

RECLAMATION OF DERELICT LANDS WITH AN
OUTDOOR RECREATIONAL RESORT AT THE SOUTH-INTERLAKE OF
MANITOBA, CANADA

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BY
SOLOMON AJIBOLA AREMU.

RECLAMATION OF DERELICT LANDS WITH AN
OUTDOOR RECREATIONAL PARK AT THE SOUTH INTERLAKE OF MANITOBA,
CANADA.

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CHAPTER 1. RECOMMENDATION TO THE DECISION MAKERS

INTRODUCTION:

The human personality requires for its full development the opportunity for

- (i) self-expression and development of broad and absorbing interests,
- (ii) varied recreational experiences,
- (iii) relaxation from tensions of work and responsibility,
- (iv) constructive social relationships with people,
- (v) broad perspectives and satisfactions derived from cultural communication, and
- (vi) participation in responsibility for community life.

Technical advances have affected changes in living patterns resulting in more comfort for more people but less satisfaction from the ordinary chores of living and working.

Tensions mount for individuals, families, and communities in this province when basic social needs are not met or cannot be met easily and naturally. The density of population areas especially urbanization in Manitoba further compounds the problems. The provincial government has a vital role in fostering the conditions, facilities, and programs that would strengthen the capacities of individuals and families for meeting their own recreational needs. The provincial responsibility is also required because of the comprehensive nature of the need of the Manitobans and because of the provincial government's unique capacity to plan for and obtain large-scale facilities for outdoor recreational parks.

The family, other family associations, youth serving agencies, churches, universities, community colleges, schools, commercial enterprises, and other institutions in Manitoba provide for many of the needed satisfactions, but these alone without the protection of land use for recreational pur-

poses and without programs provided for all result in undesirable conditions or uneven opportunities.

As public policy and support move to develop resources, facilities, and co-ordination of the unique purposes and functions of recreation, urgent attention must be directed to the provisions for recruitment and education of competent manpower, research methods on recreation, organizations, programs, and new approaches to multiple recreation of resource uses.

By and large, the people of South Interlake should make use of the instrumentality of the provincial government to develop and conserve those resources of nature and man that make recreation a rewarding aspect of human development and offer opportunities for putting to good use the new leisure made possible by increasing productivity.

To this end the following recommendations are made:

Recommendation

1. That the provincial government should have a sub-branch of government officials who would specifically be in charge of recreational demand analysis for each current year. This sub-branch of the Department of Recreation and Tourism should contain at least three officers - two analysts and one secretary.

Note: The importance of the above recommendation is that, if the job is properly done, the minister in charge of recreation and tourism would know the facilities that have higher current demand, the location where to put the facilities and how urgent the facility is needed. In so doing, the government revenue would be more wisely spent and have quick return for the future expansion of other facilities within and

outside the department, though all for the benefit of the Manitobans. For instance, it would be worthwhile for the government to spend more **on** the facilities with a very high demand than spending a huge amount of money on facilities for less demand.

2. This research recommends that a deeper research on Manitobans and their visitors be done on the socio-economic factors influencing participation in outdoor activity in Manitoba.
3. This study recommends the building of a provincially financed outdoor recreational park at the South Interlake of Manitoba as a resource base for the area to help alleviate that community's problems.

Note: The province of Manitoba would have a deficit of 471 square miles (or 66,440 acres) of lands for outdoor recreational parks by 1980.¹ The supply of that demand should be able to serve a multiple purpose. That is, the building of more parks should be a supply for the recreational needs as well as aid to alleviate problems in some areas of Manitoba. Problems such as the elimination of poverty, redistribution of income to the needy, providing employment opportunities and reclamation of land resources wherever necessary in such areas as the South Interlake. In order for the Department of Recreation and Tourism to achieve those multiple aims with one resource base the above recommendation should be considered.

4. The research recommends technical and resource information services for the South Interlake communities.

Note: There should be a resource expert that should talk to the people of the South Interlake on their problems as sociologically seen

¹. See Table 1 .

TABLE 1 . PROJECTED GROWTH OF SOME PERTINENT RECREATION FACTORS FOR MANITOBA.

	YEARS		
	1970/71	1980	1990
1. Population of Manitoba (Total)	1,018,236	1,128,861	1,268,934
2. Rural Manitoba	220,143	168,518	123,507
3. Urban Places (0 - 10,000)	102,280	109,353	114,761
4. Urban Places (10,000 - 33,000)	45,721	49,598	51,507
5. Winnipeg	553,109	633,006	701,050
6. Indian Bands	30,254	40,540	58,360
7. Resource Region	66,729	127,856	219,754
8. Personal Income per capita (\$)	2,903	3,347	3,892
9. Personal Disposable Income (\$)	2,383	2,745	3,191
10. Consumer Price Index on Recreation & Reading for Winnipeg	136.6	238.2	343.8
11. Number of Visitors to Manitoba	3,250,000	9,750,000	29,250,000
12. Visitors Spending in Manitoba (\$)	144,000,000	720,000,000	3,600,000,000
13. Area of parks in use (in square miles)	4,338		
14. Average number of people per sq. ml. in park use (without visitors)	235	260	293
15. Average number of people per sq. ml. in park use (with visitors)	984	2,508	7,035
16. Area of parks required (in square miles)		4,809	5,406
17. Area needed to be added to 1971 total park area (in square miles)		471	597

2. (Nos. 1-7) W.R. Maki, C.F. Framingham, D.J. Sandell, Population Projections for Manitoba by Region and Town Size 1971-1990, Research Bulletin No. 73-2 (University of Manitoba, Winnipeg, Manitoba, Canada: Department of Agricultural Economics and Farm Management, Sept. 1973) P.8

3. (Nos. 8 & 9) Hon. E. Schreyer, Manitoba Budget Address 1973. (Winnipeg, Manitoba, Canada, March 27, 1973) Table 16.
(\$3,347) R.E. Grose, Manitoba to 1980, Report of the Commission on Targets for Economic Development, (Winnipeg, Manitoba: March 1969) P.10

4. (No. 10) Manitoba Bureau of Statistics, Manitoba Digest of Statistics (Winnipeg, Manitoba, August 1973) P.50

5. (Nos. 11 & 12) Hon. P. Burtiniak, and O.S. Eagleton, The Economic Impact of Tourism (Legislative Building, Winnipeg, Manitoba, Canada: Department of Tourism and Recreation, 1970).

6. (No. 13) D.C. Bythell, The Canadian Tourism Facts Book (Ottawa: Department of Industry, Trade & Commerce, 1972) P.100

* For numbers 14 - 17, see the calculations under Appendix 'A' - Notes and Calculations.

and the importance of putting a resource base in the area.

5. This study recommends the use of the existing hills and valleys at the South Interlake for recreational activities.
6. This study recommends the inclusion of all the facilities in this program on the South Interlake outdoor recreational park and the multiple use of some of the facilities for the winter activities so as to allow all year round use of the park for this province.
7. The provincial government should exercise the regulatory powers on the South Interlake outdoor recreational park.
8. The Department of Recreation and Tourism should employ a competent professional leader to head the building of an outdoor recreational park at the South Interlake of Manitoba.
9. This research recommends the employment of more local people for the construction and maintenance of the South Interlake outdoor recreational park.
10. This study recommends that the provincial government of Manitoba should prepare a long range plan for the development of outdoor recreational opportunities for this province.

Note: This long range plan should include land acquisition and development for recreational parks to meet the needs of the increasing population, urbanization and the increasing number of visitors to this province.

11. This study recommends that the government of Manitoba build more parks apart from that of the South Interlake before 1980 or to increase the outdoor recreational facilities on the provincial park before 1980. For instance, Manitoba needs an additional 4,878

(5884-1006) of unserviced sites by 1980. This figure excludes the facilities to be put on South Interlake park. As the unserviced sites on Table 2 show an increase, so also all the other outdoor recreational facilities on Table 2 show increase. After the building of the South Interlake park, the additional facilities that Manitoba needs to add to the existing parks in Manitoba, (or to put on the additional parks it may build) are listed on Table 3, assuming the facilities on Manitoba Parks are fully used between 1970 and 1975. This is sure to happen unless there is an international disorder which prohibits foreigners use of the outdoor recreational parks in Manitoba. If no more facilities are added, and no new park is built, there is bound to be overcrowding on the parks, over use of the resources, less satisfaction to the recreationists, and less economic benefit return to the government.

TABLE 2. DEMAND PROJECTIONS FOR MANITOBA OUTDOOR RECREATIONAL FACILITIES (WITH VISITORS)

	Demand Increased From			
	1970 to		1980 to	
	1970/71	1980	1980 to 1990	1970/71 to 1990 by
YEAR				
POPULATION	4,268,236	10,878,861	20,518,934	
1. Number of Sites: (i) Unserviced	3,799	9,683	18,263	5,884
(ii) Electrical	791	2,016	3,803	1,225
(iii) Fully serviced	182	464	875	282
Total	<u>4,772</u>	<u>12,163</u>	<u>22,941</u>	<u>7,391</u>
2. Comfort Facilities:				
(i) Tables	4,868	12,408	23,402	7,540
(ii) Fireplaces	1,013	2,582	4,870	1,569
(iii) Kitchen Shelters	68	173	327	105
(iv) Open shelters	5	13	24	8
(v) Toilets (Flushing)	59	150	284	91
(vi) Toilets (Non-modern)	203	517	976	314
(vii) Showers	24	61	115	37
(viii) Laundry	5	13	24	8
(ix) Stores	34	87	164	53
3. Summer Homes	4,480	11,419	21,537	6,939
4. Recreational Facilities:				
(i) Nature Trails	2	5	10	3
(ii) Miniature Golf	19,595	49,944	94,201	30,349
(iii) Lookout Towers	8	20	39	12
(iv) Tennis Court	3,251	8,286	15,629	5,035
(v) Golf Course	1	3	5	2
(vi) Boat ramp	51	130	245	79
(vii) Hiking Trails	10	26	41	16
(viii) Playgrounds	32	82	154	50
(ix) Swimming	48	122	231	74
(x) Fishing	58	148	279	90
(xi) Museum	2	5	10	3
(xii) Skiing	1	3	5	2
(xiii) Dock	38	97	183	59
				86
				145

(EXCLUDING THE SOUTH INTERLAKE PARK)

FACILITIES		Total demand for Manitoba In 1980	Total Supply To South Interlake By 1980	Additional Facilities to be Supplied by 1980
1. Number of Sites:	(i) Unserved	9,683	1,035	8,648
	(ii) Electrical	2,016	215	1,801
	(iii) Fully serviced	464	50	414
	Total	12,163	1,300	10,863
2. Comfort Facilities:				
	(i) Tables	12,408	1,550	10,858
	(ii) Fireplaces	2,582	1,345	1,237
	(iii) Kitchen Shelters	173	2	171
	(iv) Open Shelters	13	4	9
	(v) Toilets (Flushing)	150	22	128
	(vi) Toilets (Non-modern)	517	-	517
	(vii) Showers	61	6	55
	(viii) Laundry	13	1	12
	(ix) Stores	87	N.A.	87
3. Summer Homes		11,419	N.A.	11,419
4. Recreational Facilities:				
	(i) Nature Trails	5	1	4
	(ii) Miniature Golf	49,944	-	49,944
	(iii) Lookout Towers	20	2	18
	(iv) Tennis Court	8,286	32	8,254
	(v) Golf Course	3	1	2
	(vi) Boat ramp	130	20	110
	(vii) Hiking Trails	26	10	16
	(viii) Playgrounds	82	6	76
	(ix) Swimming	122	2	120
	(x) Fishing	148	10	138
	(xi) Museum	5	1	4
	(xii) Skiing	3	1	2
	(xiii) Dock	97	4	93

CHAPTER 2. CONCLUSION AND SUMMARY

The South Interlake is a depressed area with many problems which have been identified in this research. The best resource base to alleviate those problems is an outdoor recreational park which can be either a water oriented outdoor park or a garden of Prairie plant species.

If either of the projects is built, there are good indications of benefits to be derived. The benefits in the long run show feasibility and the long run impact of the investment is encouraging.

In summary, this study has presented the following:

SUMMARY:

Identification of an area in Manitoba with socio-economic and natural resource problems, and a detailed analysis of those problems. In order to eradicate those problems, this study has specified the following objectives:

- (i) To provide information for socio-economic policy planning programs to the provincial government of Manitoba as well as to any agency that may be in charge of economic and community development at the South Interlake of Manitoba.
- (ii) To give information of how income redistribution can be provided to the people of South Interlake.
- (iii) To provide information on projecting employment opportunities for the South Interlake.
- (iv) To provide information for the enhancement at the South Interlake environment.

In presenting the present situation of the South Interlake, the study gives the detailed analysis of the following topics in the area -

- (1) Land resources
- (2) Water resources
- (3) Human resources

- (4) Economic resources
- (5) Economic performance.

In order to achieve the main objectives stated earlier with one project, the study presents these three alternative proposals:

- (1) An outdoor recreational park with artificial lakes surrounded by other recreational facilities;
- (2) A garden of indigeneous plant species of the Prairie Provinces environment;
- (3) A combination of the above alternatives.

The research focused on the first two alternatives and left the third alternative to the decision makers on the South Interlake development program. It is believed that the third alternative would contain some of the facilities in proposals one and two and the benefits from this third alternative proposal would be from both proposals as well.

The author of this research thought that it would be wise to first examine the use of the provincial outdoor recreational parks in Manitoba so as to know whether it would be wise for the provincial government to make an investment in another outdoor recreational park. In doing so the author examines the percentage of the Manitobans, the other Canadians, and the Americans participating in eighteen outdoor recreational activities in Manitoba and the type and the location of the parks to which those participants go for their recreation.

Moreover, in order to know why the Manitobans and their visitors prefer the use of one facility to the other, the author has examined the socio-economic factors of the recreationists under the following headings:

- (1) Income (2) Education (3) Occupation (4) Sex (5) Age

(6) Urbanization (7) Highways (8) Mobility (9) Real Consumer expenditures (10) Leisure time (11) Paid vacation (12) Place of residence and region and (13) Group composition. From the examination of these factors, the author was able to project the future demand for recreational facilities in Manitoba including another important factor which was the increase of population in Manitoba and the increase of the tourist visitors to Manitoba in the future.

Projections from 1980 to 1990 are given under the following topics:

1. Population increase (a) in Manitoba, and
(b) in Winnipeg.
2. Population increase of the tourist visitors.
3. Area of lands needed for outdoor parks in Manitoba for 1980 and for 1990.
4. Percentage increase of people living in areas of urban Manitoba.
5. Total manhours of work for 1980 and 1990.
6. Total leisure hours from 1980 onward.
7. Family and household formation for Manitoba.
8. Total employees in Manitoba.
9. Highway constructions in Canada.
10. Real consumer expenditures per capita.
11. Personal income per capita.
12. Personal disposable income.
13. Consumer price index on recreation.
14. Passenger cars in Manitoba.

Demands' projections from 1980 to 1990 are given under the following topics:

1. Projected total Manitobans demand for outdoor recreational facilities (in percentages).

2. Projected total visitors demand for outdoor recreational facilities in Manitoba (in percentages).
3. Demand for more parks in Manitoba.
4. Demand for more outdoor recreational facilities in Manitoba.
4. Additional recreational facilities needed on Manitoba parks by 1980.

From the above projections and demands for Manitoba, the author derives the demands and projections for the outdoor recreational facilities at the South Interlake of Manitoba under the following: -

1. Demand projections for South Interlake outdoor recreational facilities.
2. The forecast use of South Interlake outdoor recreational park from 1980 to 1990 with
 - (a) Annual attendance forecast for each year
 - (b) Annual visitor days for each year.

The plan of the two alternative projects contain:

1. Introduction
2. Classification
3. Space standards
4. Guiding factors
5. Name of the park and name of the garden.
6. (a) The total land area of the park which is 10,240 acres.
(b) The total land area of the garden which is 4,840 acres.
7. (a) The total outlay of the park which is eight million dollars.
(b) The total outlay of the garden which is four million dollars.
8. (a) Time of constructing the park - five years before the official opening.
(b) Time of constructing the garden before the official opening - ten years.
9. The cost distribution for both projects are then made under the following:

- (i) Land acquisition
- (ii) Development and construction
- (iii) Operation and maintenance
- (iv) Publicity
- (v) Others.

10. The summary of each project was given at the end of each plan.
11. The land areas are distributed according to the facilities requirements. This is done under item ii - Development and construction.
12. Notes are also presented on each facility and calculations.

The benefits were estimated under tangible and intangibles. The tangible benefits of the park were larger than that of the garden, but the intangible benefits of the garden were more than those of the park, though it is not measurable.

The tangible benefits are:

	Projects 'A'	'B'
Total tax revenue generated	\$ 2,747,840	\$ 686,960
Present direct taxes on the land (i.e. before using the land for a park)	\$ 573,987	\$ 352,047
Excess sales taxes for the govern- ment from using the land for project	\$ 2,172,853	\$ 334,913
Income redistribution effect: The money that would sink into the South Interlake economy in the short run from project	\$ 4,320,000	\$ 2,160,000
Sharing of the total benefits: Sales to the local area from the total sales	\$48,303,600	\$18,107,200
Income to the local area	\$ 8,070,944	\$ 2,995,472
Benefits to the local area from net benefits	\$ 4,316,431	\$ 1,118,216
Benefits to the rest of Manitoba from the total benefits: Sales:	\$43,919,704	\$16,273,272
Benefits to the rest of Manitoba from net benefits	\$ 4,455,105	\$ 2,169,768
Jobs to the local area	1,076	443
Jobs to the rest of Manitoba	1,963	729

Benefits from the construction of the projects.

Projects	'A'	'B'
Total sales generated	\$21,836,224	\$10,918,112
Total jobs generated	952	476
Total income generated	\$ 3,475,536	\$ 1,737,768 -

Total Benefits at the end of 20th year.

Projects	'A'	'B'
Sales	\$92,823,304	\$34,380,475
Income	\$16,771,536	\$ 6,169,768
Net Income (Benefit-Cost)	\$ 8,771,536	\$ 2,169,768
Estimated recreationists spending	\$13,296,000	\$ 4,432,000
Jobs generated	2,087	696
Total number of employment opportunities from construction and recreationists spending	3,039	1,172

The recommendations given are meant to improve the policy of the decision makers on the South Interlake outdoor recreational park. The chief part of the recommendation is that the provincial government of Manitoba should build an outdoor recreational park at the South Interlake to alleviate the problem of low income and unemployment in the area.

CHAPTER 3. SOUTH INTERLAKE OF MANITOBA.

INTRODUCTION

Derelict land is land that has one way or the other been used for economic production purposes but is later abandoned owing to economic or social changes within the generation. Good examples of such lands are the old quarries and gravel pits on Vancouver Island, and in the South Interlake of Manitoba. The derelict land at Vancouver Island was recovered by Mr. and Mrs. Butcher, but the derelict land at the South Interlake of Manitoba has not been reclaimed.

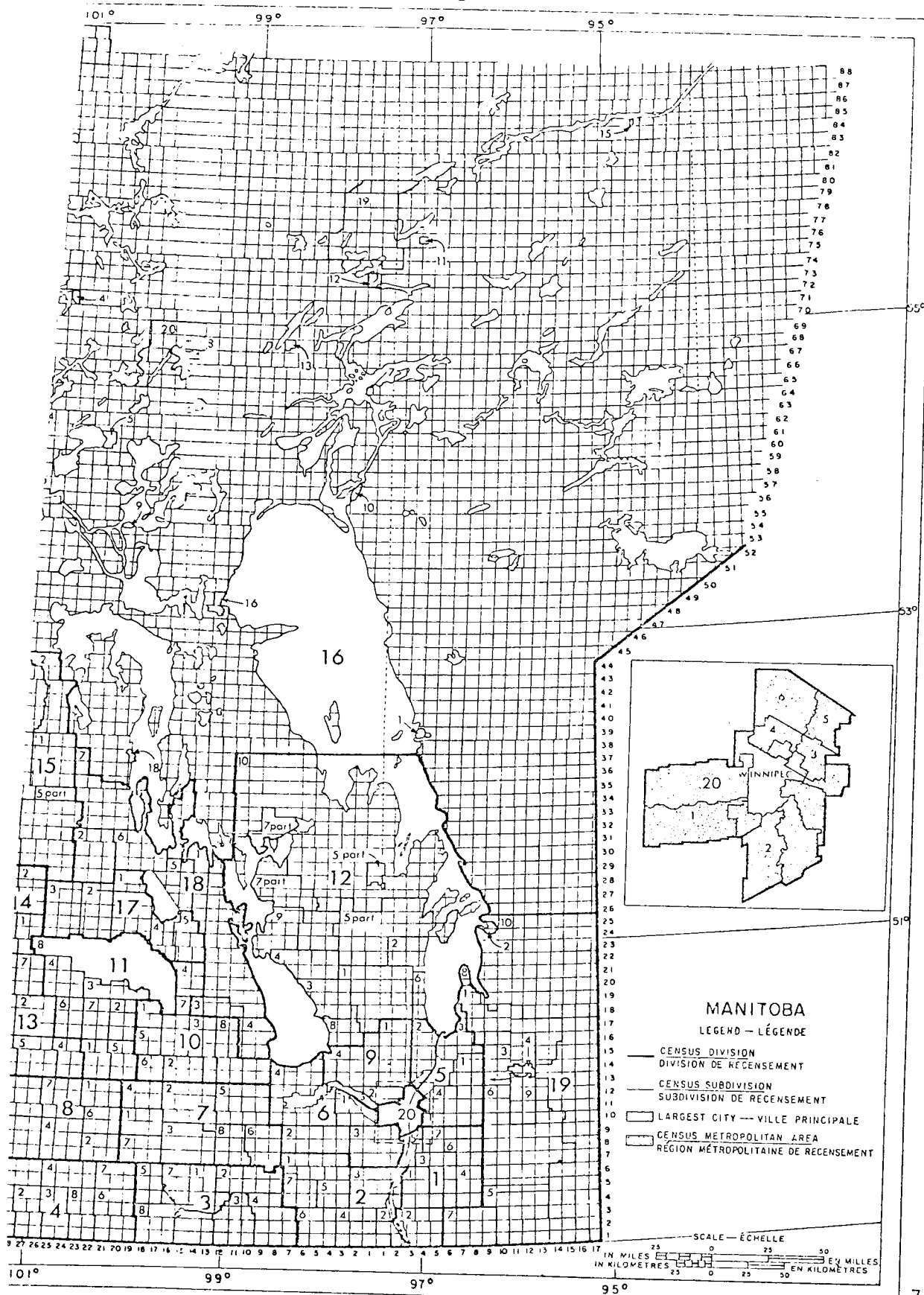
Land as a natural resource should be used for several reasons -

- (1) When land is abandoned and unused, it does not form part of productive natural resources anymore and incomes and employment may suffer. It is when land is productive that it can be called a natural resource in the sense of a productive economic resource.
- (2) A land is a static resource whereas if the human beings living on it multiply at an accelerating rate the land would become a relatively scarce resource. For these and other reasons, land should be conserved for the present generation and reserved for the future generations.

The purposes of this research are:

- (1) to identify the problems of the area;
- (2) calculate the benefits to be derived from the resort. Then state the benefits to be derived by the South Interlake community as well as the benefits to be derived in the rest of Manitoba from the same economic base.
- (3) to propose reclamation of the derelict lands at the South Interlake of Manitoba using a park resort, and
- (4) to plan the park resort.

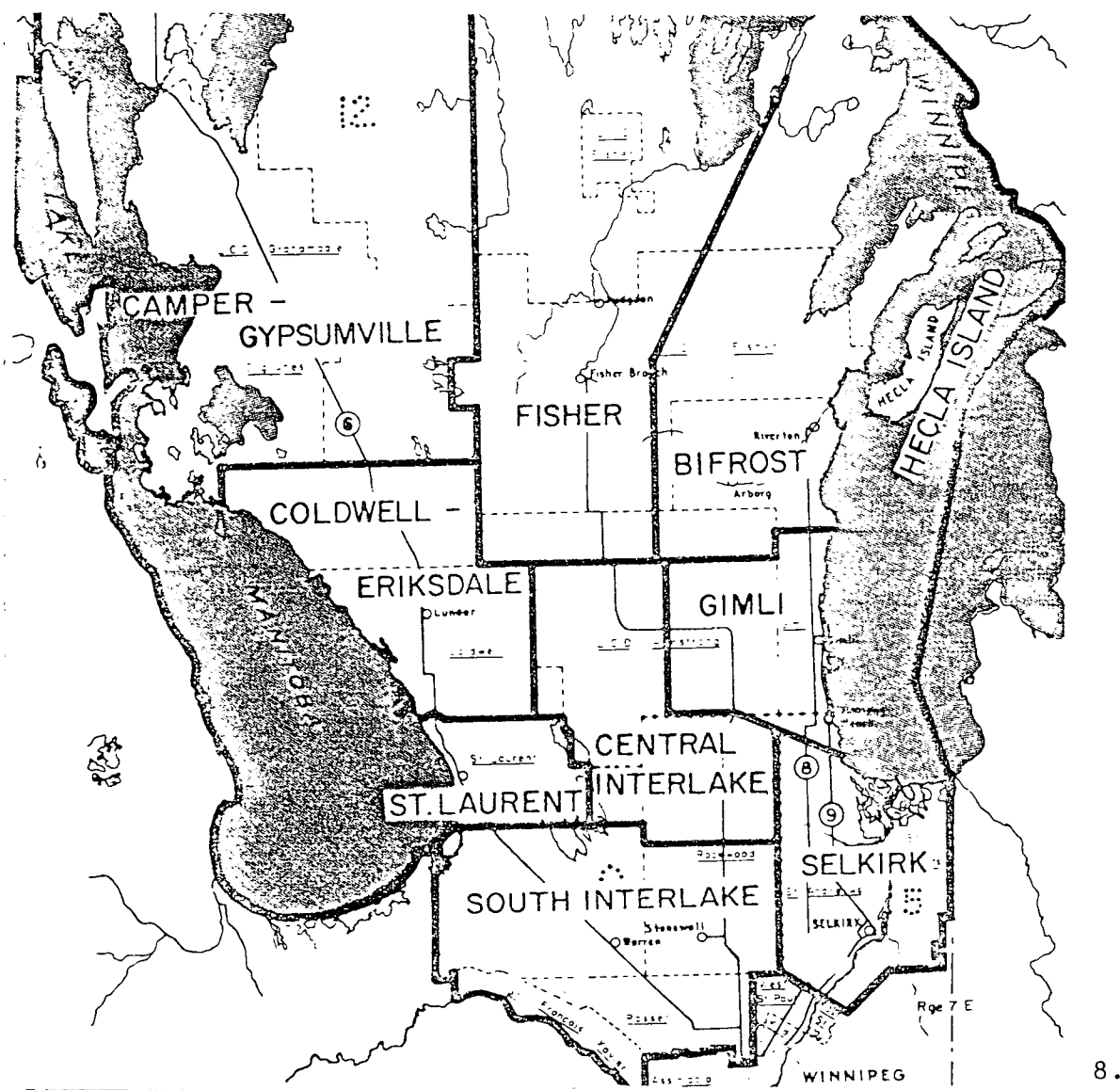
Multi-Municipal Regions of Manitoba.



RECENSEMENT DU CANADA.

7. Dominion Bureau of Statistics, Census of Canada, "Maps of Counties and Subdivisions, Metropolitan and major urban areas", Population (Ottawa, 1968), Catalogue 92-616, Vol. 1, Page C-15.

FIGURE 2.

Map of the Interlake of Manitoba

8. Canada Department of Forestry and Rural Development. Kah-Miss-Ahk (Ottawa: The Queens Printer, 1969) P. 61.

FIGURE 3.

MAN.

SUBDIVISIONS

<p>Division No. 1</p> <ol style="list-style-type: none"> 1. De Salaberry 2. Franklin 3. Hanover 4. La Broquerie 5. Ritchot 6. Ste. Anne 7. Taché 	<p>Division No. 8</p> <ol style="list-style-type: none"> 1. Daly 2. Glenwood 3. Pipestone 4. Sifton 5. Wallace 6. Whitehead 7. Woodworth 	<p>Division No. 15</p> <ol style="list-style-type: none"> 1. Minitonas 2. Mountain¹ 3. Park¹ 4. Swan River 5. Unorganized - Non municipalisé
<p>Division No. 2</p> <ol style="list-style-type: none"> 1. Dufferin 2. Montcalm 3. Morris 4. Rhineland 5. Roland 6. Stanley 7. Thompson 	<p>Division No. 9</p> <ol style="list-style-type: none"> 1. Rockwood 2. Rosser 3. St. François Xavier 4. Woodlands 	<p>Division No. 16</p> <ol style="list-style-type: none"> 1. Alexander¹ 2. Churchill² 3. Consol (Carrot Valley and other parts S.D.) 4. Consol (Cold Lake S.D.) 5. Consol (Cormorant Lake S.D.) 6. Consol (Cranberry Portage S.D.) 7. Consol (D.R. Hamilton S.D.) 8. Consol (Herb Lake S.D.) 9. Consol (Moose Lake S.D.) 10. Consol (Norway House S.D.) 11. Consol (Pikwitonei S.D.) 12. Consol (Thicket Portage S.D.) 13. Consol (Wabowden S.D.) 14. Consol (Wanless S.D.) 15. Gillam 16. Grand Rapids 17. Lynn Lake 18. Mountain¹ 19. Mystery Lake 20. Snow Lake 21. Unorganized - Non municipalisé
<p>Division No. 3</p> <ol style="list-style-type: none"> 1. Argyle 2. Lorne 3. Louise 4. Pembina 5. Riverside 6. Roblin 7. Strathcona 8. Turtle Mountain 	<p>Division No. 10</p> <ol style="list-style-type: none"> 1. Clanwilliam 2. Langford 3. Lansdowne 4. McCreary 5. Minto 6. Odanah 7. Rosedale 8. Westbourne 	
<p>Division No. 4</p> <ol style="list-style-type: none"> 1. Albert 2. Arthur 3. Brenda 4. Cameron 5. Edward 6. Morton 7. Whitewater 8. Winchester 	<p>Division No. 11</p> <ol style="list-style-type: none"> 1. Blanshard 2. Harrison 3. Park¹ 4. Rossburn 5. Saskatchewan 6. Shoal Lake 7. Strathclair 8. Riding Mountain Nat. Park 	<p>Division No. 17</p> <ol style="list-style-type: none"> 1. Dauphin 2. Gilbert Plains 3. Grandview 4. Ochre River 5. Ste. Rose
<p>Division No. 5</p> <ol style="list-style-type: none"> 1. Brokenhead 2. St. Andrews 3. St. Clements 4. Springfield 	<p>Division No. 12</p> <ol style="list-style-type: none"> 1. Armstrong 2. Bifrost 3. Coldwell 4. Eriksdale 5. Fisher 6. Gimli 7. Grahamdale 8. St. Laurent 9. Siglunes 10. Unorganized - Non municipalisé 	<p>Division No. 18</p> <ol style="list-style-type: none"> 1. Alonsa 2. Ethelbert 3. Glenella 4. Lakeview 5. Lawrence 6. Mossey River 7. Mountain¹
<p>Division No. 6</p> <ol style="list-style-type: none"> 1. Cortier 2. Grey 3. Macdonald 4. Portage la Prairie 	<p>Division No. 13</p> <ol style="list-style-type: none"> 1. Archie 2. Birtle 3. Ellice 4. Hamiota 5. Miniota 6. Russell 7. Silver Creek 	<p>Division No. 19</p> <ol style="list-style-type: none"> 1. Alexander¹ 2. Alexander (Bad Throat S.D.)¹ 3. Lac du Bonnet 4. Pinawa 5. Piney 6. Reynolds 7. Stuartburn 8. Victoria Beach 9. Whitemouth 10. Unorganized - Non municipalisé
<p>Division No. 7</p> <ol style="list-style-type: none"> 1. Cornwallis 2. Cypress, North 3. Cypress, South 4. Elton 5. Norfolk, North 6. Norfolk, South 7. Oakland 8. Victoria 	<p>Division No. 14</p> <ol style="list-style-type: none"> 1. Boulton 2. Hillsburg 3. Shellmouth 4. Shell River 	<p>Division No. 20</p> <ol style="list-style-type: none"> 1. Charleswood 2. Fort Garry 3. Kildonan, North 4. Old Kildonan 5. St. Paul, East 6. St. Paul, West

¹ Part of municipality. - Partie de municipalité.² Not shown on reference map. - Non indiquée sur la carte de référence.

9. Dominion Bureau of Statistics, Census of Canada, "Maps of Counties and Subdivisions, Metropolitan and major urban areas". Population (Ottawa, 1968) Catalogue 92-616, Vol. 1, Page C-16.

THE STUDY AREA

The study area of this research is the Census Division 9. (See Figure 1 - Multi-Municipal Regions of Manitoba). Under the 'Fund For Rural Economic Development Program' the area is known as South Interlake. (See Figure 2 - Map of the Interlake of Manitoba). This area includes Stonewall, Warren, Rosser, Grosse-Isle, St. Francois-Xavier, Teulon, part of Rockwood and part of Woodlands. (See Figure 3 - Manitoba Subdivisions.) The land area of Division 9 is approximately 730,880 acres. The center of this study area is about twenty-four miles from Winnipeg.¹⁰

GEOLOGICAL - HISTORICAL BACKGROUND OF DIVISION 9.

Geological structure, through time, determines the economic and social activities on any piece of land. For instance, a piece of land occupied by hard and large rocks cannot be used for a vegetable garden, neither can a road be constructed across a high mountain of rock. If these assumptions are correct, then it may be appropriate to see how geological structure influences the land use and economic activities at the South Interlake of Manitoba.

Division 9, as is defined above, has Silurian geological formation. This area is between the Municipality of Winnipeg, Lake Winnipeg and Lake

¹⁰. Dominion Bureau of Statistics, Census of Canada, Agriculture (Ottawa , 1973), catalogue 96-708, Vol. 1, page 31.

Manitoba. (See Figure 2 - Map of the Interlake of Manitoba.) Unfortunately, a larger portion of the area has dolomite stones near the surface of the ground. The Silurian formation and the dolomite stones by the surface of the ground induced the quarry activities that went on in some parts of the area (i.e. at Stonewall). About seven miles away from Stonewall towards the penitentiary are deposits of fine sands and gravel. These fine sands and gravel deposits induce the gravel pit activities in many areas of the South Interlake. A third activity in the area is agriculture. This aspect will not be dealt with in this paper.

THE PROBLEMS OF THE STUDY AREA

- (1) There is unemployment and underemployment problems at the South Interlake of Manitoba.
- (2) The South Interlake is designated as a depressed area in Manitoba.
- (3) Stonewall and its surrounding towns are known as dying settlements 11 of the Interlake while other towns of the Interlake are improving - some potential for commuter communities
- (4) There are some abandoned and unused lands as a result of the quarries and gravel pit activities at the South Interlake.
- (5) There is no water or adequate sewage supply at the South Interlake settlements.
- (6) There is a watertable which is about fifty feet deep in the area. Moreover, the water in the area is too hard for industrial cooling. For these reasons, water becomes a problem for industrial location and economic development in the area.

OBJECTIVES OF THIS STUDY

- (1) To provide information on projection of employment opportunities at the South Interlake of Manitoba through the developing and improving

- 22
- the quality, quantity and variety of recreational facilities to attract and hold the tourists and revenue in the province.
- (2) To give information on how income redistribution can affect the people of this identified community.
 - (3) To provide information for socio-economic policy planning programs to the provincial government as well as to any agency in charge of economic and community development for the South Interlake.
 - (4) To enhance the South Interlake environment through the provision of a recreational park.

METHODOLOGY:

This research proposes to use cost and benefit method for predicting the benefits that might be derived from two alternative projects to be built at the South Interlake of Manitoba. The assumptions to use for predicting the benefits to be generated by each of the alternative outdoor recreational park, would be based on the Craven's model¹² and Framingham's¹³ model, as applicable to cost and benefit analysis.

How the datas from Craven's model and Framingham's model applicable to this research would be dealt with in detail from chapter eight of this study.

The prediction of the benefits from the alternative park projects to be proposed by this research would be based on some factors. These factors include:

- (1) The available resources of the study area.
- (2) The past participation and interest of the Manitobans and their visitors in outdoor recreation in Manitoba.
- (3) The socio-economic factors of the recreationists in relation to outdoor parks in Manitoba.
- (4) Projections for outdoor park resources in Manitoba and the forecast use

of the South Interlake outdoor recreational park.

- (5) Planning of two alternative outdoor recreational park projects for the South Interlake of Manitoba.

It is after the examination of these factors that the benefits on the two alternative projects will be predicted.

THE PRESENT SITUATION OF THE AREA.

Land Resources:

Out of the whole land area of South Interlake 613,773 acres are used for farming. While 303,166 acres of the farmland areas are used for crops, 32,886 acres are used for pasture, and the remaining parts of the lands are used for other activities. The unimproved areas occupy 199,555 acres of the land area.¹⁴

The term unimproved here means the area covered by quarries, gravel pits, unimproved pasture areas and woodland areas.

¹¹. 'Settlement' and 'Community' are used synonymously with 'Area' in this research.

¹². J. Craven, C.F. Framingham, and R.E. Capel. A model for the analysis of the demand for and socio-economic impacts of recreation in Manitoba (Winnipeg, Manitoba: The University of Manitoba, Department of Agricultural economics and Farm Management, 1974).

¹³. C.F. Framingham, J.A. MacMillan and Paul E. Nickel, Guidelines for Community Planning (Winnipeg, Manitoba, Canada: The University of Manitoba, Department of Agricultural Economics and Farm Management, February 1973).

¹⁴. 1971 Census of Canada, Catalogue 96-708, Vol. 1V Part 3, Ottawa: March 1973, pages 30-31.

Water Resources:

South Interlake is between Lake Winnipeg and Lake Manitoba. See Figure 2 - Map of the Interlake of Manitoba. This map shows the proximity of South Interlake to both lakes. Lake Manitoba, which is nearer to South Interlake, is a good resource for any water oriented project that may take place at South Interlake of Manitoba.

Human Resources:

There were 11,832 people living at the South Interlake in 1961. This figure decreased to 11,752 in 1966.¹⁵ In 1971, the population of the area was 8,467 people. This means that South Interlake had a decrease of .7 per cent between 1961 and 1966, whereas it had about 27 per cent decrease between 1966 and 1971, which was a period of five years. On the whole, this area had about 28.5 per cent decrease of population in ten years. The decreasing percentage of this area can be attributed to two causes - death or migration. The latter cause can be associated with lack of employment opportunities. It was also noticed that while Rosser's population decreased from 1,220 in 1966 to 66 people in 1971, Stonewall's, which was a part of Rockwood municipality, population increased from 1,577 people in 1966 to 1,583 people in 1971.¹⁶

In 1966, the total labour force of South Interlake was 3,321 with agriculture having the highest employment by that time. Second to agriculture was trades.¹⁷ In 1971, the labour force¹⁸ of South Interlake was 4,700 out of which 4,510 was employed¹⁹, 190 people were unemployed²⁰, and 3,495 were not in the labour force²¹⁽²²⁾. For more information on the detailed statistic figures on South Interlake labour force by industrial division, see Table 4.

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15. Dominion Bureau of Statistics, Census of Canada, Population (Ottawa, 1968) p. 9-50.
 16. Manitoba, Canada Vacation Handbook, 1973, Pages 17-19.
 17. (i) Dominion Bureau of Statistics, Census of Canada, Population (Ottawa: 1967) P. 42.
 (ii) C.F. Framingham, J.A. MacMillan & D.J. Sandell, The Interlake Fact (Winnipeg, Manitoba, Canada: Hignell Ltd., 1970).
 18. Labour force - In the 1971 Census, this refers to non-inmates 15 years and over, who, in the week prior to enumeration, worked for pay or profit, helped in unpaid family work, looked for work, were on temporary lay-off, or had jobs from which they were temporarily absent because of illness, vacation, strike, etc. Persons doing housework in their own home or volunteer work only, are excluded from the labour force. Also excluded are female farm workers who indicated that they helped without pay in a family farm or business for less than 20 hours.
 19. Employed labour force - Refers to all non-inmates 15 years and over who, during the week prior to enumeration, worked for pay or profit or in unpaid family work. It also includes persons who had a job from which they were temporarily absent because of illness, vacation, strike, etc. (provided they were not also looking for work).
 20. Unemployed labour force - The unemployed consists of all non-inmates, 15 years and over who, during the week prior to enumeration, were not working but were looking for work, were on temporary lay-off, or would have been looking for work except that they were temporarily ill or believed no suitable work was available in the community.

 Unemployed without experience - Refers to those persons in the unemployed labour force who last worked prior to January 1, 1970 or who never worked.
 21. Not in the labour force - Refers to all persons 15 years and over not classified as members of the labour force. Most persons in this category are students, housewives, retired workers, seasonal workers 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, including inmates of institutions.
 22. Statistics Canada, 1971 Census of Canada, "Labour force activity", (Ottawa: Ministry of Industry, Trade and Commerce, February 1971) P. 2.

As it can be seen from Table 4, Stonewall had a total labour force of 510 in 1966 out of which only 28 were employed in agriculture, whereas Rosser had about 50 per cent of its labour force in agriculture. Forestry had only one employee which means that the whole area was almost barren. It would be difficult to maintain resource production given these conditions.

The total enrolment in all schools of the area in 1972 was 923.²³ The schools were located at Rosser, St. Francois-Xavier, Grosse-Isle and Stonewall. There is no technical or vocational school in the area. When the students complete the highest grade in the area, they either go to Winnipeg for further education or take up employment in the area. Unfortunately, the employment situation in the area is not impressive. However, these are some of the factors contributing to the problems of the area.

Economic Resources:

The economic conditions of South Interlake in 1966 were not as good as in 1961.

Table 5 shows that in 1961, the total sales of all the stores in the community were about 6.356 millions of dollars. In 1966, the total sales decreased by 6.200 millions of dollars. Moreover, the total sales from all groceries was 1,473 thousand dollars in 1966 whereas it was 1,955 thousands in 1961. The sales from hardware was about 280 thousand dollars in 1966 whereas it was over 411 thousand dollars in 1961. This shows that the economic conditions of South Interlake were deteriorating instead of improving.

²³. Manitoba Community Recreation Branch, 189 Evanson Street, Winnipeg, Manitoba.

Average wage earnings in 1961 were also poor. The average wage earnings reported in 1961 range from \$2,051. to \$2,762. per annum. The average earnings were not the same in that community. For instance, while the average earnings at Woodlands area were \$2,051. per annum, they were \$2,421. in the Rockwood area, and \$2,762. at Rosser. Such differences in average wage earnings within a community can be a source of conflict. Most of the workers in that area at that time earned less than \$3,000. per annum.²⁶ People who earn below \$3,000. per annum in Canada are designated as impoverished people.²⁷ Some workers at South Interlake earned less than \$3,000., hence the area was designated as a poor community.

Females are little employed in the area. In 1961, while 492 males were wage earners at Rockwood area, only 132 females were wage earners. In Woodlands area, 286 males were wage earners and only 66 females were wage earners. In the self employed jobs, while there were 663 males that were self employed, in the Rockwood area, only 37 females were self employed. The condition of Rosser was worse with 226 males and 3 females that were self employed.²⁶ In the 1971 unemployment rate for the South Interlake of Manitoba, the total unemployment rate was 4 per cent. The male unemployment rate was 3.9 percent while that of the female was 4.3 percent.²⁸ The sex inequality would not persist if there were enough jobs for this community. For more information on the complete picture of the South Interlake wage earnings and labour force by occupation, see Tables 6 and 7 of this research.

²⁶. Dominion Bureau of Statistics, Census of Canada, Trade (Ottawa, 1961) PP.48-58.

²⁷. Ian Adams, The poverty wall (Toronto: McClelland and Stewart Ltd., 1970) P.16.

²⁸. Statistics Canada, 1971 Census of Canada, "Labour force activity", (Ottawa: Ministry of Industry, Trade and Commerce, February 1974) P. 13.

TABLE 4. SOUTH INTERLAKE LABOUR FORCE BY INDUSTRIAL DIVISION

Rural Municip. and Local Govt.	Labor Force	Agri- culture	Forest- ry	Fishing & Trapping	Mines & Quarries	Manu- factur- ing	Cons- truct- ion	Transp. & Comm.	Trades	Finance & Ins.	Services	Admin- istra- tion	Not Stat
Rockwood	1429	853	-	-	13	63	72	73	122	9	110	91	23
Rosser	611	311	1	-	2	57	37	63	56	8	50	21	5
Woodlands	771	502	-	-	2	19	34	57	59	6	67	14	11
Stonewall	510	28	-	-	2	54	49	66	139	19	104	42	16
TOTAL	3321	1694	1	-	19	193	192	259	367	42	331	168	55

TABLE 5. SOUTH INTERLAKE RETAIL TRADE BY KIND OF BUSINESS GROUP AND NO. OF STORES & SALES BY TYPE OF STORE AND

	Total										Hard-									
	All	Food	General	Auto-	Apparel	ware	Other													
	Stores	Grocery	Merch.	motive	&	&	Retail													
	Sales	Sales	Sales	Sales	Sales	Home	Stores	Retail	Services	Wholesale										
	No. (\$000)	No. (\$000)	No. (\$000)	No. (\$000)	No. (\$000)	No. (\$000)	No. (\$000)	No. (\$000)	No. (\$000)	No. (\$000)										
1966																				
All Division 9	83	6200.1	23	1473.0	15	1278.7	30	2797.0	4	97.6	6	280.4	5	273.4	81	6356.4	NA	NA	30	4214.3
Stonewall	22	2213.0	5	604.9	1	-	6	1093.4	3	-	4	-	3	-						
Remainder	61	3987.1	18	868.1	14	-	24	1703.6	1	-	2	-	2	-						
1961																				
All Division	81	6356.4	28	1955.2	13	875.4	27	2834.6	1	-	7	411.6	5	-						

TABLE 6. 1961 SOUTH INTERLAKE LABOUR FORCE BY OCCUPATION.

Rural Municip.	1961 Pop.	All Occup.	Man-gerial	Clerical	Sales	Serv. & Recreation	Transp. & Comm.	Farm-Workers	Loggers	Fisher-men & Trappers	Mines & Quarry-Men	Crafts-men	Labourers	Professional
Rockwood	4340	1429	53	48	26	102	37	843	-	-	15	148	42	73
Rosser	1751	611	17	42	11	31	48	306	1	-	-	108	17	26
Woodlands	2346	771	22	25	11	23	38	500	-	-	1	82	14	40
Stonewall	1420	510	62	58	43	64	39	25	-	-	4	105	39	54

TABLE 7. 1961 SOUTH INTERLAKE WAGE EARNERS & EARNINGS.

Pop. Total over Labor % 15	Force	Wage Earners		Self Employed		Unpaid Farm Workers		Wage Earners by Earnings (reported)								
		Fe- Total Male	male	Fe- Total Male	male	Fe- Total Male	male	Under \$3,000	\$3,000 \$5,999	\$6,000 \$9,999	Over \$10,000	Average earnings				
Rockwood	Total 2821	1429	624	492	132	700	663	37	105	78	27	328	236	7	1	2421
%			43.7	34.3	9.3	49.0	46.3	2.7	7.3	5.5	1.8	57.3	41.3	1.2	.2	
Rosser	Total 1097	611	354	275	79	229	226	3	28	13	15	195	126	3	-	2762
%			57.9	45.0	12.9	37.5	36.9	.5	4.6	2.1	2.5	60.2	38.9	.9	-	
Woodlands	Total 1491	771	352	286	66	374	363	11	45	23	22	203	92	4	-	2051
%			45.7	37.1	8.6	48.5	47.1	1.4	5.8	3.0	2.8	67.9	30.8	1.3	-	
Stonewall	Total 995	510	430	303	127	78	68	10	2	1	1	222	169	18	2	2731
%			84.3	59.4	24.9	15.3	13.3	2.0	.4	.2	.2	54.0	41.1	4.4	.5	29

RECREATION FACILITIES

As was stressed earlier and as can be seen through the population fluctuations of the area, most of the settlements of South Interlake are declining in settlements. There are few outdoor recreation facilities in the area. Where there are facilities, they are mainly attached to the schools. The few places where the statistics are available include:

- (a) Stonewall with one swimming pool known as Kinsmen Lake, one arena, and one fair ground. Other facilities such as fields for soccer and baseball, and tennis courts are attached to the school.
- (b) Warren has one hockey rink, one arena and one curling club. Other facilities such as halls and fields are attached to the school.³⁰

All these facts boil down to the fact that the Provincial Government must do something to meet the objectives stated earlier in this paper in order to improve the economic, social and recreational conditions of the people of South Interlake of Manitoba.

There are three alternatives open to the Provincial Government to improve this area: one is to build a big park with an artificial lake. Another alternative is to have a big garden of indigeneous plant species of the prairie environmental area. Such species would include trees, shrubs, sedges, rushes, and flowers - all of prairie origin. The third alternative is a combination of the above two suggested projects.

This would not be done in a vacuum, it has to involve a big capital investment. Such a public capital investment entails provincial and local

³⁰ Manitoba Community Recreation Branch, 189 Evanson Street, Winnipeg, Manitoba.

government policies. In order for a government to execute a good policy, it would need a guide such as the estimated costs and benefits that could be derived from a project. For these reasons, this research is going to present the estimated costs and benefits for the first two alternative projects suggested below.

These projects as previously mentioned are:

- (1) An outdoor recreational park with artificial lakes surrounded by other recreational facilities such as a golf course and nature trails.
- (2) A garden of indigeneous plant species of the Prairie Provinces environment.
- (3) A combination of the above alternatives.

By and large, provincial outdoor recreational park projects, as it applies to this study, requires a huge investment of economic resources such as money, land, water, and manpower. In order to make a useful investment of such resources for a provincial project such as an outdoor recreational park, some issues should be properly examined. Such issues include the participation rate of the population of the province coupled with the participation rate of the visitors. Therefore, the next chapter of this study will examine the participation rate of Manitoban and tourist visitors to Manitoba in outdoor recreational parks within the province of Manitoba.

CHAPTER 4. PARTICIPATION AND INTEREST OF
MANITOBANS AND VISITORS TO
MANITOBA IN OUTDOOR RECREATION

INTRODUCTION:

In order to plan for the future recreational needs in Manitoba, it would be necessary for this study to examine (1) how Manitobans use the present outdoor recreational parks in this province, and (2) the socio-economic factors that influence the Manitobans in using the outdoor recreational parks within their province. The examination of these two important factors would then point out whether it is necessary or unnecessary for the province of Manitoba to have an additional provincial park at this period in this decade, assuming other factors such as the problems relating to South Interlake are constant.

PARTICIPATION AND INTEREST:

Tables 8 and 10 present the percentage of the Manitobans and other Canadians participating in eighteen outdoor recreational activities in 1967 and 1972. The percentages shown on Table 8 are based on the population of Manitobans and other Canadians participating in different activities in that year. At the top are activities: --- driving for pleasure, picnicking, sightseeing, visiting historical sites and walking for pleasure. These activities take minimal preparation, skill, or exertion. On the national level, the same activities top the list.

It should be stressed that this table does not provide any measure of the degree of interest of individual recreationists in various outdoor recreation activities, but to some extent it represents an ordering of the relative ease with which many people engage in different activities. It is possible, for example, that persons who engage in such sports as

skiing and horseback riding, though fewer in number according to the percentage on the table, are more avidly involved in these activities than the much more numerous individuals who go driving and picnicking. A person does not participate in an activity that takes skill, training, preparation, money, and effort unless he has a considerable interest in it. The acquisition of skill and training, the investment in time and money, the purchase of equipment, and the reinforcement which comes from a series of satisfying experiences are likely to strengthen the commitment to the activity.

In order to make a justifiable conclusion, it would be necessary (1) to assume that there was no significant change in the distribution of interests among Manitobans in outdoor recreational activities between 1967 and 1972 as was shown by the percentage of interests shown on Tables 8 and 10 and (2) to compare participation in outdoor recreation activities of 1972 with another year. Tables 9, 10, 11, and 12 are very good for this purpose for they show the participation percentage for 1967 and 1972, with figures and percentage change. Tables 10 and 12 show the percentage of Manitobans and Canadians aged eighteen and above participating in selected recreation activities for 1967 and 1972. The tables point to driving for pleasure, picnicking, and walking for pleasure to be the top of all the activities for those years. Table 8 presents the percent of population aged ten years and above, whereas Tables 10 and 12 present the population eighteen years of age and above. From these, one can conclude that there is a greater demand by adults in those three activities than for winter sport facilities.

TABLE 8. MANITOBA AND CANADA

PERCENTAGE OF CANADIANS AND MANITOBAIS AGED 10+
PARTICIPATING IN SELECTED RECREATIONAL ACTIVITIES 1972

Activity	<u>Percent of Population Participating</u>	
	Manitoba	Canada
Tent Camping	24.5	23.8
Trailer Camping	12.5	11.5
Pickup Truck Camping	5.4	3.6
Hunting	12.3	12.8
Power Boating	28.3	26.2
Canoeing	16.5	13.1
Sailing	3.0	5.1
Visiting Historic Sites	47.7	37.4
Driving for Pleasure	67.7	64.5
Sightseeing from Private Vehicle	50.9	38.4
Snow Skiing	8.5	9.7
Snowmobiling	20.0	23.9
Picnicking	63.5	58.3
Walking-Hiking for Pleasure	47.0	46.3
Ice Skating	30.4	34.0
Horseback Riding	16.2	14.9
Bicycling	38.6	35.8
Fishing	40.1	36.2

31. Neil Nixon, Participation of Manitobans in Outdoor Recreation Activities 1972 (Winnipeg, Manitoba: Department of Tourism, Recreation and Cultural Affairs, Research and Planning, May 1973) P. 10

TABLE 9. MANITOBA

ESTIMATED NUMBERS OF PARTICIPANTS AGED 18+ IN SELECTED
RECREATIONAL ACTIVITIES- 1967 AND 1972

Activity	1967	1972	Percentage Change in Participants
Tent Camping	66,300	115,600	+ 74.3
Trailer Camping	42,200	77,000	+ 82.5
Hunting	72,400	83,500	+ 15.3
Fishing	120,600	244,000	+102.3
Power Boating	90,500	141,000	+ 55.8
Canoeing	18,100	57,800	+219.3
Visiting Historic Sites	72,400	263,200	+265.0
Driving for Pleasure	289,500	443,000	+ 53.0
Snow Skiing	12,100	44,900	+271.1
Snowmobiling	48,300	109,200	+126.1
Picnicking	223,200	379,000	+ 69.8
Walking-Hiking for Pleasure	114,600	256,800	+124.1
Pickup Truck Camping	12,100	32,100	+165.3
Sailing	12,100	25,700	+112.4
Ice Skating	72,400	141,300	+ 95.2
Horseback Riding	12,100	51,400	+324.8
Bicycling	42,200	166,900	+295.5

32. Ibid. P.16

TABLE 10. MANITOBA

PERCENTAGE OF MANITOBA POPULATION AGED 18+ PARTICIPATING IN
SELECTED RECREATIONAL ACTIVITIES 1967 AND 1972

Activity	1967 (1969*)	1972
Tent Camping	11%	18%
Trailer Camping	7	12
Hunting	12	13
Fishing	20	38
Power Boating	15	22
Canoeing	3	9

Walking-Hiking for Pleasure	114,600	256,800	+124.1
Pickup Truck Camping	12,100	32,100	+165.3
Sailing	12,100	25,700	+112.4
Ice Skating	72,400	141,300	+ 95.2
Horseback Riding	12,100	51,400	+324.8
Bicycling	42,200	166,900	+295.5

32. Ibid. P.16

TABLE 10. MANITOBA
PERCENTAGE OF MANITOBA POPULATION AGED 18+ PARTICIPATING IN
SELECTED RECREATIONAL ACTIVITIES 1967 AND 1972

Activity	1967 (1969*)	1972
Tent Camping	11%	18%
Trailer Camping	7	12
Hunting	12	13
Fishing	20	38
Power Boating	15	22
Canoeing	3	9
Visiting Historic Sites	12	41
Driving For Pleasure	48	69
Snow Skiing	2	7
Snowmobiling	8	17
Picnicking	37	59
Walking-Hiking for Pleasure	19*	40
Camping with Pickup Camper*	2*	5
Sailing*	2*	4
Ice Skating*	12*	22
Horseback Riding*	2*	8
Bicycling*	7*	26

33. Ibid. P.15

TABLE 12. CANADA
ESTIMATED NUMBERS OF PARTICIPANTS AGED 18+ IN
SELECTED RECREATIONAL ACTIVITIES- 1967 AND 1972

Activity	1967	1972	Percentage Change in Participants
Tent Camping	1,724,200	2,635,800	+ 52.8
Trailer Camping	862,100	1,387,200	+ 60.9
Hunting	1,724,200	1,526,000	- 11.5
Fishing	3,325,300	4,300,500	+ 29.3
Power Boating	1,847,400	3,190,700	+ 72.7
Canoeing	615,800	1,387,200	+125.3
Visiting Historic Sites	1,970,500	4,994,100	+153.4
Driving for Pleasure	6,404,200	9,017,100	+ 40.8
Snow Skiing	738,900	971,100	+ 31.4
Snowmobiling	862,100	2,497,000	+189.6
Picnicking	5,172,600	7,491,100	+ 44.8
Walking-Hiking for Pleasure	4,556,814	5,410,300	+ 18.7
Pickup Truck Camping	246,315	554,900	+125.3
Sailing	369,500	693,600	+ 87.7
Ice Skating	2,340,000	2,774,500	+ 18.6
Horseback Riding	985,300	1,109,800	+ 12.6
Bicycling	1,601,000	2,635,800	+ 64.6

34. Ibid. P.18

TABLE 12. CANADA
PERCENTAGE OF CANADIAN POPULATION AGED 18+ PARTICIPATING
IN SELECTED RECREATIONAL ACTIVITIES 1967 AND 1972

Activity	1967 (1969*)	1972
Tent Camping	14%	19%
Trailer Camping	7	10
Hunting	14	11
Fishing	27	31
Power Boating	15	23
Canoeing	5	10
Visiting Historic Sites		

Sailing	369,500	693,600	+ 87.7
Ice Skating	2,340,000	2,774,500	+ 18.6
Horseback Riding	985,300	1,109,800	+ 12.6
Bicycling	1,601,000	2,635,800	+ 64.6

34. Ibid. P.18

TABLE 12. CANADA
PERCENTAGE OF CANADIAN POPULATION AGED 18+ PARTICIPATING
IN SELECTED RECREATIONAL ACTIVITIES 1967 AND 1972

Activity	1967 (1969*)	1972
Tent Camping	14%	19%
Trailer Camping	7	10
Hunting	14	11
Fishing	27	31
Power Boating	15	23
Canoeing	5	10
Visiting Historic Sites	16	36
Driving for Pleasure	52	65
Snow Skiing	6	7
Snowmobiling	7	18
Picnicking	42	54
Walking-Hiking for Pleasure	37*	39
Pickup Truck Camping	2*	4
Sailing	3*	5
Ice Skating	19*	20
Horseback Riding	8*	8
Bicycling	13*	19

35. Ibid. P.17

The most useful part of Tables 9 and 11 is the percentage change in participants among the Manitobans and the Canadians between 1967 and 1972. In Table 9, the percentage change among the Manitobans was very high in horseback riding, bicycling, snow skiing, visiting historical sites and canoeing. Whereas in Table 11, the percentage change on the national level between 1967 and 1972 was great in snowmobiling, visiting historical sites, canoeing, sailing and boating. On both sides, visiting historical sites and canoeing are important. When it comes to the frequency of participation in selected activities among the Manitobans as presented in Table 13, driving for pleasure still comes first among the activities, especially under the percentage of population participating more than ten times. That is, more than 38 percent of the recreationists drove for pleasure within their short period of staying or going to the park. The more they go to the park, the more they drive for pleasure instead of taking part in other activities. Other activities that top the list of frequency of participation by the recreationists are sightseeing, picnicking, walking for pleasure and bicycling. Bicycling, on the other hand, is an activity for sightseeing and pleasure riding.

The importance of these comparisons and illustrations is that in considering facilities for the South Interlake of Manitoba outdoor recreational park, the facilities for these activities - driving for pleasure, picnicking, sightseeing, visiting historical sites, horseback riding, bicycling and water oriented activities, would be given priority because they obviously have greater demand than other recreational activities in the province of Manitoba.

One way of throwing light on the potential need for outdoor recreational facilities is to examine the satisfaction people derive from their

present degree of participation and the extent to which they would like to increase these activities in the future. Table 13 - Frequency of participation in selected activities among Manitobans aged ten plus in 1972, shows the satisfaction and the degree to which the Manitobans prefer one activity to the other. Under the percentage of population participating or who wish to participate in one activity more than ten times,³⁶ thirty eight percent of Manitobans favour driving for pleasure while about twenty seven percent favour bicycling, twenty percent favour sightseeing and the rest are all below twenty percent. Thus, there seems to be a significant potential for additional recreation activity that is not completely gratified in Manitoba. For example, see Tables 14 and 15 for the activities that had adequate and inadequate facility supply to the parks in Manitoba in 1972.

In order to be able to predict fairly accurately the facilities having more demand than another, it is necessary to see how adequate the present outdoor recreational facilities are in Manitoba. In this way, one can see the facilities that are adequate and do not need to be increased assuming there is no increase or change in preference in socio-economic factors influencing the use of recreational facilities. Those socio-economic factors that one may assume constant here are - population, income, mobility, urban growth, urban distress and technology. In the same manner, one can see which facilities are in short supply and need to be increased. Table 14 presents population perception of the adequacy of facilities for eighteen outdoor recreation activities in Manitoba and Canada for 1972. The other assumption to bear in mind before using this table is that what happens in the 1972 survey represents the general picture of the outdoor recreation facilities in Manitoba, at least up to that year.

³⁶ more than ten times: That is, the activity that many people prefer to do always without boredom.

TABLE 13. MANITOBA
FREQUENCY OF PARTICIPATION IN SELECTED ACTIVITIES
AMONG MANITOBANS AGED 10+ IN 1972

Activity	<u>Percent of Population Participating</u>				
	Total	1-5 Times	6-10 Times	More Than 10 Times	Not Stated
Tent Camping	24.5	19.9	1.6	2.2	0.7
Trailer Camping	12.5	4.2	2.6	4.9	0.8
Pickup Truck Camping	5.4	3.6	1.4	0.4	-
Hunting	12.3	9.0	0.3	2.6	0.4
Power Boating	28.3	14.7	3.0	9.8	0.8
Canoeing	16.5	11.6	2.6	2.2	-
Golfing	3.0	2.2	0.7	-	-
Visiting Historic Sites	47.7	35.2	4.8	7.1	0.6
Driving for Pleasure	67.7	12.3	10.8	38.2	6.4
Sightseeing from Private Vehicle	50.9	17.8	8.1	20.3	4.7
Snow Skiing	8.5	5.0	3.5	-	-
Snowmobiling	20.0	6.6	2.9	9.3	1.2
Picnicking	63.5	38.2	13.5	8.3	3.8
Walking-Hiking for Pleasure	47.0	17.3	11.4	16.4	1.8
Ice Skating	30.4	12.5	4.2	13.2	0.5
Horseback Riding	16.2	9.6	2.6	2.8	1.3
Bicycling	38.6	11.2	3.2	20.6	3.6
Fishing	40.1	21.2	6.0	11.7	1.2

37. Neil Nixon, Participation of Manitobans in Outdoor Recreation Activities 1972 (Winnipeg, Manitoba: Department of Tourism, Recreation and Cultural Affairs, Research and Planning, May 1973) P.13.

TABLE 14. MANITOBA AND CANADA
POPULATIONS PERCEPTION OF THE ADEQUACY OF FACILITIES
FOR SELECTED RECREATIONAL ACTIVITIES, 1972

Activity	Manitoba-Percent Indicating				Canada- Percent Indicating			
	Very Adequate	Reasonably Adequate	Not Very Adequate	No Idea	Very Adequate	Reasonably Adequate	Not Very Adequate	No Idea
Tent Camping	23.0	34.7	9.0	33.3	22.0	28.3	11.9	37.8
Trailer Camping	19.2	31.3	7.6	41.8	19.2	26.1	10.6	44.1
Pickup Truck Camping	20.5	29.0	6.8	43.6	17.2	24.1	10.0	48.7
Canoeing	12.8	17.1	11.6	58.5	15.5	18.1	14.4	51.9
Power Boating	21.9	25.5	10.9	41.7	24.3	23.7	11.3	40.7
Fishing	17.7	26.8	9.3	46.1	18.8	22.4	13.2	45.6
Hunting	8.7	13.5	23.7	54.1	17.9	19.4	13.2	49.5
Visiting Historic Sites	21.8	32.4	16.3	29.4	25.0	26.2	11.8	36.9
Visiting for Pleasure	35.6	40.3	4.2	20.0	42.1	28.5	5.8	23.6
Travelling from Private Vehicle	26.1	28.9	14.8	30.2	28.9	24.9	8.8	37.4
Down Skiing	7.3	13.5	22.6	56.6	23.1	19.1	12.5	45.3
Automobile	24.9	13.4	12.6	49.1	27.2	20.7	10.1	42.0
Hockey	39.6	30.5	9.6	20.3	42.9	26.5	6.8	23.3
Hiking-Joking for Pleasure	37.3	29.3	5.4	31.5	41.4	24.1	6.5	28.0
Ice Skating	36.7	23.4	6.2	28.7	38.5	22.1	7.7	31.5
Recreational Riding	15.2	26.4	10.8	47.6	18.7	19.8	12.7	48.8
Swimming	29.9	26.2	16.5	27.3	32.4	23.0	10.9	33.7
Skiing	29.9	21.8	11.9	36.4	28.5	23.8	11.9	35.8

¹. Ibid. 14

TABLE 15. POPULATION PERCEPTION OF THE ADEQUACY OF FACILITIES
FOR SELECTED RECREATIONAL ACTIVITIES FOR MANITOBA IN 1972.

Activity	Manitoba Percent indicating	
	Adequate	Not Adequate
Tent Camping	57.7	42.3
Trailer Camping	50.5	49.4
Pick-up truck Camping	49.5	50.4
Hunting	29.9	70.1
Power boating	47.4	52.6
Canoeing	44.5	55.4
Sailing	22.2	77.8
Visiting historical sites	54.2	45.7
Driving for pleasure	75.9	24.2
Sightseeing	55.0	45.0
Snow skiing	20.8	79.2
Snowmobiling	38.3	61.7
Picnicking	70.1	29.9
Walking for pleasure	63.1	36.9
Ice skating	65.1	34.9
Horseback riding	41.6	58.4
Bicycling	56.1	43.8
Fishing	51.7	48.3

38. N. Nixon, Participation of Manitobans in Outdoor Recreation Activities
(Winnipeg, Manitoba: Department of Tourism, Recreation and Cultural Affairs,
Research and Planning, May 1973) P.14.

The attention here will be focused on Manitoba in that table. The percentage under 'Very Adequate' and 'Reasonably Adequate' would be added together for each facility, and the percentage under 'Not Very Adequate' and 'No Idea' to have received no satisfaction with the facilities mentioned. For these comparisons, see Tables 14 and 15. In Table 15, the activity with the largest percentage is driving for pleasure which has no special skill and requires no special facility to be supplied by the government whereas snow skiing and sailing that top the activities under no adequate supply need skill as well as facilities to be supplied by the government such as artificial lakes. Other activities that have a higher percentage under no adequate supply of facilities are snowmobiling, horseback riding, canoeing, power boating, pick-up truck camping, trailer camping, tent camping, and fishing.

American tourists contribute a larger percentage to the tourist business than other tourists in Manitoba. These are positive dollars from "export" of recreation services. Recreationists from Winnipeg or Canada only contribute redistribution dollars, not positive dollars of benefit to the nation. For instance, in 1969, American tourists formed about fifty percent of all the visitors that came to Manitoba. In 1970, the American recreationists formed above sixty percent among the non-resident recreationists in all outdoor recreational parks in Manitoba.³⁹

Any analysis done without considering the Americans in

³⁹. D.B. McCloy, Tourist Reception Centre Study (Winnipeg, Manitoba: Department of Tourism, Recreation and Cultural Affairs, Research and Planning Branch, February 1971) P.8.

the tourist business of Manitoba might be invalid. By and large, the interests of the American tourist are mostly in visiting the historical sites, visiting the museums and the shopping centres, and fishing. They participate in other activities as well but not as much as they participate in the above four activities.⁴⁰ An important policy issue not considered here but which should be considered is whether as policy of government it wishes to actively encourage American visitors to come to Manitoba.

Another means by which one can see how people participate in recreational activities according to their interest and socio-economic conditions is to see where people go for outdoor recreation. Table 16 presents a good picture of how recreationists choose where to go for their enjoyment or spend their holidays. In Tables 16 and 17, one can see at a glance that the higher percentage of Manitobans participating in outdoor recreation go to either government parks or to any other public property than the percentage that go to the private property. The reason behind these are many - (1) Probably the private property charge higher fees than the public parks or public properties. As such, those who cannot afford to pay for the private recreational facilities go to the public places for their enjoyment. (2) There may be more facilities of different types at the public parks than the private parks. (3) It may be that only the upper income people who can afford the costs go to the private parks while the middle class and lower class people go to the public parks.

Whatever the case, more people prefer to go to the public parks than to go to the private parks since the society contains more people in the middle and lower income category than the number of people in the upper income categories. The welfare of the people is the interest of this province,

⁴⁰.N. Nixon, Interest of American Visitors (Winnipeg, Manitoba: Department of Tourism, Recreation and Cultural Affairs, Research and Planning Branch; November 1973) P.2.

TABLE 16. MANITOBA
LOCATION OF 1972 PARTICIPATION IN SELECTED
RECREATIONAL ACTIVITIES BY MANITOBIANS AGED 10+

Activity	Total	Manitoba-Percentage of Population Participating					Not Stated
		In City or Town	In Gov't Park	Private Property	Other Public Property	Not Sure	
at Camping	24.5	0.6	16.2	7.1	2.1	0.4	-
ailer Camping	12.5	0.9	9.2	2.8	4.6	-	0.4
ckup Truck Camping	5.4	0.7	2.7	1.6	1.0	2.2	-
nting	12.3	-	1.5	9.2	4.5	-	10.0
ver Boating	28.3	0.8	13.3	4.5	12.1	-	-
noeing	16.5	0.6	7.3	2.9	7.8	-	0.2
iling	3.0	-	0.9	0.5	1.5	-	-
siding Historic Sites	47.7	14.5	27.4	2.7	15.5	1.1	0.7
ving for Pleasure	67.7	31.4	33.1	9.3	46.9	2.7	2.0
tsseeing from Private Vehicle	50.9	23.2	30.6	5.4	35.1	1.4	0.7
w Skiing	8.5	-	4.1	1.9	2.9	-	-
wmobiling	20.0	0.4	3.0	14.7	7.5	0.4	0.7
knicking	63.5	7.0	44.6	9.6	21.3	1.0	-
king-Hiking for Pleasure	47.0	21.3	17.5	8.1	19.1	0.5	1.0
Skating	30.4	18.1	0.9	2.2	8.9	1.0	1.2
eback Riding	16.2	1.7	1.2	9.4	2.7	0.4	1.1
ycling	38.6	26.9	1.7	7.6	13.9	0.4	1.2
ating	40.1	1.2	17.2	7.8	17.0	0.4	1.2

*Ibid P.11.

TABLE 17. MANITOBA
 NUMBER OF PARTICIPANTS AGED 10+ IN SELECTED RECREATIONAL
 ACTIVITIES BY LOCATION OF PARTICIPATION* 1972
 (Based on Population of 802,639 Persons Age 10+)

Activity	Total	Number Participating		Private Property	Other Public Property
		In City or Town	In Gov't Park		
Tent Camping	196,600	4,800	130,000	57,000	16,900
Trailer Camping	100,300	7,200	73,800	22,500	36,900
Pickup Truck Camping	43,300	5,600	21,700	12,800	8,000
Hunting	98,700	-	12,000	73,800	36,100
Power Boating	227,000	6,400	106,800	36,100	97,100
Canoeing	132,400	4,800	58,600	23,300	62,600
Sailing	24,100	-	7,200	4,000	12,000
Visiting Historic Sites	382,900	116,400	219,900	21,700	124,400
Driving for Pleasure	543,400	252,000	265,700	74,600	376,400
Sightseeing from Private Vehicle	408,500	186,200	245,600	43,300	281,700
Snow Skiing	68,200	-	32,900	15,300	23,300
Snowmobiling	160,500	3,200	24,100	118,000	60,200
Picnicking	509,700	56,200	358,000	77,100	171,000
Walking-Hiking For Pleasure	377,200	171,000	140,500	65,000	153,300
Ice Skating	244,000	145,300	7,200	17,700	71,400
Horseback Riding	130,800	13,600	9,600	75,400	21,700
Bicycling	309,800	215,900	13,600	61,000	111,600
Fishing	322,000	9,600	138,900	62,600	136,400

*Excludes those "not sure" and "not stating" their location(s) of participation. Participants by location may add to more than total participants because of multiple response to locations of participation.

therefore, the government of Manitoba needs more land for park and water outdoor recreational facilities for Manitoba citizens.

The proportion in this chapter points out that there might be some forces governing the participation and interest of the Manitobans and her visitors that are yet to be known and unless those forces are known, a valid judgement cannot be made on how these people participate in outdoor recreation. For this reason, the next chapter would examine the forces that induce people to participate in one form or another among many available outdoor activities.

CHAPTER 5. OUTDOOR RECREATION IN RELATION TO
SOCIO-ECONOMIC FACTORS IN MANITOBA.

INTRODUCTION:

The previous chapter throws some light on the possible future trends in outdoor recreational activities in Manitoba by examining the Manitobans and their tourist visitors' wish and aspiration, and in some cases the barriers to the realization of those recreationists' aspirations. In that chapter, it was not clear to know the forces that shape the participants to the form in which they are, therefore it is the intent of this section to examine how outdoor recreational patterns vary in the different sub-groups of the population by focusing on the socio-economic factors that can predict the participants' behaviour. The study would look at the differences between the lower and the higher income people, the old and the young, their educational levels, their occupations, and the sex differences of the recreationists. The importance of examining these factors are: (1) they enhance the understanding of Manitobans and their visitors' current practices, and (2) they identify some of the factors which make for high or low participation in outdoor activities. By and large, these comparisons would aid this research as well as help the Department of Tourism and Recreation of this province to arrive at the estimates of how future needs and demands for facilities would differ from the present needs in Manitoba.

The assumption on which the analysis would be based is that the 1969 park visitor survey in Manitoba as presented in the tables used here, represents the general socio-economic characteristics of the Manitobans.

INCOME:

Income in relation to outdoor recreation patterns is of particular interest because of the possibility of substantial income increases in the

years ahead. In order to see the validity of the possibility of substantial income increases in the years ahead, see Tables

18 - Selected Economic Indicators for Manitoba

19 - Manitoba and Canada, Per Capital Income Comparison

20 - Percentage Distribution of Family Units and Their Aggregate Income

21 - Percentage Distribution of Individuals by Income Groups and Sex in Manitoba

- (See Personal Income Per Capita for Manitoba in 1980 and 1990, and Personal Disposable Income for Manitoba in 1980 and 1990 in)

Projected Growth of Some Pertinent Recreation Factors for Manitoba.

In those tables, one would see that the percentage of lower income people decreases from year to year among the whole population of Manitoba including males and females whereas the percentage of people moving to the middle income and upper income positions increases yearly. Lower income people are classified here as people earning less than \$6,000 per annum. Middle income people points to the people earning between \$6,000 to \$10,000 per annum, and the people earning above \$10,000 per annum are classified as upper income people. This is an arbitrary classification as the author thinks is applicable to 1974. The importance of these tables and the sociological analysis is that income affects people's recreation choices in certain ways:

- (1) in attending the outdoor recreational parks especially when the park is a distance away from the place of residence, and
- (2) in taking part in outdoor recreational activities at the park especially where there are user fees and the activities that require special equipment and skill such as boating, water skiing, and horseback riding.

Table 22 presents the household incomes of non-resident visitors to

TABLE 18. SELECTED ECONOMIC INDICATORS FOR MANITOBA
(Millions of Dollars)¹

Year	PERSONAL INCOME		LABOUR INCOME ²		FARM CASH INCOME		CHECKS CASHINGS	
	Value	Percent Change	Value	Percent Change	Value	Percent Change	Value	Percent Change
1960	1,492		884		233		19,081	
1961	1,436	-3.8	905	2.4	243	4.3	21,131	10.7
1962	1,611	12.2	955	5.5	262	7.8	21,191	2.8
1963	1,647	2.2	1,003	5.0	270	3.1	26,496	25.0
1964	1,775	7.8	1,058	5.5	300	11.1	27,284	3.0
1965	1,892	6.6	1,143	8.0	342	14.0	30,922	13.3
1966	2,039	7.8	1,242	8.7	377	10.2	33,715	9.0
1967	2,280	11.8	1,410	13.5	373	-1.1	35,372	4.9
1968	2,523	10.7	1,557	10.4	365	-2.1	34,184	-3.4
1969	2,703	7.1	1,720	10.5	350	-4.1	36,436	6.6
1970	2,854	5.6	1,837	6.8	341	-2.6	39,897	9.5
1971	3,165	10.9	1,989	8.3	381	11.7	43,166	8.2
1972	3,542*	11.9	2,212*	11.2	485	27.3	47,800	10.7

* Estimated

¹ All data have been revised to accord with updated Statistics Canada series.
² Unadjusted wages and salaries.

Source: Department of Agriculture/Department of Labour/Department of Finance.

43. Hon. E. Schreyer. Manitoba Budget Address 1973, March 27, 1973.

TABLE 19. PER CAPITA INCOME COMP.
MANITOBA AND CANADA

Year	PERSONAL INCOME PER CAPITA				P
	Manitoba	Percent Change	Canada	Percent Change	
1960	\$1,647		\$1,656		\$1,489
1961	1,557	-5.5	1,651	-3	1,395
1962	1,721	10.5	1,764	6.8	1,550
1963	1,736	8.7	1,840	4.3	1,562
1964	1,851	6.6	1,933	5.1	1,656
1965	1,961	5.9	2,091	8.2	1,752
1966	2,117	8.0	2,303	10.1	1,854
1967	2,368	11.9	2,482	7.8	2,047
1968	2,598	9.7	2,690	8.4	2,231
1969	2,761	6.3	2,943	9.4	2,290
1970	2,903	5.1	3,124	6.2	2,383
1971	3,703	10.3	3,405	9.0	2,636
1972*	3,571	11.5	3,756	10.3	2,942

* Estimated

Source: Department of Finance.

BOOKS FOR MANITOBA
1973

FARM CASH INCOME	CHECKS CASHINGS	
	Percent Change	Value
1960	4.3	21,131
1961	7.8	21,191
1962	3.1	26,496
1963	11.1	27,284
1964	14.0	30,922
1965	10.2	33,715
1966	—1.1	35,372
1967	—2.1	34,184
1968	—4.1	36,436
1969	—2.6	39,897
1970	11.7	43,166
1971	27.3	47,800
1972	10.7	

TABLE 19. PER CAPITA INCOME COMPARISON
MANITOBA AND CANADA

Year	PERSONAL INCOME PER CAPITA			PERSONAL DISPOSABLE INCOME PER CAPITA		
	Manitoba	Percent Change	Canada	Manitoba	Percent Change	Canada
1960	\$1,647	—5.5	\$1,656	\$1,489	—6.3	\$1,487
1961	1,557	10.5	1,764	1,395	11.1	1,475
1962	1,721	8.7	1,840	1,550	.8	1,579
1963	1,736	6.6	1,933	1,562	6.0	1,646
1964	1,851	5.9	2,091	1,656	5.8	1,713
1965	1,961	8.0	2,303	1,752	10.4	1,846
1966	2,117	11.9	2,482	1,854	2.262	1,994
1967	2,368	9.7	2,690	2,047	2.424	2,116
1968	2,598	6.3	2,943	2,231	7.2	2,262
1969	2,761	5.1	3,124	2,290	4.6	2,335
1970	2,903	10.3	3,405	2,383	8.6	2,754
1971	3,703	11.5	3,756	2,630	10.5	3,044
1972*	3,571			2,942		

*Estimated
Source: Department of Finance.

Percent of Finance
dress 1973, March 27, 1973.

TABLE 20. PERCENTAGE DISTRIBUTION OF FAMILY UNITS AND THEIR AGGREGATE INCOME

		Income Size Groups in Current Dollars										TOTAL	AVERA
		Under \$1,000	\$1,000- \$1,999	\$2,000- \$2,999	\$3,000- \$3,999	\$4,000- \$4,999	\$5,000- \$5,999	\$6,000- \$6,999	\$7,000- \$9,999	\$10,000 and over			
		PERCENT											
1951	Distribution of all units	15.9	17.9	23.9	18.6	9.6		12.6				100.0	3,185
	Distribution of aggregate income.	2.6	8.5	19.3	20.3	13.3		25.7		10.3		100.0	
1954	Distribution of all units	13.1	14.7	18.6	19.9	13.5	12.5	5.0				100.0	3,654
	Distribution of aggregate income.	2.0	5.9	12.7	19.1	16.3	19.9	11.1	13.0			100.0	
1957	Distribution of all units	11.0	13.7	15.0	17.2	14.0	10.2	6.4	9.0			100.0	4,269
	Distribution of aggregate income.	1.3	4.7	8.9	14.0	14.8	13.3	9.8	18.1	15.1		100.0	
1959	Distribution of all units	10.0	11.9	12.9	16.1	15.2	11.6	7.9	9.9			100.0	4,521
	Distribution of aggregate income.	1.1	4.0	7.2	12.4	14.9	14.0	11.3	18.1	17.0		100.0	
1961	Distribution of all units	9.9	10.4	12.0	13.8	14.7	12.5	9.0	12.3			100.0	4,815
	Distribution of aggregate income.	1.1	3.2	6.2	10.2	13.7	14.0	11.9	21.0	18.7		100.0	
1965	Distribution of all units	6.6	8.5	8.9	10.5	11.3	12.0	10.8	19.2			100.0	6,049
	Distribution of aggregate income.	0.7	2.2	3.8	6.1	8.5	11.0	11.8	26.7	29.2		100.0	

100

[illegible]

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TABLE 21. PERCENTAGE DISTRIBUTION OF INDIVIDUALS BY INCOME GROUPS AND SEX IN MANITOBA

Income Group	1 9 7 1		1 9 6 7	
	Males	Females	Males	Females
Under \$500				
\$ 500 - \$ 999	5.6	16.8	5.4	15.6
1,000 - 1,499	5.2	10.7	6.6	15.1
1,500 - 1,999	4.6	9.8	7.6	18.9
2,000 - 2,499	7.6	14.7	4.5	9.0
2,500 - 2,999	4.8	6.7	3.9	9.6
3,000 - 3,499	3.8	5.3	4.7	7.4
3,500 - 3,999	3.6	6.0	4.2	7.6
4,000 - 4,499	3.6	5.9	5.8	4.3
4,500 - 4,999	4.5	4.9	6.4	3.3
5,000 - 5,499	3.1	4.7	7.2	2.3
5,500 - 5,999	4.0	2.5	7.5	1.7
6,000 - 6,999	4.1	3.0	6.7	1.9
7,000 - 7,999	9.7	3.2	10.1	2.3
8,000 - 9,999	7.3	2.0	6.4	0.5
10,000 - 14,999	12.5	1.5	6.7	0.5
15,000 and over	11.6	2.0	6.3	0.3
	4.4	0.3		
TOTALS	100	100 45	100	100 46

45. Dominion Bureau of Statistics, Income Distribution by Size in Canada (Ottawa: Information Canada, May 1973)

46. Dominion Bureau of Statistics, Consumer, Finance Research Staff, Income Distribution by Size in Canada 1967 (Ottawa: The Queens Printer, December 1970) P.45

Manitoba in 1969 whereas Tables 23 and 24 present household incomes of Manitobans and their travel for outdoor recreation. As Table 24 presents the lower income people as defined above, go mostly to Island Park and Norquay Beach whereas most of the middle income people in Manitoba go to Duck Mountain, Cranport, Bakers Narrows, Grand Beach, Grass River and Overflowing River. Most of the people in the upper income level go to the Grass River Park and to Bakers Narrows. This does not mean that these sub-groups do not mix at the parks. For instance, it is possible to find some lower income people at Grass River Park and Bakers Narrows, and it is also possible to find the people of the upper income level at Island Park. The difference is that more of one class of people go to one type of park more than the other, thus showing their preferences.

Another point of interest from Tables 22 and 23 is that the average income of visitors to Manitoba is higher than the Manitobans'. Moreover, the average income of the Americans is higher than that of the Canadians. The importance of these comparisons is that the people with high income can afford to travel far for their recreation than the lower income people. Moreover, Table 25 shows that the Manitobans go to the park in Manitoba more than the combined Canadian and the American tourists. This is an indication that most of the Manitobans cannot afford to go away from Manitoba for their recreation.

In addition, Table 26 shows most of the American visitors are professional technicians or retirees whereas most of the Canadian visitors to Manitoba are either professional, technicals or managers, officials, or proprietors. This analysis is supported by the percentages in the tables

TABLE 22. HOUSEHOLD INCOMES OF VISITORS: NON RESIDENTS

Income	Other Canadians	U.S.A.
Under \$3,000	10.3%	3.0%
3,000-5,999	16.1%	10.9%
6,000-7,999	19.5%	14.3%
8,000-9,999	20.8%	19.2%
10,000-14,999	23.9%	26.6%
Over \$15,000	9.5%	25.9%
Average Income	\$8,617	\$10,749

TABLE 23. AVERAGE HOUSEHOLD INCOME OF VISITORS FROM MANITOBA

Park	Average Household Income in Dollars
Grand Beach	\$7,574
St. Malo	7,263
St. Ambroise	7,490
Norquay Beach	7,074
Overflowing River	7,273
Cranberry Portage	7,549
Bakers Narrows	7,864
Duck Mountain	7,193
Grass River	8,213
Island Park	6,934
All Areas	\$7,414

* See Table 47 for the footnotes of Tables 22-30 and 39-40.

TABLE 24. HOUSEHOLD INCOME LEVELS OF VISITORS: MANITOBBANS

PERCENT

TABLE 23. AVERAGE HOUSEHOLD INCOME OF VISITORS FROM MANITOBA

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Grass River	8,213
Island Park	6,934
All Areas	\$7,414

* See Table 47 for the footnotes of Tables 22-30 and 39-40.

TABLE 24. HOUSEHOLD INCOME LEVELS OF VISITORS: MANITOBANS

PERCENT

Household Income level	Grand Beach	St. Malo	St. Ambroise	Norquay Beach	O'Flo. River	Cran. Port.	Bakers Narrows	Duck Mt.	Grass River	Isl. Park
Under	9.6	6.8	9.1	9.8	6.6	5.9	3.2	7.5	5.6	13.7
3000-5999	21.0	30.4	26.9	34.0	29.8	13.7	26.4	28.6	22.2	33.5
6000-7999	33.6	30.1	26.8	26.1	32.2	47.1	34.4	33.7	33.3	22.2
8000-9999	14.9	15.2	16.6	12.2	14.9	21.6	16.8	14.6	11.1	12.3
10000-14999	15.6	13.8	15.3	11.5	11.6	7.8	10.4	10.6	18.5	10.7
Over 15000	5.3	3.7	5.6	6.5	5.0	3.9	8.8	5.0	13.0	7.7

TABLE 27. AGE AND SEX OF VISITORS: PERCENTS

	Grand Beach	St. Malo	St. Ambroise	Norq. Beach	O'Flo. River	Cran. Port.	Bakers Narrows	Duck Mt.	Grass River	Isl. Park	1970 Manitoba Pop.
4	7.7	9.3	11.0	8.0	5.1	5.7	7.2	8.7	3.8	11.8	8.4
9	12.0	19.0	15.8	14.3	11.0	13.2	14.7	17.9	8.1	16.2	10.3
14	10.9	16.7	13.5	16.6	14.8	13.4	16.7	15.2	12.1	12.2	10.2
19	14.9	10.6	7.9	9.3	10.3	7.0	7.4	7.8	7.5	6.9	9.6
24	14.8	8.3	10.2	4.8	3.3	4.7	3.6	5.8	4.2	8.6	8.6
34	15.1	13.7	17.1	11.8	10.8	17.9	14.4	18.0	11.9	13.7	12.0
44	12.8	13.3	11.5	15.3	17.3	12.9	18.0	13.7	18.2	11.5	10.9
54	5.7	5.5	8.3	10.5	14.8	12.2	10.8	8.2	18.2	9.3	11.1
54	4.4	2.1	3.3	6.6	9.4	9.0	5.8	3.5	10.5	5.3	9.0
59	.6	.7	1.0	2.0	2.3	2.2	1.2	.5	3.6	1.6	3.3
	1.1	.7	.4	.8	.9	1.7	.2	.6	2.0	2.8	6.6
Female	50.5	52.0	49.2	49.5	56.5	57.2	51.3	52.9	66.3	51.1	Average % = 53
Male	49.5	48.0	50.8	50.5	43.5	42.8	48.7	47.1	33.7	48.9	Average % = 46

TABLE 25. ORIGINS OF PARK VISITORS

Park	Percent of Visitors			
	Manitoba	Other Canada	United States	Total
Grand Beach	92.5	4.4	3.1	100.0
St. Malo	95.5	2.8	1.7	100.0
St. Ambroise	97.1	2.1	0.8	100.0
Norquay Beach	40.7	35.0	24.3	100.0
Overflowing River*	61.0	16.0	23.0	100.0
Cranberry Portage*	51.0	15.0	33.0	100.0
Bakers Narrows*	64.0	13.0	23.0	100.0
Duck Mountain*	74.0	16.5	9.1	100.0

-44	12.8	13.3	11.5	15.3	17.3	12.9	18.0	13.7	18.2	11.5	10.9
-54	5.7	5.5	8.3	10.5	14.8	12.2	10.8	8.2	18.2	9.3	11.1
-64	4.4	2.1	3.3	6.6	9.4	9.0	5.8	3.5	10.5	5.3	9.0
-69	.6	.7	1.0	2.0	2.3	2.2	1.2	.5	3.6	1.6	3.3
	1.1	.7	.4	.8	.9	1.7	.2	.6	2.0	2.8	6.6
Male	50.5	52.0	49.2	49.5	56.5	57.2	51.3	52.9	66.3	51.1	Average% = 55
Female	49.5	48.0	50.8	50.5	43.5	42.8	48.7	47.1	33.7	48.9	Average% = 44

TABLE 25. ORIGINS OF PARK VISITORS

Park	Percent of Visitors			
	Manitoba	Other Canada	United States	Total
Grand Beach	92.5	4.4	3.1	100.0
St. Malo	95.5	2.8	1.7	100.0
St. Ambroise	97.1	2.1	0.8	100.0
Norquay Beach	40.7	35.0	24.3	100.0
Overflowing River*	61.0	16.0	23.0	100.0
Cranberry Portage*	51.0	15.0	33.0	100.0
Bakers Narrows*	64.0	13.0	23.0	100.0
Duck Mountain*	74.0	16.5	9.1	100.0
Grass River*	38.6	9.0	52.4	100.0
Island Park	81.2	15.3	3.5	100.0

* Actual figures taken from campgrounds permit sales.

7. H.N. Nixon, Park Visitor Surveys 1969 Summary Report (Winnipeg, Manitoba: Department of Tourism, Recreation and Cultural Affairs, Research and Planning Branch, Nov. 1970) pp. 5-18.

(This is the footnote for Tables 22-30 and Tables 39-40.)

TABLE 26. OCCUPATIONS OF THE PARK VISITORS: PERCENTS

Occupation	Manitoba	Visitors From	United States
		Other Canada	
White Collar Workers	1.9	4.4	1.4
Professional-Technical	21.0	27.7	31.8
Managers-Officials-Proprietors	8.8	14.7	9.0
Clerical	8.5	4.7	3.0
Sales	5.8	4.7	4.9
Blue Collar Workers	4.2	2.6	4.8
Craftsmen-Foremen	16.3	10.5	7.0
Operatives	4.1	5.7	4.1
Non-Farm Laborers	1.4	1.5	1.6
Service Workers	1.3	0.8	1.7
Private Household Workers	-	-	-
Other Service Workers	5.6	2.2	2.6
Farm Workers	3.3	0.9	1.8
Students	6.5	0.9	2.9
Housewives	1.4	0.7	0.8
Retiree	2.4	5.1	16.5
Military	1.7	5.1	2.2
Unemployed	0.4	0.2	0.5
Others	1.2	-	0.8
Not Stated	4.5	7.3	2.7

as supported by the percentages in the tables mentioned show that some of the differences between income groups are attributable to two other social class characteristics - education and occupation. Although this does not erase the fact that income has a significant influence of its own for visiting a distant park for recreation and even on participation in outdoor recreation. This is true for the fact that one who cannot afford to travel to a distant park may not also be able to use recreational facilities that have user fees.

It is interesting in this context that driving, picnicking, visiting historical sites, and walking and hiking for pleasure top the percentage list of the Manitobans and her visitors in their participating in outdoor recreational activities. This fact was already shown on Tables 8, 9, 10, 11, and 12.

When it comes to the activities like sailing, horseback riding, canoeing, and trailer camping, the percentage drops very rapidly because these activities involve spending money to buy equipment and the spending of leisure time. This confirms the finding that the income differences reflect social class differences in life styles and interest patterns. The distinction between a financial effect and a class effect has important implications for forecasting; for as people shift into higher income brackets they will not immediately adopt the leisure time patterns of people in that income class unless money itself is the conditioning factor.

By and large, some of the differences between income groups are due to such related factors as education, occupation, and age. The very low rate of participation by the bottom income group for example and in association

to Tables 24 and 27, can be accounted for by the high proportion of older people, many of them retired, in this bracket. Even after allowance for these other factors has been made, it is still clear that income itself has a decided influence on preferring outdoor recreation at the parks. In general, participation in outdoor activities and going out to the parks tend to go up as income does as it is shown on Table 24. The jump is sharpest at about the \$3,000 a year mark; from this point participation in outdoor activities and going to the parks steadily increases in Manitoba, reaching a maximum in the \$15,000 bracket. Above that income, participating and going out to the parks decreases.

EDUCATION:

In general, education affects participation as much as income does; the more education people have, especially the adults, the more participation they are likely to indulge in. This is particularly the case in swimming, playing games, sightseeing, walking, and driving for pleasure.

In Manitoba, education shows a strong relationship with Manitobans who go to the parks, and who take part in outdoor activities. By and large, the higher educated people go to the parks more and participate more in outdoor recreational activities than the lower educated people. In Manitoba, this generality does not hold because people with university education go to the parks less than the high school graduates as Table 28 and 29 show. In all the parks in Manitoba where the survey was made in 1969, people from high school have the highest percentage, as compared to people from the university, grade school, and technical vocational schools. The recreationists who did not complete high school or have not completed high school have a higher percentage in most of park attendance than those people who completed high school.

TABLE 28 . EDUCATION LEVEL OF VISITORS-MANITOBBANS: PERCENTS

Education Level	Grand Beach	St. Malo	St. Ambrose	Norquay Beach	O'Flo. River	Cran. Port.	Bakers Narrows	Duck Mt.	Grass River	Isl. Park
School	6.8	15.8	12.4	10.5	22.3	10.7	13.7	11.5	19.0	16.5
High School	19.4	27.3	23.2	29.6	26.2	39.3	23.7	33.5	29.5	26.8
School Grad.	27.6	21.9	22.8	24.5	25.4	23.2	29.8	27.0	19.0	24.6
University	15.8	10.2	11.0	13.0	6.2	3.6	6.1	5.0	12.1	10.5
University Grad.	19.0	15.1	19.7	15.3	11.5	14.3	18.3	11.5	13.8	13.9
Technical-Vocational	11.4	8.1	11.0	7.2	8.5	8.9	8.4	11.5	6.9	7.7

TABLE 29 . EDUCATIONAL LEVEL OF VISITORS: MANITOBBANS

COMPARISONS: PERCENTS

Education Level	1969 Nine ² Prov. Areas	1968 ² Whiteshell	1967 8M ³ Survey	1965 Labour ⁴ Force in Man.
Grade School	9.6	10.0	24	36.7
Part High School	22.4	21.7	33	34.7
High School Grad.	36.2 ¹	41.8	26 ¹	17.5
Part University	13.9	10.8	10	11.1
University Grad.	17.8	15.7	7	

TABLE 30 . EDUCATION LEVEL OF VISITORS: NON RESIDENTS

PERCENTS

Education Level	United States Visitors	Other Canadians
Grade School	5.6	7.4
Part High School	8.3	26.9

TABLE 29 . EDUCATIONAL LEVEL OF VISITORS: MANITOBIANS

COMPARISONS: PERCENTS

Education Level	1969 Nine ² Prov. Areas	1968 ² Whiteshell	1967 8M ³ Survey	1965 Labour ⁴ Force in Man.
Grade School	9.6	10.0	24	36.7
Part High School	22.4	21.7	33	34.7
High School Grad.	36.2 ¹	41.8	26 ¹	17.5
Part University	13.9	10.8	10	11.1
University Grad.	17.8	15.7	7	

TABLE 30 . EDUCATION LEVEL OF VISITORS: NON RESIDENTS

PERCENTS

Education Level	United States Visitors	Other Canadians
Grade School	5.6	7.4
Part High School	8.3	26.9
High School Grad.	23.6	23.0
Part University	14.7	8.6
University Grad.	40.7	24.2
Post High School (Technical-Vocational)	7.0	9.9

The reverse of this pattern applies to the people from the universities. The university graduates have a higher percentage of participation than those who did not complete their university education or those who have not completed their undergraduate studies. The technical vocational people were at the bottom of the scale. The grade school students also have a higher percentage than the technical vocational people. In a general proposition people with minimal education tend to be the much older people who go to the park less and participate even less in outdoor recreational activities. Those of lower education are also heavily represented in the lower income groups which also rank low in going to the park for recreation. Yet, according to Tables 26, 28 and 29, education has a distinct bearing on interest of people in, and number of people who go to the park.

The chief findings from these analyses are (1) the people with high school education go to the parks more in Manitoba than the people with the university education. (2) The professional technician and the crafts foremen are many in number among the recreationists that use outdoor parks in Manitoba. It can be concluded from these findings that most of the professional technicians and the crafts foremen had high school education because of these correlations. In a way, the percentage figure of these two groups correspond with the findings in the household income levels of the Manitobans who go to the parks for recreation. The two findings from Tables 24, 28 and 29 are relatively correlated. The high school people are mostly found in the middle income group with the household income ranging from \$3,000 to \$10,000 per annum. As such they cannot afford to travel out of the province for their holidays. The emergent question from these findings is why do the undergraduates and graduates of the universities go to the park less in Manitoba? If they go to the parks outside their own province, as they can afford to, this may mean that there is inadequate outdoor

recreational facilities in this province hence they go to far distant parks. By and large, more research should be done on these findings.

The pattern presented above about the Manitobans who go to the parks for recreation is almost the same as the pattern presented by other Canadians who go to parks in Manitoba. This analysis is presented in Table 30. The only difference is in the visitors from the United States of American where the visitors were mostly from the university graduates category. Nevertheless, education influences people who go for recreation in outdoor parks in Manitoba.

OCCUPATION:

Occupation has a considerable influence on recreation attendance, though to some extent, it may not be so much the particular work a person does as how he is paid for it and how long a vacation he is given.

In Manitoba, occupation influences the segment of its population that goes to the park for outdoor recreation. For instance, in Table 24 presented earlier in this research, occupation of the park visitors, the professional-technicians has the highest percentage among the Manitobans, the other Canadians, and the Americans that go to the park for outdoor activities in Manitoba. Other occupations that follow that are the managers, the craftsmen and the clerical workers. At the bottom of the occupational status hierarchy are the labourers, service workers, farm workers, housewives and the unemployed. The peculiar finding in this table is the retiree that is the second largest percentage among the Americans who go to the parks in Manitoba whereas the retired people have a very low percentage among the Manitobans that go to the outside park for recreation. The question that comes from this finding is: do the retirees in Manitoba move out of the province after retirement or do they just prefer not to go to the parks for recreation? More research should be done on this issue to see

whether their pay is so low that they cannot afford to go to the park or not. Furthermore, it should also be found out what these people do in summer for recreation if they do not move out of Manitoba. Special regard must be given to this class of people for they are the builders of not only Manitoba but also Canada, therefore they deserve special attention with regard to their pay and their activities.

Occupational differences among the people that go to parks in Manitoba are of interest, even though the multivariate analysis indicates that they are due in large part to other related factors such as income, education and length of paid vacation. For men the relation of occupation among people going to the park in Manitoba for outdoor activity is significant especially with professional technicians, managers, and craftsmen showing higher percentages of visitors to the parks in Manitoba. The number of women going to the parks in Manitoba for outdoor recreational activities does not depend on their husband's occupation to any significant degree. If this last statement is correct, what then are the factors that motivate the housewives to go to the parks for recreation? A further research should be done on this point.

DEMOGRAPHIC CHARACTERISTICS.

By and large, demographic characteristics such as sex, age and stage in the life cycle are important for the preparation of the future forecast for Manitoba because the demographic characteristics of the adult population can be projected more reliably if such variables as income, free time available, and preferences for leisure time are available. Nevertheless, this study prefers to use the total population of Manitoba to forecast the future parks' requirements for this province. On analysis for sex, age,

and stage in life cycle in relation to park use in Manitoba is given below.

SEX:

Table 27 - Age and Sex of Visitors, presents the male and female percentages at different parks in Manitoba. By and large, the male has a larger percentage occurrence than the females in eight different parks in Manitoba as compared to the females who have a large percentage in two parks out of the ten parks used in the survey. The total average percentage shows that the male has 53.7 as compared to the female with 46.4 percentage. In short, males go to the park for outdoor recreational activities more than females in Manitoba. These differences can be associated with (1) the strong interest men show for such traditionally masculine pursuits as hunting and fishing, (2) the discrimination in income of females and less opportunity of employment to females especially in the jobs that require physical ability. Table 21 presents a good picture of the differences in income between males and females in Manitoba for 1967 and 1971. While the females have a larger percentage in the lower income group, the males have a larger percentage at the middle and upper class group. The differences among males and females in going to parks in Manitoba is due to income differences, keeping other factors constant.

The way males and females participate in outdoor activity would likely follow the same pattern for the fact that people who do not go out could not take part in outdoor activity.

AGE:

In addition to Table 27 - Age and Sex of Visitors (that is, Manitobans

and their visitors), this average percentage would also be used in this analysis.

TABLE 31. AVERAGE AGE PERCENTAGE OF VISITORS
TO THE PARKS IN MANITOBA.

GROUPS					
Ages	'A' Percent	Ages	'B' Percent	Ages	'C' Percent
0 - 4	8.4	20 - 24	8.6	45 - 54	11.1
5 - 9	10.3	25 - 34	12.0	55 - 64	9.0
10 - 14	10.2	35 - 44	10.9	65 - 69	3.3
15 - 19	9.6			70+	6.6
Total of 0-19	38.5%	Total of 20-44	31.5%	Total	30.0%
Average of		Average %	10.5%	Average	7.5%
0-19	9.625%				

⁴⁸. This table is constructed from Table 27. The percentages are taken from the sub-heading - 1970 Manitoba Population.

The eleven groups of ages given in Table 27 are shortened into these three groups because the behavior and the patterns of the daily routing of people in an industrialized and civilized society like Manitoba follows the above pattern.

The age composition of population in the present era changes with the expectation of increases in the older and the younger age groups. The relationship between the age and the ability to go to the parks for recreation in Manitoba as presented in Tables 27 and 31 is of a particular interest.

Age has a sharper influence on outdoor recreation than all other factors. As might be expected the older people get the less they engage in outdoor activity. This decline, though the data on this issue for Manitoba is not available, is generally noticeable in the more active pursuits such as cycling, hiking, horseback riding, and water skiing. Furthermore, in late middle age, people still engage in such activities as swimming, motor boating, fishing, and nature walks. In the other types of recreation such as walking or driving for pleasure, sightseeing, visiting historical

sites, and picnicking, participation rates are impressive among the Manitobans in general, but the data on male and female, old and young ways of participating in those activities are not available. That impressive point can be seen from Tables 10, 13, 16 and 17. The interests of the visitors to Manitoba are also high in some of those activities. The additional interests of the visitors are: - seeing the museums and shopping as it is indicated in Table 32. By and large, there is a general decline in activities with advancing years as it is pointed out in Tables 27 and 31. The border lines between all the ages listed in Table 27 are the ages between 0 to 4, and the ages above 55 years old. The groups in between these two extremes, that is between the ages of 5 and 54, have the highest total percentage that go to the parks for recreation. On the other hand, if these eleven groups are re-grouped into three groups as is presented in Table 31, group 'B' has the highest average percentage of people going to the parks in Manitoba. This group 'B' contains the ages of 20 to 44. Group 'A' with 9.63 percent comes second. This group contains the ages of 1 to 19. Group 'C' comes last with the ages above 45 and with the average percentage of 7.5. The sharpest drop with the least percentage is the ages between 65 and 69.

The importance of this analysis are (1) as the population increases, the percentage of people going to the parks in Manitoba would increase most in group 'B' of Table 31. That is the population of the people between the ages of 20 to 44 would increase most. (2) The future increase of population in Manitoba and even elsewhere depends on the reproductive capability of this group. (3) If this group of people are very healthy and if they choose to reproduce at a high rate, the future of Manitoba would

be very bright especially with an increase in population and labour force.

(4) If the population of this group increases after taking other factors constant, then the recreational facilities in Manitoba should also increase.

It is clear from Tables 27 and 31 that advancing age is one of the major barriers to outdoor recreational activity as well as the ability to go to the parks for recreation. In fact, a growing proportion of older people among the total population of Manitoba would imply a growing proportion of people whose ability to go to the parks for outdoor recreation is limited to the nearest parks or to house back yards. However, older people also differ from the younger ones in interests and tastes, and these are subject to change in the near future. The older people of Manitoba today would likely differ from the Manitoba older people of tomorrow as regards the experience with outdoor recreation in their youth. In the present Manitoba older generation there are many of them who never learned to swim or fish, and who never went camping in their youth. Such activities are seldom started at the middle age. It is likely that the Manitoban generation which would be 55 and over within the next twenty five years would be more actively engaged in outdoor recreation earlier in life, and probably many of these people would continue to engage in those activities as they grow older and thereby induce them to go to the parks for recreation. By and large, as the generation which is young now grows older, it may well engage in going to the parks for outdoor recreation to a greater extent than the older age groups do now.

TABLE 32. PROJECTED TOTAL VISITORS DEMAND FOR OUTDOOR RECREATIONAL FACILITIES IN MANITOBA (IN PERCENTAGES)

FACILITIES	1970/71		1970/71		DEMAND		DEMAND INCREASES FROM	
	Total	Percent	Average	Percent	FOR		1970/71 to 1980 by	
	Interest Before Getting to the park	of Activity Undertaken at the park	Percent Interest	Percent Interest	1980	1990	1980 to 1990	by
Fishing	18.6	18.6	18.6		55.8	167.4	37.2	111.6
Historical Sites	58.1	57.2	57.7		173.1	519.3	115.4	346.2
Hunting	1.9	1.9	1.9		5.7	17.1	3.8	11.4
Museums	49.3	48.4	48.9		146.7	440.1	97.8	293.4
Swimming	26.6	26.5	26.6		79.8	239.4	53.2	149.6
Musical events (e.g. Skating)	14.1	13.6	13.9		41.7	125.1	27.8	83.4
Boating	11.3	11.2	11.3		33.9	101.7	22.6	67.8
Plays	13.8	13.7	13.8		41.4	124.2	27.6	82.8
Water skiing	3.3	3.3	3.3		9.9	29.7	6.6	19.8
Sports Events	12.0	11.9	12.0		36.0	108.0	24.0	72.0
Shopping	39.1	38.6	38.9		116.7	350.1	77.8	233.4
Canoeing	3.7	3.6	3.7		11.1	33.3	7.4	22.2
Others	35.3	34.9	35.1		105.3	315.9	70.2	210.6
TYPE OF ACCOMMODATION								
	Interest in Accommodation	Accommodation Used	Average % of Accommod.					
Friends and Relatives	14.6	12.41	13.5		40.5	121.5	27.0	81.0
Campsite	40.7	34.69	37.7		113.1	339.3	75.4	226.2
Cottage	1.7	1.47	1.6		4.8	14.4	3.2	9.6
Lodge	2.0	1.76	1.9		5.7	17.1	3.8	11.4
Motel	29.6	25.22	27.4		82.2	246.6	54.8	164.4
Hotel	7.4	6.30	6.9	52	20.7	62.1	13.8	41.4
Others	4.0	18.15	11.1		33.3	99.9	22.2	66.6

49 D.B. McCloy, Tourist Reception Centre Study (Winnipeg, Manitoba: Department of Tourism, Recreation and Cultural Affairs, and Planning Branch, Feb. 1971) PP. 38-81

R OUTDOOR RECREATIONAL FACILITIES IN MANITOBA (IN PERCENTAGES)

1970/71 Average Percent Interest	DEMAND FOR		DEMAND INCREASES FROM			
	1980	1990	1970/71 to 1980	1980 to 1990	1970/71 to 1990	by
			by	by	by	by
18.6	55.8	167.4	37.2	111.6	148.8	
57.7	173.1	519.3	115.4	346.2	461.6	
1.9	5.7	17.1	3.8	11.4	15.2	
48.9	146.7	440.1	97.8	293.4	391.2	
26.6	79.8	239.4	53.2	149.6	212.8	
13.9	41.7	125.1	27.8	83.4	111.2	
11.3	33.9	101.7	22.6	67.8	90.4	
13.8	41.4	124.2	27.6	82.8	110.4	
3.3	9.9	29.7	6.6	19.8	26.4	
12.0	36.0	108.0	24.0	72.0	96.0	
38.9	116.7	350.1	77.8	233.4	311.2	
3.7	11.1	33.3	7.4	22.2	29.6	
35.1	105.3	315.9	70.2	210.6	280.8	
Average % of Accommod.						
13.5	40.5	121.5	27.0	81.0	108.0	
37.7	113.1	339.3	75.4	226.2	301.6	
1.6	4.8	14.4	3.2	9.6	12.8	
1.9	5.7	17.1	3.8	11.4	15.2	
27.4	82.2	246.6	54.8	164.4	219.2	
6.9	20.7	62.1	13.8	41.4	55.2	
11.1	33.3	99.9	22.2	66.6	88.8	

Manitoba: Department of Tourism, Recreation and Cultural Affairs, Research

URBANIZATION, HIGHWAYS, MOBILITY, REAL CONSUMER EXPENDITURES, LEISURE TIME

Among all the forces contributing to the difficulties of the present and the future, none is more central than the concentration of population in the metropolitan area of Winnipeg, where over 54 percent of the people of Manitoba now live.⁵⁰ If the population of Brandon and Portage la Prairie is added to the population of Winnipeg, the percentage would be higher than 55. In general, the percentage of urbanization for Manitoba in 1971 was 71.4.⁵¹ This concentration of people living in the urban centers is expected to increase in the future years as it is presented on Table 33. By 1981, about 79 percent of the population of Manitoba would be urbanized. This figure would rise to 85 percent in 1991.

This concentration of people living in urban centers would have great impact on the natural resources of Manitoba. The problem that confronts the public policy is the striking contrast between the present and the future demand for outdoor recreation on the part of the urban populations and the limited supply of land and water resources readily accessible to these populations. Partly, this would be a matter of inherent limitations of space, and the basic problem of establishing priorities for use. A huge population would generate such an enormous demand for non recreation as well as for recreation uses of land and water that recreation may never get an appropriate share of space. Overcrowding at local parks and beaches would persist. This pressure should discipline and figure in the priorities for allocation on a more efficient use of the land that is available for recreation as well as for housing or for industry.

⁵⁰. Table 19. Winnipeg with a population of 553,109 out of 1,018,236 people of the whole of Manitoba.

⁵¹. Table 37.

TABLE 33. PROJECTED PERCENTAGE URBANIZATION OF MANITOBA (Male & Female)

YEAR	1971	1976	1981	1986	1991
PERCENTAGE	71.4	75.5	79.3	82.6	85.3

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TABLE 34. PROJECTION OF HIGHWAY CONSTRUCTION IN CANADA INCLUDING MANITOBA.

YEAR	NO. OF HIGHWAY CONSTRUCTIONS	INVESTMENT ON HIGHWAY CONSTRUCTIONS (in Millions of 1961 dollars)
1973	50	74
1974	100	156
1975	150	209
1976	200	316
1977	300	466
1978	300	494
1979	300	430
1980	300	394

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TABLE 35. PROJECTED PASSENGER CARS FOR MANITOBA (IN THOUSANDS)

YEAR	1971	1976	1981	1986	1991
NOS.	310	344	375	404	427
PER CAPITA:	.31	.34	.36	.38	.39

(Saturation Level: 0.50 Cars per capita)

54

TABLE 36. PROJECTIONS OF REAL CONSUMER EXPENDITURES PER CAPITA
(Calculated in terms of 1961 dollars) ON

	ACTUAL		PROJECTED	ACTUAL		PROJECTED
	1960	1970	1980	1960	1970	1970-1980
	(Dollars)			(Average Annual		% change)
Personal Transportation	92	128	234	4.2		5.1
Equipment						
Recreational Durables	22	34	59	4.8		4.8

55

52. Systems Research Group, Canada 2000 (Toronto, Canada: Carswell Printing Company, 1970) P. 101.

53. Economic Council of Canada, The Years to 1980 (Ottawa: Information Canada, 1972) P. 41.

54. System Research Group, Canada 2000 "Transportation projections" (Toronto, Canada: Carswell Printing Company, 1970) P. 56.

55. Economic Council of Canada, The Economy to 1980 (Ottawa: Information Canada, 1972) P. 288.

In the search for opportunities for recreation, urban dwellers travel with ease to distant parks within the province for outdoor activities. Geography, highways, and cars remove barriers to a larger percentage of the population of Manitoba's movement, hence the demand for recreation spreads out across the whole province of Manitoba to other urban regions of Canada and even to the United States of America. For example, there were about 50 new highways constructed in Canada in 1973. This number rose to 100 highways for construction in 1974 and it may continue to rise rapidly. Table 34 presents the greater highway construction in Canada. In addition, the number of passenger cars on Manitoba roads is increasing. As Table 35 shows, the number of cars in Manitoba increases by thousands annually. Moreover, the real consumer expenditures per capita, in terms of 1961 dollars as is presented on Table 36 shows personal transportation equipment and recreational durables, rise as rapidly as the number of highways constructed rise. As such, the mobility of the urban populations to distant parks for outdoor recreation in Manitoba is not a problem. The large number of cars owned within the province and Canada, and the new network of highways has greatly reduced the barriers of time and space between the cities in Manitoba as well as in Canada, and the outdoor parks. Assuming the price of gas per gallon to be constant, this trend of events is sure to continue as Tables 34 to 36 present. The only problem that would arise from the easy mobility is that it would elevate the demand for outdoor recreational parks in Manitoba and it would complicate greatly the planning and provision of the facilities for outdoor recreation in this province.

Urbanization and mobility have compounded, and would continue to com-

pound, the impact of the dramatic growth in the leisure time available to the Manitobans, the Canadians and even the Americans. The work week of 60 hours or more at the turn of the century fell to 40 hours in 1963, and it could decline to as little as 31 hours a week by 1991. This factor is illustrated by Table 37.

In any event, most Manitobans and the other Canadians face the prospect of more leisure time in the future, and thus the challenge of using it for their own enrichment and development as individuals and as citizens of this nation. This is precisely the contribution that outdoor recreation can provide. For at its best, outdoor activity, whether undertaken lightly or with the serious intent of the perfectionist, is held to be essentially a renewing experience and a refreshing change from the workaday world.

This is true no matter what an individual actually chooses to do in the outdoors. As long as the activity is freely chosen, because it is refreshing and interesting to do, it serves the basic function of recreation - the task of re-creating human vitality. Latent energy is tapped, unused powers of the body, mind, and spirit are employed, the imagination works on fresh material, and when all these things occur, the individual returns to his work with a sense of renewal.

The use of leisure time in this manner is important to the health of the individual. Outdoor recreation has cultural values that are essential to the health of this province and this country. It is a part of the educational process that strengthens people's minds as well as their bodies; that broadens their understanding of the laws of nature; that sharpens their appreciation of its manifold beauties; and that fortifies people's most

precious possession - the spirit which gives life its meaning. These are the qualities which in the long run can make Manitoba, Canada, and its people truly great and which find strong nourishment in outdoor recreation. By and large, the present and future challenge is to assure that all Manitobans have permanent access to their outdoor heritage.

PAID VACATION

Paid vacation is a concomitant of occupation and income that affects people in going to the parks for outdoor recreation. By and large, people who have no paid vacation or people with only a few days vacation might not go to a distant park for their recreation, rather, these people often use the nearest park to their place of residence or use indoor recreation facilities. In general, people with paid vacations coupled with long vacations are usually found among the high income and occupational categories in Manitoba and in other parts of North America. Another important point of this generality is that this is an additional non-monetary reason why the people of upper income may choose outdoor parks for recreation more than the middle and the lower income people. The word generality is used on this factor because there is no statistical figure to support the statements.

PLACE OF RESIDENCE AND REGION

The rural-urban continuum also influence people in going to the parks for outdoor recreation. Statements on this factor have to be based on assumptions or generalities as well.

By and large, people in rural areas of Manitoba differ in many ways from the people of urban places like Winnipeg or Brandon. These differences

include differences in income, difference in education, difference in style of life and differences in the encountering of the social distress. People in the big cities like Winnipeg and Brandon get more of those factors than the people of for example, Minnedosa. For instance, the more of social distress one gets, the more one may like to go to a far distant park for a sort of isolation and get away from it all, whereas many of the people who live in small towns and villages do not encounter much distress as noise, pollution, and so on. On the other hand they are already isolated by their place of residence hence their degree of willingness to go to the parks for outdoor recreation would not be as high as people of the big cities.

Another important generality is the fact that the region of residence may affect whether people go to a park or not. For instance there is tendency for the provincial government to have more outdoor recreational facilities in the region where there are more people to use the parks. For example, there are more parks at the Southern part of Manitoba than in the Northern part of it, because there are more people in the South than in the North as in the Interlake or Resource regions. It is also interesting to note that not only do the Manitobans not go to the North or the Interlake regions but the visitors to Manitoba also do not go there as illustrated in Table 38.

Apart from Pembina Valley which is overshadowed by Winnipeg, the regions where people go least are the Interlake and the Northern region.

GROUP COMPOSITION

Group composition of recreationists is an important factor in the use of parks in Manitoba. Table 39 - Group Composition: Manitobans percent, and

Table 40 - Group Composition: Non residents - percent, presents the type of groups that use parks in Manitoba. In Table 39, one family with children has the largest percent among the whole eight groups in all the parks in Manitoba. The second group is one couple only. The same thing occurs in Table 31. This shows that among the Manitobans and her visitors, the people who use the parks most are a family and children and a couple without children.

The significance of this factor is:

- (1) to help determine how families among the Manitobans and visitors seek outdoor recreation together;
- (2) to help determine how families turn to activities in which children can participate along with their parents, and to demonstrate that the aspirations of the parents in trying to educate their children to a level above their own, and to the extent of helping the children develop interest in outdoor pursuits; and
- (3) to help determine how the parks in Manitoba would be used in the future.

If these two groups have a declining relationship in the future, then the provincial government should think properly before investing a large amount of money on parks in the future. However, the future use of parks in Manitoba in the near future is likely to be high as Table 41 and many of the other tables indicate. Table 41 shows the projected family and household formation for Manitoba from 1966 to 1990 years. It is very interesting to see that the family formation group increases in number while also the net migration of married females declines. Married couples and parents with one or two children use the parks more in Manitoba. Albeit, it is valid to assume that the probably future use of parks in Manitoba will be heavy. As such the provincial government should not hesitate to provide more parks for future use in Manitoba.

TABLE 37. PROJECTIONS OF MANHOURS OF WORK FOR THE TOTAL ECONOMY IN CANADA
INCLUDING MANITOBA FROM 1971-1991

(GROWTH RATE FROM 1963 - 1968: 0.89)

	Y E A R							
	1963	1967	1971	1976	1981	1986	1991	
HOURS PER YEAR	2063	1990	1920	1836	1756	1678	1605	
HOURS PER WEEK	40	38	37	35	34	31	31	56

TABLE 38. PERCENTAGE OF PEOPLE GOING TO DIFFERENT REGIONS
IN MANITOBA FROM 1969 TO 1972.

Regions / Areas	1969	1970	1971	1972	
Winnipeg	35.3%	49.8%	42.0%	49.4%	
Western Region	8.0	3.0	4.7	5.4	
Pembina Valley	.5	.5	.6	.3	
Eastern Region	2.7	2.9	3.7	5.1	
Central Region	.4	.2	.8	1.0	
Parkland Region	5.4	5.9	4.6	3.3	
Northern Region	6.7	2.0	4.4	2.4	
Interlake	.4	.8	1.4	.7	
Unknown	34.0	34.9	37.8	32.4	57

⁵⁶. Systems Research Group, Canada 2000 (Toronto, Canada: Carswell Printing Company, 1970) P. 46.

⁵⁷. G.R. Church, Tourist Reception Center Study (Winnipeg, Manitoba: Department of Tourism, Recreation and Cultural Affairs, Research and Planning, 1973) P. 23.

TABLE 41. PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR MANITOBA (IN THOUSANDS)

	1966-1971	1971-1976	1976-1981	1981-1986	1986-1990
Initial Stock of Families	222.7	232.4	245.5	259.9	273.1
Marriages	38.5	43.5	46.6	46.9	44.9
Net Migration of Married Females	- 6.1	- 6.0	- 6.0	- 5.9	- 5.7
Final Stock of Families	232.4	245.5	259.9	273.1	282.6
Family Households	226.6	240.5	255.9	269.9	280.1
Non-Family Households	47.2	55.5	65.6	76.2	86.5

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58. Systems Research Group, Canada: Family, Household Housing Projections to the year 2000 (Toronto; Canada: Carswell Printing Company, 1970) P. 58.

INTERLAKE

It is necessary to stress more points with reference to the Interlake as shown on Table 38. Should the provincial government allow this region to be poor and isolated as it is now? It is a region with more natural resource development potentials for recreation because it has more open spaces than the southern part of Manitoba. The Interlake is a rural area. The region has a small population. Its present population as presented by figure 4 is just a little above nineteen thousand people. The population of the whole region is even less than the population of Winnipeg alone. What can the provincial government do to improve the conditions of this region? One answer is that the government of Manitoba can invest in a large outdoor recreational park at the confluence or at the southern part of the Interlake which would alleviate some of the problems of the area in employment as well as supply an outdoor recreational park for the large future recreation market centered in Winnipeg.

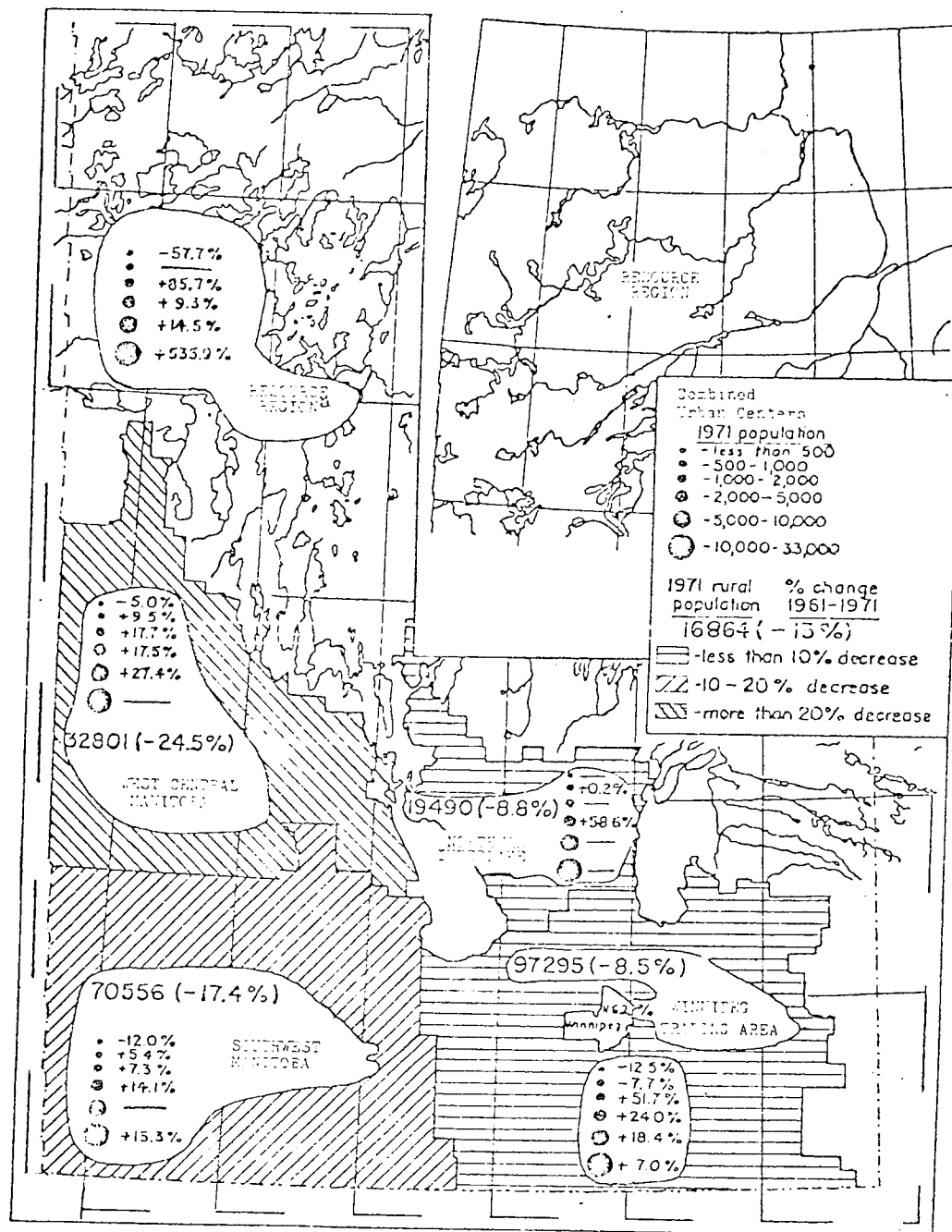


Figure 4

Manitoba Regions and Their Rates
of Population Change

^aLimited rural population included in urban statistics.

59. W.R. Maki, C.F. Framingham, & D.J. Sandell, Population Projections for Manitoba By Region and Town Size - 1971-1990 (Winnipeg, Manitoba: Dept. of Agricultural Economics and Farm Management, Sept. 1973).

FUTURE DEMAND

The basic factor that will determine the future demand for more parks in Manitoba is the number of people. The future population of Manitoba and its visitors is projected in Table 1. Barring a war or other catastrophe, it seems likely that the population who will use the outdoor recreational parks in Manitoba would triple to about 10,878,861 in 1980 and to about 30,518,934 by the year 1990⁶⁰ according to the forecast and predictions for Manitoba as they are presented on Table 1.

The population of Manitoba will be more concentrated in the urban centres. There will be more young and active people. These figures therefore suggest a tripling of demand for Manitoba as from 1980 onward, even if participation does not increase, though it should increase.

Income will also be higher. Tables 18, 19 and 20 present a good picture of the trends for the future higher personal income per capita and the higher personal disposable income which is also presented on Table 1.

Opportunities for employment in Manitoba will also increase. As it was shown on Table 42, while opportunity for employment in Manitoba was about 335 thousands in 1964, it was 360 thousands in 1968 and 392 thousands in 1973.⁶¹ This opportunity for employment would rise to 441 thousands in 1980 for Manitoba. Furthermore, the personal income per capita which was \$1,647 in 1960, and \$3,203 in 1971 in Manitoba, would rise to \$3,347 in 1980 and rise to \$3,892 in 1990 in Manitoba. Moreover, as personal income per capita rises, the personal disposable income per capita will rise also. For instance in 1960, the personal disposable income per capita was \$1,489, and \$2,630 in 1971.

⁶⁰.(i) Projected population of Manitoba for 1980 and 1990 plus (ii) the projected population of visitors to Manitoba in 1980 and 1990 equals 10,878,861 in 1980, and 30,518,934 in 1990.

- (ii) W.R. Maki, C.F. Framingham, D.J. Sandell, Population projections for Manitoba by Region and Town size 1971-1990. (University of Manitoba, Winnipeg, Manitoba: Department of Agricultural Economics and Farm Management, September 1973) P. 8.
 - (iii) Hon. P. Burtiak, and O.S. Eagleton, The Economic Impact of Tourism - (Legislative Building, Winnipeg, Manitoba, Canada: Department of Tourism and Recreation, 1970).
61. Manitoba Digest of Statistics (Winnipeg, Manitoba: 1973) P. 23.

TABLE 42. PROJECTIONS OF LABOUR FORCE AND EMPLOYMENT FOR MANITOBA.

	1975	1980
Labour force (in thousands)	416	452
Employment (in thousands)	406	441
Ratio of Labour force to population	39.5%	40.5% ⁶²

⁶². W.R. Maki, and J.A. MacMillan, Regional Systems for Development Planning in Manitoba (Winnipeg, Manitoba: The University of Manitoba, Department of Agricultural Economics and Farm Management, Reprinted March 1972) P. 95.

This figure will rise to \$2,745 in 1980, and rise to \$3,191 in 1990.

(These figures are quoted from Tables 19 and 1 .) More people will also be moving into the higher income brackets, and the opportunity to spend more money on recreation, and transportation will increase. This is another factor pointing to the higher demand for outdoor recreational parks in Manitoba.

This new pattern of affluence would induce more Manitobans to spend on activities including horseback riding, water skiing, boating and bicycling. As the economic base widens, many of the present differences between groups in the kinds of recreation they seek would be lessened. There will also be a shift in the occupational composition of the population, with more people graduating from the Red River Community College, and other technical institutes in the province. Thus, more people will be in professional, technical and white collar categories, and this is likely to bring about an increase in outdoor activity of Manitoba in the near future. Moreover, an expected increase in the educational level of the adult population may be felt in greater participation in such activities as nature walks, playing games and sightseeing.

People will have more free time in the future in Manitoba. In 1981, it is estimated that the standard scheduled work week will average 34 hours for the entire industrial work force versus 40 hours in 1963. This figure may drop to 31 hours by 1991. (See Table 37.) Much of the extra time would be spent on recreation; at least one fifth of the free time goes into outdoor recreation in 1963. That is, about 609 hours were spent on recreation in 1963. By 1980, this figure would rise to over 670 hours to a worker

for recreation.⁶³ If this figure is multiplied by the projected 441 thousand employees of Manitoba for 1980,⁶⁴ it means that at least 295,470 thousand hours would be spent on recreation in 1980. This is likely to be more because a lot of the employees would spend about half of their residual hours on recreation. If this happens, the 295,470 thousand hours would nearly double. These hours would be given to the employees as weekends or summer holidays. Therefore, leisure time for the future is available, what is left for Manitoba is to provide the parks for the people.

⁶³. Calculations on Manhours of work: (i) Total hours in a year is $365 \times 24 \text{ hours} = 8,760 \text{ hours}$. Deduct hours for sleeping and eating which is $365 \times 10 = 3,650 \text{ hours}$. This leaves a total of 5,110 hours available for work. A working year of 2,063 hours in 1963 left a residual of 3,047 hours. One fifth of 3,047 is 609 $\frac{2}{5}$ hours used for recreation in 1963. 1981 is 5,116 hours available for work minus 1,756 hours of work for that year leaves a residual of 3,354 hours of work. If a man spends one fifth of that on recreation, he would have used at least 670 hours.

(iia) The work year of 2,015 hours in 1966 meant that each employed worker had about 3,095 hours available for leisure activities. The addition of 486 hours by 2001, an increase of about 15 percent in 'Leisure' time, will have important social implications. This extra time might appear as a third day on week ends, or as an extra long vacation.

In addition to the number of man hours worked, the second factor affecting the projections of output per worker is output per man hour. Historically, while economy-wide output per man hour grew at the annual rate of 3.44 percent from 1946-1968, over the period 1961-1968 the annual rate of growth was only 3.14 percent, and over the shorter period of 1963-1968 the growth rate showed a further decline to 2.76 per cent. Thus output per man hour has demonstrated a continual rise, but at a slackening rate of growth.

(iib) Total hours in the year equal $365 \times 24 = 8,760$. Deduct hours needed for sleeping and eating = $365 \times 10 = 3,650$. This leaves a total of 5,110 hours available for work. A working year of 1990 hours in 1967 left a residual of 3,120 hours available for leisure.

⁶⁴. W.R. Maki and J.A. MacMillan, Regional Systems for Development Planning in Manitoba (Winnipeg, Manitoba: The University of Manitoba, Department of Agricultural Economics and Farm Management, Reprinted March 1972) P. 95.

⁶⁵. Systems Research Group, Canada 2000 "Economic Projections to the year 2000" (Toronto, Canada: Carswell Printing Company, 1970) PP. 45 and 85.

Moreover, the forecast for the passenger cars for Manitoba in 1981 is projected at 375 thousand. This figure would rise to 427 thousand in 1991. (See Table 35.) The number was only 310 thousand in 1971. That is between 1971 and 1981 the number of passenger cars would have risen by 21 percent and by 38 percent in 1991. This new degree of mobility in Manitoba will inevitably increase the pressure on the outdoor recreational park sites that was remote in 1971.

The new inter-provincial highway program (See Table 34), when completed, will modify and enlarge the Manitobans and other Canadians' present outdoor recreation plant by reducing the travel time to now remote areas of Manitoba such as the Northern region.

Nevertheless, consideration of the factors that will affect demand must include supply. What people do depends greatly on what is available for them to do. The opportunity to try an activity is a necessary stimulus, but once experienced, it can set off a powerful spiral. Change is hard for anyone to foresee, the sheer existence of new recreation facilities can stimulate people to use them, to try new activities, and this in turn leads them to seek still more.

By and large, interaction between supply and demand complicates predictions, but it makes planning all the more necessary. Outdoor recreation may seem to be a vast set of miscellaneous activities whose only common denominator is the fact that they take place out of doors. Basically, however, they make up a system with qualities of order in it.

Thus, demand is one element of a system. Analysis of the preferences of individuals and groups can indicate the directions and amount of the

total demand. These, together with the other elements of the system - the location of the outdoor recreational park and the way the resources would be used on the park, will produce a strong demand for the South Interlake park in Manitoba.

The pattern can be anticipated, and it can be planned for. As such, the next two chapters would deal with (1a) the projections for outdoor park resources in Manitoba, (1b) the forecast use of the South Interlake outdoor recreational park in Manitoba; and (2) the planning of two alternative outdoor recreational park projects for the South Interlake of Manitoba.

CHAPTER 6. PROJECTIONS FOR PARK RESOURCES IN
MANITOBA AND THE FORECAST USE OF THE
SOUTH INTERLAKE OUTDOOR RECREATIONAL PARK
IN MANITOBA.

PROJECTED DEMAND FOR OUTDOOR RECREATIONAL PARK AND FACILITIES IN MANITOBA

INTRODUCTION:

A plan for outdoor recreation facilities in Manitoba should be based on some estimate of future needs for such facilities. Many factors will affect the demand for recreation facilities of Manitoba in the future. Shorter work weeks, higher disposable incomes, the number of visitors to Manitoba, area of parks, family and household formation, and improved highway networks will all tend to increase the future demand for recreation in Manitoba. However, population growth would be the dominant factor. For this reason the method used to project future recreation demand for Manitoba concentrates on the future population growth of Manitoba and the increasing number of visitors expected to use the outdoor parks of Manitoba in the future.

PROJECTED DEMAND FOR OUTDOOR RECREATIONAL PARK AND FACILITIES IN MANITOBA

In order to know the additional space areas of lands needed for outdoor recreational parks in Manitoba, and also in order to know the additional facilities needed to be supplied to the parks in Manitoba, it would be necessary to see how the interest of the people of Manitoba and its visitors, would either rise or fall in the future. If the projected interests fall, then Manitoba does not need to increase its resources for outdoor recreations but if the projected interests rise, then the Manitoba government should supply more land space areas and more facilities for outdoor recreation in its province.

While Table 43 presents a rising demand of Manitobans' interest in outdoor recreational facilities, Table 32 presents the rising demand of

visitors to Manitoba in 1980 and 1990. These tables, computed with the population increase in Manitoba, and the population increase of its visitors show that Manitoba needs to supply more lands for outdoor recreational parks, and also to supply more facilities for the new parks.

In order to know the amount of each resource to be supplied to other parks in Manitoba including the proposed South Interlake park, the next chapter presents the projected demand for outdoor recreational parks and facilities in Manitoba.

DEMAND FOR MORE PARKS IN MANITOBA

As it was indicated in the 1970/71 survey in Table 1 , the present area of national and provincial outdoor parks in Manitoba is 4,338 square miles. In 1971, this number of square miles was used by 4,268,236 people which is the total population of Manitoba and its visitors. On this basis, 984 people used a square mile of park in 1971. In 1980 and 1990, the number of people to use the outdoor recreational parks in Manitoba are 10,878,861 and 30,518,934 respectively. These figures would result in 2,508 people using a square mile of parks in 1980, and 7,035 people for 1990. This means that parks would be over crowded in those years if all the socio-economic factors increase coupled with increase in the population of Manitoba and its future visitors. When parks are crowded, many of the recreationists are unsatisfied and the result would be that many Manitobans would stop going to parks or choose to travel to another province either in Canada or to the United States or to a foreign country for their vacation. The tourists spending which is also given on Table 1 would go

to other provinces or other countries. This may have adverse effect on the economy of Manitoba in those years. Therefore, the provincial government of Manitoba should add at least 471 square miles of parks to its 4,338 square miles before 1980. The government should add 597 square miles to the 4,338 square miles before 1990.⁶⁶

It is for this reason that this research proposes another park in the South Interlake of Manitoba close to the Winnipeg population center to increase the additional recreation land area this province may require in 1980.

⁶⁶. See Table 1.

TABLE 43. PROJECTED MANITOBBANS DEMAND FOR OUTDOOR RECREATIONAL FACILITIES
(IN PERCENTAGES)

FACILITIES	1967 % interests of the Manitobans	1972 % interests of the Manitobans	Average % interests of the Manitobans	DEMAND FOR		DEMAND INCREASES FROM		
				1980	1990	1970/71-1980 - 1990 BY		
						1980 BY	1990 BY	1990 BY
1. Tent Camping	11	18	14.5	16.1	18.1	1.6	2	3.6
2. Trailer Camping	7	12	9.5	10.5	11.8	1	1.3	2.3
3. Hunting	12	13	12.5	13.9	15.6	1.4	1.7	3.1
4. Fishing	20	38	29	32.2	36.1	3.2	3.9	7.1
5. Power Boating	15	22	18.5	20.5	23.1	2	2.6	4.6
6. Canoeing	3	9	6	6.7	7.5	.7	.8	1.5
7. Visiting Historical Sites	12	41	26.5	29.4	33	2.9	3.6	6.5
8. Driving for Pleasure	48	69	58.5	64.9	72.9	6.4	8	14.4
9. Snow Skiing	2	7	4.5	5	5.6	.5	.6	1.1
10. Snowmobiling	8	17	12.5	13.9	15.6	1.4	1.7	3.1
11. Picnicking	37	59	48	53.2	59.8	5.2	6.6	11.8
12. Walking-Hiking for Pleasure	19	40	29.5	32.7	36.8	3.2	4.1	7.3
13. Camping with Pick-up Camper	2	5	3.5	3.9	4.4	.4	.5	.9
14. Sailing	2	4	3	3.3	3.8	1.3	.5	.8
15. Ice Skating	12	22	17	18.9	21.2	1.9	2.3	4.2
16. Horseback Riding	2	8	5	5.5	6.2	.5	.7	1.2
17. Bicycling	7	26 ⁵¹	16.5	18.3	20.6	1.8	2.3	4.1

TABLE 44. MANITOBA INVENTORY OF PARK FACILITIES FOR 1970/71.

Population of Manitoba with visitors for 1970/71 = 4,268,236		
1. Number of Sites:	(i) Unserviced	3,799
	(ii) Electrical	791
	(iii) Fully serviced	182
	Total	4,772
2. Comfort facilities:		
	(i) Tables	4,868
	(ii) Fireplaces	1,013
	(iii) Kitchen shelters	68
	(iv) Open shelters	5
	(v) Toilets (Flushing)	59
	(vi) Toilets (Non-modern)	203
	(vii) Showers	24
	(viii) Laundry	5
	(ix) Store (within half a mile)	34
3. Summer homes		4,480
4. Recreation facilities:		
	(i) Nature trails	2
	(ii) Miniature Golf	19,595
	(iii) Lookout Towers	8
	(iv) Tennis Court	3,251
	(v) Golf Course	1
	(vi) Boat ramp	51
	(vii) Hiking Trails	10
	(viii) Play Grounds	32
	(ix) Swimming	48
	(x) Fishing	58
	(xi) Museum	2
	(xii) Skiing	1
	(xiii) Dock	38
		68

68 . N. Nixon, D. McCloy, R. Saurette, Park Statistics (Winnipeg, Manitoba: Department of Tourism, Recreation and Cultural Affairs, Research and Planning Branch, January 1971) PP. 5 - 219.

TABLE 45. PROJECTIONS FOR SOUTH INTERLAKE OUTDOOR RECREATIONAL FACILITIES

	YEAR POPULATION	1970/71 4,268,236	1980 1,129,416	1990 2,739,039	Adjusted Facilities for S.Inter. for 1980
1. Number of Sites:	(i)	Unserviced	3,799	1,006	2,439
	(ii)	Electrical	791	209	508
	(iii)	Fully serviced	182	48	117
		Total	4,772	1,263	3,063
					1,300
2. Comfort Facilities:	(i)	Tables	4,868	1,288	3,124
	(ii)	Fireplaces	1,013	268	650
	(iii)	Kitchen Shelters	68	18	44
	(iv)	Open Shelters	5	1	3
	(v)	Toilets (Flushing)	59	16	38
	(vi)	Toilets (Non-modern)	203	54	130
	(vii)	Showers	24	6	15
	(viii)	Laundry	5	1	3
	(ix)	Stores	34	9	22
3. Summer Homes			4,480	1,186	2,875
					N.A.
4. Recreational Facilities:	(i)	Nature Trails	2	.5	1
	(ii)	Miniature Golf	19,595	5,185	12,575
	(iii)	Lookout towers	8	2	5
	(iv)	Tennis Court	3,251	860	2,086
	(v)	Golf Course	1	.3	.6
	(vi)	Boat ramp	51	14	33
	(vii)	Hiking Trails	10	3	6
	(viii)	Playgrounds	32	9	21
	(ix)	Swimming	48	13	31
	(x)	Fishing	58	15	37
	(xi)	Museum	2	.5	1
	(xii)	Skating	1	.3	.6
	(xiii)	Dock	38	10	24
					4

69. N.A. means not applicable to this project resource base planning. (These facilities would be generated later on.)

DEMAND FOR MORE OUTDOOR RECREATIONAL FACILITIES IN MANITOBA

Table 44 presents the facilities available for 4,268,236 people in 1971. This figure would rise to 10,878,861 and 30,518,934 in 1980 and 1990 respectively. If there is no change within the increases in the socio-economic determinants of these people, almost all of them would attend the parks in Manitoba in those years. If the number of people to use the outdoor recreational facilities increases, the number of facilities should also be increased, so as to avoid the over use of the recreational facilities and resources. If the recreational facilities are not increased the result would be less enjoyment and less satisfaction to the recreationists. Otherwise larger percentages of people would probably not return in the following years. In order to avoid those disruptions in the outdoor parks in Manitoba, the provincial government should increase the facilities on its parks to the numbers shown on Table 2. Tables 45 and 3 present the additional facilities Manitoba needs to supply in its parks by 1980 to meet the demand for its population and for its visitors as well.

If the space areas are provided, and adequate recreational facilities are provided, as is suggested here, then Manitoba would be able to obtain the estimated tourists spending for Manitoba in 1980 and 1990 respectively.

In order to refine the figures on facilities to be provided in Manitoba, this research concentrates on the facilities for the South Interlake outdoor provincial recreational park. If those facilities presented on Table 45 are supplied to this park, the over use of the present facilities in future would be minimized. Other facilities that should be provided

to other parks excluding the South Interlake provincial park are shown on Table 3.

If an outdoor recreational park is to be built at the South Interlake the government would like to know who would use it. In order to justify construction of this park on the basis of users, the next chapter presents the forecast use of the South Interlake park.

FORECAST USE OF THE SOUTH INTERLAKE PARK

Table 45 presents the number of Manitobans and the number of visitors who would use the park each year between 1980 and 1990. The visitor days are also computed on this table. It is on these figures that the benefits to be derived from the South Interlake park would be based.

The attendance figures for Manitobans and the tourists could be more than the figures presented for each year. The increase in the number of users was taken into consideration for the pertinent factors of the South Interlake park. For instance, the 10,240 acres of land suggested could, in some cases, contain more additional facilities and even more people than the capacity set without overcrowding or over use of the resources on this park.

While Tables 43, 32, 44 aid Tables 2 and 45, Tables 2, 45, 46 aid the planning of the South Interlake park with the facilities to be put in the park, as they are presented in the next chapter.

TABLE 46. FORECAST USE OF SOUTH INTERLAKE OUTDOOR RECREATIONAL PARK
FORECAST ATTENDANCE AND VISITOR DAYS FROM 1980-1990

YEARS	MANITOBANS ATTENDANCE NO.	MANITOBANS VISITOR DAYS	TOURISTS ATTENDANCE NO.	TOURISTS VISITOR DAYS	TOTAL ATTENDANCE NUMBER	TOTAL VISITOR DAYS
1980	345,516	1,727,580	783,900	3,135,600	1,129,416	4,863,180
1981	349,698	1,748,490	940,680	3,762,720	1,290,378	5,511,210
1982	353,881	1,769,405	1,097,460	4,389,840	1,451,341	6,159,245
1983	358,063	1,790,315	1,254,240	5,016,960	1,612,303	6,807,275
1984	362,244	1,811,220	1,411,020	5,644,080	1,773,264	7,455,300
1985	366,428	1,832,140	1,567,800	6,271,200	1,934,228	8,103,340
1986	370,610	1,853,050	1,724,580	6,898,320	2,095,190	8,751,370
1987	374,792	1,873,960	1,881,360	7,525,440	2,256,152	9,399,400
1988	378,974	1,894,870	2,038,140	8,152,560	2,417,114	10,047,430
1989	383,157	1,915,785	2,194,920	8,779,680	2,578,077	10,695,465
1990	387,339	1,936,695	2,351,700	9,406,800	2,739,039	11,343,495

Explanations and calculations for these figures are presented under Appendix A.

CHAPTER 7. PLANNING OF TWO ALTERNATIVE
 OUTDOOR RECREATIONAL PARK PROJECTS
 FOR THE SOUTH INTERLAKE OF MANITOBA, CANADA.

A. WATER OUTDOOR RECREATIONAL PARK

INTRODUCTION:

A water recreational park is a park having facilities for swimming, camping, and picnics. In some cases facilities for skating, skiing and golfing may be provided if the outdoor recreational park is as large as the one that this study would provide. The size of the park that this research would plan will be provided under 'The Facilities for South Inter-lake Outdoor Water Recreational Park'.

Recreation, by definition, is an activity undertaken by an individual who chooses it. It is an action that refreshes the mental attitude of that individual.⁷⁰ In the modern complex world, recreation means a major opportunity for self expression which may be in form of activity. The two popular classes of recreation are indoor recreation and outdoor recreation. It is the latter that is applicable to this study.

Outdoor recreation is the recreation that is typically carried on outdoors. This can be in a park near the city, or near a beach or an artificial lake. A good example of a park with an artificial lake is the Birds Hill Park in Manitoba.

Moreover, some outdoor recreational activities such as organized games and other group activities are formal, while most activities such as picnics, hikes, and fishing expeditions are characterized by informality. It is the informality coupled with the absence of order and pressure, and the spon-

70.

Robert W. Douglass, Forest Recreation (Toronto: Pergamon Press, 1970)
P.6.

taneity that give outdoor recreation its appeal and its value.⁷¹

CHARACTERISTICS:

Outdoor recreation and water resources are regarded as having elements of a public or collective good. Any development of these resources is rightfully undertaken by public agencies who seek to maximize the benefits to society from the utilization of the outdoor recreation resources. Recreational resources have common property characteristics which foster its simultaneous use by more than one person, and no one person can appropriate exclusive use rights to the resource and prevent others from sharing its benefits. In effect, the price to consumers of using the resource, irrespective of travel costs and living expenses, would be zero, assuming there is no congestion.

The provision of wilderness and recreational land resources to be used for outdoor recreation is justifiably undertaken by public agencies because of two aspects of outdoor recreation. First, the decision to allocate resources to outdoor recreation and preservation involves the interests of future generations which are not accounted for in the market place due to the dynamics in the society. Second, a park project usually has a physically unlimited project life. The public supply of outdoor recreation has also been justified on the ground that an availability of opportunity to enjoy the outdoor recreation provides external benefits by giving the individual participant a well balanced personal life. Moreover, those

⁷¹. Marion Clawson, and Jack L. Knetsch, Economics of Outdoor Recreation (Baltimore: The Johns Hopkins Press, 1966) PP. 6 and 7.

who participate in outdoor recreation tend to become better adjusted socially and also become more productive citizens,⁷² thus the welfare of the whole nation is enhanced.⁷³

PLANNING OF THE PARK

In spite of the fact that South Interlake recreational park is being proposed to meet some specific objectives which were set earlier in this research, space standards must also be set to meet the planning of the park. However, prior to the setting of space standards for this park, the classification of this park into a specific category must be accomplished first.

CLASSIFICATION

The type of park to be planned for South Interlake of Manitoba is classified as a regional park. That is, it is an outdoor park to serve the needs of the whole of Manitoba including the community in which the park is situated.

The purpose of this type of classification is to differentiate a regional park from either a local park or from a national park. A local park serves the local population and sometimes it has a small investment in terms of capital cost. Usually a local park occupies a smaller space area of lands when compared to a regional or national park. A national park sometimes occupies the largest areas of lands when it is compared to the areas of lands occupied by either a regional park or a local park. Furthermore, a national park sometimes has a larger capital investment than the capital investment for either a regional park or a local park.

73. Marion Clawson, and Jack L. Knetsch, Economics of Outdoor Recreation (Baltimore: The Johns Hopkins Press, 1966) P. 267.

72. physically alert and not prone to illness.

Although a national park may be situated in one of the federal provinces, it is meant to serve the whole federation whereas a regional park is supposed to serve the whole region. The capital investment of a national park might be shared by the federal government and the government of the province in which the park is situated whereas the regional government bear the capital investment for a regional park. Sometimes the capital investment for a local park is shared by the regional and local governments, and at times the local government or the regional government pays the whole capital investment.

The annual expenditure for maintenance during the existing years of the park follows the same pattern as the capital investment.

Moreover, classification is a useful tool for planning an outdoor recreational park, hence it preceeds the setting of standards of planning a park.

SPACE STANDARDS

Space standards are here defined as the measure of the need of land area for the purposes for which the recreation space is provided.⁷⁴ It must be declared here that this is a human opinion and not a static measure, albeit it can change as the thinking of the South Interlake management and conditions change.⁷⁵

The reasons for setting space standards for the planning of this South Interlake outdoor recreational park are:

⁷⁴. National Recreation Park Association, Outdoor Recreation Space Standards (1700 Pennsylvania Avenue, N.W. Washington, D.C. 20006, 1967) P.18.

⁷⁵. Conditions change here means social and technological change. It is used as a broad term.

- (1) To provide information on how income redistribution can affect the South Interlake of Manitoba
- (2) To give information on the employment opportunities for the South Interlake of Manitoba
- (3) To give information on how the South Interlake park visitors can engage in different outdoor recreation activities without interfering with one another
- (4) To provide information on how the individual sites of the park could be beautiful features which would contribute in large measure toward making the South Interlake community environment a permanently attractive place in which to live
- (5) To provide information on how to preserve permanently natural beauty and features of value and interest for the benefit of the present and future generations of this province.

GUIDING FACTORS

The factors to consider in setting the space standards for the South Interlake park are:

- (1) The availability of land at the South Interlake of Manitoba from where the land area for the park is to be extracted.
- (2) The population of Manitoba as a whole and the population of the urban centers in Manitoba that would use the park.

The assumption to use here is that the number of visitors that will come to use the park from other parts of Canada, from the United States, and from other parts of the world is kept constant.

Manitoba is one of the few places of the world that has vast land areas with few people calculated as the number of population per square mile. See Table 47 below - Comparison of Ten Canadian Provinces Total Land Areas with their 1971 Populations.

TABLE 47. COMPARISON OF TEN CANADIAN PROVINCES TOTAL OUTDOOR
RECREATIONAL AREAS OF LANDS WITH THEIR 1971 POPULATIONS.

Names of Canadian Provinces (excluding Yukon & N.W. Territories)	Total Land Area Occupied By Each Province in sq. mls.	Population of each Province in 1971	Approximate Population per sq. ml.
Newfoundland	156,000	522,104	3
Prince Edward Island	2,184	111,641	51
Nova Scotia	21,425	788,960	37
New Brunswick	28,354	634,557	22
Quebec	594,860	6,027,764	10
Ontario	412,582	7,703,106	17
Manitoba	251,000	988,247	4
Saskatchewan	251,700	926,242	4
Alberta	255,285	1,627,874	6
British Columbia	366,255 ⁷⁶	2,184,621 ⁷⁸	6
Canada	3,851,809 ⁷⁷	21,568,311	6

76. Rolph McNally Ltd., Canadian Road Atlas Travel Guide (Canada: Litho-graphed Rolph McNally Ltd., 1969) PP. 4-25.

77. Quick Canadian Facts (Toronto, Canada: Thorn Press, 1968) P.19

78. Statistics Canada, 1971 Census of Canada, Population catalogue 92-701 Vol.:1, Part 1 (Ottawa: Information Canada, July 1973) P.11.

In comparing these ten Canadian provinces' total land areas with their populations, there is only one province that is better off than Manitoba in having more lands for its people, and that is Newfoundland with three people per square mile. Manitoba comes second with four people per square mile. Therefore it is undeniable to say that Manitoba has among the greatest of land area in Canada.

The importance of these illustrations is that the space standard to be set for the South Interlake outdoor recreational park would be based on these two factors (1) population of Manitoba with its availability of land areas and, (2) the large amount of unimproved land areas at the South Interlake of Manitoba which is 199,555 acres.⁷⁹

The space allotted to each facility would not be based on the same space standard as it would be set for the whole park. It would be based on the author's judgement. The reason for these differences in space standards are:

- (1) the gate officials would control the daily attendance of the whole park. Once the limit set for the use of the whole park is reached in one day, the gate officials would use their judgements to allow (not to force) some recreationists to leave before allowing others in.
- (2) People differ in tastes, as such many facilities are provided so that there would not be overcrowding on only one facility. There would also be officials who would see that none of the facilities is over used. Therefore, the capacity set for each activity is a tool to guide the South Interlake park's management officials rather than be a static regulation.

⁷⁹. 1971 Census of Canada, Catalogue 76-708, Vol. 1V Part 3, Ottawa: March 1973, Pages 30-31.

THE PLAN

The plan as it is here used, would contain the names of the facilities to be provided, the cost of constructing (or cost of providing) each facility, the space standard for each facility where it is required, and the capacity limit for the number of recreationists who would use each facility at one time.

Towards the end of the plan is the allowance for future changes that may allow adjustment in the land areas set aside for each facility. Moreover, land allowance is also set aside for the changes that may occur in the cost of providing each facility.

There is a section under Appendix "A" termed as 'Notes and Calculations' which contains explanations of the facilities for the park as they are designated and arranged under "Development and Construction". The notes and calculations are made to aid the readers of this report.

The capital outlay, the total land area, capacity of the park and the time of construction are the best estimates the author of this research could arrive at when planning for these two alternative outdoor parks for the South Interlake of Manitoba.

TABLE 48. AN OUTDOOR RECREATIONAL PARK FOR SOUTH INTERLAKE OF MANITOBA.

Name of the Park:	South Interlake Park.
Total land area of the park:	10,240 acres (i.e. 4 X 4 square miles)
Capital outlay of the park:	\$8,000,000.00
Capacity of the park: (per year)	102,400 visitors
Time of Construction:	Minimum time period: 5 years Maximum time period: 8 years before the official opening of the park.

TABLE 49. COST DISTRIBUTION

1. Land acquisition cost 6% of \$8,000,000. =	\$ 480,000.
2. Development and Construction of buildings, roads, and supplying of other facilities for the park to cost 50% of \$8,000,000. =	\$4,000,000.
3. Operation and Maintenance of the park costs 30% of \$8,000,000. =	\$2,400,000.
4. Publicity of the park to take 8% of \$8,000,000. =	\$ 640,000.
5. Others: 6% of \$8,000,000. =	<u>\$ 480,000.</u>
Grand Total Costs	\$8,000,000.

TABLE 50. LAND ACQUISITION

1. One legal practitioner (lawyer)	}	Cost \$ 480,000.
2. Acquisition of 10,240 acres of land		
3. Other eventualities		

TABLE 51. DEVELOPMENT AND CONSTRUCTION

Nos.	Names of Facilities for the Park.	Units	Approx. Area in Acres	Cost Of Each Facility	Capacity For Each Facility
1.	Lakes (with 9 man made islands)	10	100	\$300,000.	30,000
2.	Swimming pools	2	8	600,000.	20,000
3.	Beach and Bathhouse (boat ramps)	20	1.1	455,000.	15,000
4.	50 foot floating section to dock	4	1	2,000.	-
5.	Lifeguard Towers	2	.05	1,200.	4
6.	Large horse stable	1	.4	40,000.	50
7.	Purchasing of horses	50	-	15,000.	-
8.	Camping sites of 65 bays with 20 units in each bay	1,300	640	28,080.	3,900
9.	Picnic areas	4	-	-	-
10.	Fireplaces (barbeques)	1,345	-	53,800.	20,175
11.	Open shelter buildings	4	1	30,000.	-
12.	Kitchen shelter buildings	2	.05	40,000.	1,000
13.	Tables	1,550	-	13,562.50	4,650
14.	Seating benches	300	-	10,500.	-
15.	Drinking fountains	8	.025	4,000.	-
16.	Toilet buildings (separate wash- room buildings)	8	1	12,000.	-
17.	Car parks	10	20	200,000.	2,200
18.	Museum	1	.4	20,000.	100
19.	Pavillion	1	.4	250,000.	150
20.	18 hole golf course	1	162	22,000.	100,000
21.	Golf course watering systems	4	-	12,500.	-
22.	Playgrounds	2	.4	46,000.	200
23.	Soccer/football	1	2	12,500.	1,500
24.	Cricket field/field hockey	1	4.025	12,500.	2,000
25.	Chess/checker sets	4	.05	600.	40
26.	Table tennis	5	.05	1,250.	250
27.	Tennis courts	4	1	1,800.	1,000
28.	Other playgrounds	-	4	25,000.	-
29.	Skiing areas and toboggan runs	1	160	5,500.	1,500
30.	20 feet high slope for skiing beginners	1	.25	3,500.	200
31.	Skating rinks	1	.4	20,000.	524
32.	Grocery building	1	.1	20,000.	-
33.	Service building	1	.025	25,000.	-
34.	Refreshment house (restaurant)	1	.2	26,000.	100
35.	Staff house	1	.025	20,000.	-
36.	Laundromat room	1	.05	20,000.	-
37.	Laundromat machines	10	-	5,000.	-
38.	Park entrance	2	.025	10,000.	-
39.	Utilities (equipment)	-	-	75,000.	-
40.	Sidewalks	12	5 mls.	937.5	-
41.	Paved roads	2	10 mls.	47,500.	-
42.	Gravel roads	10	20 mls.	5,000.	-
43.	Hiking trails (extra paths)	10	2.5 mls.	762.50	-
44.	Nature trails	1	5 mls.	500,000.	-
45.	Electric outlets	250	-	3,000.	-
46.	Sewers (underground)	1	-	35,000.	-
47.	Manholes - 42 inches (to be put underground)	1	-	1,500.	-
48.	Gutters	-	8 mls.	126,720.	-
49.	Septic tank - size 400 (to be put underground)	1	-	2,000.	-
50.	Garbage cans - size 18½ gallons	50	-	680.	-

10. Museum	1	.4	20,000.	100
19. Pavillion	1	.4	250,000.	150
20. 18 hole golf course	1	162	22,000.	100,000
21. Golf course watering systems	4	-	12,500.	-
22. Playgrounds	2	.4	46,000.	200
23. Soccer/football	1	2	12,500.	1,500
24. Cricket field/field hockey	1	4.025	12,500.	2,000
25. Chess/checker sets	4	.05	600.	40
26. Table tennis	5	.05	1,250.	250
27. Tennis courts	4	1	1,800.	1,000
28. Other playgrounds	-	4	25,000.	-
29. Skiing areas and toboggan runs	1	160	5,500.	1,500
30. 20 feet high slope for skiing beginners	1	.25	3,500.	200
31. Skating rinks	1	.4	20,000.	524
32. Grocery building	1	.1	20,000.	-
33. Service building	1	.025	25,000.	-
34. Refreshment house (restaurant)	1	.2	26,000.	100
35. Staff house	1	.025	20,000.	-
36. Laundromat room	1	.05	20,000.	-
37. Laundromat machines	10	-	5,000.	-
38. Park entrance	2	.025	10,000.	-
39. Utilities (equipment)	-	-	75,000.	-
40. Sidewalks	12	5 mls.	937.5	-
41. Paved roads	2	10 mls.	47,500.	-
42. Gravel roads	10	20 mls.	5,000.	-
43. Hiking trails (extra paths)	10	2.5 mls.	762.50	-
44. Nature trails	1	5 mls.	500,000.	-
45. Electric outlets	250	-	3,000.	-
46. Sewers (underground)	1	-	35,000.	-
47. Manholes - 42 inches (to be put underground)	1	-	1,500.	-
48. Gutters	-	8 mls.	126,720.	-
49. Septic tank - size 400 (to be put underground)	1	-	2,000.	-
50. Garbage cans - size 18½ gallons	50	-	680.	-
51. Supplying of water	-	-	96,000.	-
52. Shower buildings	6	1	9,000.	-
53. Allowance for adjusting of lands wherever necessary	-	-	300,000.	-
54. Installation of black telephone communication systems	4	-	15.20	-
55. Buying of trees, 2,000 or more, shrubs, 3,000 or more, flowers, 4,000.	9,000	5,120	304,602.	-
56. Planting of trees, shrubs, and flowers	-	-	69,900.	-
57. Allowance for changes in prices of facilities & other needs	-	-	57,572.30	-
58. Undesignated areas 1/10 of 10,240 acres	-	1,024	-	-
59. Areas left for roads, paths, etc. in nos. 40,41,42,43,44.	-	2986.975	-	-
TOTAL		10240	4,000,000.	-

OPERATION AND MAINTENANCE

This branch which contains the people who would see that all the facilities mentioned under the 'Development and Construction' are placed in the correct place for the recreationists. The branch employs the labourers and directs the development of the park to see that the park is completed at the minimum time period. In short, this is the management of the park. The branch and its administrator reports to the Minister in charge of Tourism, Recreation and Cultural Affairs of the province.

The group contains: TABLE 52. OPERATION AND MAINTENANCE

<u>Names</u>	<u>Units</u>		<u>Budget for them</u>
Developer (one company)	1	30% of \$2,400,000 =	\$ 720,000.
Architects	2		
Surveyor (one company)	1		
Accountant (one firm)	1		
Engineers	2	70% of \$2,400,000 =	\$1,680,000.
Electrician (one company)	1		
Painters (one company)	1		
Carpenters (one firm)	1		
Bricklayers (two companies)	2		
Labourers			
Total (100%)		=	\$2,400,000.

TABLE 53. PUBLICITY FOR FIVE YEARS. (Capital Budget \$640,000.)

<u>Years of Construction</u>	<u>% of Total Capital Budget For Publicity</u>	<u>Budget Distribution</u>
1st year	53% of \$640,000	339,200
2nd year	25% of \$640,000	160,000
3rd year	15% of \$640,000	96,000
4th year	5% of \$640,000	32,000
5th year	2% of \$640,000	12,800
Total 5 years	100%	\$640,000

OTHER COSTS

This is the allowance set aside for doubtful and miscellaneous expenses from the four areas - (1) Land acquisition, (2) Development and Construction, (3) Operation and Maintenance, and (4) Publicity.

The total amount for this item is six percent of the total outlay of the park. That is, six percent of eight million dollars which equals four hundred and eighty thousand dollars.

This item is supposed to be known only to the administrator of the park but not to any personality or agency included in the above four areas so as to avoid unnecessary demand for more money.

On the other hand, the administrator can retain this amount of money in the government treasury for the emergency spendings on this park -

\$480,000 from item 5 - others above

\$ 57,572.30 - the allowance for changes in price from item 2 -
Development and Construction.

\$ 12,800. - the allowance for first year publicity could be
ignored and used for other items if there is a
great demand for anticipation of increase in some
of the items under cost distribution.

The amount to remain in the treasury for future eventualities would
come down to \$550,372.30.

SUMMARY OF THE WATER ORIENTED OUTDOOR RECREATIONAL PARK PLAN FOR THE SOUTH INTERLAKE OF MANITOBA.

The total land area for the park is 10,240 acres. The capital outlay of the park is \$8,000,000. Estimated time of construction is 5 years.

The use of this eight million dollars to turn these acres of land into an outdoor park within five years would generate sales, jobs and income at the South Interlake and in the rest of Manitoba, in the following manner:

<u>ITEMS</u>	<u>COST</u>	<u>PERIOD</u>	<u>GENERATED</u>		
			<u>SALES</u>	<u>JOBS</u>	<u>INCOME</u>
Land acquisition	\$ 480,000	-	\$ 1,310,173	57	\$ 208,532
Development and Construction	\$4,000,000	5 years	\$10,918,112	476	\$1,737,768
Operation and Maintenance	\$2,400,000	5 years	\$ 6,550,867	286	\$1,042,661
Publicity	\$ 640,000	5 years	\$ 1,746,898	76	\$ 278,043
Other items	\$ 480,000	5 years	\$ 1,310,174	57	\$ 208,537
TOTAL	\$8,000,000	5 years	\$21,836,224	952	\$3,475,536

How these generated benefits would be distributed between the South Interlake and the rest of Manitoba is analyzed in detail under benefits in the next chapter.

ANOTHER ALTERNATIVE MEANS THAT THE PROVINCIAL GOVERNMENT CAN USE
TO RETAIN THE DERELICT LANDS AT THE SOUTH INTERLAKE OF MANITOBA
IS A GARDEN OF PRAIRIE PLANT SPECIES.

INTRODUCTION

Regional analysis offers a quantitative, definitive, explicit means of analyzing options available within a region. At present, only the economic considerations can be evaluated at this community. However, in a pragmatic society, such as that which characterizes the South Interlake, one can look no further than the economic implications of development and growth. In order to do that, one needs a quantitative tool that would allow close analysis of these considerations, and especially one with the potential that would allocate scarce resources to their most productive use, whether that of industrialization or the return of land to a more primitive state. That is "a garden of prairie plant species as a park".

It is observed that the increasing tempo of urbanization and growth is depriving many Manitobans the right to live in decent surroundings. More of the Manitobans are crowding into cities like Winnipeg with its present population of 553,109. In 1975, 1980, and 1990, the population of Winnipeg is projected to be 590,147; 633,006, and 701,050 respectively. Portage la Prairie presently holds 13,258 people and its projected population for 1975 and 1980 are 13,279 and 13,064 respectively. Brandon presently holds 32,463 and its projected population for 1990 is 10,543.⁸⁰ Many of these people who are crowding into cities are being cut off from beauty of nature by the forces and values surrounding them but not their own. Cities like Winnipeg and Brandon reach out into the countryside, destroy streams, trees, and meadows as they go. Modern highways in Manitoba also wipe out some areas of natural beauty with every mile of

⁸⁰ W.R. Maki, C.F. Framingham, and D.J. Sandell, Population Projections for Manitoba by Region and Town Size, 1971-1990 (Winnipeg, Manitoba: Dept. of Agricultural Economics and Farm Management, the University of Manitoba, 1973) P.100.

their extensions. As these processes go on, eventually, people might be disenchanted with the city's distress and frustrations and then try to move out from the city to get closer to nature, and they would be surprised to find out that nature has moved away from them.

The modern technology which has added uncontrolled waste products to the Manitoban environment are menacing the public in their enjoyment and their health. The air they breathe, the water in the area, the soil and the wildlife are being blighted by the poisons and chemicals which are the by-products of technology and industry. The skeletons of discarded cars litter the countrysides. The same Manitoba society which receives the rewards of technology, should as a cooperative whole, take responsibility for control of their environment.

To deal with these problems would require a new conservation technique. The Manitobans should not only protect their countryside and save it from destruction, they should restore what has been destroyed and salvage the beauty and charm of their cities. Their conservation should be not just the classic conservation of decreasing a rate of use by protection and development, but a creative conservation of restoration and innovation that is productive and aesthetic. The Manitoban concern should not be with nature alone, but with and primarily with, the total relation between the citizens and the world around them. The object of the Provincial Government should not be just man's welfare, but the dignity of man's spirit. For these and other benefits to be enumerated later, the Government of Manitoba should not hesitate to have a Garden of the Prairie indigenous plant species at the Census Division 9 of Manitoba.

The projects proposed for this identified area are either a recreational water oriented park or a garden of indigenous plant species of the prairie provinces as a park or a combination of the two. If the third alternative is

chosen, the benefits and costs would be a mixture of proposals one and two whereas if the second proposal is chosen the cost may be equivalent to the cost of the alternative one but the benefits may be a little different owing to the nature of each proposal. What the three alternatives might have in common is the nature of a public park with a longlife span benefit, and a public planning policy with guiding objectives.

TABLE 54. PLANNING OF THE GARDEN.

Name of the Garden: Prairie Native⁸¹ Garden.

Total Area of the garden: 4,840 acres ($2\frac{3}{4}$ miles by $2\frac{3}{4}$ miles)

Total Capital Outlay: \$4,000,000.00

TABLE 55. AREA DISTRIBUTION OF THE TOTAL CAPITAL OUTLAY.

1. Land acquisition to cost 6% of \$4 million	= \$ 320,000
2. Development and Construction to cost 52% of \$4 million	= \$2,080,000
3. Operation and Maintenance to cost 30% of \$4 million	= \$1,200,000
4. Publicity of the garden to cost 8% of \$4 million	= \$ 320,000
5. Others 2% of \$4 million	= \$ 80,000
Total Investment (100%)	= \$4,000,000

TABLE 56. LAND ACQUISITION.

One legal practitioner (lawyer)	}	\$320,000.
Purchasing of land		
Other eventualities		

81. 'Native' here means plant species that are natives of the Prairie Provinces. That is, indigeneous plant and shrub species of prairie lands of Canada.

TABLE 57. DEVELOPMENT AND CONSTRUCTION.

Nos.	Names of Facilities For the Garden	Units	Area in Acres	Cost Of Each Facility
1.	Preparation of land for planting, and for other facilities where necessary, such as adding good soils on top of land to use.	All	(4,840)	\$ 200,000.
2.	Buying and planting of trees, shrubs, flowers, etc.	Numerous	3,710	\$1,200,000.
3.	Pond	1	.1	\$ 20,000.
*4.	Little bridge over the pond	1	.033 (1/30)	\$ 57,600.
5.	Lake	1	2	\$ 14,000.
6.	Rock garden	1	1.2	\$ 15,000.
7.	Water systems for the garden	4	-	\$ 20,000.
8.	Car parks	2	6	\$ 70,000.
9.	Drinking fountains	4	.016 (1/60)	\$ 1,000.
10.	Garbage cans (size 18½ gallons at \$13.60 each)	30	-	\$ 408.
11.	Gates	2	.025	\$ 10,000.
12.	Scenic road	1	(1 mile long)	\$ 1,500.
13.	Service road	1	(1 mile long)	\$ 1,300.
14.	Path (sidewalks)	10	(5 miles)	\$ 937.50
15.	Hiking trails (extra paths for scenic values)	10	(5 miles)	\$ 762.50
16.	Nature trails (Allowance set for Nos. 12-16 above (roads & Paths)	(22)	1,110	-
17.	Staff house	1	(5 miles)	\$ 500,000.
18.	Staff house	1	.025	\$ 20,000.
18.	Allowance for equipment of maintaining the garden	-	-	\$ 1,434.90
19.	Washrooms (toilets)	4	.5	\$ 2,800.
20.	Restaurant house	1	.2	\$ 26,000.
21.	Flower house	1	.4	\$ 100,000.
22.	Sitting benches	50	-	\$ 1,750.
23.	Telephone Communication System (boxes - black)	2	-	\$ 7.10
24.	Sewer	1	-	\$ 30,000.
25.	42 inch manholes	1	-	\$ 1,500.
26.	Size 200 septic tanks	1	-	\$ 1,000.
27.	Allowance for space adjustments	-	9,501	-
28.	Allowance for miscellaneous expenses and changes in prices of the above facilities	-	-	\$ 217,000.
Total			4,840	\$2,080,000.

The calculations for these facilities are based on the calculations made in the notes for the South Interlake outdoor recreational park which are included in Appendix 'A' of this research.

82. - not applicable

83. () not included in the total

- includes figures shown in the other items

84. * See the calculation note.

TABLE 58. OPERATION AND MAINTENANCE DURING THE CONSTRUCTION PERIOD.

<u>Names</u>	<u>Units</u>	<u>Budget</u>
Botanist	1	\$1,200,000.
Landscape Architect	1 firm	
Architect for the buildings	1 firm	
Engineer	1	
Electrician	1 firm	
Bricklayers	1 firm	
Carpenter	1 firm	
Surveyor	1 firm	
(Other workers) Labourers		
Developer	1	

TABLE 59. PUBLICITY OF THE GARDEN FOR 10 YEARS (WITH \$320,000.)

<u>Years of Construction and Maintenance</u>	<u>% of Total Capital Budget for Publicity</u>	<u>Budget Distribution</u>
1	1% of \$320,000	\$ 3,200.
2	2% of 320,000	6,400.
3	2% of 320,000	6,400.
4	4% of 320,000	12,800.
5	5% of 320,000	16,000.
6	8% of 320,000	25,600.
7	8% of 320,000	25,600.
8	10% of 320,000	32,000.
9	20% of 320,000	64,000.
10	40% of 320,000	128,000.
Total 10	100%	\$320,000.

OTHER COSTS

This allowance is set aside for doubtful and miscellaneous expenses from the other four areas - (1) Land acquisition, (2) Development and Construction, (3) Operation and Maintenance, and (4) Publicity.

The budget for this item is eighty thousand dollars, which is two percent of the total outlay of the garden.

SUMMARY OF THE PLAN FOR THE GARDEN OF PRAIRIE PLANT SPECIES.

There are four million dollars to spend on this garden for a period of ten years. The estimated area of the garden is 4,840 acres.

These resources (4,840 acres of land, and four million dollars) would have the following impact:- The resources would generate sales, job opportunities, and income at the South Interlake as well as in the rest of Manitoba, in the following manner:

<u>ITEMS</u>	<u>COSTS</u>	<u>PERIOD</u>	<u>GENERATED</u>		
			<u>SALES</u>	<u>JOBS</u>	<u>INCOME</u>
Land Acquisition	\$ 320,000	-	\$ 873,449	38	\$ 139,021
Development and Construction	\$2,080,000	10 years	\$ 5,677,418	248	\$ 903,640
Operation and Maintenance	\$1,200,000	10 years	\$ 3,275,434	143	\$ 521,330
Publicity	\$ 320,000	10 years	\$ 873,449	38	\$ 139,021
Other items	\$ 80,000	10 years	\$ 218,362	9	\$ 34,756
TOTAL	\$4,000,000	10 years	\$10,918,112	476	\$1,737,768

How these generated benefits would be distributed between the South Interlake and the rest of Manitoba would be analyzed in detail under benefits in the next chapter.

GUIDING CRITERIA FOR DECISION MAKING ON SOUTH INTERLAKE OF MANITOBA.

The decision of the provincial government of Manitoba of whether to have a 10,240 acres of land for an outdoor recreational park or to have a 4,840 acres of land for a Prairie Native Garden or a combination of the two, or to not use the land for a park at all is involved. Principles including questions as follows:

- (1) Where shall the provincial government get the land for such a park?
- (2) Why should a provincial outdoor recreation be at such a place?
- (3) How much would each of the proposals cost?
- (4) What are the benefits that would accrue to that area and to Manitoba as a whole?

In other words, there must be some criteria to guide the provincial government of Manitoba in arriving at the conclusion of whether to build an outdoor recreation park or to build a garden at such a location in Manitoba.

Those guiding criteria would include:

- (1) The problems at the South Interlake area of Manitoba
- (2) The present socio-economic situation at the local community level
- (3) The degree of use of an outdoor recreational park in Manitoba
- (4) The demand for an additional outdoor recreational park in Manitoba
- (5) The planning of either the park or the garden for the South Interlake of Manitoba
- (6) The amount of land that would be required for each of the two proposals
- (7) The cost of each proposed projects
- (8) The facilities that each of the projects will contain
- (9) The subdivisions of the capital investment on each project.

- (10) The consultant and/or the planner of the park.
- (11) The problems (or constraints) encountered in having such a project for such a location in the province of Manitoba.
- (12) The benefits that would be derived from each project.

It is on these points that the provincial government would base its policy on whether to build a park or a garden at such a location of the province.

The first ten points are already given by this research. The next chapter would examine in detail the benefits that would accrue from each proposed project while chapter nine examines the problems that may be encountered in building either project at the South Interlake of Manitoba.

CHAPTER 8. BENEFITS

INTRODUCTION

The importance of analyzing, measuring, projecting and estimating land areas and facility costs for the recreational facilities, and the socio-economic factors that shape the use of recreational facilities are:

- (1) to aid the planning of an outdoor recreation park that was dealt with in the last chapter;
- (2) to show that there is a promising market for the outdoor recreational facilities in Manitoba, and in Canada, now and in the years to come;
- (3) to show that there is a rising demand for the outdoor recreational facilities in Manitoba, now and in the future;
- (4) to show that Manitoba needs more outdoor recreational facilities for its present population, for its current visitors and for its future generations and future visitors.

Any action increasing the outdoor recreational facilities by Manitoba is likely to be a good move and unlikely to cause future problems.

Why then can the provincial government not start on the planning for more outdoor recreational facilities from now? Where shall the government find the land? How will the next outdoor recreational park be planned? Who would plan it; and where should it be? How many years would the construction of one park take? How much shall the construction of the next outdoor recreational park cost? How would the cost be distributed? These are some of the questions that this research has answered for the provincial government. On the other hand, what will be the benefits that would stem from the next additional outdoor recreational park in Manitoba? This question is what the next chapter analyzes and explains in detail.

Benefits and costs are usually measured with respect to specific goals. Each alternative course of action to achieve a specific goal requires the commitment of economic resources. Benefits measure the effectiveness of the resources and of the action and the goal. The resources once committed cannot be used elsewhere. Their commitment has an opportunity cost in other uses sacrificed. Costs measure the effectiveness and comparison of the sacrificed action in achieving the original goal.

Theoretically, benefits and costs may be calculated from any desired goal. In this research, the desired goals for the proposed projects are:

- (1) To increase the economic benefits (tangible benefits) to the people of South Interlake and to Manitoba as a whole;
- (2) To foster the redistribution of incomes to the South Interlake of Manitoba;
- (3) To raise the employment opportunities of the people of this identified community; and
- (4) To enhance the native environment of the South Interlake.

BENEFITS

Assumption: The benefits from the South Interlake require these assumptions.

- (1) The construction of either project is completed.
- (2) All necessary facilities are supplied.
- (3) The facilities are fully used by the recreationists.
- (4) The facilities are not over used or damaged.
- (5) The short run period is five years after the official opening of the park.

6. A one million dollars of tourist spending on recreational resource at the South Interlake of Manitoba generates
- (A) (i) \$260,000 as the total area income
 - (ii) \$ 9,000 as the total farm income
 - (iii) \$ 2 as an income to a farmer
 - (iv) \$251,000 as an income to the trade centres
 - (v) \$294,000 as an income to Winnipeg.
- Total income generated are:
\$260,000 to the local area and
\$294,000 in Winnipeg. The total is \$554,000 and
- (B) (i) 43 jobs to the region of the project
 - (ii) 114 jobs in Winnipeg
- Total jobs generated would be 157.⁸⁵
- (C) Total sales of \$2,932,795.⁸⁶
7. A one million dollars spent on constructing an outdoor recreational park in Manitoba would generate:
- (A) (i) \$1,504,500 sales for the South Interlake community
 - (ii) \$1,225,028 sales to the rest of Manitoba.
 - (B) (i) 63 jobs to the South Interlake of Manitoba
 - (ii) 56 jobs to the rest of Manitoba
 - (C) (i) \$228,868 income to the employees of South Interlake
 - (ii) \$434,442 income to the employees of the rest of Manitoba
 - (D) Total of (a) Sales equals \$2,729,528;
(b) Jobs opportunities equals 119;
(c) Income equals \$434,442.⁸⁶
8. The annual public expenditure on either park at the lifetime of the park is assumed constant when calculating the tangible benefits.
9. Project 'A' is assumed to generate 4.432 million dollars in the short run, and project 'B' is assumed to generate 2.216 million dollars in the short run as tourist expenditures.

⁸⁵. C.F. Framingham, J.A. MacMillan, Paul E. Nickel, Guidelines for Community Planning (Winnipeg, Manitoba, Canada: The University of Manitoba, Department of Agricultural Economics and Farm Management, February 1973) P. 45.

⁸⁶. J. Craven, C.F. Framingham, R.E. Capel, A model for the analysis of the demand for and socio-economic impacts of recreation in Manitoba. (Winnipeg, Manitoba, Canada: The University of Manitoba, Department of Agricultural Economics and Farm Management, 1974) P. 27.

TABLE 60. TANGIBLE BENEFITS

(1) Benefits from the construction of the projects.

Projects	'A'	'B'
Years of Construction	5	10
Capital Outlay	\$8,000,000	\$4,000,000
Total sales generated	\$21,836,224	\$10,918,112
Total jobs generated	952	476
Total income generated	\$ 3,475,536	\$ 1,737,768

(2) Benefits from the use of the park by the recreationists.

PROJECT A: Benefits in the short run of five years is

$$(\$554,000 \times 8) = \$4,432,000$$

PROJECT B: Benefits in the short run is \$2,216,000.

Benefits at the end of 15th year since the construction of either park started are:-

Project A would generate \$8,864,000

Project B would generate \$2,216,000.

Therefore, the benefits at the end of the 20th year the investment was made would be 13.296 million dollars on project 'A' and 4.432 million dollars on project 'B'.

In order to be able to compare the benefits for both projects, the benefits would be calculated at the end of the 20th year. At the end of the 20th year since the construction began, the benefits would be:

(3) Total Benefits at the end of the 20th year.

Projects	'A'	'B'
Year of estimation	20	20
Sales	\$92,823,304	\$34,380,475
Income	\$16,771,536	\$ 6,169,768
Capital cost	\$ 8,000,000	\$ 4,000,000
Net income	\$ 8,771,536	\$ 2,169,768
Benefit-Cost ratio	2.096	1.542

At the end of the 15th year the construction had started, the first project would have generated \$8,864,000 while the second project would have generated \$2,216,000.

The reason the second project would take ten years of construction is that it is a garden of plants, shrubs, flowers, etc. It would take additional five or more years before this garden can be economically and aesthetically feasible. A good example of this type of garden is the Butchart Gardens at the Victoria Island of British Columbia. Butchart Gardens took more than twenty years before it started to yield economic benefits. Though this garden generates at least one million dollars a year after the garden was begun it is operated by the Government of British Columbia.⁸⁷

⁸⁷ • Ralph Allen (editor) "Butchart Gardens", Maclean's Magazine (Montreal 2, Canada: Dominion Square Building, September 15, 1952).

TABLE 61. SHARING OF THE TANGIBLE BENEFITS AT THE END OF THE 20th YEAR.

1. SALES

<u>Projects</u>	<u>Sales from construction</u>	<u>To South Interlake</u>	<u>To the rest of Manitoba</u>
A	\$21,836,224	\$12,036,000	\$ 9,800,224
B	\$10,918,112	\$ 6,018,000	\$ 4,900,112
	<u>Sales from tourist ex-</u> <u>penditures</u>	<u>S. Interlake</u>	<u>Manitoba</u>
A (for 15 yrs)	\$70,387,080	\$36,267,600	\$34,119,480
B (for 10 yrs)	\$23,462,360	\$12,089,200	\$11,373,160
	<u>Total Sales</u>	<u>S. Interlake</u>	<u>Manitoba</u>
A	\$92,223,304	\$48,303,600	\$43,919,704
B	\$34,380,472	\$18,107,200	\$16,273,272

2. TOTAL INCOME

<u>Projects</u>	<u>Income from construction</u>	<u>To S. Interlake</u>	<u>To the rest of Manitoba</u>
A	\$ 3,475,536	\$ 1,830,944	\$ 1,644,592
B	\$ 1,737,768	\$ 915,472	\$ 822,296
	<u>Income from tourist ex-</u> <u>penditures</u>	<u>To S. Interlake</u>	<u>To the rest of Manitoba</u>
A	\$13,296,000	\$ 6,240,000	\$ 7,056,000
B	\$ 4,432,000	\$ 2,080,000	\$ 2,352,000
	<u>Total Income from Tour-</u> <u>ist expenditures and</u> <u>Construction</u>	<u>To S. Interlake</u>	<u>To the rest of Manitoba</u>
A	\$16,771,536	\$ 8,070,944	\$ 8,700,592
B	\$ 6,169,768	\$ 2,995,472	\$ 3,174,296

3. NET INCOME

<u>Projects</u>	<u>Total Net Income</u>	<u>To S. Interlake</u>	<u>To the rest of Manitoba</u>
A	\$ 8,771,536	\$ 4,316,431	\$ 4,455,105
B	\$ 2,169,768	\$ 1,118,216	\$ 2,169,768

Explanation of the calculations are presented under Appendix 'A' - Notes and Calculations.

After these benefits have been shared in the above manner, it would then be redistributed among the following economic sectors in this form, 38 percent of the income from the tourists' expenditure and sales tax from income of construction would go to the personal income after taxes, 5 percent would go to the personal taxes, 7 percent to the corporate taxes, 8 percent to other incomes, 8 percent to the allowance for depreciation, of course saved, 14 percent to the indirect taxes, and 20 percent would be lost to the outside sectors outside Manitoba. This 20 percent would take the charge of import of goods and services to the province.⁸⁸ In the 20 year period, the total impact would come down to \$16,771,536 as the total income from construction and tourists' expenditure, assuming project 'A' is built.

GOVERNMENT REVENUE

The government direct taxation from the total tourist expenditure and sales tax from the industries that would be derived from building project 'A' at the South Interlake of Manitoba would be \$2,012,584. About \$402,517 from this amount would be returned to the provincial treasury. Indirect taxes would account for an additional \$2,348,015 in public revenue, raising the total tax collected by the Manitoba Government to \$2,750,532. However, taxes also circulate in the same proportion as the remaining expenditures. Albeit, the total effect of the \$16,771,536 benefits from the park in the 20 year period is \$5,199,176 in tax revenue.

INCOME REDISTRIBUTION BENEFITS

Income redistribution to the South Interlake of Manitoba is going to be a form of tax transfer to that area from the provincial government.

⁸⁸. Hon. P. Burtiak, and O.S. Eagleton, The Economic Impact of Tourism (Winnipeg, Manitoba, Canada: Department of Tourism and Recreation, 1971) PP. 8 and 9.

This income redistribution would include (1) the capital outlay of the project in that area in the short run, and (2) the annual expenditure in maintaining the park during its lifetime.

The cost of the first project is estimated at eight million dollars, and the cost of the alternative project is four million dollars. Whichever project is given to this community would improve their levels of living. A dollar expenditure on recreational resource in Manitoba is estimated to have the following impact -

Personal income after taxes is	38 cents
Personal taxes is	5 cents
Corporate taxes is	7 cents
Other income is	8 cents
Depreciation (saved) is	8 cents
Indirect taxes is	14 cents
Imports (lost from Manitoba is	<u>20 cents</u>
Total	\$1.00 ⁸⁹

Moreover, the money would be spent at an average of 1.9 times. Although this would be an income multiplier. Therefore, the 80 cents remaining in the region will generate a total income of \$1.52. Within the first one dollar spent, at least 54 cents would remain in that area. This 54 cents is made up of the personal income of 38 cents, other income of 8 cents, and the depreciation of 8 cents that is saved which may yield interest. This 54 cents would generate at least \$1.026 into their economy and thereby improve their income and even employment opportunities.

If eight million dollars is spent on a recreational resource project for the area, at least \$4,320,000 would sink into the economy of that region. If the second project is the one carried out, \$2,160,000 would sink into the area from the investment. That over four million dollars

⁸⁹. Hon. P. Burtiak, and O.S. Eagleton, The Economic Impact of Tourism (Winnipeg, Manitoba, Canada: Department of Tourism and Recreation, 1971) P. 9.

would create about 172 jobs,⁹⁰ for the area. These employees would receive at least \$688,000 a year. The unemployment insurance they have been receiving would be retained. The government would also receive tax from these salaries. As such, the project would benefit the local people employed for the construction as well as beneficial to the government. This process would continue at least for a short period of ten years. In this way, capital cost of the recreational resource project would be a good system of income redistribution to the South Interlake of Manitoba.

Moreover, the land of the area that has been left unused for years would be put into a productive process and thereby enhance the environment, and yield more tax revenue to the provincial government. At the same time, yield employment opportunities to the local people.

By and large the capital investment on a recreational resource project at the South Interlake would serve as income distribution as benefits per se.

EMPLOYMENT OPPORTUNITIES BENEFITS

The economic benefit of using the unemployed resources for constructing, operating and maintaining the South Interlake outdoor recreational park (of both projects) would be evaluated as the wages paid to those who would otherwise be under-employed.

The assumption to use here are:

1. One million dollars spent on constructing an outdoor recreational park at the South Interlake of Manitoba would generate 63 jobs for the South Interlake community and 56 jobs to the rest of Manitoba.
2. One million dollars of tourist expenditure on South Interlake recreational

⁹⁰ C.F. Framingham, J.A. MacMillan, Paul E. Nickel, Guidelines for Community Planning (Winnipeg, Manitoba, Canada: Department of Agricultural Economics and Farm Management, The University of Manitoba, Feb. 1973) P. 45

resource.would generate

- (i) 43 jobs to the South Interlake region
 - (ii) 114 jobs to the rest of Manitoba.
3. The year of calculation is the 20th year since the construction of either project began.
 4. Assume the new employees were previously unemployed.

TABLE 62. EMPLOYMENTS

1. Through Construction

Projects	'A'	'B'
Construction period	5 years	10 years
Capital outlay	\$8,000,000	\$4,000,000
Jobs opportunity	952	476

2. Through income generated by the tourist expenditure.

Projects	'A'	'B'
Years of estimation	20th year	20th year
Estimated tourist spending	\$13,296,000	\$4,432,000
Job opportunity	2,087	696

3. Total number of employment opportunities that would be generated within the twenty years period by

Project 'A' is $952 + 2,087 = 3,039$ jobs

Project 'B' is $476 + 696 = 1,172$ jobs.

On this basis of employment opportunities project 'A' is more preferable to project 'B' because it reduces the number of the unemployed in the province by 3,039 whereas project 'B' reduces it by 1,172 within the twenty year period. Moreover, the income to the project 'A' employees would reduce the unemployment payments more than the unemployment payments to the number of employees in project 'B'. The income to those employees in project 'A' would increase the income of many other people in the province. By and large, project 'A' is more useful than project 'B'.

By and large, these employment opportunities would be shared within the South Interlake of Manitoba and the rest of Manitoba as it is analyzed below:

DISTRIBUTION OF EMPLOYMENT OPPORTUNITIES BETWEEN THE SOUTH INTERLAKE AND THE REST OF MANITOBA IN 20 YEARS PERIOD.

1. Employment opportunities through the project construction.

	Projects	
	'A'	'B'
Years of construction	5	10
Employment to the South Interlake of Manitoba	504	252
Employment to the rest of Manitoba	<u>448</u>	<u>224</u>
Total employment through construction	<u>952</u>	<u>476</u>

2. Employment through income from the tourists expenditure at South Interlake:

	Projects	
	'A'	'B'
Years of full use	15	10
Employment to the South Interlake	572	191
Employment to the rest of Manitoba	<u>1515</u>	<u>505</u>
Total employment through income from tourist expenditure	<u>2087</u>	<u>696</u>

3. Summary of Nos. 1 and 2.

	Projects	
	'A'	'B'
Periods of Employment	20 years	20 years
Employment to the South Interlake	1,076	443
Employment to the rest of Manitoba	<u>1,963</u>	<u>729</u>
Total employment in 20 year period	<u>3,039</u>	<u>1,172</u>

TAX REVENUE BENEFITS VERSUS OPPORTUNITY COST

Introduction:

The fundamental purpose of this issue is to determine whether the additional public investment on the land area that would be used for an outdoor recreational park at the South Interlake is worthwhile.

The area of land resources and the capital investment would have gone into the formation of some other type of productive capital; the opportunity cost of using these resources should equal the productivity that economic resources would have had in the investment foregone. This opportunity foregone by the government of Manitoba is to be estimated through the comparison of the tax revenue that the government would have collected on the land if the land had not been used for the park with the tax to be collected from the park. If the tax from the land is greater than the tax that the park would generate to the government of Manitoba, then the building of the park on that area of land might be justifiable.

TAX REVENUE

Present direct tax from the land:

The present direct tax from the derelict land of 10,240 acres is \$38,265.8 per annum. The 10,240 acres is the area for the proposed outdoor recreational park at the South Interlake of Manitoba. The land area for the garden is 4,840 acres with the annual tax of \$23,469.8.

Tax revenue from either project: The tax revenue that would be collected on the park by the government of Manitoba is \$2,747,840 for the period of ten years. Whereas the land has been occupied for construction for five years before the use, this makes the number of years to be fifteen

that the land has been occupied by the park. The tax revenue from the garden after fifteen years would be \$686,960.

TABLE 63. COMPARISON OF TAX REVENUES FOR 15 YEARS.

	PROJECTS	
	A	B
Generated taxes	\$2,747,840	\$686,960
Present land taxes	<u>573,987</u>	<u>352,047</u>
Excess taxes from using the land	\$2,172,853	\$334,914

It is a general belief that land enhancement benefits result when a more productive land use is made possible by the project and are distinguished from the direct benefits to the land use which would prevail without the project as it is proved here. For instance, if the government uses the 10,240 acres for the park, it would collect an additional sales tax revenue of \$2,172,853 from the use of the land over what the government would have collected from the land had it not been used by the government. Moreover, if the government uses 4,840 acres of land for the garden, it would collect an additional tax revenue of \$334,913 over what it would have collected from the land if it had not been used for the garden.

The tax revenue the government would receive from the park could also be used for another project whereas if the government does not build the park, the amount of \$2,172,853 would be an opportunity foregone.

According to the above calculations, and comparisons of tax revenues, the outdoor recreational park would generate more tax revenue than the garden, as well as generate more revenue than the tax from the land when the land is not used for the recreational purposes. On this basis, the construction of the outdoor recreational park is viable.

INTANGIBLE BENEFITS

Intangible benefits describe consequences which cannot be assigned a monetary value but aid the policy decision of whether to build or not to build the park project.

The intangible benefit of the outdoor recreational park would include - the improvement of health of the recreationists; the improvement of the environmental aesthetics; and the educational benefits of providing an area for the study of the interrelationships between living organisms and the environment of the area, and the provision of recreational facilities in harmony with the preservation of significant geographical, geological, biological and historical features, and possibly remove the uncertainties about the effects of particular development of derelict lands in other areas of the ordovician shield that may cause social losses.

If the garden is built, its intangibles would include not only those that are already mentioned but also include - the preservation of a unique feature of the prairie provinces of Canada for the present and future generations; - preservation of the wilderness as forest lands, and the maintenance of the widest possible variety of existing species of flora and fauna in the area; - standing of the wilderness as sanctuary for people seeking contact with the primitive values and at the same time enhance the balance of the ecosystem and the environmental quality. Any of the project would maintain the option of future re-allocation of the land resources.

SOCIAL BENEFITS

The social gains from any of the alternative proposals would include:

- (1) the tax paid by the private economic sectors of the South Interlake in proportion to the value of the park to the tourists at the lifetime of the park;
- (2) employment opportunities and potential source of earned income for the under-employed labour force of the South Interlake, especially to those who might have not got jobs in the absence of the project; and
- (3) the economic growth effects as well as the population growth effects on the South Interlake.

By and large, the general effects of either project would include:

- (4) indirect benefits of increasing the local and provincial revenues from the tourist trade;
- (5) secondary benefits of increasing sales of retail business establishments and indirectly increase the number of certain types of commercial enterprises catering to the users of the park such as food, lodging, and automobile services;
- (6) upgrading of the local communities through the construction of commercial facilities, and new homes which would transform the area;
- (7) additional depth to the local and provincial economy;
- (8) diverting the traditional expenditures of the residents of Manitoba in travelling to other parts of Canada and abroad to this province;
- (9) creating of travel activity in Manitoba by the Manitoba residents, by the Canadians from other provinces of Canada, and by foreigners who might be induced to come to this province;

- (10) these last two benefits might increase the Manitoba's balance on travel account, and thereby reduce regional inequity; and
- (11) income distribution to the government such as the consumer taxes, individual income taxes, and corporate taxes.

CHAPTER 9. CONSTRAINTS

The most obvious problems that may be encountered in building an outdoor park at the South Interlake of Manitoba are:

1. The acquisition of private lands for the public use in the area.

Although this problem should be overcome by the policy makers on the basis that the land resources used for the public benefits is more justifiable than the land held by an individual for private use. Land resources are made for people and not for one person.

2. The water table in the area may be a problem to the engineer but not to the developer. The land resource developer only needs to point out this problem to the engineer. Nevertheless, this should not be a problem to hinder the construction of an outdoor park at the South Interlake.
3. The road problem may arise if the park is not directly near the highways in the area. There may be road construction that would pass through some private lands leading to the park. By and large, this should not be a hindrance to this project because the project would provide benefits to more people than the private individual owner.
4. Should an outdoor park be built at the South Interlake of Manitoba, would it not drain recreationists from other parks of the province? As far as this park is concerned, this would not happen for the fact that it is going to be a complementary park and not a substitute. It has been proved in this research that the demand for outdoor parks would be high by 1980. As such, the building of an outdoor park at the South Interlake of Manitoba should not be a problem to the decision makers; rather the park is going to be a necessary requirement for this province by the year 1980.

These are few of the problems that may arise. In any case, there is no significant problem that should be allowed to hinder the building of an outdoor park in the South Interlake of Manitoba.

CHAPTER 10. POLICY ON SOUTH INTERLAKE OUTDOOR RECREATIONAL PARK

PART I

This recreation plan is a report that presents decisions concerning the recreation development of the South Interlake. It is an outline of what is to be done in order to establish the recreation areas needed to meet the present and future demand deficits that have been estimated by the demand and supply inventoried.

This study presents a fifteen point recreation plan to represent a program for the policy makers on regional development in Manitoba.

This fifteen point program includes: -

1. identification of an area with natural resource and socio-economic problems.
2. enumeration of the problems facing the South Interlake of Manitoba.
3. stating of the objectives for this study. It is assumed that the achievement of the objectives would alleviate most of the problems stated in number two above.
4. presentation of the social and economic situations of the South Interlake, as well as analyzing the resources available to this community.
5. examining the participation rates of the recreationists in Manitoba. This shows that the present recreational resources in Manitoba are fully used.
6. socio-economic factors that fostered the behaviour of the recreationists in Manitoba.
7. presentation of the demand for recreational resources in Manitoba.

8. Projections of pertinent recreational facilities for Manitoba.
9. Stating the forecast use of the proposed outdoor recreational park at the South Interlake of Manitoba.
10. Presentation of well detailed planning on two alternative projects for the South Interlake of Manitoba.
11. Show the guidelines for the planning.
12. Calculating and analyzing the benefits from the two alternate projects.
13. Presentation of some relevant problems on the projects.
14. Showing how the program rests in the hands of the policy makers, and then
15. Presenting the research recommendations to the provincial government of Manitoba.

In general, policy is a matter of concept, that is, a method of providing a relevant framework to order information so that real alternatives will emerge, in some order of performance. It is this particular point that this research dealt with by providing a well detailed program on the South Interlake of Manitoba, but the decision of using the program or choosing among the two alternative projects is left to the government policy makers. They may choose either project or a combination of the two projects or they may decide to do nothing if they wish. It must be stressed that the provincial policy makers are the arbiter of this environment.

By and large, the idea behind provision of this program rests on the fact that recreation is an industry with employment expansion opportunities proportionately beyond those in the traditional primary

sectors. Moreover, it provides the people of the service industries in remote communities like the South Interlake to acquire employment and the managerial expertise and responsibility which at the present time and under the present system they have difficulty acquiring.

Nevertheless the essence of the Manitoba Department of Tourism and Recreation policy with regard to the South Interlake Outdoor Recreational Park should include the preservation of the unique features of the natural resources of this identified area.

The finance of any of these proposals could be met either by the provincial government of Manitoba, or by the Fund for Rural Economic Development program (F.R.E.D.) which is a joint Federal-Provincial Agency for rural economic development of the Interlake of Manitoba.

Although the use and recognition of this program rests with the policy makers, this research would present its recommendations to those who may be involved in that decision so as to point out some of the immediate needs for the South Interlake and for this province as well.

However, policy on some specific facilities are:

PART II

PARK ROADS:

Roads are the accepted means of access to and within the parks. The design of park roads requires high quality construction but width, grade, and alignment should be adequate for moderate speeds only. The South Interlake road standards should conform to a carefully prepared classification system in which the volume of traffic, type of vehicle and desired speed of travel are considered. The location, design and construction of the park roads must keep impairment of the landscape to an absolute minimum and avoid interference with special park features.

TRAILS AND FOOTPATHS;

Travel in parks by foot and horse should be encouraged. While the construction of trails and footpaths does not appreciably impair the landscape, care should be taken to avoid impairment as much as possible.

FINANCE AND DEVELOPMENT

1. South Interlake park development should be considered primarily on the basis of need and desirability in relation to park purposes. Economic considerations should affect only timing of the individual item of construction.
2. The basic financial policy for the South Interlake provincial park should be payment out of the general revenues, modified by charges for the purpose of:
 - (i) administrative control
 - (ii) effecting visitor realization of value
 - (iii) requiring users of special facilities to pay a portion of costs.
3. Capital expenditures and administration of the South Interlake park should be charged to the province of Manitoba.

OPERATION AND MAINTENANCE

Operation and maintenance costs should be divided between the user and the province of Manitoba in accordance with the following:

- (i) An entrance charge should be made at the South Interlake park. The amount should not restrict use but should indicate a value.
- (ii) Charges for the South Interlake outdoor recreational facilities such as golf courses, tennis courts, swimming pools, and so on,

should be based on the operation and maintenance costs and comparison with charges for similar facilities elsewhere, taking into account also the desire to encourage general use.

- (iii) Fees for serviced campgrounds and for modern trailer parks should be based on the same factors as (ii) above.

No fees should be charged for camping at campgrounds with minimum services.

- (iv) Charges for miscellaneous natural recreation facilities, when made available at the South Interlake park, should be nominal for the purpose of control only.

- (v) Charges for miscellaneous permits required for administrative control should be nominal.

APPENDIX A: NOTES AND CALCULATIONS

APPENDIX A. TABLE 64. CALCULATIONS

ble 1.(Nos. 8 & 9)	Personal Income per capita	1970 \$2,903	2,903	$\frac{520}{2903} \times \frac{100}{1} = \frac{52,000}{2,903}$
	Personal Disposable Income	2,383	- $\frac{2,383}{520}$	
		a decrease of 18%		$= 17 \frac{2649}{2903}$
				= 18% decrease

$$\begin{aligned} \frac{1980}{3,347} \text{ to be decreased by } 18\% &= 100 - 18 = 82\% \\ &= \frac{3347}{1} \times \frac{82}{100} = \frac{274,454}{100} = 2744 \frac{54}{100} \\ &= 2745 \end{aligned}$$

$$\begin{aligned} \frac{3347}{- \frac{2903}{444}} \quad \frac{444}{3347} \times \frac{100}{1} &= \frac{44,400}{3,347} = 13,889 \frac{89}{3347} = 13\% \end{aligned}$$

$$\frac{3347}{100} \times 113 = \frac{389,211}{100} = 3892 \frac{11}{100} = 3892$$

$$\begin{aligned} \frac{3347}{- \frac{2745}{602}} \quad \frac{602}{3347} \times \frac{100}{1} &= \frac{60,200}{3347} = 17 \frac{3301}{3347} = 18\% \end{aligned}$$

$$\frac{3892}{100} \times 82 = \frac{319,144}{100} = 3191 \frac{44}{100} = \underline{\underline{3,191}}$$

(No. 10) Increase from 1961 to 1970 based on 1961 100

$$= .2 - .2, + 1.3 + 2.6 + 6.2 + 15.1 + 21.6 + 26.2 + 32.6 = \underline{105.6}$$

$$\begin{aligned} \frac{132.6}{132.6} \text{ to be increased by } 105.6 \\ + \frac{105.6}{238.2} + \text{another } 105.6 &= 343.8 \end{aligned}$$

(Nos. 11 & 12) Projections are based on the speech made by Mr. R.E. Grose, in Manitoba to 1980, Report of the Commission on Targets for Economic Development Winnipeg, Manitoba, March 1969, Page 295.

No. of visitors	3,250,000 X 3 =	9,750,000	for 1980
	9,750,000 X 3 =	29,250,000	for 1990
Visitors spending	\$144 million X 5 =	\$720 million	for 1980
	\$720 million X 5 =	\$3,600 million	for 1990

(No. 14) Population of Manitoba + 4338

(No. 15) That year's Manitoba population plus the number of visitors + 4338

Additional area needed in 1980 = 11,062 - 4338 = 6,724

Additional area needed in 1990 = 31,017 - 4,338 = 26,679

(No. 16) (a) increase of 155%

$$4338 \times \frac{255}{100} = 11,061 \frac{9}{10} = \underline{\underline{11,062}}$$

(b) Increase of 615%

$$4338 \times \frac{715}{100} = 31,016 \frac{7}{10} = 31,017$$

(Notes on Nos. 15-17) The reason why the number of the visitors was added to the population of Manitoba in each year is that the Provincial park is expected to be opened to the whole population of Manitoba without any prejudice to any segment of the society with regard to race, color, ethnic origin, sex, age, religion, or social status. This study is more interested in focusing on the benefits to the whole society rather than to any segment of it, hence it includes the whole population of Manitoba and not just few that attended that year. The future projection is to be made for the benefits of the whole Manitobans and her visitors rather than to a secluded privileged segment of the province.

NOTE ON THE PROJECTED TOTAL DEMANDS FOR THE MANITOBANS AND THEIR VISITORS.

- Step (1) The average percents of Manitobans' interest on recreational facilities for 1967 and 1972 surveys was worked out. The average percent is assumed as the percent interest for 1970/71 in Manitoba.
- Step (2) The average percent is divided by the population of Manitoba in 1971, and the result is multiplied by the Manitoba projected population for 1980. The same method is used for 1990.
- Step (3). The average percent for 1970/71 is subtracted from the projected interest demand for 1980 to get the increase percent from 1970/71 to 1980. The same method is used for 1990 and for 1970/71 to 1990.
- Step (4) The percent interest of the visitors to Manitoba in 1967 is not available.
- Step (5) The reason for using the average percent interest of visitors with prior interest before getting to the park and the real participating percent interest of visitors is that some visitors might have a certain interest in mind, and when they got to the park or the lodging place, the facility is overcrowded or not in sufficient supply at such a place. They might then decide to use the available facility. On the other hand, some might change their minds because they found another facility more attractive than their prior conception, then they might change their minds. The third point is that the user fee of the facility they are interested in might be more than what they expected, especially in the case of the accommodation. They might have used the cheaper facility especially if they were from lower income people. For these reasons, it is better to use the average between the prior

interest and the real use in order to get rid of these discrepancies.

Step (6) Another assumption that is used here is that the percentage of the survey of visitors got in 1970/71 represents the interest of all the visitors because the survey sample was really large.

Step (7) The methods for numbers two and three above are then applied to the projected visitors numbers from Table 1 .

Step (8) 1970/71 was assumed to be the base year because

- (a) it had more data available than the other years
- (b) it is the one mostly used in this study.

HOW THE PROJECTED DEMAND FOR OUTDOOR RECREATIONAL FACILITIES IN MANITOBA FOR 1980 AND 1990 WAS COMPUTED.

The facilities listed under 1970/71 were meant for 4,268,236 population in Manitoba. This figure is the total number of Manitobans and her visitors for 1971. This is based on the assumption that the facilities are meant for the total population of the province of Manitoba and not meant for a certain segment of the province. Seclusion of a certain group or class of people from the forecast or the use of park facilities is a sort of discrimination which should be avoided by a civilized society.

In 1980, the projected population of Manitoba is added to the projected number of visitors. The number of facilities is then divided by the 1971 population, and the result is multiplied by the projected population that would use the facilities in 1980. The same method is applied to 1990.

The same method used in working out the number of facilities needed in Manitoba for 1980, and 1990, is also used to project the number of facilities needed for the South Interlake outdoor recreational park.

In order to get the additional outdoor recreational facilities needed on Manitoba parks by 1980, assuming the South Interlake park is built according to the plan, the total number of facilities to be supplied to the South Interlake is subtracted from the total number of facilities needed in 1980. The result is the additional facilities that the government of Manitoba should supply to other parks within the province before 1980.

NOTES ON FORECAST USE OF SOUTH INTERLAKE OUTDOOR RECREATIONAL PARK

Steps taken:

1. The average percent of visitors going to the Northern region of Manitoba, South Interlake, and the unknown from 1969-1972 was taken.

This is followed by the assumption that at least one-fourth of the percent of the unknown would go to either the proposed park, or pass through the park to either the Northern region or to the Interlake.
2. Each of the average got is then used as a proportional percentage of the visitors forecast for 1980 and 1990.
3. The numbers got are then added up.
4. This is followed by the assumption that at least sixty percent of the total got in number three would go to the park or pass through the park when going to either the Northern region or to the Interlake region. This sixty percent is assumed for the total (in no. 3) for 1980 through 1990.
5. Another assumption is that between 1980 and 1990, the attendance would rise gradually as the socio-economic factors rise and populations increase. Therefore, the total number for 1981, 1982 to 1989 was then computed in an ascending order.
6. It is assumed that at least thirty five percent of the Winnipeg projected population for 1980, as well as 1990, would go to that park each year from 1980 to 1990.

7. It is also assumed that twenty five percent of the rest of Manitoba would go to that park each year from 1980 to 1990.
8. The projected population of Winnipeg is then subtracted from the projected population of Manitoba to get the population of the rest of Manitoba.
9. Thirty five percent is then worked out against the Winnipeg projected population while twenty five percent is worked out against the projected population of the rest of Manitoba to get the attendance that would attend the park in 1980, and 1990.
10. After the attendance for 1980 and 1990 have been got, the attendance for each year from 1980 to 1990 is then computed.

Basis of assumption numbers 4, 6, 7 are

- (i) Easy access to the South Interlake park.
 - (ii) Increase in population and socio-economic factors of the people.
 - (iii) Central location of the park - that is, it is between Lake Winnipeg and Lake Manitoba.
 - (iv) Individual demand for enjoyment.
 - (v) Availability of facilities on this park.
11. The total attendance for Manitoba is multiplied by the average length of the Manitobans staying at the park to get the visitor days for Manitoba. The same system is used for the visitors. Then, the total visitor days of the Manitobans is added to the total visitor days of the tourists to get the total visitor days for each year.

HOW THE NUMBER OF VISITORS GOING TO THE SOUTH INTERLAKE PARK IS GOT.

APPENDIX A. TABLE 65. PERCENTAGE OF TOURISTS GOING TO DIFFERENT REGIONS OF MANITOBA FROM 1969-1972.

YEARS	REGIONS		
	Northern	Interlake	Unknown
1969	6.7	.4	34.0
1970	2.0	.8	34.9
1971	4.4	1.4	37.8
1972	2.4	.7	32.4
Total	15.5	3.3	139.1
Average	3.875	.825	34.775
Adjusted	3.9	.8	34.8

Assume $\frac{1}{4}$ of 34.8 to pass through or attend the South Interlake Park.
(i.e. 8.7%)

Appendix A. TABLE 66. PROJECTIONS OF VISITORS TO MANITOBA.

YEARS	NUMBER OF VISITORS
1980	9,750,000
1990	29,250,000

Appendix A. TABLE 67. NUMBER OF VISITORS TO SOUTH INTERLAKE PARK.

1980		1990	
3.9% of	9,750,000 = 380,250	29,250,000 =	1,140,750
.8% of	" = 78,000	" =	234,000
8.7% of	" = 848,250	" =	2,544,750
Total	=1,306,500		= 3,919,500

Assume 60% of all the people going to the Northern region, the Interlake region and the unknown to attend the South Interlake (tourist attraction) park yearly between 1980 and 1990.

91. See Table 38.

92. See No. 11 of Table 1.

Therefore, 60% of 1,306,500 is 783,900 people for 1980 and 60% of 3,919,500 is 2,351,700 people for 1990. Assume the number of tourists increase gradually between 1980 and 1990.

In order to get the projections of visitors for each year between 1980 and 1990, subtract 1980 figure from 1990 figure, then divide the result by 10. That is, $2,351,700 - 783,900 = 1,567,800 \div 10 = 156,780$. Add 156,780 to 783,900 to get 940,680 for the 1981 visitors. The same system applies to 1982 to 1990.

HOW THE NUMBER OF MANITOBBANS GOING TO THE SOUTH INTERLAKE PARK IS PROJECTED.

Assumptions

1. Assume thirty five percent of the population of Winnipeg would attend the South Interlake Park at least once a year from 1980 through 1990.
2. Assume twenty five percent of the rest of Manitoba would attend the South Interlake park at least once a year from 1980 through 1990.

APPENDIX A. TABLE 68. PROJECTED POPULATIONS OF MANITOBA.

<u>YEARS</u>	<u>WINNIPEG</u>	<u>THE REST OF MANITOBA</u>	<u>TOTAL</u>
1980	633,006	495,855	1,128,861
1990	701,050	567,884	1,268,934

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APPENDIX A.

TABLE 69. PROJECTIONS OF THE PEOPLE OF WINNIPEG TO ATTEND THE SOUTH INTERLAKE PARK.

35% of 633,006 = 221,552 people for 1980.

35% of 701,050 = 245,368 people for 1990.

93. See Table 1 .

APPENDIX A.

TABLE 70. PROJECTIONS OF OTHER MANITOBBANS TO ATTEND THE SOUTH INTERLAKE PARK.

25% of 495,855 = 123,964 people for 1980.

25% of 567,884 = 141,971 people for 1990.

APPENDIX A.

TABLE 71. PROJECTIONS OF THE TOTAL MANITOBBANS TO ATTEND THE SOUTH INTERLAKE PARK.

YEARS	WINNIPEG	THE REST OF MANITOBA	TOTAL
1980	221,552	123,964	345,516
1990	245,368	141,971	387,339

In order to get the projection of Manitobans for each year between 1980 and 1990, subtract 1980 figure from 1990 figure, then divide the result by 10. That is, $387,339 - 345,516 = 41,823 \div 10 = 4,182$. Add 4,182 to 345,516 to get 349,698 for the population of Manitoba to attend the park in 1981. The same system applies to 1982 to 1990.

HOW THE VISITOR DAYS ARE GOT.

Average length of staying on parks in Manitoba in 1970.

		Days	Nights	94
A.	1.	Manitobans:	2.85	4.53
		Adjusted:	2.9	4.5

Total of days and nights is $2.9 + 4.5 = 7.4$
Average of the total is 3.7.

2. Average of staying in the parks in 1971 was 5.5 days.

3. Total of 1970 and 1971 = $3.7 + 5.5 = 9.2$ days.

4. Average of 1970 and 1971 = 9.2 divided by 2 = 4.6 days.

B.	1.	Visitors:	Average:	Days	Nights	94
				3.61	3.14	
			Adjusted:	3.6	3.1	

2. Total $3.6 + 3.1 = 6.7$
Average of $6.7 = 3.35$
Adjusted = 3.4

94. H.N. Nixon, Park Visitor Survey 1969 (Winnipeg, Manitoba: Department of Tourism, Recreation, 1970) PP. 21-22.

3. Average for 1971 was 5.1
4. Average of 1970 and 1971 = $3.4 + 5.1 = 8.5 \div 2 = 4.25$
Adjusted = 4.3 days

C. Average length of staying of the Manitobans and the visitors.

Manitobans:	4.6
Visitors:	4.3
Adjusted:	Manitobans = 5 days
	Visitors = 4 days

D. In order to get the visitor days for the Manitobans, multiply the number of Manitobans that is projected to go to the South Interlake park in one year by 5. Example for 1980 visitor days: $345,516 \times 5 = 1,727,580$ visitor days.

E. In order to get the visitor days of the visitors, multiply the projected number of visitors to South Interlake park for one year by 4. Example for 1981 visitor days: $940,680 \times 4 = 3,762,720$ visitor days.

F. In order to get the total visitor days for one year, add the visitors of Manitoba to the number of visitor days of the visitors, the result is the total visitor days for that year.

Example: Manitoba visitor days for 1980 is 1,727,580, and the tourist visitor days for 1980 is 3,135,600, the result is 4,863,180 total visitor days.

NOTES ON THE PLANNING OF THE PARK.

- (1) 10,240 acres or 4,840 acres.

The Land Area of either the South Interlake outdoor park or for the Prairie Native garden is supposed to be taken out of the 199,555 acres of the unimproved lands at the South Interlake of Manitoba. (See page of this research for this figure.) As such, the planning of the park for that locality would not disrupt other business in the area; instead, the outdoor recreational park would foster other businesses of the area.

- (2) 10,240 acres

The 10,240 acres allotted to the park is to be taken out of the 199,555 acres of the unimproved land areas of the South Interlake. See page of this research for this figure.

- (3) 102,400 visitors

See page

- (4) Capital Outlay means the capital investment on the whole park facilities before the official opening of the park.

- (5) The area of 10,240 acres of land and the capacity of 102,400 visitors.

10,240 acres are allotted to 102,400 recreationists at one time. That is, one acre to 10 people instead of one acre to 100 people standards.⁹⁵ This 102,400 people for 10,240 acres space standard gives allowance for changes in the future as it may be needed by this park's management. It gives allowance for the increase of recreationists in future as a response to the future increase in population and increase in other factors

⁹⁵. National Recreation and Park Association Staff, Outdoor Recreations Space Standards (1700 Pennsylvania Avenue, N.W. Washington, D.C. 20006, 1967) P.10.

of recreation demand.

The 102,400 visitors to 10,240 acres allows ten people to one acre of land.

The 102,400 visitors is assumed as the number of visitors that may occupy the park at once without the over use of the recreational facilities and the park's resources. A day attendance could exceed or less this figure as the people come and go from the park.

For instance, by 2000 years, this park would be able to accommodate 204,800 visitors. Then, instead of one acre to ten visitors, the area would be reduced to one acre for twenty visitors which is still less than the standard set for some recreational areas in North America in the seventies.

This is an advantage of availability of land areas in Manitoba today, with few number of people per square mile.

TIME OF CONSTRUCTION AND THE USE OF THE PARK (THE SOUTH INTERLAKE PARK OR THE PRAIRIE NATIVE GARDEN).

The park could be opened to the recreationists after the third or fourth year that the construction started. This would promote the publicity of the park, yield revenue to the government and increase the employment opportunities before the facilities of the park are completed.

COST DISTRIBUTION is based on the comparative importance and time period of the construction of the park.

NOTES AND CALCULATIONS ON

THE DEVELOPMENT AND CONSTRUCTION OF THE PARK.

1. The Lake of 100 acres. There would be ten lakes with nine artificial islands. Each lake would be 5,000 feet long and 2,800 feet wide, 25 feet deep at the center and four feet deep along the shore. The beaches will be covered with sand, good soil in some places. Trees would be planted on the islands between the lakes. The capacity set for the lake is one acre to three hundred people.
2. Swimming Pool. The pool should have "L" shape. People usually crowd together in the swimming pool hence the capacity of one acre to 2,500 is set for this facility.

The space for these pools is set with the consideration that one of the pools could be smoothed out in winter and then used for skating.

The depth of each pool is fifteen feet at the center and one half a foot at the edge deepening down gradually towards the center.

80 percent of the pool surface area should be shallow.

Other things considered in setting the price are the pipes for bringing in water and also an outlet to drain the water when it is dirty.

3. Beach and bathhouse. The beach with sand would surround the swimming pools.

The sands would be bought and transported to where it is needed. The bathhouse is a place for changing clothes before going for swimming. Ten portions are to be provided for males and ten for females, all in one house divided into two sections with two separate entrances. All these facilities are estimated together to cost \$455,000.

The beach would be provided for use to all ages, classes and races. While some people are swimming, some would prefer to sit by the beaches,

watching the swimmers, hence the capacity for the beach is estimated to be 20,000 swimmers plus 10,000 watchers equals 30,000 capacity limit.

4. 50 foot floating section to dock. One large swimming pool is assumed to have two floating sections to dock. Each floating dock is assumed to be made of wood, put on metal runners, in the form of a barrel. Each floating dock includes jumping board and has a seat built about seven feet high, like a life guard tower.

Each floating dock is estimated at a cost of \$500.

5. Lifeguard Towers. Capacity of two employees to one tower. Two employees for the swimming pools and the remaining two to watch other parts of the park.

It is an already made equipment that would be bought from the store and brought to the park for use. The 1/20 acre is the total estimated areas for the two towers. One lifeguard tower that is bought and placed at the correct place for use is estimated at a cost of \$600.

6. Large horse stable. The estimated space area of 2/5 acre includes yards for the horses. It is assumed that separate track for the horse ride would not be necessary since a rider may also have many things of interest to see at the park. A horse rider can go between 2 - 45 miles depending on the rider's taste and time.

It is assumed that a large horse stable with all the necessary facilities would cost \$40,000. to complete.

Each horse could be purchased at \$300. As such, 50 horses would cost \$15,000. This is outside the monthly expenses since the buying of the horses may not take place until the park is ready for use by the recreationists.

A month expense for a horse is estimated at \$50 for room and board. A month expense for 50 horses would be \$2,500. This amount would come under the park's expenditure in the future.

8. Camping Sites. It is estimated that a large regional park of this type should contain at least 65 bays. These bays would be scattered about within the area of one square mile of 640 acres. Each unit is to be separated from each other by scenic forest. This would give each camper the feeling of personal privacy. It is assumed that each bay would contain 20 camping units. As such the number of units for all the bays would be 65×20 units, which is equal to 1,300 units. The 1,300 unit sites are to be made up of 1,035 unserviced sites, 215 electrical sites and 50 fully serviced sites. It is also assumed that each unit would accommodate the average of three people. Albeit, the capacity for the camping sites becomes $1,300 \times 3 = 3,900$ campers.

(That is: 1 bay with 20 units
 3 people in 1 unit
 60 people in 1 bay (20×3)
 3,900 people in 65 bays (60×65))

There would be roads to serve the trailers to their sites where mobile campers could spend one or more nights of their holidays.

It is further assumed that the preparation of the sites for camping would cost at least \$21,600. or more.

9. Picnic Areas. It is assumed that the picnic areas would be provided at a free of charge to the recreationists. The sites would be situated within places like camping areas, scenic areas, wooded areas, and other areas, hence, no special area is allocated for the picnic sites.

It is estimated that there would be four picnic areas. Each area would have 50 tables with an average of three people to a table. The total number of tables to the picnic area would be (50×4) 200. More-

over, there would be 40 barbeques (fireplaces) for the picnic areas, one barbeque for every five tables. There would be 160 (40 X 4) barbeques in all picnic areas.

There would be at least 600 (200 X 3) people using the picnic areas at once, and at most 3,000 people using the barbeques and the tables at different intervals.

There would also be kitchen shelter buildings within the picnic areas to give shelter in case of sudden rainstorms. It is estimated that each shelter building would be at least thirty feet by fifty feet.

The picnic areas would also contain at least two drinking fountains and at most four with hard surface land areas. At least two toilet buildings would also be in the area.

The picnic area would be located near the parking area.

The capacity of 3,000 people is set because of some people that would bring in their utensils for use in case the provided places are occupied by other recreationists.

No special cost is allotted to this facility in order to avoid double counting. For instance, there are special costs allotted to the barbeques, the tables, the sitting benches, and the shelter buildings. These facilities would be used by the picnickers. It would be double counting if these costs are calculated for the picnic areas again.

The picnic areas are allotted to all ages, and races of people.

10. Fireplaces (barbeques), do not take designated areas because they are located in such places as camping units, picnic areas and so on.

There would be 1,300 barbeques (fireplaces) corresponding to the 1,300 camping units. One barbeque would be enough for five tables; and each table could accommodate a family of three (the average number

of people per table). There would be 40 barbeques in the four picnic areas, and also one barbeque for every ten tables in various locations (i.e. five barbeques for 50 tables in various locations).

Total number of barbeques is 1,300 plus 40 plus 5 = 1,345

Capacity of people would then be 1,345 X 5 tables X 3 people to a table = 20,175 people in all per day.

Cost: One barbeque costs \$40. Therefore 1,345 barbeques cost \$40. X 1,345 = \$53,800.

11. Open Shelter Houses. One in each picnic area with ten tables.

Four shelters with forty tables. These forty tables are included in the 200 tables designated for the four picnic areas. This applies to barbeques as well. That is, each shelter will be supplied with a barbeque supplied from the total number designated to that area, e.g.

50 tables / picnic area distributed as 10 in the shelter and 40 in the surrounding areas.

10 barbeques / picnic areas distributed as 1 barbeque in the shelter and nine in the surrounding areas.

Each shelter costs \$7,500

Four shelters cost \$30,000.

No capacity estimation for this facility since it is meant for emergency.

12. Kitchen Shelter. - One room should contain a sink for washing dishes

- tables and chairs for campers and picnickers
- food preparation counters with enclosed shelving
- a garbage can
- toilet rooms (one for male and one for female)

- coat and hat racks
- a hardwood floor
- a stove

It is estimated that the kitchen shelter would cost at least \$40,000. with these facilities.

The capacity of 1,000 people excludes the staff. One kitchen shelter can accommodate 500 if there is no rain but if it rains one can accommodate as much as 1,000.

13. Tables. It is estimated that 1,300 tables would be supplied for the camping units, 200 to the picnic areas, and 50 at various locations. Total number of tables to be supplied is estimated to be 1,550.

Each table would cost \$8.75. Therefore, 1,550 tables would cost $\$8.75 \times 1,550 = \$13,562.50$.

The average of three people to a table is estimated, hence the capacity for the tables becomes 4,650 people.

14. Seating benches, are to be made of hardwood and to be about six yards long.

It is estimated that each bench would cost \$35. and 300 benches should be supplied. Total estimate is now $300 \times \$35 = \$10,500$.

There is no separate area allotted to the sitting benches since they would be distributed within the park of 10,240 acres.

No capacity is set because many people would just sit for a while and then go for more enjoyment. At times many benches would be vacant and at times all may be occupied.

Many people might also prefer to sit on the grass than even on the benches purposely for relaxation.

15. Drinking fountains. The eight drinking fountains should be distributed throughout the whole park such as in the picnic areas and so on.

Two drinking fountains should not be located near each other.

It is estimated that one drinking fountain would cost \$500. to finish, hence the cost of eight drinking fountains would be \$4,000.

Two of the drinking fountains should be 32 inches to top of the nozzle, two to 36 inches, and two to 40 inches to top of the nozzle.

16. Toilet building (washrooms). Four separate washrooms should be constructed excluding those attached to the buildings.

Each one should include a water closet, lavatory, and shower.

Each one should be divided into two - one side for males and the other side for females, with separate entrances. Each one should accommodate eight people at a time - four males at one side and four females at the other side.

The location for each washroom should be properly chosen.

It is estimated that one separate toilet building would cost \$1,500. hence, eight toilets would cost $\$1,500 \times 8 = \$12,000$.

The other eight toilets would be constructed with the following buildings - one toilet each to (1) kitchen (2) museum (3) pavillion (4) grocery (5) service building (6) restaurant (7) staff house (8) laundromat room and (9) one toilet to the shower building.

The total number of toilets is 22.

Showers. One shower building is estimated at a cost of \$1,500. hence, the cost of six shower buildings is \$9,000.

No capacity is set for this facility since people would go for a shower and leave within some minutes for others to use.

Each building would contain eight shower fountains, clothes hangers, seating benches and toilets.

Hiking Trails (extra paths) should either join each other or lead to a path or to a road. The ten units could be located at different places within the park.

17. Car parks are based on these assumptions. 1 car covers 400 square feet
- 2 large parks of 3 acres each spaced for 6 acres with 660 cars
- 2 small parks of $1\frac{1}{2}$ acres each spaced for 3 acres with 330 cars
- 1 smaller park of 1 acre spaced for 1 acre with 110 cars.
- Total: 5 parks (of various sizes as analyzed) of 10 acres spaced for 1,100 cars.

TABLE 72. COST FOR CAR PARKS

Costs: \$60,000 for constructing 2 large parks
 30,000 for constructing 2 small parks
 10,000 for constructing 1 smaller park
 Total cost \$100,000. for constructing 5 parks with 1,100 cars.
 Double \$200,000 for constructing 10 parks with 2,200 cars.

20. Golf course. A standard 18 hole golf course with 400 golfers per day and with a capacity of about 100,000 people (that is made up of golfers and the spectators).

It would contain a small clubhouse and land with uneven topography. There would also be woods in some areas within the course.

It would also have a watering system for the maintenance of the grass.

Although the cost of the watering system is estimated separately, it is closely related to the course.

22. Playgrounds. The playground would be two. Each one would be 968 square years (i.e. $1/5$ acre).

It would contain equipment for children's play such as slides, hop-scotch court with paved areas and properly lined, merry-go-round, swings, sandboxes and see-saws.

One of the playgrounds might be near the swimming pool with the other near the picnic area.

The capacity of 100 players at one time excludes the parents who may stand outside the playground watching their children play.

It is estimated that one would cost \$23,000 including all the equipment.

The particulars for the equipment to put on the playgrounds are as follows: -

TABLE 73. EQUIPMENT FOR PLAYGROUNDS

Equipment	Length in Feet	Height in Feet	Approximate use space requirements in feet	Space in Square feet
Swings (set of 4)	18 ft.	10	20X30	600
Slide	16	8	12X30	360
See-saws (set of 4)	12	2	20X20	400
Merry-go-round	10(diameter)	3.5	22X22	484
Sandboxes	6 X 10 (min)	1	12X16	192
Hopscotch	5 X 12½ft. dimensions		10X20' use dimension	200 sq.ft. 2 or 4 players

23. Soccer field. This would be a grass green field. It would contain a flag of Manitoba at one side and a flag of Canada at the other side. The flag would be one foot by 2 feet in size on a five foot high staff.

It would contain a goal area of eight yards apart internal measurement. The goal court would have a bar across it and should be eight feet from the ground. The posts by the goal could be set in concrete portable sleeves. The sleeves set would be six inches with two inch gravel to insure drainage.

The field should be properly marked to contain the penalty area of 12 yards, corner kicks areas of 18 yards at each side of the goal. The field should be 100 yards long and 60 yards wide.

The cost of this facility is estimated at \$12,500.

The capacity set includes the players and the referees.

The field used for soccer can also be used for football at a different time in one day.

25. Concrete chess and checker tables. This is one of the multiple use apparatus. That is, one table could be used for chess as well as checkers at different intervals in one day.

The table should be two feet eight inches square and set on a concrete base with a pedestal support of eight inches square. The top of the table should be two inches thick of concrete. The table would contain a board of 18 inches square which would be set in the top of the table which is two feet four inches high. There would also be two hard wooden benches at the two sides of the concrete table, all permanently erected. A table can accommodate ten people at a time. This capacity includes the two players. The capacity for four tables becomes $10 \times 4 = 40$.

The space of about $1/20$ acre is allotted for four sets of tables with the whole park.

The cost per set is estimated at \$150. excluding the chairs that would be supplied from the 300 seats for the whole park. Four sets would cost $\$150 \times 4 = \600 .

26. Table tennis. This is to be made with concrete, permanently erected at the park. It is to be about three to four feet high with seven concrete legs support. One leg at the middle of the table and three legs at each

side of the table. The floor is also to be made of concrete.

5 sets of tables would occupy $1/36$ acre which is approximately $1/20$ acre.

A table could have about 52 people capacity including the two players. At times four players could use the table. The five tables are to be located in three different places in the park. That is, two tables in each of two areas and one table at another angle of the park. Total capacity would be about $52 \times 5 = 260$ people.

One table would cost about \$250, while the five tables would cost $\$250 \times 5 = \$1,250$.

27. Tennis courts. This would occupy a concrete rectangle floor of 78 feet long and 36 feet wide. It would contain two posts of $3\frac{1}{2}$ feet high and stand on three feet outside the court on each side. The net would be three feet high. There would be a service line of 21 feet away from the net. The center mark will be four inches in length and two inches wide. The space behind the base line should not be less than 21 feet, and not less than 12 feet at each side of the court.

Each set of courts would cost about \$450 hence, four sets would cost \$1,800 with a capacity of about 1,000 for the four sets of courts. Each set would contain eight courts, therefore four sets would contain 32 courts.

The area of one acre set for the courts includes the areas to be occupied by the spectators.

23-27.

Likewise the field for cricket can also be used for field hockey at different intervals.

TABLE 74. SPACE ANALYSIS FOR GAMES

The space analysis for checker/chess, soccer/football, tennis courts, table tennis are given below.

Facility	Dimension of Game Areas In Feet	Use Dimensions In Feet	Total Space Required In Sq.Ft.	No. of Players
Checker/ Chess	2' 8"	20'X20'	400	2
Cricket	Wicket 66' apart	420X420	176,400	22
Field Hockey	180X300	210X330	-	22
Football	160X360	190X420	-	22
Soccer	180X300	225X360	81,000	22
Table tennis	5X9	12X20	240	2 or 4
Tennis courts, double	36X78	60X120	7,200	4

The use dimensions include some areas left for the spectators since the games are not in a stadium where there would be seats for the spectators.

The total space area for soccer is also for football. The total space for cricket is also for field hockey.

Toboggan run is mainly for winter activities.

It should contain a fairly steep slope, level ground, a hill facing north, wooded steps for going to the top. It should be built on a 2X8 inch plank for two-thirds the length of the run and 2X6 inch planks for the other third. The vertical sides of the chute are to be 19 inches apart. The landing slope of about 30 degrees and the width of the slope is to be 30 feet or more. All these are considered to cost about \$5,500 to complete.

Skating rink: This is an outdoor skating rink.

The dimension should be 85' X 185' and it should be surrounded by clasher boards with warming-house facilities for the skaters. The area per skater is

30 square feet. The capacity for the rink is 524 skaters. The total area for the skaters would be 15,720 square feet whereas the area required for the rink is 15,725. The floor construction is open steel piping (or in sand).

This skating rink is expected to be near to one of the toilet separate buildings so as to give room for changing and minimize the cost, though two warming rooms could be attached to the washroom. A First Aid box would also be near for eventualities.

Five seating benches should be supplied to each of the two rooms. One room for males and one for females.

Laundromat machines. It is estimated that there should be two drier machines to eight washing machines. Each machine costs \$500 hence the cost of ten machines totalled \$5,000.

Sidewalks (Paths) It is estimated that there should be about twelve sidewalks on the park, to different directions. The sidewalks are to be made with cement.

1 sidewalk to the refreshment house

1 short sidewalk to the swimming pool

1 short sidewalk to the pavillion and

1 to the museum (short)

About four sidewalks to the toilets.

1 to the golf course parking lot

1 to the laundry room

1 to the kitchen and

1 to another direction.

The short one is estimated to be about $\frac{1}{8}$ mile long while others could be about $\frac{1}{4}$ to $\frac{1}{2}$ mile long.

All the sidewalks might cross each other and they may be curved where necessary. It is estimated that all the sidewalks could be up to five miles. Sidewalks would also cross roads on the park. The cost for all sidewalks is \$937.50. This amount is estimated from the cement road of \$750 per mile. A sidewalk could be about one quarter of the road. Therefore $\frac{1}{4}$ of \$750 = \$187.50. $\$187.50 \times 5 = \937.50 .

Paved roads or cement roads. Cost as much as tared roads. Each road is to be of two lanes at a cost of \$750 per mile. The cost of ten miles for all the roads within the park is \$7,500. The roads might be curved and cross the gravel roads in some places.

Two construction engineers for the roads and the sidewalks at a cost of \$20,000 per annum. Two would cost \$40,000. per annum.

Gravel roads. Gravel road is estimated at a cost of \$250 a mile. As such, twenty miles of that would cost $\$250 \times 20 = \$5,000$.

Electrical Outlets. It is estimated that there would be 250 outlets. One outlet costs \$4. Therefore, 250 would cost $\$250 \times 4 = \$1,000$. The wire for them to cost \$1,000 and the casing to cost \$1,000. Total cost becomes \$3,000.

Gutters. Gutters are to be along one side of the road. It is estimated at \$3. a foot. The whole park could have about eight miles of gutters at a cost of $1,760 \text{ yards} \times 3 \text{ feet} \times 8 \text{ miles} \times \$3 = \$126,720$.

Water. Water has many uses in recreation areas. It is needed for the spraying or flooding of areas for skating during winter months, for shrub planting and flower beds. The drinking fountains, fields and

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shelters require water supply for the toilets and showers. Water is needed for the swimming pool. It is estimated that this facility would cost \$96,000.

Policy The water supply should be established first before the work on the recreational park begins. Water supply pipes and drains should be laid while the grading is being done in order to save expense and to prevent subsequent interference with the use of the area.

Trees, Shrubs, Flowers. One half of the whole park is allotted to this facility because many people like to be with nature.

Little Bridge. 1 square foot concrete costs \$40.

12 ft. wide and 120 ft. long

Total cost equals $120 \times 12 \times 40 = \$57,600$.

TABLE 75. CALCULATIONS OF THE BENEFITS

Project 'A' would generate \$4,432,000 in the short run of five years.

One million dollars generates \$554,000.

Therefore eight million dollars would generate $\$554,000 \times 8 = \underline{\$4,432,000}$.

In another five years, it would generate at least another \$4,432,000 resulting in the total of \$8,864,000 after 15 years.

Project 'B' would generate \$2,216,000 in the short run of five years.

At the end of the 15th year, project 'B' would generate $\$554,000 \times 4 = \underline{\$2,216,000}$.

At the end of the 20th year, project 'A' would generate $\$8,864,000 + \$4,432,000 = \underline{\$13,296,000}$., and project 'B' would generate $\$2,216,000 + \$2,216,000 = \underline{\$4,432,000}$.

Benefit cost ratio is $\$13,296,000$ divided by $\$8,000,000 = 1.662$ for project 'A' and $\$4,432,000$ divided by $\$4,000,000 = 1.1$ for project 'B'.

Sharing of Benefits: Local area takes \$260,000 out of \$554,000 of the benefit on one million dollars while Winnipeg takes \$294,000. These come down to $\frac{130}{277} \times \frac{\$13,296,000}{1} = \$6,240,000$ approx. for the local area

and the rest of \$7,056,000 to Winnipeg. This fraction of $\frac{260,000}{554,000}$ is also

used to calculate for project 'B' as well as for the sharing of the net benefits.

CALCULATIONS FOR THE BENEFITS TO THE LOCAL AND TO THE PROVINCIAL ECONOMIC SECTORS IN THE SHORT RUN

All the percentages used are taken from The Economic Impact of Tourism by Hon. Peter Burtiniak, and O.S. Eagleton, (Winnipeg, Manitoba, Canada: Department of Tourism, and Recreation, Legislative Building, 1971) PP. 9 and 10.

Calculations for the Income Distribution benefits:

54% is made up of 38% to the personal incomes, 8% of the other incomes and 8% depreciation cost which is saved in the bank at the region.

$$54\% \text{ of } \$8,000,000 = \$4,320,000$$

$$54\% \text{ of } \$4,000,000 = \$2,160,000$$

\$1,000,000 would create 43 jobs for the local area.

Therefore, \$4,320,000 would generate 172 (app.) jobs.

Assume one employee to receive \$4,000 per annum, 172 employees would receive $\$4,000 \times 172 = \$688,000$ in a year in the area.

TABLE 76. Calculation for the government revenue:

$$12\% \text{ of } \$16,771,536 = \$2,012,584$$

$$20\% \text{ of } \$2,012,584 = \$402,517$$

$$14\% \text{ of } \$16,771,536 = \$2,348,015.04$$

$$\$402,517 + \$2,348,015 = \$2,750,532$$

$$31\% \text{ of } \$16,771,536 = \$5,199,176.16$$

Calculations of Benefits from

(a) Construction.

Sales $\$2,729,528 \times 8 = \$21,836,224$ for project 'A'.

$\$2,729,528 \times 4 = \$10,918,112$ for project 'B'.

Income on project 'A' = $\$434,442 \times 8 = \$3,475,536$
and

Income on project 'B' = $\$434,442 \times 4 = \$1,737,768$

(b) Total benefits at the end of 20th year.

Sales from project 'A'

from construction: $\$21,836,224$

from tourist expenditure: $\$2,932,795 \times 8 = \$23,462,360$ from \$8 million
for short run of 5 years and $\$46,924,720$ for the next 10 years.

For 15 years, Sales are $\$70,387,080$.

$\$70,387,080 + \$21,836,224 = \$92,223,304$.

Sales from project 'B'

from construction: $\$10,918,112$

from tourist expenditure: $\$2,932,785 \times 4 = \$11,731,180$

from \$4 million for short run of 5 years after construction.

Another 5 years will yield sales of $\$11,731,180$.

Total sales = $\$23,462,360$ from tourists.

Total: $\$10,918,112 + \$23,462,360 = \$34,380,472$.

(c)	Income from project 'A'	$\$3,475,536$	from construction
		<u>$\\$13,296,000$</u>	from tourist expenditure
		<u><u>$\\$16,771,536$</u></u>	
	'B'	$\$1,737,768$	from construction
		<u>$\\$4,432,000$</u>	from tourist expenditure
		<u><u>$\\$6,169,768$</u></u>	

(d) Benefit Cost ratio

project 'A' $\$16,771,536$ divided by $\$8,000,000 = 2.096$

project 'B' $\$6,169,768$ divided by $\$4,000,000 = 1.542$

Calculations

INCOME

From Construction:

'A'	<u>Region</u>		<u>Manitoba</u>
	\$228,868	\$434,442	\$205,574
	8	8	8
S. Int.	<u>\$1,830,944</u>	<u>\$3,475,536</u>	<u>\$1,644,592</u>
		\$1,830,944	
		1,644,592	
		<u>\$3,475,536</u>	
'B'	\$228,868	\$ 434,442	\$205,574
	4	4	4
	<u>\$915,472</u>	<u>\$1,737,768</u>	<u>\$822,296</u>
		\$ 822,296	
		\$ 915,472	
		<u>\$1,737,768</u>	

Total Income

S.

M.

Construction

	\$ 3,475,536	\$1,830,944	\$1,644,592
Tourist			
Exp.	\$13,296,000	\$6,240,000	\$7,056,000
	<u>\$16,771,536</u>	<u>\$8,070,944</u>	<u>\$8,700,592</u>
			\$8,070,944
			\$16,771,536

\$ 1,737,768	\$ 915,472	\$ 822,296
\$ 4,432,000	\$2,080,000	\$ 2,352,000
\$ 6,169,768	\$2,995,472	\$ 3,174,296
		\$ 2,995,472
		\$ 6,169,768

\$ 12,036,000		\$ 9,800,224
36,267,600		34,119,480
\$ 48,303,600		\$43,919,704

\$48,303,600
\$43,919,704
\$92,223,304

\$ 11,373,160	\$ 6,018,000	\$ 4,900,112
12,089,200	12,089,200	11,373,160
\$ 23,462,360	\$18,107,200	\$16,273,272
		\$18,107,200
		\$34,380,472

\$ 10,918,112
\$ 23,462,360
\$ 34,380,472

Sales from construction

'A'	Regional		Manitoba
	1,504,500	12,036,000	1,225,028
	<u>8</u>	<u>9,800,224</u>	<u>8</u>
	<u>12,036,000</u>	<u>21,836,224</u>	<u>9,800,224</u>
'B'	1,504,500	6,018,000	1,225,028
	<u>4</u>	<u>4,900,112</u>	<u>4</u>
	<u>6,018,000</u>	<u>10,918,112</u>	<u>4,900,112</u>

Sales from tourist expenditure

'A'	1,511,150	12,089,200	1,421,645
	<u>8</u>	<u>11,373,160</u>	<u>8</u>
	12,089,200 for 5 yrs.	<u>23,462,360</u>	11,373,160 for 5 yrs.
	<u>12,089,200</u>		<u>11,373,160</u>
	24,178,400 for 10 yrs.	1,511,150	22,746,320 for 10 yrs.
+ 12,089,200 for 5 yrs.		<u>1,421,645</u>	<u>11,373,160</u> for 5 yrs.
<u>36,267,600</u> for 15 yrs.	<u>2,932,795</u>	<u>34,119,480</u> for 15 yrs.	
	<u>8</u>		
	23,462,360		
	<u>23,462,360</u>		
	<u>46,924,720</u> for 10 yrs.		
	36,267,600	21,836,224	
	<u>34,119,480</u>	<u>70,387,080</u>	
	<u>70,387,080</u>	<u>92,223,304</u>	
'B'	1,511,150	6,044,600	1,421,645
	<u>4</u>	<u>5,686,580</u>	<u>4</u>
	6,044,600 for 5 yrs.	<u>11,731,180</u>	5,686,580 for 5 yrs.
	<u>6,044,600</u> for 5 yrs.	<u>11,731,180</u>	<u>5,686,580</u> for 5 yrs.
12,089,200 for 10 yrs.	<u>23,462,360</u>	11,373,160	

Net Income

'A' \$ 13,296,000
 - 8,000,000

 \$ 5,296,000

S. Int.

Manitoba

\$ 2,485,487

\$ 2,810,513

'B' \$ 4,432,000
 - 4,000,000

 \$ 432,000
 1,737,768

 \$ 2,169,768

S. Int.

Manitoba

\$ 202,744
915,472

\$ 1,118,216

\$ 229,256
822,296

\$ 1,051,552
\$ 1,118,216
\$ 2,169,768

A \$ 13,296,000
 8,000,000

 5,296,000
 3,475,536

 \$ 8,771,536

S. Int.

Manitoba

\$ 2,485,487
1,830,944
\$ 4,316,431

\$ 2,810,513
1,644,592
\$ 4,455,105

\$4,316,431
4,455,105
\$8,771,536

TABLE 77. Calculations for employment opportunities between the South Interlake and the rest of Manitoba.

		JOBS		
	'A'	A	B	'B'
1. Construction:	\$ 3,475,536	952	476	\$ 1,737,768
2. Tourist Exp.	\$13,296,000	<u>2087</u> 3039	<u>696</u> 1172	\$ 4,432,000

1. \$ 1,000,000 generates 63 jobs to South Interlake and
56 jobs to the rest of Manitoba
2. \$ 1,000,000 generates 43 jobs to South Interlake and
114 jobs to the rest of Manitoba.

$$\begin{array}{rcl}
 952 \times 63 \div 119 & = & 504 \text{ jobs} \\
 952 \times 56 \div 119 & = & 448 \text{ jobs} \\
 476 \times 63 \div 119 & = & 252 \text{ jobs} \\
 476 \times 56 \div 119 & = & 224 \text{ jobs} \\
 2087 \times 43 \div 157 & = & 571.94 = 572 \text{ jobs} \\
 2087 - 572 & = & 1515 \text{ jobs} \\
 696 \times 43 \div 157 & = & 190.98 = 191 \text{ jobs} \\
 696 - 191 & = & 505 \text{ jobs} \\
 572 + 504 & = & 1076 \text{ jobs} \\
 448 + 1515 & = & 1963 \text{ jobs} \\
 252 + 191 & = & 443 \text{ jobs} \\
 224 + 505 & = & 729 \text{ jobs} \\
 1076 + 1963 & = & 3039 \text{ jobs} \\
 443 + 729 & = & 1172 \text{ jobs}
 \end{array}$$

TABLE 78. CALCULATIONS OF TAX REVENUE

Direct total taxation from the land before using it for a park

(a) Project 'A'

10,240 acres 10,240 acres - 70 acres = 10,170 acres
10,170 acres at \$2.74 per acre of land
= \$27,865.8 + \$10,400 (at Stonewall)
= \$38,265.8 for one year.

(b) Project 'B'

If 4,840 acres of land for the garden:

$$\begin{aligned} &= 4,840 - 70 \text{ acres of land} \\ &= 4,770 \text{ acres at } \$2.74 \text{ per acre} \\ &= \$13,069.8 + \$10,400 \\ &= \$23,469.8 \text{ for} \end{aligned}$$

TABLE 79. CALCULATION OF THE PRESENT TAX FROM THE LAND.

TAXATION

a) Stonewall Quarries: Steel Brothers has 60 acres at \$125 per acre
= \$ 7,500
Comstock has ten acres at \$290 per acre = \$ 2,900
Total: 70 acres at \$10,400 tax.

<u>Municipalities</u>	<u>Assessment rate</u> <u>Per Acre</u>	<u>Mill rate</u>	<u>Taxation</u> <u>with \$50 per acre</u>
Rosser	\$42.50 - \$45.22	52.23	\$2.61 per acre
Rockwood	\$50	57.35	\$2.87 "
Woodland	\$50	52.23- 57.35	\$2.74 "

Lands are classified and taxed according to the nature of the soil, and not according to the use either for gravel or for agriculture or pastoral. Though in some cases the pastoral lands are taxed at \$10 per acre whereas others range up to \$10,000 per acre. For instance, part of

Rosser is assessed thus, 136 acres at \$6,150 while at another part is assessed 160 acres at \$6,800 per acre. Another with urban influence, 161 acres at \$18,300 per acre, i.e. within the perimeter.

Gravel pits and agricultural lands could be assessed at \$40 per acre at times.

Apart from Stonewall quarries, the general assumption for all other areas is \$50 per acre assessment of 54.79 mill rate (i.e. average of 52.23 and 57.35 mill rate). This comes down to the taxation of $\$50 \times \frac{54.79}{100} \times \frac{1}{1000} = \$2.7395 \text{ per acre} = \$2.74 \text{ per acre of land.}$

Tax revenue from the projects

From Project 'A': The total benefit from the tourist expenditure calculated under the tangible benefits is \$8,864,000. The tax revenue from that is estimated to be 31% of \$8,864,000 which equals \$2,747,840.

From Project 'B': The benefit after fifteen years is estimated to be \$2,216,000. The tax revenue from that is estimated to be 31% of \$2,216,000 which equals \$686,960.

Subtract the direct taxes from each of these, the result is the excess of taxes from using the land for either project.

96 *Classification by the Assessment Branch, 508-1181 Portage Avenue, Winnipeg.

APPENDIX B: BIBLIOGRAPHY.

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