that one company alone could absorb the capacity required by five tenants of a similar size from the manufacturing sub-sectors.

The phasing of services installation should, if practicable, be linked to the phased development of the initial 85 acres and subsequent 63 acres. This will reduce the initial capital expenditure and ease the problem of financing.

### 4. Land Prices

The price of fully serviced land with underground facilities in industrial parks in the Kamloops area, as of August 1981, is \$120,000-\$150,000 per acre. This is a significant increase over the level in January 1980 of \$60,000-\$110,000 per acre. The B.C. Assessment Authority is currently reviewing the appraised value of land in the Vernon District and shortly should be able to comment on both purchase and sale prices of land relative to the Anderson Subdivision.

VICTORIA, B.C.

PRICE WATERHOUSE ASSOCIATES

January 31, 1982

APPENDICES A - E

APPENDIX A

LAND INVENTORY, HISTORIC DEMAND AND ABSORPTION  
BY COMMUNITY/ELECTORAL AREA

LAND INVENTORY, HISTORIC DEMAND AND ABSORPTION  
BY COMMUNITY/ELECTORAL AREA

## A. ARMSTRONG

1. Land Inventory:

Land zoned industrial	19.94 acres
Land used industrial	13.15 acres
Vacant	6.79 acres
ALR	None

2. Historic Demand and Absorption:

Of all the districts in the North Okanagan, Armstrong has the lowest amount of land zoned for industry. It has had no change in either its industrially zoned land or industrial land usage since 1979. Although ownership of some of the property has altered, the only absorption of land in the last three years has been 0.18 acres.

3. Future Development:

During the past year, four companies enquired about the availability of serviced land in the Armstrong district. No development occurred as the land available was not suitably serviced for their purposes. Most available land is low-lying and probably needs in-fill. For estimating purposes, 6 acres of vacant land are assumed to be usable and zoned for medium-heavy industry.

## B. COLDSTREAM

1. Land Inventory:

Land zoned industrial	264.34 acres
Land used industrial	150.53 acres
Vacant	109.25 acres
ALR	202.41 acres

Only 2.43 acres of the 109.25 designated as vacant are not in the ALR.

2. Historic Demand and Absorption:

Land zoned industrial decreased by 123 acres between 1978 and 1981. This decrease resulted from the re-zoning of the railway right-of-way. Land used industrially appears to fluctuate on a yearly basis at precisely the same rate as land zoned industrially. Accordingly, no absorption of industrial land has taken place during this period. Coldstream has not experienced any change in ownership of industrial land or of tenants during this same three year period.

3. Future Development:

In Coldstream, almost all the vacant land is zoned for medium-heavy industry but is in the ALR, with few owners. Of the 6 vacant lots the largest parcel is (72.04 acres), owned by Consumers Glass, which also owns a further 20.89 acre parcel. The next largest parcel of available land - 18.89 acres - is owned by Lavington Planer. There are three other vacant lots of approximately two acres each in size. None of these parcels is fully serviced and there is no sewer in the area. For estimating purposes, 2 acres of vacant land are assumed to be usable.

C. ENDERBY

1. Land Inventory:

Land zoned industrial	26.41 acres
Land used industrial	12.53 acres
Vacant	11.00 acres
ALR	None

2. Historic Demand and Absorption:

Although Enderby has experienced an increase in the amount of land used industrially during the last three years - a total absorption of approximately 6.5 acres - Enderby is very small, with only 26.43 acres of land zoned industrially, of which 11.00 acres are vacant.

3. Future Development:

None of the vacant land is located in the ALR, and virtually none is zoned for medium-heavy industry. There are seven vacant lots in the municipality of which five are less than one acre in size and the remainder between three and five acres. Servicing is adequate, however, much of the land is low-lying in relation to the nearby river.

Expansion of the industrial land available in the Enderby district will be difficult in view of the proximity of an Indian reservation to the south and east. For estimating purposes 11 acres of vacant land are assumed to be usable.

#### D. LUMBY

##### 1. Land Inventory:

Land zoned industrial	226.60 acres
Land used industrial	190.98 acres
Vacant	34.78 acres
ALR	14.53 acres

##### 2. Historic Demand and Absorption

A decrease of 14.07 acres in land zoned industrially during the last three years is a result of the re-zoning of the Canadian National Railways right-of-way. A decrease of 8.17 acres of land used industrially has also occurred. Some absorption has taken place but, between 1979 and 1981, only one acre was converted from vacant land to industrial use.

##### 3. Future Development:

Of the 34.78 acres available, the largest parcel is 25 acres with water and gas services. Since Lumby is a major forestry centre, the most likely potential tenants would be for industries such as wood furniture fabrication. It is reported that, although several enquiries have been made from firms seeking land in the area, none of these has resulted in re-location due to the shortage of available land of suitable quality and services.

The 25 acre lot owned by Henry and Ronald Catt has recently been purchased by the Village of Lumby to be developed into an industrial park. 14.53 acres of this lot is in the ALR, and the whole lot is low-lying. The nine-acre vacant lot owned by Crown Zellerbach is not likely to be sold.

For estimating purposes, 20 acres of vacant land are assumed to be usable and zoned for medium-heavy industry.



## E. SPALLUMCHEEN

1. Land Inventory:

Land zoned industrial	586.02 acres
Land used industrial	390.78 acres
Vacant	136.08 acres
ALR	219.65 acres

2. Historic Demand and Absorption

Spallumcheen has the largest amount of land zoned industrially in the whole of the Regional District but, in the last three years, this has declined by 65.57 acres. It is difficult to assess the absorption rate of industrial land because of the zoning changes which have occurred, but there appears to be little or no net growth during this period.

3. Future Development:

Industrial land in Spallumcheen is roughly one-third of the price of that in Vernon, such that those companies not solely dependent upon local markets and requiring five or more acres of land, may consider Spallumcheen the most suitable area in the NORD. The primary drawback to the area is the lack of extensive services, and none of the vacant land has sewers. Approximately one-third of the total vacant land is a 45 acre parcel owned by Alfred E. Udy. 110 acres of the vacant land, including the Udy parcel, is not in the Agricultural Land Reserve. The next largest parcels include a thirty acre lot held by Redell Investments Limited, currently used as a gravel pit. In addition there are some ten further lots of between 2 and 10 acres in size. In all cases, services are limited or non-existent, and less than 95 acres of the vacant land have water available.

For estimating purposes 90 acres of vacant land are assumed to be usable.

## F. CITY OF VERNON

1. Land Inventory:

Land zoned industrial	258.52 acres
Land used industrial	131.85 acres
Vacant	93.08 acres
ALR	None

2. Historic Demand and Absorption

Most companies seriously considering the NORD as a potential location prefer to be near the largest centre - the City of Vernon. Generally, these are smaller manufacturing firms, dependent on local markets and requiring relatively smaller parcels of serviced land.

In the City of Vernon during the period 1978 - 1981, the land zoned industrial remained almost unaltered - a decrease of 2.99 acres to 258.52 acres. In the same period, land used industrial increased by 16.45 acres to 131.85 acres. This suggests a moderate absorption of land at an average rate of just over 5 acres per annum.

The industrial land inventory indicates a 20% increase in the number of owners of industrial land in this area between 1978 and 1981. Accordingly, we conclude that some of these new owners, at least, would represent new business entering the area.

3. Future Development:

None of the 93.08 acres of land currently vacant is in the ALR. Its suitability for industrial use is undetermined, but most of it is serviced with water, gas and sewers. The majority is in small lots of less than 2 acres in size, dispersed throughout the city. By sub-district, the vacant land is as follows:

- North - 30 lots totalling 17 acres, of which 2 acres zoned for medium-heavy industry; most of the vacant land is well located and available;
- Southeast - 33 lots totalling 51 acres, the largest being 18.8 acres; 9 acres are zoned for heavy industry; this is a prime area in which to locate.

- West - 28 lots totalling 23 acres, none zoned for medium-heavy industry; many of the vacant lots have houses on them; in some cases, the shape of the land is inappropriate (too long and narrow);
- Central - 8 lots totalling 2 acres, none zoned for medium-heavy industry; this area is limited for expansion; the adjoining land usage conflicts with the industrial zoning (much of it borders on commercial or residential land).

The regional plan identifies some 300 acres located in the south and northern parts of the City of Vernon designated for future industrial use. This is not yet zoned industrial, and a significant proportion is currently used as a golf course, such that its conversion to industrial use appears unlikely.

For estimating purposes 50 acres of vacant land are assumed to be usable.

#### G. ELECTORAL AREA "A"

##### 1. Land Inventory

Land zoned industrial	49.06 acres
Land used industrial	49.06 acres
Vacant	None
ALR	49.06 acres

##### 2. Historic Demand and Absorption

Between 1979 and 1980, 3.25 acres were removed from the designation of zoned industrial land. This was land forming part of the City of Vernon Airport. No other change in land inventory has taken place in the last three years.

There are no services available in the area.

##### 3. Future Development:

Presently, there is no vacant land, but realignment of the airport may provide good quality lots in the future. All land zoned for industry<sup>12</sup> this area is currently related to air travel.

## H. ELECTORAL AREA "B" (ANDERSON SUBDIVISION, STICKLE ROAD AND SWAN LAKE NORTH)

1. Land Inventory:

Land zoned industrial	74.60 acres
Land used industrial	34.27 acres
Vacant	23.10 acres
ALR	None

2. Historic Demand and Absorption:

In the Stickle Road/Swan Lake North area, H. Y. Louie Company in 1980 converted their vacant lot of 7.39 acres to industrial use. Overall, the land used industrially has increased by slightly over two acres.

3. Future Development:

In the Anderson Subdivision, two lots totalling 5.8 acres, which were designated as used industrial in 1979, are now vacant. In general, Anderson lacks services, has poor access, is low-lying and existing lots are long and narrow. The Anderson Subdivision - 148 acres - represents the proposed industrial park currently under review. It would incorporate land currently zoned 'County Residential', 'Commercial', 'Light Industrial' and 'Heavy Industrial'. Those parts which are not currently zoned industrial do not appear in the above inventory.

The Stickle Road/Swan Lake North area has good quality land, but little is available other than the site owned by H. Y. Louie. Water and gas is available in the vacant land (1.18 acres) in Stickle Road/Swan Lake North.

For estimating purposes 2 acres of vacant land are assumed to be usable, none of which is zoned for medium-heavy industry.

## J. ELECTORAL AREA "D"

1. Land Inventory

Land zoned industrial	100.80 acres
Land used industrial	100.80 acres
Vacant	None
ALR	8.80 acres

2. Historic Demand and Absorption

In this electoral area, the land zoned industrial has increased by 2 acres during the past three years. Industrial land usage has increased in the same period by 17.56 acres, resulting from the expansion of a sawmill, and purchase of 4.2 acres of vacant land by Dan Chambers Trucking Limited - the only business to locate in Electoral Area "D" in that time.

All six firms in the area are lumber or lumber related, with the exception of B.C. Hydro.

3. Future Development:

There is no land presently available.

K. ELECTORAL AREA "F"

1. Land Inventory

Land zoned industrial	76.97 acres
Land used industrial	39.41 acres
Vacant	30.02 acres
ALR	28.88 acres

2. Historic Demand and Absorption

The land zoned industrial has declined by 16 acres between 1978 and 1981. This re-zoning was concurrent with a reduction of the land owned by two organizations - Crown land owned by the Ministry of Highways, and land owned by Baird Bros. Limited.

The amount of land used industrially declined by over 40 acres between 1979 and 1981, due partially to the above change and also to vacancies incurred by Riverside Forest Products Ltd.

3. Future Development:

At present, the 30 acres of vacant land consists of one 16.4 acre lot (unserved), one 5 acre lot (unserved) and five lots between .91 and 2.76 acres in size. Only the two larger lots are not in the ALR. Roughly 80% of the vacant land in this area is owned by Riverside Forest Products.

Where available, services are telephone and hydro.

For estimating purposes 20 acres of vacant land are assumed to be usable.

ZONING BY-LAW NUMBER 2458 - INDUSTRIAL ZONE DEFINITION

DIVISION FOUR-M1

ZONING BY-LAW NUMBER 2458 - INDUSTRIAL ZONE DEFINITIONDIVISION FOUR-M1LIGHT INDUSTRIAL DISTRICT M1

This District provides for the accommodation of light industrial uses, encourages a high standard of development and is particularly designed to minimize conflict with surrounding uses.

25.0 Uses Permitted:

- (a) Processing and manufacturing, provided that they do not create fire, explosion or safety hazards, noise in excess of average intensity of street and traffic noise in the area in question; they do not emit smoke, dust, dirt, toxic or offensive odors or gas, and there is no production of heat or glare perceptible from any lot line of the site on which the use is located, and shall include such uses as:

Milk or Soft Drink Bottling

Bakery

Cold Storage Plant

Frozen Food Lockers

Apparel and Clothing Manufacturers

Ornamental and Art Products

Signs

Printing

Publishing and Book Binding

- (b) Offices in conjunction with storage buildings and yards for the following \*Trade Contractors:

Building

Electrical

Heating

Ventilating and Air Conditioning



By-law Number 2458

DIVISION FOUR-M1

LIGHT INDUSTRIAL DISTRICT M1, CONT'D.

Painting  
Plumbing  
Sheet Metal  
Refrigeration  
Roofing  
Septic Tank  
Sign  
Flooring  
Drywall

\* Excluding concrete, paving and heavy construction contractors.

- (c) Warehouses
- (d) Clubs and Lodges
- (e) Civic Use
- (f) Commercial Recreation

25.1 Height of Buildings:

The height of a building shall not exceed 12m (39.4').

25.2 Lot Area and Width:

Each lot shall have an area of not less than 929.00 square metres (10,000 sq.ft.) and a width of not less than 30m (98.4').

25.3 Site Coverage:

The maximum coverage shall be Sixty Percent (60%) of the site area.

By-law Number 2458

DIVISION FOUR-M1

LIGHT INDUSTRIAL DISTRICT M1, CONT'D.

25.4 Front Yard:

A front yard shall be provided of not less than 6m (19.7') in depth, except where a lot is separated from a lot in an A, R or RM District by a street, such front yard shall be not less than 9m (29.5') in depth, subject to Section 3.13 of Division Three of this by-law.

25.5 Side Yards:

No side yard shall be required except that where a lot abuts a lot in an A, R or RM District, or is separated by a street or lane therefrom, a side yard shall be provided of not less than 6m (19.7') in width, and subject to Section 3.13 of Division Three of this by-law.

25.6 Rear Yard:

No rear yard shall be required except where a lot abuts a lot in an A, R or RM District, or is separated by a lane therefrom, such rear yard shall be not less than 9m (29.5') in depth, and subject to Section 3.13 of Division Three of this by-law.

25.7 Off-Street Parking:

Off-Street parking shall be provided and maintained in accordance with Division Five of this by-law.

25.8 Off-Street Loading:

Off-street loading shall be provided and maintained in accordance with Division Six of this by-law.

25.9 Conditions of Use:

- (a) All permitted uses shall be housed completely within an enclosed building, except for outdoor display, rental, sale or storage yards, parking and loading facilities.

By-law Number 2458

DIVISION FOUR-M1

LIGHT INDUSTRIAL DISTRICT M1, CONT'D

- (b) Nothing shall be done which is or will become an annoyance or nuisance to the surrounding areas by reason of unsightliness, the emission of odors, liquid effluents, dust, fumes, smoke, vibration, noise or glare; nor shall anything be done which creates or causes a health, fire or explosion hazard, electrical interference or undue traffic congestion.

By-law Number 2458

DIVISION FOUR-M2

HEAVY INDUSTRIAL DISTRICT M2

This District provides for the accommodation of special types of industry and heavy industrial activities.

26.0 Uses Permitted:

- (a) Uses permitted in the Light Industrial District M1.
- (b) The following Service Uses:
  - Drive-In Theatres
  - General and Heavy Construction Contractors
  - Sale and Repair of Machinery and Heavy Equipment
  - Trust Terminal
  - Welding Shops
- (c) The manufacturing or processing of the following food products:
  - Fruit
  - Flour
  - Grain
  - Feed
- (d) The manufacturing or processing of synthetic fibres.
- (e) The manufacturing or processing of the following wood products:
  - Lumber and Building Materials
  - Millwork Products
  - Plywood and Veneer
  - Prefabricated and Structural Wood Products
  - Shingles
  - Wood Preserving
- (f) The manufacturing or processing of the following fabricated metal products:
  - Boilers and Plates
  - Fabricated and Structural Metals
  - Pipe Tubing
- (g) The manufacturing of the following machinery and transportation equipment or other products of like character or kind:
  - Agricultural Implements
  - Boats
  - Engines, Turbines, Pumps and Compressors
  - Heavy Machinery and Equipment

By-law Number 2458

DIVISION FOUR-M2

HEAVY INDUSTRIAL DISTRICT M2, CONT'D.

- (h) The manufacturing of heavy electrical machinery and equipment.
- (i) The manufacturing, processing or finishing of the following non-metallic mineral products, or others of like character or kind:
  - Abrasive Products
  - Asbestos Products
  - Cement, Plaster, Lime, Gypsum, and associated products
  - Clay and Clay products
  - Concrete Products or Ready-Mix Concrete
  - Rock, Sand and Gravel
  - Stone Products
- (j) The manufacturing, processing and storage of the following petroleum and coal products:
  - Asphalt
  - Coal and Tar Products
  - Coke
  - Creosote
  - Paving and Roofing Materials
  - Petroleum Products
- (k) The manufacturing, processing and storage of the following chemical and allied products:
  - Compressed Gases
  - Disinfectants and Insecticides
  - Gum and Wood Chemicals
  - Primer and Plastics
  - Rubber
- (l) Storage Yards
- (m) Auto wrecking and junk yards, provided that such uses are completely enclosed by a solid view-obstructing 2.44m (8') fence or wall, and for that portion of such yard which fronts upon or adjoins a public street, the screen fencing shall consist of one of the following:
  - (i) A Masonry Wall

By-law Number 2458

DIVISION FOUR-M2

HEAVY INDUSTRIAL DISTRICT M2, CONT'D.

- (ii) Aluminum panels attached to and set between metal posts embedded in concrete footings; or
- (iii) Fibreglass panels firmly bolted to the outer side of chain link fencing with panels set between metal posts embedded in concrete footings. No material shall be piled to a greater height than that of the surrounding fence or wall.

26.1 Lot Area and Width:

Each lot shall have an area of not less than 930.00 square metres (10,000 sq.ft.) and a width of not less than 30m (98.4').

26.2 Front Yard:

A front yard shall be provided of not less than 6m (19.7') in depth, except where a lot is separated from a lot in A. R or RM District by a street, such front yard shall be not less than 9m (29.5') in depth, subject to Section 3.13 of Division Three of this by-law.

26.3 Side Yards:

A side yard shall be provided on each side of the building of not less than 3m (9.8') in width, except that:

- (a) A side yard not flanked by a street, lane or an A, R or RM District may be reduced to nil, provided that the other side yard has a width of not less than 6m (19.7'), and subject to Section 3.13 of Division Three of this by-law.
- (b) In the case of a corner lot, the side yard adjoining the flanking street shall be not less than 5m (16.4') in width, and subject to Section 3.13 of Division Three of this by-law.

By-law Number 2458

DIVISION FOUR-M2

HEAVY INDUSTRIAL DISTRICT M2, CONT'D

- (c) Where a lot abuts a lot in an A, R or RM District or is separated by a street or lane therefrom a side yard shall be provided of not less than 6m (19.7') in width, and subject to Section 3.13 of Division Three of this by-law.

26.4 Rear Yard:

A rear yard shall be provided of not less than 3m (9.8') in depth, except where a lot abuts a lot in an A, R or RM District, or is separated by a lane therefrom, such rear yard shall be not less than 9m (29.5') in depth, and subject to Section 3.13 of Division Three of this by-law.

26.5 Off-Street Parking:

Off-street parking shall be provided and maintained in accordance with Division Five of this by-law.

26.6 Off-Street Loading:

Off-street loading shall be provided and maintained in accordance with Division Six of this by-law.

By-law Number 2458

DIVISION FOUR-M3

INDUSTRIAL PARK M3

This District provides for the accommodation of light industrial uses, encourages a high standard of development in a park atmosphere and is particularly designed to minimize conflict with surrounding uses.

27.0 Uses Permitted:

- (a) Processing and manufacturing, provided that they do not create fire, explosion or safety hazards; noise in excess of average intensity of street and traffic noise in the area in question; they do not emit smoke, dust, dirt, toxic odors or offensive odors or gas; and there is no production of heat, or glare perceptible from any lot line of the site on which the use is located.
- (b) Sale, rental and/or repair of trucks and heavy equipment, and related parts.
- (c) Offices in conjunction with storage buildings and yards for the following \*Trade Contractors:

- Building
- Electrical
- Heating
- Ventilating and Air Conditioning
- Painting
- Plumbing
- Sheet Metal
- Refrigeration
- Roofing
- Septic Tank
- Sign
- Flooring
- Drywall

\* Excluding concrete, paving and heavy construction contractors.

- (d) Building Supplies
- (e) Commercial Recreation
- (f) Civic Use
- (g) Wholesale



By-law Number 2458

DIVISION FOUR-M3

INDUSTRIAL PARK M3, CONT'D.

27.1 Height of Buildings:

The height of a building shall not exceed 8m (26.2').

27.2 Lot Area and Width:

Each lot shall have an area of not less than 3,716.00 square metres (40,000 sq.ft.) and a width of not less than 60m (196.9').

27.3 Site Coverage:

The maximum permitted site coverage shall not exceed Sixty Percent (60%) of the site area.

27.4 Front Yard:

A front yard shall be provided of not less than 15m (49.2') in depth, of which the front 6m (19.7') abutting the street shall be suitably landscaped and maintained by the owner, subject to Section 3.13 of Division Three of this by-law.

27.5 Side Yard:

A side yard shall be provided on each side of the building of not less than 6m (19.7') and subject to Section 3.13 of Division Three of this by-law.

27.6 Rear Yard:

No rear yard shall be required.

27.7 Off-Street Parking:

Off-street parking shall be provided and maintained in accordance with Division Five of this by-law.

By-law Number 2458

DIVISION FOUR-M3

INDUSTRIAL PARK M3, CONT'D.

27.8 Off-Street Loading:

Off-street loading shall be provided and maintained in accordance with Division Six of this by-law.

27.9 Conditions of Use:

- (a) A buffer strip of 12m (39.8') shall be provided where the development abuts any existing residential or small holdings lands, to consist of evergreen trees to be a minimum height of 3m (9.8') to screen industrial uses from residential uses.
- (b) Where a development is adjacent to a controlled access highway, a 15m (49.2') buffer strip shall be provided to consist of surface treatment, trees and shrubs.
- (c) Storage areas shall be adequately screened by way of a 2m (6.6') hedge or 2m (6.6') fence consisting of masonry or uniformly-coloured tight board fence or preservative treated materials, or a 2m (6.6') chain link fence supplemented with shrubs or a hedge to be the same height as the chain link fence to be located on the street side of the fence.
- (d) All permitted uses shall be housed completely within an enclosed building, except for outdoor display, rental, sales or storage yards, parking and loading facilities.
- (e) Nothing shall be done which is or will become an annoyance or nuisance to the surrounding areas by reason of unsightliness; the emission of odors, liquid effluents, dust, fumes, smoke, vibration, noise or glare; nor shall anything be done which creates or causes a health, fire or explosion hazard, electrical interference or undue traffic congestion.
- (f) Free-standing signs shall not be permitted.

PROJECTION OF FUTURE LAND ABSORPTION  
BASED ON POPULATION GROWTH  
FORECASTS

## A. METHODOLOGY

Future land absorption can be calculated on the assumption that the average amount of land per employee will remain constant over the forecast period. Accordingly, as the population and labour force grow a proportionate amount of land will be absorbed. This methodology has three components:

- the estimation of the current density of industrial employment;
- the estimation of the incremental labour force in the forecast period;
- the combination of these two estimates to project land absorption.

### 1. Density of Industrial Employment

A sample of 46 firms, taken from throughout the NORD, was used to calculate the density of current industrial employment in terms of employees per acre. To minimize the sampling error, the sample was distributed amongst three broad categories of firms:

- large manufacturing companies (over 50 employees);
- small manufacturing companies (under 50 employees);
- utilities, service and construction companies.

Seven large manufacturing companies were identified using Scott's Industrial Directory and all were included in the sample. Eighteen small manufacturing companies were included in the sample, together with twenty-one utilities, service and construction companies; these were chosen at random from those listed in the following sources:

- Scott's Industrial Directory,
- B.C. Manufacturers Directory,
- Community Data Summaries by the NORD,
- Industrial Land Inventory by the NORD,
- List of Manufacturers by NOCI,
- Regional Telephone Directories.

Employment data was obtained from the above sources and by telephone calls made directly to the companies chosen. Land usage was abstracted from the Industrial Land Inventory. Density calculations were made as follows:

Firm Category	Total Acres	Total Employees	Employees per acre NORD	Employees per acre Okanagan-Similkameen
Large Manufacturers	591.90	1,699	2.87	6.07
Small Manufacturers	65.13	354	5.43	12.15
Utilities etc.	51.88	570	10.99	10.12
All	708.91	2,623	3.70	-

It should be noted that the inclusion of Crown Zellerbach in the sample of large manufacturers makes a significant impact on the density for that category. Crown Zellerbach holds a substantial reserve of land, and accordingly a lower than average employment density.

In comparison with employment density in the Okanagan-Similkameen Regional District, the NORD has lower densities for large and small manufacturers. (Source: Okanagan-Similkameen Industrial Land Study, December 1980).

## 2. Incremental Labour Force

B.C. Research population growth rates for the NORD, of 2.1 - 4.0% per annum relating to 1981-86, were applied to the base population in the NORD of 54,150 (1980) over the forecast period to 1991. Labour force was assumed to climb in proportion, but allowance was made for 8% unemployment:

Assumed Average Annual Growth %	1980 Labour Force (actual)	1991 Labour Force (estimate)	1980-1991 Labour Increment	1980-1991 Labour Increment with 8% Unemployment
2.1%	21,800	27,400	5,600	5,152
4.0%	21,800	33,560	11,760	10,819

To obtain the proportion of the population employed in the three categories, reference was made to the Kamloops Department of Employment and Immigration office. According to Employment and Immigration, 12.7% of the 1980 labour force (2,775 out of 21,800 people) worked in the manufacturing sector. Their figures for utilities, service and construction companies indicate this category accounts for some 14.3% of the labour force. Allowing for non-use of land by, say, 30% of these businesses, 10% of the labour force is assumed to be employed in the third category.

Scott's Industrial Directory - Western Canada average figures - shows that 58% of the manufacturing labour force are employed by companies with over 50 employees, and 42% for companies with under 50 employees.

By combining the above sets of figures the proportion of the total labour force employed by the three categories is estimated to be:

Proportion of Labour Force Employed by Category	
<u>Category</u>	<u>Proportion of total</u>
Large Manufacturers	7.4%
Small Manufacturers	5.3%
Utilities etc.	10.0%
Other	<u>87.3%</u>
All	100.0%

While there is known to be a trend towards a greater proportion of employment by utilities, service and construction companies, no data is known to be available to enable quantification of this trend.

Accordingly, no change in the proportions employed by the various categories has been incorporated in the forecast period.

Applying the labour increment figures of 5,152 - 10,819, as forecast from population growth, to the three categories and appropriate employment densities, estimated land absorbed is 229 - 483 acres:

Category	% of Labour Force	Incremental Employees in Category		Land Absorbed	
		2.1% Growth	4.0% Growth	2.1% Growth	4.0% Growth
Large Manufacturers	7.4	381	801	132	279
Small Manufacturers	5.3	273	573	50	106
Utilities etc.	10.0	515	1,082	47	98
Total	22.7	1,169	2,456	229	483
All Businesses	100.0	5,152	10,819	-	-

### 3. Sensitivity to Error

Although this methodology of calculating land absorption by statistical methods is perhaps as accurate as any available, it is sensitive to small changes in employment trends. Accordingly, too great a reliance should not be placed on the precise figures calculated. For example, although it is theoretically possible to calculate land absorbed by sub-district in the NORD, based upon population, the sample would be too small to avoid undue forecasting error.

Changes in the employment levels by the three categories chosen would also significantly change the land absorbed. To estimate the sensitivity of the method to such changes, an arbitrary adjustment was made to the percentage of the labour force employed by these categories:

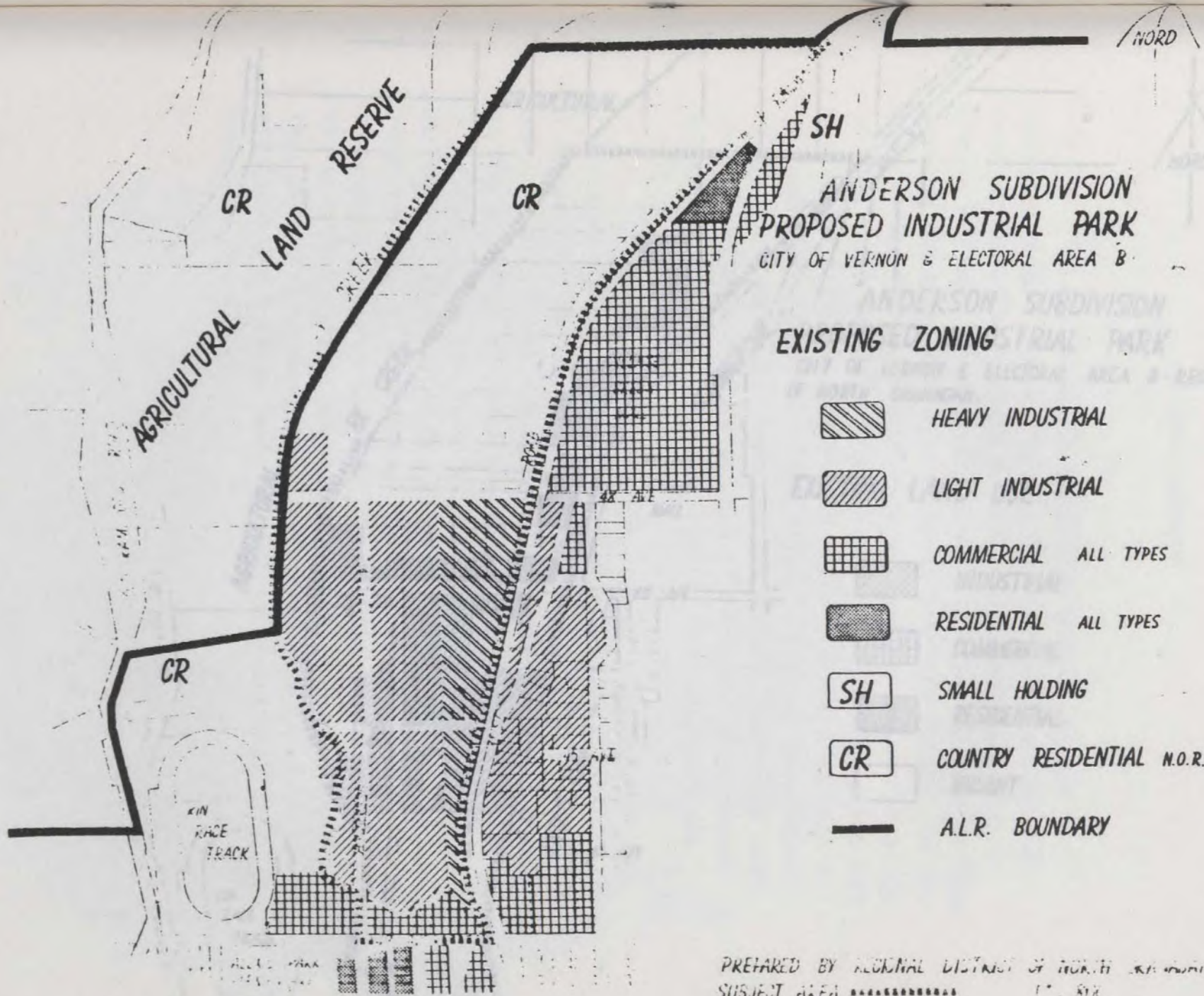
Category	% of Labour Force		Land Absorbed 4.0% growth rate	
	Unadjusted	Adjusted	Unadjusted	Adjusted
Large Manufacturers	7.4	3.0	279	113
Small Manufacturers	5.3	7.5	106	150
Utilities etc.	10.0	12.2	98	120
Total	22.7	22.7	483	383

The maximum amount of land absorbed is thus reduced by 100 acres, from 483 to 383 acres, at the higher growth rate of 4.0%.



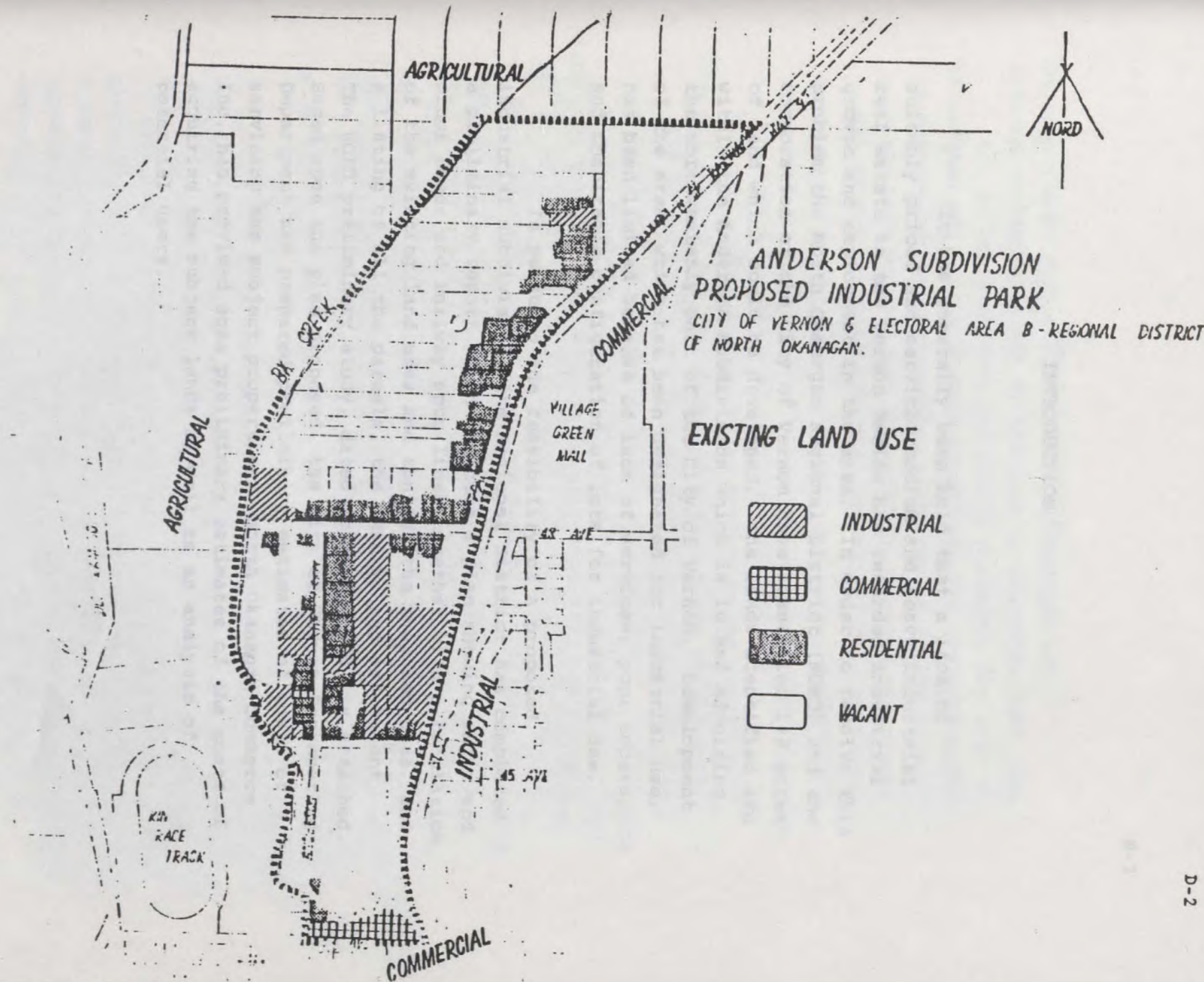
PRELIMINARY PROPOSAL  
ANDERSON SUBDIVISION INDUSTRIAL PARK  
PREPARED BY NORTH OKANAGAN COMMERCE INC.  
For  
NORTH OKANAGAN REGIONAL DISTRICT  
And  
THE CORPORATION OF THE CITY OF VERNON

January 21, 1980






PREPARED BY REGIONAL DISTRICT OF NORTH BRITAIN  
 SUBJECT AREA \*\*\*\*\* 1" = 50'





ANDERSON SUBDIVISION  
 PROPOSED INDUSTRIAL PARK  
 CITY OF VERNON & ELECTORAL AREA B - REGIONAL DISTRICT  
 OF NORTH OKANAGAN.

EXISTING LAND USE

-  INDUSTRIAL
-  COMMERCIAL
-  RESIDENTIAL
-  VACANT

## INTRODUCTION

It has generally been held that a lack of suitably priced and serviced medium and heavy industrial real estate in the Vernon Region has retarded industrial growth and employment in the area. In order to resolve this problem the North Okanagan Regional District (NORD) and the Corporation of the City of Vernon have identified 148 acres of land which could be developed. The lands identified are within the Anderson Subdivision which is in and adjoining the northwesterly part of the City of Vernon. Development of the area, which has been designated for industrial use, has been limited because of lack of services, poor access, and unsuitable configuration of lots for industrial use.

In pursuing the feasibility of a proposed industrial subdivision, the Regional District has completed a preliminary report which includes a plan showing major and minor roads and railway spur lines together with a tabulation of the existing land uses and zoning, the proposed uses, and a listing of all the parcels, the owners, and assessment. The NORD preliminary study, dated October, 1979, is attached. Based upon the plan proposed, the City of Vernon Engineering Department has prepared preliminary estimates of costs of servicing the subject properties. North Okanagan Commerce Inc. has provided some preliminary estimates of the costs of acquiring the subject lands as well as an analysis of potential users.

The Regional District and the City have requested that NOCI undertake an analysis of the information gathered to date and prepare a report for consideration by the Regional Board and the Vernon City Council. The purpose of this report is to provide a perspective for the project to enable the Regional District and the City to make policy decisions with respect to further implementation of the proposal.

The following project proposal, of necessity, is preliminary and therefore relies upon a number of basic assumptions. Much more detailed design and feasibility work will be required in order to test the viability of the proposal which follows. It is assumed that the Regional District and City are positive in their approach to the project and will undertake to provide the necessary approvals as well as technical and financial support. To date it has been generally held that medium to heavy industrial land is required in the area, however, documented evidence has not been gathered to support this position. The proposal has been prepared on the basis that equity capital will be obtained from the B.C. Development Corporation and/or other public programs to enable the financing of the project.

## PROJECT PROPOSAL

The Anderson Subdivision property is located adjacent to the City of Vernon north of 43rd Avenue and bounded on the west by B.X. Creek and to the east by the CPR Railway. The site is relatively level, however, there is evidence of a high water table, otherwise, there are no evident problems with servicing or construction on the site.

The Anderson Subdivision is characterized by haphazard development with uses varying from industrial, commercial, residential, and limited agriculture. Located outside the Agricultural Land Reserve, present zoning permits country residential, light industrial, heavy industrial, and commercial uses. Development generally has been restricted to the area south of 48th Avenue, however there are tracts of undeveloped land within that area as well. The area north of 48th Avenue encompasses some 85 acres and is generally undeveloped with the exception of one small commercial lot and one small industrial lot. Road access is along Anderson Subdivision Road from 43rd Avenue to the south. A full range of community services is available to the property from the City of Vernon at 48th Avenue and 31st Street.

The area encompassed within the NORD Study "Anderson Subdivision Proposed Industrial Park" is 148 acres. The Plan proposed would improve access and allow rearrangement of lots more suitable to industrial use and, in addition, the property would be improved with the extension of adjoining community water and sewer systems as well as natural gas service and increased capability of the electrical distribution system.

The road system as proposed appears practical; however, the project could be substantially improved if the northerly extension of 32nd Street was continued to connect with Highway 97 at the northern boundary of the subject property. This extension would allow industrial traffic to bypass 27th Street while providing good internal circulation.

After careful review of all available data it is recommended that NORD/City of Vernon proceed with the development of the 84.5 acres of land located north of 48th Avenue between B.X. Creek and the CPR right-of-way. It is our opinion that to undertake the development of the full 148 acres for medium and heavy industrial purposes at this time would be over-ambitious. Preliminary indications are that the Vernon market area might expect to absorb 5 to 10 acres of industrial land per year during the next ten year period. Currently, there is a more than adequate supply of serviced light industrial and service commercial land within the Vernon area and it would not be prudent to compete with existing serviced lands.

Undertaking the full development of the 148 acres would be more difficult to finance because of the higher capital cost and, in addition, a longer period of time would be required to implement the project. Within the 148 acres there are 74 separate titles and 66 land owners while within the 84.5 acre block there are 26 parcels and 25 land owners. The problem of acquisition would be substantially reduced. Further, the cost of acquiring those lands within the 84.5 acre area would in our opinion be substantially less since the parcels are generally larger in size and less well developed. It follows, therefore, that the industrial lands could be serviced at an earlier date and at lower cost.

In order to service the 84.5 acres we would recommend that the plan as generally proposed by the Regional District be used as a basis for feasibility and that the major service road (32nd Street) extending north from 43rd Avenue be retained and as noted earlier, extended to tie in with Highway 97 North at the northern boundary of the property. An allowance for a rail spur should be included within the subdivision as shown on the plan. However this need not be constructed immediately but a right-of-way should be provided.

It is proposed that the industrial subdivision be fully serviced with all community services and paved roads, however, it is not expected that servicing will include concrete curbs and gutters and would only include above-ground electrical and telephone services. Land servicing costs should be kept to a minimum.

The following services are available to the property at 48th Avenue and 31st Street; however, a crossing of the CPR Railway would be required at that point.

1. 12" water main
2. 21" sanitary sewer main
3. 3-phase, 25,000 KV power
4. 4" gas main
5. telephone

The City Engineering Department states that the above services would be sufficient to handle the anticipated industrial use.



## ESTIMATED PROJECT COSTS

The information we have at hand, which is preliminary at best, indicates that the cost today of acquiring the subject real estate, servicing and related expenses, would be approximately \$63,400 per acre for the 69 acres net of roads and railway spur right-of-way which could be marketed.

After careful analysis it is estimated that the cost of acquisition of the subject lands would be \$25,000 per acre. As pointed out previously, the larger size parcels and the lack of development contribute to this value. It is likely that at least one year would be required in order to assemble the subject lands and the final acquisition costs would be reflected by the skill of the team which undertook the assembly. It is obvious that appraisals of the land would be required prior to the commencement of negotiations. However, since the project would be undertaken as a public enterprise, prior knowledge would be available to all and this would affect the asking price of the existing owners.

The City of Vernon Engineering Department has completed preliminary estimates of cost of servicing the proposed Anderson Subdivision Industrial Park based on the NORD plan. The average cost per acre for servicing the 148 acres was \$20,000 per acre while for the 85 acre parcel the average cost would be \$24,600 per acre. The higher unit cost on the smaller acreage is the result of front-end costs which are applied to a smaller unit area. It would be

expected the City would recover some of the cost of providing services through areas not included in the project by assessing frontage taxes.

In discussions with the Highways Department, it is possible that a majority of the road construction costs of the 32nd Street extension may be absorbed by the Highways Department if the road were connected to Highway 97 North and provided an alternate to the use of 27th Street.

Related costs to the project which would include all items of project management including engineering, legal and accounting, and financing during construction, are estimated to be \$4,700 per acre. These expenses are all outgoings which would be required prior to marketing of the lots.

The following Estimated Project Costs Statement gives an indication based on present information of the costs of acquiring and servicing the 84.5 acres.

ANDERSON SUBDIVISION INDUSTRIAL PARK  
PRELIMINARY ESTIMATED PROJECT COSTS

LAND	84.5 Acres	
Less Existing Roads	<u>8.8 Acres</u>	
	75.7 Acres @ \$25,000	\$1,892,500

## SERVICING

Sewage Lift Station	\$ 70,000	
48th Avenue Crossing	80,000	
48th Avenue Watermain Extension	60,000	
250 mm Gravity Sanitary Sewer - 48th Avenue	8,000	
Well Point @ \$600/Acre	50,700	
Filling and Piling @ \$4,000/Acre	338,000	
B.X. Creek Improvement @ \$600/Acre	50,700	
Sanitary Sewer	143,400	
Storm Sewer	168,400	
Water	219,000	
Roads	602,500	
Services	87,000	
Contingency	<u>200,000</u>	2,077,700

## RELATED COSTS - FEASIBILITY

Project Management (incl. Engineering)	200,000	
Legal and Accounting	20,000	
Legal Survey	10,000	
Interest, During Construction	<u>170,000</u>	<u>400,000</u>
		<u>\$4,370,200</u>

Development Cost Per Acre - 69 Acres - \$63,336

January 21, 1980

The indicated floor selling price of the industrial lots based on the project as proposed is \$105,000 per acre. In calculating the floor sale price we have assumed that all of the 84.5 acres is developed immediately with the beneficial financing for all development expenses available under the Industrial Development Subsidiary Agreement (IDSA) and that the B.C. Development Corporation participates in the project and provides the balance of the equity financing required. Further, it is assumed that all of the serviced land available for sale, being 69 acres, are sold at an average rate of 6.9 acres per annum over a 10-year period and that all debt is repaid out of sale proceeds during that time.

The estimated annual project expenses are:

Direct development financing (IDSA) Repayment \$2,500,000 @ 7.5% over 10 years	\$354,300
Land acquisition financing (BCDC) Repayment \$1,900,000 @ 11.5% over 10 years	321,100
Management	10,000
Marketing	30,000
Conveyancing	<u>5,000</u>
Total Annual Operating Expense (including debt service)	<u>\$720,400</u>

Sale Price per acre

$$\$720,400 \div 6.9 \text{ Acres} = \underline{\$104,405} \text{ per acre}$$

Current sale prices of medium to heavy industrial land in Kamloops and Kelowna are:

Kelowna	\$80,000 - \$130,000/Acre
Kamloops	\$60,000 - \$110,000/Acre

In our opinion a sale price of \$105,000 per acre or \$2.41 per sq. ft. for serviced industrial land is not unreasonable, particularly when one considers that delivery would be a year from now. Economies could be achieved which would reduce the selling price:

1. Since the project would be undertaken by the City of Vernon/North Okanagan Regional District the engineering and project supervision services could be provided in-house which would save an estimated \$400,000.
2. It is possible to "phase" the development of the lots, i.e. not service the entire 84.5 acres immediately but to develop on a gradual basis as required and therefore reduce interest expenses by paying some development costs out of cash flow.
3. The term for repayment of project financing could be extended beyond the 10-year period, say to a 20-25 year term, and financing could possibly be arranged through the Regional District or City through bond type debenture financing.
4. Cost sharing of the 32nd Street extension with the B.C. Department of Highways.

## DEVELOPMENT CORPORATION

After considering the alternatives available and the objectives for undertaking this development, we recommend that the program should be undertaken as a joint venture between the City of Vernon/North Okanagan Regional District and the B.C. Development Corporation. It is envisaged that a separate development agency would be incorporated, say Vernon Industrial Park Limited, and shares would be held by each participant. The number of shares held would be directly related to the equity which each party has contributed to the project. We had considered the possibility of syndicating the present land owners to form part of the joint venture but, in our opinion, this would be most difficult to organize inasmuch as there are 25 owners and all are unlikely to have the same financial objectives.

We have had meetings and discussions with the representatives of the B.C. Development Corporation and they would look most favourably at a proposal from this region for the development of industrial land. The criteria which BCDC applies is that there must be a demonstrated need for the industrial land and the project must be viable. BCDC is, however, prepared to accept a lower rate of return on their investment than private sector developers. In our discussions with BCDC, we were encouraged to proceed with the project and particularly in terms of a joint venture between the public body and the B.C. Development Corp.

## IMPLEMENTATION

The foregoing preliminary proposal for the Anderson Subdivision Industrial Park provides both the Regional District and the City with enough base information for making a decision as to whether or not to proceed further with the project. Before a final decision is made we would recommend that a full project feasibility report be completed for the purpose of determining economic viability. In addition to determining viability, the report will provide project design information and would include a detailed market study.

The terms of reference for the project feasibility study should include the following:

1. Physical Analysis of the site including
  - topographic plan
  - soil testing
  - water table analysis
  - B.X. Creek protection
2. Land Planning
  - road layout
  - subdivision plan
  - model and/or rendering of project
3. Engineering
  - preliminary design - plans
  - estimated construction costs
  - project phasing
4. Market Analysis
  - industrial land available in area
  - projected absorption rate for industrial land
  - economic size of lots

- market value of serviced industrial real estate
  - analysis of labour force including training, skills, availability, etc.
5. Land Acquisition
    - appraisals
    - strategy for assembly
  6. Implementation Plan
    - project phasing based upon technical data and market study
  7. Feasibility
    - Pro Forma project statements to test viability
  8. Corporate Organization - recommendation
  9. Project Management - recommendation
  10. Project Financing - recommendation

Having completed the feasibility, all would now be in a position to make a final commitment with respect to the undertaking of the project. In our opinion, the foregoing work could be completed within a 3-month period at an estimated cost of \$25,000.00.



## RECOMMENDATION

The primary reason for undertaking the development of the Anderson Subdivision Industrial Park is to provide serviced medium and heavy industrial land in the North Okanagan at a competitive price. This land will provide sites for existing industries requiring new locations and as an incentive to new industries to locate in the region. It is evident that an industrial job base will contribute to the economic vitality of the region. In Vernon and District, as in other areas, the local governments must become involved in the development of industrial lands because in many cases the total size of the projects are beyond the financial means of many private sector developers. In addition, the return on investment in industrial land development tends to be a much longer term proposition than other alternatives for the investor.

We recommend that the City of Vernon and the North Okanagan Regional District proceed to the next stage with a proposal to develop approximately 85 acres as identified within the Anderson Subdivision as medium and heavy industrial land. Our analysis indicates that the lands can be serviced at a reasonable cost. It is further recommended that an in-depth feasibility study be undertaken at the earliest possible date and that this be submitted to the B.C. Development Corporation for their consideration.

CONTACT LIST

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Lew Rossner	Regional Economic Development Commissioner - North Okanagan Commerce Inc. (NOCI)
Peter Briekss Paul Palm Bob Bolin Bill Adams	B. C. D. C.
Geoff Artz	Ministry of Industry and Small Business - Vancouver.
Marcis Esmits Ian Back	Ministry of Industry and Small Business - Victoria.
Blake Kimura	Vernon City Planning Dept.
Peter Tassie Rudy Singer	Regional District of North Okanagan Planning Dept.
Sigrid-Ann Thors	City of Vernon - Alderman.
Bill Attlesey	Mayor of Enderby
Brick Reed	Chamber of Commerce - Enderby.
Pat Duke	Mayor of Lumby.
Don Bigelow	Chamber of Commerce - Lumby.
Marvin Kirton	Mayor of Armstrong.
Caroline Bethune	Chamber of Commerce - Armstrong/Spallumcheen.
Doug Weir	President - Chamber of Commerce - Vernon. Chairman - Economic Development Commission - NOCI.
Bill Chu Mike Rumble	Idec Engineering - Vernon. B.C. Assessment Authority - Vernon.
Mr. Clarke Mr. Moore	Ministry of Municipal Affairs - Victoria.
	Cumberland Realty Group
	Statistics Canada

## Contact List

B.C. Research.

Garth McGuire 'NRG' Action - Vernon  
Consultant - NOCI.

Peter Mackiewich Regional Administrator District of North Okanagan.

William A. Nelles Employment and Immigration Canada.

City Land Agent City of Kamloops.

Rino Elverhoy Regional Economic Development Commissioner - Thompson -  
Nicola.

Sid Spargo Economic Development Commissioner - Kamloops.

Dwight Browns Regional Economic Development Commissioner - Central  
Okanagan.

Royal Trust Co. - Kelowna.

Royal Trust Co. - Kamloops

Block Bros. - Kelowna.

Block Bros. - Kamloops.

Local Businesses

David Jones Starwest Realty - Vernon.

David Wright Valley Tool (1977) Ltd. - Enderby.

Erwin Kreig Big Foot Industries Ltd - Vernon.

Geoff Bowen Valley Monuments Ltd. - Vernon.

Roger Lockwood Western Concrete Products - Vernon.

Hank Havinga Havinga Holdings - Enderby.

Don Matheson Hytec Manufacturing Ltd. - Spallumcheen.

Lorne Major Colonial Farms Ltd. - Armstrong.

Neil Wong Shell Canada Ltd. - Vernon.

Contact List

Mrs. Helga Prichard	Hi-Line Industries - Kelowna.
E. Rohoway	Buns Master Bakery - Kelowna.
Betty Vinoly	The Sign Shop - Kamloops.
	Scac Canada Concrete Products. Head office - Vancouver.
Jerome Abraham	A Touch of Class Upholstering - Kelowna.
Mr. Ryde	Interior Belting Ltd. - Kamloops.
David Briggs	H & D Manufacturing Ltd. - Salmon Arm.
E. Chalke	Hidden Valley Resort & Trailer Park - Salmon Arm.
Kurt Knuever	President - Tekmar - Automatic Control Systems - Vernon.

Other Sources:

	British Columbia Manufacturers Directory - 1980.
	Scotts (Western) Manufacturers Directory.
Plan Vernon -3rd Draft - 1980	Inventory and Overview of Resources for the Regional Districts of North Okanagan, Central Okanagan and Okanagan Similkameen - 1979.
Industrial Land Inventory - NORD 1979 and 1981	The Regional District of Okanagan - Similkameen Industrial Land Study 1980.

