

routes are minimized and thus the time on the bus for each student approaches the imposed limit itself. Urban residents who live within the "no bussing" limit would not consider their situation to be equitable to those receiving bus service especially if they are just inside the present 1.6 kilometer limit.

Areas of low density in population simply do not produce the numbers of children to warrant class sizes to justify all available options within reasonable bussing times. Transportation limitations and density factors are two of the largest impediments to equality of opportunity in education. Rural residents know this all too well and are anxious to ensure that at least their elementary school children are educated close to home and they knowingly accept the fact that total equality in the form of equivalent facilities and choices may be sacrificed. In most cases this is deemed acceptable as long as a good basic education is available within reasonable bussing distance.

In the urban areas, while transportation limitations are not the same, there are still arguments about equity and equality. In Winnipeg where there are ten separate school divisions there are variations of program offerings in the divisions. Some divisions have developed specialties that non-resident students wish to access and they can not understand why boundaries within the city prevent that access. The charging of non-resident fees where access is allowed gives cause to claims of "double taxation" and inequitable treatment.

In the northern and remote districts and divisions people live with major restrictions as a fact of life. They know better than anyone the limitations that distance and isolation impose on attempts to achieve equality. They readily acknowledge that equality is impossible to achieve - but they do expect equity - fairness under the circumstances.

## **2. MANITOBA - PHYSICAL AND CULTURAL GEOGRAPHY**

### **PHYSICAL PATTERNS**

The physical environment has a critical effect on the lives of Manitobans. Natural resources, especially minerals, soils and forests shape the economy and the patterns of life. The existence of one of the most extreme climates in the world dictates behavior and accommodations to nature and each other that is not necessary in many other regions. It is important to have a good understanding of this environment as a framework for any long-term planning. It is the stage upon which life in Manitoba is acted out.

School division/district boundaries are generally artificial lines superimposed on the physical landscape. However, they should reflect the settlement patterns which in turn were originally determined by the physiography of the land. The physical landscape itself changes very slowly and thus we can to some extent determine future settlement potential by determining the nature of that landscape. Vast areas of the province are likely to remain sparsely populated, while others will see fluctuating populations as the economy changes.

The Province of Manitoba is the seventh largest of the provinces and territories in Canada which in turn is the second largest country in the world. The provincial area consists of the following:

Province of Manitoba	
Land area	548,360 km <sup>2</sup>
Fresh water	101,590 km <sup>2</sup>
<b>Total area</b>	<b>649,950 km<sup>2</sup></b>

More than 50% of the province (349,000 km<sup>2</sup>) is classified as forest.

### TOPOGRAPHIC PATTERNS

The topographic pattern of the province is established by one of the most distinct geological boundaries in the entire world i.e., the contact line between the granite of the Canadian Shield and the sedimentary rocks of the interior to the southwest of the Canadian Shield. This line extends in a northwest to southeast fashion and is most noticeable in the eastern half of the province. A portion of the line is less distinct because it coincides with the eastern shore of Lake Winnipeg. It is unlikely that the shield area to the northeast of this line will ever carry a large population and will continue as it has in the past – sparsely populated with very small settlement centres primarily geared to mining or forestry industries.

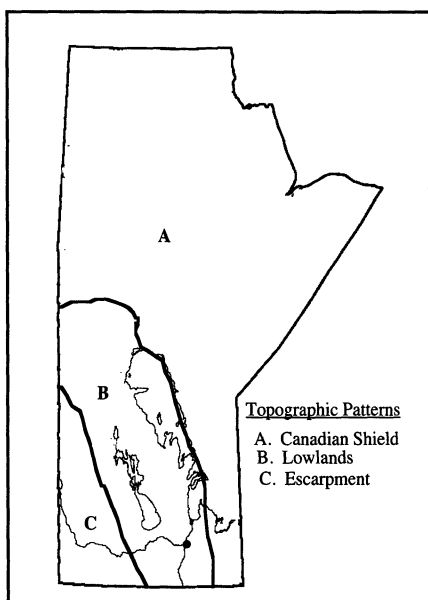


Figure 5

Abutting the shield and running down the centre of the province are the Manitoba lowlands which were occupied by glacial Lake Agassiz for much of the last ten thousand years. Lake Winnipeg, as the thirteenth largest lake in the world, is the largest remnant of Lake Agassiz which, in turn, was reputedly the largest fresh water lake on earth. Together with Lake Winnipeg, Lake Manitoba and thousands of others dominate the landscape especially in the central portion of the province where they dictate patterns of settlement and transportation. In some ways this makes it easier to draw boundaries but it also makes it more difficult to create efficient administrations and contributes to difficult and expensive transportation patterns.

The southern end of this region is occupied by the Red River Valley, the most prosperous agricultural area built on the clay deposits of Lake Agassiz. This region will continue to be the main centre of settlement and development. The focal point of this region is the City of Winnipeg, located at the confluence of the Red and Assiniboine Rivers. While the importance of the rivers as transportation and trade arteries has disappeared, the dominant role of the City of Winnipeg is guaranteed to continue. On the West side, the Red River Valley is bounded by the Manitoba Escarpment stretching from the Pembina Hills in the south to the Duck Mountains in the northwest. Although only some four hundred meters in elevation this escarpment has considerable influence over the cultural patterns. Soil and climate patterns are quite different and thus there are differences in both the economy and the inhabitants of those areas. The Red River Valley is the first of three prairie levels with the second level running from the Manitoba Escarpment west to the foothills of the Rockies which form the third level. Some people refer to the second level as the only true prairie level and in terms of climate they are technically correct.

VEGETATION ZONES

The geological footprint of the province gives us three distinct regions with northwest to southeast boundaries. However, the climate creates vegetation zones that cut across the northwest/southeast topographic lines. We can identify four basic regions:

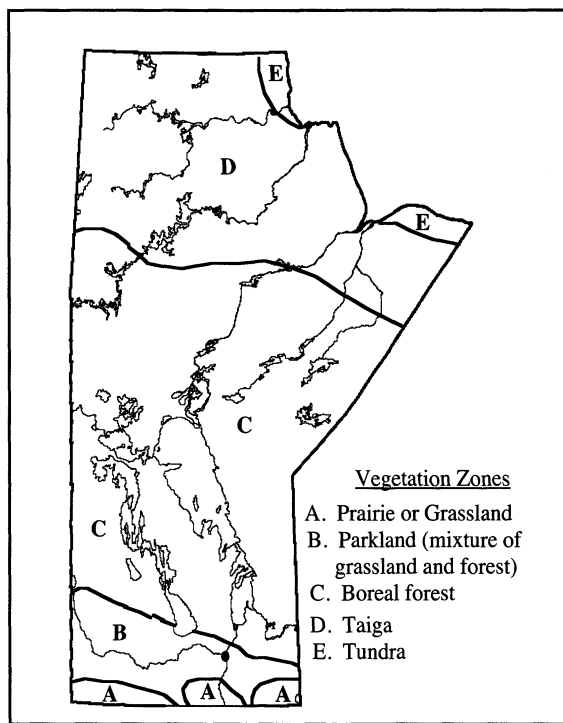


Figure 6

Vegetation Zones

- A. Prairie or Grasslands
- B. Parkland (a mixture of grassland and forest)
- C. Boreal or Great Coniferous Forest
- D. Taiga

A fifth region, the Tundra, just touches the northeast corner of the province but is not significant to our discussion. The first three-specified regions very distinctly determine cultural and economic patterns and these patterns have and will continue to form the basis of settlement, transportation and economic activity which in turn will be utilized in forming the recommendations later in this report.

## POPULATION PATTERNS

The Dominion of Canada census of 1871, the year after Manitoba became a province, showed a total population of 25,268 for an area 18 times smaller than is now Manitoba. One hundred and twenty years later, in 1991, after having expanded twice (1881 and 1912) from its original "postage stamp" size, the population statistics show 1,091,945 which is a forty-three fold increase. This means the population has increased by an average of 8,889 persons per year or 3.19% annually (compounded) since the province was created. The actual rate of increase has slowed markedly in the last few years and is predicted to be only 0.3% over the next several years. In addition, the rate of increase will vary substantially from region to region with many areas experiencing a decline.

The population density varies widely from the highest in Winnipeg to the lowest in the vast northern regions. A simple average equates to a population density of 1.7 persons per square kilometer. A quick look at a Manitoba map will show that we effectively use less than one-third of our province and the large majority of the population is southwest of the Canadian Shield boundary line. In fact more than 60% is concentrated in the City of Winnipeg area.

## DOMINANCE OF THE CITY OF WINNIPEG

Only British Columbia has a provincial demography similar to Manitoba with a single dominating urban centre. A rank-size study of Manitoba and the prairie provinces creates some interesting results. If all the communities from the largest to the smallest are listed they would normally create a distinctive "J" curve. (See normal "J" curve Figure 7.) A rank-size pattern for Manitoba (Figure 8) shows the extent to which the City of Winnipeg dominates the province as you plummet from Winnipeg's 616,790 population to Brandon with 38,567. Saskatchewan has similar but equally distinctive patterns with two dominant cities before the plunge to the next largest. Interestingly, if the prairies are considered as one political unit, then the rank size pattern tends to approach the normal "J" curve. Notwithstanding, the provincial imbalance of urban centres

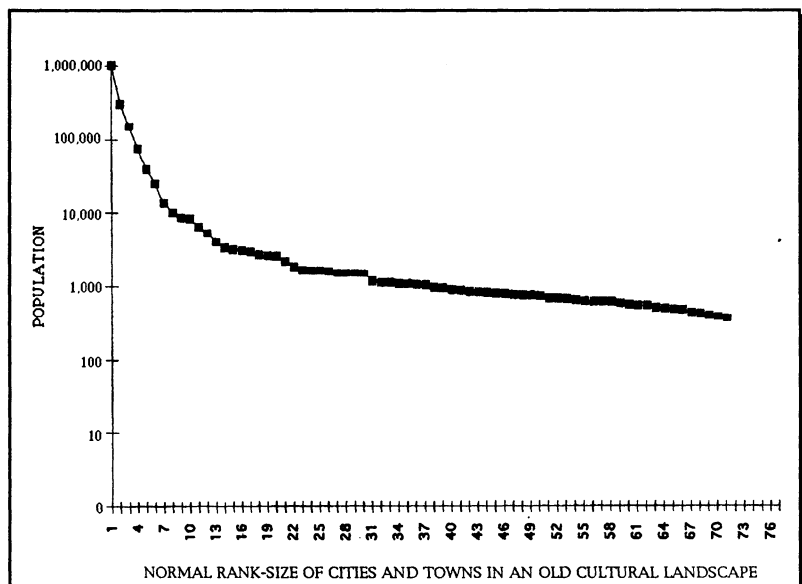


Figure 7

creates great problems when trying to create equity in service delivery irrespective of area of residence. This applies to both municipal and educational services.

The dominance of Winnipeg has increased over the years despite attempts by various governments to offset the trend. In 1921, approximately 65% of the population of Manitoba lived in rural areas. By 1991, this had reduced to 40%. Considering the growth of bedroom communities the real figures present an even more dramatic story:

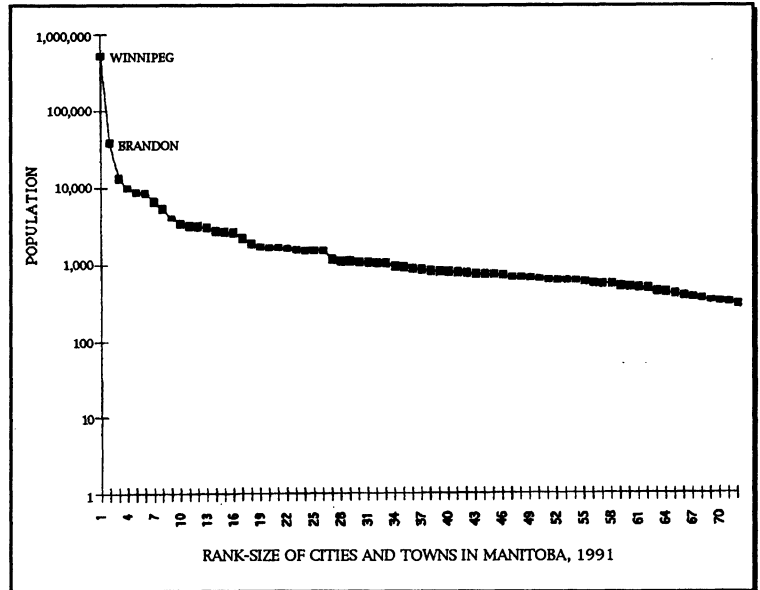


Figure 8

"Recent estimates of Winnipeg's population 'under-count' the true scope of the metropolitan area in view of the growth of 'ex-urban' centres such as Oakbank, Niverville and Stonewall. In these communities ringing Winnipeg, a high portion of households have at least one head of the household working in Winnipeg. Even a city such as Portage la Prairie, one hour away by car has many residents who commute daily to Winnipeg." (Greg Mason, Prairie Research Associates Inc., in *The Manitoba Economy in the World and National Context*, July 1993)

There is no evidence that this trend will cease as more and more bedroom communities develop around the city. It is possible that the trend will slow although it has been a steady one over the last 90 years. One change that might slow the trend is the movement of retired people to small rural communities.

RURAL - URBAN INEQUITIES

It would be very easy to ignore the perceived inequities that exist in rural Manitoba. Real or imagined, the perceptions exist and must be considered. Additionally, urban residents must become more aware of the extent to which their economy and survival is dependent upon the health of rural Manitoba. The phrase "perimeter vision" is often heard outside of Winnipeg and is a real issue that needs addressing. While not malicious or intentional in its origin, it is, nonetheless, a factor in the culture of rural Manitobans as they relate to their major urban centre.

25 Year Population Projections 1991 to 2016	
Winnipeg	+12.7%
South Interlake	+16.9%
Southeast	+30.8%
South Central	+9.7%
Southwest	-17.0%
Parklands	-18.5%
North Central	-2.4%
North	-1.2%

Figure 9

**FUTURE POPULATION TRENDS**

In a 1993 report, Greg Mason of Prairie Research Associates Inc., identified population trends in Manitoba. The Commission must consider these when determining future school division/district boundaries. He reviewed five groupings of population change as outlined in Figures 12 to 16 headed High Growth, Medium Growth, Low Growth, Slow Decline and Rapid Decline Centres. Translation of areas of decline and growth to regional categories results in projections for the period 1991 to 2016 as shown in Figure 9. (Projections performed by Manitoba Bureau of

Statistics, September, 1992)

As Mason noted, this means Winnipeg's share of the total population will increase from 56% in 1991 to 59% in 2016. He further identified three distinctive patterns emerging from studies of population projections and these patterns have been utilized by the Commission in formulating the final recommendations:

1. Southwest and Parklands regions will continue to decline dramatically in population.
2. The high growth region will be "...primarily in the triangle formed by highways 59, 3 and the United States border, and secondarily in the Interlake and the eastern regions."
3. "Winnipeg will continue to comprise an increasing share of the provincial population and will exert an increasing influence on all forms of political and economic activity."

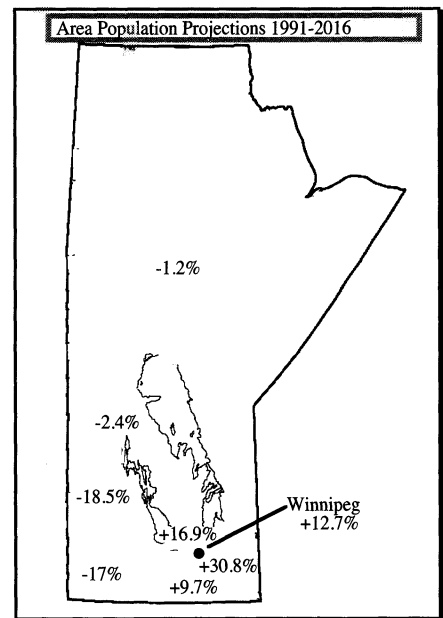


Figure 10

Dr. Ball, in his comments to the Commission, noted that: "The last point is important because it means that whatever actions are recommended by the Commission, consideration must be given to hedging against the increasing dominance of Winnipeg."

**RATE OF POPULATION CHANGE**

A second aspect of population trends is significant and was highlighted in the Manitoba Teachers' Society brief where they noted that "The rate of natural population increase will be lower than in preceding decades." (Manitoba Teachers' Society, 1994, p.8) This agrees with Mason's predictions of

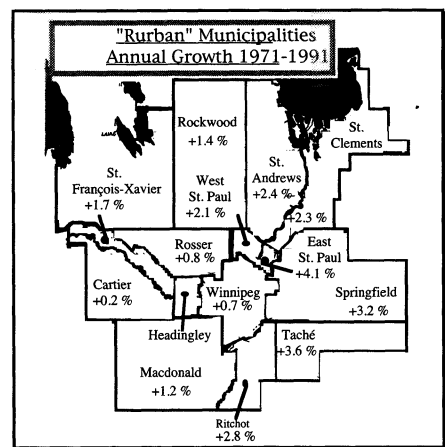


Figure 11

0.3% as a rate for the immediate future. This will result in an aging population with a diminishing number of people making direct demands on the education system via their children but also changes in their contributions to the tax base. The population distribution will vary from region to region and although some regions will experience population increase, that will likely be due more to migration than the reproduction rate. Some regions will be severely pressed. For example, northern regions will likely experience a net out migration but a higher birth rate would compensate for the loss and result in a higher demand for elementary education. At the same time they will experience a reducing work force and tax base. The Southwest and Parklands areas create one of the greatest challenges because the infrastructure is in place for much greater numbers and the future predicts only continued reduction.

The Manitoba Teachers' Society Research Department Review tends to concur with Mason's conclusions as they pointed out in their brief: "Regional demographic trends show slight increases in opening enrollment figures for the City of Winnipeg, the Southeast and South Central; decreases in the Interlake and Northern regions; and more serious decreases in Parklands and the West."

The Commission notes that Mason's reference to growth in the Interlake refers to the southern portion of Interlake, especially in the Stonewall area while the decreasing student population statistics are primarily related to the northern Interlake area.

#### GOVERNMENT POLICY AND POPULATION DISTRIBUTION

In recent years, government policy has become increasingly influential in determining the survival of communities. Decisions surrounding construction of schools or hospitals can have a great influence on the viability of individual areas. Recent government initiatives regarding decentralization of government services have been made in attempting to augment the viability of towns throughout the province. The centralization – decentralization tug-of-war evident in all aspects of the public service is an issue that the Commission had to wrestle with. It was necessary, however, to remain focused on its primary concern, that of making recommendations to provide for the best possible system for delivery of education to Manitoba children within the public school system. Nonetheless, the Commission could not lose sight of the fact that the educational delivery system is inextricably linked with the survival of communities. Thus socio-economic impact of any changes within the system was an integral part of our educational and financial considerations. Socio-economic impacts of potential change will be discussed in further detail in Section VI of this report.

High Growth Centres 1971-1991

City / Town / Village / R.M.	1971	1991	% Change	Average Annual growth %
*R.M. of East St. Paul	2,616	5,820	122.5	4.08
Winkler	3,009	6,397	112.6	3.84
*R.M. of Taché	3,749	7,576	102.1	3.58
Stonewall	1,583	2,997	89.3	3.24
*R.M. of Springfield	5,955	11,102	86.4	3.16
*R.M. of Ritchot	2,945	5,146	74.7	2.83
Morden	3,266	5,273	61.5	2.42
Niverville	938	1,514	61.4	2.42
*R.M. of St. Andrews	5,865	9,461	61.3	2.42
Steinbach	5,265	8,213	56.0	2.25
*R.M. of St. Clements	5,047	7,870	55.9	2.25
*R.M. of West St. Paul	2,429	3,658	50.6	2.07
Altona	2,122	3,060	44.2	1.85
Plum Coulee	480	676	40.8	1.73
*R.M. of St. François-Xavier	645	898	39.2	1.67
Ste. Anne	1,062	1,477	39.1	1.66
*R.M. of Rockwood	5,341	6,990	30.9	1.35
Carman	2,030	2,567	26.5	1.18
*R.M. of Macdonald	3,169	3,999	26.2	1.17
Ste. Rose	818	1,008	23.2	1.05
Teulon	828	1,016	22.7	1.03

Figure 12

Medium Growth Centres 1971-1991

City / Town / Village / R.M.	1971	1991	% Change	Average Annual growth %
Gretna	522	620	18.8	0.86
Arborg	879	1,039	18.2	0.84
Brandon	32,713	38,567	17.9	0.83
Waskada	247	289	17.0	0.79
Beausejour	2,255	2,633	16.8	0.78
*R.M. of Rosser	1,171	1,364	16.5	0.77
Morris	1,408	1,616	14.8	0.69
MacGregor	744	852	14.5	0.68
*Winnipeg	540,262	616,790	14.2	0.66
Carberry	1,305	1,481	13.5	0.63
Lac du Bonnet	952	1,076	13.0	0.61
Swan River	3,522	3,917	11.2	0.53
Powerview	667	736	10.3	0.49
<b>Province of Manitoba</b>	<b>988,247</b>	<b>1,091,942</b>	<b>10.5</b>	<b>0.50</b>

Figure 13



Low Growth Centres 1971-1991

City / Town / Village / R.M.	1971	1991	% Change	Average Annual Growth %
Deloraine	961	1,045	8.7	0.42
Rapid City	374	406	8.6	0.41
St. Pierre-Jolys	846	907	7.2	0.35
Garson	301	320	6.3	0.31
Russell	1,526	1,616	5.9	0.29
Killarney	2,047	2,163	5.7	0.28
Treherne	628	661	5.3	0.26
Selkirk	9,331	9,815	5.2	0.25
Roblin	1,753	1,838	4.8	0.24
*R.M. of Cartier	2,987	3,115	4.3	0.21
Virden	2,823	2,894	2.5	0.12
Erickson	531	544	2.4	0.12
Oak Lake	342	350	2.3	0.12
Portage la Prairie	12,950	13,186	1.8	0.09
*The Pas	6,062	6,166	1.7	0.09
McCreary	545	554	1.7	0.08
Neepawa	3,215	3,258	1.3	0.07
*Snow Lake	1,582	1,598	1.0	0.05
Wawanesa	478	482	0.8	0.04
Melita	1,132	1,134	0.2	0.01
Notre Dame de Lourdes	613	614	0.2	0.01
Hamiota	822	823	0.1	0.01

Figure 14

Slow Decline Centres 1971-1991

City / Town / Village / R.M.	1971	1991	% Change	Average Annual Growth %
Gladstone	933	928	-0.5	-0.03
Souris	1,674	1,662	-0.7	-0.04
*Gillam	1,921	1,893	-1.5	-0.07
Boissevain	1,506	1,484	-1.5	-0.07
Pilot Mound	763	747	-2.1	-0.11
Cartwright	340	329	-3.2	-0.16
Glenboro	698	674	-3.4	-0.17
Minnedosa	2,621	2,526	-3.6	-0.18
Rosburn	638	609	-4.7	-0.23
Dauphin	8,891	8,453	-4.9	-0.25
Shoal Lake	833	784	-5.2	-0.30
Winnipeg Beach	687	641	-6.7	-0.35
Manitou	871	811	-6.9	-0.36
Rivers	1,175	1,076	-8.4	-0.44
Birtle	882	802	-9.1	-0.47
St. Claude	679	613	-9.7	-0.51

Figure 15

Rapid Decline Centres 1971-1991

City / Town / Village / R.M.	1971	1991	% Change	Average Annual Growth %
Grandview	967	870	-10.0	-0.53
Minitonas	610	544	-10.8	-0.57
Benito	479	427	-10.9	-0.57
Elkhorn	569	505	-11.2	-0.59
Winnipegosis	887	771	-13.1	-0.7
Emerson	830	721	-13.1	-0.7
Gilbert Plains	854	741	-13.2	-0.71
Bowsman	443	382	-13.8	-0.74
Hartney	579	477	-17.6	-0.96
*Flin Flon	8,873	7,119	-19.8	-1.10
*Thompson	19,001	14,997	-21.2	-1.18
Crystal City	555	437	-21.3	-1.19
*Grand Rapids	653	506	-22.5	-1.27
Gimli	2,041	1,579	-22.6	-1.28
Somerset	646	496	-23.2	-1.31
Riverton	797	584	-26.7	-1.54
St. Lazare	431	315	-26.9	-1.56
Ethelbert	526	364	-30.8	-1.82
*Churchill	1,604	1,106	-31.1	-1.84

Figure 16

Source: Manitoba Bureau of Statistics base information as analyzed by Greg Mason, Prairie Research Associates Inc., in *The Manitoba Economy in the World and National Context*, July 1993, with added information (\*) and analysis by the Boundaries Review Commission.