LOCATION OF A PARK EQUIPMENT MANUFACTURING PLANT IN THE PARKLAND REGION OF MANITOBA

by

Ian B. Anderson

A Practicum Submitted to the Natural Resource Institute, University of Manitoba in Partial Fulfillment for the Degree Masters of Natural Resource Management.

January, 1976

LOCATION OF A PARK EQUIPMENT MANUFACTURING PLANT IN THE PARKLAND REGION OF MANITOBA

Ъу

IAN B. ANDERSON.

A dissertation submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements of the degree of

MASTER OF NATURAL RESOURCE MANAGEMENT

© 11977

Permission has been granted to the LIBRARY OF THE UNIVER.

SITY OF MANITOBA to lend or sell copies of this dissertation, to
the NATIONAL LIBRARY OF CANADA to microfilm this
dissertation and to lend or sell copies of the film, and UNIVERSITY
MICROFILMS to publish an abstract of this dissertation.

The author reserves other publication rights, and neither the dissertation nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

ACKNOWLEDGEMENTS

I wish to express my gratitude to Dr. J.A. MacMillan, Department of Agricultural Economics, University of Manitoba, for acting as head of my Practicum committee and for providing valuable guidance and assistance. I am also indebted to Mr. David Kalinovich of the Parks Branch of the Department of Tourism, Recreation and Cultural Affairs, to Mr. Ernie Ens and Mr. Wayne Blackburn both of the Rural Development Division of the Department of Agriculture and to Dr. Paul Nickel of the Natural Resource Institute, University of Manitoba, for their assistance in the researching and preparing of this report.

I would also like to acknowledge the kind co-operation and assistance received from Mrs. Betty Nowicki of the Department of Indian Affairs and Northern Development, Miss Allyson Treleaven of the Manitoba Bureau of Statistics, and Mr. Charles Hample and Mrs. Patricia Jasen, both of Statistics Canada in locating data in their respective agencies.

For their valuable comments made throughout the preparation of this report, I would like to thank Otto Gebhardt and Roy McCallum, Supervisor and Counsellor respectively of the Selkirk Manpower Corps Training Plant, and Mr. Walter Driedger of the School of Social Work, University of Manitoba.

Special thanks go to Patricia Misko, Elizabeth Miron and Elaine Buchanan for their noteworthy patience and excellent work in arranging and typing the material in this report.

Finally, I am indebted to many individuals, who are too numerous to mention here and who assisted in a variety of ways in the preparation of this report.

ABSTRACT

Over the past decade, North American governments have been placing greater emphasis on providing disadvantaged groups with equal opportunity to the amenities of North American life. In Manitoba, the Interlake Manpower Corps of the Fund for Regional Economic Development (FRED) plan has identified a clientele who are disadvantaged due to a lack of literary and social-industrial life skills. In recognition of the special training and employment needs of the disadvantaged group, as well as the desire of Parks Branch to centralize and economize the production of park equipment, a plant for the manufacturing of park equipment was established at Selkirk in 1969. This plant performs the dual functions of providing park equipment for Parks Branch and at the same time training and employing members of the disadvantaged group.

In the Parkland Region, there are a large number of people who are similar to the clientele of the Interlake Manpower Corps in that they too are disadvantaged due to a lack of literary and social-industrial life skills. As considerable park expansion has been planned for this region and the demand for park equipment is expected to rise beyond the capacity of the Selkirk plant, it has been proposed that a second park equipment plant similar to the one in Selkirk be established in the Parkland Region.

This study is concerned with determining the most suitable size and location of a park equipment plant in the Parkland region. In determining the most suitable size and location, data has been collected on the annual value of demand for park equipment by Parks Branch and for wooden lawn and garden furniture by the open markets of Manitoba and

the Prairie region. From the data collected on the annual value of demand, three alternative plant sizes have been determined. For these alternative plant sizes, data has been collected for each plant's costs. Data has also been collected on the socio-economic characteristics and infrastructure of each of several specified locations.

Based on the lowest annual subsidy required, the most suitable plant size appears to be the largest of the three alternatives. This plant could employ as many as 54 people and would require an annual subsidy of \$175,810.

For this plant size, Roblin is the most suitable location if the criteria of location with greatest need and economic location criteria are considered to be the most important. Alternatively, if other considerations are more important, such as the desire to locate the plant on an Indian Reserve or the desire to develop a smaller size of plant, then other locations including the Ebb and Flow Indian Reserve, Russell, Swan River or Dauphin could be considered.

TABLE OF CONTENTS

			PAGE
ACKNOWLE	DGEM	MENTS	i
ABSTRACT			ii
LIST OF	TABL	ES	vi
CHAPTER			
ONE	INT	RODUCTION AND PROPOSAL	1
	A.	Background to the Problem	1
	В.	The Problem	3
	C.	The Proposal	10
	D.	Implications of the Study	11
TWO	A R	EVIEW OF THE SELKIRK PLANT	14
	A.	Formation	14
	В.	Administration	17
	C.	Capital Costs	19
	D.	Operating Costs for Fiscal Year 1974-75	20
	E.	Value of Production for Fiscal Year 1974-75	21
٠	F.	Trainee Numbers	22
	G.	Benefits of the Plant	23
THREE	DEM	IAND ANALYSIS	25
	A.	Demand Analysis Objective	25
	В.	Description of Method Used	25
	C.	Summary of Findings	26
	D.	Limitations of the Analysis	27
	E.	Detailed Findings	28
FOUR	SIZ	E AND COSTS ANALYSIS	36
	A.	Size and Costs Analysis Objective	36
	В.	Description of Method Used	36
	C.	Summary of Findings	37
	D.	Limitations of the Analysis	38
	Ē.	Detailed Findings	38

CHAPTER			PAGE
FIVE	LOC	ATION ANALYSIS	47
	Α.	Location Analysis Objective	47
	В.	Description of Method Used	47
	C.	Summary of Findings	50
	D.	Limitations of the Analysis	63
	E.	Detailed Findings	69
SIX	CON	CLUSIONS	89
	Α.	Study Objectives	89
	В.	Study Conclusions	89
•	C.	Best Location	94
	D.	Benefits of Plant to Parkland Region	94
APPENDIC	ES:		
I		PARISON OF THE MANPOWER CORPS TRAINING PROGRAM WITCHNADA MANPOWER INDUSTRIAL TRAINING PROGRAM	IH 96
	A.	The Need for An Innovative Program	96
	В.	The Manpower Corps Training Program - An Innovative Approach	98
	C.	The Canada Manpower Industrial Training Program.	105
	D.	Unique Features of the Manpower Corps Training Program	106
II	SUGO	JESTIONS FOR FURTHER RESEARCH	109
	Α.	Additional Markets For the Proposed Plant	109
	В.	A Comprehensive Data Base on Native People Of Southern Manitoba	111
III	DEFI	NITIONS OF LABOUR FORCE TERMS	117
	Α.	Labour Force	117
	В.	Not In Labour Force	118
	C.	Employed	119
	D.	Unemployed	120
	Ε.	Underemployed	121
•	F.	Discouraged Workers	121
	G.	Unemployment Rate	122
	н.	Participation Rate	123
BIBLIOGR	APHY		124

LIST OF TABLES

TABLE		PAGE
1	Annual Production Staff	. 42
2	Total Personnel Required and Their Costs	. 43
3	Annual Operating Costs and Total Annual Costs	. 44
4	Capital Costs	. 45
5	Feasible Profit and Actual Subsidy	. 46
6	Location Criteria Summary	. 67
7	A Comparison of the Manpower Corps Training Program with the Canada Manpower Industrial Training Program.	.108

CHAPTER ONE INTRODUCTION AND PROPOSAL

A. BACKGROUND TO THE PROBLEM

1. Government Concern

Over the past decade, North American governments have been placing greater emphasis on providing disadvantaged groups with equal opportunity to the amenities of North American life. In it's "Guidelines for the Seventies", the Government of Manitoba stated as one of it's four major policy principles "...greater equality of the human condition for all Manitobans through more equitable distribution of the benefits of development." The Government of Manitoba has also stated:

Equality of access must be provided in the wide range of provincial public goods and services such as housing, health, education, and social services. Economic policy generally must ensure that employment is guaranteed to the fullest extent possible in all regions of the province.

In line with the above policy statements, a number of programs and projects have been designed for the natural resource, human resource, and social infrastructure development of Manitoba's regions. One of the most comprehensive of these programs is the Fund for Regional Economic Development (F.R.E.D.) plan of the Interlake Region.

The Interlake FRED plan come into effect when the governments of Canada and Manitoba entered into a formal agreement on May 16, 1967.

Province of Manitoba, <u>Guidelines for the Seventies</u>, Volume 1, (Winnipeg: Information Canada, 1973), p. 13.

²<u>Ibid.</u>, p. 14.

The agreement called for programs and projects designed to increase the incomes and standard of living of Interlake residents. These programs and projects included those of education, manpower, development and structural adjustment, research and administration.

The agreement was undertaken to give residents of the area the opportunity to participate fully in the economic and social life of the nation by means of:

- a) investment in education to raise education levels
- b) increased training facilities, training allowances, and mobility grants to prepare the employable population for more rewarding opportunities in areas of expanding employment.
- c) provision of counselling to make residents more aware of their opportunities
- d) development of economic potential of renewable resources and the encouragement of secondary industry
- e) development of local infrastructure to encourage additional 3 employment opportunities and to raise the standard of living

2. Manpower Corps and It's Target Group

Under the auspices of the FRED plan an innovative program called the Manpower Corps was established in 1967. This program is aimed at the special needs of hard-to-employ groups of individuals who are disadvantaged as a result of a severe lack of skills including social-industrial life skills.⁴

³Department of Regional Economic Expansion, Manitoba Federal-Provincial Agreement, (Ottawa: Queens Printer, 1972), p. 3.

 $^{^4}$ For an explanation of the term social-industrial life skills, see Appendix I.

The target group for Manpower Corps activities numbers about 30,000 people. These people are located in over 100 communities on the geographic fringe of the agricultural areas of Southern Manitoba. As a result of compelling social reasons, many of these communities are unusually stable in terms of population despite migratory influences affecting other rural communities. 5

The target group has only a marginal participation in the social and economic life of Mamitoba. Generally speaking, the target group is comprised of racial and cultural minority groups (often of Indian ancestry), who have low education and labour force skills. These low level skills combined with limited work opportunities tend to restrict the target group's income earning capacities.

B. THE PROBLEM

1. Overall Problem

As a result of their lack of skills as well as the other factors listed below, the above target group does not form part of the regular labour force and is unable to participate in regular manpower training programs. More specifically, the target group is excluded from the regular labour force and manpower training programs for the following reasons:

a) lack of literacy, work and social-industrial life skills

For a discussion of these compelling social reasons, see Mark Nagler, Natives Without A Home, (Don Mills: Longman Canada Limited, 1975), p. 17, 55.

⁶For the purpose of this study, people of Indian ancestry includes Indians of status and non-status categories.

- b) isolation from employment areas and urban centers where manpower programs tend to be located
- c) aim of most traditional training programs is primarily towards those people who are in the labour force but are temporarily unemployed
- d) other characteristics such as attitudes to regular working hours
- e) modern working conditions pose an alien environment

In view of the fact that the target group does not form part of the regular labour force and is unable to participate in regular manpower training programs, the need exists for finding some way in which to upgrade their skills and income earning capacity as well as providing them with employment. Generally, the overall problem is to find some way in which to enable the target group to become participants in the economic and social life of Manitoba. Specifically, the overall problem is that of finding a method of enabling the target group to gain meaningful employment and increased incomes.

2. Formation of the Manpower Corps and the Selkirk Equipment Plant

In recognition of the special needs of the target group, an innovative program called the Interlake Manpower Corps was formed with

⁷Some people refer to these "other characteristics" as "cultural traits". However, considerable controversy exists as to whether these traits are indeed cultural. For example, controversy exists as to whether there really is a "culture of the poor". For a discussion of this topic, see W.E. Mann Ed., Poverty and Social Policy in Camada, (Toronto: The Copp Clark Publishing Company, 1970), p. 17 - 49.

Controversy also exists as to whether native people belong to one culture or rather to several cultures. For a discussion of this topic, see Mark Nagler, Natives Without A Home, (Don Mills: Longman Canada Limited, 1975).

the specific objective:

To provide training and work orientation to low income high-risk but employable people, particularly people of Indian ancestry in order to improve their opportunity for meaningful employment and increased incomes.

Through the Interlake Manpower Corps, the Selkirk park equipment plant, officially called The Manpower Corps Training Plant, was established with the objective to:

Provide training in industrial life skills to trainees relocating from areas of underemployment. Provide training in wood and metal manufacturing, sign making, spray painting. 9

\$400,000.00 and can handle up to 30 trainees and 20 full-time employees at any one time. 10 During the 1974/75 fiscal year, 91 trainees participated in training at the average cost of \$2,539.00 per trainee (costs include instructor's salaries, support costs and trainee allowances). Benefits to the trainees have been found to include increased material possessions, increased incomes, increased employability, improved housing, and most are employed following training whereas they were unemployed before training. 12

⁸Interlake FRED Plam, Performance Report for Year Eight, April 1, 1974 to March 31, 1975, p. 17.

⁹Ibid., p. 19.

¹⁰ Carl L. Wall, The Socio-Economic Evaluation of Training Benefits to Trainees of The Manpower Corps Training Plant - Selkirk, (Winnipeg: The Natural Resource Institute, 1974), p. 8.

Capital cost of the Plant was derived from a personal contact with Edward Somers, Development Officer, Department of Regional Economic Expansion.

¹¹ Interlake FRED Plan, Performance Report for Year Eight, April 1, 1974 to March 31, 1975, p. 8.

¹²Wall, op. cit., p. iii.

Along with training and employing members of the target group, the Selkirk plant produces park equipment for Manitoba's parks. At present, the Selkirk plant is operating at or near full capacity. The demand for park equipment is expected to increase through park expansion in Western Manitoba. To meet this expected demand, an additional plant will be required. ¹³

3. The Immediate Problem

Analysis of 1971 census data revealed that the Northwest (Parkland) region of Southern Manitoba was one of the more disadvantaged regions of the province in terms of income and employment. It was discovered that 2/3 of the municipalities in this region had 40 - 55% total census families with less than \$3,000 total family income. ¹⁴ Of the total census families in the region, 33.3% had a total family income (1970) of less than \$3,000. ¹⁵ In other regions of the province, the percentage of families of total family income of less than \$3,000 are as follows:

Southeast - 22.4% Interlake - 24.3% Southwest - 21.8% Central - 27.2%

¹³ Personal contact with David Kalinovich of Parks Branch.

¹⁴ Report of Departmental Task Force, Rural Development Corps (Manpower Corps) Program Outline Proposal Draft #3, (October 15, 1974), p. 2.

¹⁵ Ibid., Appendix C-2.

¹⁶ Ibid., Appendix C.

An indication of the unemployment situation in the northwest region can be seen from the ratio: number of unemployed people to number of vacant jobs. ¹⁷ For the month of February, 1975, this ratio was 28 in the Parkland region. This indicates that there were 28 unemployed people for each vacant job in the Parkland region. In other regions of the province, this ratio for the month of February, 1975 is as follows: ¹⁸

Southeast	-	19
Interlake	-	14
Southwest	***	9
South Central		7
North Central	-	36
Northern		3
Winnipeg	-	3

The Northwest region has a total Indian on reserves population of 1,774 (in 1973) and a total Metis population of 3,229 (in 1968). ¹⁹

A study of the Parkland region has observed that of the Indian on reserves in the region, the participation rate in the labour force is

¹⁷ It is important to note that the unemployed referred to here includes only those who are registered with Canada Manpower as unemployed and who are actually looking for work. The Parklands Region Manpower Information Study on page iv (see foot-note 20) refers to people who are without work and who may be discouraged from seeking work due to limited job opportunities. If these "discouraged workers" were added to the total unemployed, the ratio: unemployed to vacant jobs would be considerably higher.

¹⁸This information was prepared by the Management, Productivity and Manpower Branch of the Department of Industry and Commerce and was made available by Bill Wilson, Policy Consultant, Cabinet Planning Secretariat.

¹⁹Report of Departmental Task Force, <u>Ibid.</u>, Appendix A-15.

only 28% as compared to 60% for the province as a whole and 53% for the region. 20

In view of the existing situation in the Northwest region, the region has been established as a priority area. It has been proposed that Manpower Corps activities, as part of a broader development plan, be expanded to this region. It has also been proposed that a second park equipment plant similar to the existing one in Selkirk, be located in this region to fulfill the following objectives:

- a) provide training to people of Indian ancestry (see Appendix I)
- b) provide employment to people of Indian ancestry at or near their home community
- c) produce park equipment for parks in Western Manitoba
- d) produce recreation furniture for the open market

It is intended that the second plant will differ from the Selkirk plant in the following respects:

a) The Selkirk plant was designed to train people of the target group for employment in urban areas. The site of Selkirk was chosen as a stop over center to allow clientele to ease into the urban environment rather than suffering the cultural shock of an urban center the size of Winnipeg.

Studies indicate that benefits to the clientele of

Department of Agricultural Economics, University of Manitoba, Parklands Region Manpower Information Study, Volume 1: Introduction and Summary of Working Papers, (Winnipeg: Department of Industry and Commerce, 1974), p. vii. On page v of this study, participation rate is defined in terms of the labour force as a percent of the total population aged 15 and over. This definition is that used in the 1971 census. For definitions of labour force terms, see Appendix III.

the Selkirk plant tend to decline over a three year period. 21 While follow-up studies have not been done beyond the three year period, it is reported that many of the clientele return to their home communities rather than finding employment in urban areas. 22 If this is the case, then it would appear that many of the clientele strongly prefer to remain in their home communities.

Unlike the Selkirk plant which orients the clientele towards urban employment, the second plant will be located at or near the clientele's home community.

In this way, it is hoped that the problem of declining benefits over time can at least be partially alleviated.

b) Unlike the Selkirk plant which produces park equipment solely for provincial parks, it is intended that the second plant will also produce recreation furniture for the open market.

Before the second plant can be established, it is necessary to know what size the plant should be and where the plant should be located. The immediate problem then, and the problem on which this study will focus, is a two-fold technical problem: what size of plant is required and where should it be located.

²¹ J.A. MacMillan, P.E. Nickel, L.J. Clark, A New Approach To Evaluating Northern Training Programs: The Churchill Prefab Housing Manpower Corps Project, (Winnipeg: Center for Settlement Studies, 1975), p. 17.

 $^{22\}mbox{Personal}$ contact with Wayne Blackburn, Interlake Manpower Corps Manager.

C. THE PROPOSAL

The basic objective of this study is to determine the most suitable size and location of the proposed second plant such that:

- 1. Training will be provided for people of Indian ancestry of the target group (see Appendix I).
- 2. Employment will be provided for people of Indian ancestry of the target group.
- 3. Location of the plant will be at or near the clientele's home community.
- 4. Park equipment will be provided to parks in Western Manitoba at the lowest possible cost.
- 5. Recreation furniture may also be produced for the open market.

What needs to be determined then, is what size of plant is required and where it should be located. In order to determine the most suitable size and location, the study proposes to employ the following method of analysis:

- 1. Review existing Selkirk plant.
- 2. Estimate park equipment and recreation furniture demand.
 - (a) Parks Branch
 - (b) Prairie Region Open Market
 - (c) Manitoba Open Market
 - (d) Develop Alternative Plant Sizes
- 3. Estimate plant costs and subsidy.
 - (a) Personnel Costs
 - (b) Operating costs
 - (c) Raw Materials costs
 - (d) Capital costs
 - (e) Annual Sales
 - (f) Annual Subsidy
- 4. Identify potential plant locations
 - (a) List locations to be considered
 - (b) Analyze each location in terms of the following:

- i) Need based on the population aged 15 45 available for training and employment and the availability of other similar government programs.
- ii) Availability of local plant supervisor, local facilities that could be used for the plant and local social services.
- iii) Local receptivity to the program.
- iv) Population stability.
- v) Integrative capacity of receiving community.
- vi) Trade patterns.
- vii) Available infrastructure and its costs.
- viii) Transportation costs.
 - ix) Availability of housing.
- (c) List favourable and unfavourable location factors for each possible location.
- (d) Identify location options.

D. IMPLICATIONS OF THE STUDY

Benefits resulting from the study will lie in the provision of the following types of information:

- 1. size of plant required
- 2. costs of plant required
- 3. plant location options
- 4. number of people that will gain employment
- 5. nature and amount of on-going subsidy that may be required.

The provision of training and employment to members of the target group, by means of a park equipment plant located in rural Manitoba, is consistent with the following summary of employment implications of the four policy principles of the Government of Manitoba:

- 1. "Maximization of the general well-being of Manitobans."
 - provision of jobs for all persons wanting employment, including disadvantaged persons
 - improvement of aggregate income levels

12

- general upgrading of job opportunities
- increase in the 'market power' of the low wage sector
- 2. "Greater equality of the human condition for all Manitobans more equitable distribution of the benefits of development."
 - bring disadvantaged people into self-supporting employment
 - establish a system of guaranteed employment, thereby ensuring a minimum income for all individuals
 - increasing accessibility to a variety of employment opportunities
- 3. "Implementation of an effective Stay Option through policies and programs which will prevent Manitobans from being coerced by economic forces to leave their province or to leave the region within the province in which they prefer to live."
 - ensure that people can find meaningful employment in their region of the province
 - ensure that people in all regions have equal access to manpower products
 - reduce or stop the trend to rural depopulation
- 4. "The promotion of public participation in the process of government and, more particularly, in the development of decisions which will affect all Manitobans in the years ahead."
 - increasing participation in plant decisions from plant floor up
 - guaranteeing jobs for those who would otherwise be unemployed
 - supporting and encouraging the disadvantaged to participate in the economic life of the province. 23

Policy quotations from Province of Manitoba, <u>Guidelines for</u> the Seventies, Volume 1, (Winnipeg: Information Canada, 1973), p. 13.

Summarized by the Department of Agricultural Economics, University of Manitoba, Parklands Region Manpower Information Study, Volume 1: Introduction and Summary of Working Papers, (Winnipeg: Department of Industry and Commerce, 1974), p. 40.

The development of a park equipment manufacturing plant in the Parkland region is consistent with a regional development strategy. This strategy calls for the development of resources in the region in which they are located rather than removing these resources for development elsewhere. A park equipment manufacturing plant in the Parkland region would enable the regional development of human resources in terms of the disadvantaged group and natural resources in terms of forestry products.

Establishing a park equipment plant in the Parkland region would result in several direct benefits to the plant location and to the region. Basically, these benefits would be in the form of employment opportunities for Parkland residents and a capital flow from plant construction and operation expenditures into the region.

CHAPTER TWO

A REVIEW OF THE SELKIRK PLANT

A review of the Selkirk plant (officially called the Manpower Corps Training Plant) was undertaken to gain an indication of how a park equipment plant operates. In making this review, the following aspects were considered:

- A. Formation
- B. Administration
- C. Capital Costs
- D. Operating Costs
- E. Value of Production
- F. Trainee Numbers
- G. Benefits of the Plant

A. FORMATION

A.1. Events Leading Up To Formation

a) FRED PLAN - Through concern over regional disparities and the desire to provide disadvantaged groups with equal opportunity to the amenities of Canadian life, the federal and provincial governments authorized a development agreement on May 16, 1967 called the Interlake Funds for Regional Economic Development (FRED) plan. ¹ This agreement

Department of Regional Economic Expansion, Manitoba Federal-Provincial Agreement, (Ottawa: Queens Printer, 1972), p. 1.

called for programs and projects of education, manpower, development and structural adjustment, research and administration. These programs and projects were designed to increase the incomes and standard of living of Interlake residents.

- b) INTERLAKE MANPOWER CORPS As part of the Interlake FRED plan, the Interlake Manpower Corps was formed in 1967. The Interlake Manpower Corps Program is aimed at the special training and employment needs of a clientele usually characterized by the following:
 - often of Indian ancestry
 - isolated from urban centers where training and employment programs tend to be located
 - lacking literary, work and social-industrial life skills
 - unemployed
 - poor employment records
 - unsuitable for existing manpower training programs
 - unfamiliar with modern working conditions²
- c) PARKS BRANCH DESIRE FOR CENTRALIZATION The FRED plan called for extensive park recreation development which raised the demand for park equipment. Park equipment was being acquired from a variety of private and government agencies scattered throughout the province. As this supply system tended to be complex and inefficient, it was desired by the Parks Branch of the Department of Tourism, Recreation and Cultural Affairs that manufacturing of park equipment be centralized. Through centralization, it was hoped that procurement could be streamlined and the complete production process made more economical.³

²For a more detailed discussion of Manpower Corps clientele, their training needs and the Manpower Corps Program, see Appendix I: A Comparison of the Manpower Corps Training Program and The Canada Manpower Industrial Training Program.

³Information concerning Parks Branch desires for centralization was taken from a letter to E.O. Ens, from W.W. Danyluk, dated February 11, 1969 and made available by David Kalinovich of Parks Branch.

A.2. Formation of the Selkirk Plant

- a) COMBINATION OF INTERESTS Through a combination of the interests of both the Interlake Manpower Corps and Parks Branch, a comprehensive training and employment project for the production of park equipment was established at Selkirk.
- b) SELKIRK PLANT OBJECTIVES The Selkirk plant was established to fulfill the following objectives:
 - 1. To provide a Manpower Corps unit that would operate with
 - a continuous flow of clients:
 - a) to receive individual vocational counselling from a general counsellor and contact with Canada Manpower counsellors to aid in formulating and fulfilling realistic vocational goals.
 - b) to gain knowledge and understanding about themselves in work situations and the work community by participating in training sessions on:
 - effective public speaking and confidence building
 - elements of human behavior
 - money management including credit and budgeting
 - group dynamics as related to work situations such as relationships between employee and supervisor, between employees, between employees and public
 - training requirements and processes
 - the nature of work including responsibilities to employer
 - safety on the job
 - meeting procedures and processes
 - organizations in the work system
 - c) to obtain realistic positive job experience working in a group under supervision.
 - d) to evaluate their attitudes, positive attributes and deficiencies for successful training and satisfactory employment.
 - e) to obtain training in fundamental communication, science, and arithmetic skills if particularly required.
 - f) to have the opportunity to establish and follow-up a program of personal improvement through study.
 - 2. To provide a plant that would fabricate park equipment

specifically for the Interlake area and generally for the province.⁴

- c) RATIONALE OF SELKIRK AS SITE The location of Selkirk was chosen for the following reasons:
 - 1. trainees would be closer to urban employment and training centers
 - 2. Selkirk is closely identified with the Indian population, thus Indian people are acceptable to the community
 - 3. there are greater opportunities for achieving more success in aiding Indian people to adjust to alternate jobs and living conditions
 - 4. Selkirk is central to the major locations where parks are located and developing.⁵
- d) DATES OF ESTABLISHMENT Construction of the plant began on September 15, 1968 and was completed on May 30, 1969. Production commenced in June of 1969 and the plant was officially opened in October of 1969. Expansion of facilities occurred during 1973.

B. ADMINISTRATION⁷

B.1. FRED Plan And The Department of Regional Economic Expansion

The Selkirk plant was established under the Training-in-Industry

⁴The objectives of the Selkirk plant were taken from material entitled "Proposal on Trainee Housing - Selkirk", as made available by David Kalinovich of Parks Branch.

⁵Reasons for Selkirk as site were taken from material entitled "Manpower Corps Proposal - Parks Furniture Fabrication Plant", as made available by David Kalinovich of Parks Branch.

⁶Carl L. Wall, The Socio-Economic Evaluation of Training Benefits
To Trainees of The Manpower Corps Training Plant - Selkirk, (Winnipeg: The Natural Resource Institute, 1974), p. 4.

⁷Information concerning administration was taken from a variety of material contained in Parks Branch files and made available by David Kalinovich.

and Manpower Corps sections of the FRED plan. Capital cost of the plant was shared between the federal and provincial governments with the federal government paying 75% and the province 25%. Federal government interests in the Selkirk plant and the Interlake Manpower Corps are represented through the Department of Regional Economic Expansion. This department is responsible for monitoring and auditing the Interlake Manpower Corps Program and provides representatives for the Interlake Manpower Corps Directorate.

B.2. Manitoba Department of Agriculture

The Department of Agriculture is responsible for:

a) the Interlake Manpower Corps

b) administration of the training program

c) guidance and counselling for trainees and their families

d) clientele referral

B.3. <u>Interlake Manpower Corps</u>

The Interlake Manpower Corps of the Department of Agriculture is responsible for:

- a) payment of training allowances
- b) operating and maintenance costs
- c) the Selkirk plant supervisor
- d) clientele selection

B.4. The Selkirk Plant Supervisor

The plant supervisor is responsible for:

- a) supervision of staff and trainees, production and the training program
- b) assuring that production meets the requirements of Parks Branch
- c) assuring that the training program meets its objectives
- d) ordering, keeping and shipping of all materials and products
- e) payroll signing authority
- f) clientele selection

^{8&}lt;sub>Ibid</sub>.

B.5. Parks Branch

Parks Branch is responsible for:

- a) supplying all raw materials and equipment needed for production
- b) purchasing most of the products produced
- c) designing the products produced
- d) salaries of regular employees producing park equipment
- e) determining production priorities

B.6. Associated Agencies

- a) DEPARTMENT OF HEALTH AND SOCIAL DEVELOPMENT Participates in locating, counselling and referring trainees and their families.
- b) CANADA MANPOWER Participates in referring trainees and assisting trainees with employment or additional training selections.
- c) MANITOBA HOUSING AND RENEWAL CORPORATION Participates by providing low rental housing for trainees and their families.
- d) DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT Participates by referring trainees and providing supplementary programs
 which are available to Treaty Indians.
 - e) INDIAN BANDS Participate by referring trainees.
 - make band members aware of the benefits of the program
 - provide feedback and advice on how the program is operating and where it can be improved

C. CAPITAL COSTS

Land = \$8,200.00

Buildings = \$230,000.00 (original)

= \$165,000.00 (expansion)

Equipment = $\frac{$100,000.00}{$503,200.00}$

⁹Capital costs were approximated by David Kalinovich of Parks Branch.

D. OPERATING COSTS FOR FISCAL YEAR 1974/75 10

D.1. Salaries

a)	Supervisor	= {	1	6,000.00
α_{j}	Caporvisor	7	, –	- ,

b) Instructors = \$ 11,340.00

= \$ 13,128.00

c) Counsellor = \$ 13,800.00

d) Lead hands = \$ 7,300.00

= \$ 7,000.00

e) Office clerk = \$6,300.00

f) Parks Branch employees = $\frac{$48,877.00}{}$

g) TOTAL = $$123,493.60^{11}$

D.2. Training Allowances

Training allowances for the 1974/75 fiscal year totalled

\$119,815.41.

D.3. Employer's Contribution

a)	cost of	living	allowance	=	\$	4,500.00
_					de	7 CAF 00

b) workers compensation = \$ 3,645.00

c) unemployment insurance = \$ 2,960.68

d) Canada pension plan = $\frac{$3,084.95}{}$

e) TOTAL = \$ 14,190.63

¹⁰Fiscal year refers to April 1, 1974 to March 31, 1975. Information concerning operating costs was taken from material entitled "Profit and Loss Statement", as provided by Otto Gebhardt, supervisor of the Selkirk plant.

The stated total (\$123,483.00) differs from the sum of items (a) to (f) for the following reason. Items (a) to (e) were estimated by Otto Gebhardt, supervisor of the Selkirk plant and thus are approximations rather than being completely accurate. The stated figure (\$123,493.60) is, however, accurate and was taken from the Profit and Loss Statement.

D.4. Operation - Maintenance

a) UTILITIES	telephoneheatinghydrowatertaxesTOTAL	= \$ 2,028.72 = \$ 4,257.57 = \$ 3,629.85 = \$ 500.68 = \$ 7,699.02 \$18,115.84
b) GENERAL SERVICE	shop maintenance and repairjanitorial servicesfreight and cartagepersonal travelTOTAL	
c) EDUCATION AND SAFETY SUPPLIES	toolssafety suppliesstationery, etc.TOTAL	= \$ 1,367.39 = \$ 1,358.99 = \$ 1,267.76 \$ 3,994.14
d) OPERATIONS - MAINTENANCE	- GRAND TOTAL	<u>\$33,583.81</u>

D.5. Raw Materials and Equipment

Raw materials and equipment for the 1974/75 fiscal year totalled \$234.647.91.

D.6. Total Operating Costs

	•		
f)	TOTAL	= .	\$ 525,731.26
e)	raw materials and equipment	= '	\$ 234,647.91
d)	operations - maintenance	=	\$ 33,583.81
c)	employers contributions	=	\$ 14,190.63
b)	training allowances	=	\$ 119,815.41
a)	salaries	=	\$ 123,493.60

E. VALUE OF PRODUCTION FOR FISCAL YEAR 1974/75

E.1. Estimated Sales Value

a) PROCEDURE - A method has been developed for estimating the sales value of production. The method includes:

- materials cost plus 15% for operating costs
- labour costs at \$3.00 per hour multiplied by the number of hours of production, plus 20% for such things as vacation pay and employer's contributions
- the sum of the above 12
- b) ESTIMATED SALES VALUE By applying the above procedure to the 1974/75 fiscal year production, the estimated sales value is $\$526,698.46.^{13}$

E.2. Profit - Loss

Considering total costs at \$525,731.36 and an estimated sales value at \$526,698.46, an estimated profit of \$967.10 occurred during the 1974/75 fiscal year. 14

F. TRAINEE NUMBERS 15

During the 1974/75 fiscal year, there were 59 new enrollments, 51 people who withdrew before their training was completed and 12 people who satisfactorily completed training. 16

 $^{^{12}\}mathrm{This}$ method was developed by Otto Gebhardt, supervisor of the Selkirk plant.

 $^{^{13}\}mathrm{Sales}$ value figure was taken from the Profit and Loss Statement provided by Otto Gebhardt.

¹⁴ It should be noted that estimated sales value and profit are hypothetical and did not in reality occur. Products were sold to Parks Branch at cost. It should also be noted that the \$525,731.36 total cost stated here does not include any capital costs.

¹⁵Figures stated for trainees were taken from bi-monthly production reports as made available by Otto Gebhardt and David Kalinovich.

 $^{^{16}}$ It is important to note that trainees who withdraw before their training is completed should not be considered unsuccessful. These trainees do receive some benefit from their training, primarily in the form of exposure to an alternative life style and in the form of some human development. For an explanation of this human development, see Appendix I.

Bi-monthly averages for the 1974/75 fiscal year were as follows:

Total Enrollment = 32
New Enrollments = 10
People Who Withdrew = 9
People Who Satisfactorily Completed Training = 2

G. BENEFITS OF THE PLANT

G.1. Benefits To Trainees 17

- a) SKILLS TRAINING Trainees receive training in those skills necessary for employment and those skills necessary for further training or education.
 - b) OTHER BENEFITS Other benefits to trainees include:
 - increased material possessions
 - increased incomes
 - increased employability
 - improved housing
 - most are employed following training whereas they were unemployed before training
 - trainees also gain pride and confidence in themselves which if sustained and reinforced becomes a model for their children.

G.2. Benefits To Manitoba

Along with providing the benefits to trainees discussed above, the Selkirk plant also provides a number of benefits to Manitobans in general. 18

¹⁷Information concerning benefits to trainees was taken from Wall, op. cit., p. iii.

¹⁸Information concerning benefits to Manitoba was taken from material entitled "Selkirk Park Furniture Plant", as provided by David Kalinovich of Parks Branch.

These include:

- 1. goods previously imported into Manitoba are now being manufactured in the province, thus providing employment and increasing the provincial cash flow to low income people
- 2. efficiency has been enhanced by the elimination of transportation costs. Goods are being obtained by the government at a saving of an estimated 25% under market price.
- 3. an expected net saving in welfare costs over time.
- 4. better equipped provincial parks with more modern equipment to meet changing use patterns.

CHAPTER THREE

DEMAND ANALYSIS

A. DEMAND ANALYSIS OBJECTIVE

The overall objective of the demand analysis was to gain an indication of the value of demand for park equipment and for wooden lawn and garden furniture from the following sources:

- 1. Parks Branch
- 2. Manitoba and Prairie Region open markets
- 3. Other sources of demand such as other governments and other government departments

The specific objective of the demand analysis was to determine possible market sizes from which the required size of manufacturing plant could be determined.

B. DESCRIPTION OF METHOD USED

Parks Branch demand was estimated by Parks Branch personnel.

Open market demand for Manitoba and the Prairie Region was based on an extrapolation of a report from Manfred Keil to Ernie Ens. 1 This extrapolation involved:

This report entitled "Selkirk Manpower Corps and The Prairie Market For Porch, Garden and Lawn Furniture Made of Wood" was an estimation of the open market in the Prairie Region for wooden porch, lawn and garden furniture for the year 1971. This Prairie market estimation was based on the assumption of homogeneous consumption patterns. This estimation was determined by multiplying the percentage of total Canadian population found on the Prairies by the total Canadian market (Canadian production plus Canadian imports). This report was made available by Ernie Ens of the Department of Agriculture.

- 1. projecting the value of the total Canadian market for wooden lawn and garden furniture from 1971 to 1979 and converting this value to 1974 dollars²
- 2. projecting the population of Canada, Manitoba and the Prairie Region from 1971 to 1979
- 3. determining the Manitoba and Prairie Region portions of the total Canadian market
- 4. determining the penetrable portion of the Manitoba and Prairie Region markets
- 5. converting the value of the penetrable markets of Manitoba and the Prairie Region to a defined wholesale value so as to be homogeneous with the value of Parks Branch demand

Other sources of demand were investigated through personal contact.

Once the value of demand from all sources had been determined and converted to homogeneous terms, three alternative market sizes were specified.

C. SUMMARY OF FINDINGS

1. Major Sources of Demand

Major sources of demand include:

- a) Parks Branch = \$325,000 per year
- b) Manitoba Open Market = \$28,405 per year
- c) Prairie Region Open Market = \$105,792 per year

2. Three Alternative Market Sizes

Three alternative sizes are:

²The year 1979 was selected for the demand analysis on the basis of the following assumption. It was assumed that production in the proposed plant would begin in 1977 and after two years of adjustment, 1979 would be a normal production year. This assumption was approved by David Kalinovich of Parks Branch and Ernie Ens of the Department of Agriculture.

³It should be noted that this method of analysis was generally approved by Ron Stewart, economist for the Manitoba Trading Corporation (Winnipeg) and A.G. Teskey, Senior economist, Canadian Forestry Service (Edmonton).

- a) Size #1 = Parks Branch demand alone = \$325,000
- b) Size #2 = Parks Branch demand and Manitoba Open Market demand = \$353,405 rounded off to \$350,000
- c) Size #3 = Parks Branch demand and Prairie Region Open Market demand = \$430,792 rounded off to \$430,000

3. Other Possible Sources of Demand

Other possible sources of demand for which additional analysis is required and warranted include:

- a) Government of Manitoba
- b) Government of Canada
- c) City of Winnipeg
- d) pine, poplar and diamond willow furniture
- e) local and regional business needs

These or other additional sources of demand must be developed by 1983 in order to replace \$300,000 annual value of Parks Branch demand which will end at this time. Failure to do so may result in severe implications for the size of plant required, the number of trainees and employees needed and the optimum plant location.

D. LIMITATIONS OF THE ANALYSIS

1. Insufficient Data

As the number of assumptions used throughout the analysis suggest, sufficient data was not immediately available to allow for a thorough analysis of the open market demand. For example, more time and effort could be spent in obtaining a more up-to-date analysis of market trends during the years 1971 - 1975.

2. A Minimum Estimation

As data was available for only three rather than all of the possible sources of demand, values stated are a low estimate of the total demand that actually exists. It is probable that further analysis of those potential sources of demand listed, would reveal additional values of demand.

E. DETAILED FINDINGS

I. Major Sources of Demand

1. Parks Branch Demand⁴

- a) Value of demand for Park expansion = over the five year period 1977 82, goods needed for park expansion will total approximately \$1.5 million. On an annual basis, this amounts to a value of \$300,000.
- b) Value of demand for equipment replacement = \$25,000 per year.
- c) Total annual Parks Branch demand = \$300,000 + \$25,000 = \$325,000.
- d) Wholesale Value The \$325,000 annual Parks Branch demand is in terms of 1974 dollars and is in what Parks Branch refers to as wholesale value. Wholesale value is defined by Parks Branch as the cost of raw materials plus their delivery to plant site. 5

2. Manitoba and Prairie Region Open Markets for Wooden Lawn and Garden Furniture

a) 1979 value of total Canadian Wooden Market

The steps taken in determining the Canadian market for wooden lawn and garden furniture include:

- 1. determining total (metal and wooden) Canadian markets in 1967 and 1971 from Canadian production and imports
- 2. converting the 1967 total Canadian market value to 1971 dollars
- 3. determining the annual wooden market change from 1967-71
- 4. determining the 1979 value of the Canadian wooden market by applying the average annual market increase from 1967-71 to the 1971 value
- 5. converting the 1979 Canadian wooden market thus determined, from 1971 dollars to 1974 dollars.

⁴Figures and information stated for Parks Branch demand were provided by David Kalinovich of Parks Branch. Figures stated are in 1974 dollars.

⁵As plant site is unspecified, the cost of materials delivery is an average estimate included in lump sum figures. The definition of wholesale was provided by David Kalinovich of Parks Branch.

a.1.) Canadian Production = 1971 1967

> \$10,885,000 \$9,427,000 Total:

\$1,070,000 (11.4%)\$ 3,652,000(33.6%) \$8,357,000 \$ 7,233,000 Wood:

Metal :

a.2.) Canadian Imports $$1,\overline{429,000}$ Total (wood and metal): \$\overline{562,295}\$

ASSUMPTION #1: Assume 34% (33.6) of 1971 and 11.4% of 1967 imports were wooden.

a.3.) Canadian Wooden Imports

 $1967 = 562,295 \times 11.4\% = $64,102$ $1971 = 1.429,000 \times 34\% = $485,860$

a.4.) Total Canadian Wooden Market (production and imports)

1967 = 1,070,000 + 64,102 = \$1,134,1021971 = 3,652,000 + 485,860 = \$4,137,860

ASSUMPTION #2: Assume that to convert 1967 dollars, multiply 1967 dollars by a factor of 1.136

- a.5.) Total Canadian Wooden Market in 1971 Dollars $1967 = 1,134,102 \times 1.13 = $1,281,535$ = \$4,137,8601971 =
- a.6.) Canadian Wooden Market Change 1967-71 Actual = 4.137.860 - 1.281.535 = \$2.856.325 (1971\$)Change as a percentage of 1967 = \$2,856,325 ÷ 1,281,535 x 100 = 222.88%
- a.7.) Average Annual Canadian Wooden Market Change 1967-71 $222.88 \div 5 \text{ (years)} = 44.58\%$

ASSUMPTION #3: Assume the Canadian wooden market continues to increase

The manufacturer's selling price index for the household furniture industry was 110 in 1967 and 123.9 in 1971 (1961 was base year at 100). This means that goods which cost or were sold for \$110 in 1967 cost \$123.9 in 1971. By dividing 123.9 by 110, a factor of 1.13 results which when multiplied by 1967 dollar values yields 1971 dollar values. Through this procedure, market values can be made homogeneous and an accurate indication of the relative sizes of production for 1967 and 1971 can be had. This procedure and information was made available by Charles Hample of Statistics Canada. The household furniture industry was selected as being the closest category to which lawn and garden furniture applied.

annually by an average of 44.58% from 1971 to 1979 i.e. 8 years.

a.8.) Canadian Wooden Market in 1979
45% (44.58) x 4,137,860 x 8 + 4,137,860 =
\$19,034,156 (1971\$)

ASSUMPTION #4: Assume that to convert 1971 dollars to 1974 dollars, multiply 1971 dollars by a factor of 1.4.

a.9.) Canadian Wooden Market in 1979 in 1974 Dollars 19,034,156 x 1.4 = \$26,647,818 (1974\$)

b) 1979 Population of Canada, Manitoba and the Prairie Region:

The steps taken to determine the population of Canada, Manitoba and the Prairie Region include:

- 1. calculating the average annual percentage change in population for Canada, Manitoba, Saskatchewan and Alberta for the years 1951-71 and 1966-71
- 2. determining 1979 population by applying the average annual change to the 1971 population

b.1.) Population ⁸		1961	1966	1971
Canada	_	18,238,247	20,014,880	21,568,311
Manitoba	-	921,686	963,066	988,247
Saskatchewan	· -	925,181	955,344	926,242
Alberta	-	1,331,944	1,463,203	1,677,874
Prairie Region	_	3,178,811	3,381,613	3,542,363

According to Charles Hample of Statistics Canada, the manufacturers selling price index for the household furniture industry was 123.9 in 1971 and 173.4 in 1974. By dividing 173.4 by 123.9, a factor of 1.4 results which when multiplied by 1971 dollars yields 1974 dollars.

⁸Population statistics for parts b.1. and b.2. were taken from Canada Yearbook 1973.

b.2.) Average Annual Percentage Changes

	1951-71	1966 - 71	Ayerage of 1951-71 & 1966-71 %
Canada -	2.2	1.5	1.85
Manitoba -	1.2	.5	.85
Saskatchewan-	.5	6	05
Alberta -	2.8	2.2	2.5

ASSUMPTION #5: Assume the average annual percentage changes in production remain constant from 1971 to 1979 i.e. for 8 years

b.3.) 1979 Population⁹

Canada - 1.85% x 21,568,311 x 8 + 21,568,311 = $\frac{24,760,421}{1}$ Manitoba - .85% x 988,247 x 8 + 988,247 = 1,055,448 Saskatchewan - .05% x 926,242 x 8 + 926,242 = $\frac{922,537}{1}$ Alberta - 2.5% x 1,677,874 x 8 + 1,677,874 = $\frac{1,953,449}{1}$ Prairie Region- 1,055,448 + 922,537 + 1,953,449 = $\frac{3,931,434}{1}$

c) 1979 Value of Manitoba and Prairie Region Markets

The steps taken to determine the 1979 value of the Manitoba and Prairie Region markets include:

- 1. determining the percentage of Canada's 1979 population in the Prairie Region
- 2. determining the percentage of the 1979 Prairie population found in Manitoba
- 3. applying these population percentages to the total Canadian market so as to determine the market value of Manitoba and the Prairie Region
- 4. determining the penetrable portion of the Manitoba and Prairie Region markets
- 5. converting these penetrable portions to wholesale values that are homogeneous with Parks Branch demand values.

⁹For comparison purposes, it is interesting to note how Statistics Canada has projected the 1979 population of Canada and the Prairie Provinces. These projections have been made in the following two series which were taken from Population Projections Canada and the Provinces 1972 - 20001, Cat. No. 91-514, (Ottawa: Statistics Canada, 1974).

Series A Series B

	Series A	Series b	
Canada:	24,357,200	Canada:	23,784,400
Manitoba:	1,039,500	Manitoba:	1,010,500
Saskatchewan:	829,900	Saskatchewan:	857,100
Alberta:	1,927,800	Alberta:	1,868,700

c.1.) Prairie Population as a Percentage of Canada's 1979
Population

 $3,931,434 \div 24,760,421 \times 100 = 15.88$ %

c.2.) Manitoba Population as a Percentage of the Prairie Region 1979 Population

 $1,055,448 \div 3,931,434 \times 100 = 26.85$ %

ASSUMPTION #6: Assume no Canadian exports of wooden lawn and garden furniture over the 1971-79 time period. 10

ASSUMPTION #7: Assume homogeneous consumption patterns for wooden lawn and garden furniture throughout Canada.

- c.3.) Value of the 1979 Canadian Market Found in the Prairie
 Region
 \$26,647,818 x 15.88% = \$4,231,674 (1974\$)
- c.4.) Value of the 1979 Prairie Region Market Found in Manitoba \$4,231,674 x 26.85% = \$1,136,205 (1974\$)

ASSUMPTION #8: Assume the Prairie Region and Manitoba 1979 markets can be penetrated by 10%. 11

- c.5.) Value of Penetrable Prairie Market 1979 \$4,231,674 x 10% = \$423,167 (1974\$)
- c.6.) Value of Penetrable Manitoba Market 1979
 \$1,136,205 x 10% = \$131,621 (1974\$)

ASSUMPTION #9: Assume that to convert the above market values to wholesale value as defined by Parks Branch, multiply the above values by 25%.

 $^{^{10}}$ This assumption is based on the fact that Manfred Keil in his report to Ernie Ens, found no Canadian exports of wooden lawn and garden furniture for the period 1967-71.

 $^{^{11}}$ According to Fred Moore of the Manitoba Trading Corporation, a new firm entering an industry can expect to penetrate the market by 10%.

¹² The market values stated in c.6. are in terms of manufacturer's price and include all costs of production rather than just the costs of materials and their delivery to plant site. According to Ron Stewart, economist for the Manitoba Trading Corporation, the cost of materials and their delivery to plant site would equal approximately 25% of the manufacturer's price.

- c.7.) Wholesale Value of Prairie Market 1979 \$423,167 x 25% = \$105,792 (1974\$)
- c.8.) Wholesale Value of Manitoba Market 1979 $$113,621 \times 25\% = $28,405 (1974\$)$

II. Three Alternative Market Sizes

- 1. Size #1 Parks Branch demand alone = \$325,000 per year.
- 2. Size #2 Parks Branch demand plus the value of the Manitoba Open Market = \$325,000 + \$28,405 = \$353,405 or \$350,000 per year rounded off.
- 3. Size #3 Parks Branch demand plus the value of the Prairie Region Open Market = \$325,000 + \$105,792 = \$430,792 per year or \$430,000 rounded off.

III. Other Possible Sources of Demand

A lack of available data has prevented a thorough investigation of other potential sources of demand. The sources discussed below indicate potential demand for goods that could be produced in a park equipment manufacturing plant. Further evaluation of these and any other potential sources of demand would require considerable time and effort which is warranted.

The importance of developing additional markets cannot be overstated. As can be seen above, the major component of each of three alternative market sizes is \$325,000 annual demand for Parks Branch, primarily for park expansion. As was noted on page 28, Parks Branch will have this value of demand for the years 1977-1982 only. In 1983, the annual value of demand for each of the alternative plant sizes will drop by \$300,000 unless alternative markets have been developed by this time.

This loss of \$300,000 annual value of demand would have severe implications for the size of plant required, number of trainees and employees required and the optimal plant location. The remainder of the analysis of this study has been based on the assumption that the necessary alternative markets will be developed.

a) Government of Manitoba

- a.1.) The Department of Mines, Resources and Environmental Management
 - Mr. Cawley, Deputy Minister of this Department indicates that some potential demand especially for such things as equipment needed in wildlife refuges exists. 13

a.2.) Office Furniture

- Although office furniture could be a high demand source, a number of production problems are apparent. These problems include:
 - fluctuating design
 - while the first production order is relatively inexpensive, successive orders tend to become increasingly expensive.
 - stocking of replacement parts is very expensive.
 - delivery of finished goods often takes a long time.

Despite these problems, a number of factors make the production of office furniture attractive. These include:

- possibility of available expertise (at the Louis Riel Manufacturing and the Selkirk Manpower Corps Training Plant)
- furniture production is labour intensive
- office furniture could possibly be produced for the open market

¹³ Personal contact with Mr. Cawley, Deputy Minister of the Department of Mines, Resources and Environmental Management.

¹⁴ These problems were stated by Lee Finch of the Department of Public Works.

b) Federal Government

- b.1.) Parks Canada Angus MacLean of Riding Mountain National Park suggests that there may be some potential demand for park equipment in the national parks of Manitoba. Expansion of national parks in Manitoba may be an additional source of demand.
- b.2.) Office Furniture This source may have high potential especially if those production problems discussed above could be resolved.

c) City of Winnipeg

The City of Winnipeg may have demand both for office furniture and park equipment.

d) Pine, Poplar and Diamond Willow Furniture

According to Fred Moore of the Manitoba Trading Corporation, there appears to be a high demand for furniture of a rustic style made from these woods.

e) Local and Regional Business Needs

There may be some demand from regional and local business needs for goods such as wooden crating and boxes.

CHAPTER FOUR SIZE AND COSTS ANALYSIS

A. SIZE AND COSTS ANALYSIS OBJECTIVE

The objective of the size and cost analysis was to:

- 1. determine the size of plant required to produce for the three alternative market sizes
- 2. determine the costs involved with each of the three alternative plant sizes
- 3. determine the amount of any subsidy that would be required to operate each of the three plant sizes.

B. DESCRIPTION OF METHOD USED

The steps taken during the size and cost analysis were:

- 1. determine the number of trainees and employees required for each of the three alternative sizes--based on the value of production per trainee and Parks Branch employee in the Selkirk plant for the 1974/75 fiscal year and the expected trainee and employee rates of turnover.
- 2. determine the number of other personnel and total personnel costs required for each of the three alternative sizes--based on estimates made by Otto Gebhardt, Selkirk plant supervisor and Wayne Blackburn, Interlake Manpower Corps manager
- 3. determine the capital costs for land, building, and equipment for each of the three alternative sizes-based on estimates made by David Kalinovich, Parks Engineer for Parks Branch
- 4. determine annual operating costs for each of the three sizes--based on estimates made by Otto Gebhardt and Wayne Blackburn
- 5. determine the annual subsidy required for each of the three sizes--based on the difference between total annual costs and total annual sales. (These total annual costs do not include any capital costs.)

C. SUMMARY OF FINDINGS

1.	•	Size

TOTAL

Annual Subsidy
Plant Size

Annual Subsidy

	a) Staff Plan	t Size	#1 #2	#3
	Trainees Employee Instruct Clerical Counsell Supervis	es tors L Staff lors	9 9 26 29 2 2 2 2 1 1 1 1	11 36 2 3 1
	TOTAL		41 44	54
	b) Land, Buildings	and Equipment	t	
	Plant Si	ize	#1 #2	#3
	Acres of Land Square feet of Cost of equipme	buildings 19	3 ,000 21,00 ,000 \$380,00	3 0 25,000 0 \$460,000
2.	Costs			
	Plant Size	#1	#2	#3
	Capital Annual Personnel Annual Operating Raw Materials ¹ Total Annual	\$927,500 325,480 30,725 325,000 681,205	\$1,017,200 377,440 31,500 350,000 758,940	\$1,217,500 455,660 35,150 430,000 920,810
3.	Annual Sales			
	Plant Size	#1	#2	#3
	To Parks Branch Open Market	\$325,000 0	\$325,000 100,000	\$325,000 420,000

\$326,205

#1

\$325,000

\$425,000

#2

\$333,940

\$745,000

#3

\$175,810

 $^{^{1}\}mathrm{The}$ cost of raw materials is equal to the rounded off wholesale value of demand as determined in Chapter Two.

D. LIMITATIONS OF THE ANALYSIS

1. Business and Property Tax Not Included

The absence of business and property taxes from the cost analysis means that total annual costs and annual subsidies are understated.

2. Locational Cost Differences Not Reflected

The objective of this section was to indicate what costs and subsidies would be involved with each of the three alternative plant sizes rather than to compare costs between locations. Significant cost comparisons are made in Chapter Four, the location analysis section of this study.

3. Actual Employee and Trainee Turnover Rates May Vary

Employee and trainee turnover rates were based on manufacturing plants that are similar yet not identical to that proposed.

Differences may occur due to peculiarities of the proposed plant as well as such things as a rural location. If these differences do in fact occur, there will in turn be an effect on the number of trainees and employees required for each alternative plant size.

E. DETAILED FINDINGS

Number of Trainees and Employees Required

In attempting to determine the number of employees and trainees required each year, answers to the following questions were sought:

- how many employees are required to produce the stated levels of demand
- once the number of required employees has been determined, what rate of turnover can be expected and how many employees will leave each year

- how many trainees will have to be trained the year before (assuming a twelve month training period) to fill the gap left by employee loss each year
- how many trainees once trained will go on for additional training or education rather than become plant employees, i.e. what is the expected trainee turnover rate.

The steps taken in attempting to answer these questions include:

- 1. determining the levels of annual production per employee and trainee in the Selkirk plant
- 2. estimating the expected employee turnover rate on the basis of the employee turnover rate of a similar manufacturing plant
- 3. estimating the expected trainee turnover rate on the basis of those who go on for additional training or education from the Selkirk plant.
- 4. determining through trial and error the combination of employees and trainees required each year to produce the stated levels of demand.²
 - A. Value of Production Per Full-Time Employee
 And Full-Time Trainee At The Selkirk
 Plant For The 1974/75 Fiscal Year³
- A.1. Average Number of Full-Time Employees = 17
- A.2. Average Number of Full-Time Trainees = 25
- A.3. Employee Equivalent of Trainee Production (trainees are involved in production for 65% of their training period with the remaining 35% spent on classroom instruction = 25 x .65 = 16
- A.4. Total Full-Time Employee Equivalent = 17 + 16 = 33 1 = 32 (One trainee was involved in clerical duties and not production.)
- A.5. Lost Production Time (for such things as replacing trainees and employees) = 6%

²It should be noted that trainee and employee rates of absenteeism have been assumed to be zero.

³Estimations of the value of production per full-time employee and full-time trainee were made with the assistance of David Kalinovich of Parks Branch and Otto Gebhardt, Supervisor of the Selkirk plant.

- A.6. Total Full-Time Employee Equivalent Minus Lost Time = $32 (32 \times 6\%) = 30$
- A.7. Approximate Wholesale Value of 1974/75 Production = \$ 300,000
- A.8. Annual Value of Production per Employee or Employee Equivalent = $$300,000 30 = $10,000^4$
- A.9. Annual Value of Production Per Trainee = $$10,000 \times .65 = $6,500$

B. Expected Trainee and Employee Rates of Turnover

B.1. Employee Rate of Turnover - The employee turnover rate was estimated as being similar to that of a similar manufacturing plant. According to Erica Witt of A.A. De Fehrs Furniture Manufacturing, approximately 50 of their 200 employees leave each year. This becomes a 50 - 200 x 100 = 25% employee

This annual value of production per employee is based on what Parks Branch refers to as wholesale value of production. Wholesale value as defined by Parks Branch is equal to the cost of raw materials plus their delivery to plant site. Another concept of wholesale value is the manufacturer's selling price. Manufacturer's selling price is based on all costs of production including an allowance for profit, amortized capital and taxes. If the value of production in the Selkirk plant for 1974/75 was calculated in terms of manufacturer's selling price, the annual value of production per employee would appear considerably higher.

 $^{^5}$ This apparently high rate of employee turnover was verified by Glen Suppes, Economist for Canada Manpower. According to Mr. Suppes, the employee turnover rate in the furniture industry is high and 25% appears to be a realistic rate.

- turnover rate and is the rate used for the plant under consideration.
- B.2. Trainee Rate of Turnover It is hoped that by locating the proposed plant at or near the clientele's home community, the trainee turnover rate will be considerably lower than that of the Selkirk plant (see footnote 3). If this does occur, then the major factor affecting trainee turnover should be that of those trainees leaving to go on for additional training or education. The trainee turnover rate has then been estimated by examining the number of trainees who go on for additional training or education out of the total number of trainees who complete training at the Selkirk plant. From June 1969 to March 1975, a total of 25 trainees went on for additional training or education out of 122 who completed training. This results in a 25 122 x 100 = 20% rate of trainee turnover and is the rate used for the plant under consideration.

The employee turnover rate of the Selkirk plant was not used for the following reason. Employees and trainees of the Selkirk plant are brought in from locations which are considerably distant from Selkirk. It is reported that many employees and trainees leave their jobs at the Selkirk plant out of desire to return to their home communities. As the proposed plant would be located at or near the employees and trainees home community, it can be expected that employee and trainee turnover out of desire to return to their home communities would be eliminated or at least reduced. Hence, the Selkirk rate of employee turnover does not accurately apply to the proposed plant.

It is very interesting to note that the annual employee turnover rate for A.A. De Fehrs Furniture Manufacturing is essentially identical to that of the Louis Riel Manufacturing in St. Laurent. According to Jim Bruce, the Louis Riel Manufacturing loses approximately two of their eight full-time employees each year. This is a $2-8 \times 100=25\%$ annual employee turnover rate.

TABLE 1

ANNUAL PRODUCTION STAFF

Plant Size	\$320,000 - 325,000 #1	\$350,000 #2	\$430,000 #3
Total Production Units Needed*	320,000 ÷ 10,000 = 32	350,000 ÷ 10,000 = 35	430,000 ÷ 10,000 = 43
Employees Required** Trainees Required	26 9	29 9	36 11
Annual Employee Loss*** Annual Employee Carry Over	26 x .25 = 7 26 - 7 = 19	29 x .25 = 7 29 - 7 = 22	36 x .25 = 9 36 - 9 = 25
Annual Trainee Loss**** Annual New Employees As Former Trainees	9 x ,2 = 2 9 - 2 = 7	9 x .2 = 2 9 - 2 = 7	11 x .2 = 2 11 - 2 = 9
PRODUCTION STAFF EACH YEAR:			
Employee Carry Over	19	22	27
New Employees	7	. 7	. 9
Current Trainees	9	. 9	. 11
Current Trainee Production Units****	$9 \times .65 = 6$	9 x .65 = 6	11 x ,65 = 7
Total Annual Production Units	19 + 7 + 6 = 32	22 + 7 + 6 = 35	27 + 9 + 7 = 43
TOTAL ANNUAL PRODUCTION	32 x 10,000 = \$320,000	35 x 10,000 = \$350,000	43 x 10,000 \$430,000

Annual value of production per employee = \$10,000



^{**}Annual employees and trainees required was determined by trial and error.

^{***}Annual employee rate of turnover = 25%

^{****}Annual trainee rate of turnover = 20%

^{*****}Annual value of production per trainee = 65% of that of an employee

TABLE 2

TOTAL PERSONNEL REQUIRED AND THEIR COSTS*

Plant Size	\$325,000	\$350,000	\$430,000
	#1	#2	#3
Trainees Number Required Hourly Rate/Trainee TOTAL Annual Cost	9	9	11
	\$3.00	\$3.00	\$3.00
	\$ 56,160	\$ 56,160	\$ 68,640
Employees Number Required Hourly Rate/Employee TOTAL Annual Cost	26	29	36
	\$4.00	\$4.00	\$4.00
	\$216,320	\$241,280	\$299,520
Instructors Number Required Rate/Instructor TOTAL Annual Cost	2	2	2
	\$ 15,000	\$ 15,000	\$ 15,000
	\$ 30,000	\$ 30,000	\$ 30,000
Clerical Staff Number Required Average Rate/Clerk TOTAL Annual Cost	2 \$ 7,500 \$ 15,000	2 \$ 7,500 \$ 15,000	3 \$ 7,500 \$ 22,500
Counsellor Annual Salary	\$ 15,000	\$ 15,000	\$ 15,000
Supervisor Annual Salary	\$ 20,000	\$ 20,000	\$ 20,000
Total Annual Personnel Costs Trainees Employees Instructors Clerical Staff Counsellor Supervisor	\$ 56,160	\$ 56,160	\$ 68,640
	\$216,320	\$241,280	\$299,520
	\$ 30,000	\$ 30,000	\$ 30,000
	\$ 15,000	\$ 15,000	\$ 22,500
	\$ 15,000	\$ 15,000	\$ 15,000
	\$ 20,000	\$ 20,000	\$ 20,000
TOTAL	\$352,480	\$377,440	\$455,660

*Total personnel required and their costs were estimated by Wayne Blackburn, Manager of Interlake Manpower Corps and Otto Gebhardt, Supervisor of Selkirk plant.

T A B L E 3

ANNUAL OPERATING COSTS AND TOTAL ANNUAL COSTS*

Plant Size	\$325,000	\$350,000	\$430,000
	#1	#2	#3
Annual Operating Costs Utilities and Maintenance Supplies Other Than Product Materials Employer's Contributions TOTAL	\$ 16,000	\$ 16,000	\$ 16,000
	\$ 4,000	\$ 4,500	\$ 5,000
	\$ 10,725	\$ 11,550	\$ 14,150
	\$ 30,725	\$ 31,500	\$ 35,150
Total Annual Costs Personnel Operating Raw Materials	\$325,480	\$377,440	\$455,660
	\$30,725	\$ 31,500	\$ 35,150
	\$325,000	\$350,000	\$430,000
	\$681,205	\$758,940	\$920,810

^{*}Annual operating costs were estimated by Wayne Blackburn, Manager of Interlake Manpower Corps and Otto Gebhardt, Supervisor of Selkirk plant. Total annual costs do not include business or property taxes.

TABLE 4
CAPITAL COSTS*

Plant Size	\$325,000	\$ 350,000	\$ 430,000
	#1	#2	#3
Land Acres Needed Cost/Acre TOTAL Cost	3 \$ 2,500 \$ 7,500	3 \$ 2,500 \$ 7,500	3 \$ 2,500 \$ 7,500
Buildings Square Feet Needed Cost/Square Foot TOTAL Cost	19,000	21,000	25,000
	\$ 30	\$ 30	\$ 30
	\$570,000	\$ 630,000	\$ 750,000
Equipment Production Equipment Office Equipment TOTAL Cost	\$300,000	\$ 325,000	\$ 395,00
	\$ 50,000	\$ 55,000	\$ 65,00
	\$350,000	\$ 380,000	\$ 460,00
Total Capital Costs Land Buildings Equipment TOTAL	\$ 7,500	\$ 7,500	\$ 7,50
	\$570,000	\$ 630,000	\$ 750,00
	\$350,000	\$ 380,000	\$ 460,00
	\$927,500	\$1,017,500	\$1,217,50

^{*}Capital costs were estimated by David Kalinovich, Parks Engineer for Parks Branch.

TABLE 5
FFASIBLE PROFIT AND ACTUAL SUBSIDY

Plant Size	\$ 325,000	\$ 350,000	\$ 430,000
	#1	#2	#3
Feasible Profit Total Annual Costs Wholesale Value of Production* Value of Production at Manufacturer's Selling Price** Feasible Profit***	\$ 681,205	\$ 758,940	\$ 920,810
	\$ 325,000	\$ 350,000	\$ 430,000
	\$1,300,000	\$1,400,000	\$1,720,000
	\$ 618,795	\$ 641,060	\$ 799,190
Actual Subsidy Sales at Wholesale **** Sales at Manufacturer's Selling Price **** Total Sales Annual Subsidy or Loss *****	\$ 325,000	\$ 325,000	\$ 325,000
	\$ 0	\$ 100,000	\$ 420,000
	\$ 325,000	\$ 425,000	\$ 745,000
	\$ 356,205	\$ 333,940	\$ 175,810

^{*}Wholesale value as has been defined in Chapter Three, refers to the cost of raw materials and their delivery to plant site.

^{**}Manufacturer's selling price as has been defined in Chapter Three refers to all costs of production and is determined by multiplying the above wholesale value by four. The manufacturer's selling price would include a profit margin as well as an allowance for such costs as depreciation, amortized capital, and taxes.

^{***}This feasible profit may not accurately account for capital costs and depreciation. Although the manufacturer's selling price does include these costs, it may be higher or lower than the amount actually required. In the same way, taxes may not be accurately accounted for. Feasible Profit = Value of Production at Manufacturer's Selling Price Minus Total Annual Costs.

^{****}Sales at Wholesale are sales to Parks Branch.

^{*****}Sales at Manufacturer's Selling Price are sales of wooden lawn and garden furniture on the open market of Manitoba and the Prairie Region.

^{*******}Annual Subsidy or Loss = Total Sales Minus Total Annual Costs. Total Annual Costs do not include Capital Costs.

CHAPTER FIVE

LOCATION ANALYSIS

A. LOCATION ANALYSIS OBJECTIVE

The objective of the location analysis was to:

- 1. Provide information that would be useful for determining the optimum location for the plant under consideration.
- 2. Determine positive and negative location features of each possible location.
- 3. Determine positive and negative location features of specified location options.

B. DESCRIPTION OF METHOD USED

Steps taken during the location analysis include:

- 1. Collection of data for the following location criteria: 1
- (a) NEED refers to the size of population available for training and employment. Need also refers to the availability of other government programs which have objectives similar to the proposed plant. Column 1 to 8 on the Location Criteria Summary table pertain to Need.
- (b) AVAILABILITY OF PLANT SUPERVISOR refers to the desire of finding a supervisor for the proposed plant from the local area of the plant's location. Column 9 of the Location Criteria Summary table pertains to this criterion.

¹These location criteria were specified by David Kalinovich of Parks Branch and Ernie Ens of the Department of Agriculture.

- (c) LOCAL RECEPTIVITY TO THE PROJECT refers to the desire of locating the proposed plant in a location where it is wanted and where there is little opposition to it. As noted in Column 10 of the Location Criteria Summary table, this criterion will be determined by presenting the project to concerned community members of the selected location if and when the project is approved.
- (d) POPULATION STABILITY refers to identifying those communities whose native populations have remained stable over time. As noted in Column 11 of the Location Criteria Summary table, there was insufficient data available to make any assessment of the native population stability for any location.
- (e) INTEGRATIVE CAPACITY OF RECEIVING COMMUNITY refers to the identification of those communities whose characteristics would enable them to absorb a native project more readily than other communities. As noted in Column 12 of the Location Criteria Summary table, there was insufficient data available to make any assessment of this criterion.
- (f) LOCATION CONSISTENCY WITH EXISTING FLOW OF PEOPLE (TRADE PATTERNS) refers to the desire that the plant location be consistent with the existing flow of people from smaller centers to larger centers for purposes such as school, shopping and recreation. Column 13 of the Location Criteria Summary table pertains to this criterion.
- (g) AVAILABILITY OF SOCIAL SERVICES refers to the desire of locating the proposed plant at or near a center which has services such as those provided by the Department of Health and Social Development. Column 14 of the Location Criteria Summary table pertains to the criterion.

- (h) AVAILABILITY OF FACILITIES THAT COULD BE USED FOR THE PLANT refers to the desire of locating the proposed plant in a center that has a vacant building that could be used for the proposed plant. Column 15 of the Location Criteria Summary table pertains to this criterion.
- (i) AVAILABILITY OF NECESSARY INFRASTRUCTURE AND ITS COSTS refers to the availability of a year round accessible road, railroad, three phase hydro power, water and sewer systems and the cost of water and sewer. Columns 16-22 of the Location Criteria Summary table pertain to this criterion.
- (j) TRANSPORTATION COSTS refers to the costs of truck transfer and railway transfer from each location to sources of raw materials and markets. Column 23-42 of the Location Criteria Summary table pertain to this criterion.
- (k) AVAILABILITY OF HOUSING refers to the supply of housing at each location. As noted in Column 43 of the Location Criteria Summary table, the supply of housing is very low at all locations.

Data for the location criteria was collected for the following locations: $\!\!\!^2$

Ebb and Flow Indian Reserve Valley River Indian Reserve Waywayseecappo Indian Reserve Bacon Ridge Ebb and Flow Combined Binscarth Birch River Cayer

²These locations were approved by David Kalinovich of Parks Branch and Ernie Ens of the Department of Agriculture.

Cowan
Dauphin
Eddystone
Kinosota
Mafeking
Roblin
Russell
San Clara and Boggy Creek Combined
Swan River
Winnipegosis

Data for location criteria (a), (b), (g), (h), and (k) was collected through personal contact with people who are familiar with the Parklands region. Data for the remaining criteria (and part of (a) was collected and derived from secondary data sources.

- Recording of location criteria data on location criteria summary table.
- 3. Determining the positive and negative locational features of each possible location from the location criteria summary table.
- 4. Determining positive and negative features of location options.

C. SUMMARY OF FINDINGS

1. Positive and Negative Locational Features of Each Location

Ebb and Flow Indian Reserve:

- (a) positive features
 - 1. above average population aged 15-45 available for training

³See Page 65 of this Chapter.

- 2. above average number of annual new entrants to the labour force
- 3. no similar government projects
- 4. an available plant supervisor
- 5. has year round accessible road
- 6. has three phase hydro power
- 7. has below average truck transport costs
- (b) negative features
 - 1. not consistent with existing flow of people
 - 2. no social services available
 - 3. no plant facilities available
 - 4. no water system

Valley River Indian Reserve:

- (a) positive features
 - 1. no similar government project
 - has year round accessible road
- (b) negative features
 - less than average population aged 15-45 available for training and employment
 - 2. less than average number of annual new entrants to the labour force
 - 3. no plant supervisor available
 - 4. not consistent with existing flow of people
 - 5. no social services available
 - 6. no plant facilities available
 - 7. has above average truck transportation costs

- 8. no three phase hydro power available
- 9. no water system

Waywayseecappo Indian Reserve:

(a) positive features

- 1. above average population aged 15-45 available for training and employment
- 2. above average number of annual new entrants to the labour force
- 3. no similar government projects
- 4. has year round accessible road
- 5. has below average truck transport costs

(b) negative features

- 1. no plant supervisor available
- 2. not consistent with existing flow of people
- 3. no social services
- 4. no plant facilities
- 5. no three phase hydro power
- 6. no water system

Bacon Ridge Ebb and Flow Combined:

(a) positive features

- 1. above average population aged 15-45 available for training and employment
- 2. above average number of annual new entrants to the labour force
- 3. no similar government projects
- 4. an available plant supervisor
- 5. has year round accessible road
- 6. has three phase hydro power
- 7. has below average truck transport costs

(b) negative features

- 1. not consistent with existing flow of people
- 2. no social services
- 3. no plant facilities
- 4. no water system

Binscarth:

- (a) positive features
 - 1. no similar government project
 - 2. has year round accessible road
 - 3. has three phase hydro power
 - 4. has developed water system
 - 5. has below average truck transport costs

(b) negative features

- 1. below average population aged 15-45 available for training and employment
- 2. below average number of annual new entrants to the labour force
- 3. no plant supervisor available
- 4. not consistent with existing flow of people
- 5. no social services
- 6. no plant facilities

Birch River:

- (a) positive features
 - 1. no similar government projects
 - 2. has year round accessible road
 - 3. has three phase hydro power
 - 4. will have a water system by 1976

(b) negative features

1. below average population aged 15-45 available for training and employment

- 2. below average number of annual new entrants to the labour force
- 3. no plant supervisor available
- 4. not consistent with existing flow of people
- 5. no social services
- 6. no plant facilities
- 7. no water system
- 8. has above average truck transport costs

Cayer:

- (a) positive features
 - 1. no similar government projects
 - 2. below average truck transport costs
- (b) negative features
 - below average population aged 15-45 available for training and employment
 - 2. below average number of annual new entrants to the labour force
 - 3. no plant supervisor available
 - 4. not consistent with existing flow of people
 - 5. no social services
 - 6. no plant facilities
 - 7. no water system
 - 8. no year round accessible road
 - 9. no three phase hydro power

Cowan:

- (a) positive features
 - 1. no similar government project
 - 2. year round accessible road
- (b) negative features
 - 1. below average population aged 15-45 available for training and employment

- 2. below average number of annual new entrants to the labour force
- 3. no plant supervisor
- 4. not consistent with existing flow of people
- 5. no social services
- 6. no plant facilities
- 7. no three phase hydro power
- 8. no water system
- 9. above average truck transport costs

Dauphin:

(a) positive features

- 1. above average population aged 15-45 available for training and employment
- 2. above average number of annual new entrants to the labour force
- 3. no similar government project
- 4. plant supervisor available
- 5. consistent with existing flow of people
- 6. social services available
- 7. plant facilities available
- 8. year round accessible road
- 9. three phase hydro power
- 10. water system
- 11. below average truck transport costs
- 12. lowest water costs

(b) negative features

None (despite the absence of negative features, it will be noted later that Dauphin does not appear to be the most suitable location for Plant Size #3).

Eddystone:

- (a) positive features
 - 1. no similar government projects
 - 2. year round accessible road
 - 3. three phase hydro power
 - 4. below average truck transport costs
- (b) negative features
 - 1. below average population aged 15-45 available for training and employment
 - 2. below average number of annual new entrants to the labour force
 - 3. no plant supervisor
 - 4. not consistent with existing flow of people
 - 5. no social services
 - 6. no plant facilities
 - 7. no water system

Kinosota:

- (a) positive features
 - 1. no similar government projects
 - 2. year round accessible road
 - 3. lowest truck transport costs
- (b) negative features
 - 1. below average population aged 15-45 available for training and employment
 - 2. below average number of annual new entrants to the labour force
 - 3. no plant supervisor
 - 4. not consistent with existing flow of people
 - 5. no social services
 - 6. no plant facilities
 - 7. no three phase hydro power
 - 8. no water system

Mafeking:

- (a) positive features
 - 1. no similar government projects
 - 2. year round accessible road
 - 3. three phase hydro power
- (b) negative features
 - 1. below average population aged 15-45 available for training and employment
 - 2. below average number of annual new entrants to the labour force
 - 3. no plant supervisor
 - 4. not consistent with existing flow of people
 - 5. no social services
 - 6. no plant facilities
 - 7. no water system
 - 8. highest truck transport costs

Roblin:

- (a) positive features
 - 1. no similar government projects
 - 2. consistent with existing flow of people
 - plant facilities
 - 4. year round accessible road
 - 5. three phase hydro power
 - 6. water system
 - 7. below average water costs
 - 8. is a source location of raw materials
- (b) negative features
 - 1. below average population aged 15-45 available for training and employment
 - 2. below average number of annual new entrants to the labour force
 - 3. no plant supervisor
 - 4. no social services

5. above average truck transportation costs (this excludes the near zero transportation costs associated with transporting raw materials produced in Roblin to a plant site located in Roblin)

Russell:

(a) positive features

- 1. no similar government projects
- 2. consistent with existing flow of people
- 3. year round accessible road
- 4. three phase hydro power
- 5. water system
- 6. below average truck transport costs

(b) negative features

- lowest population aged 15-45 available for training and employment
- 2. lowest number of annual new entrants to the labour force
- 3. no plant supervisor
- 4. no social services
- 5. no plant facilities
- 6. above average water costs

San Clara and Boggy Creek Combined:

(a) positive features

- 1. largest population aged 15-45 available for training and employment
- 2. largest number of annual new entrants to the labour force
- 3. no similar government projects
- 4. plant supervisor
- 5. year round accessible road
- 6. three phase hydro power

(b) negative features

1. not consistent with existing flow of people

- 2. no social services
- no plant facilities
- 4. no water system
- 5. above average truck transportation costs

Swan River:

- (a) positive features
 - 1. plant supervisor
 - 2. consistent with existing flow of people
 - 3. social services
 - 4. plant facilities
 - 5. year round accessible road
 - 6. three phase hydro power
 - 7. water system
- (b) negative features
 - below average population aged 15-45 available for training and employment
 - 2. below average number of annual new entrants to the labour force
 - 3. similar government project
 - 4. above average truck transport costs
 - 5. above average water costs

Winnipegosis:

- (a) positive features
 - 1. no similar government projects
 - 2. consistent with existing flow of people
 - 3. year round accessible road
 - 4. three phase hydro power
 - 5. water system
- (b) negative features
 - 1. below average population aged 15-45 available for training and employment

- 2. below average number of annual new entrants to the labour force
- 3. no plant supervisor
- 4. no social services
- 5. no plant facilities
- 6. above average truck transport costs
- 7. highest water costs

2. Positive and Negative Locational Features of Location Options

As plant size #3 requires the lowest annual subsidy and thus appears to be the most economical choice of plant size, location options have been determined for plant size #3. It was found that few of the possible locations have a sufficient population available for training and employment to meet the requirements of plant size #3. This necessitated the grouping of each possible location on the basis of a 30 mile commuting distance. The plant location identified for each group is that location having the greatest number of positive features for plant site. This grouping procedure resulted in the following location options:

A. PLANT LOCATION: EBB AND FLOW INDIAN RESERVE

SUPPORT GROUP: CAYER, EDDYSTONE, BACON RIDGE, EBB AND FLOW INDIAN RESERVE, KINOSOTA

This group has the following outstanding (features not held by other groups) positive features for plant location: second largest population available for training and employment (268); second largest number of annual new entrants to the labour force (20); and the lowest transportation costs. Outstanding negative features discouraging plant location for this group include: the Ebb and Flow Indian Reserve is not consistent with the flow of people to other towns for such

purposes as shopping and recreation; an office of the Department of
Health and Social Development is not located in the area; this location
does not have vacant facilities that could be used for the plant; and
this location does not have a water system.

B. PLANT LOCATION: ROBLIN

SUPPORT GROUP: VALLEY RIVER INDIAN RESERVE, ROBLIN, SAN CLARA, BOGGY CREEK

Outstanding positive features of this group include: largest population available for training and employment (456); largest number of annual new entrants to the labour force (32); lowest water costs; and Roblin is a major source of raw materials.

Outstanding negative features attributable to this group include: third highest transportation costs (see footnote); and Roblin does not have an office of the Department of Health and Social Development.⁴

C. PLANT LOCATION: RUSSELL

SUPPORT GROUP: BINSCARTH, RUSSELL, WAYWAYSEECAPPO INDIAN RESERVE

This group has the following outstanding positive features; third largest population available for training and employment (202); third largest annual new entrants to the labour force (15); and the second lowest transportation costs.

⁴It should be noted that transportation costs for comparison purposes were based on transporting goods to and from Winnipeg. As Roblin is a major source of raw materials, total transportation costs would be considerably reduced if the plant was located in Roblin.

Outstanding negative features belonging to this group include: this location does not have vacant facilities that could be used for the plant; there is no local plant supervisor in the area; second highest water costs; and this location does not have an office of the Department of Health and Social Development.

D. PLANT LOCATION: SWAN RIVER

SUPPORT GROUP: COWAN, SWAN RIVER, BIRCH RIVER

This group has only one outstanding positive feature: an office of the Department of Health and Social Development.

This group has the highest number of outstanding negative features which include: highest transportation costs; highest water costs; Swan River has a government project which is similar in nature to the proposed park equipment plant; there are no vacant facilities that could be used for the plant; lowest population available for training and employment (113); and the lowest number of annual new entrants to the labour force (8) which does not meet the annual employee turnover rate (11) of plant size #3.

The above grouping process resulted in the exclusion of three locations which are beyond a 30 mile commuting distance of any group. These locations are Dauphin, Winnipegosis and Mafeking.

Although Dauphin meets nearly all of the location criteria, the population available for training and employment and the annual number of new entrants to the labour force do not meet the requirements

of plant size #3.⁵ Dauphin would be a good location if a smaller size of plant was selected or if native people were moved to Dauphin and housed in a manner similar to the Selkirk plant.

Winnipegosis and Mafeking have relatively small native populations and do not have any outstanding positive features for plant location. It may be possible to move the population available for training and employment from Mafeking and Winnipegosis to a larger center such as Swan River or Dauphin and provide housing for them in a manner similar to the Selkirk plant. It may also be possible for people living in Mafeking to commute to Swan River although this would involve travelling a one way distance of 43 miles.

D. LIMITATIONS OF THE ANALYSIS

1. Lack of Available Data

The proposed project in this study would be developed primarily for disadvantaged people of native ancestry. While non native disadvantaged people would not be excluded from the project, it is expected that the majority of trainees and employees will be of native ancestry. For this reason, locational data has been collected for native people only.

⁵It should be noted that for many of the communities (including Dauphin) considered for plant location, the only available data source recording the number of native people living in these communities was the 1971 census. As discussed on page 114 of Appendix II, there are several factors which limit the accuracy of this census data. Any inaccuracies occuring in the location analysis as a result of using census data, will be greatest for Dauphin as Dauphin has the largest total population of all communities considered.

There is a general shortage of data on native people in Manitoba. Although a considerable amount of data exists for natives of northern communities (in areas under the jurisdiction of the Department of Northern Affairs) and for natives living on reserves (which are under the jurisdiction of the Department of Indian Affairs and Northern Development), there is an acute shortage of data for native people living in southern Manitoba off reserves.

Information that does exist for native people of southern Manitoba often appears to be inconsistent and should be interpreted with great care. To some degree the cause of this apparent inconsistency lies in different definitions used by the data sources. An additional cause for this apparent inconsistency lies in the frequent migrations of native people. These frequent migrations make the time of enumeration for data collection significant. Data collected at different times could then appear inconsistent. For an elaboration of these data consistency problems, see page 113 of Appendix II.

The lack of available and consistent data prevented a thorough and accurate analysis of each location. Although data was generally available for native people on reserves, data for native people living off reserves and in towns had to be derived through the use of several assumptions.

2. The Accuracy of Assumptions

The process of deriving data for native people living in towns in the Parkland region involves the use of several assumptions. These assumptions are usually of two types: assume that characteristics of native people living on reserves are similar for native people living in towns; assume that trends existing for certain years hold constant

over certain time periods.

While the accuracy of data derived from such assumptions is questionable, the lack of comparable data prevents accuracy checks. The data was, however, examined and modified by the following people who are familiar with the Parkland region:

Gordon Walker, Department of Health and Social Development in Dauphin

Bernie Novakowski, Canada Manpower Centre Manager at Dauphin Harold Boughton, Agricultural Representative in Roblin Gus Arnal, Farm Diversification Specialist in Ste Rose du Lac Robert Long, General Manager of Kee-Tan-O-Ke-Min Enterprises in Swan River

Douglas Gourlay, Agricultural Representative in Swan River Wayne Digby, Rural Development Counsellor in Russell David Hill, Agricultural Representative in Dauphin Neville Sokol, Rural Development Counsellor in Ste Rose du Lac Valerie Matthews, Rural Development Counsellor in Swan River.

As the data derived through the use of the above assumptions is of uncertain accuracy, it should be used with extreme caution. The objective of attempting to derive such data was not to provide an accurate population analysis of each location but rather to gain an indication of possible population characteristics of each location on the basis of available data.

 $^{^6\}mathrm{These}$ same people were consulted and provided information for those criteria listed on page 50 of this chapter.

⁷The accuracy of the socio-economic data produced in this chapter has not been checked with the Indian and Metis leaders of the potential plant locations considered. The reason for not doing so at this time is the desire to keep the proposed plant confidential until it has been approved. If and when the proposed plant is approved, this data should definitely be checked for accuracy with the appropriate Indian and Metis leaders.

The data derived for population characteristics of each location is for the year 1971. As it is expected that the proposed plant would commence production in 1977, it is necessary to assume that characteristics apparent in 1971, will remain constant in 1977. As the accuracy of this assumption is very questionable, further analysis or a revision of the analysis of this study at a date near 1977 would be warranted.

TABLE 6 LOCATION CRITERIA SUNPLRY TABLE 6 LOCATION CRITERIA SUNPLRY TABLE 6 LOCATION CRITERIA SUNPLRY LOCATION CRITERIA SUN	4
LOCATION 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	22
Ebb and Flow 1.R. 357 357 129 6 12 111 8 N Y	_
Valley River J. R. 212 212 77, 3 7 67 5 N N N N N N Y Y N N	_
Waywayseecappo 1.R. 479 479 173 8 16 149 11 N N B N N N N Y Y N N N	_
Bacon Ridge Ebb and Flow	
Binscarth 619 140 51 2 5 44 3 N N H N N N N Y Y Y Y	
Cayer 200 140 51 Z 5 44 3 N N H H N N N N N N	
Covan 220 50 18 1 2 15 1 N N B E E N N N N Y Y N N S 26.76 28.55	
Dauphin 8891 335 121 5 11 105 7 N Y 5 M N Y 7 Y Y Y Y Y 26.76 28.55	34.49
Eldystone 115 30 11 1 1 9 1 N N E N N N N N N N N N N N N N N N N	
150 120 43 2 4 37 3 N N N N N N N N N N N N N N N N N	
Nafeking 450 225 82 4 8 70 5 N N S N N S N N Y Y Y N	
Roblin 1753 45 16 1 2 13 1 N N Y N Y Y Y Y S5.07 59.16	72.33
	117.90
Rissell 1526 30 11 1 2	
Boggy Creek 1300 160 54 7 5 A7 3 Y Y Y Y Y Y Y Y Y Y 75,17 80.8:	89.97
Swan River 3572 150 54 2 5 47 3 Y Y N N N Y Y Y 103.73 1415	173.51

<u>, , , , , , , , , , , , , , , , , , , </u>			TRAN	\ { S P C	RTA	TION	cos	T.S.	<u></u>	RUC			<u></u>		\leftarrow	9.7\ E 9	(3,8)			2	
From Child's	; _';	ron Pol	7	7	rom The		to: Pr	om Nin	ipeg (0;\F	os Tior	nson t	o; Fro	n The N	arros t	<u> </u>					Ž.
TABLE 6 (continued)	an to	Si no the	Sto Its		The Hard	SO H:	A III	ST OF THE THE	SEO THE	W Its	ist and the	SS III	No two		' '	Sign In		A description of the state of t	Mad Library Stranger	in the state of th	\
TABLE 6 (continued) (CATION CRITERIA SUNNARY	' 	? / / is .	, s	/ /		1 / si /		* / <u>i</u>		! 8		, , ,	8 1		1 8 1			1 4 6	3/	: \	7
LOCATION	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	61	42	(3.
Ebb and Flow I.R.	7.75	13.20	164.00	7.45	12.60	156.00	13.95	24.80	332.00	8.40	14.40	180.00	1.75	59.50	\$40.00	5.50	8.90	100.00	_		
Valley River 1.R.	5.80	9.50	112.00	4.85	7.70	84.00	11.65	20.50	268.00	11.65	20.50	268.00	9.80	35.80	488.00	8.10	13.80	172.00	-		
Naywayseecappo I.R.	7.45	12,60	156.00	5.80	9.50	112.00	12.65	22.40	296.00	10.05	17.50	224.00	0.80	37.70	516.00	\$.80	9.50	112.00			
Bacon Ridge Ebb and Flow	7.75	13.20	166.00	7.45	12.60	156.00	13.95	24.80	332.00	8.40	14.40	180.00	21.75	39.50	540.00	5.50	8.90	100.00			50.
Binscarth	7,10	12.00	144.00	5.50	8.90	100.00	12.65	22.40	296.00	10.35	18.10	232.00	20.45	37.00		10.05	17:50	224.00		280.00	N. A.
Birch River	6.15	10.20	120.00	7.10	12.00	14.40	7.75	13.20	164.00	14.60	26.00	348.00	15.90	28.50		10.35	-18.11	232.00	·		Α.
Cayer	8.10	13.80	172.00	8.10	13.80	172.00	14.25	25.40	340.00	9.40	16.30	208.00		40.10	\$52.00	5.50	8.90	├	-		È
Conan	5.50	8.90	100.00	7.10	12.00	144.00	9.70	16.90	216.00	12.65	22.40			31.50	428.00	9.05	15.70	1	 	256.00	<u> </u>
Dauphin	6.15	10.20	120.00	5.80	9.50	112.00	12.30	21.80	288.00	10.05	17.50		20.15	36.40	496.00	6.45	10.80	 	┼		LOCATIONS
Eddystone	7.75	13.20	164.00	7.45	12.60	156.00	13.60	24.20	320.00	8.75	15.00	188.00	21.75	39.50	540.00	4.85	7.70	-	┼	-	- 65
Kinosota	8.40	14.40	180.00	8.10	13.80	172.00	14.25	25.40	340.00	8.10	13.80	172.00	22.40	40.70	\$60.00	5.80	9.50		-	-	
Pafeking	6.80	11.40	136.00	7.75	13.20	164.00	7.45	12.00	144.00	15.25	27.30	364.00	15.25	27.30	364.00	11.00	 		4	308.00	,
Roblin	5.80	9.50	112.00	0	0	0	11.00	19.30	252.00	11.65	20.50	268.00	19.15	34.60	472.00	8.40	╂		-	304.00	
Russell	6.80	11.40	136.00	5.15	8.30	92.00	12.30	21.80	288.00	10.70	18.70	 	20.15	36.40	496.00	9.70	-		┵	┼∸	-
San Clara Boggy Creek	4.85	7.70	84.00	4.85	7.70	84.00	10.35	18.11			-}		18.50	33.40	452.00	-			-		0
Swan River	5.80	9.50	112.00	6.45	10.80	128.00	8.75	15.00	 	13.60			-	┼	400.00	┼			1-		-
Winnipegosis	5.80	9.50	112.00			156.00	i	19.90	1	ı		260.00 nild's La	·	<u> </u>	1		1		<u></u>	<u> </u>	

a Columns 23 - 40 represent the cost of shipping three different load weights by truck from Child's Lake, Roblin, The Pas, Minnipeg, Thompson and The Narrows to (or from) each of the locations listed on the left. For example, the cost of shipping 1000 pounds from The Pas to Russell is \$21.80 (Col. 30)

ed Column 41 represents a comparison of the costs of shipping goods from each location listed on the left to (or from) Minnipeg. Average cost for all places listed on left is \$11.04 for a 451 - 500 lb. load. A + (positive) sign indicates costs were above average, a - (minus) sign indicates below

E. DETAILED FINDINGS

DATA RECORDED IN COLUMNS ON THE LOCATION CRITERIA SUMMARY TABLE

Column 1: Total Population 1971

As no single source could provide population figures for all places, three different sources were used: 8

a) Material made available by Allyson Treleaven of the Manitoba Bureau of Statistics. This material was prepared by the Department of Indian Affairs and Northern Development and was used for the following locations:

Ebb and Flow Indian Reserve Valley River Indian Reserve Waywayseecappo Indian Reserve

b) A report entitled "A Review of Selected Indian and Metis Communities in Manitoba" compiled by Richard Humphrey and Maurice Dubreuil in 1971 for the Department of Regional Economic Expansion. This report was based on secondary data as well as interviews with local officials and was used for the following locations: 10

Bacon Ridge and Ebb and How Combined Binscarth Cayer Cowan (includes Briggs Spur) Eddystone Kinosota Mafeking San Clara and Boggy Creek Combined

⁸For a discussion of factors limiting the data accuracy of the data sources used for columns 1 and 2, see Appendix II pages 114-116

For these three reserves, the population figures stated under Column 1: Total population 1971 and Column 2: Total Native Population 1971 include only those Indians who are registered with an Indian band.

¹⁰This report was made available by Bing Allen of the Department of Industry and Commerce.

c) The third source used for total population figures was "Rural Development Corps - Program Proposal Draft #3" a report of a Department of Agriculture Task Force. Data used in this report originated with the 1971 census. This report was used for the following locations:

Birch River Dauphin Roblin Russell Swan River Winnipegosis

Column 2: Total Native Population, 1971

Total native population figures listed in Column 2 came from four sources:

a) Material made available by Allyson Treleaven of the Manitoba Bureau of Statistics. This was the same material as was used for total population in Column 1. This material was used for the following locations.

Ebb and Flow Indian Reserve Valley River Indian Reserve Waywayseecappo Indian Reserve

b) The report entitled "A Review of Selected Indian and Metis Communities in Manitoba". This is the same report as was used in Column 1 and was used in Column 2 for the following locations:

Bacon Ridge and Ebb and Flow Combined
Binscarth (includes a 3 mile radius around the town)
Cayer
Cowan (includes Briggs Spur)
Eddystone
Kinosota
Mafeking
San Clara and Boggy Creek Combined

c) "Rural Development Corps - Program Proposal Draft #3".

This is the same report as was used in Column 1 and was used in Column 2 for the following locations:

Birch River (includes Metis only) 11

d) Material made available by Allyson Treleaven of the Manitoba Bureau of Statistics. This material originated with the 1971 census and was used for the following locations:

Dauphin Roblin Swan River Russell Winnipegosis

Column 3: Native Population Aged 15-45 in 1971 12

Native population aged 15-45 for each location was derived by first determining the average percentage population aged 15-45 of total population for the three Indian reserves - Ebb and Flow, Valley River and Waywayseecappo. This average percentage was then multiplied by the native population of each location to determine the native population aged 15-45 of each location.

The procedure is as follows:

¹¹ The figure stated in Column 2 for Birch River is for the year 1968. As data for 1971 was unavailable, it was necessary to assume that the 1968 figure held constant for 1971.

¹² According to Wayne Blackburn, Manager of the Interlake Manpower Corps, the preferred ages of clientele of the Selkirk plant are 15-45. It was assumed that this age preferrance would hold true for the proposed plant as well. This assumption was approved by Wayne Blackburn.

a) Ebb and Flow Indian Reserve 1969¹³

total population = 371
population aged 15-45 = 138
population aged 15-45 as a percentage of total population=
(138 ÷ 371) x 100 = 37.2%

b) Valley River Indian Reserve 1969

total population = 252 population aged 15-45 = 93 population aged 15-45 as a percentage of total population= (93 ÷ 252) x 100 = 36.9%

c) Waywayseecappo Indian Reserve 1969

total population = 582 population aged 15-45 = 200 population aged 15-45 as a percentage of total population= (200 ÷ 582) x 100 = 34.4%

- d) Average percentage of population aged 15-45 of total population = (37.2 + 36.9 + 34.4) ÷ 3 = 36.2%
- e) Assume 36.2% as a rate of native population aged 15-45 of total native population remains constant for 1971, for all Indian reserves and for native population of all locations considered.
- f) The results from applying the rate 36.2% to the total native population of each location are recorded in Column 3.

Column 4: Native Population Aged 15-45 With Full-Time Employment in 197114

Native population aged 15-45 with full-time employment for each location was derived by first determining the average percentage population aged 15-45 with full-time employment of total population aged 15-64 for the three Indian reserves - Ebb and Flow, Valley River,

¹³Data cited for the Ebb and Flow, Valley River, and Waywayseecappo Indian Reserves for 1969 was taken from community information sheets as provided by Betty Lowicki of the Department of Indian Affairs and Northern Development.

 $^{^{14}\}mathrm{Full}\text{-time}$ employment refers to those people with steady jobs at which they are employed for a full year.

and Waywayseecappo. This average percentage was then multiplied by the native population aged 15-45 of each location to determine the native population aged 15-45 with full-time employment of each location.

The procedure is as follows:

- a) Ebb and Flow Indian Reserve 1969
 - population aged 15-64 = 161 population employed full-time = 8 population employed full-time as a percentage of population aged 15-64 = (8 ÷ 161) x 100 = 5%
- b) Valley River Indian Reserve 1969

population aged 15-64 = 117
population employed full-time = 6
population employed full-time as a percentage of
population aged 15-64 = (6 ÷ 117) x 100 = 5%

c) Waywayseecappo Indian Reserve 1969

population aged 15-64 = 250 population employed full-time = 8 population employed full-time as a percentage of population aged 15-64 = (8 ÷ 250) x 100 = 3.2%

- d) Average percentage population employed full-time of population aged 15-64 = (5 + 5 + 3.2) ÷ 3 = 4.4%
- e) Assume 4.4% as a full-time employment rate for those aged 15-64 is the same for those aged 15-45 and remains constant for 1971, for all Indian reserves, and for native population of all locations considered.
- f) The results from applying the rate 4.4% to the total native population aged 15-45 of each location are recorded in Column 4.

Column 5: Native Population Aged 15-45 - Attending School in 1971

Native population aged 15-45 attending school in 1971 was derived by first determining the average percentage population attending school of native population aged 15-45 for the three Indian

reserves - Ebb and Flow, Valley River, and Waywayseecappo. ¹⁵ This average percentage was multiplied by the native population aged 15-45 of each location to determine the native population aged 15-45 attending school of each location.

The procedure is as follows:

a) Ebb and Flow Indian Reserve 1969

population attending grades 9-12 = 24
population attending adult education = 15
total population attending school = 39
population aged 15-45 = 138
population attending school as a percentage of
population aged 15-45 = (39 ÷ 138) x 100 = 28.3%

b) Valley River Indian Reserve 1969

population attending grades 9-12 = 2
population attending vocational training = 3
total population attending school = 5
population aged 15-45 = 83
population attending school as a percentage of
population aged 15-45 = (5 ÷ 83) x 100 = 6%

c) Waywayseecappo Indian Reserve 1969

population attending grades 9-12 = 14
population attending adult education = 10
population attending vocational training = 15
total population attending school = 39
population aged 15-45 = 200
population attending school as a percentage of
population aged 15-45 = (39 ÷ 200) x 100 = 19.5%

- d) Average percentage population attending school of population aged 15-45 = (28.3 + 6 + 19.5) ÷ 3 = 17.9%
- e) Assume 17.9% as a rate of population aged 15-45 attending school remains constant for 1971, for all Indian reserves, and native populations of all locations considered.

¹⁵ Native population attending school includes those attending grades 9-12, those attending adult education, and those attending vocational training.

f) The results obtained through this procedure were examined by people who are familiar with the Parklands region. 16 Gus Arnal and Neville Sokol of Ste. Rose du Lac and Robert Long of Swan River thought the figures on native population aged 15-45 attending school had been overstated. Robert Long in particular, felt the figures were too high by as much as 50%. Accordingly, the figures on native population aged 15-45 attending school were reduced by 50% and these results recorded in Column 5.

Column 6: Native Population Aged 15-45 Available for Training and Employment in 1971

Native population aged 15-45 available for training and employment was calculated as follows:

- a) the sum of native population aged 15-45 who are employed full-time and those who are attending school in 1971 was calculated for each location.
- b) this sum was then subtracted from the total native population aged 15-45 for each location.
- c) the results of this subtraction were then recorded in Column 6 as the native population aged 15-45 available for training and employment.

The figures stated for native population aged 15-45 available for training and employment would include those people who are underemployed, those who are unemployed and are seeking work, and those who are effectively unemployed but are discouraged from seeking work due to a lack of job opportunities (see Appendix III). These figures would also include some people who are not available for training and employment such as some housewives, some medically disabled and those who are voluntarily idle.

¹⁶See page 65 of this Chapter.

Column 7: Native People Aged 16 in 1971 - A Proxy For Annual New Entrants to the Labour Force

In order to gain an indication of the native annual new entrants to the labour force, the native population aged 16 was derived for each location. ¹⁷ Native population aged 16 was derived by first calculating the average percentage population aged 16 for the three reserves - Ebb and Flow, Valley River and Waywayseecappo. This average percentage was then multiplied by the total native population of each location to determine the native population aged 16, i.e. the native annual new entrants to the labour force for each location.

The procedure is as follows:

a) Ebb and Flow Indian Reserve 1974¹⁸

population aged 16 = 10 total population = 357 population aged 16 as a percentage of total population = (10 ÷ 357) x 100 = 2.8%

b) Valley River Indian Reserve 1974

population aged 16 = 5 total population = 207 population aged 16 as a percentage of total population = $(5 \div 207) \times 100 = 2.4\%$

c) Waywayseecappo Indian Reserve 1974

population aged 16 = 6 total population = 434 population aged 16 as a percentage of total population = $(6 \div 434) \times 100 = 1.4\%$

¹⁷ The use of native people aged 16 as a proxy for annual new entrants to the labour force assumes that most native people leave school and are available for work at the age of 16.

¹⁸Data cited for Ebb and Flow, Valley River, and Waywayseecappo Indian Reserves for 1974 was provided by Betty Nowicki of the Department of Indian Affairs and Northern Development.

- d) Average percentage population aged 16 of total population = (2.8 + 2.4 + 1.4) ÷ 3 = 2.2%
- e) Assume 2.2% as a rate of total population aged 16 was the same in 1971 for all Indian reserves and native populations of all locations considered.
- f) The results from applying the 2.2% rate to the total population of each location are recorded in Column 7.

Column 8: Locations Having Projects Which are Similar in Objectives to the Project Under Consideration

Information concerning locations having similar government projects was obtained through consultations with various people who are familiar with the region. The only location with a similar government project was Swan River where Kee-Tan-O-Ke-Min Enterprises are located.

According to Robert Long, general manager of Kee-Tan-O-Ke-Min Enterprises this project is similar to the proposed plant in that it provides employment (28 on average) and on-the-job training for people of Indian ancestry. However, Kee-Tan-O-Ke-Min Enterprises unlike the proposed plant, does not provide social-industrial life skills training nor classroom instruction. Kee-Tan-O-Ke-Min Enterprises is a federally funded LEAP Program which began in January of 1975, is on-going, and is presently committed for the next three years at least.

Column 9: Local Supervisor Available

Information concerning locations having potential plant supervisors was obtained through consultations with people who are familiar with the Parkland region. People consulted for this information were asked to recommend potential plant supervisors on the basis

 $^{^{19}}$ See page 65 of this Chapter.

of those qualifications called for in the job advertisement for the Selkirk plant supervisor. ²⁰ The following locations were found to have at least one potential plant supervisor: ²¹

Location: Ebb and Flow Indian Reserve

Potential Plant Supervisor: Mr. Houle of the Ebb and Flow

Indian Reserve

Recommended by: Neville Sokol, Rural Development Counsellor of

Ste. Rose du Lac

Location: Dauphin

Potential Plant Supervisor: Mervin Marchinski, of Dauphin Recommended by: Bernie Novakowski, Canada Manpower Centre

Manager of Dauphin

Location: Swan River

Potential Plant Supervisor: Robert Long of Swan River

Recommended by: Wayne Digby, Rural Development Counsellor of

Russell

Location: San Clara or Roblin

Potential Plant Supervisor: Renee Carrier or Ralph La Roche

both of San Clara

Recommended by: Harold Boughton, Agricultural Representative

of Roblin

²⁰The list of qualifications and duties from which people recommended potential plant supervisors included: related experience in training in wood, metal and concrete fabrication; experience and training in instruction; ability to develop and administer production methods to meet specified quality standards; ability to superintend instructors and trainees in a production and training project; ability to adjust and adopt processes to assure trainees will be achieving sound work habits; ability to administer financial accounts, supervise records and handle money; and experience in present day working conditions and worker actions as well as labour codes and union rules. Duties include: to supervise the staff and trainees as well as the production and training program; to assure that production quality, quantity and time schedule meets the requirements of Parks Branch; to assure that the training program meets the objective of the Manpower Corps Program; to order all equipment and supplies and assure that said equipment and supplies are inventoried and kept in good working order.

²¹It is important to note that if the proposed plant does commence production in 1977 (as has been assumed by this study), the people indicated as potential plant supervisors may no longer be available.

Column 10: Local Receptivity to the Project

As indicated on the Location Criteria Summary table, this criterion will be determined through presentation of the project to concerned community people of the selected location if and when the project is approved.

Column 11: Population Stability

As is discussed in greater detail in the "Limitation of the Analysis" section of this chapter and in Appendix II, one of the greatest problems encountered in the location analysis section of this study has been a lack of available information. One of the consequences of this lack of information is that no meaningful data was produceable for native population stability of the considered locations.

In general, there appears to be three major sources of data on native people of southern Manitoba. These are the Department of Health and Social Development, the Department of Indian Affairs and Northern Development and census data of Statistics Canada. The first two of these major sources of data compile information on native people living on reserves. These two data sources have very little information on native people not living on reserves.

The latter source of data, census data of Statistics Canada, appears to be the only data source containing information on native people living both on and off reserves. However, there appears to be several problems associated with this census data. One of these problems, in addition to those discussed in Appendix II, is that for many of the communities considered for plant location, data is available at the 'enumeration area' level only. Enumeration areas contain populations which are considerably larger than that of the community

for which data is desired. Consequently, data is not directly available for all of the communities considered for plant location and comparisons of the native population stability of these communities is made difficult.

In attempting to determine native population stability in the plant locations considered, two basic steps should be followed. First, determine from all possible data sources the amount of accurate information that is unavailable. Second, determine the most effective method of obtaining that required information which is currently unavailable. Unfortunately, there was insufficient time available in this study to thoroughly undertake either of these steps.

Column 12: Integrative Capacity of Receiving Community

While consulting with people who are familiar with the study region, an attempt was made to identify those locations that have favourable or unfavourable characteristics concerning absorption of a project geared towards native people. Unfortunately, no meaningful results were apparent.

Column 13: Consistency With Existing Flow of People

Locations that are consistent with the existing flow of people from smaller centers to larger centers were determined from a "Functional Relationship of Settlements and Their Spheres of Influence, 1971" map of the Regional Analysis Program of the Department of Industry and Commerce. 22 This map identifies larger centers to which people flow from farms and smaller centers for such purposes as shopping, recreation and school. Larger centers to which people flow are of

 $^{^{22}}$ This map was provided by Mike Basford of the Department of Industry and Commerce.

three sizes with 'local' centers being the smallest, followed by 'market' centers and 'regional' centers as the largest. 23

For the purposes of this study, locations identified as being consistent with existing flows of people were local, market and regional centers. These included: Dauphin and Swan River as regional centers; Roblin and Russell as market centers; and Winnipegosis as a local center. These results are recorded in Column 13 of the Location Criteria Summary Table.

Column 14: Availability of Social Services

Locations having available social services were identified as those communities which had an office of the Department of Health and Social Development. According to Helmut Klein of the Department of Health and Social Development, communities having an office of this department include only Dauphin and Swan River. These communities are recorded in Column 14 of the Location Criteria Summary Table.

Column 15: Available Facilities That Could Be Used for the Plant

Locations having vacant buildings that would be suitable for the proposed plant were identified through consultation with people who are familiar with the Parkland region. These locations as noted in Column 15 of the Location Criteria Summary table include:

For a description of the characteristics of each of these types of center see, Department of Industry and Commerce, Regional Analysis Program Southern Manitoba, Analysis of Community Functions and Relationships, (January 1974), PP. 14-20.

Location:

Dauphin

Name of Building:

Smith Jackson School

Size:

Condition:

n: Good

Recommended by:

David Hill, Agricultural Representative of

Dauphin

Location:

Roblin

Name of Building:

John Deere Agency

Size:

5000 square feet (approximately)

Condition:

Good

Recommended by:

Harold Boughton, Agricultural Representative

of Roblin

Columns 16-19: Available Infrastructure

Infrastructure considered to be important for the economical operation of the proposed plant includes: (a) a year round accessible road; (b) a railroad; (c) three phase hydro power; and (d) a water and sewer system. ²⁵

A) AVAILABILITY OF A YEAR ROUND ACCESSIBLE ROAD - According to Adam Hrabinski of the Department of Industry and Commerce, provincial roads (those under the responsibility of the Department of Highways) usually have good year round access while municipal roads (those under the responsibility of the municipality in which they are located) may be less reliable. Accordingly, locations having a year round accessible road were determined as those communities located on provincial roads. These locations were determined through the use of the official Department of Highways road map of Manitoba. As noted in Column 16 of

A dash (-) indicates that this information was unavailable. It is important to note that if the proposed plant does commence production in 1977 (as has been assumed by this study), the facilities indicated for potential plant use may no longer be available.

 $^{^{25}\}mathrm{These}$ infrastructure items were recommended and approved by David Kalinovich of Parks Branch.

the Location Criteria Summary Table, Cayer is the only location not having a year round accessible road.

- B) AVAILABILITY OF RAILROAD Communities located on rail lines were determined through the use of a Department of Highways official road map of Manitoba. These locations are recorded in Column 19 of the Location Criteria Summary Table.
- C) AVAILABILITY OF THREE PHASE HYDRO POWER Communities

 linked to three phase hydro power were identified by Frank Ramlil of

 Manitoba Hydro in Brandon. These communities are recorded in Column 18

 of the Location Criteria Summary Table.
- having water and sewer systems were identified in a report entitled "Manitoba Community Reports, 1975" as made available by Adam Hrabinski of the Department of Industry and Commerce. This report identified all those communities listed in Column 19 of the Location Criteria Summary Table except for Binscarth. The water and sewer system for Binscarth was identified through a report entitled "A Review of Selected Indian and Metis Communities in Manitoba". This report was compiled by Richard Humphrey and Maurice Dubreuil in 1971 for the Department of Regional Economic Expansion.

Columns 20-22: Water Costs By Size of Plant

Water costs were calculated for each of the three alternative plant sizes and for each location that has a water system. These calculations are based on the rate of water use for the Selkirk plant and on the water costs of each location as stated in the report

entitled "Manitoba Community Reports, 1975". The procedure is as follows:

A) RATE OF WATER USE IN THE SELKIRK PLANT FOR THE 1974-75 FISCAL YEAR²⁷

Approximate wholesale value of production = \$300,000 Average gallons of water used per month = 34,000 Average gallons of water used per year

= 34,000 x 12
Ratio of water use to value of production
= 408,000 ÷ 300,000 = 1.36 - i.e. for
each dollar of production, 1.36 gallons
of water are used

B) RATE OF WATER USE FOR EACH OF THE THREE ALTERNATIVE PLANT SIZES

Plant Size #1

Wholesale value of annual production = \$325,000 Gallons of water used per year = $325,000 \times 1.36$ = $442,000^{28}$ Average water used per month = $442,000 \div 12$ = 36,833 gallons

408,000

Plant Size #2

Wholesale value of annual production = \$350,000 Gallons of water used per year = $350,000 \times 1.36$ = 476,000 Average water used per month = $476,000 \div 12$ = 39,667 gallons

Plant Size #3

Wholesale value of annual production = \$430,000 Gallons of water used per year = $430,000 \times 1.36$ = 584,000 Average water used per month = $584,000 \div 12$ = 48,733 gallons

 $^{^{26}\}mathrm{This}$ report was made available by Adam Hrabinski of the Department of Industry and Commerce.

²⁷Information concerning the Selkirk plant's rate of water use was provided by Otto Gebhardt, Supervisor of the Selkirk Plant.

²⁸This calculation assumes that ratio of gallons of water used per dollar of production will be the same for the proposed plant as for the Selkirk plant.

C) COST PER MONTH OF WATER USE FOR EACH ALTERNATIVE PLANT SIZE FOR EACH LOCATION HAVING A WATER SYSTEM

The monthly water use of each alternative plant size was applied to the water costs of each location having a water system. An example of the procedure is as follows:

Roblin

Water cost per quarter (3 month period):
for first 25,000 gallons = \$1.65 per 1000 gallons
for next 225,000 gallons = \$1.45 per 1000 gallons
for all over 250,000 gallons = \$1.30 per 1000 gallons

i) Plant Size #1

Water use per quarter: $36,833 \times 3 = 110,499$ gallons

for first 25,000 gallons: $(25,000 \div 1000) \times 1.65 = 41.25 leaving 110,499 - 25,000 = 85,499 gallons for next 225,000 gallons: $(85,499 \div 1000) \times 1.45 = 123.97 total quarterly cost: \$41.25 + \$123.97 = \$165.22 average cost per month: $$165.22 \div 3 = 55.07

ii) Plant Size #2

Water use per quarter = $48,733 \times 3 = 119,001$ gallons

for first 25,000 gallons: $(25,000 \div 1000) \times 1.65 = 41.25 leaving: 119,001 - 25,000 = 94,000 gallons for next 225,000 gallons: $(94,000 \div 1000) \times 1.45 = 136.30 total quarterly cost: \$136.30 + \$41.25 = \$177.55 average cost per month: $$177.55 \div 3 = 59.18

iii) Plant Size #3

Water use per quarter: $48,733 \times 3 = 146,199$ gallons

for first 25,000 gallons: $(25,000 \div 1000) \times 1.65 = 41.25 leaving: 146,199 - 25,000 = 121,199 gallons for next 225,000 gallons: $(121,199 \div 1000) \times 1.45 = 175.74 total quarterly cost: \$175.74 + \$41.25 = \$216.99 average cost per month: $$216.99 \div 3 = 72.33

D) THE ABOVE PROCEDURE WAS REPEATED FOR EACH ALTERNATIVE PLANT SIZE FOR EACH LOCATION HAVING A WATER SYSTEM AND THE RESULTS RECORDED IN COLUMNS 20-22 OF THE LOCATION CRITERIA SUMMARY TABLE

As indicated in these columns, water costs for the Town of

Binscarth were unavailable. According to Gwen McNair, Secretary-Treasurer for the Town of Binscarth, water costs for large consumers are not predetermined but are negotiated individually.

Columns 23-40: Truck Transportation Costs

Truck transportation costs were determined for three load weights (451-500 pounds, 1000 pounds and 40,000 pounds) and for each location considered for plant site. These transportation costs were calculated by:

- 1. determining the distance between each location considered for plant site and (a) each location that is a source of raw materials; (b) each location that will receive finished products
- 2. applying the appropriate per mile cost to the above distances for each of the three load weights.

According to David Kalinovich of Parks Branch, locations that are sources of raw materials include Child's Lake, Roblin, The Pas, and Winnipeg. Locations that will receive finished goods include Thompson, The Pas, The Narrows and Winnipeg. Per mile truck transportation costs were taken from "Standard Tarriff of Tolls Governing the Movement of Freight Within The Province of Manitoba By Public Service Vehicles" as provided by the Highway Traffic and Motor Transport Board. The results of the above procedure are recorded in Columns 23-40 of the Location Criteria Summary Table.

For determining the distance between the Narrows and each location considered for plant site, the junction of provincial roads #235 and #325 was used as the Narrows destination point. It is assumed that the shipment of finished goods to Winnipeg includes both goods for Parks Branch and goods that will be redistributed to the open market.

Column 41: Comparison of Average Truck Transportation Costs

In order to gain an indication of the relative truck transportation costs of each location considered for plant site, a cost comparison was made between Winnipeg and each of the possible plant locations. The selection of Winnipeg for truck transportation cost comparison purposes was based on the assumption that Winnipeg would be sending or receiving the greatest volume of goods of any finished good destination or source of raw material location. 30

The cost comparison was made by calculating the average truck transportation cost between all possible plant locations and Winnipeg for a 451-500 pound load. This average cost was \$11.04 and was then compared with the truck transportation cost for a 451-500 pound load from each of the possible plant locations to Winnipeg. The results from this comparison are recorded in Column 41 of the Location Criteria Summary Table. A+ (positive) sign indicates that costs were above average for those particular locations and a- (negative) sign indicates that costs were below average for those particular locations.

Column 42: Railroad Transportation Rates

Railroad transportation costs based on a 40,000 pound full car load of lumber were provided by Adam Hrabinski of the Department of Industry and Commerce. As the process of determining such rates is time consuming and complex, rates for only those locations specified (Winnipeg to:) were calculated. These rates have been recorded in Column 42 of the Location Criteria Summary Table.

This assumption was approved by David Kalinovich of Parks Branch.

By comparing the rail transportation rates of Column 42 with the truck transportation rates (for a 40,000 pound load) of Column 34, it can be easily seen that rail transportation rates in each case are remarkably higher than truck transportation rates. For this reason along with the two following reasons, rail transportation costs were eliminated from the comparison of positive and negative locational features of each possible plant location. The rail costs stated in Column 45 do not include costs of cartage which according to Adam Hrabinski would raise total rail costs by as much as 10%. Also, according to Adam Hrabinski, rail rates are expected to increase by a greater percentage than truck rates in 1976.

Column 43: Available Housing

An attempt was made through consultations with people (including Jim Quinn, Director of Manitoba Housing and Renewal Corporation in Dauphin) who are familiar with the Parkland region to gain an indication of the available housing supply in each of the locations considered for plant site. The consistent reply of all of those consulted was that housing of any size or quality was in short supply at all locations.

CHAPTER SIX

CONCLUSIONS

A. STUDY OBJECTIVES

The objective of this study has been threefold:

- 1. to determine the annual value of demand for park equipment and wooden lawn and garden furniture from Parks Branch, the open markets of Manitoba and the Prairie region, and any other potential demand sources
- 2. to determine alternative plant sizes from the annual value of demand and to determine the costs and subsidy of each alternative plant size
- 3. to develop location options for the proposed plant consistent with Manpower Corps objectives and economic considerations

B. STUDY CONCLUSIONS

Conclusions reached in this study include the following:

1. Annual Value of Demand

The annual value of demand (stated in terms of cost of materials and their delivery to plant site) for Parks Branch was found to be \$325,000 and for the open markets of Manitoba and the Prairie region, \$28,405 and \$105,792 respectively. Other potential sources of demand which warrant further investigation were found to include: other governments such as the federal and municipal governments; other provincial government departments such as the Department of Mines, Resources and Environmental Management; other products such as pine, poplar and diamond willow furniture of a rustic style; and regional

or local business needs for products such as crating and wooden boxes.

(The importance of finding additional markets cannot be over-emphasized. The major demand component for each alternative plant size is that of park expansion at \$300,000 per year. As this \$300,000 per year is expected to last for five years only, the annual value of demand will drop by this amount at the end of the fifth year unless additional markets have been found by this time.)

2. Alternative Plant Sizes and Their Respective Costs and Subsidy

Alternative plant sizes on the basis of annual value of demand were determined as: plant size #1 with an annual value of demand of \$325,000 (this includes Parks Branch demand only); plant size #2 with an annual value of demand of \$350,000 (this includes the rounded off sum of Parks Branch and the Manitoba open market demand); plant size #3 with an annual value of demand of \$430,000 (this includes the rounded off sum of Parks Branch and the Prairie region open market demand).

Total annual costs for each alternative plant size were found to be: for size #1 - \$681,205; for size #2 - \$758,940; and for size #3 - \$920,810.

Total annual sales for each alternative plant size were found to be: for size #1 - \$325,000; for size #2 - \$438,621; and for size #3 - \$738,167.

On the basis of the difference between total annual costs and total annual sales, the annual subsidy required for each alternative plant size was found to be: for size #1 - \$356,205; for size #2 - \$333,940; and for size #3 - \$175,810. (Total annual costs do not include capital costs)

3. Location Options

As plant size #3 requires the lowest annual subsidy and thus appears to be the most economical choice of plant size, location options were determined for plant size #3. It was found that few of the possible locations had a sufficient population available for training and employment to meet the requirements of plant size #3. This necessitated the grouping of each possible location on the basis of a 30 mile commuting distance. The plant location identified for each group was that location having the greatest number of positive features for plant site. This grouping procedure resulted in the following location options:

A. PLANT LOCATION: EBB AND FLOW INDIAN RESERVE

SUPPORT GROUP: CAYER, EDDYSTONE, BACON RIDGE, EBB AND FLOW INDIAN RESERVE, KINOSOTA

This group has the following outstanding (features not held by other groups) positive features for plant location: second largest population available for training and employment (268); second largest number of annual new entrants to the labour force (20); and the lowest transportation costs.

Outstanding negative features discouraging plant location for this group include: the Ebb and Flow Indian Reserve is not consistent with the flow of people to other towns for such purposes as shopping and recreation; an office of the Department of Health and Social Development is not located in the area; this location does not have vacant facilities that could be used for the plant; and this location does not have a water system.

B. PLANT LOCATION: ROBLIN

SUPPORT GROUP: VALLEY RIVER INDIAN RESERVE, ROBLIN,

SAN CLARA, BOGGY CREEK

Outstanding positive features of this group include: largest population available for training and employment (456); largest number of annual new entrants to the labour force (32); lowest water costs; and Roblin is a source location for raw materials.

Outstanding negative features attributable to this group include: third highest transportation costs; and Roblin does not have an office of the Department of Health and Social Development.

C. <u>PLANT LOCATION</u>: RUSSELL

SUPPORT GROUP: BINSCARTH, RUSSELL,

WAYWAYSEECAPPO INDIAN RESERVE

This group had the following outstanding positive features: third largest population available for training and employment (202); third largest annual new entrants to the labour force (15); and the second lowest transportation costs.

Outstanding negative features belonging to this group include: this location does not have vacant facilities that could be used for the plant; there is no local plant supervisor in the area; second highest water costs; and this location does not have an office of the Department of Health and Social Development.

¹It is important to note that the negative feature of third highest transportation costs for Roblin is based on a comparison of the cost of shipping goods from each location to Winnipeg and does not consider the fact that Roblin is a source location for raw materials. If this source for raw materials fact was taken into account, Roblin's transportation costs would be considerably reduced.

D. PLANT LOCATION: SWAN RIVER

SUPPORT GROUP: COWAN, SWAN RIVER, BIRCH RIVER

This group had only one outstanding positive feature: an office of the Department of Health and Social Development.

This group had the highest number of outstanding negative features which included: highest transportation costs; highest water costs; Swan River has a government project which is similar in nature to the proposed park equipment plant; lowest population available for training and employment (113); and the lowest number of annual new entrants to the labour force (8) which does not meet the annual employee turn-over rate (11) of plant size #3.

The above grouping process resulted in the exclusion of three locations which are beyond a 30 mile commuting distance of any group. These locations are Dauphin, Winnipegosis and Mafeking.

Although Dauphin meets nearly all of the location criteria, the population available for training and employment and the annual number of new entrants to the labour force do not meet the requirements of plant size #3. Dauphin would be a good location if a smaller size of plant was selected or if native people were moved to Dauphin and housed in a manner similar to the Selkirk plant.

²It should be noted that for several of the communities (including Dauphin) considered for plant location, the only available data source recording the number of native people living in these communities was the 1971 census. As discussed on page 114 of Appendix II, there are several factors which limit the accuracy of this census data. Any inaccuracies occurring in the findings of this study as a result of using this census data, will be greatest for Dauphin as Dauphin is the largest of all communities considered.

Winnipegosis and Mafeking have relatively small native populations and do not have any outstanding positive features for plant location. It may be possible to move the population available for training and employment from Mafeking and Winnipegosis to a larger center such as Swan River or Dauphin and provide housing for them in a manner similar to the Selkirk plant. It may also be possible for people living in Mafeking to commute to Swan River although this would involve travelling a one way distance of 43 miles.

C. BEST LOCATION

For the largest plant size (plant size #3), Roblin is the best location if the criteria of location with greatest need and economic location criteria are considered to be the most important.

If other considerations are more important, such as the desire to locate the plant on an Indian Reserve or the desire to develop a smaller size of plant, then other locations including the Ebb and Flow Indian Reserve, Russell, Swan River and Dauphin could be considered for plant site.

D. BENEFITS OF THE PLANT TO THE PARKLAND REGION

Establishing a park equipment plant in the Parkland region would result in several benefits to the plant location and to the region. Basically, these benefits would be in the form of employment opportunities for Parkland residents and a capital flow into the region.

Assuming that all job positions are filled by people of the Parkland region, the number of jobs that each of the three alternative

plant sizes would provide are as follows:

: PLANT SIZE #1 = 41 jobs : PLANT SIZE #2 = 44 jobs : PLANT SIZE #3 = 54 jobs

The portion of capital and annual expenditures that would accrue to the Parkland region is difficult to estimate. However, the portion of these expenditures accruing to the Parkland region would include at least the wages and salaries of the above jobs as well as some portion of the other annual and capital expenditures. Annual personnel, total annual, and total capital expenditures for each of the three alternative plant sizes are as follows:

PLANT SIZE	#1	#2	#3
ANNUAL PERSONNEL EXPENDITURE	\$325,480	\$377,440	\$455,660
TOTAL ANNUAL EXPENDITURE 4	\$681,205	\$758,940	\$920,810
TOTAL CAPITAL EXPENDITURE	\$927,500	\$1,017,200	\$1,217,500

³Although some materials required for plant construction and operation can be purchased in the Parkland region, others such as cedar wood will have to be purchased outside of the Parkland region.

⁴Total annual expenditure is the sum of annual personnel, annual operating and annual raw material expenditures.

APPENDIX I

A COMPARISON OF THE MANPOWER CORPS TRAINING PROGRAM WITH THE CANADA MANPOWER INDUSTRIAL TRAINING PROGRAM

A. THE NEED FOR AN INNOVATIVE PROGRAM

1. National Manpower Training Programs

a) OBJECTIVES - According to a study prepared for the Manpower Programs Committee, The Council of Ministers of Education, Canada:

In recent years Federal manpower training policy in Canada has been based primarily on growth oriented strategy. The Federal Government has pursued an objective of long run economic growth, measured by increased G.N.P., in the implementation of its manpower training policies and programs. Training programs, part of such a growth oriented policy, aim at the most efficient matching of labour supply and market demand. This necessitates emphasis on training those who will yield a high return in employment and productivity. This "cream skimming" approach to training is seen as the optimal way of achieving labour market efficiency and economic growth.

As can be seen from the above, the two major objectives of national manpower training programs are economic growth and labour market efficiency.

b) "CREAM SKIMMING" APPROACH - Canada Manpower training programs geared to the objectives of economic growth and labour market efficiency tend to operate on a "cream skimming" approach. Clientele

¹ Study Papers to Assist in the Formulation of A Policy
Position On Manpower Training, (Toronto: Systems Research Group Inc.,
May 1972), P. I-21.

selected for training programs are usually considered to be low risk with a high potential for employment. This approach has resulted in the exclusion of a large group of people who have come to be known as "the ineligibles" or "the disadvantaged."

2. The Disadvantaged - The Need for Innovation

a) THE DISADVANTACED - The disadvantaged have been described on a national basis as:

.... generally economically disadvantaged because they are unemployable. In addition to the lack of employment opportunities due to trade and skill deficiencies, they are incumbered by social problems such as inadequate basic education, race prejudice, language barriers, or unacceptable employment and cultural patterns.²

More specifically, Canada's disadvantaged include individuals with some of the following characteristics. 3

- unemployed much of the time
- unstable work record
- below average annual income
- unskilled
- low education level
- police record
- member of a minority group
- single head of household with dependants
- in economically underdeveloped area
- b) THE TRAINING NEED OF THE DISADVANTAGED As the disadvantaged do not form part of the regular labour force and are excluded from Canada Manpower Training Programs geared to growth and efficiency objectives, the disadvantaged have special training needs. These special training needs consist of two major aspects.

²Ibid, P. II-3

³1111, P. A-1

- 1. training needs associated with enabling the disadvantaged to become participants in the regular labour force
- 2. training needs associated with enabling the disadvantaged to become more suitable for existing manpower training programs

The specific training needs of the disadvantaged concern two major training components:

- 1. life skills training
- 2. trade skills training

Life skills have been defined as "includes the total of education training and employment knowledge and experience." Trade skills refers to training in a specific trade such as the woodworking and metal trades.

B. THE MANPOWER CORPS TRAINING PROGRAM AN INNOVATIVE APPROACH

1. Formation of the Manpower Corps

- a) RECOGNIZED NEED In recognition of the special training needs of disadvantaged people in Manitoba (see Page 3), the Manpower Corps was established under the auspices of the FRED Plan in 1967.
- b) OBJECTIVE OF MANPOWER CORPS The objective of the Manpower

Corps is: To provide training and work orientation to low income high-risk but employable people, particularly people of Indian ancestry in order to improve their opportunity for meaningful employment and increased incomes.

⁴Ibid, P. A-2

⁵Interlake FRED Plan, Performance Report for Year Eight, April 1, 1974 to March 31, 1975, P. 17.

- c) THE SELKIRK PLANT As part of the Manpower Corps program, a comprehensive training and employment program was established through a parks furniture plant at Selkirk in 1969. The Selkirk plant is a combined project under the Training-in-Industry and Manpower Corps sections of the Interlake FRED Agreement.
- d) THE OBJECTIVE OF THE SELKIRK PLANT The objectives of the Selkirk plant include:
 - 1. To provide a Manpower Corps unit that would operate with a continuous flow of clients:
 - a) to receive individual vocational counselling from a general counsellor and contact with Canada Manpower counsellors to aid in formulating and fulfilling realistic vocational goals.
 - b) to gain knowledge and understanding about themselves in work situations and the work community by participating in training sessions on:
 - effective public speaking and confidence building
 - elements of human behaviour
 - money management, including credit and budgeting
 - group dynamics as related to work situations such as relationship between employee and supervisor, between employee and public
 - training requirements and processes
 - the nature of work including responsibilities to employer
 - safety on the job
 - meeting procedures and processes
 - organizations in the work system
 - c) to obtain realistic positive job experience working in a group under supervision
 - d) to evaluate their attitudes, positive attributes and deficiencies for successful training and satisfactory employment
 - e) to obtain training in fundamental communication, science, and arithmetic skills if particularly required
 - f) to have the opportunity to establish and follow up a program of personal improvement through study

To provide a plant that would fabricate park furniture specifically for the Interlake area and generally for the Province.

The Manpower Corps Training Program (MCTP) 6

- a) A UNIQUE TRAINING PROGRAM Although the MCTP was formed in part under the Training-in-Industry section of the Interlake FRED Agreement, the MCTP is not a regular Training-in-Industry program. For reasons that will become apparent in examining both the MCTP and the Canada Manpower Industrial Training Program (the Canada Manpower Training-in-Industry has been absorbed in the broader Canada Manpower Industrial Training Program), the MCTP is a unique approach to training the disadvantaged.
 - b) MCTP TRAINING OBJECTIVES Training objectives include:
 - 1. to equip disadvantaged people with skills necessary for employment
 - 2. to equip disadvantaged people with skills necessary for further education and training
 - c) MCTP TRAINING COMPONENTS Training components include:
 - 1. training in social industrial life skills trade skills training in wood and metal trades

Actual classroom instruction occupies approximately 35% of the total training period with production training occupying the remaining 65%.

The letters "MCTP" are often used to refer to the Manpower Corps Training Plant (the official title of the Selkirk Plant). Throughout this appendix, the letters "MCTP" refer to Manpower Corps Training Program.

The wood and metal trades were selected for the MCTP for two reasons: 1. These are the trades associated with production of park furniture, and 2. Indications of a high demand for labour skilled in these trades.

d) MCTP AREAS OF INSTRUCTION⁸

I. SOCIAL-INDUSTRIAL LIFE SKILLS

1. Communication

- a) Confidence Building Exercises
- b) How Opinions Are Formed
- c) How To Defend Your Opinions
- d) Public Speaking
- e) Meetings and Meeting Management
- f) The Importance of Daily Logs and Periodic Reports

2. Money Management

- a) The Importance of a Budget
- b) The Banking System
- c) The Meaning of Credit
- d) The Cost of Retail Credit Versus Bank Loans
- e) Debt and the Law

3. Employer-Employee Relationships

- a) Employer Responsibilities
- b) Employee Responsibilities

4. Government Influence on Employer-Employee Relations

- a) Hours of Work
- b) Age at Which You Can Start Working
- c) Statutory Holidays
- d) Annual Vacation Leave
- e) Number of Hours work During a Week
- f) Enforce Safety Regulations

5. Modern Companies

- a) Typical Structure Head Office Branch Offices
- b) Use of Organizational Diagram
- c) Duties of the General Manager
- d) The Extent and Limit of His Authority
- e) The Duties and Responsibilities of the Superintendent
- f) The Duties and Responsibilities of the Foreman

⁸Information concerning the areas of instruction was derived from the Manpower Corps Training Plant Curriculum as made available by Wayne Blackburn, Interlake Manpower Corps Manager.

6. Modern Union Management

- a) Why Unions Were Necessary (Historical Background)
- b) The Duties and Responsibilities of the International Head Officer
- c) The Duties and Responsibilities of Branch Offices and District Representatives
- d) The Duties of the Shop Steward

7. Modern Unions and Their Members

- a) Control Membership Qualifications
- b) Control Number of Members
- c) Control the Training and Trade Education of Members
- d) Control Discipline (and Expulsion) of Members

8. How To Live and Work With Others

- a) The Individual
- b) The Group
- c) The Team
- d) The Productive Unit
- e) Social Behaviour on the job
 - off the job
- f) Drinking its good points and bad
 - social drinking
 - drinking to get drunk
- g) Police and the Law

II. TRADE SKILLS TRAINING IN WOOD AND METAL TRADES

- 1. Language Arithmetic Science (instruction in the terminology, and science of woodworking and metal trades.
- 2. Trade Skills Training in the following areas:
 - a) Arc Welding (introductory)
 - b) Arc Welding Theory and Techniques
 - c) Oxygen Acetylene Welding (introductory)
 - d) Oxygen Acetylene Welding and Cutting Procedures
 - e) Concrete Products (introductory)
 - f) Concrete Products
 - g) Operation of Woodworking Machines (introductory)
 - h) Operation of Woodworking Machines
 - i) Metals: Bench Work (introductory)
 - j) Metals: Bench Work
 - k) Painting: Brush Spray and Dipping Processes
 - 1) Painting and Decorating
 - m) Bench Woodworking (introductory)
 - n) Bench Woodworking
 - o) Operations of Metal Working Machines (introductory)
 - p) Metal Working Machines

- e) MCTP COUNSELLING SERVICES Counselling services available to trainees and their families include:
 - 1. Counselling at the plant to help trainees with problems of money management, tardiness, health, housing, job search, vocational selection, personal problems, or any other problems trainees have.
 - 2. Home Visitor Program counselling to assist families in learning basic home economics knowledge such as wise shopping.
 - 3. Other counselling services such as those provided by a public health nurse and social worker.
- f) MCTP TRAINEE ELIGIBILITY CRITERIA Trainees are referred to the trainee selection committee through the Department of Agriculture, the Department of Health and Social Development, Indian Bands and Canada Manpower. The trainee selection committee is comprised of a plant counsellor, the plant co-ordinator and the Interlake Manpower Corps Manager.

While no rigid eligibility criteria exist, trainees are selected through guidelines such as the following: 9

- 1. Trainee should be a resident of the project's region (in case of the Selkirk Plant, this would be the Interlake Region).
- 2. Trainees should be trainable in terms of the training program (i.e. the trainee should be sufficiently literate to be able to learn the training aspects yet not skilled beyond the point that the training program would be of little benefit).
- 3. Trainee should not have been through the training program before.
- 4. Trainee should be in need of training (based on such things as skill level and employment history).

⁹Information on MCTP eligibility criteria, training period, trainee evaluation, and training received was derived from personal contact with Wayne Blackburn, Interlake Manpower Corps Manager.

- 5. Trainee should be between the ages of 15 and 45.
- g) MCTP TRAINING PERIOD As training needs differ among individuals, trainees progress at their own rates of speed and no fixed end of the training period exists. On the average, the training period runs for approximately 12 months. Extensions may be necessary for some individuals.
- h) MCTP TRAINEE EVALUATION As individual training programs differ, considerable difficulty occurs in evaluating trainees in homogeneous terms. Generally, a trainee is considered to have completed training when he has been sufficiently skill equipped to undertake employment or further training. The determination of when a trainee has completed training lies in the discretion of the trainee's instructors.

While no rigid completion of training criteria exist, general guidelines include:

- 1. Testing of the physical skills of the trade
- 2. Attitudinal development
- 3. Practical tests such as completely building a picnic table
- 4. Trainee's eagerness for employment or additional training
- 5. Classroom performance records
- i) MCTP TRAINING RECEIVED As individual training needs differ, trainees seldom receive identical training. As trainees seldom receive identical training, it is felt that a certificate acknowledging the skills learned by the trainees would be relatively meaningless.

Trainees who complete the program are considered to be skilled in those life skills necessary for employment and those skills associated with the practical aspects of specific jobs in the woodworking and metal trades. Through training, trainees are considered

to move from an unskilled labour category to a skilled labour category.

Trainees who have completed the program are considered to be suitable for at least one of the following areas:

- 1. employment within the woodworking and metal trades
- 2. employment in other industries
- 3. employment at the Selkirk Plant
- 4. further training such as a Canada Manpower Training Program

C. THE CANADA MANPOWER INDUSTRIAL TRAINING PROGRAM (CMITP)

- 1. CMITP OBJECTIVES Objectives include: 10
 - a) to encourage employers to establish training programs to improve existing programs
 - b) to expand employment opportunities for unemployable workers and those with "special" needs who have unusual difficulty getting and holding jobs¹¹
 - c) to alleviate persistent skill shortages
 - d) to prevent the lay off of workers because of technological or economic change
 - e) to support industrial development strategies in various regions of the country
- 2. CMITP TRAINING ASPECTS The training method used in any project under the program should be the most appropriate to provide the necessary knowledge and skills required by the occupation. It should meet the particular problems and needs of the trainee, provide skills

¹⁰ Information concerning CMITP objectives, training aspects, eligibility criteria, and training period was derived from a Manpower and Immigration Information Service pamphlet as provided by Frank Mulvey, Superintendent of the Programs Section of Canada Manpower.

¹¹While this goal appears to be similar to one of MCTP goals, according to Ed Arndt, Manager of Selkirk Canada Manpower Centre, the CMITP program is still essentially geared to low risk clientele of high employment potential and does not emphasize "special needs" training in the same manner nor to the same degree as MCTP.

which are transferable, utilize the expertise and facilities of the employer and call upon other training resources in the community if required. Assistance cannot be provided for training in skills which are readily available on the local labour market, except in cases where the training is for clients who have unusual employment barriers to overcome.

- 3. CMITP TRAINEE ELIGIBILITY CRITERIA Eligible trainees must be:
 - 1. One year beyond the school leaving age of the Province in which they reside.
 - 2. Employees of the contracting employer (or of members of the contracting association) during the training period.
 - 3. Likely to gain continuing benefit from the training and work experience in terms of increased employability and/or earning capacity.
- 4. CMITP TRAINING PERIOD Training period is usually of at least 5 days of full time or 30 hours of part time instruction but cannot be longer than 52 weeks full time or 1820 hours part time.
- 5. CMITP TRAINING RECEIVED Although completed trainees receive no certificate indicating skills or skill level achieved, completed trainees are considered to be skilled in the practical aspects of specific jobs in the particular industry. These skills are transferable from one firm to another within the industry. 12

D. UNIQUE FEATURES OF THE MANPOWER CORPS TRAINING PROGRAM

1. COMPLIMENTARY TO EXISTING MANPOWER TRAINING PROGRAMS - As indicated

 $^{^{12}\}mathrm{Personal}$ contact with Larry Barton, Councillor in Programs Division of Canada Manpower.

in the first section of this Appendix, existing manpower training programs are essentially oriented towards clientele who are familiar with the modern labour force and modern working conditions. Existing manpower training programs such as the CMITP are essentially geared towards upgrading the skills of this clientele and at the same time alleviating skill shortages in the labour force.

The MCTP is essentially oriented towards clientele who are not familiar with modern working conditions and who are normally not suitable for existing manpower training programs. The MCTP acts complimentary to existing manpower training programs by:

- 1. directing its efforts towards a clientele excluded from existing manpower training programs
- 2. equipping the clientele with those skills necessary for employment
- equipping this clientele with those skills necessary for participating in existing manpower training programs
- 2. MCTP UNIQUE FEATURES Features distinguishing the MCTP from other manpower training programs such as the CMITP are:
 - 1. a high risk clientele
 - a major emphasis on social industrial life skills training
 - 3. individually tailored training programs
 - 4. extensive counselling services
 - 5. an empathetic employer with the time and patience required for the training needs of this clientele

¹³ Information on the uniqueness of the MCTP was provided by Ed Arndt, Manager Selkirk Canada Manpower Centre.

A12

TABLE 7

A COMPARISON OF MCTP AND CMITP *

CMITP		MCTP
OBJECTIVES:	Essentially geared towards: 1. A low risk clientele with a high employment potential 2. Alleviating skill shortages in the labour market 3. Upgrading the skills of un—and underemployed clientele	Essentially geared towards: 1. High risk clientele usually unable to participate in a CMITP type of training program 2. Increasing the skills of disadvanataged people such that they can become participants in the regular labour force and/or undertake further education or training
TRAINING ASPECTS:	 Job skills training in an employ- ment setting 	 Job skills training in an employment setting Social - industrial life skills training Counselling in personal and work related matters Individually tailored training programs
TRAINEE ELIGIBILITY:	Relatively rigid criteria based on adult occupational training act criteria	Relatively flexible criteria based on such things as: 1. Region of residency 2. Training needs 3. Trainability 4. Age
TRAINING RECEIVED:	1. Skills related to practical aspects of specific jobs within the particular industry	 Skills related to practical aspects of specific jobs within the woodworking and metal trades Skills related to becoming participants in the modern labour force Skills related to becoming eligible for further training or education

* CMITP (CANADA MANPOWER INDUSTRIAL TRAINING PROGRAM)
MCTP (MANPOWER CORPS TRAINING PROGRAM)

APPENDIX II

SUGGESTIONS FOR FURTHER RESEARCH

One of the results of this study has been the detection of two major areas where additional research is required. These two areas are the development of:

- A. additional markets for the proposed plant
- B. a comprehensive data base on native people of Southern Manitoba

A. ADDITIONAL MARKETS FOR THE PROPOSED PLANT

1. Major Markets Identified In This Study

For the proposed park equipment manufacturing plant, the following markets have been determined (see Chapter III):

- a) PARKS BRANCH with a demand for park equipment valued at \$325,000 annually for the first five years and \$25,000 thereafter.
- b) MANITOBA OPEN MARKET with a demand for wooden lawn and garden furniture valued at \$28,405 annually.
- c) PRAIRIE REGION OPEN MARKET with a demand for wooden lawn and garden furniture valued at \$105,792 annually. 1

¹Market values are stated in terms of what Parks Branch refers to as wholesale value. Wholesale value as defined by Parks Branch is equivalent to the cost of raw materials plus their delivery to plant site.

2. The Need For Additional Markets

From the above market values, three alternative plant sizes have been developed. These are:

Plant Size #1 - Parks Branch demand alone at \$325,000 per year

Plant Size #2 - Parks Branch plus the value of the Manitoba Open Market = \$325,000 + \$28, 405 = \$353,405 rounded off to \$350,000 per year

Plant Size #3 - Parks Branch plus the value of the Prairie Region open market = \$325,000 + \$105,792 = \$430,792 rounded off to \$430,000 per year

As can be seen above, for each of the three alternative plant sizes, Parks Branch has the major demand component at \$325,000 per year. However, \$300,000 of this demand value for Parks Branch will last for five years only from the commencement of production date. After the first five years of production, the demand value for each of the three alternative plant sizes will decrease by \$300,000 unless additional markets have been developed by this time.

If the value of demand does drop by \$300,000 at the end of the first five years as expected, and if additional markets are not found to replace this \$300,000, severe implications will result for the size of plant required, number of trainees and employees required and the optimal plant location. If these severe implications are to be avoided, it is crucial that additional markets be developed to replace the \$300,000 of Parks Branch annual demand. This study has assumed that such markets will indeed be found.

3. Additional Market Possibilities

As discussed on pages 34-35 of this report, additional market possibilities include at least the following:

- a) park equipment for other Manitoba government departments, the federal government and the City of Winnipeg
- b) office furniture for the Government of Manitoba, the federal government and the City of Winnipeg
- c) pine, poplar and diamond willow furniture of a rustic style
- d) regional and local business needs such as for wooden boxes and crating

B. A COMPREHENSIVE DATA BASE ON NATIVE PEOPLE OF SOUTHERN MANITOBA

One of the major problems confronted by this study has been that of finding available data on native people living in Southern Manitoba. While there appears to be a considerable amount of information on native people living on reserves, there is an acute shortage of information on native people who do not live on reserves.

1. Existing Data Sources

Existing sources of statistical data on native people in Southern Manitoba include the following:³

Native people as referred to here and throughout this study includes any person who has a total or partial native ancestry and who belongs to either the status or non-status categories. Southern Manitoba as referred to here is that portion of the Province below the jurisdictional area of the Manitoba Department of Northern Affairs.

³This synopsis of available data from existing data sources has been verified by Betty Nowicki of the Department of Indian Affairs and Northern Development, Charles Hample of Statistics Canada, Helmut Klein of the Department of Health and Social Development and Allyson Treleaven of the Manitoba Bureau of Statistics.

- a) DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT This department appears to have a considerable amount of information on native people (especially native people registered with Indian Bands), living on reserves. This information appears to be fairly comprehensive and includes data on such aspects as total population, age and sex distributions, employment, welfare recipients and school enrollment. In general, this data is available on native people living on reserves or on crown land only and does not include information on native people living off reserves.
- b) STATISTICS CANADA This agency has some information available on native people of Southern Manitoba. This information is from the 1971 census and has several problems associated with it. Two of these problems include the following:
 - : much of this data is now becoming out of date
 - : much of this data (especially at the enumeration area level) is available only by requesting special tabulations through the Ottawa office. The process of compiling special tabulations often takes one month or longer.
- c) DEPARTMENT OF HEALTH AND SOCIAL DEVELOPMENT This Department compiles some data on native people of Southern Manitoba through the Manitoba Health Services Commission. This data includes age and sex distributions and the locations of native people. This data is primarily on native people living on reserves and does not include information on native people not living on reserves.
- d) MANITOBA BUREAU OF STATISTICS Although this agency has not conducted any original research on native people, it does collect data from the above three data sources. This agency also assists in data searching by directing researchers to appropriate data sources.

The above four agencies are not the only sources of data on native people in Southern Manitoba. Some data seeking studies have been conducted by other concerned agencies. One such study entitled "A Review of Selected Indian and Metis Communities in Manitoba" was conducted by Richard Humphrey and Maurice Dubreuil in 1971 for the Department of Regional Economic Expansion. This study compiled a considerable amount of socio-economic and infrastructure data for several communities in Manitoba.

2、公主人 "这些人"建筑大学教学工艺

It should be noted that the Manitoba Metis Federation and Manitoba Indian Brotherhood have very little statistical data on native people of Southern Manitoba. These agencies do, however, have a considerable amount of data on the history of native people in Manitoba.

2. A General Problem Concerning Data On Native People of Southern Manitoba

Information that does exist for native people of Southern Manitoba often appears to be inconsistent and should be interpreted with great care. For example, the on reserve population of Ebb and Flow Indian Reserve for 1973 is recorded at 343 by the Department of Indian Affairs and Northern Development, at 500 by the Manitoba Health Services Commission, and at 287 by the Manitoba Human Resource Survey. 4

To some degree, the apparent inconsistency reflects definitional differences. For example, the on reserve population recorded by the Department of Indian Affairs and by the Manitoba Human Resources Survey includes those Indians actually living on the reserve and registered with

The figures stated for the Manitoba Human Resources Survey and for the Department of Indian Affairs and Northern Development were provided by Betty Nowicki of the Department of Indian Affairs and Northern Development. The figure stated for the Manitoba Health Services Commission was provided by Helmut Klein of the Department of Health and Social Development.

the reserve band. The on reserve population recorded by the Manitoba Health Services Commission is based on mailing address and may possibly include native people who do not actually live on the reserve but have the reserve as their mailing address.

Another major source of data inconsistency was suggested by
Robert Long, general manager of Kee-Tan-O-Ke-Min Enterprises of Swan
River. According to Mr. Long, native people tend to migrate both in and
out of reserves very frequently and in considerable numbers. As a result
of these frequent migrations, reserve populations fluctuate considerably
and the time of enumeration for data collection becomes significant.
Data collected at different times would thus appear inconsistent.

3. Accuracy Limitations Of Existing Data Sources

Factors limiting the accuracy of the Department of Indian Affairs and Northern Development, the Manitoba Health Services Commission and Census data include the following:

- a) DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT In general, population data of this department is considered to be reasonably accurate as it is updated annually by a band member residing on each Indian Reserve. The major factor limiting the accuracy of this data is the frequent migrations of native people as discussed above in Section 2. These frequent migrations limit the accuracy of this data to the time at which it was collected. This data would not then, be necessarily accurate for any time period during the year other than that in which it was collected.
- b) CENSUS DATA In addition to the problem of this data becoming out-of-date and the migration factor stated above, the accuracy of Census data is limited in that it may not identify Metis people. According to

Bing Allen of the Department of Industry and Commerce, the question pertaining to ethnic origin on the long form (which was used to sample one-third of Canada's population) of the 1971 census reads as follows:
"To what ethnic or cultural group did you or your ancestors (on the male side) belong on coming to this continent." According to Mr. Allen, this question gives Metis people an option of the following four responses: native Indian band; native Indian non band; one of several European and other non native Indian responses; and the response option of 'other'. Considering these response options, many Metis people may not be recorded in the census as being of native ancestry. Rather, many Metis people may be recorded as being of European (or some other non native Indian) ancestry or of 'other' ancestry. The tendency for Metis people being recorded in one of the latter two responses categories may be affected by the following factors:

- : many Metis people would be of European (or some other non native Indian) ancestry on the male side
- : according to Emil Pelltier of the Manitoba Metis Federation many Metis people do not prefer to be known as being of native Indian ancestry.
- c) MANITOBA HEALTH SERVICES COMMISSION In addition to the migration factor, the accuracy of Manitoba Health Services Commission data is limited by two other factors. First, this data is based on the mailing address of people registered with the Manitoba Health Services Commission. Many people do not notify this commission of a change of address when they move from one community to another. Second, as this data is based on mailing address, the on reserve population figures recorded by this commission for Indian Reserves may include people who do not actually live on the reserve but who use the reserve for their mailing address.

d) DREE REPORT "A REVIEW OF SELECTED INDIAN AND METIS COMMUNITIES IN MANITOBA - In general, population figures stated in this report
are considered to be reasonably accurate as they have been examined by
officials residing in each of the selected communities. The accuracy of
this data, however, is limited in that it was collected in 1971 and may
now have become out-of-date, as well as the same migration factor affecting the data of the above three data sources.

4. The Need For A Comprehensive Data Base

As governments continue to place a greater emphasis on the provision of programs designed for native people, there is an increasing need for a comprehensive data base on native people of Southern Manitoba. Essentially, this need can be subdivided into four major aspects:

- a) the need to determine from all sources the amount and type of data currently in existence
- b) the need to determine the accuracy of existing data and of existing data collection methods
- c) the need to determine the amount and type of data that does not exist but is required
- d) the need to determine the most effective method of establishing and maintaining a comprehensive data base

A comprehensive data base on native people of Southern Manitoba should include at least the following types of information:

- : total population of status and non status categories
- : locations of native people and their migration patterns
- : age and sex distributions
- : education and training levels
- : income levels and sources
- : employment and participation rates in the labour force.

Until such a data base has been established, the development of projects for native people of Southern Manitoba will continue to be hampered.

APPENDIX III

DEFINITIONS OF LABOUR FORCE TERMS

Many people are confused as to the meaning of labour force terms such as 'unemployment rate' and 'participation rate'. In an attempt to clarify some of this confusion, this appendix provides definitions for the following labour force terms:

- A. LABOUR FORCE
- B. NOT IN LABOUR FORCE
- C. EMPLOYED
- D. UNEMPLOYED
- E. UNDEREMPLOYED
- F. DISCOURAGED WORKERS
- G. UNEMPLOYMENT RATE
- H. PARTICIPATION RATE

For many of these terms, a variety of different definitions exist. The definitions provided in this appendix are those used by the Labour Force Survey, the 1971 Census and the Parklands Region Manpower Study.

A. LABOUR FORCE

1. To The Labour Force Survey

-- "The civilian labour force is composed of that portion of the civilian non institutional population 14 years of age and over who, during the reference week, were employed or unemployed." This labour force

¹Labour Force Survey definitions were taken from <u>The Labour Force</u>, (Ottawa: Statistics Canada, December 1975), pp. 83 - 85.

excludes residents of the Yukon and Northwest Territories, Indians living on reserves, immates of institutions and members of the armed forces.

2. To The 1971 Census

1ast week (last week refers to the week prior to enumeration) for pay or profit (armed forces and civilian); worked last week in unpaid family work; looked for work last week; were on temporary lay-off last week; or who were with a job but not at work last week (armed forces and civilian). Excluded by definition from this labour force are those people whose labour activities were housework in own home and volunteer work, female farm workers who worked on a family farm without pay and for less than 20 hours, and inmates of institutions.²

B. NOT IN LABOUR FORCE

1. To The Labour Force Survey

-- "Those not in the labour force include all civilians 14 years of age and over (exclusive of institutional population) who are not classified as employed or unemployed. This category includes those: going to school; keeping house; too old or otherwise unable to work; and voluntary idle or retired. Housewives, students and others who worked part-time are classified as employed. If they looked for work they are classified as unemployed."

Definitions for the 1971 census were taken from <u>Dictionary Of</u>
The 1971 Census Terms, (Ottawa: Statistics Canada, December 1972),
pp. 20 - 25.

2. To The 1971 Census

-- Is the sum of 'not in the labour force (immate)' and 'not in the labour force (non-immate)'. "Not in the labour force (immate) refers to persons 15 years and over, classified to head [of household] as immates of institutions (i.e. including immate's wife, etc., see Household Status), who are automatically categorized as not in the labour force (i.e. as not working, looking for work or with jobs but not at work) in the census edited data, regardless of their entries to the labour force query."

'Not in the labour force (non-inmate) refers to persons other than inmates who reported negatively to all five parts of the labour force query, i.e. who did not work or look for work, were not on temporary lay-off and did not have a job from which they were absent because of illness, etc., in the week prior to enumeration. Includes also female farm labourers who helped one to nineteen hours only on a family farm."

Most persons in the 'not in labour force' category are students, housewives, retired workers, seasonal workers, enumerated in an 'off' season who are not looking for work, and persons who cannot work because of long-term physical or mental illness or disability. Inmates of institutions are included. Unpaid female farm workers helping less than 20 hours in a family farm or business are transferred to this group by edit.

C. EMPLOYED

1. To The Labour Force Survey

-- "The employed includes all persons who, during the reference

week:

- a) did any work for pay or profit;
- b) did any work which contributed to the running of a farm or business operated by a related member of the household;
 or
- c) had a job, but were not at work, because of bad weather, illness, industrial dispute, or vacation, or because they were taking time off for other reasons.

Persons who had jobs but did not work during the reference week and who also looked for work are included in the unemployed as persons without work and seeking work."

2. To the 1971 Census

-- ".....Refers to all non-immates 15 years and over who, during the week prior to enumeration, worked for pay or profit or in unpaid family work, or had a job from which they were temporarily absent because of illness, vacation, strike, etc. Persons who had jobs but did not work during the reference week were included in the unemployed, if they were on temporary lay-off or looked for work. Female farm workers working less than 20 hours in a family farm or business are also excluded, as are employed inmates of institutions."

D. UNEMPLOYED

1. To The Labour Force Survey

- -- "The unemployed includes all persons who, through the reference week:
 - a) were without work and seeking work, i.e. did not work during the reference week and were looking for work; or would have been looking for work except that they were temporarily ill, were on indefinite or prolonged lay-off, or believed no suitable work was available in the community; or

b) were temporarily laid off for the full week, i.e. were waiting to be called back to a job from which they had been laid off for less than 30 days."

2. To The 1971 Census

-- "...Consists of all non-inmates 15 years and over who, during the week prior to enumeration were not working but were "looking for work", or were on "temporary lay off". ...Persons seeking their first job are included as are those who would have looked for work except that they were temporarily ill or believed no suitable work was available in the community. It excludes unemployed inmates of institutions."

E. UNDEREMPLOYED

The Parklands Region Manpower Information Study refers to unemployed persons in the following three aspects:

- 1. those who earn less than \$3000 (net) annually
- 2. those who are working in positions or at levels of production below their producing capabilities
- 3. those who work less than a full work week (excluding those who are voluntarily working part-time).³

F. DISCOURAGED WORKERS

The Parklands Region Manpower Information Study refers to discouraged workers as those people who are without jobs and who are discouraged from seeking work due to a severe lack of job opportunities.

³Department of Agricultural Economics, University of Manitoba, Parklands Region Manpower Information Study, Volume II: Working Papers (unpublished), pp. 185 - 187.

Department of Agricultural Economics, University of Manitoba, Parklands Region Manpower Information Study, Volume I: Introduction and Summary of Working Papers, (Winnipeg: Department of Industry and Commerce, 1974), P. IV.

Although in effect these discouraged workers are unemployed, they appear to be categorized as 'not in the labour force' by the 1971 census. ⁵ The Labour Force Survey appears to include these discouraged workers as unemployed.

G. UNEMPLOYMENT RATE

1. To The Labour Force Survey

-- "The unemployment rate represents the number of unemployed persons as a per cent of the labour force. The unemployment rate for a particular group (age, sex, marital status, etc.) is the unemployment in that group expressed as a per cent of the labour force for that group. Seasonally-adjusted rates are calculated by dividing seasonally-adjusted unemployment by the sum of seasonally-adjusted employment and seasonally-adjusted unemployment (i.e. seasonally-adjusted labour force by summation)."

⁵Although by definition the 1971 census would seem to include these discouraged workers as unemployed (Persons...are included...who would have looked for work except that they...believed no suitable work was available...), examination of the 1971 census questionnaire would suggest otherwise. For those people who did not work or who did not look for work during the week prior to enumeration, (i.e. those categorized as 'not in the labour force'), there appears to be no question on the 1971 census questionnaire as to why these people did not look for work. In other words, there appears to be no way of identifying discouraged workers from any other people of the 'not in the labour force category'. For this reason, it would appear that discouraged workers are categorized by the 1971 census as 'not in the labour force' even though they are effectively unemployed. This conclusion was reached with the assistance of Jack Craven, Research Associate of the Department of Agricultural Economics, University of Manitoba.

⁶It should be noted that Labour Force Survey definitions stated here, apply as of December 1975. Since December 1975, some modifications have been made to the Labour Force Survey. It appears that future Labour Force Surveys will obtain more detailed information concerning such matters as the characteristics of employed, unemployed and 'not in the labour force' respondents. For more information concerning these recent modifications, contact the Labour Force Survey Division of Statistics Canada.

2. To The 1971 Census

-- "... for any census area or category is the percentage the unemployed labour force forms of the total (or occasionally the experienced) labour force in the area, group or category."

H. PARTICIPATION RATE

1. To The Labour Force Survey

-- "The participation rate represents the labour force as a percentage of the population 14 years of age and over. The participation rate for a particular group (age, sex, marital status, etc.) is the labour force in that group expressed as a percentage of the population for that group. Seasonally-adjusted participation rates are obtained by direct adjustment (i.e. by dividing the unadjusted participation rate by the seasonal factor.)"

2. To The 1971 Census

-- "... for any area, group or category is normally the percentage the total labour force forms of the total population 15 years and over in the area, group or category."

Major Differences Between Labour Force Survey And 1971 Census Definitions

There are essentially two major differences in the definitions used by these two data sources. These differences are:

- 1: the Labour Force Survey includes those people aged 14 years and over whereas the 1971 census includes those people who are aged 15 years and over.
- 2. the Labour Force Survey excludes from its definitions: residents of the Yukon and Northwest Territories; Indians living on reserves; immates of institutions; and members of the armed forces. The 1971 census does include these groups in its definitions.

BIBLIOGRAPHY

Canada Department of Regional Economic Expansion, Manitoba Federal-Provincial Agreement. Ottawa: Queens Printer, 1972.

Department of Agricultural Economics, University of Manitoba.

Parklands Region Manpower Study. Volume 1: "Introduction And Summary of Working Papers", and Volume 2: Working Papers (Vol. 2 unpublished). Winnipeg: Manitoba Department of Industry and Commerce, 1974.

Dictionary Of The 1971 Census Terms, Ottawa: Statistics Canada, 1972.

Dubreuil, Maurice; Humphrey, Richard. A Review of Selected Indian and Metis Communities in Manitoba. Winnipeg: Canada Department of Regional Economic Expansion, 1971.

Government of the Province of Manitoba. Guidelines For the Seventies. Winnipeg: Queens Printer, 1973.

Interlake FRED Plan Performance Report For Year Eight. Winnipeg: Manitoba Department of Agriculture, 1975.

Isard, Walter. <u>Introduction To Regional Science</u>. Englewood Cliffs: Prentice Hall Inc., 1975.

Keil, Manfred. A Rural Development Corps. Winnipeg: Department of Agriculture, 1975.

MacMillan, J.A.; Nickel, P.E.; Clark, L.J. A New Approach To Evaluating Northern Training Programs: The Churchill Prefab Housing Manpower Corps Project. Winnipeg: Center for Settlement Studies, 1975.

Manitoba Community Reports. Winnipeg: Manitoba Department of Industry and Commerce, 1975.

"Analysis of Community Functions and Relationships". Working Paper #2, Regional Analysis Program of Southern Manitoba. Winnipeg: Manitoba Department of Industry and Commerce, 1974.

Manitoba Departmental Task Force (Agriculture). Rural Development Corps (Manpower Corps) Program Outline Proposal Draft #3. (unpublished), 1974.

Mann, W.E. (ed.) <u>Poverty and Social Policy in Canada</u>. Toronto: The Copp Clark Publishing Company, 1970.

Nagler, Mark. <u>Natives Without A Home</u>. Don Mills: Longman Canada Limited, 1972.

Population Projections Canada And the Provinces 1972 - 2001. Cat. No. 91 - 514. Ottawa: Statistics Canada, 1974.

Statistics Canada. <u>Canada Yearbook</u>, 1973. Ottawa: Information Canada, 1972.

Study Papers to Assist in the Formulation of a Policy Position on Manpower Training. Toronto: Systems Research Group Inc., May, 1972.

The Labour Force. Ottawa: Statistics Canada, 1975.

Wall, Carl L. The Socio-Economic Evaluation of Training Benefits To Trainees of the Manpower Corps Training Plant - Selkirk. Winnipeg: The Natural Resource Institute, 1974.