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Progress and Prospects

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WINNIPEG
1874 - 1974

Progress and Prospects

Tony J. Kuz
University of Winnipeg
Editor

Commissioned by the
Manitoba Department of Industry and Commerce
Honourable Leonard S. Evans, Minister
L. Remis, Deputy Minister

Winnipeg, Canada
1974

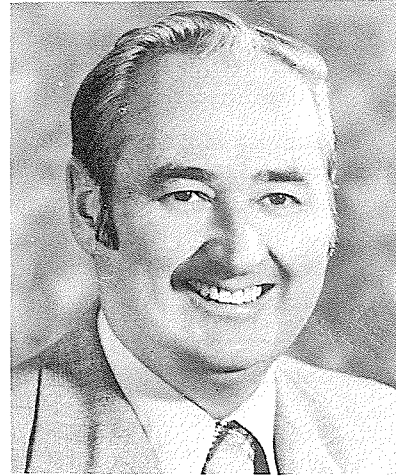
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WINNIPEG
1874 - 1974



Two rivers, the Red and the Assiniboine, wind through the City of Winnipeg. The view above is the central area of the City with the Legislative Building shown in centre foreground with the new Convention Centre and highrise office towers directly behind.

Foreword



This volume of studies in honour of the City of Winnipeg Centennial was commissioned by the Manitoba Department of Industry and Commerce under the general editorship of Professor Tony J. Kuz of the Department of Geography, University of Winnipeg.

The Department of Industry and Commerce has been responsible for the technical editing and production of the publication. Dr. Kuz, the general editor, was responsible for outlining goals, securing contributors, critical editing, and in providing the conceptual framework into which contributions could be fitted.

During the preparation of the study it was found that data were lacking in many areas of economic and industrial interest; it is therefore hoped that, to some extent, this series of papers by academic and industrial contributors will prove fruitful in stimulating additional interest in the topics covered.

Perhaps the most remarkable result, as shown in the various papers, is the emergence of a common viewpoint on Winnipeg and its future. There is general agreement, both practically and in theory, that the city has attained a mature plateau of growth that is nonetheless capable of substantial expansion in subsequent years. The attraction of the city as an urban centre and its consequent inflows from the rural regions of Manitoba is shown as part of the national trend towards urbanization. The movement away from labour-intensive manufacturing areas into the service industries reflects both the value of emerging industrial technologies — with enhanced output — and the emphasis on services required by a mature economy directed to improved living standards.

Though the published statistics have yet to reflect recent government and private initiatives, more than one study emphasises the importance of alternative strategies for provincial development as well as continuing industrial prospects for the capital city.

Winnipeg in the past held a monopoly trading position in the West. That process has now slowed, but the production of exportable surpluses of processed products and manufactured goods, added to the primary products on which the Province first thrived, indicates that they will continue to form a developmental base for both the Province, Winnipeg, and rural growth areas.

It is sincerely hoped that these contributions to the understanding of an historic capital city will provide a guide to anticipating its future.

A handwritten signature in dark ink, reading "Leonard S. Evans". The signature is fluid and cursive, with the first name "Leonard" and last name "Evans" clearly legible.

LEONARD S. EVANS
Minister,
Department of Industry and Commerce

Preface

Man is an inquisitive being and is constantly in search of answers to complex problems. One of the more complex questions relates to urban form and structure. Consequently there is always a demand for systematic research dealing with the complex processes of urban growth and development. This collection of research papers on Metropolitan Winnipeg offers one basis on which to assess the implications of trends in urban growth for the changing environment of contemporary Canadian urban life, with a view to augmenting our ability to anticipate and respond to the course of future events.

All of the following research papers deal with various aspects of Metropolitan Winnipeg. Such aspects as growth, structure, organization and economic base are extensively developed.

Objectives and Organization

The book has two objectives. The first is to relate clearly to people in Winnipeg and elsewhere so that all will have a better appreciation of Winnipeg's important past and present role in the growth of the West, its consequent contribution to Canadian history and the high quality of life that the city now supports.

The second objective is a desire to increase the flow of information and to stimulate further research on Metropolitan Winnipeg. Many of the papers presented are but bare foundations for subsequent research. Hopefully they will raise some questions that students, academics, and professionals will want answers to and consequently result in related research. It is therefore hoped that this book will lead to an awareness of the necessity of providing a broad and thorough analysis of past trends and evolving structural interrelationships as a foundation for understanding Metropolitan Winnipeg's development.

Content

As noted above, the papers in this book are concerned with describing and analyzing the growth patterns, structure, organization and economic base of Winnipeg. The papers are grouped into three main parts with each part organized around a central theme. These themes are: (1) the process of urbanization of Winnipeg; (2) the economic base of Winnipeg; and (3) distinctive activities in Winnipeg and distinctive functions of

Winnipeg. A fourth section is in the nature of a speculative analysis of Winnipeg more than a decade hence.

The first part develops the reasons for migration into the Prairies, the resulting ethnic mix of Winnipeg's population, the growth and social area stratification in Winnipeg, and the political organization of Winnipeg during the past 100 years. These papers are highly descriptive, designed to provide an overview in graphic and tabular form of how Winnipeg developed. The second part deals with the many manufacturing activities that are found in the city. Contributors have attempted in general to deal with this topic historically, indicating the nature of the initial industries, type of products manufactured, market area served and source of raw materials for manufactured products. The nature and significance of the various manufacturing enterprises are also analyzed in the present. Wherever relevant statistics will allow, comparisons are made to explain the significance of the various industries both locally and nationally. The third part deals with activities that have been particularly important in Winnipeg's development. These activities are transportation and finance; also developed is the importance of Winnipeg to the Manitoba economy. Cultural activities which have given Winnipeg an international reputation are discussed in this section in a paper entitled "Culture at the Gateway".

Definitions and Data

Throughout this book any reference to Winnipeg implies the metropolitan area. All statistics used are based on the metropolitan area and are the most timely for comparative purposes. Individual figures for special purposes are sometimes available for years later than the 1970 computational base, and are inserted where practicable. Anyone having done longitudinal analysis immediately recognizes the difficulty of compiling similar data over time. Definitional changes and area changes are but two factors which severely affect data comparability. In many instances, data in published form are just not available. These were some of the problems faced by the contributors and many have had to obtain their information through questionnaires and interviews.

The papers in this book have attempted to trace developments in Winnipeg during the past one hundred years. Numerous tables and graphs are used to illustrate the various trends. Most of the work is descriptive and no emphasis has been placed on analytical techniques. However, in some instances where particular insights are not possible without data manipulations, the use of techniques has been encouraged.

Almost all of the papers presented have been specially drafted for the book. In all instances the contributors have either had an academic interest in the various topics or are professional people who have been actively involved with the various industries or organizations over the years. These papers have been revised at the discretion of the editor, but the revisions have not affected the unique contribution of each author in terms of strategies and procedures. Upon reading, it will also be apparent that the papers selected for inclusion vary considerably as to style, scope and vigour. This is inevitable when numerous contributors are involved. It will be equally apparent that considerable "overlap" exists among the research papers. This is, in fact, necessary in order to maintain the flow of ideas and reasoning in each study.

One other note of explanation might be added. To eliminate footnoting as much as possible, the generally accepted usage among scientists, including social scientists, has been observed. Mention of an author, date, and page in parentheses in the text indicates that a full reference may be found by referring to "bibliographies", "select bibliographies", "references" or other annotations which follow most of the papers.

Acknowledgments

The papers in this volume have been assembled to commemorate the city of Winnipeg's centennial. Without the financial and technical assistance of the Manitoba Department of Industry and Commerce this effort would not have been possible. I would especially like to thank the Department's Director of Information Services, John McVea, for his assistance throughout the preparation of this work.

The book serves as an excellent example of the type of achievements which may be attained when various groups band together in a common effort. Hopefully the achievements here will result in further co-ordination of similar efforts in the future.

I wish to thank all of the people that have been directly or indirectly involved in the preparation and production of this study. Co-ordinating and editing this book has been an exhilarating experience.

Winnipeg
October, 1974

TONY J. KUZ

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PART I

The Process of Urbanization

Editor's Comments

Cities, while not unique to the modern world, are a prime focus for concern in our expanding and changing society. There are a number of ways in which social scientists endeavour to account for the process of urbanization and the three main theories are presented at the end of these comments. It will then be seen that the papers presented in Part I lend themselves, in one way or another, to these theories. Though the papers may be read for their description, data, and viewpoint alone, they all have relevance to understanding Winnipeg's development and its relations with its surrounding hinterland and they exemplify, to some degree, the theories outlined hereafter.

Professor Kuz in his paper "Metropolitan Winnipeg: Inter-Urban Relationships" traces the course of Winnipeg's development from 1874 to the present. The paper emphasizes Winnipeg's early role as a gateway city and the effects this had on its growth and development. The paper is organized around five topics. They are: (a) theory of gateway cities, (b) development of Winnipeg as a gateway city, (c) Winnipeg as a central place, (d) Winnipeg today, and (e) quality of life in Winnipeg.

Professor Evans in his paper "Migration into Manitoba" addresses himself to the following questions:

(a) How did each ethnic major group perceive the advantages of settling in Western Canada?

(b) What were the local factors urging them to leave their original homes?

(c) What valid generalizations may be made about each group?

The major groups to be considered are: (1) Ontario, (2) British, (3) Jewish, (4) Ukrainian, and (5) other Europeans.

In the paper consideration is given as to why the various ethnic groups settled where they did. As indicated by Professor Evans, more detailed and analytical research is necessary if the above question is to be adequately answered.

Professor Carlyle develops the following topics: Winnipeg growth, ethnic mix, and socio-economic areas. Two aspects of growth are considered: (1) population growth, and (2) growth of the urbanized area. In the case of population growth several well established reasons are put forth for Winnipeg's rapid development up to the beginning of the First World War. Developed more fully is the nature and character of the population and how this population distributed itself within Winnipeg. The distribution of various ethnic groups is analyzed and explained

through the use of maps. Five average family income ranges are used to subdivide the city into economic areas. Very extensive variations exist with income averages around 3,500 dollars near the core area and over 31,000 dollars in parts of suburban Tuxedo.

Professor Weir in his paper, "Winnipeg: A City in the Making," writes about how the small villages at the forks of the Red and Assiniboine Rivers evolved to form the complex of administrative units eventually to comprise Greater Winnipeg. The evolution of Greater Winnipeg to include sixteen suburban units and a core city, the development of Metropolitan Winnipeg from 1960 to 1971, and finally the amalgamation of the municipal governments into Unicity are topics which are extensively developed.

Theories of Urbanization Process

Urbanization is defined as a process that involves two things: increases in the number of points of population concentrations as well as the increase in size of individual concentrations. In addition, economic, sociological and political aspects of the process are very important.

The "three concepts of urbanization" — the behavioral, the structural and the demographic — are outlined by Lampard (1965). The first concept is concerned with the experience of individuals over time and with patterns of behaviour; the second deals with the activities of the population and emphasizes the changes in economic structure; the third sees urbanization primarily as one of population concentration.

There is considerable overlap among the theories. However, "the important fact is that there *are* parallel attempts to understand the process of urbanization and of the cultural, social and economic metamorphoses that take place" (Carter, 1965, p. 33).

The foremost proponent of the behavioral theory of urbanization is Wirth. He states that the size of the aggregated population will affect all varieties of relations between members, increasing the process of differentiation which ultimately leads to segregation (Wirth, p. 11). In addition, increased densities will give rise to further diversification of the city into areas of wealth and poverty. The "bonds of kinship", present in rural societies, are likely to be absent or relatively weak in the urban area. Consequently, new roles and bonds are established through place of employment and other contacts which are made.

The second interpretation relates to "the movement of people out of agricultural communities into other and generally larger non-agricultural communities. This conception gives primary recognition to the differential ordering of occupations . . . within a given territorial space" (Lampard, 1965, p. 520). The theory postulates that there is a direct correlation between economic growth

and development and the process of urbanization. Urban growth is associated with increasing economic specialization and advanced technology. The linkage between specialization and growth is that with specialization greater numbers of people are required to carry out the functions of the urban place. This linkage results in the process of urbanization.

The third interpretation of the urbanization process is called demographic in that its explanation of the urbanization process is simply one of population concentration. Urbanization is seen as "the organizational component of a population's achieved capacity for adaptation. It is a way of ordering a population to attain a certain level of subsistence and security in a given environment" (Lampard, 1955, pp. 520-1).

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Metropolitan Winnipeg: Inter-Urban Relationships

by Tony J. Kuz*

In a short 100 years Winnipeg has evolved from a tiny nucleus at the confluence of the Red and Assiniboine Rivers to a fully matured metropolitan area of over one-half million people. This history of the growth process is both interesting and fascinating. Winnipeg is a city that in its early stages of development was the undisputed Queen of the prairies. If fortunes were to be won or lost in land deals, Winnipeg was the city where such entrepreneurial ventures were possible. At various stages in her development, Winnipeg rivaled the importance of cities such as Chicago, Minneapolis and Toronto.

It is the intention of this study to trace the course of Winnipeg's development. The study is organized into five parts:

- (a) theory of gateway cities,
- (b) development of Winnipeg as a gateway city,
- (c) Winnipeg as a central place,
- (d) Winnipeg today, and
- (e) quality of life in Winnipeg.

Theory of Gateway Cities

Numerous articles, books and promotional materials have referred to Winnipeg as a gateway city. What exactly does the term mean and what have been the consequences for Winnipeg being a gateway city? In order to answer these questions it is necessary to look at the existing theories relating to gateway cities and other cities which are called central places.

Social scientists tried for a long time to account for the origin and distribution of urban places, and during the 1930's Walter Christaller assembled the empirical pieces of information and formulated the Central Place Theory. Briefly, the theory states that there is a hierarchy among urban places which is based on population and the number of functions

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that each performs. As a rule the controlling hinterland of each urban centre is hexagonal, square or circular in shape with the urban centre located near the centre of that hinterland.

Gateway cities are different from central places in a number of ways. Gateway hinterlands are generally fan-shaped and very large with the city located at some extremity of the fan. The fan-shaped hinterland in general extends in a direction away from the national core area. Gateway cities generally develop between areas which exhibit extensive physical and economic differences. By contrast, central places tend to service a homogeneous hinterland. Because of the obvious function of funnelling goods and services between the two distinct economic areas, the employment structure of the gateway city should be relatively high in the transportation and wholesaling sectors.

In the initial stages of a gateway city's development, the population growth rate is very rapid as it has complete control over the commerce in the fan-shaped hinterland. The more activity in the hinterland, the greater the capital investment in the gateway city to accommodate the rapidly growing demands for goods and services. This rapid growth has its expression in the form of new buildings, new transport facilities, large population growth and a boisterous, optimistic attitude on the part of the city's residents.

Good things cannot last forever. For the gateway city everything is "good" in its initial stages of development because of the monopoly it has on development. To the individual demanding goods and services in the extended hinterland the situation is deplorable. The individuals have little choice and the goods and services are costly because of the monopolistic conditions.

As effective settlement moves further and further away from the gateway city, other urban centres develop to meet the needs of the population. These central places are in direct competition with the gateway city. Because of better accessibility to their customers, the emerging central places have a distinct advantage over the distant gateway city. As the new central places grow and control larger hinterlands, the trade area of the gateway city is seriously eroded. This erosion of hinterland has serious repercussions on the gateway's employment structure. In time the gateway city's role is reduced to that of a central place with its service hinterland being biased toward the national core area.

Let us now test the theory regarding gateway cities by looking at Winnipeg's development during the past one hundred years.

Development of Winnipeg as a Gateway City

Transportation was a key to Winnipeg's development from its very beginnings. In the fur trading days its location at the confluence of the Red and Assiniboine Rivers made it a readily accessible settlement for trading. In the steamboat days Winnipeg was an existing point for settlers heading west to their homesteads. With the coming of the Canadian Pacific railroad in 1881, Winnipeg's position as a major centre in the prairies was guaranteed. Along with the railway line, major freight and repair yards were established as well. It was during this time that Winnipeg was mobbed with land speculators from all parts of the world. Fortunes were made and remade day after day with land being sold as far away as Edmonton. The bubble burst in 1882 coinciding with extensive flooding in the city. As a consequence land prices fell and the flow of immigrants slowed.

The railway continued to expand, making Winnipeg the focal point. The CPR's monopoly was broken by 1888 and, by 1890, 12 railway lines had focused on Winnipeg, giving the city access to all the settled areas in the West.

Winnipeg bargained for special freight concessions and in 1886 was granted a 15 per cent discount on goods shipped west from the city by local companies. In 1890 the same concessions were granted on goods brought from the east. These concessions greatly strengthened the wholesaler position in the western economy. This also prompted eastern wholesalers to open branches in Winnipeg. In 1897 Winnipeg won another major concession from the railways that greatly enhanced the wholesale trade. Winnipeg wholesalers in shipping to western points paid freight charges no greater than those paid by eastern firms shipping to the same point. Under this tariff Winnipeg wholesalers could break bulk on shipments from the east, send smaller shipments to the west and not incur additional costs. In 1901 a further reduction in freight rates from the Lakehead (now, Thunder Bay, Ontario) to the city gave it a commanding advantage over other cities in distributing across the prairies.

These advantages of special freight rates for Winnipeg wholesalers plus the fact that Winnipeg was closer to the market and could fill the orders more quickly than the eastern firms gave Winnipeg a most favourable position in the wholesale trade.

The strong demand for eastern manufactured products and relatively slow delivery on orders placed in the west gave the necessary impetus for growth of the city's manufacturing facilities. Firms such as flour

mills and packing plants and firms producing construction materials such as paint, lumber, and bricks were the first to develop.

To meet the needs of the local population retail outlets were constructed. The most imposing was the department store opened by the T. Eaton Co. of Toronto in 1905. This covered 5½ acres of floor space. Moreover, financial institutions such as the locally based Great-West Life Assurance Company were doing increasing business across Canada and parts of the United States.

The railway also made Winnipeg the administrative centre of the prairie wheat trade. By 1890 the Federal Government had allowed Winnipeg to establish a grain exchange to inspect and grade all grain shipped east and to set up a Board of Arbitration for the prairies — a function that previously was carried out in Toronto. With the acquisition of these prerogatives, Winnipeg's authority over the western grain trade became virtually complete.

This spectacular expansion and prosperity of Winnipeg and the West fostered a spirit of great optimism in the future of the city. In 1911, W. E. Curtis, a reporter for the *Chicago Record Herald*, wrote the following about Winnipeg:

All roads lead to Winnipeg. It is the focal point of the three transcontinental lines of Canada, and nobody . . . can pass from one part of Canada to another without going through Winnipeg. It is a gateway through which all the commerce of the east and the west and the north and the south must flow. No city, in America at least, has such an absolute and complete command over the wholesale trade of so vast an area. It is destined to become one of the greatest distributing commercial centres of the continent as well as a manufacturing community of great importance.

In 1911 Winnipeg had a population of 136,035. Its employment structure was characterized by: (1) a high percentage of the total population in the work force (45.7); (2) a relatively low percentage of the labour force in manufacturing (17.8); (3) a high percentage of the labour force in trade (24.9), transport (13.7), and construction (17.2).

Winnipeg reached the height of its power and influence in the west by 1912. Winnipeg controlled grain marketing for the entire prairie region, wholesaling from the Great Lakes to the Rockies, its financial institutions operated throughout Canada and controlled the prairie region. The manufacturing industry was meeting demands for products in the construction industry. The railway yards and shops were crucial

to the operation of the whole western network. Although other cities such as Edmonton and Calgary were beginning to develop into important western cities, Winnipeg by far was the most dominant and the prevailing attitude of its residents was one of optimism and hope for continued expansion.

Winnipeg, the Emergence of a Central Place

During the war and post-war period many changes took place in the west. The most prominent was the end of the settlement frontier. By 1914 most of the available land was homesteaded and immigration declined. The pre-war period resulted in a difficult capital market. Foreign money in Canada and particularly in western Canada became scarce and consequently the level of economic activity was substantially reduced.

The period of the First World War was a fairly prosperous time for the farmers as the price of wheat exceeded two dollars per bushel in 1918. The increased purchasing power resulted in brisk activities in Winnipeg in the farm implement and automobile wholesale trades.

Several factors were developing during this time that would have a permanent effect on the commerce of Winnipeg. With the emergence of the mail order companies, retailers and wholesalers at the local level suffered. Wholesalers of hardware, clothing and other domestic items were especially damaged by the mail order firms. Mail order prices were competitive because postal rates were not directly proportional to distance while those of the retailer were directly proportional to distance.

The opening of the Panama Canal influenced marketing patterns on the Prairies. Vancouver became a new gateway to the west and was soon able to capture a large part of Winnipeg's grain and wholesale trade.

With the continued growth of rival prairie centres Winnipeg's primary function as a distributing centre was seriously undermined (Table 1). By the mid-1920's a major portion of Winnipeg's huge wholesale district was tenantless as firm after firm was forced out of business. This severe cutback in Winnipeg's wholesale functions marks the point of transition from gateway to central place status.

After 1920 changes in the freight policy allowed wholesalers to function in the West's newer centres. The revised freight rates made it cheaper to ship through Winnipeg without breaking bulk.

TABLE 1
The Decimal Proportion of the Population of Competitive Cities
to the Population of Winnipeg 1891 - 1971¹

Year	Winnipeg Population	Calgary	Edmonton	Regina	Saskatoon
1891	25,639	0.0	0.0	0.0	0.0
1901	44,359	.099	.094	.051	.003
1911	136,035	.328	.217	.211	.084
1921	191,908	.331	.306	.179	.121
1931	235,090	.355	.337	.227	.184
1941	240,117	.368	.388	.241	.178
1951 ²	356,813	.399	.494	.200	.149
1961 ²	475,989	.585	.709	.236	.201
1971 ²	540,262	.746	.916	.259	.233

¹ The table shows the relative growth of competitive prairie cities from 1891 to 1971. The decimal proportions are calculated by dividing Winnipeg's population into the population of each prairie city. A decimal value of 1.0 would indicate a competitive city the size of Winnipeg.

² The figures for 1951, 1961 and 1971 for Winnipeg, Calgary and Edmonton are for the entire metropolitan areas whereas for Regina and Saskatoon only city limits population are listed. This explains the drop in ratio values between 1941 and 1951.

Source: Statistics Canada

In the post-war period the rapid economic growth of the manufacturing sector in eastern Canada minimized the importance of the wheat economy within the national economy. Whereas the focus of growth had been in the west the focus had now swung east. This in turn had severe repercussions on the Winnipeg economy. The leadership and the talent of the citizenry were drawn off to head offices located in Toronto, Montreal, and Vancouver. This loss of technical virtuosity affected the quality of leadership and entrepreneurial skills available to the city. With the economic changes capital also became less freely available in Winnipeg.

The Great Depression began with the financial crisis of 1929 and steadily grew worse in the western provinces in the early thirties as farmers suffered severe crop failures and diminishing markets for their products. The year 1933 was the worst for Winnipeg and the Prairies. At this time the full effect of low wheat prices, poor harvests, high unemployment and inadequate government policy was experienced. Because of prevailing economic conditions many wholesale and retail distributors were forced out of business.

During the 1930's eastern manufacturers paid less and less attention to the needs of the west. It was this factor that enabled local manufacturing to thrive. The abundance of labour, the availability of cheap

hydro-electric power, the emergence of a brisk demand for materials by mining concerns in the north and readily available space vacated by the wholesalers prompted brisk industrial activity. The most notable expansion of the period was in the needle trades. At the time this was the most rapidly growing industry in Winnipeg.

Winnipeg Today

Despite changing economic conditions at both the national and regional levels, Winnipeg is still the largest metropolitan centre in the prairie region. However its character has changed substantially over the years. Winnipeg is no longer thought of as a boisterous boom town. On the contrary, it is felt to be a mature and sophisticated city. The qualities of "boom" are now much more closely associated with the western cities of Calgary and Edmonton.

Today Winnipeg is still the major rail centre of the prairies and is still in control of a high portion of Canadian wheat sales and shipments. Both the Canadian National and Canadian Pacific Railways maintain extensive rail yards and major switching depots in Winnipeg. Winnipeg is also the prairie city with direct U.S. rail connections. This service is provided by Burlington Northern Railways and the Soo Line.

Winnipeg's hinterland as a central place is considerably different from the hinterland it once commanded as a gateway city. Its position at the point of its once fanshaped hinterland has resulted in a smaller than normal central place hinterland for a city the size of Winnipeg. To the west the wholesale divide between Winnipeg, Edmonton and Calgary falls in the middle of the prairie "fan" (the line is slightly west of Saskatoon). This line is not an absolute boundary. It does indicate however, a greater probability of interaction with the respective cities depending on which side of the boundary one is located. Saskatoon and Regina also compete with Winnipeg within the service area defined. On the Precambrian Shield, Winnipeg's service area extends beyond the Lakehead. However, because of scant populations, the eastern hinterland in comparison to the western market is of lesser consequence to the economic well being of Winnipeg.

The present trade area of wholesalers in Winnipeg can best be shown by examining the results of a survey conducted by R. B. Short in his study "The Wholesale Function in Winnipeg". From a 10 percent sample the following results were found (Table 2):

TABLE 2
The Trade Area for Independent Wholesalers
in Winnipeg

Sphere of Trade	Percentage	Cumulative Percentage
Winnipeg Only	26	26
Winnipeg and Manitoba	28	54
Manitoba and N.W. Ontario	15	69
Manitoba and Saskatchewan	8	77
Manitoba to Alberta	4	81
Manitoba to British Columbia	8	89
Other Areas	11	100

Source: R. B. Short, *The Wholesale Function in Winnipeg*, University of Manitoba: Unpublished M. A. Thesis, 1973, p. 66.

The research findings indicate that almost 70 percent of the Winnipeg independent wholesaler's market lies in Winnipeg, the rest of Manitoba and northwestern Ontario. The western provinces of Saskatchewan, Alberta and British Columbia comprise 20 percent of the total market and the remaining 11 percent goes to other areas.

However other kinds of economic activities have their own market areas. It varies considerably for different commodities and services. The garment industry has been realizing about one-third of its sales in the central and eastern provinces and a significant percentage in the U.S. Buses manufactured in Winnipeg are marketed nationally and internationally.

Population growth and employment are taking place in Winnipeg despite the fact that the city has lost a substantial portion of its market area and the province at large is not growing. Winnipeg, according to urban theorists, has reached a stage of self-sustaining growth. J. and R. Simmons in *Urban Canada* published in Toronto in 1969 explain it this way:

As cities grow to metropolitan size they become less specialized and more like one another. A greater portion of their economy is devoted to serving the needs of the city and nearby area. These needs, of course, grow with the growth of the city, and at a certain size level, they generate administrative and manufacturing enterprises as well as stores. The city's own market is sufficient to support various small industries and specialized public service. At this size level — in Canada, perhaps about 500,000 persons — the growth impetus becomes self-sustaining. The local market creates a great deal of demand, attracting establishments which

can then, given their solid local base, afford to grow to a point where they sell to a national and international market. High wages and highly skilled labour leads to innovation and improvement. Ideas lead to new firms and more efficient methods of production.

Of the employment activities in manufacturing in 1970 food and beverages, textiles and clothing, metal fabricating, transportation equipment, and printing and publishing were the largest employers of labour. Together they accounted for approximately 70 percent of the employment in manufacturing.

Between 1966 and 1970 the following employment changes occurred in the manufacturing industries (Table 3).

Between 1966 and 1971 the manufacturing industries of food and beverage, clothing, printing and publishing, and metal fabricating all registered decreases in employment. The largest increases in employment took place in transportation. Transportation equipment increased the most rapidly with an increase of over 1,200 employees during this time period.

Almost all industries registered an increase in the value of the output produced. The highest increases in value added were realized in transportation equipment.

Although the value of manufacturing outputs has increased, the number of employees in most industries has declined. Though the reasons for this are complex, it is a characteristic that Winnipeg is sharing with many North American centres. There is a growing shift in the city, and in the province, from the industries historically based on agriculture and resources, to the extent that while these appear to be generally stabilised, the city is entering a phase when the service industries, and newer, space-age, high-technology opportunities are being developed.

Fewer employees in certain of the industries also reflect the introduction of superior technology (with increased output), thus freeing labour for integration in, training or adaptation for, more technologically oriented industry.

A further factor in the expanding industrial face of industry in Winnipeg is the reduction of the city's once vast geographic marketing area in western Canada, in response to the formation of industrial growth centres in Alberta and British Columbia. Fresh markets are, however, being developed to counter this thrust, especially in the northern United States and overseas wherein light-weight, high-technology products help overcome factors of distance and freight costs.

TABLE 3
Manufacturing Employment in Winnipeg, 1966, 1970

Employment Activity	Employment		Value Added \$'000		Change in Employment	Change in Value
	1966	1970	1966	1970	1966 - 1970	Added 1966 - 70 \$'000
Food and Beverage	8,793	8,288	89,201	104,275	-505	+15,074
Textiles and Clothing	6,705	6,560	34,937	40,853	-145	+5,916
Wood	659	750	4,051	6,184	+91	+2,133
Furniture	2,009	1,844	12,572	14,479	-165	+1,907
Printing and Publishing	3,711	3,663	32,990	41,556	-48	+8,566
Primary Metal	4,508	4,498	39,373	52,499	-10	+13,126
Machinery Industries	2,311	2,254	24,660	23,616	-57	-1,044
Transportation Equipment	2,978	4,227	21,610	43,052	+1,249	+21,442
Electrical Products		1,410		14,052		
Non-Metallic Minerals	1,653	996	17,843	20,114	-657	+2,271
Chemicals and Chemical Products	660	552	11,124	11,116	-108	+8
Total	38,939	39,305	343,082	428,132	+366	+85,050

Source: Statistics Canada, Principal Statistics of Census Metropolitan Areas by Industry Group and Industry 1966 and 1970, *Manufacturing Industries of Canada*, Cat. No. 31-209.

Moreover, according to a report prepared by the federal Department of Regional Economic Expansion titled, "Manitoba, Economic Circumstances and Opportunities", excellent prospects for growth may be found in the following industries: (a) electrical products, (b) metal fabricating, (c) the garment industry, (d) agricultural implements, (e) aerospace, (f) transportation equipment, (g) chemical and allied products, and (h) furniture.

Among the most important elements of growth in the Winnipeg economy during the past years have been the service industries. In almost all service activities the rate at which employment increased was in excess of the rate at which the city's population increased. Equally, these rates of increase in employment compare very favourably with the national figures.

This rapid increase in the service industry is a result of the current level of the economy. As Clark has stated in *The Conditions of Economic Progress* (London, 1940);

Studying economic progress in relation to the economic structure of different countries we find a very firmly established generalization that a high average level of real income per head is always associated with a high proportion of the working population engaged in tertiary (i.e. service) industries.

A report prepared by the Royal Commission on Canada's Economic Prospects states that:

By 1980 it is predicted that 55 persons in every 100 will be occupied in the service industries, assuming a continued increase in the real income of Canadians.

Within the Winnipeg service sector there are several activities highly concentrated in Winnipeg. Firstly, the public administration sector is large with a high proportion of federal civil servants. Secondly, there are many financial and insurance offices. The latter because of their nature are expected to provide substantial growth impetus to the city.

Quality of Life in Winnipeg

A matter such as "quality of life" in a given environment does not lend itself easily to analysis by quantification, although attempts have been made to develop such social and cultural indicators. It is still largely a matter of subjective appraisal.

Recent studies have indicated that Winnipeg has above average recommendations over most major Canadian cities in certain aspects that might be construed as affecting the quality of life of its people.

Though it has had for some time a lower per capita income, this is being steadily improved — and certain costs, such as those for housing, are lower than those of ten major urban centres in Canada.

Winnipeg is considered a good city from the point of view of the percentage of the population needing social assistance, it has a high degree of citizen participation in public affairs, and ranks as a major contributor per capita in organised charitable giving.

Winnipeg has one of the most comprehensive health delivery services in Canada and is a leading research centre in the medical sciences. Its air pollution index shows it to be among the most pollution-free cities of its size in Canada — well below the average in air pollutants among major Canadian cities.

It has well-developed cultural and educational institutions, sophisticated restaurants and night clubs, and sports-oriented organizations which present many outlets for community participation.

It is still free from major traffic congestion problems and other harassments common to cities of major rank. It is a city where new building and urban renewal are putting a fresh façade on the long-established downtown core. Its tree-lined residential areas are supplemented by small parks in or near the urban core and riverside retreats are furnished by the two major rivers whose confluence gave rise to its first location.

Conclusions

The view of Winnipeg's development during the past 100 years has been brief and has largely attempted to define the major factors which have influenced the city's growth. The factors discussed have been primarily economic. In addition, the quality of life in Winnipeg has been indicated by reference to a number of social and physical variables.

It is hoped that, through the foregoing, people here and elsewhere will have a clearer appreciation of Winnipeg's important past and present role in the growth of the West, its consequent contribution to Canadian history, and the high quality of life that the city now supports.

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Migration Into Manitoba c. 1885 — c. 1920, and Some Problems and Questions Which It Raises

by Brian M. Evans*

Whilst there is a voluminous literature dealing with the whole topic of migration in the 19th century and early 20th century, nevertheless there is still much disagreement about some fundamental questions, among which one might list the following:

1. In the promotion of emigration, was the perceived "attraction" (whether economic, social, or political) of the New World of greater importance than the perceived "disadvantages" of staying home? Rephrased, was the carrot of more importance than the stick?

2. Why, even in those parts of Europe most affected by emigration mania, was the local pattern so "spotty"? Some parishes lost half or more of their population; others remained virtually unaffected. It is frequently asserted that this occurs because the pioneer immigrants wrote home, and that the nature and scope of initial success were of the highest importance in attracting relatives, neighbours, and friends. This view of emigration, therefore, stresses the intercommunication and correspondence of New and Old Worlds.

3. Why did many Europeans, who had been almost entirely rural and agricultural in the Old World, become overwhelmingly urban and industrially oriented in the New? Why did significant national differences in this pattern frequently emerge? For example, a far higher percentage of Poles in Manitoba became urban from the beginning than did Ukrainians. Sometimes a reverse situation arose. Most British migrants to the Prairie Provinces came from urban backgrounds, yet many tried their hand (and frequently succeeded) at pioneer farming.

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Following the work of Hansen (1940), whose broad generalizations have passed the test of time, emigration to North America and especially to the U.S., has been divided into three great periods usually characterized as follows:

1. The Celtic Migration — 1820-1860

This mainly affected Ireland, Scotland, and other “fringe” regions of Europe. It was frequently a migration of desperation, with people literally driven from their homelands by eviction (eg., Highland Scotland) or famine (eg., Ireland in the 1840’s). While the Scots often adapted to New World Agriculture (eg., Nova Scotia, Eastern Ontario, Selkirk Settlers) the Irish almost entirely became unskilled labour in the burgeoning cities (eg., Boston).

2. The Germanic Migration — 1860-1890

This affected England, Germany and Scandinavia. These settlers were, as a group, more prosperous than the Celts, and left Europe for the perceived economic and social advantages of America. Many of them became prosperous farmers; others prominent in certain industries and professions, eg., German brewing. They generally avoided Canada.

3. The Southern and Eastern Europe Exodus — 1890-1920

This is a group far larger in total numbers than the first two and one far more heterogeneous. It is the group that falls into the chronological period under discussion. In this period, clear differences emerge between Canada and the U.S., and the former country became relatively far more important than previously, with the opening up of the Canadian West, and the active promotion policies followed by the Canadian government. However, it is not true to state that Eastern Europeans dominated the settlement of the Prairies. First, and always more numerous, except locally, were immigrants from other parts of North America, notably Ontario, and secondly, there was a massive resumption of migration from the British Isles. Thus a detailed breakdown must consider the following topics:

(a) How did each ethnic major group perceive the advantages of settling in Western Canada?

(b) What were the local factors urging them to leave their original homes?

(c) What valid generalizations may be made about each group?

The major peoples to be considered will be: (1) Ontario, (2) British, (3) Jewish, (4) “Ukrainian”, (5) Other European.

The author wishes to state before proceeding that the views which follow are personal and occasionally controversial, as much detailed work on the questions is either non-existent, or highly tendentious in character.

Sources

The main sources consulted in preparation of this essay were the censuses of 1911 and 1916. Both of these census returns present difficulties of interpretation especially in regard to the whole question of ethnic origin, a full and detailed treatment of which is a major, and as yet unwritten, monograph.

Ontario

Compared with the situation before 1860, and the post-Second World War boom, Ontario in this period between Confederation and the 1920's was not an especially prosperous area. After the middle of the 19th century, no good agricultural land was open for settlement, and industrial/urban development was slow compared to the United States. This relative stagnation was clearly reflected in the population statistics, for from 1881 to 1911 the population grew only from 2,114,000 to 2,527,000. During this same period, however, at least 500,000 people left the Province, the majority of whom were bound for the U.S. Others went to the Canadian West, either directly, or after a sojourn in the States. By 1911, of the total Prairie Provinces population of 1,390,000 the single largest group — some 390,000 — reported Eastern Canada as their birth-place. Another 170,000 claimed the U.S.

The drama of the trans-Atlantic migration should not blind us to the fact that throughout Manitoba, the first comers after 1885 (and the basic group) were from Ontario, and it was this group that established (for better or worse) much of the religious and political tone of the Province.

If the "push" factors leading to Ontario migration were the relative economic stagnation at home, the perceived attraction of the Canadian West can be briefly described as: (1) cheap (or free) land of excellent quality, (2) a clear grasp of the social and economic opportunities of the "Great Northwest" as an extension of Ontario business and commercial interests, and (3) a better appreciation than Europeans of the environmental limitations and advantages.

Because of the superior knowledge of Canadian realities possessed by the Ontario group, and their political advantages, they tended to be highly successful. By and large, early Winnipeg was dominated by them, and much of the best land of the Province (eg. around Carman, the Portage Plains, and generally throughout the Southwest) was settled by them.

Britain

In 1911, a quarter of a million people in the Prairie Provinces declared the British Isles as their place of birth. In Manitoba this represented some 20% of the population. About half of the British immigrants were English, about a quarter Scots, and the remainder Irish (mainly from what is today Northern Ireland).

The strength of the British contingent in the settlement of Manitoba is a reflection of several factors. Firstly, Britain herself in the late 19th century and early 20th century, whilst ostensibly still a world economic leader, yet in fact had a stagnating economy, and a singularly uneven distribution of wealth. For many, the standard of living was falling, and in some parts of the country, especially in Scotland and Ireland, poverty was endemic. Strong Commonwealth loyalties diverted much emigration that had previously gone to the U.S., and directed it to Canada and Australia.

The British migrants were a mixed group. While a few were top executives, most were far poorer; some (the "remittance men"), social undesirables. While most were from urban backgrounds, many became homesteaders, although as a group they tended to become city dwellers. For example, the percentage of British born in Winnipeg was nearly 30% in 1911, while in Manitoba, excluding Winnipeg, it was less than 15%.

Jewish

Jewish migrants had been born in a wide variety of countries, although the great majority came from Eastern Europe and more especially Russia. In terms of religion, there were over 10,000 in Manitoba by 1911, and over 16,000 five years later — over 13,000 of whom lived in Winnipeg. The origins of the Jewish migration were the deteriorating economic conditions and increasing intolerance in Eastern Europe, above all in those areas ruled by Russia. Few Jews had been agricultural — in Russia they were frequently forbidden to own land — but most had been involved in various types of handicraft industries or petty commerce. In Canada, the majority continued to follow these pursuits, most of which were, by definition, urban based.

The Ukrainians

In dealing with Ukrainian immigration, which was by far the most important Continental European contingent, one encounters major problems of definition. The overwhelming majority of the group whom we now so term, were, prior to 1918, inhabitants of what was then the Austro-Hungarian Empire. M.H. Marunchak, in his study, estimates that of the Ukrainian population in Canada at the time of the First World War, 97% were from provinces of Austro-Hungary. They were described variously as "Galicians", "Austrians", "Bukovinians", "Ruthenians", less commonly as Ukrainians *per se*, and occasionally as Poles. Clearly the immigration and census authorities in Canada at this period failed to recognize that they had a real linguistic or cultural unity. Religion provides a better guide, for one is reasonably safe in assuming that most people describing themselves as Greek Catholic or Greek Orthodox were in fact Ukrainian.

Marunchak estimates that in 1911 the total population of Manitoba who felt themselves to be Ukrainian was approximately 30,000 (Marunchak, p. 67).

The causes of Ukrainian migration were numerous, but at the heart of the problem lay the desperate agricultural overcrowding of the Galician area which was aggravated by the almost feudal system of landholding and the absence of industrial development. Clearly the great majority of immigrants had been farmers, and they continued in this profession in Manitoba. Their chief concentrations were to be found in parts of the Interlake (more than 8,000), and around Dauphin (7,000) and Riding Mountain (4,000). Locally in some areas they formed the plurality or majority of the population.

In the early period, the Ukrainian people did not settle in Winnipeg in any large numbers. In 1911 for example, only 3,500, or just over 10% of the numbers present in Manitoba were to be found in the city. At this period, therefore, they formed one of the smaller ethnic groups of Winnipeg itself.

Other Europeans

According to the 1916 census, no other European group matched numbers with those already discussed. For example, there were less than 3,000 people of French or German birth, and the only groups with more than 5,000 were the Icelanders, and the 23,723 who declared themselves of Russian birth — the majority of whom were Mennonites (16,000), other

German-speaking groups who had been feeling the pressures of the Pan-Slavic movement fostered by the Czarist government, Poles, or Jews.

The German-speaking (especially the Mennonites) were overwhelmingly rural-dwellers in their two "reserves", but Poles in Canada (as even more so in the United States) tended to gravitate to the urban centres. Icelanders by 1916 were no longer exclusively the fisher/farmers of the 1880's, for nearly 3,000 of them were in Winnipeg where they were already becoming prominent in professional fields.

Conclusions

The present ethnic variety of Manitoba, its visual impact, and the well-organized and vocal desires of many ethnic groups to preserve their national identities have frequently obscured the fact that in the critical years of settlement in Manitoba, non-English speaking groups were a minority, and one much smaller than is frequently imagined. Let us again turn to some statistics from the 1916 census. Of a total Manitoban population of 553,860, 60% had been born in Canada, 18.6% in Great Britain, and 3.3% in the U.S. Some 62.4% claimed English as their mother tongue; 6% claimed French. Less than 15% claimed one of the Slav languages (of which most were, in actual fact, Ukrainian); just 5% claimed German, and only 37,000 declared that they could not speak English. Ethnic mosaic, yes, but the formation was the familiar grey Anglo-Saxon concrete.

Contrary to popular opinion, it was not until the inter-war period that the full ethnic mix of Manitoba took effect. The proportion of the Province claiming Anglo-Saxon origins has declined steadily. In 1931 it was 52.6%, by 1951, 46.7%, and in 1971, 41.9%. After World War I, and again in the post-1945 period, large numbers of various European groups have entered the Province. Manitobans of Anglo-Saxon origin, on the contrary, have shown themselves more willing to emigrate out of the area in search of better economic opportunity. Until the 1950's, this movement was often towards the U.S.; since then more to British Columbia and Ontario. Lastly, some of the non-Anglo groups have tended to have rather high rates of natural increase.

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Growth, Ethnic Groups and Socio-Economic Areas of Winnipeg

by W. J. Carlyle*

Peoples moving out of Europe had settled most of the habitable parts of the temperate zone in the northern and southern hemispheres by the mid-19th century. The temperate continental grasslands, however, were still largely unoccupied partly because they were isolated by distance and lack of transportation, but also because they were not favoured as places for settlement by people accustomed to a more humid and forested environment. However, a variety of "push" and "pull" factors, including deteriorating social and economic circumstances and population increases in Europe, the offer of cheap or free land, and the development of new techniques and attitudes, all contributed to the rapid settlement of the grasslands of the Argentine Pampa, the steppes of Russia, the interior of Australia, the Great Plains of the United States and the prairies of Canada in the period 1850 to 1925.

In North America, the prairies of Canada were the last of the grasslands to be settled. Although some commercial farming had been practised at the Red River settlement, it was not until the 1870's and 1880's, decades in which Manitoba became a province of Canada, the Canadian Pacific Railway was completed, and the Homestead Act was passed, that settlement of the prairies was begun in earnest. British Canadians from Ontario and Americans were the firstcomers to the Canadian prairies, but soon settlers were drawn in large numbers from elsewhere, especially parts of Europe.

Most of these people went on the land, but some stayed in the towns and cities. Rapid growth took place in many urban centres, but Winnipeg soon emerged as the pre-eminent prairie city. Variously described as the "Canadian Chicago" and the "Gateway to the West", it grew rapidly because of its location at the apex of the triangular-shaped prairie region. Manufactured goods from eastern Canada and the United States passed through it on their journey west and agricultural products, especially wheat, passed through it on the journey east.

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These, then, are the main forces which contributed to the establishment and early growth of Winnipeg, and in the remainder of this chapter three aspects of its subsequent development will be examined in more detail: population growth, ethnic groups, and socio-economic areas.

Growth of Winnipeg

Winnipeg had a population of 241 in 1871 (Hosse, p. 195) and comprised a small cluster of merchants' offices-cum-residences in the vicinity of what became the intersection of Portage Avenue and Main Street (Figs. 1 and 2). Except for the boom of 1881-84, growth in population and of the physical area of the city was steady but unspectacular until the turn of the century.

During this early period, however, some of the basic patterns of street grids in the city were established. Notre Dame Avenue and the streets to the north were laid out on the boundary lines of the long, narrow river lots fronting on the Red River, which had been the basic land division used in the Selkirk Settlement. Cross streets were generally constructed at right angles to these streets, forming a grid system. A similar system was used from Colony Street westward, using the north-south orientated river lot boundaries extending back from the Assiniboine River. The land close to the "forks" was owned by the Hudson's Bay Company which used a grid system with a slightly different orientation. In the Point Douglas area, where small lots had been assigned to the original Selkirk settlers, and across the Red and Assiniboine rivers, the street pattern was likewise oriented according to the river lot boundaries (Richtik and Selwood, p. 7).

Similarly, some of the basic patterns of land use in Winnipeg were established a decade or more before the end of the 19th century. The commercial core was initially on Main Street near its intersection with Portage Avenue, and had subsequently expanded northward along Main Street beyond the C.P.R. tracks and southward almost to the Assiniboine River. A few commercial establishments had also been located on the streets parallel to Main Street near the first cluster of stores on Portage Avenue. The C.P.R. main line had attracted flour mills to Point Douglas and established the area as a manufacturing and warehousing district. Residential development still occupied but a portion of what it does in present-day Winnipeg, but already poorer class housing had been established north along Main Street in what became known as the "north end". Better residential districts included some of the Hudson's Bay Company land near the forks, where the company required buildings

to be of a certain minimum value (Hosse, pp. 97-100), and many leading citizens, then as now, located their houses on the south bank of the Assiniboine River.

During the period 1900-1914, very rapid development took place. The prairie-parkland zones of Saskatchewan and Alberta, as well as large parts of southern Manitoba, were settled during this period, and as the prairie region grew, so did Winnipeg, its main service centre (Figs. 1 and 2).

Expansion was generally outwards from the core, so that first Winnipeg proper, then the surrounding villages, towns, and rural municipalities became part of the built-up area. Greater Winnipeg, as the entire urban area came to be known, comprised only Winnipeg and St. Boniface in 1891, but by 1911 St. James, St. Vital, East Kildonan, West Kildonan, Fort Garry, Assiniboia, and Charleswood all were included (Hosse, pp. 145-150).

With the city located on a flat plain one might expect that its growth would have been more or less equal in all directions. This, however, was not the case. Rapid expansion took place north of the Assiniboine and west of the Red, so that the built-up area took on a triangular shape with its base on the Red River and its apex westwards along the Assiniboine (Fig. 1).

Many factors contributed to this irregular growth. The Red River settlement had itself been concentrated north of the Assiniboine and west of the Red, and this contributed to the establishment of Winnipeg in this general location. Subsequently, development to the east and south was hindered by the rivers which had to be bridged, and by the concentration of railway lines and some industries in and near St. Boniface. To the north, and especially to the west, there were no major barriers to industrial and residential development. Even the main barrier to the north, the C.P.R. tracks and yards, was crossed by the Salter Street bridge in 1898 and by the Arlington bridge in 1912. Moreover, the main travel routes, Portage Avenue and Main Street, provided easy access to the city centre, especially after the development of street cars and bicycle paths along them.

By about the time of the First World War, a watershed was reached in the growth and development of Winnipeg. The opening of the Panama Canal, which diverted an increasing volume of agricultural produce westwards to Vancouver, the termination of freight rates favourable to Winnipeg, and the development of other important urban centres in the prairie region together caused a contraction in the service area or hinterland of Winnipeg. Dreams of Winnipeg being another Chicago

were, perhaps fortunately in retrospect, shattered. That said, except for the decade of drought and depression from 1931 to 1941, the city continued to grow at what by European standards was a quite remarkable rate (Figs. 1 and 2). In particular, the suburbs have increased dramatically from a population of 78,000 in 1941 to 310,000 in 1973, while the city of Winnipeg itself experienced slow growth to 1961 and thereafter has declined slightly (Fig. 2). This overall increase in population has been accompanied by a filling-in of the remaining vacant areas of the city proper and by a vast expansion in the suburbs (Fig. 1).

Today, Winnipeg is the main service centre for the whole of Manitoba, and its influence is predominant in the eastern part of Saskatchewan and in northwestern Ontario. Slow but steady growth of the city is expected to continue in the future, and it is anticipated that by 1991 the population of Greater Winnipeg will be about 725,000 (City of Winnipeg Population Projection Cohort Survival, unpublished data, March 1974, obtained from City of Winnipeg Planning Division). Concern with urban problems has led city planners to attempt to control future growth of the urbanized area which will accompany this population increase. Further development is to be directed to certain parts of the metropolitan area, and to specific locations within a five-mile "additional" zone. In particular, expansion within the metropolitan area will be directed eastwards and to some extent southwards so that the shape of the city should become more circular than triangular. Any overspill will be absorbed in or near towns and villages within the additional zone, such as Bird's Hill, Rosser, Oakbank and Middlechurch. Indeed, movement to such dormitory towns by people who prefer a rural or semi-rural existence, but who work in Winnipeg, has already begun.

The growth experienced by Winnipeg during the past thirty years has not been matched by the province as a whole. The farm population decreased from 249,599 to 131,202 between 1941 and 1971, and this downward trend seems likely to continue for at least a decade or two. In addition, many towns and villages, especially the smaller ones, have declined in recent years. Taken together, these trends have meant that an increasing proportion of the total population of Manitoba lives in Winnipeg. Thus, in 1881, only 13 per cent of Manitoba's population lived in Winnipeg, but by 1941, 40 per cent, and by 1971, 55 per cent (Fig. 2). In one hundred years, then, Manitoba has been transformed from a rural into an urban province; a province, moreover, dominated by one large metropolitan area.

Ethnic Groups

In recent years, movement of workers amongst countries of the European Economic Community (Common Market) has in several instances led to serious clashes between national groups. Similar problems occurred in western Canada during the period of heavy immigration in the late 19th and early 20th centuries. Fortunately, such antagonisms appear to be a thing of the past in Winnipeg, and in the prairies generally, although the movement into the city of a considerable number of Indians and Métis already has caused fairly serious social problems and may ultimately lead to serious confrontation. Hopefully, these problems will be solved and any impending confrontation averted.

The general good will amongst many racial and ethnic groups in Winnipeg may stem from the fact that the population has always been varied. In the Red River settlement, Gaelic speaking Protestant Scots were on amicable, if not always overly friendly, terms with French-speaking Roman Catholic Canadians, and both obviously adjusted to the Indians since by 1870 most of the population of the settlement had some Indian ancestry (Harris and Warkentin, p. 248).

Itself an outgrowth of the Red River Settlement, Winnipeg began with a diverse population comprising French Canadians, British, Indians, half-breeds, Métis, Americans and, within a few years, Icelanders. Later, during the period of heavy immigration from 1895 to 1911, many other groups, notably German, Ukrainian, and Jewish, were added (Table 1). Since 1911, the German and Ukrainian groups have increased relatively, particularly at the expense of the still-dominant British, but now the vast majority of people in all the main groups are Canadian born (Table 2).

Winnipeg, and indeed the prairie region, has never been dominated by either or both of the two "founding" peoples as has been the case in other parts of Canada, e.g. British in Ontario and British Columbia, French in Quebec, British and French in the Maritimes (Table 1). Particularly striking is the relatively small proportion of French Canadians, who comprise about 30 per cent of the total Canadian population, but only 8 per cent of the population of Winnipeg. Indeed, the French Canadian group in Winnipeg is only the fourth largest after the British, Ukrainian and German, and it ranks fifth if the British group is subdivided into English and Scottish, both of which are larger than the French Canadian.

Except for the German, none of the main ethnic groups in Winnipeg has grown through recent overseas immigration, and therefore increas-

ingly Winnipeggers are Canadian born (Table 2). Increases have taken place, but these have been the result mainly of rural to urban movements within Manitoba and movement to Winnipeg from other Canadian towns and cities. It is to be expected then, that differences amongst the ethnic groups such as language, dress, food and occupations have diminished so that now it is difficult for the casual observer to distinguish members of one group from those of another. Yet, there still are fairly obvious indications of ethnic variety and cohesion in Winnipeg. One is the distinctive style of the churches, which vary from the domed Ukrainian Orthodox to the German Lutheran "A" frame and the Gothic British Protestant. More important, however, is the marked concentration of particular ethnic groups in certain parts of the city.

Residential concentration of ethnic groups has a long history in Winnipeg and its precursor, the Red River settlement. In the 1860's, the parishes of St. Norbert, St. Boniface and St. François Xavier comprised a total of 454 French Canadian and Métis Roman Catholic families, but had only 9 British and half-breed Protestant families. In sharp contrast, in the parishes of St. Peter and Upper and Lower St. Andrews there were 322 British and half-breed Protestant families, but only 10 Roman Catholic French and Métis families (Hind, pp. 208-209). Later, when St. Boniface became part of Greater Winnipeg this early pattern of French Canadian concentration was preserved and even today most are located in St. Boniface (Fig. 4). Just as marked in early Winnipeg was the concentration of central and eastern European groups — Polish, Ukrainian, German, and Jewish — in what is commonly known as the North End, i.e. the area north of the Canadian Pacific Railway main line, west of the Red River to McPhillips and north to Burrows Avenue. Indeed, by 1921, sixty per cent of the Germans, eighty-six per cent of the Ukrainians, eighty-four per cent of the Jewish and seventy-six per cent of the Polish in Winnipeg were located in the North End (Fromson, p. 34). When these groups came to Winnipeg in the late 1800's and early 1900's they worked in the shops and factories north of Portage and Main. Lacking money for transportation, they naturally located as near as possible to their places of work and therefore cheap housing was erected in the North End to accommodate them. This pattern has been considerably modified since 1921; in particular there has been movement out of the North End to the Kildonans, Transcona and Brooklands. Yet in 1951, and to a lesser degree still in 1971, these groups were still mainly in north Winnipeg, i.e., Winnipeg north of the C.P.R. tracks (Figs. 3, 4 and 5). This pattern is due not so much to economics as to the voluntary segregation of these groups. Thus, Ukrainians have

TABLE 1*
Ethnic Groups, 1881-1971: Winnipeg, Manitoba and Canada

Group	% by Group														
	Wpg.	1881 Man.	Can.	Wpg.	1911 Man.	Can.	Wpg.	1931 Man.	Can.	Wpg.	1951 Man.	Can.	Wpg.	1971 Man.	Can.
British	70.0	59.7	59.0	61.0	59.9	55.5	62.0	52.6	51.9	52.0	46.7	47.9	42.9	41.9	44.6
Ukrainian	—	—	—	2.5	6.7	1.1	7.3	10.5	2.2	11.2	12.7	2.8	11.9	14.6	2.7
German	2.0	5.7	6.0	6.3	7.6	5.6	5.1	5.4	4.6	7.7	7.0	4.4	11.5	12.4	6.1
French	14.0	15.6	30.0	4.3	6.8	28.6	5.0	6.7	28.2	9.3	8.5	30.8	8.5	8.7	28.7
Polish	—	—	—	3.3	2.7	.5	5.0	5.6	1.4	5.0	4.9	1.6	4.8	4.3	1.5
Scandinavian	4.0	1.5	.1	3.5	3.8	1.6	3.8	4.5	2.2	3.2	4.2	2.0	3.3	3.6	1.8
Jewish	.5	.6	—	6.2	2.4	1.1	6.0	2.7	1.5	4.6	2.4	1.3	3.6	2.0	1.4
Other	9.5	16.9	4.8	12.9	10.1	6.0	5.8	12.0	8.0	7.0	13.6	9.2	13.5	12.5	13.2
Total Population (000's)	8	62	4325	156	461	7207	293	700	10377	354	777	14009	540	988	21568

TABLE 2*
Winnipeg: Birthplace of Population 1881-1961

Year	% Canadian Born	% Foreign Born
1881	67.5	32.5
1911	45.5	54.5
1931	57.7	42.3
1961	77.8	22.2

*Source: *Census of Canada*, various dates.

tended to congregate near people of the same background in Old Kildonan, East Kildonan, West Kildonan, Transcona and Brooklands, as well as in the North End, whilst a large proportion of the Jewish group is in the North End and West Kildonan. There are, however, several exceptions to this general pattern. Since 1951, there has been a large movement of Jewish people from north Winnipeg to River Heights south of the Assiniboine River, and recent German immigrants have tended to locate in Winnipeg Centre—West End (Figs. 4 and 5).

The main group, the British one, is found throughout the city, but relatively few of them live in north Winnipeg and the older parts of St. Boniface (Fig. 3).

In summary, although ethnic differences are disappearing, the ties of common origin are still strong enough to attract people to areas of the city where others of the same background are concentrated.

Socio-Economic Areas

There are considerable social and economic variations within Winnipeg. In general, the poorest economic area, with average family incomes ranging between \$3,500-\$7,600, is the North End (Fig. 6). A considerable proportion of the people in this area are central and eastern Europeans who settled in the area many years ago. To an increasing extent, however, the poorest and most run-down neighbourhoods in this general area are becoming inhabited in turn by native Indians and Métis. Many of them, because of their earlier educational and cultural environment have had difficulty in adjusting to city life, and face, among other problems, that of finding employment. There were 6,415 Indians in Metropolitan Winnipeg in 1970, of which over three-quarters were in central Winnipeg, particularly the North End. The number of Métis is not precisely known, but most of them are found in much the same general areas as the Indians.

Outside of the North End, the poorest areas of the city are generally found near the city centre. Many of these were once good residential areas, but the homes have deteriorated with time, the lots often are small, and boarding houses are common. Recent immigrants such as Germans, Portuguese, Italians and Asian Indians have tended to concentrate in such areas, e.g. in the vicinity of the University of Winnipeg.

Income and housing improves towards the suburbs, where middle class residences predominate. The highest social classes and largest income families are found in Tuxedo. There the average family income was \$31,369 in 1970, which was far above the next highest area (between

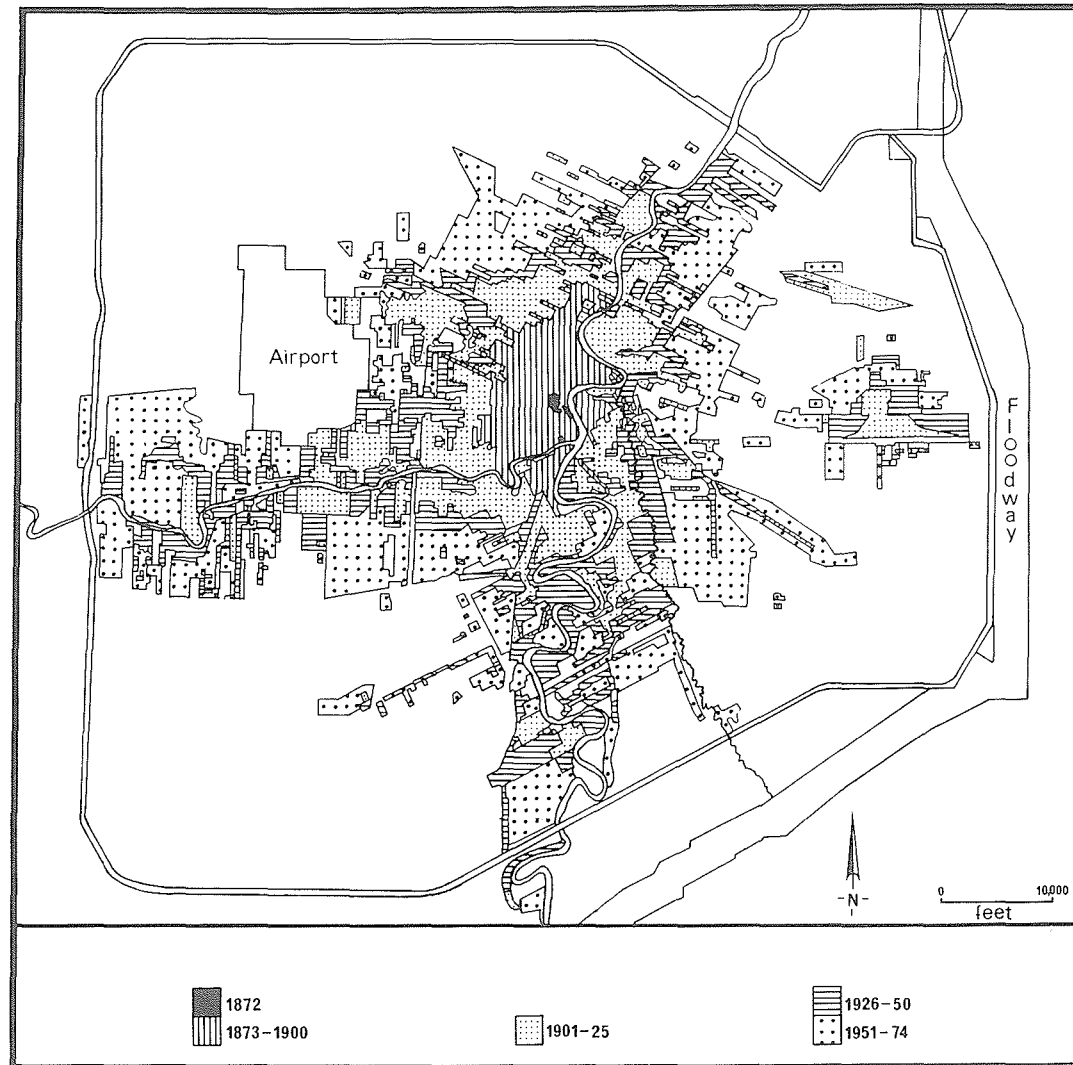
Waverley and Kenaston, Corydon and Mathers in River Heights) where it was \$18,232. The British ethnic group is over-represented in the higher income areas, but many second and third generation central Europeans now live in wealthy suburbs of West and East Kildonan, and River Heights.

One final note is that this general pattern of the central city being relatively poor is being altered by the construction in the downtown area of high rise, medium to high rental apartment blocks.

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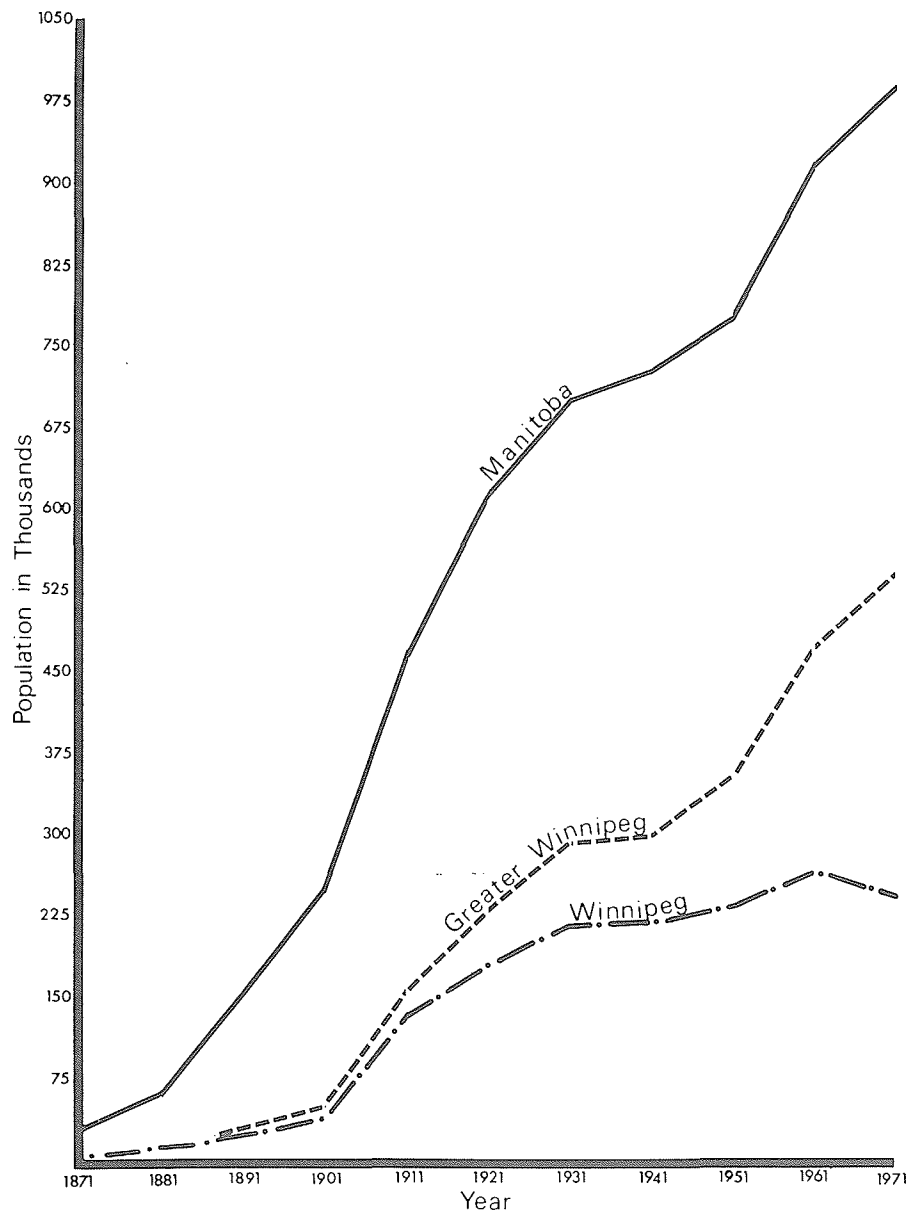
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FIGURE 1
GROWTH OF WINNIPEG
1872-1974



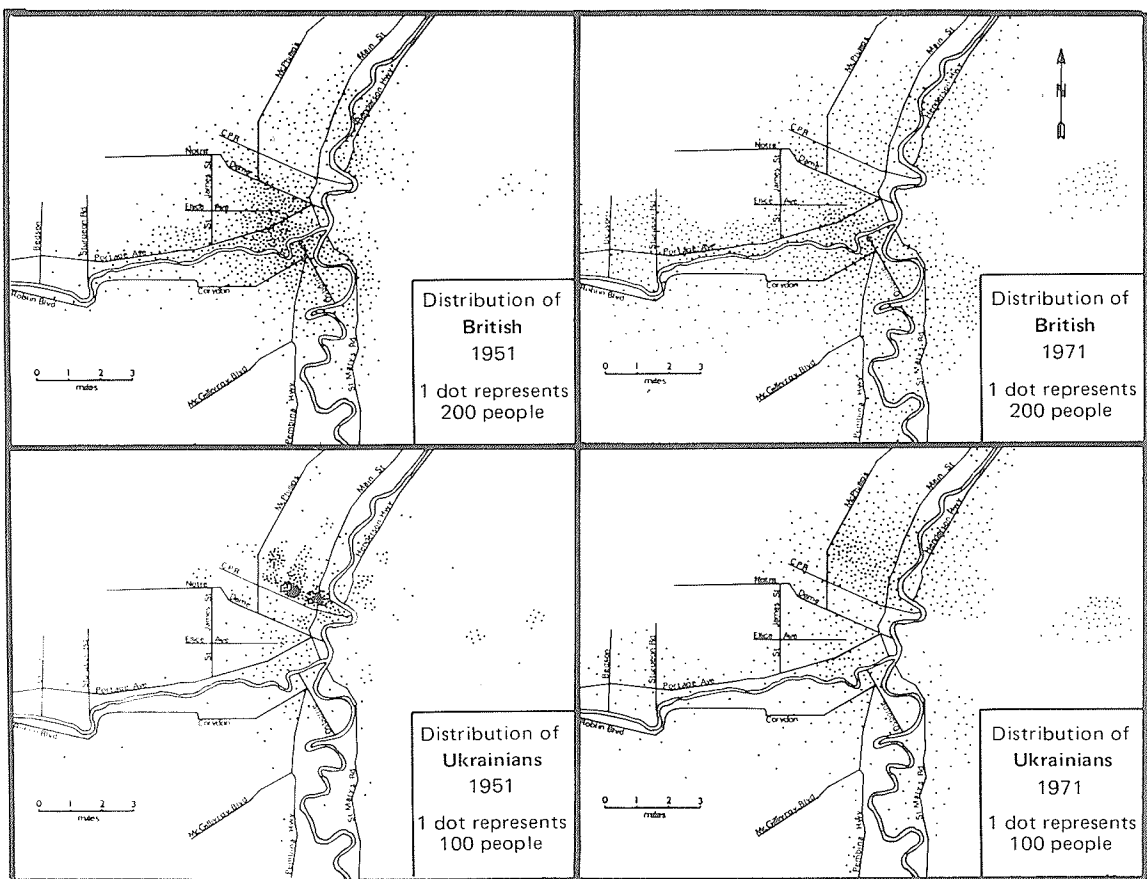
Source: The Metropolitan Development Plan, Plate 4 and Winnipeg City Map, 1974-75.

FIGURE 2
POPULATION GROWTH OF WINNIPEG AND MANITOBA
1871-1971



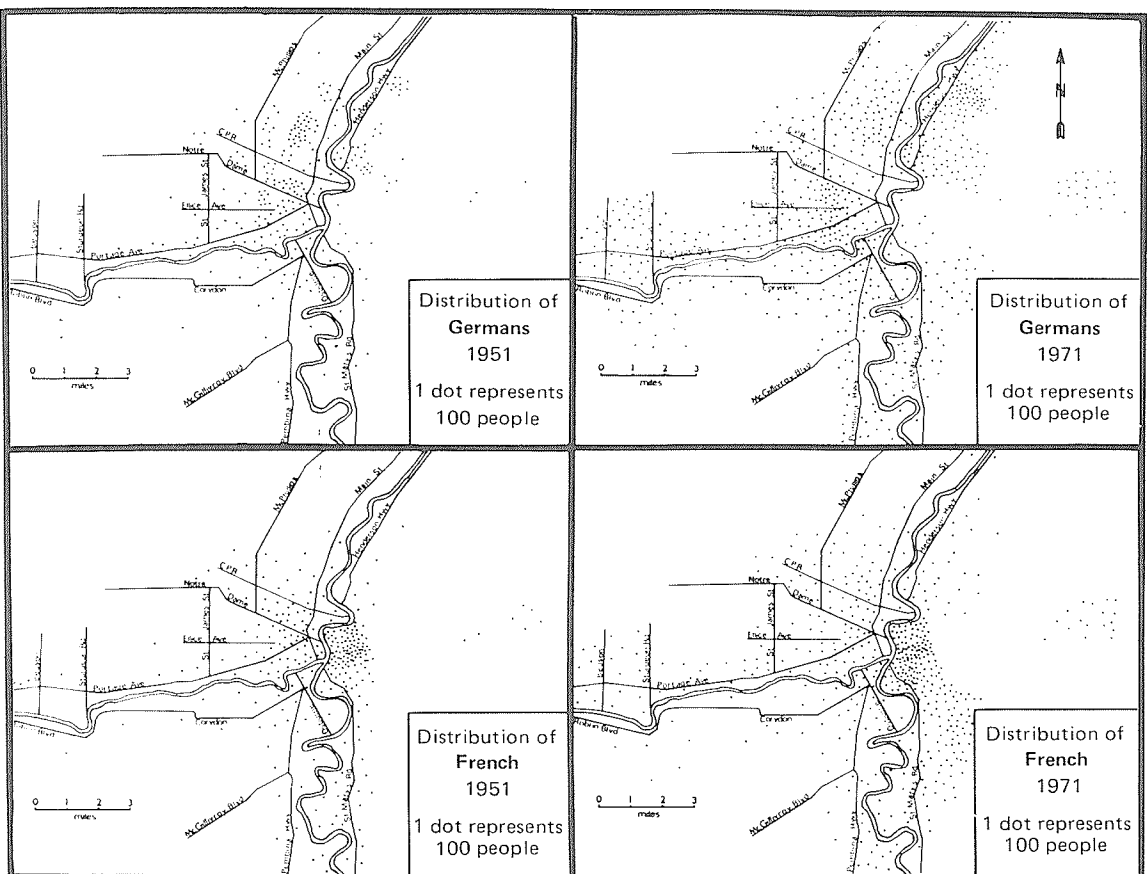
Source: Census of Canada, various dates.

FIGURE 3
DISTRIBUTION OF ETHNIC GROUPS IN WINNIPEG
1951 AND 1971
BRITISH AND UKRAINIAN



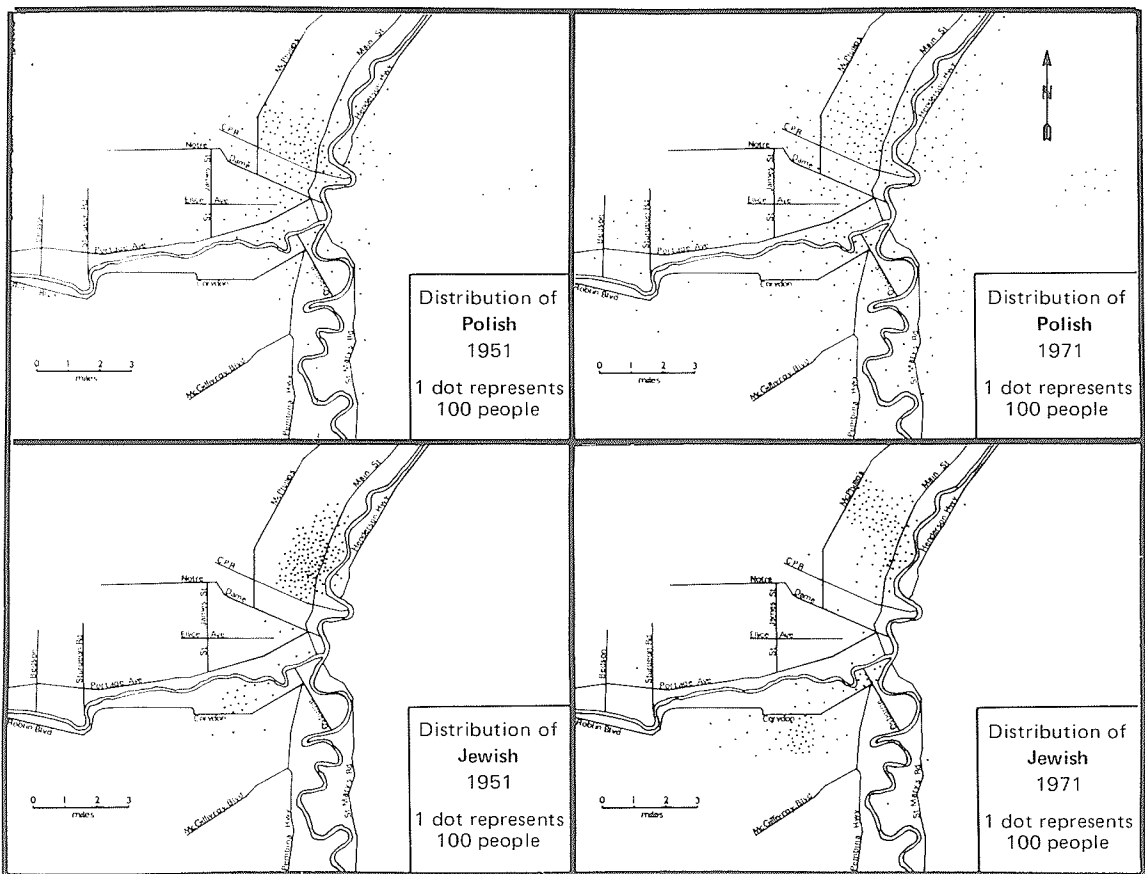
Source: Census of Canada 1951 and 1971, Census Tract Series.

FIGURE 4
DISTRIBUTION OF ETHNIC GROUPS IN WINNIPEG
1951 AND 1971
GERMAN AND FRENCH



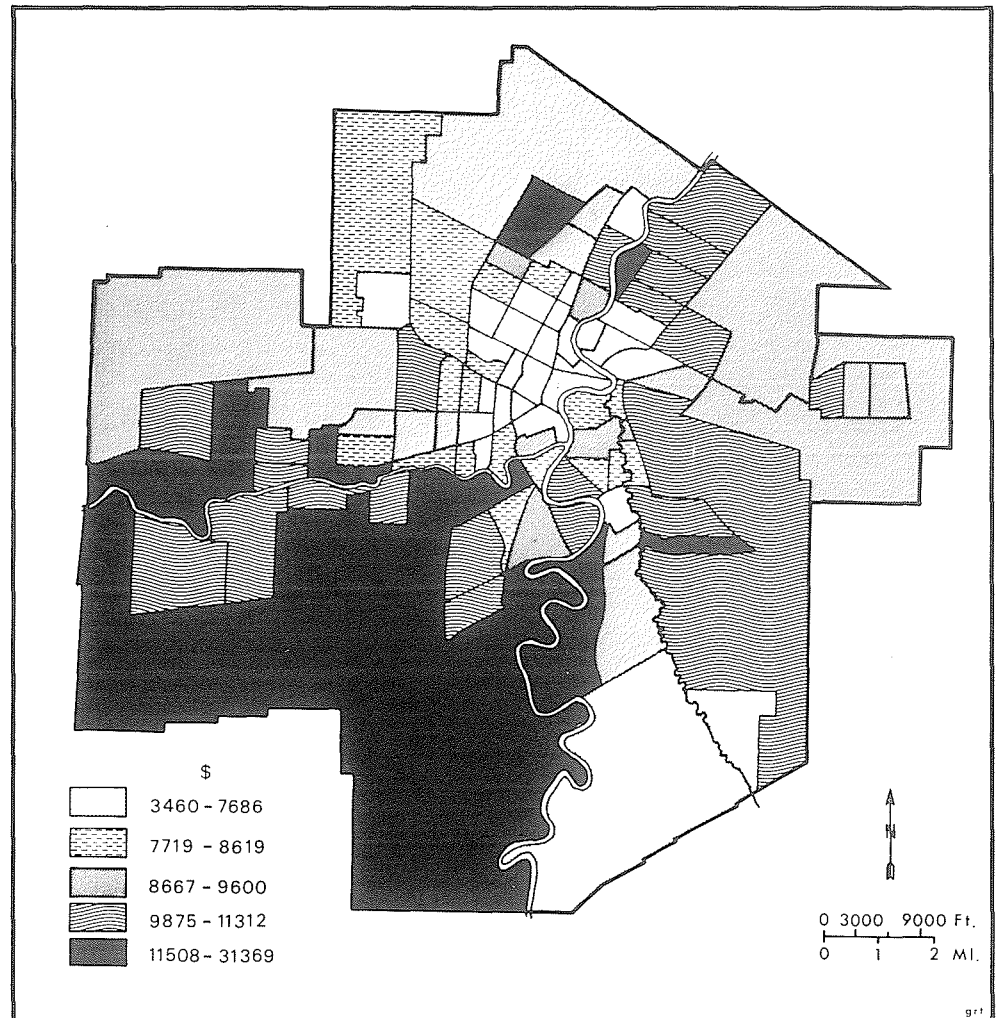
Source: Census of Canada 1951 and 1971, Census Tract Series.

FIGURE 5
DISTRIBUTION OF ETHNIC GROUPS IN WINNIPEG
1951 AND 1971
POLISH AND JEWISH



Source: Census of Canada 1951 and 1971, Census Tract Series.

FIGURE 6
AVERAGE FAMILY INCOME IN WINNIPEG
(By Census Tract)
1970



Source: Census of Canada (unpublished data obtained from Statistics Canada Regional Office, Winnipeg).

Winnipeg: A City in the Making[†]

by T. R. Weir*

Most metropolitan cities in North America are characterized by a fragmented structure of administrative areas. Such fragmentation is usually reflected in the existence of a central city plus a number of separate municipalities ranged around its periphery. So accepted has this become in American urban government that the U.S. Census has two major groupings: urban and suburban. It is now a fact of life that 31 percent of the American people live in urban core areas as compared to 37 percent in suburban areas. Each administrative unit has its peculiar advantages in respect to the others — some people being fortunate that they live in one particular municipality rather than another.

Remedial action in the form of new administrative structures for urban centres has been attempted but have been little more than props to hold up an immensely complicated system of archaic forms entrenched in jealously guarded past agreements. As cities grow larger and more complex a second tier of government is superimposed on the existing municipal structures — Metropolitan Toronto or the Montreal Urban Community are good examples. Frequently this introduces further conflict, especially over the matter of finances.

In contrast with these experiences Greater Winnipeg is an example of evolution from fragmentation to a second-tier government under Metro, to its present and presumably final form known as Unicity. Besides developing a unique administrative structure, its areal extent has been greatly altered through complete amalgamation of its parts until it is now the only large city in Canada which has progressed through the stage of fragmentation to one area with a single administration for its entire 228 square miles.

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The Evolution of Greater Winnipeg

To understand how the small village at the forks of the Red and Assiniboine Rivers evolved to form the complex of administrative units eventually to comprise Greater Winnipeg, one must commence with the "parish". Religious affiliation was the major reason for the parish, but ethnic and language characteristics were also associated.

St. Boniface was the first parish started in 1818 to minister to the need of the Catholic Métis and white settlers. St. John's was formed two years later to serve adherents of the Anglican Church and as time went on various other parishes were formed, each centred on a church. By 1870 when the Red River Colony entered Confederation there were twenty such divisions. Their names and boundaries left an impress on the system of rural municipalities which later emerged.

Since the river at this early period was the main street of communication, the homes and buildings of the settlers were arranged along it. Parish boundaries, therefore, straddled the river, extending back for approximately two miles. When the Hudson's Bay Company undertook its survey of river lots first established by the Selkirk settlers, it set up base-lines parallel to the river and about two miles back from it. The lots were then surveyed at right angles to the base-lines which later became important roads such as McPhillips Street and Bird's Hill Road. The parish was superimposed on the river-lot system, and from the parish unit, the *county* and then the *municipality* subsequently emerged.

When the Red River Colony was admitted to Confederation the parish became the electoral district from which members were sent to the Manitoba legislature, created in 1870, as well as the House of Commons in Ottawa. From the twenty parishes extant in 1870, twenty-four provincial electoral districts were created along with four federal constituencies (Fig. 1). Of the latter, the District of Selkirk contained eight parishes besides the town of Winnipeg. In 1880 the County of Selkirk, as originally constituted, comprised, besides Winnipeg, six rural municipalities: St. Paul and Kildonan to the north of Winnipeg, Assiniboia to the west and south, St. Boniface to the east, and Cartier and St. Norbert farther to the south (Fig. 2). By 1960, just before Metro government was established, there had evolved seventeen administrative units comprising in whole or in part the area of Greater Winnipeg (Fig. 1).

The stages by which various administrative structures finally evolved to eventually make necessary a second tier of administrative authority are outlined in the accompanying maps. Underlying the extensive

boundary changes over the ninety-eight year period from Winnipeg's incorporation (1873) to the emergence of Unicity (1971) were powerful economic forces which resulted in the growth of population and the consequent expansion of the city far beyond its embryonic form at the corner of Portage Avenue and Main Street.

The coming of the railroad was a key event. The decision of C.P.R. to make Winnipeg, rather than Selkirk, the point of crossing of the Red River, followed by its decision to establish there its principal yards for Western Canada, was attended by a frantic influx of settlers hungry for free land. A boom followed and as a result the city annexed large areas on all sides in the period 1880-1882 (Fig. 3). To the north it pressed into the municipality of Kildonan; to the west as well as to the south it secured large chunks of Assiniboia; and to the east it acquired a parcel of land from St. Boniface, lying west of the Red River. It was now a city of 8,000 with boundaries extending to Inkster Boulevard on the north, St. James Street on the west and Parker (Jubilee) Street on the south. Across the Red River lay St. Boniface, originally a parish, later a municipality and in 1883 an incorporated town (Fig. 4). In this year, to avoid confusion, the municipality of St. Boniface, changed its name to St. Vital, leaving the town to carry on in the French tradition. In 1904 Winnipeg acquired one of its most valuable assets — four hundred acres of land from the rural municipality of Assiniboia to be set apart as a municipal park in perpetuity.

The next major annexation came in 1906 when, to the northeast of Winnipeg, the district of Elmwood was added, necessitating the building of a bridge across the Red River (Fig. 3). A similar addition was effected in 1907 along the northwest boundary when a group of dissatisfied urban residents within rural Kildonan joined the city. Meantime, urban settlement was going on within the original municipalities that had surrounded Winnipeg in 1880. Until 1900 most of Winnipeg's land use and functions had been contained within its administrative boundaries, but thereafter a great deal of both commercial and residential construction occurred outside the city limits.

Much of this regrouping was due to the tensions between town and country. As the town expanded into farming areas, it made demands on the rural municipality for services such as surfaced roads, sewers and water. To resolve these tensions a process of division proceeded whereby the purely rural functions were separated from the urban by a redistribution of municipal boundaries and a new group of urban-centred municipal divisions emerged. While Elmwood was the obvious first case in point, the demand of other urban sectors within rural

municipalities soon followed as roads and bridges were built across rivers and as a system of street railways pressed far beyond the continuously built-up area. Added to this was the persistent aggravation of high land values and high taxes within the limits of Metropolitan Winnipeg while cheap land and lower taxes beckoned urban expansion into the adjacent rural municipalities.

Originally the large rural municipalities, following the parish boundary system, extended across the main rivers. From early times the Red and Assiniboine had been unifying elements providing water, transportation and wood along their banks. Long after the rivers ceased to be unifying features, inertia kept the municipal divisions intact. But as urbanization increased so did the disadvantages of having municipalities straddle rivers. Bridges were few and costly, so the inevitable breakup of the large units occurred using the rivers as boundaries (Fig. 5).

This is illustrated in the case of the rural municipality (R.M.) of Fort Garry carved out of St. Vital in 1912 and again in the case of R.M. Kildonan which, in 1914, became East and West Kildonan. From R.M. Assiniboia, Charleswood was formed south of the Assiniboine River in 1913. The same division occurred in the former municipality of St. Paul. Two minor annexations were made just prior to the First World War: a narrow strip of land parallel to Tuxedo, and land for a second city park to be known as Kildonan (Fig. 6). In 1914 an extensive acquisition of land was made by the city of St. Boniface. By 1915, eleven administrative units had arisen from the six of 1880. Among them was the town of Transcona, a detached urban place depending on the location of railway shops and yards (Fig. 5). Tuxedo was formed for entirely different reasons, mainly the desire of the more affluent to create a high-class residential district free from the burdensome taxes of Winnipeg. By 1915 the population of the city proper had grown to 150,000 while another 7,500 sprawled beyond its limits into adjacent rural municipalities.

The final interval of political boundary changes from the end of the First World War to the beginning of metro-government was long but without significance. In all, only four occurred. The urbanized corner of R.M. Rosser became the village of Brooklands, a working-class suburb (Fig. 7). The spill-over from west Winnipeg into R. M. Assiniboia gave rise to the creation of St. James, a further case of rural-urban conflict over the provision of services. Old Kildonan broke away from West Kildonan for the same reason, and rural North Kildonan separated from urbanized East Kildonan. By 1924 only the two southerly municipalities of Fort Garry and St. Vital had any substantial portions remaining which

were essentially rural. By 1960 Greater Winnipeg had evolved from rural municipalities to sixteen suburban units peripheral to a core city. There was little unity in such diversity. The stage was now set for a second level of government.

Metropolitan Winnipeg 1960-1971

It became apparent to the legislature of the early fifties that the multiplicity of administrative areas for what was functionally a single urban community resulted in many inequities. In consideration of these, three primary needs became apparent: (1) comprehensive planning; (2) more advantageous financing; and (3) equitable sharing in the cost of services.

In respect to planning, it was apparent that although Winnipeg was growing slowly, at the rate of three percent per year it would have a population in 1981 of 700,000. When this was translated into houses, apartments, factories, warehouses, office buildings and shopping centres it immediately became apparent that planning should be comprehensive and undertaken by a single authority. Coincident with land-use planning is the provision, on a metropolitan basis, for associated services such as water supply, garbage and sewage disposal, fire and police protection, arterial traffic routes, public transit, health and welfare. Here was a job too great for sixteen different authorities, each jealous of its own advantage and concerned first with its own problems. As for the second need, financing, it was obvious that this could be arranged at lower cost by a single authority.

In the matter of equitable sharing of the costs of services provided, the central city of Winnipeg had long been at a disadvantage compared to the fringing municipalities. In 1956 the per capita expenditure of Winnipeg City was \$98.40, whereas the average suburban figure was \$59.46. This disparity it was argued, could be explained in three ways:—

(1) Winnipeg contained many industrial firms demanding special services in the form of fire and police protection and waste disposal on a scale considerably greater than the municipalities.

(2) There were large deteriorating residential areas in Winnipeg requiring physical renewal and presenting sociological problems associated with low incomes, unemployment, welfare, delinquency and health needs.

(3) Winnipeg bore a disproportionate share of the cost of certain community-wide services including hospitals, major parks, and recreational and cultural facilities.

The maintenance of principal thoroughfares to the city centre, where many suburban people work and shop, was borne solely by Winnipeg until 1960. Until then all the bridges and overpasses had been built by the core city. While local municipalities had their own police forces and fire departments, Winnipeg was obliged to maintain much larger staffs and more equipment partly for the benefit of the metropolitan region. While the disparity between Winnipeg and the suburbs was most obvious, inequities also existed between the sixteen suburban units. The tax base varied considerably as well as the kinds of services demanded by the residents.

In consideration of its primary needs, the Greater Winnipeg Investigating Committee was set up by Order-in-Council to define, among other things, the geographical area of Greater Winnipeg to be known as the Metropolitan Area and to recommend an authority which would have jurisdiction over municipal services. Its obvious concern centred on the coordination and efficiency of municipal, intermunicipal and public school services common to the metropolitan area. Accordingly the commission made an exhaustive study of all aspects of administration pertaining to the units that comprised the metropolitan area. In its report released in 1959, the Commission recommended consolidation of the following areas, heretofore independent (Fig. 8):

1. West Kildonan, Old Kildonan and West St. Paul (15, 8, 16) to be amalgamated under West Kildonan;
2. the urbanized portion of Rosser (9) and the tiny village of Brooklands (2) to be annexed to Winnipeg;
- (3) large parts of Rosser (9) and Assiniboia (1) to be amalgamated with St. James (11) to become an enlarged St. James;
4. Charleswood (3) and the residential area of Tuxedo (14) to be annexed to Winnipeg;
5. the industrial area of south Tuxedo to become a part of Fort Garry (6);
6. portions of St. Vital (12) and Transcona (13) to be added to St. Boniface (10);
7. Transcona to be enlarged by taking in parts of adjacent R.M. Springfield and North Kildonan (7);
8. East Kildonan (4), North Kildonan (7) and East St. Paul (5) to be amalgamated to form East Kildonan.

By these recommendations eight areal units with their corresponding administrations would emerge besides an enlarged city of Winnipeg. In this way the number of administrative units would be reduced by one-half but, unfortunately, these suggestions were never acted upon.

In considering that part of its mandate concerned with defining one authority or more responsible for administering the affairs of the metro area as a whole, the Commission recognized three alternatives. These were (1) to strengthen the authority of the seven intermunicipal boards, each having jurisdiction over a particular service; (2) to bring several essential services under a single authority over the area as a whole, and leave the remainder to the municipalities; or (3) to eliminate municipalities and bring all services under a single authority.

In considering the first alternative, that of maintaining intermunicipal boards with jurisdiction over one city-wide service such as water supply, it was obvious that the problem lay in a lack of coordination between the services by a single authority. Then, too, the existing intermunicipal boards, which were reasonably efficient in themselves, were not elected by the citizens at large. The members had divided interests between what favoured their own municipality and what was best for the metropolitan area. The Commission, therefore, concluded that "proper municipal administration of the Greater Winnipeg Community requires a co-ordinated approach, so that each individual public service is seen, not as unique and independent but as part of the overall effort to provide for the general well-being of the community."¹

The second alternative was anticipated from the criticism of the first, namely, "that a central coordinating authority be established for a number of services."² This meant a single authority which could speak and act for Greater Winnipeg as a whole and was, with embellishments, the final choice of the Commission.

The third possibility was, in a sense, a variation of the second. Instead of the authority taking the form of a metropolitan council concerned only with certain services throughout the urban region, it could become a kind of city council, with all the municipalities being amalgamated into one large city. In this way all services would come under a single authority — the *unicity* concept.

In 1960 the Manitoba Government dissolved the intermunicipal boards which heretofore had independently exercised jurisdiction over certain services and vested their functions in the Metropolitan Corporation of Greater Winnipeg, second of its kind in Canada (Fig. 9). The new Metro Council was charged with the preparation of a development plan for the area as a whole. In addition, certain functions closely related to the plan became a direct responsibility of the Corporation, namely, zoning, major streets and bridges, traffic control, transit, sewer and water, and the establishment and maintenance of major parks and garbage

¹For this and succeeding footnotes, see end of article.

disposal. The Council was also charged to make a uniform assessment of all property for purposes of local taxation and later assumed control of land along rivers and streams.

The areal extent of the Corporation's jurisdiction included not only the 166 square miles of urban area but an additional outer zone comprising a total of 493 square miles. Instead of creating eight municipalities it departed from the Investigating Committee's Report by recognizing twelve areas (besides inner Winnipeg) which continued to exercise authority over purely local matters not contained within the mandate of Metro (Fig. 9). These were the cities of Winnipeg, St. James-Assiniboia (an amalgamation), St. Boniface, St. Vital, East Kildonan, West Kildonan and Transcona, the suburban municipalities of Old Kildonan and North Kildonan, the town of Tuxedo, and the rural municipalities of Charleswood and Fort Garry. The outer zone included parts of seven additional rural municipalities.

Metro Council members were elected by citizens from ten electoral divisions, each having one representative on Council. Metro raised funds, however, by assessing the twelve municipal units, a subsequent source of friction. While the citizens who elected the Council were the same as those who paid the additional taxes, Metro was only indirectly responsible to them. Metropolitan Winnipeg was thereby served by a two-tier governmental structure for nearly twelve years.

Almost from its commencement Metro Government in Greater Winnipeg was fraught with problems, one of the most vexing being its power to impose a levy on municipalities without their having any control over the amount. In the end the municipalities had to extract from the taxpayer an amount for local government for which they were directly answerable, and another amount for Metro over which they had no control. The municipalities were without representation on the Metro Council, although the Investigating Committee had recommended it, and an annual consultative meeting between the two tiers of government led to "useless confrontation and often bitter criticism." Further causes of friction lay in Winnipeg's vehement opposition to dual government and the unrelieved fragmentation which continued under Metro. Only one amalgamation recommended by the Investigating Committee materialized, namely, the union of St. James and Assiniboia and the village of Brooklands into a single unit. East and West St. Paul were excluded from Metro, thereby leaving the fragmentation almost as complete as before. Many services which seemed obviously metropolitan in nature, such as police and fire, still remained within the local jurisdiction.

Notwithstanding its embattled position Metro made some positive contributions to Greater Winnipeg during the sixties. In the field of planning it produced for the first time a master blueprint for the Winnipeg region known as the Greater Winnipeg Development Plan. In the area of transportation, it laid out new thoroughfares, built several bridges and upgraded the regional transit system. It coordinated the use and distribution of water and the disposal of sewage. It equalized land assessment throughout Greater Winnipeg, transferring some of the tax burden to the suburbs. It enhanced the appearance of the city by enlarging its parks, landscaping its streets and building playgrounds. In effect, Metro proved that regional government is possible and Winnipeg's perennial mayor has used much of Metro's administrative machinery to run Unicity.

Unicity 1972 —

One of the first campaign promises to receive attention by the newly-elected New Democratic Party was that of total amalgamation of the twelve municipal governments comprising Greater Winnipeg. A white paper³ on the subject was published in December 1970, followed by a series of public discussions held in various parts of the city over a period of several months. The suburbs in particular were highly critical of the proposal especially since it would remove obvious advantages which they had to some extent enjoyed at the expense of the inner city. Nevertheless, the government imposed the new City of Winnipeg Act, without referendum, on July 30, 1971, which brought Unicity into being on January 1, 1972.

By eliminating the disadvantages of fragmentation through amalgamation of the twelve municipal communities, the Provincial Government was now faced with the problem of providing adequate representation for the people at the local level. Can a city be large and yet retain the essential element of citizen participation? To answer this, the Act created thirteen community committees to provide for citizen involvement at the "grass roots". At the same time the Act created a Council of 50 members representing 50 wards, each electing one member from a constituency of approximately 10,000 people. Membership in each community committee consists of three to six councillors from a corresponding number of wards (Fig. 10). Attached to each community committee is a resident advisory group elected at an annual meeting of area residents. Six of the thirteen committees are located in the former city of Winnipeg now referred to as Inner City. The others correspond

with some of the amalgamations that formerly existed. It was intended that each committee would act as a liaison between the city and its citizens in the discussion of policies, programs, budgets and services. The committee was expected to meet monthly to discuss the affairs of the community and conduct quarterly and annual meetings with citizen participation. This was supposed to be a unique feature, avoiding the inequities of fragmentation that existed under the former systems of government.

The new governmental structure is an effort to blend policy and administration through a committee system. City Council is advised by an *Executive Policy Committee* which in turn is served by three standing bodies dealing with finance, environment and public works. Administration is effected through a *Board of Commissioners* whose membership consists of the Chief Commissioner and three other persons dealing with environment, finance and public works. The Board of Commissioners is directly responsible to the Executive Policy Committee and through that Committee to City Council.

In a little under two years it is too early to pass judgment on the Unicity experiment. Certain portents indicate problems ahead, one of the major ones being the unwieldy size of City Council. Already there is talk of the Legislature reducing the number of Councillors from fifty to a more manageable number. There is a sense of frustration on the part of citizens that, although they have a voice at the Community Committee level, their specific interests will have little chance of consideration at Council level. Sectional and regional differences will in the end be averaged out by the needs of the city as a whole.

While the community budget is intended to allow for community emphasis in terms of particular services, a uniform tax rate will limit the degree to which such individual aspirations can be achieved. Can Unicity remain large administratively and still have that amount of citizen participation which small autonomous municipalities could provide? The question of citizen involvement in the past ten years has become increasingly popular. However, the reorganization of local government in Winnipeg had a dual purpose: to produce uniformity and therefore efficiency, and through community committees to provide greater involvement of the citizen in an advisory way, in the decisions of the councillors. While achieving the former purpose will size make administration less efficient? Whereas citizen contact with administration is desirable, will apathy produce the result that only small activist groups will gain the ear of the elected representatives?

Some critics of Unicity see this ultimately emerging; for the present the eyes of urban administrators are fastened on Winnipeg as the laboratory for testing the viability of the unicity concept.

Footnotes

¹Greater Winnipeg Investigating Commission, *Report and Recommendations*, Vol. 1, Winnipeg, Manitoba, 1959, p. 233.

²*Ibid.*, p. 244.

³"Proposals for Urban Reorganization in the Greater Winnipeg Area," Province of Manitoba, December 1970.

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FIGURE 1
GREATER WINNIPEG AREA
ADMINISTRATIVE STRUCTURES

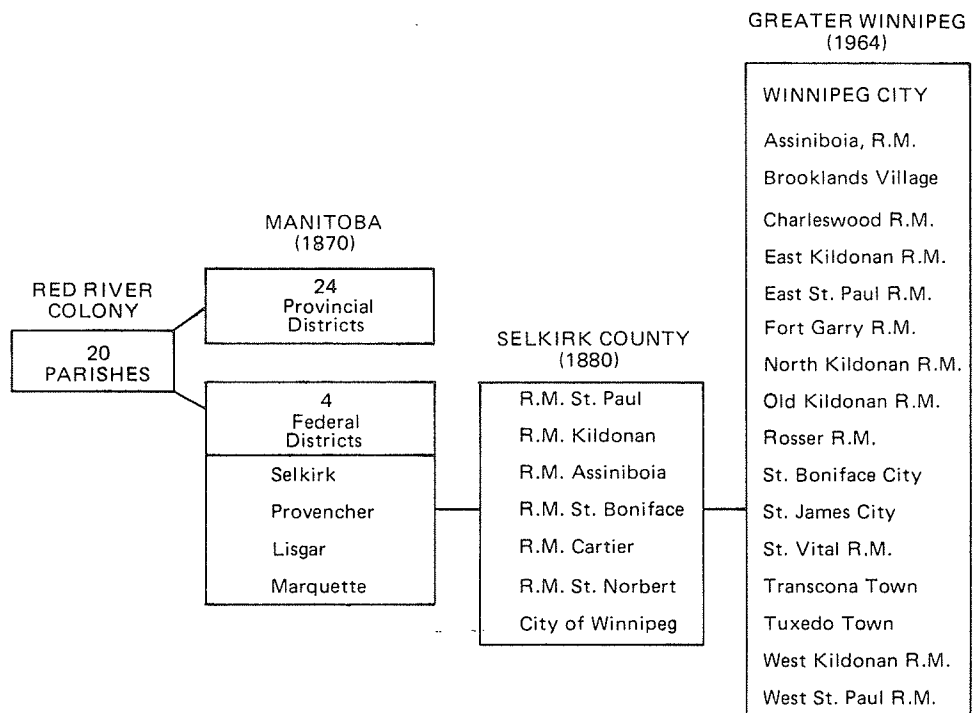


FIGURE 2
CITY OF WINNIPEG AND THE SURROUNDING MUNICIPALITIES
ESTABLISHED 1880

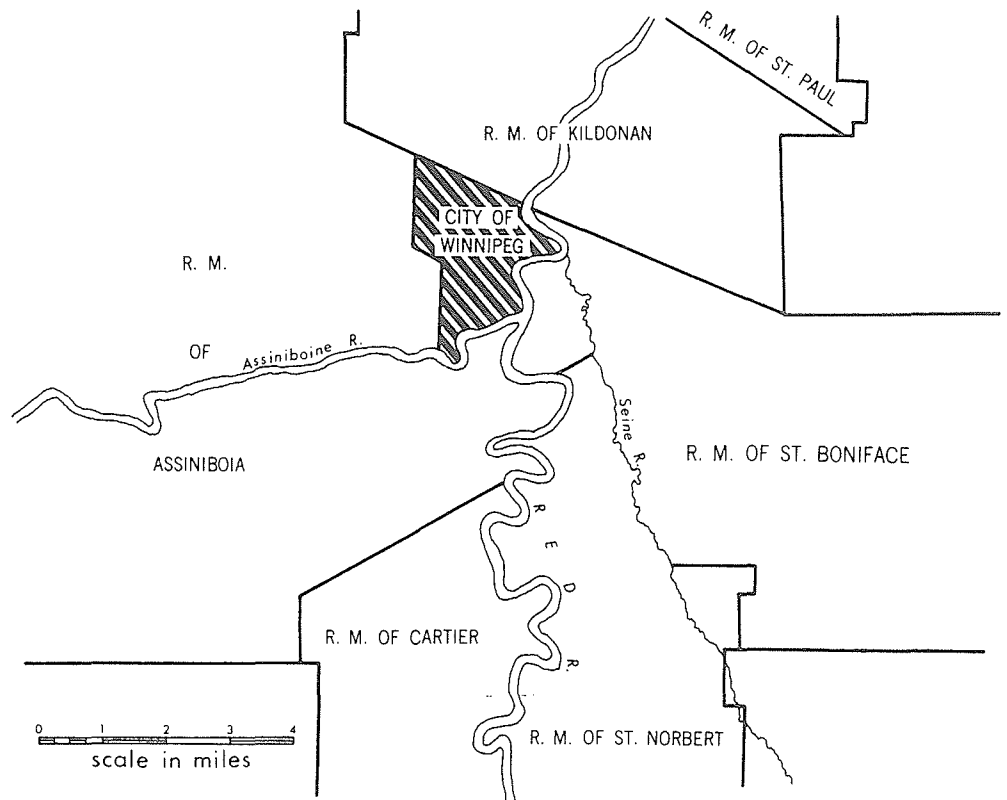


FIGURE 3
ANNEXATIONS BY WINNIPEG
1882-1907

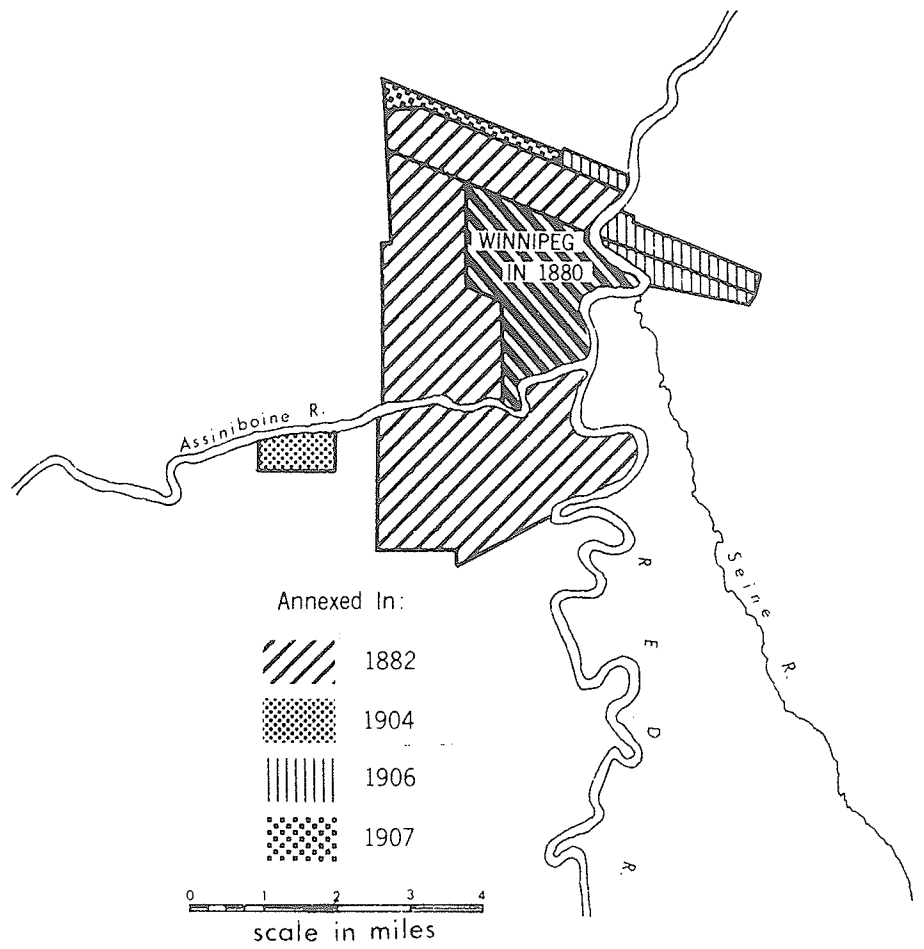
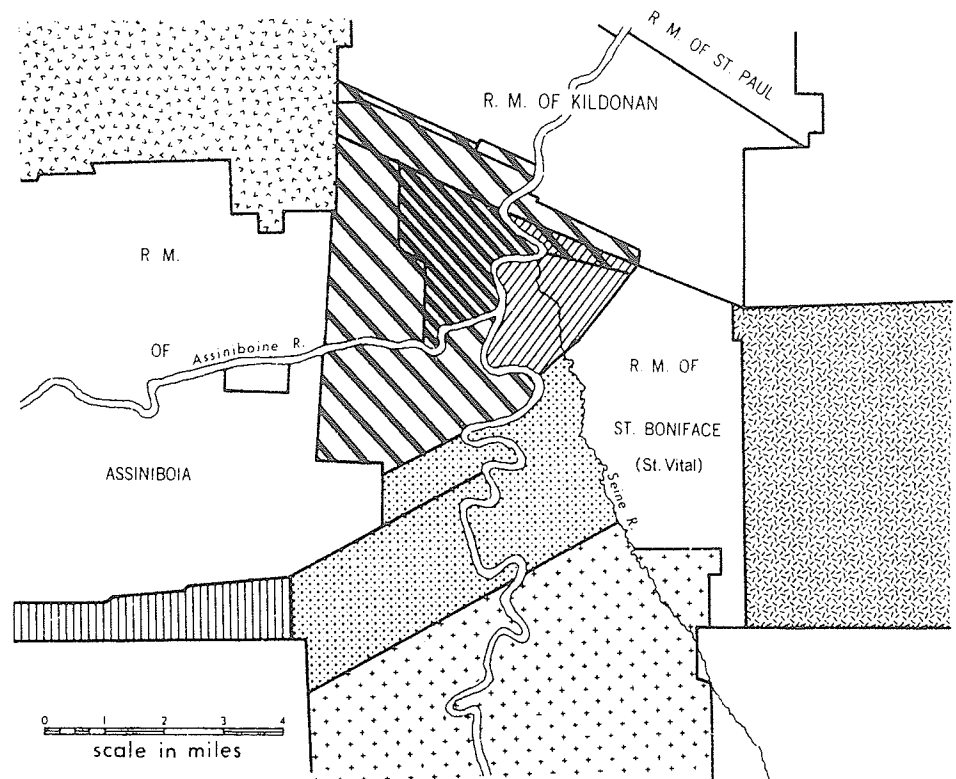






FIGURE 4
ANNEXATIONS IN GREATER WINNIPEG
1880-1907



-  City Of Winnipeg 1880
-  City Of Winnipeg 1907
-  Town Of St. Boniface 1883
-  R. M. Of Ritchot Formed 1890

Annexed By:






-  R. M. Of St. Boniface 1891
(Name changed to St. Vital 1903)
-  R. M. Of Springfield 1891
-  R. M. Of Rosser 1893
-  R. M. Of Kildonan 1895
-  R. M. Of Macdonald 1899

FIGURE 5
POLITICAL UNITS ESTABLISHED
IN GREATER WINNIPEG AREA — 1907-1915

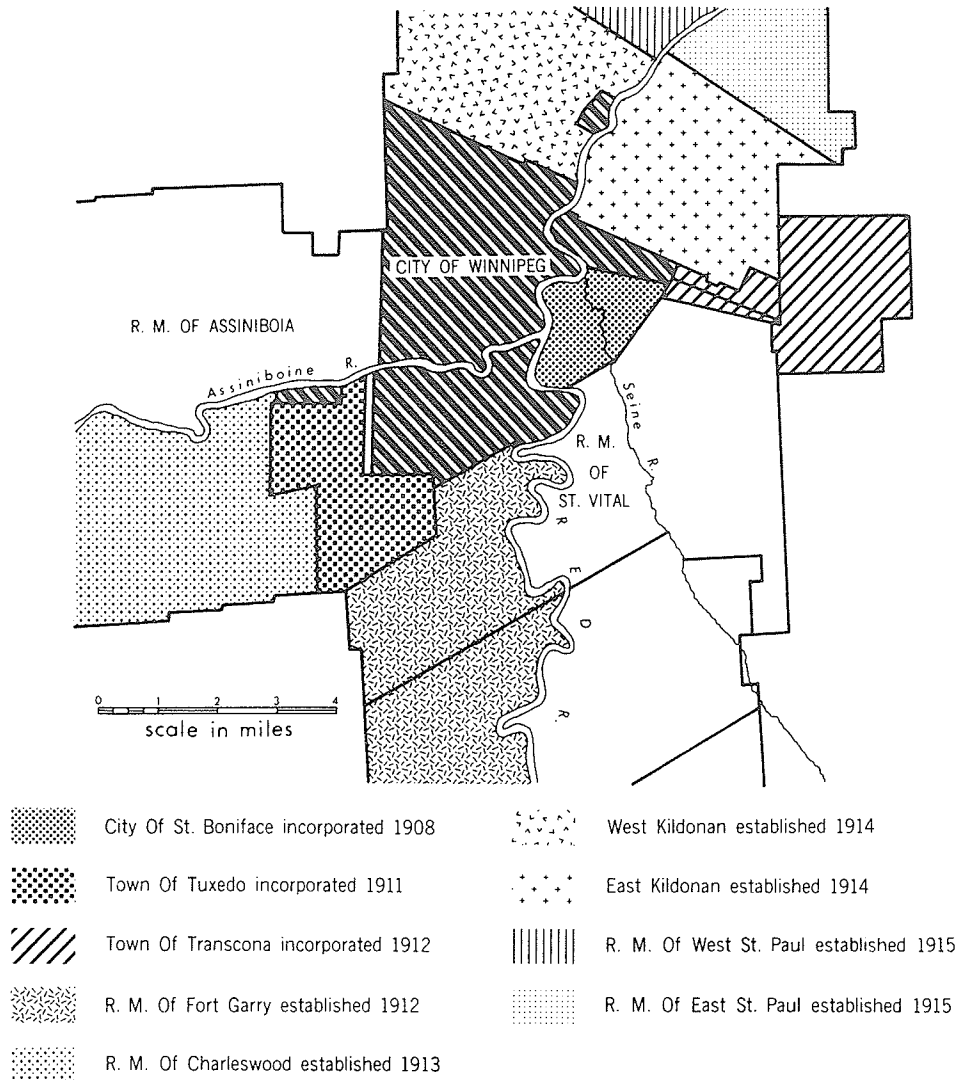


FIGURE 6
ANNEXATIONS TO ESTABLISH POLITICAL UNITS
IN GREATER WINNIPEG – 1907-1915

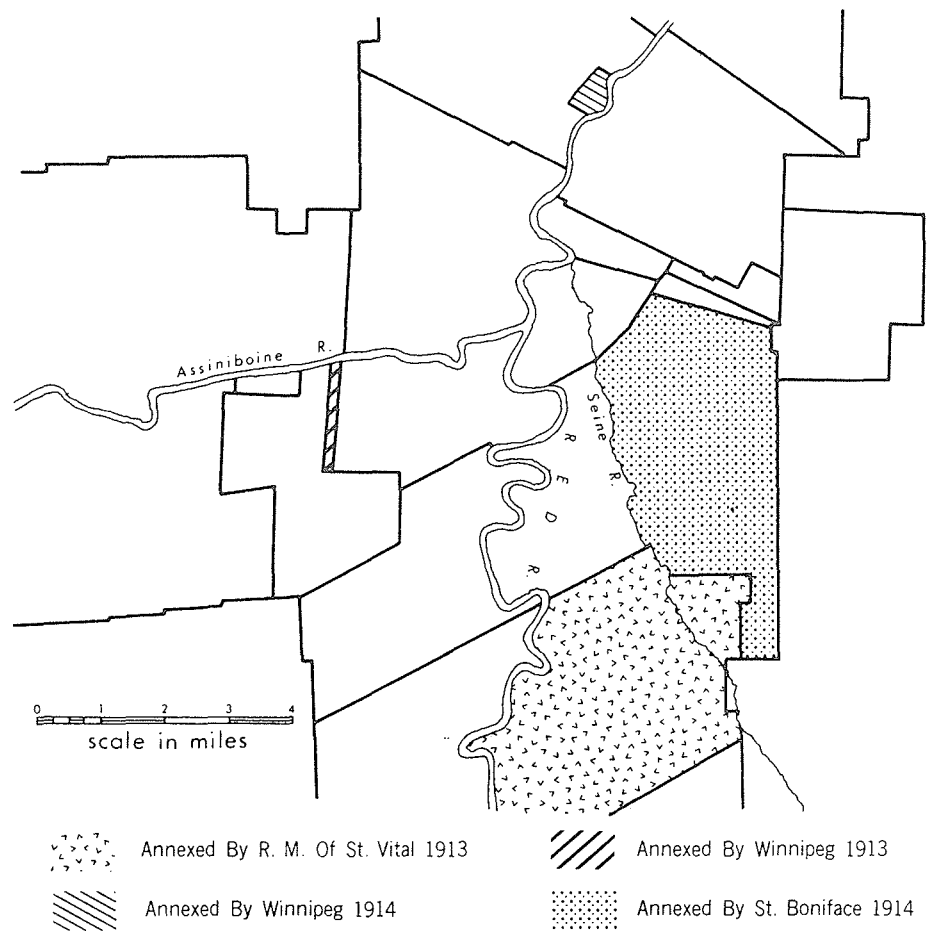
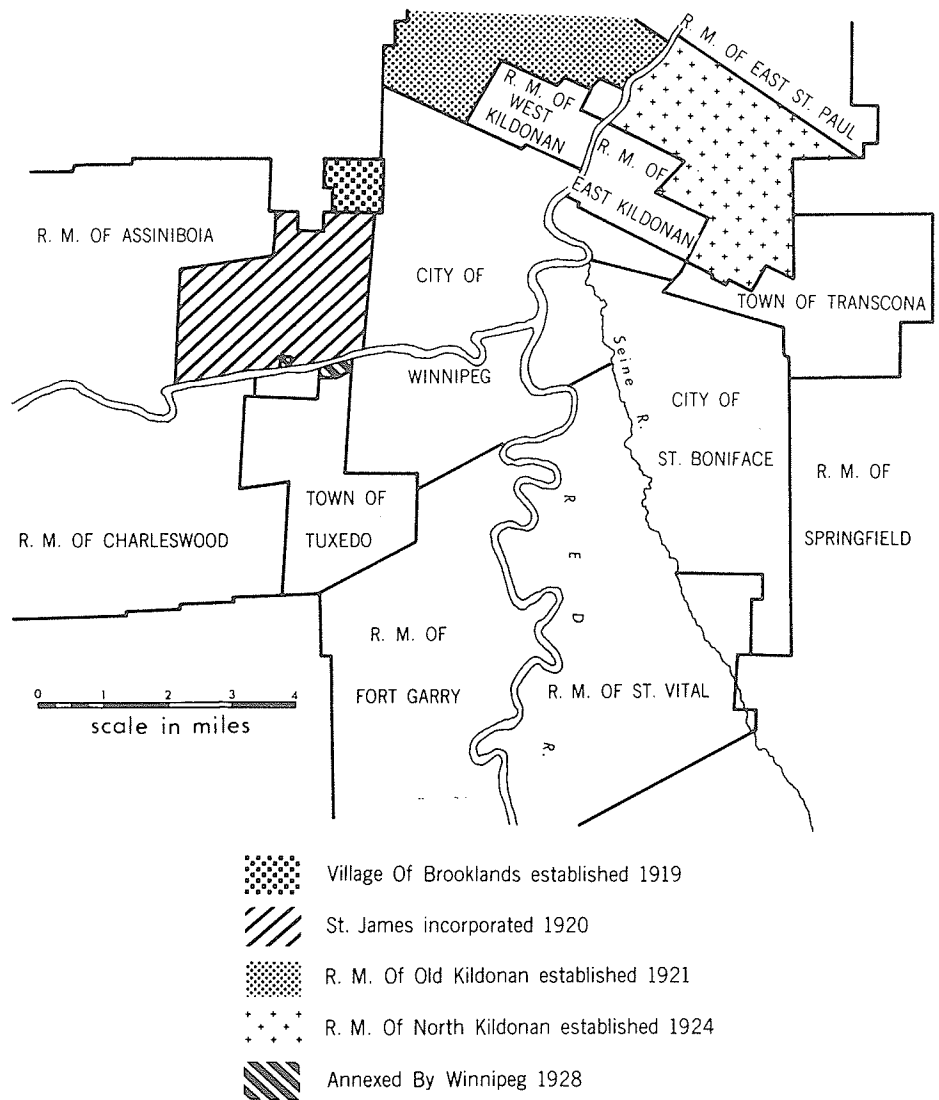


FIGURE 7
POLITICAL UNITS ESTABLISHED
IN GREATER WINNIPEG AREA - 1915-1964



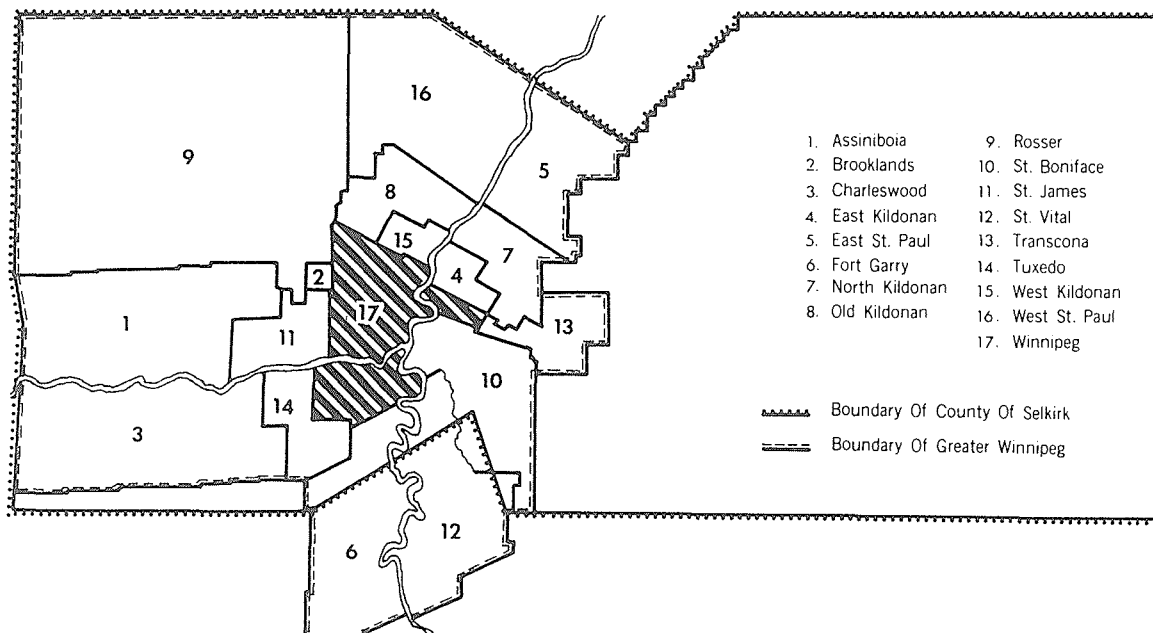
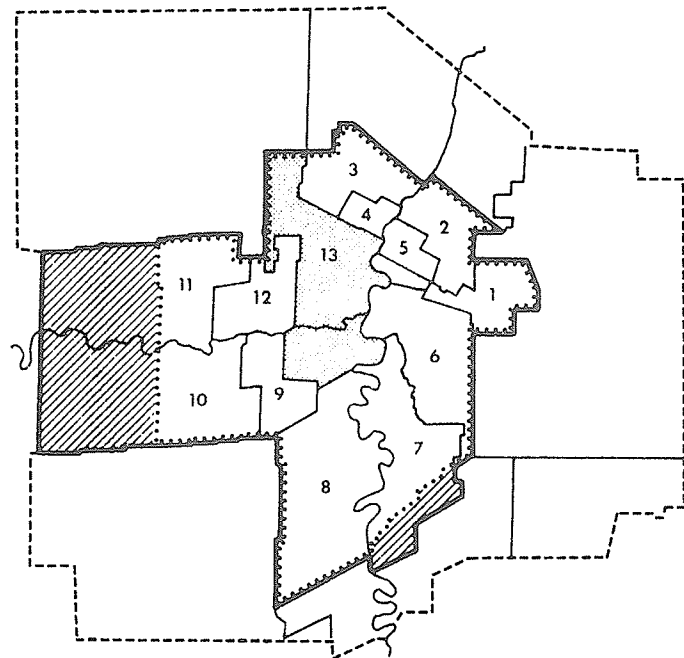


FIGURE 8
POLITICAL UNITS COMPRISING
GREATER WINNIPEG - 1960

FIGURE 9
AREAS COMPRISING METROPOLITAN WINNIPEG (1964)
AND UNICITY (1971)



- | | |
|-------------------|-----------------|
| 1. Transcona | 7. St. Vital |
| 2. North Kildonan | 8. Fort Garry |
| 3. Old Kildonan | 9. Tuxedo |
| 4. West Kildonan | 10. Charleswood |
| 5. East Kildonan | 11. Assiniboia |
| 6. St. Boniface | 12. St. James |
| | 13. Winnipeg |

Boundaries Of Area Under
Former Metropolitan Winnipeg 1970

Unicity Boundary Including Additional Zones

Zone Limit

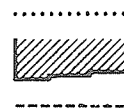
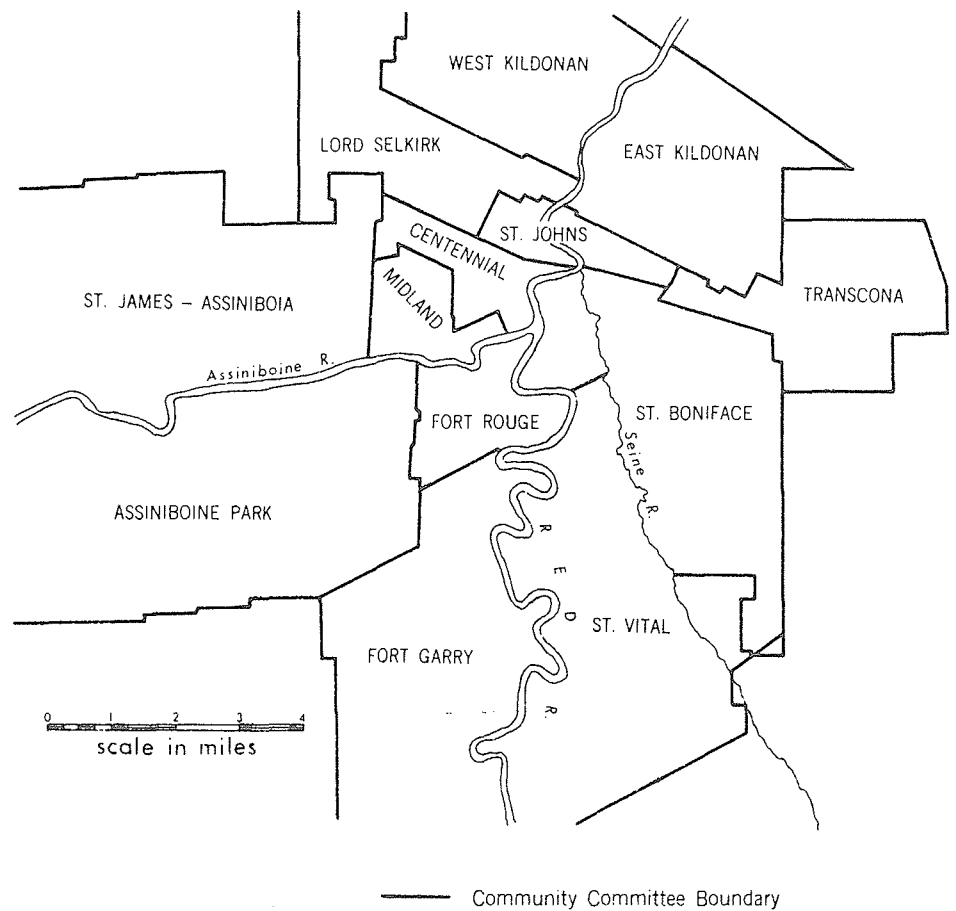


FIGURE 10
THE CITY OF WINNIPEG AND
COMMUNITY COMMITTEE BOUNDARIES – 1971



PART II

The Economic Base

Editor's Comments

In 1971, Winnipeg had an employed labour force of 229,640 people. The labour force was engaged in all types of activities. It is the intention of this section to look at the various activities found in Winnipeg and to provide some theoretical foundations for the structure and changes which have taken and are taking place.

In the social sciences literature extensive reference is made to a city's employment structure as being basic and non-basic. Briefly this theory of urban growth presents the following logic. In order for an urban place to be economically viable it must sell part of its output beyond the borders where it is produced and receive money in return so as to be able to pay for imports of foodstuffs and raw materials necessary for further production.

Basic employment is that number of people engaged in the production of goods and services within a settlement but sold beyond the settlement region. The non-basic employment is that number engaged in the production of goods and services consumed within the region. If a large proportion of the production is basic, revenues will be generated which in turn will result in local growth (Blumenfeld, 1955, pp. 3-14).

Those urban places which are growing will move through distinct stages. The stages and characteristics of growth have been extensively developed by Wilbur Thompson (Thompson, 1965, pp. 15-16).

The first stage is that of "export specialization". At this stage the local economy is dominated by a single industry or even a single firm. If the firm or industry is able to generate enough income, the urban place then moves on to the "stage of export complex" where a broadening of the local economy takes place. Generally, horizontal and vertical integration occurs. The next stage is one of "economic maturation" where local activity replaces imports with "own use" production and business and services are expanded. The final stage is that of "regional metropolis". At this level the city is a node connecting and controlling neighbouring cities, once rivals but now satellites.

When the city attains a population of 250,000 or greater, it then exhibits all of the characteristics of self-sustaining growth. Where, in the initial stages of development the city could not exist by "taking in its own washing," it can apparently do so in the later stages.

It should be noted that the export product mix of the urban places is constantly changing. New technology, new products, changing situational characteristics of place will cause the export staples to continually

change. The rate of growth experienced by an urban place will reflect its ability to adjust to constantly changing circumstances.

One very crude measure by which basic and non-basic industries can be identified is the coefficient of localization. More sophisticated techniques are available for this purpose; however, as none of the papers in this book have utilized these more advanced techniques, they will not be developed here. In the case of the coefficient of localization the logic behind its use is as follows: A constant rate of productivity per employee is assumed. Regional proportions engaged in various activities should be equal to national proportions. If the regional divided by national values comes to a value greater than 1.0 for a specific industry, then that industry is assumed to be an export industry producing more than is required by its population. If the value is less than 1.0 the industry's production is insufficient to supply local needs and presumably must be supplemented with imports.

The coefficients of localization have been computed for most employment groups for Winnipeg for 1951, 1961 and 1971 (Table 1). It can be seen that the export industries for Winnipeg since 1951 are transportation, trade, finance, community service and public administration. These particular activities are all service-producing industries and they are evidence of Winnipeg's importance as a regional distribution and service centre.

Manufacturing

Manufacturing involves the processing or fabricating of goods and materials. It is one of the most important activities in Winnipeg by virtue of its contribution to the economy through wages, employment and investment. In 1970 there were 957 firms engaged in manufacturing which employed 39,305 people and produced goods valued at 1.029 billion dollars. The total payroll was over 234 million dollars.

The mix of manufacturing industry in Winnipeg is typical of a diversified industrial economy. While processing of primary resources continues, expansion has occurred into industries which are not dependent upon proximity to a raw material base. Examples of such industries are the clothing, transportation equipment and electrical products industries.

Within the manufacturing sector in Winnipeg there are many different groups of industries. To determine their relative importance, in terms of employment, coefficients of localization have been computed for each (Table 2). The value added in terms of dollars in these industries

has shown continuing increases, however, indicating overall growth in manufacturing.

In 1970 Winnipeg's most important manufacturing industries were food and beverage, clothing, printing and publishing, machinery industries and transportation equipment.

TABLE 1
Coefficients of Localization
Selected Industries
Metropolitan Winnipeg 1951, 1961 and 1971 *

Activity	1951	1961	1971
Manufacturing	.99	.91	.92
Construction	.96	.98	.82
Transportation	1.61	1.48	1.45
Trade	1.73	1.39	1.28
Finance	1.75	1.49	1.28
Community Service	1.17	1.11	1.09
Public Administration	1.19	1.11	1.11

*Labour force statistics have been substituted for employment statistics.

Source: Statistics Canada, *Experienced Labour Force, Detailed Industries by Sex*, Special Tabulation, February 27, 1974.

TABLE 2
Coefficients of Localization
Selected Manufacturing Industries 1970

Industry	1970 Coefficient
Food and Beverage	1.26
Clothing	2.36
Furniture	.86
Printing and Publishing	1.10
Primary Metals	.20
Metal Fabricating	1.00
Machinery Industries	1.25
Transportation Equipment	1.66
Electrical Products	.59
Non-metallic Mineral Products	.73
Chemical and Chemical Products	.41

Source: Statistics Canada, *Census of Manufacturer*, 1974.

Food and Beverage Industry

The food and beverage industry in terms of employment and value of shipments is the most important manufacturing activity in Winnipeg. In 1970 there were 147 establishments engaged in the industry which employed 8,288 people and produced goods valued at 378 million dollars.

The industry is directed to both export and domestic markets. Commodities which are extensively exported are meat products. Commodities confined to local markets include processed dairy products, bakery goods, soft drinks and brewery products.

Clothing Industry

Winnipeg supports the third largest clothing industry in Canada. As an employer of people it is second only to food and beverages. In 1970 the industry employed 5,900 people and produced goods valued at over 84 million dollars. The products of the clothing industry are extensively marketed, with exports going primarily to the United States.

Much of the industry's success has been due to improving both product design and manpower productivity. Equally perceptive insights by the manufacturers into consumer demands have kept the industry viable.

Metal Industries

Included within the metal industry category are the machinery, transportation equipment, electrical products, metal fabricating and primary metals industries. As a group these industries have registered the greatest increases in both employment and value of shipments in Winnipeg during the past decade.

In 1970, together they employed 12,837 people and produced goods valued at over 259 million dollars. The largest contributor of the industries cited was metal fabricating with an employment of almost 4,500 and values of products at 89 million in 1970. The next most important was the transportation equipment industries with 4,227 employed and value of manufacture over 73 million dollars.

All of the metal industries have very strong linkages with the rest of the economy. As an example, a high percentage of output in the machinery industry is produced to meet the demands of the agricultural sector for farm implements, tractors, etc.

Many of the firms in the metal industries group have realized export markets for their products. Firms engaged in the production of farm machinery have successfully marketed their products throughout the Prairies and the mid-west United States.

In the case of transportation equipment Winnipeg firms have captured extensive export markets. Products exported include interurban and school buses and city transit vehicles. The aerospace industry has exported aircraft components and rockets.

In the papers that follow the authors have developed their research in one of two ways. Some present a review of major developments in the life of the industry, briefly discussing some of the firms involved. Others adopt the technique of following a single important firm from its beginnings and relating its part in or response to major developments in the industry.

Both techniques are here demonstrated to be fruitful in relating the history of what are today major dimensions of the economic life of the city.

In neither case is it the author's intention to present a registry of firms nor to imply that a firm cited in example is a key or dominant firm.

Only printing and publishing among leading Winnipeg industries has not been covered. Time and difficulty of obtaining relevant statistics and lack of previous works, precluded its presentation here.

In the following presentations there are papers which form natural groups. Papers on the aerospace industry, Flyer Industries Limited, and Motor Coach Industries all deal with the transportation industry in Winnipeg. The papers dealing with Versatile Manufacturing and Co-op Implements describe part of the agricultural machinery industry. There are others which comment on electrical products manufacture, metal fabrication and clothing. These certainly do not exhaust the possible list, but provide some insight into important segments of manufacturing activity in Winnipeg.

Selected References

- Blumenfeld, H., "The Economic Base of the Metropolis", *Journal of the American Institute of Planners*, No. 21, 1955.
- Simmons, J. and R. Simmons, *Urban Canada*, Copp Clark Publishing Company, Toronto, 1959.
- Thompson, W., *Preface to Urban Economics*, Johns Hopkins Press, Baltimore, 1965.

The Food and Beverage Industry

Although this industry covers a wide range of processed goods, as far as Winnipeg is concerned two important aspects are meat processing and brewing, which are dealt with in the two following articles.

For a brief indication of the importance of this industry refer to the Editorial Comments introducing Part II. — Ed.

Winnipeg Livestock and Meat Processing Industry: A Century of Development

by Ralph Parliament*

The first known movement of cattle into western Canada took place in 1823 after the establishment of the Red River settlement. A herd of 300 head of cattle was driven across the border from the United States and sold to the colonists in Manitoba. Later, many homesteaders from Ontario brought with them more cattle, hogs, sheep and horses which helped to further the industry.

The development of the livestock industry in Manitoba followed closely the pattern of development in the United States and Upper Canada. These stages are:

1. The "pioneer stage" when livestock was imported into Manitoba to supply the immediate needs of the new community.
2. The "local slaughtering" stage when animals were slaughtered by the village butcher or by farmers and sold from door to door or at the village market place.
3. A "small packer" stage when hogs were slaughtered on the farm during the winter and cured and packed by numerous small packers. At this stage practically all by-products were completely wasted.

This was roughly the nature of the packing industry when Winnipeg became a City in 1874.

During all this period the industry was strictly a local one supplying the needs of the local population. There were no means of supplying outside markets, so all operations were quite small.

However, the basic foundations of the industry were laid in the period between 1850 and 1875. It so happened that Winnipeg became a City at the same time that livestock and meat packing were becoming an important part of the Winnipeg economy.

Another very important development took place between 1850 and 1875. An American developed ice-making equipment. This started a

*Vice-President, Canada Packers Limited (Retired).

revolution in the meat processing business, although it was not until 1875 that it became possible to ship meat by refrigerated railway cars.

1874-1900

Two very key factors changed the nature and scope of the industry, namely, the development of the refrigerated rail car and the completion of the trans-continental Canadian Pacific Railway in 1885.

Now the west and primarily Winnipeg were in the position of being able to supply the fast expanding Eastern Canadian market with fresh, cured and smoked meats.

Alert local businessmen realized this and Winnipeg reached the fourth stage in the development of the meat industry, namely, a "big packer" or "abattoir" stage in which dressing of meats became centralized in larger establishments, where work could be carried on under sanitary conditions, where mass production lowered operating costs, and where it was possible to conserve all by-products.

Firms such as J. Y. Griffin Co. (Elmwood), Gordon, Ironside and Fares Co. (Logan Avenue), Western Packing Co. (Logan Avenue), Gallagher, Holman Co. (Logan Avenue) built plants and, in addition, there were several small slaughtering plants built.

The Gordon, Ironside and Fares and J. Y. Griffin plants were large plants for the times and incorporated many technological advances such as the continuous processing of hogs on the rail, better methods of curing and smoking meats, manufacturing sausage and cooked meats, and modern methods for producing and marketing by-products such as liver, kidney, heart, and so on. They also installed modern equipment for producing both edible and inedible fats and marketable inedible products such as meat scraps, bone meal, dried blood, tallow and hides.

As indicated before, the rapid development of the meat packing industry in Winnipeg was greatly affected by its ideal geographical location. Destined for the eastern markets of Canada and the United States or overseas all western livestock and meat products had to pass through Winnipeg.

Without any special freight rate advantage, Winnipeg was able to bring livestock from Saskatchewan and Alberta, process it, and ship the dressed product to eastern Canada at a lower cost than shipping livestock directly there for processing.

At the close of this quarter century, Winnipeg was in a sound position and well on the way to being established as the "Chicago" of Canada.

1900-1925

There were five important events in this quarter century:

1. Livestock supplies were increasing rapidly.
2. The Federal Government inaugurated a very fine Health of Animals and Meat Inspection Service. It was of a very high standard and has contributed a great deal to the success of livestock and meat processing.
3. Improvements in packing house processes, equipment and types of buildings were introduced. Actually, these improvements led the way to still greater improvements in the years to come. The developments led to better quality, lower costs and greater acceptance by the consumer of fully processed meats.
4. Of paramount importance to the Winnipeg economy was the construction of the Union Stock Yards in St. Boniface.

In the early years of the present century the need for adequate marketing accommodation to meet the rapidly growing livestock industry became imperative. To provide a solution to this problem the Province of Manitoba, in 1911, passed an Act incorporating The Public Markets, Limited.

Following passage of this Act, negotiations were then entered into between the government and the railway companies with a view to the development of a modern stock yard. As a result, the railways undertook to subscribe to all stock in the newly incorporated company, to secure a suitable site without delay and to construct thereon the necessary facilities.

The Union Stock Yards in St. Boniface is the largest in Canada. The area developed is almost 200 acres, of which 36 acres are occupied by covered sale and storage pens, alleyways and corrals.

The Yards consist of 1,000 cattle pens, almost 300 pens for hogs, sheep and lambs, in addition to 25 corrals of varying sizes. To provide adequate access to all facilities, 7 miles of paved alleyways are available. A major portion of the cattle pens, and all hog and sheep pens, are covered and fully enclosed to ensure protection from the weather.

Storage capacity of the Yards amounts to approximately 25,000 head, accommodating 15,000 cattle and calves and 10,000 hogs, sheep and lambs.

The Public Markets Limited owns approximately 6 miles of railway tracks located on its property which are used exclusively for livestock service. The stock yard company also has its own locomotive to do the necessary switching.

5. The First World War and Its Aftermath — When World War I broke out, in August 1914, Canada's meat industry was faced with the double task of serving the increasing home population and at the same time acting as Britain's larder.

Throughout the war North America was the Allies' most important source of foods. German submarines cut off supplies from Denmark and other European countries, whilst shortage of bottoms made it imperative to draw maximum quantities from the nearest possible sources, Canada and the United States.

As a result the meat trade of both Canada and the U.S.A. boomed. Governments in both countries called upon farmers and packers to produce more. In the immediate struggle to supply both home and overseas requirements all thought of the future was forgotten. Plants were operated to capacity. They were enlarged and enlarged again. Canadian bacon exports to Britain rose from 38 million pounds in 1914 to a peak of 235 million in 1919. Beef and other animal products were also shipped abroad in large quantities.

The war ended in November 1918, but replenishment of the devastated areas and supplies for the Central Powers and Russia maintained export shipments at fever pitch until the autumn of 1920. Prices of many commodities actually rose after cessation of hostilities.

In the autumn of 1920 the markets collapsed. The German Mark ceased to have purchasing power. Other European currencies experienced devaluation in terms of purchasing power.

Packers, accustomed for six years to devoting all energies towards procuring goods, were caught as in an avalanche. All had goods on consignment abroad and in transit. All had meats, by-products, and produce in freezers and cellars at home. There was a frantic rush to sell out and cut losses, but this, of course, only made matters worse. Losses in 1920 and 1921 were enormous.

When the market stabilized, many Winnipeg packers found themselves financially crippled with their war profits completely wiped out. The great and long-established firms of Armour and Morris were virtually bankrupt. Allied Packers of the U.S.A., who had purchased the Matthews-Blackwell plants in Canada in 1918, were insolvent. All Canadian packers lost heavily.

The immediate losses were not, however, the worst of the situation. Export markets were gone and North American packers were left with plants and equipment idle. In Canada plant facilities far exceeded the requirements of the domestic market.

"Boom" times are usually followed by "depressed" times and this was no exception for Winnipeg.

Over-capacity and over-extension took their toll and many Winnipeg Plants were in trouble. Harris Abattoir, Toronto took over Gordon, Ironside and Fares, Winnipeg, in 1918. The Plant was on Logan Avenue. In 1925 Harris replaced it with a new Plant in St. Boniface adjoining the Union Stock Yards, and operated it under the name of Harris Abattoir Western Limited.

The major plants then in Winnipeg were Harris, Swift, Western and Gallagher Holman. In later years Burns took over Gallagher and Western. Union Packing disappeared, along with other Companies that failed, among whom were Manitoba Abattoir, Farmers Packing Co., Laurel Packing Co., and Dawson Road Abattoir.

Similar liquidation was going on all across Canada. This resulted in fewer but much sounder operations and gave greater stability to the industry as a whole. The result was better returns to the producer, better value to the consumer and a healthier position for the packer.

1925-1950

Due to the difficult operating conditions of 1920-1925, many plants were in deep trouble. This resulted in the formation of Canada Packers Limited.

In Canada a crisis was reached in 1927. Towards the end of January Gunns Limited was refused further bank credit. As this precluded purchase of livestock, overtures were made to the Harris Abattoir Company, and early in February all shares of Gunns capital stock were transferred to the Harris Abattoir Company.

In the following June the same company also acquired from Allied Packers the plants and inventories of the Canadian Packing Company (previously operated as Matthews-Blackwell).

In August, after negotiations, shareholders of both the Harris Abattoir Company and Wm. Davies Company merged their interests in a holding company to be known as Canada Packers Limited.

The chief architect of this amalgamation was Mr. J. S. McLean who became Canada Packers first President, a post which he occupied for thirty years.

Strangely enough this put Winnipeg in an excellent position with the new "Harris" plant just completed — undoubtedly the finest and most modern plant in Canada. Winnipeg benefited greatly from its ability to serve a much larger market in eastern Canada.

Furthermore, there were relatively few large plants west of Winnipeg, which meant that Winnipeg plants could bring in large numbers of cattle and hogs from Saskatchewan and Alberta for slaughtering and processing.

With the continued improvements in refrigeration and processing both Swift and Harris supplied northern Ontario and northern Quebec with large quantities of meats. These two Plants operated Branch houses at (what is now) Thunder Bay, Sudbury, Sault Ste. Marie, Timmins, in Ontario, and Rouyn, Quebec, and serviced directly other areas such as North Bay, Cochrane, and Amos.

But there were real troubles ahead. Grain prices collapsed in 1929 and there was a rush into hog production "to sell the grain through the hog". This of course resulted in a huge increase in pork but with very few buyers outside of Canada.

It was a very difficult period. The writer remembers buying unfinished hogs in the Peace River country at $\frac{3}{4}$ ¢ per pound live, bringing them to Winnipeg, killing and shipping them to Montreal dressed, and of selling sliced bacon by the carload at 10¢ per pound delivered at Toronto. In those days the freight was 1¢ per pound, the cellophane wrapper cost 1¢ per pound and the labour for slicing was 1¢ per pound, which left 7¢ for all other expenses and the payment to the farmer. There are many other illustrations but the above certainly emphasizes particularly the plight of the farmers in the "dirty thirties".

The Ottawa Agreements negotiated by the Bennett Government with Britain in 1932 were of immense value to the hog producers of Canada.

In 1931, the year before the Agreements, our sales to Britain fell below 11,000,000 lbs., compared to 235,000,000 lbs. in 1919. In 1939 they were 186,473,000 lbs.; then came the Second World War. Our peak shipments of 692,310,300 lbs. came in 1944. In 1951 they were only 1,891,000 lbs. and since then have been practically nil.

In 1938, Swift, who had purchased Griffin's plant in 1902, replaced it with a very new and modern plant which was another boost for the Winnipeg industry.

All plants in Winnipeg were at this time working to full capacity. The Harris (Canada Packers) Plant established new Canadian records: In the week ending Feb. 5, 1944 it processed 27,066 hogs. In the week ending Nov. 10, 1945 it processed 8,634 cattle. In the week ending Nov. 10, 1946 it processed 9,627 sheep and lambs.

To my knowledge no other plant in Canada has equalled these records for weekly processing.

After the war shipments of canned meats overseas, mostly to the United Nations Relief and Rehabilitation Administration (UNRRA) were enormous.

Fortunately, Canada Packers had expanded its canning operations greatly during the war and Winnipeg was the key centre for production. With the dire need of relief supplies for UNRRA its Winnipeg plant operated 18 hours a day. During this period, according to the Continental Can Company, a record for the number of cans of meat produced in any one plant in Canada and the United States was achieved at the Winnipeg plant. The production was 3,000,248 cans. There is no evidence of this record ever having been broken. This production encouraged the Continental Can Company to build a can-making plant in Winnipeg.

Another major development at the close of the quarter century was the development of the Can-Pack system of slaughtering and dressing cattle. This system was developed at Canada Packers' St. Boniface plant. Basically, it made cattle dressing an "on the rail" operation, eliminating hanging them and then laying them on the floor — then re-hanging them.

The system is used in many plants in Canada, the United States and other countries — and the principle is now used in practically every large plant on the continent. Credit must be given to Mr. Joseph Harris for his leadership and encouragement in this really major development in the beef industry.

Another major development was in hide curing. In earlier days, hides were salted and packed in the hide cellar — a very laborious and costly operation which was also one of the chief causes of unpleasant "odours". Hides are now pickled in brine for a few hours and shipped to the tanners. This greatly reduces the cost of handling and eliminates completely one of the "not so nice" operations in the packing business.

1950-1974

Winnipeg continues to be a very important place in the meat processing industry. Today, in 1974, over 2,600 people are employed in the industry. However, a number of factors are developing which are tending to affect Winnipeg's leadership in the West.

With continued improvement in mechanical refrigeration, particularly refrigerated trucks, Saskatchewan and Alberta plants have an advantage over Winnipeg in slaughtering local beef and shipping it dressed to Ontario, Quebec and the Maritimes. The supermarkets also have made this more practical because they can buy beef by the truckload.

For instance, there have been many new and modern beef plants built in Saskatchewan and Alberta. In 1935 Winnipeg was the only plant Canada Packers owned in Western Canada with the exception of a very small operation in Moose Jaw. Since then they have built plants in Edmonton, Lethbridge, and Red Deer, have acquired a large plant in Calgary, and are now building a large plant in Moose Jaw. Burns and Swift's have also expanded.

Winnipeg had and still has a real advantage in shipping processed products such as smoked meats, sliced bacon, cooked meats, and canned meats to eastern Canada, due to being closer to the market, but it has now lost most of its advantage in shipping dressed meat to eastern Canada.

Future Prospects

Steadily increasing population in Manitoba and northern Ontario will exert an ever-increasing demand for meat products. This is a challenge to Winnipeg and Manitoba in order to meet this new demand.

Every effort must be made to increase the production of livestock in Manitoba, if Winnipeg is to maintain its position. This is not too difficult for hogs — we can raise plenty of feed and climate is not too great a factor — and we have over-capacity for slaughtering and processing of pork products.

With cattle, the situation is more difficult. Our climate is not the most suitable and cattle killing plants can be located "where the cattle are" without anything like the capital investment involved in building and equipping a modern pork processing plant.

Winnipeg is also ideally located for export business to Europe and the United States. Geographically, however, we are not as soundly located as is Alberta for exports to the Far East.

Most executives in the industry in Winnipeg would concede that with greater livestock production, greater plant efficiency and greater population, Winnipeg could reasonably look forward to another century of steady growth and development in the livestock and meat processing industry.

The Brewing Industry In Winnipeg

by William Houston*

One of the earliest industries to commence operations in the Province of Manitoba was a primitive brewery erected in the neighbourhood of Middlechurch, between the years 1860 and 1862. The venturesome manufacturer was Celestin Thomas, a native of Biamont, France. The brewery constructed was the first in the West.

When the incorporation of Winnipeg as a city was mooted, Thomas purchased a site on the banks of Colony Creek and in 1873, before the City Charter had been granted, he erected the Winnipeg Brewery (Douglas, 1947, p. 7). Records maintained by the Brewers Association of Canada show that the brewery was leased to John Cosgrove and William Blackwood by Thomas in 1886 and was purchased in 1887 by McDonagh and Shea. It later became Shea's Winnipeg Brewery and was acquired by "Labatt's" in 1957.

In 1872 a brewery is reported to have been built by Hirschmer and Batkins which was subsequently sold to Edward L. Drewry. It operated under that family name until 1956 when, having been sold earlier to Western Canada Breweries Limited, it became known as the "Carling Brewery" and now operates as "Carling-O'Keefe".

What is now the "Molson" brewery in Winnipeg had its beginnings about 1920 under the firm name of Beaver Brewing and Bottling Co. It became the McPherson Brewery, was purchased by the Hoeschen family and renamed the Fort Garry Brewery and operated under that name until purchased by "Molson's" in 1960.

The Edelweiss Brewery commenced operating early in this century on the east side of the Red River in East Kildonan, became known as the Riedle Brewery, then Grant's Brewery and was purchased about 1956 and subsequently operated as the O'Keefe brewery until it was closed in 1969.

Blackwood Brothers operated a brewery in the first few years of this century in the Fort Rouge area which became the Manitoba Brewing and Malting Co. This business was purchased by the Pelissier family and operated under that family's name until it was closed in 1970. That

*Manitoba Brewers' Association.

name is now associated as Kiewel-Pelissier Breweries Limited with the continuing operation of what had been known as the Kiewel Brewing Co. Limited in St. Boniface since 1925-26.

Records reflect that there were other companies involved in the brewing industry but details regarding them are no longer available. These included The Tand Hemp & Co. in 1889; The Prairie Chicken Brewery in 1890; The Stanley Mineral Springs & Brewing Co. in 1914.

To summarize the present situation, there are now five operating breweries in Manitoba, three of which are owned by national companies. These are now operating under Carling-O'Keefe, Labatt and Molson names with the Kiewel-Pelissier plant being a wholly owned Labatt subsidiary. In addition there is the Uncle Ben Brewery which operates under Uncle Ben's Industries of Vancouver, and commenced operations in 1971.

The first available beer sales statistics for Manitoba are for the year 1874 when 36,775 gallons were sold. By 1884 this had increased to 367,000 gallons, and after a severe decrease in 1890, had increased to 492,000 gallons in 1894. By 1904 the million gallon mark had been passed with reported sales of 1,340,000 gallons which by 1914 reached the 5 million gallon level. Records reflect that the industry did not return to this level again until 1944 when sales reached 6.65 million gallons. By 1954 there were 9.9 million gallons sold in the province and 13.5 million gallons ten years later. In the twelve months ended March 31, 1974 beer sales in Manitoba had reached 16.67 million gallons.

Brewers in Manitoba traditionally produced this product to satisfy the requirements of the Manitoba market place until about ten years ago. With national brands being produced here and with certain advantages related to distance and transportation costs being apparent, two of the three national companies commenced shipping into Ontario. This pattern of supply has continued and involves a considerable volume of out of province sales.

In the most general sense, beer can be said to be produced from barley, water and hops. Minor quantities of other adjuncts are of course also used. For the most part, the barley used is among the finest grown in the world and originates in Manitoba and the other two prairie provinces. Hops used are grown in British Columbia and in Oregon and the State of Washington in the United States. Some hops are imported from Europe.

Packaging of beer requires the procurement of bottles, paper board packaging, and stainless steel kegs, all of which are produced in Canada. Bottles are obtained from glass factories near Medicine Hat, Alberta

and from Lavington, B.C., for the most part using a combination of rail and a local Winnipeg handling agency or road transport. Winnipeg box manufacturers supplied about 10 million packages in 1973.

The Brewers Association of Canada indicates that marketing of beer contributed \$97.10 million to Manitoba's Gross Provincial Product in 1973, according to estimates obtained from an econometric model which they have developed. This represents 2.1 per cent of the G.P.P. and illustrates the impact on the economy generated by the brewing industry in Winnipeg. Salaries, wages and indirect labour costs paid by the industry amounted to about \$8 million. However, this is a small part of the total wage bill when the total employment arising from the brewing and marketing of beer in Manitoba is considered. In addition to the 690 persons employed by the brewing industry, there were 2,720 persons in jobs directly related to the distribution and sale of beer and a further 4,500 persons indirectly employed. Consider the employee effort involved in the movement of 265 million pounds of full bottles of beer from breweries to the over 700 licensed outlets in the province, the additional employee requirement to serve 57.59 million bottles of beer to patrons of the beverage rooms, cocktail lounges and diners in Manitoba. Consider also the vendor effort to remove from their refrigerators and to hand the 10.5 million packages to customers who purchased these quantities in 1973. And consider also the effort required to purchase, collect and return the over 15 million dozen empty bottles which were received back from customers in 1973.

The future of the brewing industry in Manitoba should be bright. It has enjoyed volume increases of 3.4 and 4.1 per cent in the last two years. Continued growth together with an ability to increase revenues in proportion to increasing costs should ensure that it will continue to be an industrial asset to the City of Winnipeg.

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The Transportation Industry

Because of the general nature of the contribution on the aerospace industry in Winnipeg, the article by E. Thornhill, Manitoba Aviation Council, has been given separate consideration under the heading "The Aerospace Industry in Winnipeg". In the section on Transportation two of the several companies directly involved in transportation — Motor Coach Industries Limited and Flyer Industries Limited — are considered. A complete presentation would require a detailed examination of rail, air and water related industry. Transportation equipment manufacturing in 1971 for all Manitoba (in which Winnipeg had an important share) ranked fourth in value of factory shipments among all manufacturing industries and preliminary figures for 1973 indicate the same rank in importance. The transportation industry is considered one of the Province's important future growth industries. — Ed.

Motor Coach Industries Limited*

The United States has traditionally led the world in automotive design and production.

Eleven years ago a Winnipeg firm – Motor Coach Industries Limited – decided that the trend could be reversed, and its Canadian built intercity buses could be sold on the American market. The firm began exporting its highway buses to the United States in 1963, and the move has proved so successful that the Company now annually exports ten times the number of buses to the United States than it made in an entire year during the 1950's.

The company had its beginning in the 1930's as the Fort Garry Auto Body and Paint Works, basically an automotive repair shop. The company soon added the conversion of automobiles into 9- to 16-passenger buses, and began the manufacture of bus bodies for mounting on truck chassis. In the next few years the firm was re-organized, and the name changed to Motor Coach Industries Limited. The new company moved to a 20,000 square foot plant at Erin Street and St. Matthews Avenue, where it produced intercity buses.

During the war years the plant was devoted wholly to defence production, returning to manufacturing buses after the end of the war.

Motor Coach Industries designed and built the first Canadian rear engine bus, and later the first Canadian-built intercity bus with air conditioning.

During the period from 1948 to 1959 the company introduced several new bus designs, each carrying improvements suggested from experience with earlier models. The company's "Courier" and "Courier Challenger" coaches were sold to operators in all parts of Canada.

Encouraged by the ready acceptance of its products by Canadian operators, but finding the Canadian market too small to permit expansion, the firm decided to enter the much larger U.S. market. Motor Coach Industries, Inc., an associate company, was formed and an assembly plant was erected in Pembina, North Dakota on the Canadian-U.S. border. Bus "shells", or basic bodies, were to be completed in Winnipeg and shipped to Pembina, where U.S.-made mechanical components were added to complete the buses for delivery to the customer. The first "shell" was shipped to Pembina on September 13, 1963 and the first completed coach came off the Pembina plant line later the same month. Since

*Submitted by the Company.

then more than 3,000 intercity buses have gone through the North Dakota assembly line, and are operating in all parts of the United States and Canada.

The introduction of new bus models offered by MCI required an accompanying expansion of production facilities, so the company undertook a three part building program in the autumn of 1966. The original plant on Erin Street was expanded by 76,000 square feet to provide capacity for the increased production of parts and sub-assemblies for the new buses, and for continuing manufacture of the company's current model MC-5B coach.

Construction has been completed of new plant facilities with a total area of 196,000 square feet in Fort Garry Industrial Park to assemble "shells" for the new model "Crusader" buses, which will then be sent to Pembina for completion. To match expanded Canadian facilities, the Pembina plant was also enlarged to 118,000 square feet as part of the new construction program.

Motor Coach Industries Limited of Winnipeg, North America's largest manufacturer of intercity highway coaches, introduced the first turbine powered coach to the transportation industry. It has now completed installation of a new series GT 404-3 gas turbine engine, manufactured by Detroit Diesel Allison Division of General Motors, in a new model MC-8 coach. An extensive road testing program, under the widest possible range of highway and climatic conditions, has been undertaken jointly by Motor Coach Industries, Greyhound Lines and Detroit Diesel.

A new four-speed automatic transmission has been coupled to the turbine engine to provide an amazingly smooth ride, which permits the driver to keep his hands on the wheel at all times, for safer operation. This transmission was developed specifically for use with the turbine engine.

The development of this turbine powered coach represents a significant breakthrough in transportation technology, and to the travelling public will mean a quieter, smoother, vibration-free ride.

The turbine engine makes a positive contribution to the improvement of the environment, since the amount of pollutants emitted into the air is dramatically reduced. The engine is also virtually odour-free. The turbine operates well within current and projected emission standards established by various regulatory agencies.

The sometimes overlooked hazard of noise pollution is reduced to negligible proportions. With motor running at high idle speed, a conversation can be carried on in a normal tone of voice by persons standing

outside the vehicle next to the engine compartment. The coach is exceptionally quiet on the road and passengers can converse freely from the front to rear of the bus.

The turbine engine also offers other distinct advantages: anticipated engine life of up to one million miles before major overhaul; ability to use a wide range of engine fuels; no cooling system required; no elaborate plumbing and piping; and absence of cold weather starting problems.

MCI's development engineers, co-operating with Greyhound and Detroit Diesel Allison Division, provided the extensive engineering required for this installation. MCI maintains a full-time development and experimental engineering department, staffed by a total of 51 engineers, draftsmen, engineering technicians, tradesmen and engineering aides.

Introduction of the turbine powered coach holds promise of being one of the most important innovations in bus transportation history.

Currently the company's 1,200 Winnipeg employees complete three bus "shells" every working day of the year — about 750 annually — of which more than 600 are exported to the United States. The steady growth of the company has provided continuous employment opportunities for Winnipeg residents. The firm employs both men and women, with the plants working two shifts each day. Employment is expected to reach 1,300 to 1,400 in the Winnipeg area in the near future.

Flyer Industries Limited*

Flyer Industries Limited specialize in the engineering, manufacture, and marketing of quality transit vehicles, both diesel and electric trackless trolley coaches. Flyer is not the oldest bus manufacturer in North America nor is it the largest producer of buses, but Flyer has come a long way since the first coach was manufactured nearly 45 years ago.

Western Auto and Truck Body Works Ltd. was founded in 1930 by Mr. John Coval. With a handful of men Mr. Coval set out on a modest scale to construct truck and bus bodies. The company slowly and gradually expanded and with it grew a fine reputation.

In the early 1940's, Mr. Coval was awarded a contract by the Canadian Government to build trucks. Over 12,000 truck bodies as well as 300 buses for troop transport were supplied to the Army, Navy, and Air Force.

In the early 1950's, Western Flyer Coach announced the new Western Flyer Canuck. These new highway buses were tested on the rough roads and harsh conditions of the Northwest. They were custom built coaches, designed for the individual needs of the operator but still maintaining a standard design. These Canucks proved to be a great success and many of them are still in service.

In 1967, after being a manufacturer of intercity coaches for over 35 years, Flyer decided, after a thorough investigation of the market, to manufacture transit vehicles. Since then, Flyer has become a major coach manufacturing company, one of the two organizations engaged in the manufacture of transit buses in Canada.

Flyer's first transit coach was a Series 700. Today, there are approximately 600 of these vehicles operating across Canada, in Montreal, Ottawa, Toronto, Hamilton, Winnipeg, Calgary, Saskatoon, Edmonton, and Vancouver.

Flyer has the distinction of being the only manufacturer of electric trolley coaches in North America. Spurred by rising fuel costs and environmental controls, many cities are rediscovering the advantages of the electric trolleys.

In 1971, Flyer Industries entered into a mutual design project with AM General Corporation, a wholly owned subsidiary of American Motors, and out of this was born the Series "800" coach.

*Submitted by the Company.

The new "800" is worlds apart from the first coach Flyer built in 1930. The same standards in design and effort are still maintained as witnessed by the clean lines and the latest options for driver and passenger comfort and safety. For example, the new ultra-vision rectangular windows provide greater passenger visibility and allow more light for a brighter, roomier looking coach. The body construction is of a truss type design which is better able to withstand the severe stresses and strains that a transit bus is subjected to.

Flyer has three separate production sites backed up by an extensive parts and service division.

At the 55,000 square foot Fort Garry plant, parts are fabricated for the thousands of components required for the assembly of buses. Among the punches, presses, shears, and saws is a huge 700 ton press. Standing 45 feet high and weighting 300,000 pounds, this machine is used to stamp out window panels, doors, and roof crown panels. Also housed at the Fort Garry plant are the engineering staff, production planning, purchasing, and production control departments. The experienced staff at Fort Garry help produce diverse components of high quality and durability.

Only two blocks away is the 10,000 square foot reinforced fibreglass parts manufacturing plant. Utilizing various moulds, this plant produces 43 different parts used in Flyer vehicles.

The actual assembly of the buses takes place in the new 150,000 square foot plant in Transcona. With ultra-modern environmental control equipment, rotating jigs, electric welders, this modern facility utilizes the most up-to-date equipment and modern production techniques.

The production at this huge complex utilizes more than 20 major activities each involving special expertise. Before the structure is assembled, major frame sections are submerged in a 3-stage heated washer and phosphating procedure, to provide the best corrosion protection possible. The frame is then welded and as it proceeds down the assembly line, aluminum panels, flooring, insulation, and various small components are installed. There are 3 assembly lines (2 for diesel and 1 for trolley) which are in constant operation. After spray painting with preheated paint, the frame is put into the forced air dryer booth where the air is heated to 130 degrees F. for a tough durable finish.

From the paint shop the shells are taken to the mechanical installation line where the finishing touches are applied. Windows, axles, engines and seats are installed and all the interior and exterior trimmings are applied. Flyer now (1974) has the capability of producing approximately 800 units a year.

What does the future hold? What answers are there to the problems of rising fuel costs, to traffic congestion, to air and noise pollution, to valuable property used for parking and to greater distances to travel between home and work? The answer has to be improved mass transit.

Flyer is striving to become one of North America's most competent bus manufacturers. The company is developing innovative concepts in transit vehicles. For example, it is considering the production of 15- to 25-passenger vehicles which can be used for small transit systems, dial-a-bus, airport limousines, airline crew vehicles, small shopper minibuses, and other uses.

The Flyer team that re-introduced the electric trolley bus is continuing research on new forms of propulsion, independent of fossil fuel requirements. This propulsion research includes pollution-free vehicles which will lead to a cleaner environment while at the same time relieving the pressures on the problem of petroleum supplies. Wireless trolley coaches are being considered. This would greatly increase the range and versatility of the vehicles and by omitting the unsightly overhead wires it would also be a major money saver to the customer.

From a handful of men in 1930, Flyer has grown into a multi-million dollar company employing almost 700 men and women. Mass transit is expected to become the most important form of transportation in the near future and Flyer hopes to be among the first to help develop and improve new modes of rapid transit.

The Aerospace Industry In Winnipeg

by Ed Thornhill*

Winnipeg has shared in the progress of the aviation industry since the aeroplane revealed its potential as a vehicle for transportation. Interest began and those who learned to fly during the First World War found new horizons of adventure. Some were not satisfied to return to earthly toils, and sought desperately, and at great length, to adapt their new vehicle to peaceful purposes.

As it did all over the world, the aeroplane opened a new technical frontier, but in Manitoba and in other parts of Canada, the technical advancement formed a partnership with geographic explorations.

This partnership persisted through many trying years for both the aviation industry in Winnipeg and for the city itself. The days of barn-storming, northern explorations, and commercial transportation were lean years for aviation's first enterprises seeking to grow in an environment that suffered from droughts, plagues, and a world stock market disaster. For Winnipeg, these lean years culminated in the establishment of Stevenson's Field, and in the birth of Trans Canada Airlines with its operational headquarters located in Winnipeg. In 1971, Air Canada (the former T.C.A.) removed its overhaul and repair facilities from Winnipeg to Montreal, but there are indications that new repair facilities will be opened here again. Much of Winnipeg's importance as an International Airport centre, however, is derived from the activity generated by Air Canada's \$4 million dollar air cargo complex, built here over a decade ago.

Winnipeg responded to the demands of World War II for the manufacture, repair, and service of aeroplanes. In so doing, it proved that Winnipeg and its surrounding country is quite capable of industrial expansion according to the need. Several of the local aviation plants in Winnipeg today were founded during the Second World War. The more prominent of these, Bristol Aerospace and Standard Aero Engine, developed in war time from small peace time enterprises.

*General Manager, Manitoba Aviation Council.

Today, the old pioneer aviators are retiring. Aviation is now known as aerospace, with a new technology and a new scale of dimension. The industry and today's life style are both in a stage of metamorphosis.

What are some of the changes that are taking place in our new world? What part does aviation play in these changes? What resources does our community have that could give it a competitive role in our relationship with other communities and within ourselves?

These, and many other challenging questions must be raised for recognition and solution, lest we become mere spectators of progress in other areas.

Large volumes of statistics are already compiled by transportation services and civic agencies. It remains for planning genius to give them perspective and interpretation into fruitful policy. Statistical information as at present arranged displays predominant attention to passenger and cargo volumes. It is difficult to find an analysis that embraces a cross-section of the air industry in broad application. This may be an indication of public indifference to, or lack of discernment in, the magnitude of aviation's contribution to the community in terms of employment and capital investment.

At one time, Winnipeg became a hub of transportation routes by rail and road because it was in a central geographic location in Canada. When the aircraft became a factor in transportation, it followed traditional route structures because it did not have sufficient strength of population and industrial production to compete with manufacturing giants in eastern Canada and the U.S.A. The aircraft has, until recently, been limited by range and load capabilities to intercity traffic for its main support of patronage.

Aviation's progress to the long range passenger carrier, the jumbo-jet, and supersonic aircraft, now raises needs for revised air route systems. No longer is it practical to funnel the total air traffic loads, passenger and cargo, intercity and intercontinental, into common terminals for reception and dispersal. Limitations of space on the ground and in the air are now so restrictive at large cities that more and even larger air reception services must be built to accommodate increases of traffic. Moreover, considerations of real estate and zoning clearance make it necessary to build airports so far from city centres that they are losing their identification with the cities which they serve.

The development of revised air route systems becomes inevitable with the growing separation of passenger traffic from cargo traffic, and the sharpening distinctions of intercity, transcontinental and intercontinental traffic flows.

In this respect, Winnipeg may enjoy strong new prospects. It is, for example, well over four hundred miles closer to London than is Montreal. It is in a good geographic position for development as a technical service stop and as a collection and dispersal centre for western U.S.A. and Europe. Air space over Manitoba and the flight tracks to Europe are relatively free from congestions suffered along traditional airways. It is well centred for flights between the eastern half of the continent and Alaska and the growing oil and mineral production in the northwest.

In addition to convenience for long distance flights, Winnipeg has improving assets in other components of the aviation industry. Manitoba is one of the few remaining locations in the world which has growing hydro-electric power resource. It has large expanses of real estate well served by both air and surface transportation. There is an abundance of fresh water for larger populations, and fresh air from vast stretches of open country.

Winnipeg's International Airport will be called upon to serve an increasing volume of convention traffic. At the present time, it offers our visitors and resident travellers a highly enviable proximity to the downtown business section and the convention hotels. In comparison with other cities competing for this traffic, travellers to and from Winnipeg need only a 20 minute taxi ride to downtown against double and triple distances elsewhere. For a busy traveller, the long distances by road to and from the airport detract seriously from time saved by air travel. If Winnipeg contemplates remoting this convenience by building a new runway and terminal system, it must weigh the accumulated costs of construction and losses of business attracted by its present accessibility to the city.

Despite Winnipeg's involvement and recognition of the great part that aviation has played in the growth of the region, its citizens seem prone to treat its commercial benefits lightly. A chronic dependence on Air Canada tends to hide other opportunities. The prospects for a centralized transient reception organization, for traffic other than scheduled airlines, and the lack of unit assembly services in this part of Canada do not appear to receive serious consideration.

Today, Winnipeg's aviation plants are linked by contract commitments to customers in other parts of Canada, the U.S.A. and Europe. Samples of local production were on display at the recent Centennial Aerospace Exhibition in Winnipeg. Bristol Aerospace exhibited a section of the huge air ducts manufactured in Winnipeg for installation in the

jumbo Lockheed 1011, along with air foil sections reinforced by feather-weight "honeycomb" structures designed to provide strength and rigidity. However, for a true appreciation of the diversity of production output the plants themselves must be visited.

Whole fleets of aircraft from the Canadian forces and from the U.S.A. pass through the overhaul bays where repair and replacements are made to electronics, power plants and air frames. Involvement in atmospheric research was demonstrated in recent years by exposing the earth's magnetic field with the use of Black Brant rockets designed and manufactured by the Bristol plant.

Important other companies are the Winnipeg Division of Boeing of Canada Limited, engaged in aerospace and other industries, Standard Aero Engine with its overhaul plants, and the specialized workshops of CAE Aircraft.

Winnipeg is increasingly favoured now by geography and resource potential. Because most large contract packages are now in the hands of government, the city and its supporting province are handicapped by lack of population and political power; local enterprise must, therefore, strive for stronger concentrations of unity if it is to pry some of the profitable assignments away from stronger areas. Since ownership is by no means entirely local, hopes for such harmony are rather optimistic. Perhaps a stronger prospect rests with Winnipeg's aggressive promotional forces, not specifically oriented to aviation but working on a broad front for all industrial expansions of the community. A sample of such stimulation was the Air Industry Conference held in Winnipeg in 1969, out of which emerged the formation of the Manitoba Aviation Council.

Other cities have taken advantage of location to build major air centres. Amsterdam and Denver have taken advantage of location to build air terminal complexes of international magnitude. Wichita is a large manufacturing base which specializes in aviation productions. In each case, there had to be an awareness of future possibilities and a promotional dedication to evolutionary objectives — a determination to make the best of resources and opportunity in a changing world.

The Farm Machinery Industry

In this section, attention is given to the growth and development of only two companies, both of which are domiciled in Winnipeg. These are Canadian Co-operative Implements Limited and Versatile Manufacturing Ltd. They illustrate two different approaches to this vital and long-standing industry, the continued need for response to land conditions in the farming West and innovative technological skills as well as response to marketing problems in a well-established Canadian industry, which has been growing and changing under large-scale manufacturing conditions for at least a century and a quarter. — Ed.

Canadian Co-operative Implements Limited*

The history of Canadian Co-operative Implements (executive offices and manufacturing plant in Winnipeg, Manitoba) can easily be told in a success story format: Farmers band together to struggle out of the dust and depression of the thirties, scrape together enough money to acquire a manufacturing plant, battle for a market position against the well-entrenched farm machinery giants, and achieve, by 1974, annual sales of almost \$45,000,000, an international marketing program and the Prairie distributorship for one of the world's foremost heavy duty construction equipment manufacturers.

The success story is true, of course, but that approach glosses over the practical development that made it possible.

Throughout the decade of the thirties, general conditions on the Canadian prairies were extremely difficult — many years crops were ravaged by continuing drought and little money was available. Aggravating the hardship, much of the precious topsoil was blowing away. Machines were wearing out and had to be replaced, but prices were beyond what the farmer could pay.

The high prices were not only caused by the large manufacturing companies who could set inflated prices, but were also a result of the distribution system at the time, which encouraged duplication of inefficient dealer outlets.

The federal government responded to complaints by farmers by setting up a special inquiry into causes underlying the high cost of farm implements. The committee heard submissions from all concerned groups, and came up with an important conclusion and recommendation. It was: "that in the farm implement industry there is competition in the matter of sales with little effective competition in the matter of prices" and "that the companies should make every effort to reduce these costs or farmers should be encouraged to organize for the co-operative distribution and servicing of farm implements."

When no action resulted following release of the report, the Saskatchewan government established its own inquiry in 1939. Its committee recommended that the three prairie governments and major co-operatives take the lead in organizing a farm machinery co-operative.

*Prepared by R. A. Lanaway, Communications Consultant to the Company.

In 1940, this step was finally taken, with the birth of Canadian Co-operative Implements Limited.

The company did not experience an easy birth by any means. Money was the basic problem; few believed the farmers of western Canada were capable of building their own machines, or had the financial strength to combat the multi-national corporations. The co-operative spent five painstaking years in raising the \$800,000 necessary to begin operation. By 1944, it was able to purchase a small factory in Winnipeg, with money invested by farmers and loans from the three prairie governments.

The first Co-op plant, called "The Farmers Own Factory", was located at 601 Bowman Avenue, East Kildonan, now part of Winnipeg, and was purchased from the Gregg Manufacturing Company, manufacturers of horse drawn equipment. The earliest products included farm wagons, sleighs, and harrows.

The first new implement to be developed and produced was the harrower (used to spread ground trash evenly over the soil surface) in 1946 — the invention of an Alberta farmer. The folding harrow drawbar, now common on the prairies, was first manufactured and put on the market by this co-operative. Invented by a Saskatchewan farmer, he made a gift of the idea to Co-op Implements. The only reward asked and received was to receive free one of the first drawbars made.

Perhaps the era's most important addition to dryland farming practice also came in 1946, with the development and marketing of the first disker. In the forties, several farmers developed machines which they hoped would overcome problems they were having with mouldboard plows. The deepness of cultivation, coupled with the tendency to bury surface vegetation and leave soil exposed to the strong drying winds, had helped create the great 'dust bowl' of the thirties.

The disker operated at a much shallower depth, leaving surface trash partially exposed. This served to anchor the soil particles and cut down the severe soil drifting. H. A. Lewis of the University of Saskatchewan built one of the first successful disker models and made it available to Co-op Implements as a prototype. The first disker was built and put on the market in 1947. The name "Disker" was patented by the co-operative, although similar models were manufactured and sold under various names by the other machinery manufacturers.

In 1958 came yet another major step in implement evolution, with the marketing of the first deep-tillage cultivator. Although Co-op Implements was not responsible for its development, it was among those to first factory-produce this implement. The cultivator proved to be a great boon to dryland farmers, as it left the soil surface virtually intact

while cutting off the plant roots in the subsoil. The company constantly improved upon the cultivator, designing new models with greater efficiency.

Turning now from products to methods of operation, Co-op Implements decided to adopt a system of distribution other than that of the dealership. Its method was to establish a network of depots across the Prairies, located in market growth areas. The purpose was to provide convenient access for sales and service to the co-operative's members, rather than numerous and less efficient small outlets in every town.

When the company was formed, thirty-six District Implement Co-operative Associations were set up throughout the prairie area. A farmer took out membership in an Association which in turn was a member of Canadian Co-operative Implements Limited. In 1947 the organizational structure was changed so that the individual farmer took out membership directly in the co-operative and the district associations were dissolved.

Prior to this a contract had been entered into with the Cockshutt Company of Brantford, Ontario for the supply of tractors, combines, and other heavy equipment. During these post-war years, most machines manufactured at the Winnipeg factory and also those secured from Cockshutt were sold directly to members — shipped from the factory to the farmer. In certain cases local co-operatives and Pool elevator operators acted as agents. Virtually all field service was provided by Co-op Implements (this later became the company's commonly known name), while a number of local co-operatives helped out by carrying parts for repairs. During this period distribution costs were very low and savings were high. In 1958, for example, combine purchasers received a 28 percent dividend.

Growing rapidly over the years, the system by 1974 numbered 66 depots between the Red and Peace Rivers, with two more under construction. Most members of the co-operative are within 50 miles of a depot, and parts distribution is handled by depots, with back up from the central parts storage in Winnipeg. Electronic equipment installed at head office permits automatic recording of orders. This system and the Co-op's policy of ordering well in advance results in a high order fill, considered to be the best in the industry.

In 1962, arrangements with Cockshutt were terminated when that company was acquired by one of the multi-national manufacturers. Co-op Implements then began distribution of Deutz tractors and in 1968 it also began distribution of Volvo tractors and combines from Sweden. These arrangements are still in effect in 1974, although assembly of

the machines is now part of the co-operative's operation. In this year, for the first time, all Co-op Implements' combines were manufactured in total at the Winnipeg plant. Previously, all self-propelled combines were manufactured in Sweden, with only 50 percent of the pull-type being produced in Winnipeg.

Co-op Implements moved in a new direction in late 1971, when it was appointed prairie distributor for Volvo BM of Sweden, manufacturer of heavy duty equipment for the logging, mining, construction and municipal markets. The co-operative adapted seven of its depots to suit the needs of construction as well as agricultural equipment. These were designated Industrial Sales and Service Depots, and were located near major activity areas in northern areas where logging and mining are developing rapidly. The expansion into the industrial equipment market benefited the entire organization. By maintaining a steady, year-round service activity, the co-operative retained the skilled sales and service staff required for highly complex machinery. In its first full year as Volvo distributor, sales were more than \$800,000.

In 1970, new operations and the need for rapid increase in production made an expansion program imperative. The old plant, despite several additions, was not only inefficient, but incapable of further expansion. Moreover, there was concern about continuity of supply of machines and parts for the membership, particularly from overseas manufacturers. Many of these products needed to be manufactured here in Canada, particularly combines, and production of this kind was physically impossible in the existing facilities.

The solution was a new plant, where modern assembly lines could be established, with ample room for expansion in machinery production. Money was raised through a "New Factory Bond" issue, plus a \$1,671,000 grant from the federal government. The government acknowledged the need for Western Canada "to build an industrial capability on top of its great resource and agricultural base".

The \$7,200,000 plant was built on the co-operative's 40 acre site located at 770 Pandora Avenue East, Transcona. Construction was completed in April of 1973, creating 175 additional jobs in the process. Employment in 1974 totalled 1,500 including depot, office and factory personnel, a far cry from the 125 employed when Co-op Implements first opened its doors in 1946. The plant opening itself, in July 1973, was a milestone for Winnipeg. Over 20,000 members and guests from across Canada attended.

The export market became increasingly important to Co-op Implements after 1972. The co-operative moved into export sales with essentially three factors in mind. First, a steadily increasing overseas market would help to balance out the cyclical conditions of agricultural machinery sales prevalent on the Canadian prairies, thereby creating a more even manufacturing flow in the Winnipeg plant; second, export sales would aid in protection of the members' investment in plant facilities and machine tools by both regulating and increasing volume; third, increased sales reduce the unit cost for machines by more economical volume production.

As part of its export program, the co-operative developed a 15-minute educational film showing advances in Canadian agricultural machinery. It was produced in five languages.

Over the years since 1946 Co-op Implements has grown steadily with the City of Winnipeg, each contributing to the other's development and success.

Versatile Manufacturing Ltd.*

Versatile Manufacturing Ltd., a relative newcomer into the farm implement manufacturing industry, has in its short existence become the largest manufacturer of farm implements in Western Canada. During its 29 years of operation, it can demonstrate accomplishments in the agricultural field which rival those of other manufacturers who have been in the trade many more years.

Versatile today is the largest manufacturer of swathers in the world. It also was the first swather manufacturer to equip swathers with a steering wheel and also the first to market its own-design four-wheel-drive agricultural tractors with heavy-duty components.

It was the dedication of two western Canadian farmers, Peter Pakosh and Roy Robinson, which led to the firm's establishment and success.

Both men had left their farms in Saskatchewan and Manitoba and had taken jobs with various industries in Eastern Canada prior to starting their own operations.

Mr. Pakosh, formerly a tool designer with a farm implement manufacturer in Toronto, designed and assembled a grain auger — the first Versatile product. This auger, because of its simple design and fewer moving parts (therefore less cause for failure) could be manufactured on a large scale quite inexpensively.

Mr. Pakosh always believed that farm implements should be of simple design and easily repaired. This principle has been incorporated into Versatile products and is largely responsible for the popularity of its products today.

In 1946 Mr. Robinson and Mr. Pakosh entered into a verbal partnership and by 1947 the new company was formed. In the initial stages the company had very little capital, an abundance of ideas, designs for augers and field sprayers and a great deal of determination.

Rented premises were used to display the name of Hydraulic Engineering Company with Mr. Pakosh in charge of design and production and Mr. Robinson handling purchasing and sales.

Operating capital was possibly the greatest obstacle for the newly formed operation. Financial institutions were reluctant to risk capital to "beginners" who were attempting to capture portions of markets belonging to implement manufacturers that had been in operation for some 100 years.

*Submitted by the Company.

Many times both men mortgaged their personal belongings in order to obtain supplies for the completion of their products. Profits from each production were poured back into the operations and by late 1947 the firm had gained enough ground to introduce a harrow drawbar to the market.

By 1948, a production staff of 50 men were turning out larger quantities of augers, sprayers and drawbars which were sold mainly in Western Canada.

As the years passed the problems grew. One of the most serious was the increases in freight rates to Western Canada which had a severe effect on retail prices of Versatile products. This was the major reason for the decision to move operations to Western Canada. Winnipeg, a central location, proved ideal for its market area which then included Western Canada and the north central United States.

In 1952, the company relocated in Winnipeg with a plant in West Kildonan. This was the beginning of better times for the company. Greater co-operation from financial institutions, the established manufacturers of farm implements and greater acceptance of the company's outputs resulted in a more secure footing for the company. With the improved outlook, the company was able to begin experiments with other products for the farm market.

In 1954, Versatile introduced its first self-propelled swather to the market. This self-propelled swather, superior in design and priced lower than competitor models, had a substantial impact on the market its large competitors had enjoyed for some 100 years.

In 1963, the firm was incorporated as a public company under the name Versatile Manufacturing Ltd.

Within a year, the West Kildonan facilities became inadequate and the company moved to its present location in Fort Garry. Since that time, there has been continued introduction of new products and the expansion of production facilities and market areas.

Pull-type combines were introduced in 1964, four-wheel-drive tractors and self-propelled combines in 1966, self-propelled swathers with the superior hydrostatic transmissions and field cultivators in 1968 and hydrostatically driven combines in 1970.

Today, the company is a leading competitor in the industry. Expansion has brought the company to a total of 663,000 square feet of manufacturing space — 456,000 in Fort Garry, 72,000 in St. Boniface and 135,000 in Fargo, North Dakota. Numerous company owned and operated parts depots have been established throughout Versatile's market area in North America. The market area now consists of five

Canadian Provinces and some 29 States (mainly in the central and western United States).

Most of the production is still performed in Winnipeg with local suppliers being heavily relied on for steel, castings, and fabrications requirements. The company at present has a labour force of some 1,500 people.

Today, farming trends are changing drastically. With the disappearance of the "hired hand", implement manufacturers must produce equipment which is much more productive, yet economical and comfortable.

Versatile's large four-wheel-drive agricultural tractors have been adopted on many farms today. Most farmers, 20 years ago, were happy to seed crops at a rate of four acres per hour with the equipment that was available. Today, with four-wheel-drive horsepower, it is possible to seed up to 30 acres per hour.

Comfort for farm implement operators has also become a prime requisite today. Such accessories as air conditioning, radios, tape decks, and two-way communication radios are thus becoming more common in farm tractors.

The demand for Versatile products has not only reached new heights in North America, but European markets are rapidly opening as well. The Versatile name is at present being introduced to many foreign countries and others in the British Commonwealth from which significant sales volume is expected.

The Electrical Manufacturing Industry In Winnipeg

by David S. G. Ross, P. Eng.*

The objective of this paper is to present some historical and economic facts about the electrical products manufacturing industry in Winnipeg. The study attempts to trace the development of the industry by looking at the initial firms, the type of output produced and the present characteristics of the industry.

This essay is limited by the paucity of published data. Despite the numerous submissions and reports to Royal Commissions, special inquiries and so forth, detailed data are lacking or are deliberately aggregated in an effort to preserve anonymity and confidentially as required by statute.

The materials and data used in this study have come from four major sources:

- (1) Published reports, Statistics Canada publications and company annual reports,
- (2) published news stories in local and national newspapers,
- (3) directories, and
- (4) interviews with selected representatives of the industry.

The Initial Period

In the early years of the 20th century the manufacture of electrical products in Winnipeg was not very diverse. In fact as late as 1908 only two firms could be identified with the industry. One manufactured electric (storage) batteries and the other electric belts, as confirmed by *The Western Canada Directory*, 1908. Direct evidence is lacking but it also appears that electric signs and fixtures were being manufactured locally at that time.

By 1924 the total number of firms had grown to ten. Collectively they were engaged in the manufacture of wet and dry batteries, stoves, switches, heaters, irons, hot plates, and repairs to elevators (Davidson, p. 59).

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Eleven years later, in 1935, the number had increased to eleven. However these statistics did not include firms with fewer than three employees.

The *Donald Report* compared 1939 and 1943 performance and related figures for the electrical products industry for Manitoba. Considering that the industry was concentrated in Winnipeg at that time, the statistics are highly relevant in disclosing the nature of the industry (Table 1).

Although a decline in the number of plants occurred, the gross value of products manufactured increased dramatically. There was an almost one hundred percent increase in gross value of products but this was accomplished with eighty percent more employees, a ninety percent higher wage bill and a more than one hundred percent increase in the cost of materials and supplies.

The Post-War Years

Growth of the industry in Winnipeg after the Second World War was not spectacular. However, the impact of rural electrification on the industry was significant. In this connection rural electrification resulted in a "210 percent increase in the number of metered services between 1950 and 1961 and a 56 percent increase in firm energy made available" (P. A. Management Consultants Report, p. 4 and App. V).

This program resulted in several new industries being established. By 1955 the number of firms engaged in electrical products manufacturing in Winnipeg reached 20, they employed almost 800 people and the value of output was over 12.5 million dollars. Although the number of firms did not again increase until after the mid-1960's, production peaked in 1957 with a value around 15 million dollars. Since

TABLE 1
Comparison of Manitoba Electrical Products Manufacturing
1939 and 1943

Year	No. of Plants	Capital Invested \$000	Number of Employees	Salaries and Wages \$000	Cost of Materials \$000	Gross Value of Products \$000
1939	10	400.6	124	163	266	589
1943	9	557.0	222	310	567	1,150

Source: Donald, Ross and Company, *The Donald Report*, Industrial Development Board of Manitoba, 1947, p. 149.

the mid-1960's a marked rise in the value of products manufactured has occurred and this trend has continued to the present. By 1974 there were 41 such firms engaged in the manufacture of electrical products (*Manitoba Trade Directory 1974*). These firms employed 1,795 people in 1970 and the value of shipments exceeded 30 million dollars (*Census of Manufactures, 1970*).

Product Diversity

Electrical batteries were important prior to widespread electrification. There was one such firm in 1910. At one time or another since then the number of active firms rose to a high of 12; and at present there are only two. One manufactures a line of storage batteries and the other dry cells exclusively.

There appear to have been only several brief attempts to undertake the production of major domestic appliances. One firm as early as 1912 produced electric ranges, another organized in 1930 produced domestic electric refrigerators and another in 1943 put together electric washing machines.

The *Knox Report* which studied the industry in Canada compiled a list of the variety of products made in Canada during the period 1937 to 1952. Of the compiled list the following were produced in Winnipeg (Knox, 1955, p. 89): distribution transformers, industrial heating equipment, batteries, lamps, refrigerators, washing machines and other domestic heating and cooking apparatus.

Today the industry is engaged in producing a wide variety of products. According to the Standard Industrial Classification Index, the electrical industry is subdivided into 14 subcategories. Of the 14, 12 of the categories are represented in Winnipeg. The two which are not listed are major electrical appliances, and household radios and television receivers.

One Winnipeg Success Story

Organized in 1947 as Pioneer Electric Limited, this firm is now an affiliate of Federal Pacific Electric Company of Newark, N.J. and operates throughout Canada under the name of Federal Pioneer Ltd.

When the firm began with a total production staff of 6, the entire plant was geared to produce a specially designed, low priced individual farm transformer. An order from the Manitoba Power Commission for transformers in 1946 ensured the company's success.

Today the range of products has been extended and the company has become prominent in the development of high voltage equipment. In 1973 B.C. Hydro ordered nineteen 500,000 volt transformers from the company. The developing energy situation has resulted in an extended market for the firm's output.

The essential feature of this success story is that the product line is very much a matter of individual tailoring rather than one of mass production. This factor seems to suit the local manufacturing climate in that it is very nearly a common feature of the more successful producers of electrical products in Winnipeg.

Concluding Remarks

It will be apparent to the reader that full details relating to this segment of local industry are elusive. Equally, more research will have to be done in answering the following question: Why is there such a small electrical products industry in an area which has and has had an abundance of hydro-electric power available since the dawn of the 20th century and at rates noted for their stability and consistently low levels?

The example that was singled out for individual treatment indicates there has always been considerable entrepreneurial venturesomeness, and of late much greater skill in penetrating more distant markets by the local makers of electrical products. The relative stability and congeniality of the local business, social and cultural environment are acclaimed by many who continue to base their operations here. The prospects for the electrical industry generally have never looked more favourable in view of the awareness of the rich endowment of water power potential in this province, and anxieties caused by the recent energy crisis.

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The Metal Fabricating Industry

by Dave Watson*

Introduction

Metal fabricating is a world-wide, multi-million dollar industry. The development of this industry in Winnipeg has been keeping pace with population and economic growth in general. The industry as a whole consists of the processing of a very large percentage of various kinds of steel with some lighter metals such as aluminum playing a minor part while other metals such as copper wire and steel are combined in fabricating large and small power transformers.

Generally, steel shapes and machinery are what come to mind when one thinks of "metal fabricating", but metal fabricating is thought of today as *not* including the manufacture of transportation equipment and the building of certain types of machinery.

Unlike some industries, such as mining, which make extensive use of locating, obtaining and, in many cases, processing raw material, the metal fabricating industry does not do this. The material of this industry usually arrives at the fabricator's door processed and prepared in a semi-usable form.

For the most part, steel is transported to Winnipeg by truck or rail from steel mills around the Great Lakes which use raw ore from the Ungava region of northern Quebec.

Manitoba mines and processes at least one very important part of many steels at Thompson, and that is "nickel". Manitoba nickel is shipped to major steel producers all over the world, and arrives back in Winnipeg in the form of special tool steels used for punches and dies for metal fabricators. It has high use in stainless steel, used locally, and is fabricated into coolers, steam tables and other restaurant equipment.

These facts put Winnipeg's metal fabricators into much the same position as they were 100 years ago, depending on processed material from outside the province and paying more for transportation than producers nearer the larger eastern markets.

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History

At the time of the birth of Winnipeg there was very little separation within the neophyte metal fabricating industry. From a fur trading post Winnipeg grew to become mainly a warehouse and wholesale centre until about the fall of 1869 when Boyce (p. 11) states there were 18 business places in the Village of Winnipeg. Even the broadest of definitions of "metal fabricator" could only include one of these businesses, that run by Mr. J. H. Ashdown.

A feature article in the *Winnipeg Free Press*, July 5, 1969 notes that by 1902 Mr. Ashdown owned a business with a nominal capital of one million dollars which later was increased to eight million. The same article mentions a small order given Mr. Ashdown in March 1876 for 3,500 tin pails, 1,800 round pans, 1,500 half pint cups, and other similar items. While the records of this period are sketchy it was also noted by Boyce that J. H. Ashdown, who had started his business in 1869, was doing well.

Mr. Ashdown had little local competition in this area, but by this time there were several other businesses that could come under the broad classification of "metal fabricators". Arch Wright had a harness shop, and there would have been some metal fittings needed for his product (Boyce, p. 11).

There were several blacksmiths which today would not be classed as fabricators, but in 1874 they would likely be involved in such things as making horseshoes and repairing wagons and sleighs. A W.M. Chambers was listed as a manufacturer of guns, rifles, and pistols, and muzzle loading shot guns. (*Manitoba Directory*, 1876).

The pioneer machine shop founded in 1874, McKechnie and McMillan, later became Winnipeg Foundry and by 1882 it was pouring two to three tons of metal daily. It was also employing some fifty persons, thus making it a large industry for its day. The firm produced both light and heavy castings and boasted a machine shop and pattern shop as well as the foundry (Boyce, p. 57).

While Winnipeg was developing rapidly as a wholesale-retail centre, there were several large manufacturing firms being developed, the most notable, Winnipeg Barbed Wire Works, employing twenty-five persons. It had a capacity of over 10 tons daily. There were also 10 machines for spinning wire (Boyce, p. 48).

A major industrial complex, the Vulcan Iron Works, was founded in March 1881 by F. H. Brydges. The Complex had a foundry 45' x 100', an addition of 20' x 50', a machine shop 35' x 75' containing a

planer, lathes, and vertical and horizontal drills, a smith's shop 30' x 40' with five fires, and a pattern shop 20' x 33'. Although Boyce doesn't give employment figures it is estimated that an operation this size would need 100 men (Boyce, p. 43).

At this time, the available technology for shaping, forming, and fastening metals was in its infancy compared to modern technology. Large pieces were formed using coal for heat and much labour to do the job. Many holes had to be drilled for riveting because welding techniques were poor or were too expensive. Even drilling holes was slow and had a high labour cost compared to today. Machines were not well developed and carbon steel was in general use for cutting tools because high speed steel and carbide, now widespread, were unknown.

A Few Reasons for Development

One thing an industry requires is people, people require water, among many other things, and an abundant supply of clean water was not available until 1882 when The Winnipeg Water Works began operations on Armstrong's Point near the Maryland Bridge. By 1894, water was available from close to 50 public wells and the artesian wells near McPhillips Street started in 1900 (*WFP* July 27, 1974, p. 13). Water availability and distribution, however, did not really become organized until much later when the flume line was completed from Shoal Lake to Winnipeg. It was our very early metal fabricator, Mr. J. H. Ashdown, who was one of the active promoters of the Shoal Lake Water Commission which made available a good supply of drinking water for the city (*WFP* July 5, 1969, Feature article).

Many sections of metal fabrication rely on welding gases both for cutting and welding and also for heat. The first production of oxygen and acetylene at a new plant owned by Canadian Liquid Air in 1916 gave a big boost to the industry. This made a ready supply available without the delay and cost of transporting gases from the East. Canadian Liquid Air opened a new one million dollar plant on Weston Street in 1967 and its products find heavy use today for welding, cutting and heat treatment of metals, as well as in the production of steel.

Population pressure from Eastern Canada, and immigration, the lure of adventure in a frontier city, and cheap or free land attracted much of the labour force and consumers needed for Winnipeg to grow. Growing markets, especially during the Second World War, brought business and provided capital for expansion which was not ordinarily available. After the war, many manufacturers were able to buy govern-

ment owned, expensive machinery for a few dollars. In many cases the equipment was already installed and located right at the purchaser's place of business. There are many places in Winnipeg today where some equipment still bears name plates indicating the machine was owned by the Department of National Defence. Although metal fabricators are not heavy users of hydro-electric power, compared to say, basic metal manufacturers, no doubt the very reasonable power available because of hydro developments in Manitoba would be a factor in the continued growth of this industry.

Development of Specific Firms

Canadian Rogers Western Ltd. was founded in 1912 by E.G. Rogers and A.K. Rogers, his son, who has been with the firm since 1933, has built a reputation for being one of Canada's leading metal fabricators. Among the many products made by some 100 employees are metal components for institutional kitchens, agricultural products manufacturing, and construction equipment. Through another division headed by Cam Landreth, various agricultural products are manufactured, such as filter floors for barns and steel partitions and gates to be assembled into animal pens. This division of Canadian Rogers called CANRO markets its products throughout the northwestern United States as well as in Canada.

Pydee Engineering Company Ltd. has recently added another 4,400 square feet of space. Full time staff have increased from 15 to 25 and up to 50 during peak periods. Pydee has been fabricating custom equipment for manufacturers, saw mills, institutions and bakeries in Canada and the U.S.A. for over 28 years. As well as manufacturing a variety of custom work the firm also acts as distributors for hoisting equipment, tow carts, casters, and power conveyors. Installation and maintenance and adjustments is another service provided. Since it was founded in 1946 by C.E. Pydee, this firm has grown to a point where it expects over one million dollars sales volume in 1974.

Kipp Kelly Ltd., with about 60 years experience in Winnipeg, has gone from gross sales in 1913 of about \$75,000 to over five million. The company started out manufacturing milling machinery for the grain industry and now exports products for use by construction, feed milling, bakeries, other manufacturers and railroads.

Manitoba Bridge, from a modest beginning in the early 1900's at Logan Avenue and Arlington Street, has grown to the point where it can employ nearly 300 persons.

Its structural steel section has supplied materials for such jobs as the Manitoba Legislative Building and the C.N.R. Station. More recent jobs have been large fabricated water balls for local towns, monel clad plate jobs for Atomic Energy at Pinawa, Manitoba, various components for potash mines in Saskatchewan and large metal barges for transporting goods and equipment by water to Manitoba's north. A recently constructed one-half-million-dollar autoclave for Boeing Aircraft, for curing fibreglass aircraft parts, was also produced at Manitoba Bridge.

An example of new fabrication in Winnipeg is Carte Electric, which opened in October 1973 with an investment of about \$900,000. This firm produces and distributes transformers, both pad mounted and pole mounted. It merits mention here because of the considerable amount of metal fabrication which is involved in this electrical product, both for laminations and containers. It expects to employ 60 people and produce about 500 transformers per month.

There are many more establishments that deserve mention, but to cover them all adequately would involve many pages. Such companies would include Bristol Aerospace Limited and its involvement in space age components and rockets, its propellant plant, and aircraft repair capability, as well as Boeing of Canada Ltd., Winnipeg Division, which is also widely involved in the aerospace industry.

Present State of the Industry

As can be seen, Table 1 indicates a value added for 1970 of \$46,296,000. This is a substantial increase for the 100 years since Mr. Ashdown arrived in Winnipeg. Winnipeg now has the capability of fabricating a complete railway locomotive. A 160 ton crane at the C.N.R. Transcona shops can lift a complete locomotive from its tracks (*Tribune*, May 28, 1949) — a far cry from the early tinsmith shops.

Winnipeg fabricators make use of many of the recent advances of technology, welding in particular. Automatic and semi-automatic welding equipment is used in various locations. Computer-controlled point-to-point drilling machines and tape or card controlled punches and bending machines have reduced the man-hours of labour compared to that of the early shops.

When statistics are available for Winnipeg's centennial year, the value added should show a large increase over the 1970 figures. Apart from inflation, companies are busier than ever before. A buoyant Canadian economy is reflected in backlogs of orders for almost every

TABLE 1
Principal Statistics of Metal Manufacturing Industries of Winnipeg

Industry (Winnipeg)	Number of Establishments	Production and related workers		Wages in \$000	Selling value of goods shipped in \$000	Value added in \$000	Year
		Male	Female				
Iron and Steel Products	101	4072	278	14,423	56,792	—	1956
Iron and Steel Products	106	4084	282	16,065	53,736	—	1957
Iron and Steel Products	118	4067	299	17,226	57,070	—	1958
Iron and Steel Products	80	4927	371	19,607	57,865	—	1959
Metal Fabricating	72	2657	192	13,746	39,073	—	1960
Machinery	11	553	172	3,466	13,470	—	1960
Metal Fabricating	78	2433	178	13,181	35,233	—	1961
Machinery	12	547	185	3,540	14,524	—	1961
Metal Fabricating Industry	112	2729	29	11,962	56,923	26,462	1964
Metal Fabricating Industry	123	3298	42	15,156	79,439	37,827	1966
Metal Fabricating Industry	123	3319	44	16,755	83,260	43,720	1967
Metal Fabricating Industry	116	3326	101	22,944	89,630	46,296	1970

Credit and thanks go to Statistics Canada for supplying the information in the above table. The information was taken from several publications covering the years 1956 to 1970 and is provided here as an indication of the topic industry. Statistics Canada does not break down its information more specifically in order to preserve secrecy. Some variation in grouping and therefore, final, figures is to be expected because of changes in reporting procedures.

fabricator. The two major limiting factors on further expansion at this time are: a severe material shortage, particularly steel; and a skilled labour shortage. Many local firms are attempting to meet this last problem by actively seeking, hiring, and training more female staff.

Part of the shortage of skilled labour could have been eased if the industry as a whole, possibly through one of its associations, could have had a stronger commitment to training. It is only recently that there seems to be some realization that immigration and movement of skilled craftsmen from other industries are not enough to fill the void. In the last few years there is more interest in apprenticeship by several firms and there are many in-plant training programs in operation, supported by the federal government as well as by the industry.

Shortly after the Second World War there was a good supply of skilled persons but they are now reaching retirement age. Much re-thinking on training for future requirements is needed.

There appears to be no short-range remedy in sight for these problems. Steel is 50 to 60 percent higher in price than in spring 1973. Also, steel is cheaper and delivery better in some shops from West Germany or England than from eastern Canada. Furthermore, Bridge and Tank Western Ltd. (the old Vulcan Iron Works) is booked solid with jobs from Manitoba Hydro, and — despite shortages — the immediate future looks prosperous for metal fabricators (*WFP*, July 23, 1975, p. 23).

Summary

The metal fabricating industry in Winnipeg over the last 100 years has registered considerable increases in both employment and value added. Similar problems at the moment are faced as they are in related industries. To a large extent Winnipeg's welfare is closely tied to that of the rest of Canada and world conditions. Fabricators have nonetheless strong connections with the fortunes of various other industries within Winnipeg, as diverse as food production and handling to locomotive repair. The linkages of the bulk of the metal fabrication industry is, in no small measure, a reflection of the general situation obtaining in Winnipeg's broad industrial base.

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Author's note: I am indebted to various leaders of the industry who freely shared information, and to the Manitoba Department of Industry and Commerce for certain data.

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The Apparel Industry

Two views are here presented. The detailed historical description, based on original research by Prof. Hastie, leans toward an analysis of the life span, capitalization, and the pattern of foundings and failures from the earliest days of the industry. Prof. Hastie also has provided a valuable series of annotated references. His article here is a condensation of a much larger work, as yet unpublished. Mary Lile Benham has provided a somewhat different view of the industry's growth with emphasis on the new and recent initiatives undertaken by the industry to improve its overall viability rate. She has depended heavily on industry sources for much of her information. — Ed.

Development of the Apparel Industry of Winnipeg

by R. Hastie*

It is impossible to fix an exact date for the origin of the apparel industry of Winnipeg. While it would be logical to select the incorporation date of the first known factory as a starting point, this would be arbitrary, failing to provide some insight into the conditions which led to that incorporation. Similar to many other industries, the history of the apparel industry would appear to be an evolution — a gradual growing and shaping in identifiable stages. The germ of the industry arises out of the home or cottage crafts practiced by the families of the early settlers of Manitoba. A second stage in the evolution of the industry vested apparel production in the hands of a few highly skilled artisans — the tailors, dressmakers and milliners. Finally, in its third and current stage, the business of producing apparel has become concentrated in the hands of the manufacturer who employs a great many people to piece together apparel, not just to meet the needs of a single community, but of a vast number of unknown purchasers spread over a large geographic area. Each of these stages of apparel production overlaps the next, blending them into a continuous progression, from the homespun, hand stitched garments of the Selkirk Settlers to the highly mechanized production of hundreds of garments each hour as can be accomplished in many of today's factories in Winnipeg.

The apparel industry, as distinct from the "fashion industries", includes a wide variety of economic activities which result in products traditionally recognized as clothing and accessories. More precisely the apparel industries can be recognized as businesses which produce relatively standardized types and styles of apparel, efficiently, and in relatively large volumes, through specialization of labour and with mechanical devices, for distribution to large numbers of purchasers. Usually this takes place within a factory building set aside and equipped for this purpose.

Because the contingencies of the factory setting demand that a manufacturer produce standardized styles, manufacturers specialize in

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the production of one type of garment or one category of related types of garments. Specializations within the Winnipeg industry can be categorized as: cloth coats, leather and suede coats, dressing gowns, gloves, headwear, hosiery, jackets, neckwear, furs, rainwear, handbags, shirts, blouses, skirts, sweaters, pants, undergarments, swimwear, ski-wear, and uniforms.

One of the few sources of information regarding the number of manufacturers which have engaged in one or more of the variety of specializations is the *Manitoba Gazette*. The use of the *Gazette* requires, however, a page by page analysis which has inevitably led to some omissions and errors in reconstructing the number of manufacturing firms which have operated in the city of Winnipeg in the period from 1890 to 1974. Although 370 manufacturers were identified as having had existed in Winnipeg from 1901 to 1974, complete information could only be obtained for 263.

The Pre-industrial Period

It was obvious to the earliest settlers of the Red River region that they should attempt to raise sheep as a source of wool for textiles and clothing. Until they could produce some of the textiles necessary to withstand the bitterly cold winters and hot summers they would be dependent upon supplies from England or France which could only be brought into the settlements during the summer. It was not until the 1840's however, that sheep became a common possession among the settlers. Before that time buffalo robes and other skins, hides and furs of indigenous animals were an important source of materials from which apparel could be made in addition to the intermittent shipments of textiles received from Europe.

The actual production of apparel, from a collection of raw fibres to the setting of the last hand stitch, followed a yearly cycle in the Red River Settlement (Healy, 1967, p. 99). Starting in June, it was father's job to oversee the shearing. Young children worked along with their mothers at simple tasks such as picking or teasing, the breaking up of fibre bundles preliminary to carding. Carding, the next task, was mother's job which consisted of drawing pin boards through the wool to remove broken, knotted or short fibres and causing the remaining fibres to lie parallel to one another. Spinning, twisting the fibres into yarns, was generally mother's task as well but young girls were taught to spin as early as possible. Yarns were then generally greased with rendered fat or sturgeon oil prior to weaving (Healy, 1967, p. 100). The weaving

of fabrics came next. After weaving, the grease was removed by washing the fabrics and mother and daughter sat down to the task of cutting and stitching the necessary garments for various members of the family (Guillet, 1968, pp. 19-35).

Mrs. Neil Campbell, a resident of the Red River settlement, reports that, "Every article I wore was a product of my mother's hands, even my shoes, until I was 14 or 15 years old, when I got my first bought shoes or English shoes, as we called them, with brass toecaps" (Healy, 1967, p. 147).

Signs that this pre-industrial period of apparel production was coming to an end probably occurred about 1859 when the "Anson-Northup" steamed its way down the Red River to Fort Garry. From that time on fabrics and clothing, and particular accessory items began to increase in availability, making homemade shoes and homespun a thing of the past.

The Proto-industrial Period

By 1874, and the chartering of Winnipeg, the second stage of evolution toward an apparel industry in Winnipeg appears to have been fairly well established. This stage was marked by the establishing of tailor shops and by other mercantile establishments which employed tailors, dressmakers and milliners. The merchants also made it their business to supply such ready-to-wear apparel as could be imported from England, France and the United States, as well as a large assortment of yard goods upon which the tailor or dressmaker could ply their craft.

The production of apparel outside the home seems to have occurred first for the production of men's wear. As early as 1874, Winnipeg could boast of having two such shops among its commercial establishments (Begg and Nurse, 1879, p. 14). Women's wear production outside the home occurred first in late 1874, when a Miss Moncrieff, a Scottish immigrant, advertised the opening of her shop in the *Free Press* (Lucas, 1923, p. 108).

According to the Census of Manitoba for 1885, Winnipeg counted 20 industrial establishments which were devoted to the production of men's wear and 12 which were devoted to dressmaking and millinery. The men's wear shops were larger than those devoted to women's wear, averaging about seven employees, while the dressmaker shops averaged about two employees for each shop. Further, the value of apparel produced by the men's wear establishments was estimated at \$218,332, while for the women's wear establishments it was estimated at \$44,397.

In 1901, the Fourth Census of Canada recorded a decrease in the number of establishments producing apparel in Winnipeg. Thirteen men's wear shops and seven women's wear shops were enumerated. There was also a decrease in the value of the men's garments produced which was estimated at \$148,972 or about \$69,360 less than had been estimated in 1885. For women's wear there was an increase, raising the estimated value of garments produced to \$79,571 or \$35,174 more than had been estimated for 1885. In part, these changes could be accounted for by value changes in the purchasing power of the dollar, or in differential methods in reporting census information. It is equally true, however, that real changes were occurring in the Winnipeg market due to population increases.

Urban population in Manitoba had increased almost seventy-fold to 70,436 between 1871 and 1901; while rural population increased a little more than seven-fold to an estimated 184,775 persons (*Canada Year Book*, 1941, p. 60). These population figures alone would suggest the need for increased supplies of apparel which tailor shops and dress-making shops could not supply even though the workers in them averaged a 58-hour work week. Especially needed would be an increase in the amount of work clothes produced to accommodate the 160,605 rural people, most of which were farmers, new to the region during this 30-year period.

Around 1880, ready-to-wear apparel, especially of the work clothes type, was being made available through Eastern Canadian manufacturers. Winnipeg merchants and wholesale dealers, soon after, began to acquire stocks of these goods. Seven companies identified themselves as dealers of ready-to-wear apparel in Winnipeg as early as 1881 (*Henderson's Directory*, 1881, pp. 12-109), and by 1884 their number had grown to 36 (*Henderson's Directory*, 1884, pp. 12-308).

While the whole of Manitoba, including Winnipeg, found its economy to be subject to the fluctuations and influences of nature, this was especially true for the precursors of the apparel industry. In times of good harvest and high wheat prices the farmers could spend their incomes more freely on apparel, but in times of crop failure or very low prices, a more frugal attitude was taken. As a general rule farmers tended not to commit themselves to purchases until their crops were actually harvested and sold. Under these conditions, along with the contingencies of their own business methods, merchants were faced with problems of placing their orders in the East late in the season and chance missing sales, or find suppliers closer to Winnipeg, or producing their own supplies of apparel.

Many of the wholesale and mercantile companies that applied for provincial Letters of Patent in the late 1890's and early 1900's, did, in fact, expand their applications to include the right to manufacture apparel, but there is little evidence that they exercised this right (*Manitoba Gazette*, 1890-1900). It was soon evident that the need to diversify into apparel manufacturing was met by merchants who founded independent companies specifically devoted to the task, bringing the apparel industry of Winnipeg to reality.

The Modern Industry

Although there were some businesses in Winnipeg which identified themselves as apparel manufacturers as early as 1884, it was not until the turn of the century that the apparel industry as we know it today began to take shape. Since that time it has grown to be the third largest in Canada, preceded only by Montreal and Toronto.

The establishment of factories. It has been claimed that the founding of the Winnipeg Shirt and Overall Company, later renamed Western Shirt and Overall Company, in 1889 marks the beginning of the industry in Winnipeg (*Manitoba Business Journal*, 1967, p. 18). Such a claim supports the contention that the Winnipeg industry was first founded to provide adequate supplies of work clothes for farm and railroad workers, and that the production of staple men's wear has been the mainstay of the industry from its inception. On the other hand, the first provincially chartered manufacturing firm was M. B. Lee and Company, Ltd., founded on February 25, 1902. The principal applicant for these Letters of Patent was Manlius Burton Lee, who specially requested the right to manufacture ladies' suits and other clothing (*Manitoba Gazette*, 1902, p. 155).

Regardless of which company was the first, or what it produced, from the year 1900, the slow but steady progress toward a factory-institutionalized industry was underway. From 1900 on, at least one new factory was established each year and by the end of the first 12 years the industry encompassed 19 firms. The trend toward the institutionalization of the apparel industry into the factory setting during the early part of the twentieth century has been, in part, attributed to the availability of low cost buildings and building space that had previously served as warehousing during the construction of the Canadian National Railways.

In 1915, the rate at which factories were being established increased so that between 1915 and 1926 an average 3.33 were being established

each year. In the years following, from 1927 to 1943, the growth rate appears to have reached a plateau of 3.75 factories being established each year. It was thus, that by 1943, a total number of 129 firms had been established in the city.

In the 13 years between 1944 and 1956, Winnipeg's apparel industry achieved its peak growth period. On the average, 7.62 firms were established each year during the period. Nineteen forty-six (1946) stands out as an important year as 14 new firms were established. Such a spurt of growth would have been expected immediately following World War II. During the war many Winnipeg factories had been turned over to the production of uniforms, parachutes, canvas kit bags and the many other textile fabrications necessary to carry on warfare. At the same time civilian consumption of apparel was cut drastically, not only because available machinery was being devoted to the task of outfitting the Canadian armed forces, but also because a large percentage of available textile materials was also being devoted to the Canadian war effort. As the war ended textiles were made available to manufacturers who found a great demand for new clothing among civilians and returning soldiers.

A very decreased growth rate began to occur in the industry around 1957 which has continued until the present. Over this 18-year period approximately 2.67 firms have been established each year.

In the overall view, the apparel industry of Winnipeg has increased at a rate of approximately 3.65 firms per year over a 72-year period. On a year-to-year basis, the growth rate would appear to be sporadic, fluctuating especially with the incidence of war. Nevertheless, underlying this is an orderly pattern which reflects a solid, steady growth. To look only at the number of firms and factories established over the years does present an incomplete view of the development of the Winnipeg apparel industry. As surely as some firms were established others failed and ceased to exist.

Business Failures. From 1902, the establishment of the first apparel firm, it was 11 years before the first failure was recorded among the provincially chartered manufacturers. In 1913, Ryan and Goodland Company, Ltd., which had been founded in 1903, failed. John Ryan and Herbert Thomas Goodland, both of whom recorded their occupations as manufacturers, had founded the company to produce hosiery, underwear, and other related woollen and cotton clothing. Following the failure of this company it was an additional two years before the next businesses failed.

Four manufacturing businesses failed during the year 1915, among which was M.B. Lee and Company, Ltd., which was already noted as the first of the provincially chartered firms. M.B. Lee and Company had thus lasted for a 13-year period. Additional companies which failed that year included Northwestern Cap Company, Ltd., Watkins Glove and Mitten Company, Ltd., and the Invicta Manufacturing Company, Ltd., which had been a manufacturer of men's shirts and collars.

The five companies just mentioned represent the only failures of chartered companies to occur within the first 16 years of the apparel industry which at that time included approximately 30 manufacturers. R. Bellan's notation of a slackened tempo of construction activity in the West in 1914 suggests that the demand for work clothing produced by Winnipeg manufacturers would have been reduced, thus, in part, resulting in the 1915 failures (Bellan, 1958, p. 240). It must be noted, however, that only two of the four firms that failed that year could be considered to fall within the category of work clothes producers.

Around 1919, the picture of failures within the industry changes from a relatively stable 16 years to one which includes failures virtually every year. In the period from 1919 to 1974 an average of three firms failed every year.

From 1916 to 1918 much of the Winnipeg apparel industry had been devoted to producing military uniforms and war supplies for the Canadian and British governments. When, on November 11, 1918, the armistice was signed with Germany orders for these types of supplies were virtually withdrawn from the Winnipeg market. Manufacturers found themselves in the position of having to divert their production back to civilian apparel rather rapidly. Apparently, some of the manufacturers could not cope with this rapid changeover resulting in 11 failures in the three succeeding years.

Between 1922 and 1930 the failure rate dropped back to about one firm each year. This trend was short lived, however, for in 1929 and 1930, the world economic situation became very grave and the widespread depression, which followed throughout the greater portion of the 1930's, made itself felt by the Winnipeg industry (Gray, 1966, pp. 1-7). It appears that the industry was hardest hit in 1931 when seven firms failed. Although the situation was tenuous, all of the remaining manufacturers were able to hold their position throughout 1932 and 1933. Nineteen thirty-four, 1935 and 1936 brought greater hardships, however, and those manufacturers who had just managed to exist had to give up. A total of 12 firms, four each year, failed between 1934 and 1936.

By 1937, the economy, as far as the apparel industry was affected, seemed to be regaining its former life. The September 10, 1939, declaration of war with Germany by Canada added momentum to this trend and brought to the industry orders for military uniforms, tents, parachutes, kit bags and a variety of other supplies. During the period from 1937 to 1946, only nine firms failed bringing the failure rate down to slightly less than one each year. Nineteen forty-six was an important year for the establishing of manufacturing firms, but the following two years, 1947 and 1948, brought a relatively high failure rate back to the industry. Nine firms failed during these two years.

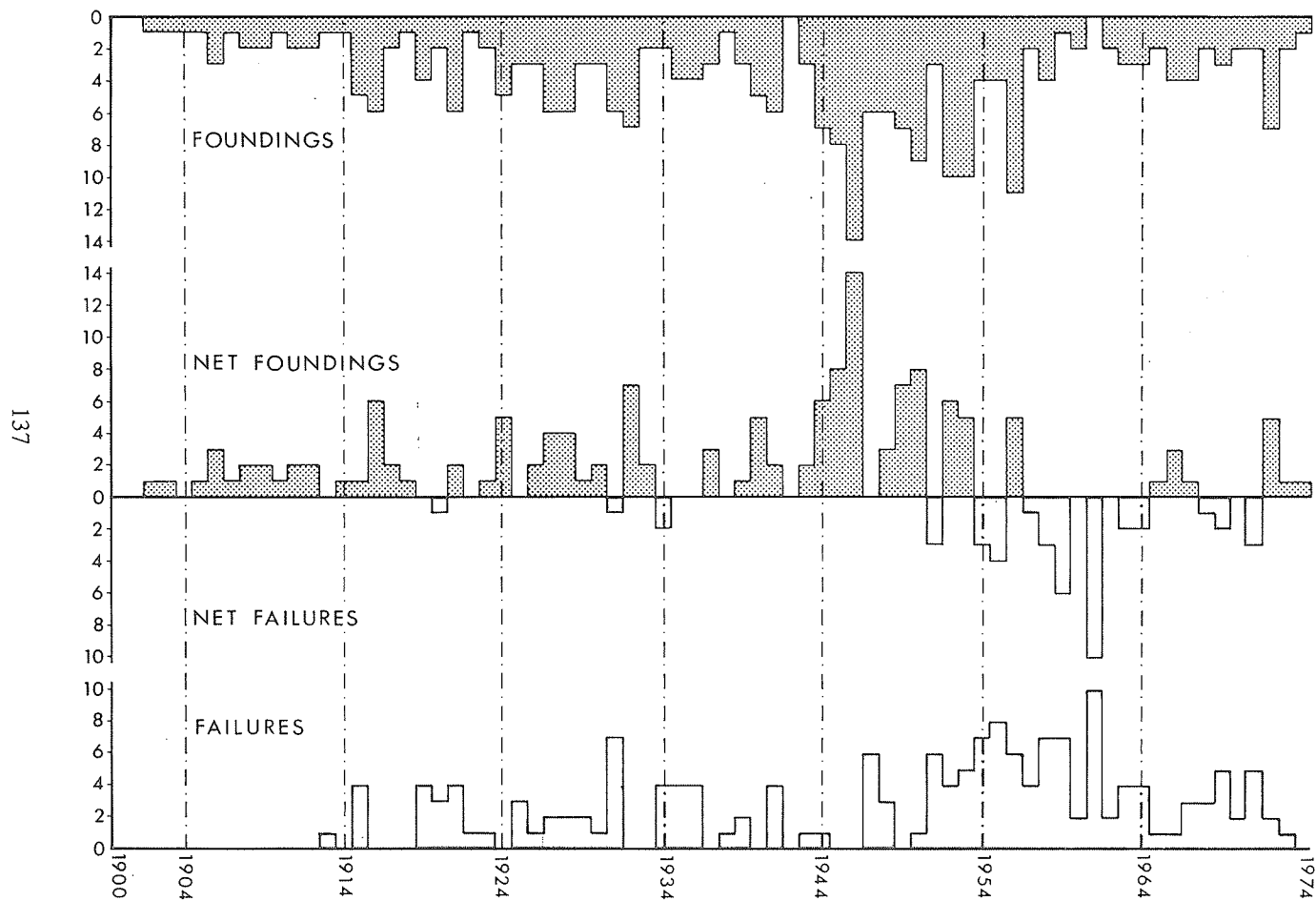
While there were no business failures in 1949, the next year followed the trend toward a high failure rate that had started in 1947 and continued to a high point in 1961. During this 12-year period the failure rate reached 6.42 firms each year for a total of 77 firms. Many of these firms that failed had been founded during the 1940's. Specifically, 60 percent of the firms founded during the 1940's failed before 1961. This suggests that the "promise" of a stabilized industry which could have resulted from government war orders and the "promise" of a vast and eager civilian market after the war, was not a reality for the Winnipeg industry.

The failure rate for the industry did drop to about half what it had been between 1950 and 1961 during the years from 1962 to 1973. For this 11-year period the failure rate was approximately 3.25 firms each year or a total of 39 failures. According to current thinking in the industry, this failure rate is accounted for by the "dumping" of apparel imports and, most important, critical labour shortages which have plagued the industry since as early as 1950. Some 116 firms operate at present in Winnipeg.

Just as looking at the founding of businesses presents an incomplete view of the development of the industry so does looking just at business failures. When the number of business failures are subtracted from the number of businesses established each year a more precise picture of the stability of the industry is seen.

Life Span and Stability. Throughout its early years the Winnipeg industry appears to be quite stable up until 1931. Prior to that year the number of firms established always exceeds the number of failures except in 1919 and 1925 when they were equal. In 1931, however, six firms were established while seven failed. Although there is little documentation of this it suggests that the stock market crash of 1929 and the depression of the 1930's had a significant influence on the development of the industry. James Gray's *The Winter Years* sheds some light

FOUNDINGS AND FAILURES IN THE WINNIPEG APPAREL INDUSTRY



on this period by describing the situation as: "Clothing merchants went broke. Clothing factories shut down, clothing workers went on relief, and nobody got any new clothes" (1966, p. 68). To account for the establishment of a number of firms in 1931, Gray observes that ethnic prejudices were rampant and that this led to the development of "bootstrap" manufacturing in Winnipeg: "Small scale garment factories, glove factories, shoe factories and dress plants proliferated. Long, empty warehouse space in the old wholesale district began to fill up with Jews trying to scratch a living in manufacturing" (Gray, 1966, p. 132). While Gray implies a great influx of Jewish people entering the garment industry during the depression, it should be noted that prior to this time the industry was dominated by people of English and Scottish origin who are still prominent ethnic elements in the industry today.

In the years following 1931 the stability of the industry remained somewhat tenuous. Although there were no business failures in 1932 and 1933, in 1934 failures exceeded the number of foundings, and in 1935 and 1936 the number of failures was equal to the number of foundings. The stability of the industry at this time was undoubtedly complicated by the arrival of union organizer, Sam Herbst, in Winnipeg in 1935. He was a representative of the International Ladies' Garment Workers Union, an affiliate of the American Federation of Labour. Winnipeg manufacturers were anti-union partly because of Communist Party efforts to organize apparel manufacturing labour. In the face of what seemed an impossible task, Herbst did manage, that year, to negotiate a contract with Jacob Crowley Manufacturing Company, Ltd., a firm that had been founded in 1919 to manufacture ladies' dresses and cloaks (Johnson, 1948, p. 66).

The I.L.G.W.U. was not the first union to become active in Winnipeg however. The United Garment Workers, local 35, an affiliate of the C.I.O., had been chartered in Manitoba in 1899 (Johnson, 1948, p. 66). Apparently the members of this union were mainly fur workers. The fur trade, including the manufacture of fur garments was, and still is, a very important part of the Winnipeg apparel industry. Dissatisfaction with the union and the fur manufacturers led to a series of strikes in 1936 and 1937 which crippled the industry badly and almost brought an end to fur manufacturing in Winnipeg.

It is worthy of note that Herbst had undertaken the task of organizing an industry which included approximately 3,000 workers by 1931. The growth of industry labour to 3,000 persons in 28 years from approximately 160 persons illustrates the significant impact this industry had on the economic situation of Winnipeg and still has as the industry continues

to grow employing currently in excess of 6,500 workers. Also significant is the fact that this industry is the second largest employer in the city, following only the food and beverage industry, and the largest employer of women in the city.

Around 1937 the apparel industry appeared to stabilize again as the number of businesses founded exceed those that failed. Canada's entry into World War II likely solidified this trend toward stability in 1939 which continued until at least 1947 when business failures again became equal to business foundings. In spite of this 1947 event, the industry did continue in a relatively stable fashion through 1950.

From 1951 on to the present, the industry appears to have become less stable. The apparel manufacturers themselves have suggested that this instability can be accounted for by continued labour shortages, rising cost of labour, relaxation of tariffs and quotas on imported clothing and finally, in 1974, the problem of gross shortages of textile fabrics from which apparel is produced.

The problems of the industry had become so complex and troublesome that in 1969 steps were taken by approximately 100 of Winnipeg's apparel manufacturers to form the Fashion Institute of Manitoba. In a highly-competitive, highly-individualistic industry, manufacturers have found it helpful to work together to improve industrial development and stability — partly in response to the March 1969 provincial government *Report of the Commission on Targets for Economic Development* (T.E.D.). This report warned of industry decline unless apparel manufacturers could improve their ability to respond to changing social and economic conditions. A steering committee was selected, which finally brought 40 manufacturers into membership in an Institute which could present a united effort against the problems the industry faced. In 1970, the Institute hired an executive secretary and coordinator of information services. A committee was formed to draw up plans for personnel recruitment and to set up a school which could be used to train sewing machine operators. The school is located on Princess Street in the heart of the industry. The Institute was chartered as a non-profit corporation on January 17, 1972.

In spite of what appears to be a trend toward increasing instability in the apparel industry at the local level, the overall trend up to 1974 when compared to the national level has been one of relative stability and growth. William Lazer states that from 1949 the clothing industry has always ranked among the top four industries in the number of commercial failures under the Bankruptcy and Winding Up Acts, and in 1954, there were more failures in the clothing industry than in any

other industry in Canada. He further states that the average life span of a Canadian apparel manufacturing firm is something less than seven years (Lazer, 1956, p. 33). While it does appear that the failure rate for the Winnipeg industry over 72 years is approximately 66 percent, this does represent, on the average, the demise of only three firms each year. Furthermore, statistical analysis would indicate that the average life span of Winnipeg apparel manufacturers is 17 years, or ten years in excess of Lazer's figure for the national average.

Life Span and Capitalization. Undoubtedly, one of the major influences in the development of any industry is its customary capitalization pattern. This is a particularly interesting question with regard to the apparel industry which has often been criticized because little of the average firm's earnings are returned to it as operating capital.

In 1904 the rate of capitalization for Winnipeg apparel firms averaged about \$50,000. This represents a fairly high rate of capitalization for that year, particularly when it is compared to other commercial enterprises in the city at that time. By 1914 the average rate of capitalization had increased to approximately \$66,000 and by 1924 had reached a peak of approximately \$93,000. Nineteen thirty-four brought a decrease to approximately \$64,000 and 1944 brought an all-time low of about \$12,000. By 1954 the average rate of capitalization had again climbed to approximately \$93,000, but again it dropped to about \$63,000 by 1964. Currently (1974) the average rate of capitalization is approximately \$78,000 and it can be noted that at least two firms, Silpit Industries, Ltd., and Monarch Wear of Canada, Ltd., are capitalized at rates in excess of one million dollars. These, of course, are not "constant dollars" but are "current dollars" for the years quoted.

One of the important questions which arises out of the average rates of capitalization is whether the average life span of any firm and its average rate of capitalization are related to one another in such a way that they may account for the apparent stability of the industry. This does not appear to be the case over the first 20 years of the industry's existence according to statistical analysis, however. From 1934 to the present the picture is quite different. A definite, positive correlation can be statistically demonstrated to exist between life span and capitalization. It can be concluded then that the higher the rate of capitalization a firm has had, the more likelihood there is that the firm will survive over a longer period of time and that this factor accounts for, in part, the stability of the apparel industry of Winnipeg.

Perhaps the most important discovery of this study has been that regarding the stability of the industry, particularly in the face of the

popular belief that the apparel industries in Canada are characterized by a high rate of turn-over among firms. The Winnipeg apparel industry to the contrary has proven itself, throughout its 72-year history to be an increasingly reliable and stable contributor to the economy of Winnipeg and Manitoba — from the Model Manufacturing Company, Ltd., founded in 1908 to become currently the oldest firm operating in the city, to Arthur Street Fashions, the youngest member of the industrial family founded in 1974.

Bibliography of References, Annotated

Begg, A. and Nursey, W. R., *Ten Years in Winnipeg*, Times Printing House, Winnipeg, 1879.

A written description of the growth and development of Winnipeg over a ten year period. Of particular value is the detail information concerning the count of tailoring and dressmaking shops for each year, as well as the counts for other commercial establishments.

Bellan, R. C., *The Development of Winnipeg as a Metropolitan Centre*, Ph.D. Thesis, University Microfilms, Ann Arbor, 1958.

A historical overview of the development of Winnipeg as a trade and resource centre for western Canada. Specific references to the apparel industry and wholesaling industry are made, indicating the relationship of railroad construction, railroad tariffs, wheat raising and war to the development of these industries, both as a general economic stimulus and as the creator of specific product needs.

Dominion Bureau of Statistics, *The Canada Year Book 1941*, Queen's Printer (Edmond Cloutier), Ottawa, 1941.

Of particular interest in this work is Chapter VI(6), Section 8, Rural and Urban Population. Table 16 entitled "Rural and Urban Populations, by Provinces and Territories, Decennial Censuses 1871-1931 and Numerical Increases 1921-31", found on page 64, gives Manitoba population figures of use; while Table 18 gives a figure for Winnipeg in 1871 which was recorded as 241.

Dominion Bureau of Statistics, *The Canada Year Book 1954*, Queen's Printer (Edmond Cloutier), Ottawa, 1954.

This volume of the year book contains the last printing of a comprehensive Canadian Chronology (1867-1953). Found in Chapter XXVIII(28) on page 1259, it lists by year the political events which have had significant influence on the development of Canada.

Government of Canada, *Census of Manitoba 1885-1886*, (Sessional Paper No. 12), MacLean, Roger and Company, Ottawa, 1887.

Table XVII(17) entitled "Industrial Establishments" gives statistics concerning tailors and dressmakers in the province. Twelve dressmaking and 20 tailoring establishments are enumerated with the former having a total of 30 employees and the latter 165. Capital investment in dress-making amounted to \$22,875.00 and in tailoring to \$97,150.00. Value of articles produced was \$44,397.00 for dressmaking and \$218,332.00 for tailors.

Government of Canada, *Fourth Census of Canada 1901*, Vol. III, King's Printer (S. E. Dawson), Ottawa, 1905.

Volume III of this census pertains to manufacturing in 1901. For Manitoba the census notes 20 apparel manufacturers of which 13 produced men's wear and 7 produced women's wear. This census did not distinguish between custom and factory garment manufacture as does the Fifth Census and probably includes both. A total working capital of \$57,648.00 for the industry is noted as is a value of \$148,972.00 for products in the men's wear industry and a value of \$79,571.00 for products in the women's wear industry.

Gray, James H., *The Winter Years*, Macmillan, Toronto, 1966.

A biographical account of the Depression in Winnipeg. Of interest for this paper was Gray's account of obtaining clothing through charity institutions in the city and his account of dealing with Mr. Samuel Herbst, a New York union organizer, while a reporter for the *Winnipeg Free Press*. Gray stresses the ethnic element in the development of the apparel industry during the 1930's, but this information appears to be heavily opinionated and not particularly factual.

Guillet, Edwin C., *Pioneer Arts and Crafts*, University of Toronto Press, Toronto, 1968.

Chapter 3 of this work is devoted to the cottage spinning and weaving industries. Steps in the process which are clearly explained are shearing and sorting, greasing and carding, spinning, dyeing, weaving, fulling and the final making of apparel. Sources of information for this work appear to be based in Ontario and Quebec, and particularly the former, which were notably advanced compared to Manitoba in the early 1800's.

Healy, W. J., *Winnipeg's Early Days*, Stovel Company Ltd., Winnipeg, 1927.

A collection of anecdotes about various commercial ventures, people and events in Winnipeg. Contains no directly useful information on the

apparel industry, but was of some use in setting a time perspective for the development of the city in general.

Healy, W. J., *Women of Red River*, Peguis Publishers, Winnipeg, 1967.

This work was originally published in 1924 and is a collection of the recollections of women who lived in the Red River Settlement. Of note is the women's recollections of the process of producing apparel from raw wool to finished garment and of styles of apparel. Also noted are lists of yearly orders for apparel to be obtained from England.

Johnson, Thelma A., *The Needle Trades in Winnipeg: A Study in Trade Unionism*, M.A. Thesis, University of Manitoba, 1948.

This work proceeds from a general description of the Winnipeg apparel industry to specific information concerning the founding of the United Garment Workers Union in 1894, International Ladies' Garment Workers' Union in 1935, International Fur and Leather Workers' Union in 1943 and the Amalgamated Clothing Workers of America in 1943, in Winnipeg. She also devotes some of her work to a discussion of various manufacturers' associations and also gives a detailed listing of union contracts.

Lazer, William, *An Analysis and Evaluation of the Marketing of Textile Clothing by Western Canadian Manufacturers*, Ph.D. Thesis, Ohio State University, 1956.

This work looks particularly at the development of the Winnipeg industry in terms of business failures, that is, when they occur and when they do not. The work provides evidence concerning the average life span of manufacturing firms which is said to be 7 years. Notes that Winnipeg is the leading producer of men's wear in Canada.

Lucas, Fred C., *An Historical Souvenir Diary of the City of Winnipeg, Canada*, Cartwright and Lucas, Winnipeg, 1923.

One significant reference to the apparel industry dated August 7, 1873. This concerns a Miss Moncrieff who established a dress and mantlemaking business. Lucas claims her to be the first modiste in Winnipeg.

Manitoba Business Journal, Vol. 4, No. 2, October /November, 1967.

This entire issue of the Journal is devoted to the Winnipeg apparel industry. Articles are found on the following firms: Reiss Furs, National Sportswear, Tan-Jay, Monarch Wear, Canadian Garment Company, and Junior Wear. Little information prior to 1960 is given.

Manitoba Department of Agriculture, *Henderson's Directory of the City of Winnipeg and St. Boniface for the Year 1884*, Directory Publishing Co., Winnipeg, 1884.

A section of this directory contains a listing of various commercial establishments in Winnipeg and St. Boniface. Three companies involved in apparel production are listed: Hibbard and Company, William Nagy Company and James Whitham and Company. Many wholesalers, tailors and dressmakers are listed.

Manitoba Department of Agriculture, *Henderson's Directory of Manitoba; The City of Winnipeg and towns in Manitoba for the year 1881*, Directory Publishing Co., Winnipeg, 1881.

Mainly a listing of people and commercial establishments in Winnipeg. No information of direct usefulness concerning the apparel industry but does list seven wholesale and retail dealers of ready-to-wear garments. Also lists many tailors and dressmakers.

Manitoba Department of Industry and Commerce, *Manitoba Trade Directory 1973*, Queen's Printer (R. S. Evans), Winnipeg, 1973.

An alphabetical listing of all registered manufacturing companies in Manitoba. One hundred and seventeen apparel manufacturers are listed. Principal products and brand names are also given for each company.

Manitoba Department of Industry and Commerce, *Report of the Commission on Targets for Economic Development, Apparel Industry*, Winnipeg, 1969.

Chapter 6 of this highly influential report has been issued as a separate document on the apparel industry. The report is highly critical of the industry for sticking to old ways of doing things and consequently failing to adapt to social and economic changes. It predicts a serious decline of the industry unless steps to adapt are taken immediately.

Newman, Roger, "Fashion's Planner", *Winnipeg Tribune*, October 20, 1970.

A newspaper report of an interview with the first executive secretary of the Manitoba Fashion Institute. Stresses the development of plans for a school to train sewing machine operators.

Province of Manitoba, *The Manitoba Gazette*, Volumes 20 through 103, 1890-1974.

Statistics Canada, *Canada Year Book 1972*, Queen's Printer, Ottawa, 1972.

Chapter XV(15) of this year book gives a statistical account of manufacturing in Canada. Of particular interest is the number of apparel manufacturers in each province given in Table 10 on pages 756 to 761. The following figures are given: Quebec — 1552, Ontario — 526, Manitoba—121, British Columbia—52, Alberta—23, and Saskatchewan—5.

Steen, James Elder, *Winnipeg, The Capital of Manitoba and Trade Centre of the Canadian North-West*, Wm. A. Martel & Sons, Winnipeg, 1903.

A general overview of the growth of Winnipeg, none of which pertains directly to the apparel industry. Much emphasis is placed on Winnipeg as a wholesale centre with specific references to McDermot, Bannatyne and Ashdown. One interesting photograph (p. 138) of the interior of W. J. Hammond's tailoring and furrier department workroom.

The Apparel Industry In Winnipeg

by Mary Lile Benham*

Second only to the Food and Beverage Processing Industry as a Winnipeg employer, the approximately 120 firms in the Clothing Industry have come a long way from the old Needle Trades days.

Much of the industry is still concentrated in the heart of Winnipeg, just off Portage Avenue and Main Street. Some of the firms are in their original quarters, but the dingy old exteriors belie the bright modern interiors. Many large companies have expanded to industrial parks, to suburban locations, or to satellites in rural Manitoba.

According to Statistics Canada figures for 1970, Winnipeg's apparel industry had 5,900 employees, or 15 percent of total employment in manufacturing. The industry then accounted for \$23.5 million in salaries and wages, or 14.8 percent of Winnipeg's manufacturing payroll. In value of factory shipments the industry ranked third, with shipments at the \$85 million mark. The industry itself estimates that its total employment figure, wages paid and value of production all have increased substantially since 1970.

One industry spokesman indicated that when the value of factory shipments is officially available for 1973 it might go as high as \$143 million and that there would be substantial increases in other industry-related figures. Preliminary figures for the industry for all of Manitoba for 1972 (released by Statistics Canada in 1974) show that there were 7,361 employees (including 663 production-related workers), that wages and salaries totalled \$33,495,000 and value of factory shipments rose to \$117,131,000. The industry was second in value produced in the Province and third in Canada.

This poses the question: How did Winnipeg, originally an agriculturally based economy, become the third largest centre in Canada for apparel manufacture?

The old laws of Cause-and-Effect, Supply-and-Demand hold true. People have to be comfortable and, in Winnipeg particularly, they have to be warm.

Back in 1822 the Buffalo Wool Company was formed in an abortive attempt to make one more use of this then essential animal. It is reported

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that the project failed because of difficulty in procuring the wool, the high cost of individual manufacture and especially the cost of transport to the British market.

Therefore, the settlers started raising their own sheep and every member of the family took part in the long cycle of shearing, teasing, carding, greasing, spinning, weaving, cutting and sewing. This sewing was often done with buffalo sinews, following the lead of the native people.

Once the Red River steamboats started regular service from the south to the settlement at Fort Garry, people could more readily obtain fabrics and accessories from eastern Canada, the United States and England. Many budget-minded mothers, of course, continued to "weave their own" and we read of little girls longing for "boughten" clothes as a status symbol.

By 1874, when Winnipeg received its charter, two tailoring shops for men's wear and one ladies' dressmaker were in operation. The dressmaker probably went to the homes of her customers, as this was the custom with many families up until about 1920 — the twice-a-year takeover of one room in the house by an elderly spinster bristling with pins in the mouth and the pincushion firmly attached to the flat maidenly bosom.

In the next decade were born twenty establishments for the production of men's wear and twelve for dressmaking and millinery, employing about 164 people all told. The value of apparel produced by the men's wear establishments was estimated at \$218,322 and the women's at \$44,397.

After the turn of the century, not only Winnipeg, but rural Manitoba experienced a tremendous population boom. The city whose population in 1901 had been 42,000, had exploded by 1911 to 142,000. In 1900 the industrial output of the province (mainly Winnipeg) totalled \$13 million, with a labour force of 5,000. By 1910 these figures were \$54 million and 17,000. Even working their usual 55-60 hour week, the tailors and dressmakers simply could not keep up with the demand for city clothes, to say nothing of the insistent demand for work clothes from rural Manitobans.

Since 1880, some imported ready-to-wear apparel had been available in Winnipeg, mainly of the work-clothes variety. Because the farmers were totally dependent on the vagaries of weather, grasshoppers and the world wheat market, it was impossible for them to know until late in the season how much hard cash would be available for the clothes budget. The retail merchants were thus equally dependent on these

factors and were reluctant to over-inventory. Consequently, by the time the farmer came to buy, the retail cupboard was often bare. It became apparent that Winnipeg needed an apparel-manufacturing industry — a factory situation — rather than the small earlier efforts which produced staple items such as hats, caps, mitts, boots and shoes, much of it produced with hand labour.

When a need becomes evident, people and places surface to meet it. Jewish people escaping European persecution were appearing in fairly large numbers in Winnipeg. Among this group, tailoring skills had been passed on from one generation to the next. Low cost buildings and building space were available which had been used as warehousing during the construction of the national railways.

By 1906, nineteen firms had been founded, largely family affairs. Oldtimers in Winnipeg will recall the hard work and long hours put in to get the industry going by such families as Berkowitz, Crowley, Freed, Kennedy, Jacob, Neaman, Nitikman, Shore, Stall, Steinberg, Waldman, to mention only a few.

As late as 1939, when National Cloaks opened in the garment district, the family syndrome was still operative. Shia Feldman, the founder, at 77 is still the president. Three other Feldmans are in top management. Only recently the company moved to spanking new premises on the Disraeli Freeway, having co-ordinated construction and occupation with S. Stall and Son Ltd.

Second and third generation management in the industry includes engineers, chartered accountants, lawyers, business administration graduates and, over the years, firms have gone outside the family to obtain professional skills.

From its beginnings as a provider of overalls and workwear for the Manitoba farmer and railway worker, the industry has become a provider of fashionable, quality garments — many of them of denim — the basic for overalls, and now the basic for high-fashion jeans and some sportswear.

Today, garments are made in Manitoba for every member of the family; approximately 90 percent of the industry is evenly divided between men's and women's wear, the balance in children's wear and the accessory area of shoes, gloves, handbags, hats and hosiery. The business in general, however, concentrates on sportswear and outerwear.

There was a steady growth in the industry, reaching a peak in 1946, in which year 14 new firms were established. The immediate post-war years naturally spawned an enormous demand for civilian goods so long denied to customers.

In spite of the hazards of fashion cycles, a highly competitive trade, and no local source for textiles, the failure rate has been comparatively low, an average of three firms a year — a very hardy survival rate.

Many of the failures were due to extraneous causes. For instance, after World War I, some firms which had been geared to the manufacture of military uniforms and war supplies such as tents, for example, for the Canadian and British governments, suddenly lost all this business and could not cope with a change in direction. During the Great Depression of the '30's bubbles burst in every business. Latterly, "dumping" of apparel imports and critical labour shortages account for some failures.

Unionism in Winnipeg can be traced back to 1899, when the United Garment Workers, local 35, an affiliate of the C.I.O., signed up workers, mainly in the fur manufacturing business. In 1935 an organizer from the International Ladies' Garment Workers Union, an affiliate of the A.F.L., arrived in Winnipeg and the first of a number of contracts was signed, starting with Jacob Crowley Manufacturing Company Ltd.

Manitoba Fashion Institute Inc.

Partly in response to recommendations in the 1969 Report of the Commission on Targets for Economic Development, which suggested a decline in the industry would occur unless it could show more response to changing social and economic conditions, one hundred of Winnipeg's apparel manufacturers got together to form the Manitoba Fashion Institute, which later was chartered as a non-profit corporation (January 1972).

As a direct result of the recommendations of the report, a Training School for the Fashion Industry, supported by the joint co-operation of the federal and provincial governments and the Institute, was opened in Winnipeg in 1971, under the administration of Ray Winston, executive director of the Fashion Institute.

With staggered graduations of six to eight a week, the School has trained over three hundred people in the basic skills of industrial sewing machine operation. Graduates move into further on-the-job training (six months) as they are placed in the industry immediately. The School assures the industry of a flow of trainees and an assessment can be made in the School of the worker's interest and potential. One hundred and fifteen of the graduates are native Indian people who had been unemployed. Though the main thrust of the School is to produce bright productive young workers, it is felt that part of its social responsibility is also to increase the training and utilization of the unemployed and

the disadvantaged — and in fact, people of suitable potential of any age-group.

Implementing other recommendations of the report, the Institute has held seminars for top management, as well as a supervisors' course, a communications and motivation seminar, and a human behaviour problems seminar. In 1970, a personnel course resulted in several companies setting up personnel departments and appropriate systems of staff selection. Other courses now in progress at Red River Community College are Time and Motion Studies, Grading and Pattern-Making and in Textile Technology at the University of Manitoba. In each case the Institute finds an instructor, the teaching facility pays the salary and the companies pay their employees' fees.

With federal and provincial government assistance, the Institute is producing a film on the fashion industry — a documentary and good promotion tool.

With the co-operation of Fashion/Canada — a national program, sponsored federally — three young women from an associated School of Design had summer jobs in Winnipeg in 1974, a program which the Institute hopes to continue. It is, in fact, working with all its members to upgrade designing. It is a two-way street. Novice designers working in the factory setting can be made aware of production and marketing constraints.

Many firms employ their own designers who make frequent trips to the United States and to Europe so that they can stay on top of trends. Winnipeg firms are small enough to "turn on a dime", but flexible in making style changes very speedily.

Although changing styles are of such vast importance in the trade, Winnipeg companies never want to lose sight of their cachet which is a quality garment, good fashion (not fad), of good fabric, dependably made. The Manitoba industry has an international reputation to maintain, particularly in sportswear and outerwear.

The Institute has membership in the Canadian Apparel Manufacturers Council and the Canada Standards Council.

Employment

An expanding, buoyant, innovative industry such as the Apparel Industry attracts new people to the province in the management field, especially to work in established firms. Top management has traditionally been a male preserve. A small percentage of women have made it to middle management, and the route is open for upward mobility.

In the late '60's there was a large influx of trained machine operators from outside Canada to the industry. It takes about six months and costs a firm \$1800 to train an operator to proficiency. Wages for an operator run up to \$4.50 an hour, with an overall average of \$2.69. On an average, an operator is responsible for about \$23,000 in sales annually.

Labour turnover at 67 percent (calculated on employees who have had at least six weeks training) is lower than in comparable industries.

Export

In the early 1900's the Manitoba garment industry began as an import-replacement business. In the 1970's, in order to survive in a province where factory output exceeds the consumption possibilities of the population, the fashion industry has become, in the main, an export business.

The search for markets outside Canada first began in an organized way in the spring of 1964 when the provincial government sponsored an apparel show in Chicago. As a result of this exposure and a careful follow-up of contacts, Manitoba garments began to sell in specialty and department stores in the United States.

Over the years federal and provincial governments have worked supportively with the industry on promotion programs, resulting in ever-increasing sales outside the country.

Over 90 percent of the apparel industry output goes outside the province — that is, in 1973, over \$130 million out of \$143 million worth of goods went elsewhere in Canada and to the United States, by industry calculation.

Goods are also sold in various European countries and in Japan. Manitoba contributes a substantial input to the total Canadian export clothing industry — and the quality and style of its products are gaining significant export recognition.

What Next?

"A slow sort of country!" said the Queen to Alice. "Now, here, you see, it takes all the running you can do to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

In order to stand still the fashion industry in Winnipeg could absorb 1,000 new people a year, because of the labour turnover. Add annual expansion to that and you have a hungry market for about 1,900 people a year, according to industry estimates.

Although so many of the old family firms are still going strong there is always room for a new bouncing baby. For example, Wescott Fashions Ltd., founded in 1970, has grown to a multimillion dollar business, known internationally by the young moderns who are attracted to its fashion sportswear.

Fashion is no longer the prerogative of the few, but the concern of the many. The fashion industry is woven into the fabric of Winnipeg's economy.

The pattern for the last few years has been one of dramatic growth. A sudden spurt in the last two and a half years has added one million square feet in new production space by over twenty firms.

The industry has come of age. Increasingly, management is ploughing profits back into the company for new space, new machinery, employee benefits, and so on.

Expansion is revitalizing the downtown core, new plants are appearing in Winnipeg's industrial parks and nestling in residential sections where workers can be close to home.

Cost of labour has been a traditional factor in planning industrial output in the apparel trades — and still is. But improved methods of work-flow, more mechanization, bolder sales techniques and design improvement are all helping alleviate the continuing demand for workers, whether machine or hand operations are involved.

The industry has shown long-term overall stability — despite recurrent failures in a high-risk industry. It has, for some time now, turned the corner from being solely a domestic supplier to being also a supplier to an international market.

The Winnipeg apparel industry owes much to the city's early isolation. The industry arose in response to local market needs, grew with a growing domestic market, and weathered periods of depression and recession. It continues to hold a major industrial ranking because it has also become more innovative, shown more initiative — along with a growing awareness of the advantage of developing a broader public appreciation of its needs and its economic importance.

From a self-sustaining provincial base, it has worked towards both import replacement and innovative foreign sales. From the viewpoint of the present it is a viable, important Winnipeg industry that helps stabilize the City's economic base.

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The Construction Industry In Winnipeg

by Roger Newman*

Winnipeg's construction industry has experienced slow but steady growth in the 100 years since the city was incorporated.

The industry's fortunes are, of course, tied closely to Manitoba's general economic health. When there is an upsurge in demand for the province's grain and manufactured products, Winnipeg builders also benefit from a substantial increase in their work volumes.

Because of Manitoba's moderate pace of development, Winnipeg has enjoyed only four major building booms in the course of its history. The first took place from 1862-1882, the period in which Winnipeg developed from a tiny village into a city of consequence. Then — from 1900 to 1914 — the province's capital was the site of enormous construction activity, as 100,000 new citizens emigrated to Winnipeg from Europe and the United States.

Their arrival sparked an enormous demand in the city for residential accommodation, office buildings and manufacturing space. Winnipeg then became the home of numerous construction firms, as well as for companies selling lumber, steel, brick, stone and building supplies of all kinds.

No construction of any great magnitude took place in Winnipeg again until the years following the Second World War. When the city's young soldiers came home and started their families, they indirectly touched off Winnipeg's third major building boom by creating a large market for residential and school construction.

The city's fourth burst of building — which is still continuing — started in 1969 when Winnipeg's former Metro Government enacted a downtown development plan that offered special incentives to developers undertaking projects in the central core. Also in 1969, James Richardson and Sons Ltd., the prominent Winnipeg investment and grain dealers, began erecting the 32-storey Richardson Building at Portage and Main, the city's key downtown intersection.

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The downtown plan and the Richardson Building have been the catalysts for a resurgence of downtown construction. Almost two dozen new high rises have been built in the central district since 1969, giving Winnipeg a completely new skyline. Furthermore, the latest construction boom has had a significant impact on Winnipeg's appearance and character, transforming it from a prairie commercial centre into a sophisticated urban metropolis.

It is the purpose of this article to show how a vital and dynamic construction industry has grown to maturity here over the years, and the best way to do this is to set out the accomplishments and characteristics of each of Winnipeg's four building booms.

The Beginnings

Winnipeg's first "big" construction project was launched in 1862 when Henry McKenney built a general store after paying \$250 for a site at Portage and Main.¹ His establishment did so well that a number of other merchants decided to set up shop in the same district. When McKenney sold his store 14 years later, he obtained a price of \$15,000.

Other buildings erected during Winnipeg's pioneer phase included the Higgins Hotel, Holy Trinity Church, the early Hudson's Bay Co. store and the homes of Sheriff Alexander Ross and the "merchant kings", A. G. Bannatyne and Andrew McDermot.

At this time, Winnipeg was a tiny village where 215 inhabitants obtained goods and services from 18 business establishments. But by 1873 — the year of the city's incorporation — Winnipeg had 1,879 citizens, 100 businesses and 27 manufacturing enterprises. Population swelled further to 5,000 by 1876 and about 1,000 buildings had been erected. Two schools had been built, as well as Grace Church which had stained glass windows imported from Toronto.

Development reached an even greater pace in 1881 when Winnipeg ratepayers voted to spend \$200,000 to build a railway bridge across the Red River. A year later, the main lines were extended through the city — and an east-west rail link became a reality.

With Winnipeg now ranking as the undisputed supply centre for all of western Canada, a real estate boom quickly materialized. There was rapid settlement of residential land and business establishments of all kinds proliferated in the city. However, development had proceeded

¹For this, and other footnotes, see end of article.

too fast and this resulted in a collapse in late 1882, followed by a depression of short duration.

Winnipeg's construction industry was brought to life again by the birth of prairie agriculture. The first grain shipment from Manitoba was made in 1876, but agriculture did not become a major force in Winnipeg's economy until the last two decades of the 19th Century. During this period — from 1880 to 1900 — grain trading businesses and financial institutions were established in a number of new office buildings that were erected in the city.

The grain trade expanded to the point where the movement of nearly the entire western Canadian crop was financed by Winnipeg banks. And in St. Boniface, contractors were busy building the large abattoirs and packing houses that still form the heart of Manitoba's meat packing industry.

The Turn of the Century

With the dawn of the 20th Century, economic expansion — and consequently construction — really took off in Winnipeg. This happened partly because the city established its first hydro utility and the Greater Winnipeg Water District which piped pure lake water into the community. These developments, in turn, attracted many new manufacturing industries lured by the prospect of an expanding market, cheap power and large quantities of pure soft water.

The arrival of the manufacturers also increased Winnipeg's traditional importance as a distribution centre for Western Canada. In fact, the city's commercial life was so vibrant from 1900 to 1914 that contractors of the era built the majority of office structures that are still standing today in downtown Winnipeg. These "skyscrapers" include the Grain Exchange Building (1912), the Fort Garry Hotel (1913) the Childs and Paris buildings and the original 12-storey Royal Bank Building at Main and William.

By 1907, Winnipeg had a population of 100,000 and its annual building permits totalled \$12 million, a sum thought to be enormous at the time. However, the best was yet to come.

In 1913, the city's building permits totalled \$20 million — a record that remained unbroken for almost 40 years. In fact, it was not until the mid-1950's that Winnipeg's permits topped the \$20 million figure, thanks to the construction of a new federal post office in the downtown district.

Meanwhile, Winnipeg contractors were also busy in rural Manitoba in the years immediately after 1900. Rapid farm settlement was taking place — and numerous small towns were being built to serve the province's expanding rural population.

Manitoba's growth slowed in 1914 when the opening of the Panama Canal adversely affected Winnipeg's position as a distribution centre. The canal became the artery for merchandise shipments to the far west, since this was cheaper than routing the shipments by rail through Winnipeg.

As a result, Winnipeg construction flagged in the 1920's, sagged further during the Depression of the 1930's and finally ground to a near halt during the Second World War.²

There were, of course, some big projects in this period. In 1927, the C.N.R. completed its rail line between Churchill and Winnipeg.

And also at this time, the Hudson's Bay Co. opened the doors of its new Portage Avenue store, an impressive building faced with the famous Manitoba Tyndall stone. The T. Eaton Co. also built a large mail-order distribution warehouse, substantially expanding its Winnipeg operations.

The War Years and After

From 1940-45, the only major structures built anywhere in Manitoba were barrack blocks and other army buildings. This limited activity created a large backlog of work that led directly to Winnipeg's third building boom immediately after the war. School and residential construction were the biggest elements of this post-war building surge, since Manitoba's servicemen had returned home to marry and start families.

The heavy workload in the post-war years resulted in a rapid increase in the number of architects practicing in Winnipeg. At War's end, the city had a number of firms, two of the best-known dating from well before the War, namely, Moody, Moore and the partnership of Green, Blankstein, Russell; but, many new partnerships were established in the late 1940's and the profession has grown to the point where 38 firms and more than 200 architects are practicing in Winnipeg today.

Smith, Carter Partners is a firm which helps typify the evolution of the architectural profession in Winnipeg and, naturally, its close relation with building and engineering projects and practice. Formed in 1947, the firm obtained its early work from school boards, following

a sequence in designing first, elementary and then high schools and university buildings, such as those housing the schools of architecture, fine arts, and animal science at the University of Manitoba. The firm later moved into the design of commercial buildings as well as the Manitoba Centennial Concert Hall.

A number of Winnipeg architects and engineers — Smith, Carter among them — are contributing to Manitoba's economy by exporting professional services. These have involved projects in such countries as India, Ceylon (Sri Lanka), Ghana, Zambia and Canadian embassy buildings overseas.

During the 1950's and 1960's, Winnipeg's construction industry continued its pattern of slow, plodding growth. However, the pace of building accelerated substantially in the late 1960's, setting the stage for Winnipeg's fourth major construction boom which is currently under way.

There are two prime reasons for the construction industry's unparalleled work volume at this particular time. One stems from Manitoba Hydro's decision to build the billion dollar Nelson River power development in northern Manitoba. Altogether, the province's public power utility will build a chain of a half-dozen large power plants along the Nelson in the years between now and early in the 1980's. Work is currently under way at four Nelson River sites and this is providing a tremendous amount of work for Manitoba construction companies and building materials suppliers, most of whom are located in Winnipeg.

As already noted, the other factor sparking the 1970's boom is a resurgence of construction in downtown Winnipeg. During the past five years, Winnipeg's building permit figure has exceeded \$150 million annually on three occasions.³

When high rise building was at a peak in 1972, the city established an all-time building permit record of \$190.9 million. But this mark will likely be shattered in 1974, since Winnipeg permits already totalled \$178 million by the end of September and were headed for a figure that will undoubtedly top \$200 million by December 31st.

A few of the more prominent additions to Winnipeg's new skyline are the 24-storey Place Louis Riel apartment building on Smith Street; the 15-storey Medical Arts Building on Graham Avenue; and the five-building Lakeview Square complex opposite Winnipeg's new \$23 million downtown convention centre.

From the construction industry's standpoint, the best thing about the downtown boom is that many more projects are planned for 1975 and the years beyond. For example, Trizec Corp. Ltd. of Montreal has signed an agreement with the city that will result in an \$80 million development on the southwest corner of Portage and Main. The C.N.R., meanwhile, is contemplating a major redevelopment of its downtown rail yards at the historic junction of the Red and Assiniboine rivers. Another developer, Bestlands Ltd., will soon start on a \$40 million redevelopment of the former St. Paul's College site at Ellice Avenue and Kennedy Street.

Prosperity Presents Problems

While it is now the best of times for Winnipeg's construction industry, it is also the worst of times. Inflation — which may reach 10 percent this year — is so rampant that it threatens the future of many building projects now on the drawing boards.

Many contemplated projects could, in fact, lose their viability if the cost of borrowing money continues to rise. However, Winnipeg contractors and developers are hoping that inflation will be brought under control before projects have to be indefinitely postponed or even consigned to the scrap heap.

At the moment, the construction industry here is working at near capacity. The industry, predominantly based in Winnipeg, is employing 35,000 people, including 4,000 on the northern Manitoba hydro projects. And the province's 600 contractors will perform about \$800 million worth of work in 1974, or five percent more than in 1973.

Although inflation may postpone some projects in the short-term, Winnipeg construction officials are generally optimistic about their long-range prospects.

In recent times, contractors here are averaging some 63 percent of their total workload from various levels of government. And they note that large construction programs are being planned in the years ahead by both the City of Winnipeg and the Manitoba Government.

The only thing worrying contractors is the cyclical nature of their industry. They wish that they could accurately judge construction volumes from one year to the next, since this would help them to intelligently schedule equipment purchases and staff hiring.

Manpower

With so much work under way at the moment, Winnipeg contractors are having to deal with another problem — a severe shortage of workers in many of the building sub-trades. This shortage has developed in the past 18 months because construction volumes have increased dramatically right across Canada.

Some companies, such as BACM Ltd., the Winnipeg construction conglomerate, have solved their labour problems by importing equipment operators from the United Kingdom on short-term 11-month contracts.

But this has been done on a minor scale — and most industry officials agree that the best solution is to persuade more Manitoba young people to choose careers in construction.

The fact is that young people have been picking other types of jobs in recent years, even though construction has come a long way from the pick and shovel days. As a result, the average age of Winnipeg journeymen is somewhat higher than it ought to be, with some trade unions having few members under 50.

To bring young people into the industry, the Winnipeg Builders' Exchange is planning a comprehensive education and public relations campaign. The exchange, which represents the majority of the city's contractors and sub-contractors, is preparing a slide and cassette presentation, plus a film on construction careers, that will be shown extensively in Manitoba high schools.

Some city contractors would also like to see changes in apprenticeship rules to make it easier for young people to enter the industry. Furthermore, they think some labour shortages could be avoided if the industry's customers would build on a 12-month basis, instead of cramming most construction into the period between May and September.

Management

In recent years, the leaders of Winnipeg's construction industry have taken progressive steps to strengthen and improve the industry's image and effectiveness. For example, in September 1973, they set up the Manitoba Construction Council to speak for all segments of the industry. Although most members are from Winnipeg, the council altogether represents 972 Manitoba companies which are engaged in general contracting, architecture, engineering, house building, concrete producing and all forms of sub-contracting. During the first year, the council has been in the formative stages, but it intends to become an effective voice for the industry, particularly in relations with governments.

Conclusion

The Winnipeg construction industry is a vital force in the provincial economy. Besides undertaking \$800 million worth of work a year, the industry contributes substantially to the prosperity of many types of Manitoba manufacturers.

For example, contractors and developers purchase more than \$350 million worth of materials annually, including cement, gravel, wood, bricks and rolling mill products. The industry's insatiable demand for raw materials has led to the development of many Manitoba secondary industries such as the Manitoba Rolling Mills at Selkirk, the Red River Brick and Tile plant at Lockport; and the stone quarries at Bird's Hill. Furthermore, the industry generates enough work to keep approximately 1,500 professional engineers fully employed in Manitoba.

Another of the construction industry's strong points is that it is labour intensive. It pays wages to more than 30,000 people whose spending helps to stimulate the well-being of numerous Winnipeg retail outlets and other service industries.

Winnipeg construction people are also recognized for their expertise in many fields. As far as building design is concerned, the University of Manitoba school of architecture is rated amongst the top institutions of its kind in Canada.

The school of architecture was established here in 1922 by Prof. Stouten in a building at Sherbrook and Portage.

Shortly afterwards, it affiliated with the University of Manitoba and when Prof. Stouten retired, Milton S. Osborne took over. He was later succeeded by his assistant, John Russell, after whom the university's new architecture school on the Fort Garry campus is named.

The point here is that Winnipeg has always had people of ability who have drawn other good people to them. That is why, for a long time, the University of Manitoba was *the* school from which to get an architectural degree. Other architectural schools have recently acquired equal renown, but the U. of M. still enjoys a good reputation.

Manitoba also has an excellent reputation for developing various building products, particularly those made from concrete. Winnipeg companies, such as BACM Ltd. and Supercrete Ltd., have not only pioneered in product innovation — they have also expanded their operations into many parts of Canada.

For many years, Winnipeg's house building industry was also on top of the world, since this was one of the few large Canadian urban areas where the average price of a house remained under \$20,000.

But in the past couple of years, housing prices in Winnipeg have risen about 30 percent. Winnipeg is now suffering the shortages of serviced residential and industrial land that are apparent in so many Canadian cities.

On the brighter side, the Manitoba Government has done a lot in the past five years to reduce a backlog of need for low income and elderly persons' accommodation. However, high prices will remain in effect for non-subsidized housing until more serviced land is made available and mortgage rates decrease. Builders are still erecting a substantial volume of single family dwellings in Winnipeg, but apartment construction is at a near standstill. It may remain that way for some time because of the high cost of borrowing money.

On an overall basis, however, Winnipeg's construction industry faces a promising future. The entire Province of Manitoba is still a developing region which has yet to tap a great deal of its natural resources and manufacturing potential. All phases of the region's future development will require construction and, judging by past performance, the industry will be equal to the task.

Footnotes

¹"The Builders of Winnipeg" by Lloyd Stinson, *Winnipeg Free Press*, October 23, 1973, p. 3.

²*Journal of Commerce*, Winnipeg Centennial Edition, Spring 1974, p. 6.

³Winnipeg Economic Development Board, *Winnipeg Statistical Supplement 1974*, p. 9.

PART III

Distinctive Activities and Functions

Editor's Comments

This section emphasizes those functions which have become extensively developed within Winnipeg and functions by which the city is strongly identified. Most people recognize Winnipeg's importance as a regional, transportation, financial and cultural centre. The reasons as to why these functions are so well developed in Winnipeg are extensively developed in the essays that follow.

Mr. D. Lofto in his paper "The Place of Metropolitan Winnipeg in the Provincial Economy" examines Winnipeg's contributions to Manitoba in terms of population, employment, personal income, value of industrial production and provincial government revenues. Extensive analysis of census data clearly indicates Winnipeg's dominant role in the Manitoba economy. Mention is also made of the present Government's policies to minimize the differences in opportunities and life styles that exist between Winnipeg and rural Manitoba.

Mr. R. Schmidt in his paper "Winnipeg as a Transportation Centre" analyzes the development and growth of railway, truck and air transportation. The factors responsible for the nature of development of each type of transport are emphasized. He ends his essay by considering the future of transportation in Winnipeg.

Professor Parsons in his paper "Winnipeg as a Financial Centre" contends that an understanding of a city's financial services is a key to providing an explanation of its growth. One indicator attesting to the magnitude of Winnipeg's role as a financial centre is the growth of cheque clearances in the city.

In the paper Professor Parsons explains the role of the grain trade during the late nineteenth and early twentieth centuries in the rise of financial institutions in the city. In the section entitled 'Winnipeg's Current Financial Structure', activities ranging from the Commodities Exchange to that of the newly formed AUTOPAC are extensively described and analyzed.

Professor Leathers writes about "Culture at the Gateway". His treatment covers most aspects of cultural activities in the city of Winnipeg. From his account we can conclude that indeed Winnipeggers have energetically practiced and fostered the arts of the theatre, dance, music, painting, and literature. Winnipeg is no cultural desert. Rather it is a city which is widely respected for its cultural attainments.

Organization of the Urban System

The organization of the urban system is based on two types of specialization; namely, between urban areas (or separate cities) and within an urban area (or city) itself.

Certain urban areas become associated with prominent activities or functions, such as manufacturing, education, services, finance, cultural activities, and so on. The leading activities associated with Winnipeg are transportation and finance (Maxwell, p. 97).

Intra-urban specializations are located in well-defined areas of the city. The articles that follow, while they include reference to specialized districts, functions and activities in an intra-urban context are concerned mainly with activities that are highly identified with Winnipeg in contrast to its hinterland or even other cities.

There are pertinent reasons for being conscious of what we may term internal and external urban relationships. Obviously, specialization in urban systems occurs because it promotes economies of scale, which in turn minimize costs per unit of output.

When you have a high degree of specialization in any of the service and productive functions of an urban area, for example, there is a dependence on other urban areas for exchange of goods or services that are in short supply.

Specialized urban areas thus depend on the other urban areas to provide non-local demand for their exports and to supply the necessary imports. In order for this exchange to occur, well developed transportation facilities are necessary. A general improvement in transport will increase the size of the market that may be captured from a given location and therefore increase the amount of specialization and exchange that can take place (Goodall, p. 33). Exchange is naturally facilitated by a strong financial organization, which is one of the economic strengths of Metropolitan Winnipeg.

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The Place of Metropolitan Winnipeg in the Provincial Economy

by D. Lofto*

Nature of the Study

The primary purpose of this paper is to examine the place of Metropolitan Winnipeg in the economy of Manitoba in terms of population, employment, personal income, value of industrial production and contribution to provincial government revenues. Secondly, a brief account of Winnipeg's position as an administrative centre will be undertaken.

Population

The 1971 Census placed the population of Manitoba at 988,247 as of June 1, 1971. On June 1, 1973, Statistics Canada estimated the provincial population to be 998,000. Between 1941 and 1973, the provincial population grew by 36.8% for an average annual growth rate of 1.2%. This time period witnessed population changes ranging from an absolute decline between 1941 and 1946 to an increase of 9.5% from 1951 to 1956 (Table 1).¹

The proportion of the population living in all centres in Manitoba which have 1,000 or more people and in the urbanized fringes of the larger centres has been steadily increasing since 1941.²

In 1941, the non-rural population represented 44.1% of the Manitoba population; by 1971 it had risen to 69.5% and it was estimated at over 70% in 1973. The majority of this urban population, however, lives in Metropolitan Winnipeg which in 1971 accounted for 54.7% of the total provincial population. The population of the other urban centres also reflects the rural to urban shift. In 1941 the other urban centres in the province accounted for only 2.7% of the urban population but by 1971 the amount had increased to 16.0%. Conversely, the rural population (farm and non-farm) has declined steadily from 55.9% in 1941 to 30.5% in 1971.

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¹All Tables are placed at end of article.

²Prior to 1951 all incorporated centres were included; minimum population for an incorporated centre was 500 persons.

There are two sources of population increase: natural increase (births minus deaths) and/or net migration (immigration minus emigration). Natural increase has been the main source of population increase in Manitoba since 1941. There has been virtually no net migration of people into the province during the last thirty-two years to contribute to the total increase in population; in fact in many years net out-migration has been so great as to cancel out a large part of the growth attributed to natural increase. To a very great extent the growth in provincial population which has occurred is accounted for by the growth of Metropolitan Winnipeg (Table 1).

It can be seen that it is the growth in Metropolitan Winnipeg that has enabled any measurable gains in population to be registered in the province. The growth-rate of the rest of the province, when Winnipeg is excluded, is below 1% per annum and far less than the rate of natural increase, with absolute losses between 1941-1946, 1966-1971 and 1971-1973, indicating a continuing out-migration from the rest of the province either into or through Metropolitan Winnipeg or out of Manitoba.

The population growth from 1966 to 1973 may be analyzed in terms of the two components of population change — natural increase and net migration. For the period from 1966-1973, there was a natural increase in Manitoba of 68,297. Of that number, 33,786 occurred in Metropolitan Winnipeg and 34,511 in the rest of the province. However, the population of Metropolitan Winnipeg grew by 51,241 which means that a substantial portion of the difference* probably migrated into Metropolitan Winnipeg. Also, since the province (including Metropolitan Winnipeg) only grew by 34,934 people and since there was a total of 68,297 natural increase, 33,363 people left the province. As for the area of the province outside of Metropolitan Winnipeg, it experienced an out-migration of 50,818 people during this period (Table 2).

Employment

As agriculture declines in importance in Manitoba other sectors of the economy grow in importance, and Metropolitan Winnipeg comes more and more to dominate the economic life of the province. In 1951 employment in Metropolitan Winnipeg accounted for 51.8% of the total employed labour force in Manitoba; this increased to 56.7% in 1961 and to 58.9% in 1971 (Table 3).

The present employment structure in Metropolitan Winnipeg is the result of a process of continuing structural change which is best seen in the perspective of the Canadian economy as a whole. There have

*That is, the difference between 51,241 and 33,786, or 17,455 people.

been some very obvious changes in the structure of the Canadian economy since the latter part of the nineteenth century involving changing proportions of production and employment among major industry groups. The most significant shift has been the relative decline of the primary industries and the corresponding expansion of almost equal magnitude in the service industries in both production and employment. The share of employment and production from secondary industry has remained about constant.

According to the *Fifth Annual Review* of the Economic Council of Canada, published in 1968:

At the end of the Second World War 60 percent of the labour force was employed in goods-producing industries and 40 percent in service-producing industries. During the past 20 years the Canadian economy has been transformed to the point where nearly 60 percent of the labour force is now employed in the service industries and a little more than 40 percent in the production of goods.

This trend to employment in the service industries is expected to continue. Again, according to the Economic Council of Canada Staff Papers:

During the 1960's, two service-sector industries — trade; and community, business, and personal services — accounted for more than 1.2 million of the 1.9 million new jobs, or for about two-thirds of the increase. The projections for the 1970's indicate that these two industries will create an even higher proportion — three-quarters, or close to 2.0 million — of the 2.6 million new jobs.

Labour force figures indicate that the structural changes in the economy which are apparent at the national level are evident, as well, in Manitoba and in Metropolitan Winnipeg. The labour force statistics for 1951, 1961 and 1971 show that Manitoba has a higher proportion of the labour force in the service producing industries than Canada, and Metropolitan Winnipeg showed a still higher proportion of the labour force in the service producing industries than did Manitoba (Table 4).

Income

For Metropolitan Winnipeg, total declared personal income increased by 421.2% in the period from 1949 to 1971, growing from \$304.2 million to \$1,585.5 million. The declared personal income for the remainder of Manitoba, the non-metropolitan area of the Province, also increased, although not as greatly, from \$166.4 million in 1949 to \$693.2 million in 1971, an increase of 316.6%.

Declared personal income for Metropolitan Winnipeg has varied from a low of 64.6% of the Manitoba total in 1949 to a high of 73.0% in 1954. It was 69.6% of the Manitoba total in 1971 (Table 5).

When these declared personal income figures are considered on a per capita basis, the upward trend is still very much in evidence. For Metropolitan Winnipeg the per capita declared income increased from \$889 in 1949 to \$2,935 in 1971, an increase of 230.1%. For the non-metropolitan area the corresponding increase is 285.8% from \$401 per capita in 1949 to \$1,547 per capita in 1971. One reason for the percentage increase being larger in the non-metropolitan area may be a result of the small size of the base year (1949) selected for the declared personal income per capita. The absolute increase to 1971 in Metropolitan Winnipeg is \$2,046 per capita; in non-metropolitan Manitoba, \$1,146 per capita.

An analysis of per capita incomes in constant (1961) dollars reveals similar trends but lower rates of growth — it shows a large amount of the increase in per capita declared income has been erased by increases in prices.

While declared personal income per capita is a useful statistic, an analysis of personal disposable income per capita (that is, the amount that remains after the federal and provincial personal income tax and the old age security tax have been removed) gives a more realistic picture of personal well being. For Metropolitan Winnipeg disposable personal income rose from \$836 per capita in 1949 to \$2,418 per capita in 1971; for non-metropolitan Manitoba disposable personal income rose from \$386 per capita in 1949 to \$1,322 per capita in 1971. For every year from 1949 to 1964, with the exception of 1961, personal disposable income per capita in Metropolitan Winnipeg was more than twice as large as that of non-metropolitan Manitoba; in 1971 it was 183% of the non-metropolitan figure.

Value of Production

Although there are no published figures which present the gross industrial product for Metropolitan Winnipeg in terms of a single or consolidated index, there are a number of other indicators of production which are available. One of the most useful indicators of the gross industrial product of Metropolitan Winnipeg is the value of shipments of goods of own manufacture, which is an acceptable measure of manufacturing production. For Metropolitan Winnipeg this industrial product has risen from \$607.0 million in 1961 to \$1,088.0 million in 1971, an increase of 79.2% or an average rate of increase of 7.2% per year.

It can be seen from Table 6 that during the period 1961-1971, the rate of growth of the industrial product of non-metropolitan Manitoba was considerably greater than that of Metropolitan Winnipeg; 79.2% for Metropolitan Winnipeg as compared with 133.6% for non-metropolitan Winnipeg. In absolute terms the growth of the value of the industrial product in the non-metropolitan area was \$147.0 million while the growth in Metropolitan Winnipeg was \$481.0 million, over three times as great.

The same observations are true of industrial product per capita and per manufacturing employee. In 1961 the industrial product per capita for non-metropolitan Manitoba was \$246.54; for Metropolitan Winnipeg it was \$1,273.75, over five times as great. Between 1961 and 1971, the per capita value of production in Metropolitan Winnipeg increased by 58.1%, while the increase in non-metropolitan Manitoba was a much larger 132.5%. However, in absolute terms in 1971, the industrial product per capita for non-metropolitan Manitoba was \$573; whereas for Metropolitan Winnipeg it was \$2,014; nearly four times as large.

Industrial product provides an indication of manufacturing output only. Other aspects of the gross metropolitan product can be described by retail and wholesale trade statistics and receipts from services. As the results of the 1971 Census are not yet published 1966 data must be used. In 1966, Metropolitan Winnipeg accounted for 62.0% of all retail sales in Manitoba; it accounted for 96% of all wholesale sales in Manitoba* and 71.0% of all service receipts. Total receipts for Metropolitan Winnipeg grew from \$104.3 million in 1961 to \$153.8 million in 1966, or from 210% to almost 245% of rural Manitoba's total during this period. The fact that Metropolitan Winnipeg's proportion of the total provincial value of the service industry increased so substantially during the period 1961 to 1966 indicates the increasing dominance of Winnipeg as a regional service centre.

Some idea of the significance of various industries in the Metropolitan Winnipeg economy can be discovered by examining the proportion of the total employment for the metropolitan area that is engaged in each activity. In 1951 the most important activities in Metropolitan Winnipeg with respect to absolute number of employees, were (in order of decreasing significance) manufacturing, trade, community service, and transportation; in 1961 and in 1971, they were: community service, trade, manufacturing and transportation. When the same employment proportions are calculated for Canada as a whole, a coefficient of localization

*1961

(sometimes referred to as "location quotient") can be derived by dividing the Winnipeg proportions by the Canada proportions. If a constant rate of productivity per employee is assumed, it can be said that a coefficient or ratio greater than 1.00 indicates that the Winnipeg industry is an export industry, producing more than is required by its population. If the coefficient is less than 1.00 the industry's production is insufficient to supply local needs and presumably must be supplemented with imports.

When the coefficients are calculated for all the major industrial groups (Table 7) it can be seen that the export industries for Winnipeg in 1951 were finance, trade, transportation, public administration, and community services.

Since these particular industries are all service-producing industries they are evidence of Winnipeg's importance as a regional distribution and service centre in 1951. The fact that these industries (except for community and public service) were also export industries for Manitoba as a whole, but not for rural Manitoba, indicates that Winnipeg served areas outside the provincial boundaries.

As might be expected, the export industries in non-metropolitan Manitoba were agriculture (with a coefficient exceeding 3.00), fishing and trapping, and mines and quarries.

The situation was basically the same in 1961, with the same industries as export industries; but the significance of trade and finance as export activities for the province as a whole was somewhat reduced, which could indicate that Winnipeg's influence as a business centre was not quite as extensive as in earlier years.

The industries of agriculture, fishing and trapping, and mines and quarries increased in significance for rural Manitoba in comparison with the national figure in 1961.

The coefficients of localization for certain other industries also rose for rural Manitoba, but they were still below Winnipeg's levels.

The coefficient of localization for manufacturing activity was not greater than 1.00 for Winnipeg and was very low for rural Manitoba; Winnipeg's ratios of 0.99 in 1951 and 0.91 in 1961, however, were considerably larger than the provincial ratios of 0.64 and 0.63 and the rural ones of 0.26 and 0.25.

In 1971, the Metropolitan Winnipeg export industries remained the same as in 1961; however, each decreased in dominance. For Manitoba as a whole, trade decreased slightly in dominance while finance ceased to be an export industry. On the other hand agriculture increased in

dominance as an export industry and mining was designated as an export industry. Similarly, agriculture and mining increased their dominance as export industries in non-metropolitan Manitoba.

Provincial Revenues

Of the total estimated revenue of \$694.6 million received by the Province of Manitoba in the fiscal year of 1974, some 53% came from six specific areas: personal income tax, revenue (sales) tax, gasoline tax, Liquor Control Commission profits, motor vehicle licence fees and tobacco tax.

For each of these sources it is possible to derive an approximation of the revenue contribution made by residents of Metropolitan Winnipeg in contrast with contributions from the remainder of Manitoba. The assumption is made that, for revenue based on the sales of a commodity at the retail level in 1974, the proportion of this type of provincial revenue produced within a particular area of the province is similar to the proportion of provincial retail sales of the commodity conducted within that same area as reported in the latest available Census. The proportion of motor vehicle licence fees paid by residents of Metropolitan Winnipeg in 1974 is assumed to be similar to the proportion of motor vehicles registered in the area in the same year.

The most significant figures are those giving revenue per capita, and the relationship between the per capita statistics for Metropolitan Winnipeg and for the remaining areas of Manitoba (Table 8). In the case of sales tax collected in the Metropolitan Winnipeg area, the higher incomes of the residents explain, to some extent, the higher per capita revenue. It must be noted as well that all of the tax from this area cannot be attributed to local residents, since the retail facilities of Winnipeg serve all of Manitoba, and also people from Saskatchewan and Ontario. Nevertheless, provincial revenue collected from firms located in Metropolitan Winnipeg is the point under discussion and, in this sense, any taxes collected within the area can be expressed in dollars per resident for comparison with any other area.

It can be seen from Table 8 that in 1974 for each charge 50% or more of the total came from the Metropolitan Winnipeg area. The source of revenue to which Metropolitan Winnipeg contributed the largest share was the personal income tax which in itself was the largest single source of provincial revenue. The population of Metropolitan Winnipeg paid 73.5%, almost three-quarters of the total provincial personal income tax. In effect, they were paying \$219 per person or two and one-fifth times as much as other residents of Manitoba who paid \$101 per person.

The difference in the contribution to the other sources of revenue cited was not quite as pronounced, but still notable. The population of Metropolitan Winnipeg contributed \$1.36 per person in tobacco tax, \$1.28 per person in revenue tax, \$1.26 per person in Liquor Control Commission profits for each \$1.00 paid by other Manitobans. The per capita amount for gasoline tax was the same in both Metropolitan Winnipeg and non-metropolitan Manitoba. For motor vehicle licence fees Metropolitan Winnipeg contributed only 78 cents per capita as compared to \$1.00 per capita contributed by non-metropolitan Manitoba.

These figures indicate that, on a per capita basis, the residents of Metropolitan Winnipeg, through their general retail buying and purchase of luxuries and gasoline, contributed more per person to the 1974 provincial revenue than did other residents of Manitoba. As for vehicle licence fees, over half of the passenger automobiles in Manitoba were registered in Metropolitan Winnipeg, but only some 30% of other types of vehicles were registered here, so that the overall revenue from motor vehicle licence fees from the Metropolitan Winnipeg area was less than half of such collections from the whole province.

The total of the revenue from these six sources formed some 53% of all revenue for the provincial government in 1974, and 66% of the total amount collected by the six charges was from Metropolitan Winnipeg.

Thus, it has been shown that Metropolitan Winnipeg dominates the Manitoba economy in terms of population, employment, income, value of industrial production and provincial government revenues generated. While the same is true for 1974 more recent statistics would indicate substantial relative changes in per capita income for the non-metropolitan areas of Manitoba. Record prices for agricultural products greatly increased per capita incomes. Equally because of envisaged greater economic opportunities rural to urban movements probably decreased.

The discrepancies in economic opportunities between rural and urban Manitoba have not gone unnoticed by the provincial government. Since the NDP election to office in 1969 it has tried to establish rational guidelines for the development of the province in the seventies. For rural Manitoba the intent of the *Guidelines for the Seventies* is to create economic opportunities which will bring farm and rural non-farm income into more favourable perspective with urban wages. One of the more important principles of the *Guidelines* to rural Manitoba is the *stay option*. The stay option principle requires the creation of economic opportunities, both within agriculture and within the local trade centres,

so that citizens of rural Manitoba will have a real choice of life style and working environment. The *stay option* requires the well being of rural Manitobans to be enhanced and regional disparities to be reduced.

In order to achieve these objectives programs have been initiated to develop more adequately the following aspects of rural life: health, education, social services and other major problems directly affecting rural Manitobans.

While major discrepancies exist in the above areas between Metropolitan Winnipeg and rural Manitoba, hopefully a concerted effort on the part of the provincial government and all peoples of Manitoba will lead to a lessening of these differences.

Administration

Metropolitan Winnipeg serves as an administrative centre for business and government within the Province of Manitoba, the Prairie region and in some cases for all of Canada.

In the business sector, Metropolitan Winnipeg is the location of the head office or regional head office for many firms in nearly all industries. However, it seems that there is an especially large number of head offices concentrated in three industrial sectors in particular. These sectors are finance, trade, and transportation.

In finance, which includes banks and trust companies, insurance companies and investment houses, we find that four major life insurance companies have their headquarters in Winnipeg. These are: Great-West Life Assurance Company, Monarch Life Assurance Company, Canadian Premier Life Insurance Company and Canadian Indemnity Company. One of Canada's largest mutual funds, Investors Syndicate Limited (The Investors Group) has its headquarters here, as does one of the nation's largest investment brokerage houses, Richardson Securities. In addition, two trust companies which are expanding into other parts of Canada, Fidelity Trust Company and Fort Garry Trust Company, have their head offices here. In banking, Winnipeg's function is shown in Table 10.

In trade, Metropolitan Winnipeg has long been the Canadian head office location of Hudson's Bay Company; in 1970, the world head office of The Bay was transferred to Winnipeg. As well, Acklands Ltd., The Beaver Lumber Co., General Distributors of Canada, Limited, Marshall Wells Limited, Metropolitan Stores of Canada Limited, Robinson, Little and Company, Limited, and Westfair Foods Limited, all have their head offices in Winnipeg. This city also serves as the Canadian head office

for two large American-owned merchandising companies: Canada Safeway Limited and Gambles of Canada Limited.

Historically, Metropolitan Winnipeg has been a major transportation centre in Canada. Today it continues to play an important role in the transportation industry; this is attested to by the fact that a regional airline (Transair Limited), a regional bus line (Grey Goose Corporation Limited), and a national trucking company (Reimer Express Lines), all have their head offices in Winnipeg. As well, two transportation-related firms, Federal Industries Limited and United Grain Growers Limited, have head offices here and two major manufacturers of transportation equipment — Flyer Industries Limited and Motor Coach Industries — are located in Winnipeg.

Winnipeg serves as a major administrative centre for the two main railway companies in Canada, Canadian National and Canadian Pacific; each has a divisional or regional vice-president located in Winnipeg. Winnipeg, as the Prairie Region Headquarters for the Canadian National Railways, administers an area reaching from Armstrong, Ontario and Thunder Bay, Ontario in the east, to Biggar, Saskatchewan in the west. The Prairie Region of the Canadian Pacific Railway, administered from Winnipeg, stretches from Thunder Bay, Ontario, west to Swift Current, Saskatchewan.

In government, Metropolitan Winnipeg also functions as an administrative centre. As it is the provincial capital, a great deal of the provincial administration is located here. According to the 1971 Census, of some 7,915 provincial employees, 5,175 or 65.4% resided in the Metropolitan Winnipeg area — this should be an approximation of the number who worked in Metropolitan Winnipeg. The Government of Canada also has a fairly large establishment in Metropolitan Winnipeg. Federal government publications indicate that of 12,764 federal government employees in Manitoba in 1972, some 7,640 or 59.9% worked in the Metropolitan Winnipeg area (Statistics Canada, 1974, p. 11). As well, Metropolitan Winnipeg has a large number of municipal government employees, reflecting its fully developed urban character.

At first it does not appear that there is a great concentration of federal administrative employment in metropolitan Winnipeg with only 59.9% of all federal government employment in Manitoba located here and 40.1% located in non-metropolitan Manitoba. An examination of employment figures by occupational classification and by department yields more information.

Thus we see that nearly 81% of all employees in the administrative category are located in Metropolitan Winnipeg, 65% of all executive,

scientific and professional, 80% of all technical, 81% of all administrative support employees, but only 58% of operational and 31% of casual and others.

Similarly, an examination of federal government employment by department in Metropolitan Winnipeg indicates that the administrative function in Winnipeg is concentrated in certain specific departments. For example, while there are administrative staff located in Winnipeg in the Department of Agriculture, their number, relative to the number in other prairie cities, would indicate that they play only a local role. However, in the Department of Environment the large number of administrative staff located here would indicate that this is probably the prairie regional headquarters. Similarly, in the Department of Manpower and Immigration and the Unemployment Insurance Commission, it would appear that Metropolitan Winnipeg is the prairie regional headquarters. It appears, as well, that Metropolitan Winnipeg performs an administrative function over a large area (but less than the entire prairie region) in the Department of National Defence, the Department of Supply and Services, the Canadian Transport Commission, the Department of Veterans Affairs and in Statistics Canada. The data are provided in Table 10. As well, Winnipeg is the location of the Canadian Wheat Board and is the prairie regional office for two government agencies, Central Mortgage and Housing Corporation and the Canadian Broadcasting Corporation.

Summarizing, it does appear that Metropolitan Winnipeg performs an administrative function, especially in three industries in the private sector, those being finance, trade and transportation and also in the public sector.

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TABLE 1
Population Growth of Metropolitan Winnipeg and Manitoba 1941-1973

	1941	1946	1951	1956	1961	1966	1971	1973
MANITOBA								
Population	729,744	726,923	776,541	850,040	921,686	963,066	988,245	998,000
Annual Growth Rate (%) (average of 5 previous years)		-0.08	1.37	1.89	1.67	1.90	1.52	0.49
METROPOLITAN WINNIPEG								
Population	302,024	320,484	356,813	412,248	476,543	508,759	540,265	560,000
Annual Growth Rate (%)		1.22	2.27	3.11	3.12	1.35	1.24	1.83
MANITOBA MINUS WINNIPEG								
Population	427,720	406,439	419,728	437,792	445,143	454,307	447,980	438,000
Annual Growth Rate (%)		-1.0	0.65	0.86	0.34	0.41	-0.28	-1.11

TABLE 2
Components of Population Change*
1966-1973

	Metropolitan Winnipeg	Manitoba minus Metropolitan Winnipeg	Total Manitoba
Natural Increase	+33,786	+34,511	+68,297
Migration	+17,455	-50,818	-33,363
Total Growth	+51,241	-16,307	+34,934

*Data for the calculation of the above table was obtained from the following sources: Statistics Canada, Estimated Population of Canada by Province at June 1, 1973, Cat. 91-201, and Statistics Canada, Estimated Populations of the Census Metropolitan Areas of Canada, June 1, 1973, Cat. 91-207.

TABLE 3
Labour Force By Industry For Manitoba
and Metropolitan Winnipeg 1971

	Manitoba	Winnipeg	Winnipeg as % of Manitoba
1. All industries	413,920	243,800	58.9
2. Agriculture	47,070	1,200	2.5
3. Forestry	710	75	10.6
4. Fishing and trapping	345	25	7.3
5. Mines (including milling), quarries, and oil wells	7,805	565	7.2
6. Manufacturing industries	56,945	44,480	78.1
7. Construction industry	22,320	12,480	55.9
8. Transportation, communication and other utilities	40,020	27,530	68.8
9. Trade	65,215	45,705	70.1
10. Finance, insurance and real estate	15,810	12,890	81.5
11. Community, business and personal service industries	94,520	62,620	66.3
12. Public administration and defence	34,010	20,010	58.8
13. Industry unspecified or undefined	29,150	16,220	55.6

Source: 1971 Census.

TABLE 4

[illegible]

TABLE 5
Personal Income for Metropolitan Winnipeg
and Non-Metropolitan Manitoba

Year	Metropolitan Winnipeg			Non-Metropolitan Manitoba			Declared Personal Income Winnipeg As % Of Manitoba
	Total Declared Personal Income \$000	Total Tax Payable \$000	Total Disposable Income \$000	Total Declared Personal Income \$000	Total Tax Payable \$000	Total Disposable Income \$000	
1949	304,164	18,395	285,769	166,430	6,388	160,042	64.6%
1950	330,472	25,825	304,647	158,194	5,870	152,324	67.6
1951	367,323	28,904	338,419	178,437	9,114	169,323	67.3
1952	404,799	37,364	367,435	182,672	10,823	171,849	68.9
1953	443,247	39,798	403,449	183,927	11,050	172,877	70.7
1954	465,046	40,025	425,021	171,935	9,665	162,270	73.0
1955	486,702	40,890	445,812	184,053	10,381	173,672	72.6
1956	524,088	43,981	480,107	211,002	12,538	198,464	71.3
1957	558,277	47,328	510,949	230,596	13,694	216,902	70.8
1958	614,495	50,182	564,313	240,546	12,656	227,890	71.9
1959	659,205	59,516	599,689	280,144	16,132	264,012	70.2
1960	688,880	65,359	623,521	290,750	18,631	272,119	70.3
1961	706,315	67,869	638,446	320,237	21,032	299,205	68.8
1962	739,914	74,017	665,897	313,553	21,800	291,753	70.2
1963	781,472	80,032	701,440	339,500	25,586	313,914	69.7
1964	837,265	91,564	745,701	364,404	28,868	335,536	69.7
1965	894,724	98,063	796,661	402,035	32,378	369,657	69.0
1966	1,012,999	113,848	899,151	462,701	39,645	423,056	68.6
1967	1,107,585	142,225	965,360	514,121	50,688	463,433	68.3
1968	1,220,793	168,388	1,052,405	551,039	60,889	490,150	68.9
1969	1,349,054	216,246	1,132,808	604,039	78,625	525,414	69.1
1970	1,468,416	255,966	1,212,450	644,419	92,366	552,053	69.5
1971	1,585,545	279,447	1,306,098	693,207	100,853	592,354	69.6
Change							
1949-							
1951	63,159		52,650	12,007		9,281	
%	20.8%		18.4%	7.2%		5.8%	
1951-							
1961	338,992		300,027	141,800		129,882	
%	92.3%		88.7%	79.5%		76.7%	
1961-							
1971	879,230		667,652	372,970		293,149	
%	124.5%		104.6%	116.5%		98.0%	

TABLE 6
Indicators of Production — Metropolitan Winnipeg

	1961	1966	1969	1970	1971
Industrial Product ¹					
Metropolitan Winnipeg	606,996	847,538	1,014,950	1,029,794	1,088,019
Non-Metropolitan Manitoba	109,744	171,462	215,070	230,622	256,836
Winnipeg as % of non-Metro	553.1	494.3	471.9	446.5	423.6
Industrial Product ¹ per capita ²					
Metropolitan Winnipeg	1,273.75	1,665.89	1,929.56	1,932.07	2,013.87
Non-Metropolitan Manitoba	246.54	377.42	474.77	512.49	573.31
Winnipeg as % of non-Metro	516.7	441.4	406.4	377.0	351.3
Industrial Product ¹ per employee ³					
Metropolitan Winnipeg	17,910.24	21,765.79	25,388.35	26,200.08	28,262.44
Non-Metropolitan Manitoba	13,778.28	17,890.44	22,729.87	24,529.04	26,133.09
Winnipeg as % of non-Metro	130.0	121.7	111.7	106.7	108.2

¹Value of shipment of goods of own manufacture, from D.B.S. Census of Manufactures.

²D.B.S. Census figures used for Manitoba and Metropolitan Winnipeg for 1961 and 1966, and estimates from various sources for the intercensal years.

³Employment figures from D.B.S. Census of Manufactures.

TABLE 7
Coefficients of Localization — All Industries

	Manitoba			Metro Winnipeg			Non-Metro Manitoba		
	1951	1961	1971 *	1951	1961	1971 *	1951	1961	1971 *
Agriculture	1.58	1.75	2.04	0.08	0.08	0.09	3.19	3.93	4.71
Forestry	0.20	0.23	0.20	0.04	0.02	0.04	0.39	0.50	0.43
Fish. and Trap.	0.56	0.66	0.28	0.02	0.04	0.03	1.14	1.50	0.66
Mines	0.67	0.87	1.17	0.09	0.11	0.14	1.31	1.87	2.65
Manufacturing	0.64	0.63	0.70	0.99	0.91	0.92	0.26	0.25	0.37
Construction	0.86	0.92	0.86	0.96	0.98	0.82	0.76	0.84	0.93
Transportation	1.26	1.24	1.24	1.61	1.48	1.45	0.89	0.93	0.94
Trade	1.19	1.09	1.07	1.73	1.39	1.28	0.60	0.71	0.78
Finance	1.09	1.01	0.92	1.75	1.49	1.28	0.37	0.38	0.41
Community Service	0.96	0.96	0.97	1.17	1.11	1.09	0.73	0.76	0.79
Public Administration	1.05	1.04	1.11	1.19	1.11	1.11	0.88	0.94	1.11

*Labour force statistics have been substituted for employment statistics.

TABLE 8
Sources of Provincial Revenue — 1974
Yield Breakdown

	Manitoba \$	Metro Winnipeg \$	%	Non-Metro Winnipeg \$	%
PERSONAL INCOME TAX	166,823,500	122,615,273	73.5	44,208,227	26.5
\$ per capita	167	219		101	
% Metro/non-Metro*			217		
SALES TAX	92,000,000	57,086,000	62	34,914,000	38
\$ per capita	92	102		80	
% Metro/non-Metro*			128		
GASOLINE TAX	43,000,000	23,951,000	56	19,049,000	44
\$ per capita	43	4		43	
% Metro/non-Metro*			100		
LIQUOR CONTROL COMMISSION PROFITS	39,000,000	24,199,500	62	14,800,500	38
\$ per capita	39	43		34	
% Metro/non-Metro*			126		
MOTOR VEHICLE LICENCE FEES	16,065,000	8,044,977	50	8,020,023	50
\$ per capita	16	14		18	
% Metro/non-Metro*			78		
TOBACCO TAX	13,100,000	8,128,550	62	4,971,450	38
\$ per capita	13	15		11	
% Metro/non-Metro*			136		
TOTAL OF SPECIFIC SOURCES	369,985,500	244,025,300	66	125,963,200	34
\$ per capita	370	436		288	
% Metro/non-Metro*			151		

Source: Public Accounts, Province of Manitoba
Taxation Statistics, Department of National Revenue
Statistics Canada

*Ratio of per capita figures.

Population figures: Manitoba 998,000; Winnipeg 560,000; Rural 438,000

TABLE 9
Winnipeg As A Banking Centre

BANK	Designation of Winnipeg	Area Served
Bank of Montreal	Divisional Headquarters	Manitoba and Saskatchewan
Bank of Nova Scotia	Regional Office	Manitoba and N.W. Ontario (as far east as Thunder Bay)
Canadian Imperial Bank of Commerce	Regional Office	Manitoba
Royal Bank	District Headquarters	Manitoba and N.W. Ontario (east to Thunder Bay)
Toronto-Dominion Bank	Western Divisional Office	Manitoba and N.W. Ontario (as far east as Marathon, Ontario)
Banque Canadienne Nationale	Divisional Office	Manitoba

TABLE 10
Federal Government Employment, Departments and Departmental Corporations
By Occupational Category
September 1972

AREA	Executive, Scientific and Professional	Administrative and Foreign Service	Technical	Administrative Support	Operational	Casual and Other	TOTAL
Manitoba	1,071	1,029	1,088	2,181	4,435	2,960	12,764
%	100						
Metro Winnipeg	694	830	867	1,760	2,570	919	7,640
%	64.8	80.7	79.7	80.7	57.9	31.0	59
Non-Metro Manitoba	377	199	221	421	1,865	2,041	5,124
%	35.2	19.3	20.3	19.3	42.1	69.0	40

Source: Statistics Canada

Winnipeg As a Financial Centre

by G. F. Parsons*

Introduction

An understanding of the financial services that a city can provide is central to any explanation of that centre's growth as a metropolitan unit. In the case of Winnipeg an historical concentration of inter-related functions in the grain, transportation and land development industries has been both symptomatic and indicative of the city's ties with a developing western regional economy and emergence as a Canadian metropolis. The following analysis therefore pursues Kerr's theme of "the reciprocity of the metropolis and the hinterland" (Kerr, 1965; 1967), which in large part explains both the rise and the relative decline of Winnipeg as a financial centre.

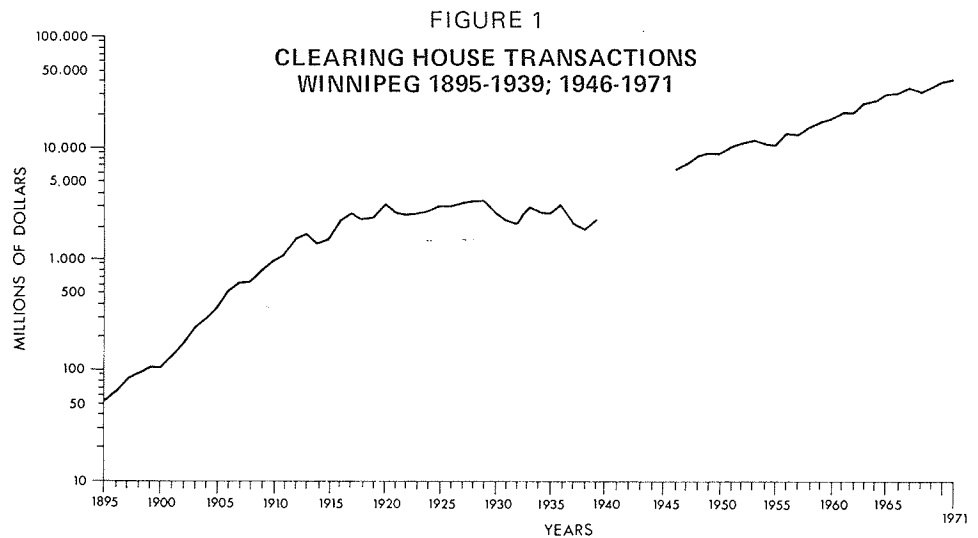
Finance as an economic activity is composed of a number of economic sectors which thrive together through a complex series of relationships (Dunning and Morgan, 1970) that are normally located in the inner or central business districts of the larger urban areas. Whilst banking is the most obvious of these activities, others such as commodity trading, security brokerage, insurance and real estate transactions all contribute to a viable financial centre and in Winnipeg's case have all been particularly significant. Statistical indices relating to the magnitude and role of individual sectors within a centre are generally restricted to employment, although data relating to cheque clearances and the geographical distribution of assets can also provide information on the financial aspects of a city (Kerr, 1965).

Winnipeg, unlike many other Canadian centres, established complex financial institutions at an early stage in its development. By 1929 it had the third highest level of cheque clearances in Canada after Toronto and Montreal and a concentration of financial assets far in excess of its population of nearly 219,000. Fundamental to Winnipeg's rapid financial growth was its strategic location in the Canadian grain trade — a natural location whose geographic advantages were economically enhanced with the completion of first the railroad to America in the south in 1878 and later to the Canadian east and west in 1885. As the

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centre of the Canadian grain trade, Winnipeg developed financial functions to service that activity. The Grain and Produce Exchange in 1887 and numerous bank branches, brokerage houses, transportation and insurance agencies were all created specifically for the grain transactions. Revenue from grain trading was managed through the Winnipeg entrepot thus encouraging the growth of numerous wholesaling and service functions for the expanding Prairie region, financing the city and western real estate activities in 1881-2 and between 1895 and 1907 as the agricultural frontier advanced and generally providing an important source of capital for western Canadian development (Bellan, 1958).

Statistical verification of the magnitude of Winnipeg's role as a financial centre is apparent from the growth of cheque clearances in the city. Fig. 1 shows the rapid growth in cheque clearances in the later part of the nineteenth and first decades of the twentieth centuries. During this period growth in overall financial activity rose steadily although periodic slumps in the world demand for agricultural produce could seriously affect activity, as it did later in 1921 and during the 1930's. Following the Second World War, growth continued although the rate of increase was less dramatic than in earlier years as Winnipeg found itself no longer the sole broker for the western Canadian economy.



Source: *Canada Year Books, 1895-1939*;
Statistics Canada, *Cheques Cashied in Clearing Centres, 1971*, Cat. 61-201.

Comparison of cheque clearances in Winnipeg with other Canadian centres also identifies the city's changing financial position. In both 1929 and 1951 Winnipeg created levels of cheque clearances far in excess of the level that might have been expected by virtue of the city's population. By 1971 this position had changed radically so by that time Winnipeg had cheque clearances nearly \$3 million below the level predicted by its size. (See Statistical Appendix, Table A-2, Relationship between cheque clearances and population for selected Canadian Centres, 1929, 1951 and 1971.) The reason for this transferred financial position emerges from a number of areas.

Generally in the pre-World War II situation cheque clearances grew only slowly with population increases between Canadian urban centres. During this time Winnipeg's growth and financial expansion far exceeded the national growth rate thereby enhancing its relative position as a major Canadian financial centre. By the post-World War II period cheque clearances between major Canadian urban centres were increasing rapidly with population at a rate exceeding Winnipeg's capacity to grow financially in an economic environment which by the 1960's and 1970's had changed dramatically from its former state. These changes in Winnipeg's economic environment can be seen to have risen from developments in grain trading practices, competition from other Canadian financial centres and the restricted area of Winnipeg's trading hinterland. All these factors have played a part in reducing the relative levels of financial concentration within the city, although in spite of this decline a significant residue of services remains which accounted for over 5.0% of the Metropolitan Winnipeg labour force in 1971.

Finance and Grain

By 1890 Winnipeg was the undisputed headquarters of the western Canadian grain trade. This function required that grading and sorting of grain from country elevators be undertaken in the city prior to shipment to the terminal elevators at the Lakehead. Large scale grain marketing facilities located in the city and in 1890 a Board of Arbitration was established, in opposition to Eastern interests, to hear disputes concerning the grain trade (Bellan, 1958). After early failures in 1883 a Grain and Produce Exchange was established in 1887, later incorporated in 1891 by an Act of the Manitoba legislature. Within a few years the Exchange was able to have an important influence on the international grain market. In 1897 a futures market was established

for wheat and telegraphic communication ties were made with other world markets.

The emergent grain economy of the late nineteenth and early twentieth centuries was an agrarian-economic response to world demand made upon a highly competitive and open international world market. The Winnipeg Grain Exchange provided a natural forum for such free enterprise conditions and it was during this period that the Exchange was most significant, both regionally and internationally. By 1920 oats, flaxseed, rye and barley futures were all being traded by the Exchange in addition to wheat. In developing the futures markets for grain and other commodities it became possible to hedge against price fluctuations that would occur between harvest and delivery in the volatile world markets (Mathieson, 1942). These futures trading practices provided significant price benefits to producers, in spite of speculative ventures on the Exchange (Stamp, 1931), and further encouraged the expansion of the grain economy. Trading under these conditions substantially boosted Winnipeg's level of cheque clearances and furthermore spawned the growth of numerous ancillary consultants, agents, brokers and shippers within the city.

The strong ties that Winnipeg developed with the expanding surrounding hinterland enabled the city to place its financial resources at the disposal of the grain industries. Cash was required by elevator companies to finance farmers on delivery of grain, for shippers and exporters. All of these needs were served by the growing banking system centred on Winnipeg. 1882 saw the existence of eight eastern chartered banks in the city and seven local private banks (Bellan, 1958). In addition, the banks were necessary to establish letters of credit for foreign traders and to provide payment for grain where foreign exchange transactions were involved.

The World Depression of 1929-32 and the subsequent low wheat prices and yields in the dry 1930's brought about a reduction in the importance of the open market with a resulting decline in the Exchange's role in the western Canadian grain trade. Public intervention in the grain industries had originated under the wartime conditions of 1914-18. Later in the early thirties indirect moves to restrict open market operations occurred with the attempts by the Canadian Co-operative Wheat Producers to manipulate Exchange trading. Full public intervention in the industry finally came with the first international wheat agreement in 1933 and culminated with the establishment of the Wheat Board in 1935 (MacGibbon, 1952).

"The marketing in an orderly manner, in interprovincial and export trade, of grain grown in Canada" was the underlying objective of the newly established Wheat Board and has remained so to this day (R.S.C., 1970). Whilst this function usurped much of the Grain Exchange's role, removing wheat, oats and barley from the open market, Winnipeg retained many of its agricultural financial functions since the Wheat Board head offices and related research and management bodies established later (Canadian Grains Council, 1969; Canadian Grains Institute, 1971) were located in the city. In time, the Board worked with the Exchange, obtaining memberships and entering the open market, although Board marketing developments in direct sales, shipping and grading effectively removed some activities from Winnipeg. Public servants replaced financial entrepreneurs and Winnipeg's location at the centre of grain trading became institutionalised with Federal legislation.

Other Financial Institutions

Winnipeg's financial growth extended well beyond those direct monetary relationships with the grain trade. Real estate, insurance and banking all developed important linkages over an extensive western hinterland. In the end decades of the nineteenth century Winnipeg financiers were dominant in western development. Eastern Canadian and foreign funds were all channelled through the city. In the real estate boom of 1881-2, following railroad construction west, Winnipeg speculators were prominent. "Winnipeg was at the centre of a boom. Towns were surveyed all over the Province and Territories, and lots in them were disposed of at fabulous prices" (Begg, 1881) at auctions in Winnipeg. The twelve investment and loan companies with Winnipeg head offices had over \$7.5 million invested throughout the west in 1882, two-thirds in city mortgages and the rest in farm mortgages (Bellan, 1958). Other investment activity was also apparent on the part of insurance companies and the private business community.

At the start of the twentieth century, with the growing maturity of the Prairie economy and the growth in size of the city's population (42,340 persons by 1901) Winnipeg possessed a number of substantial financial institutions developed initially to serve western interests, though sufficiently competitive to soon break into national markets. By 1906 the Winnipeg based Great-West Life Assurance Company was operating nationally. Similarly, the Canadian Fire Insurance Company soon established a national reputation. In 1904 the Northern Trust Company was organized and the following year two city businessmen established a

private bank destined to become "the largest private banking business ever known in Canada" (Bellan, 1958), selling out eventually to the Canadian Imperial Bank of Commerce in 1911. By 1907 a Stock Exchange was operational and trading in all aspects of development occurring from northern Ontario to the Pacific coast.

Winnipeg's Current Financial Structure

The first quarter of the twentieth century saw Winnipeg established as a financial centre. Today's economic structure strongly reflects these early developments in spite of changed conditions in grain trading, the reduction in Winnipeg's economic linkages with other regions and the growing competition from other Canadian financial centres. In 1971, 12,895 persons were employed in the finance, insurance and real estate division of Winnipeg's labour force, representing a 34.1% increase over the 1961 position. This was a rate of growth substantially below the national average of 56.5% over the same period. Indeed, employment growth in the financial sectors was even lower than Winnipeg's overall labour force increase of 36.8%, suggesting the declining importance of these financial activities today. To some extent the employment statistics will underestimate the city's financial sector since Wheat Board employment, amounting to some 620 persons or 10.2% of the financial labour force, is excluded from the figure. Table 1 shows the employment distribution between the various sectors of Winnipeg's financial community. This

TABLE 1
Finance, Insurance and Real Estate Labour Force,
Metropolitan Winnipeg, 1971

	Male		Female		Total	
	No.	%	No.	%	No.	%
Banks and other deposit establishments	1,480	(24.3)	2,685	(39.5)	4,165	(32.3)
Other credit agencies	270	(4.4)	270	(4.0)	540	(4.2)
Security brokers and dealers	250	(4.1)	220	(3.2)	470	(3.6)
Investment and holding companies	595	(9.8)	330	(4.8)	925	(7.2)
Total finance	2,595	(42.6)	3,505	(51.5)	6,100	(47.3)
Insurance carriers	1,555	(25.5)	1,860	(27.3)	3,415	(26.5)
Insurance and real estate agencies	1,200	(19.7)	905	(13.3)	2,105	(16.3)
Real estate operators	740	(12.2)	535	(7.9)	1,275	(9.9)
Total insurance and real estate industry	3,495	(57.4)	3,300	(48.5)	6,795	(52.7)
Total finance, insurance and real estate	6,090	(100.0)	6,805	(100.0)	12,895	(100.0)

Source: Statistics Canada, Special Tabulation, 27th February, 1974.

indicates the nearly even division between the financial services accounting for 47.3% of the financial, insurance and real estate labour force and the other sectors. Individually, banking with 32.3% and insurance carriers with 26.5% dominate the employment structure.

TABLE 2
Employment Location Quotients for the
Finance, Insurance and Real Estate Industries,
Winnipeg, 1951, 1961, 1971

	1951	1961	1971
Winnipeg	1.75	1.49	1.27

Source: Derived from Statistics Canada, *Experienced Labour Force*, 1951, 1961, 1971.

To estimate more precisely the degree of economic specialisation in Winnipeg use may be made of the statistical device known as the Location Quotient (L.Q.) (Isard, 1960). Table 2 provides L.Q.'s for the financial, insurance and real estate employment over the 1951, 1961, 1971 period and Table 3 disaggregates the 1971 employment pattern calculating L.Q.'s for each sector. When L.Q. values exceed 1.0 then a sector is more specialised than the average level of concentration for that sector and may be presumed to be producing its output for an export market outside the city (Tiebout, 1962). The information for Table 2 shows clearly the diminishing size of the city's L.Q., consistent of course with the relatively slow rate of employment growth observed in the sector earlier. Table 3's more detailed breakdown identifies the key income generating role that investment and holding companies and insurance carriers play in the financial life of Winnipeg with L.Q.'s of 1.6086 and 1.7073 respectively.

The role of banking in Winnipeg has traditionally remained one of a regional headquarters for eastern banking interests. Periodic attempts have been made to develop regional banking responsive to local needs such as the Bank of Western Canada and the Northlands Bank and Winnipeg interests have always played a prominent role in their formation. To date, however, none of these local developments have really become fully competitive with the eastern banking establishment. Provincial banking statistics for 1935, 1940, 1960 and 1970 (Table 4), which are dominated by the city's figures, show the absolute increase in bank branches. However, also apparent is the declining share of the national total which falls from 5.24% in 1935 to a low of 4.66% in 1960 and the slight recovery to 5.01% in 1970.

TABLE 3
Employment Location Quotients by Financial Sector,
Winnipeg, 1971

	Winnipeg
Banks and other deposit establishments	1.1038
Other credit agencies	1.1000
Security brokers and dealers	1.1875
Investment and holding companies	1.6086
Total finance	1.1682
Insurance carriers	1.7073
Insurance and real estate agencies	1.0617
Real estate operators	1.4444
Total insurance and real estate industry	1.1794
Total finance, insurance and real estate	1.2722

Note: The Location Quotient for a particular activity is obtained by dividing the proportion of the total members which are in a given activity in one area by the same proportion in another (usually larger) area. For example, if Area A has 4% of its total employment in banking compared with Area B's 2%, then the Location Quotient of the banking industry in Area A (relative to that of Area B) is 2. That is, it is twice as important in terms of employment.

Source: Statistics Canada, *Experienced Labour Force, Detailed Industries by Sex*, Special Tabulation, February 27, 1974.

TABLE 4
Branches of Chartered Banks, Manitoba and Canada,
1935, 1940, 1960, 1970

	1935	1940	1960	1970
Manitoba				
No. of branches	197	165	237	312
% of Canada	(5.24)	(4.78)	(4.66)	(5.01)
Canada	3,753	3,449	5,076	6,220

Source: Financial Post, *Survey of Markets*, Toronto, 1936, 1941, 1961, 1971.

A similar pattern of absolute growth and relative decline is clear in Table 5, which shows financial data relating to trust and loan companies over the 1931-71 period for Winnipeg and Toronto. In 1931 Winnipeg based trust companies held assets of \$30 million representing

TABLE 5
Assets of Trust and Loan Companies According to Head Office Locations,
1931, 1951, 1971, Winnipeg, Toronto and Canada

	1931		1951		1971	
	Trust Companies	Loan Companies	Trust Companies	Loan Companies	Trust Companies	Loan Companies
Winnipeg (\$'s mil.)	30	2	35	2	77	4
% of Canada	(11.7)	(1.35)	(5.25)	(1.04)	(2.8)	(0.2)
Toronto (\$'s mil.)	75	87	267	110	1,650	1,197
% of Canada	(29.3)	(58.9)	(40.1)	(57.6)	(60.3)	(51.1)
Canada (\$'s mil.)	256	148	666	191	2,738	2,341

Source: *Report of the Superintendent of Insurance of the Dominion of Canada, 1931; Trust and Loan Companies, Ottawa, 1933, 1953, 1971.*

11.7% of the national total. By 1971 assets of the Winnipeg firms had more than doubled to \$77 million but this growth was insufficient to maintain the city's position in the Canadian trust and loan industry, since by that date only 2.8% of national trust assets and 0.2% of national loan assets were based in Winnipeg. Reason for the demise in Winnipeg's financial position can partially be attributed to the success of major eastern centres like Toronto in developing national organisations in competition with regional centres like Winnipeg. By 1971 Toronto was accounting for over 50% of the assets of both trust and loan companies in Canada.

Insurance companies in Winnipeg have also suffered competition from other Canadian financial centres. Table 6 gives some indication of the level of this competition with Toronto, Montreal and London. Firms with Winnipeg head offices currently account for nearly 8.0% of all national insurance company assets and the city ranked third in Canada as an insurance centre on this criterion. Unlike the two larger eastern insurance competitors, Toronto and Montreal, Winnipeg's insurance industry has a much higher proportion of Canadian companies, i.e. 98.8% in Winnipeg compared to 77.1% in Toronto and 75.6% in Montreal. In particular, in 1971 the Great-West Life Assurance Company dominated the life assurance sector with assets of nearly \$1,600 million and the Canadian Indemnity and Wawanesa companies contained the majority of assets in the fire and casualty sector with assets of \$47.7 million and \$87.4 million respectively. Today therefore the legacy of early twentieth century entrepreneurial skills by a few individuals remains the basis of Winnipeg's insurance industry.

TABLE 6
Assets of Insurance Companies According to Head Office Location
By Ownership Group for Selected Centres and Canada, 1971

Insurance Group	Ownership Origin*	Units	Winnipeg	Toronto	Montreal	London	Canada
Fire and Casualty	Canadian	\$'s (mil.)	146.4	714.0	187.8	21.5	1,418.1
		% of Canada	(10.3)	(50.3)	(13.2)	(1.5)	(100.0)
	British	\$'s (mil.)	2.6	277.9	95.9	—	382.3
		% of Canada	(0.7)	(72.7)	(25.1)	—	(100.0)
	Foreign	\$'s (mil.)	14.9	719.9	82.1	1.9	851.0
		% of Canada	(1.8)	(84.6)	(9.6)	(0.2)	(100.0)
Total Fire and Casualty		\$'s (mil.)	163.9	1,711.8	365.8	23.4	2,651.4
		% of Canada	(6.2)	(64.6)	(13.8)	(0.9)	(100.0)
Life Assurance	Canadian	\$'s (mil.)	1,788.8	7,385.5	4,140.9	1,811.0	17,076.6
		% of Canada	(10.5)	(43.2)	(24.2)	(10.6)	(100.0)
	British	\$'s (mil.)	0.4	130.2	1,205.5	—	1,336.1
		% of Canada	(0.1)	(9.7)	(90.2)	—	(100.0)
	Foreign	\$'s (mil.)	419.0	1,274.9	15.5	—	2,655.7
		% of Canada	(0.2)	(48.0)	(5.8)	—	(100.0)
Total Life Assurance		\$'s (mil.)	1,794.1	8,790.6	5,361.9	1,811.0	22,879.4
		% of Canada	(7.8)	(38.4)	(23.4)	(7.9)	(100.0)
All Insurance		\$'s (mil.)	1,958.0	10,502.4	5,727.7	1,834.4	25,530.8
		% of Canada	(7.7)	(41.1)	(22.4)	(7.2)	(100.0)

*British and Foreign firms represent Canadian held assets allocated to head office location in Canada.

Source: *Report of the Superintendent of Insurance for Canada*, Dept. of Insurance, Ottawa, 1972, Vols. I, II, III.

Traditional grain related insurance companies such as the Grain Insurance and Guarantee and the Pool Insurance companies figure far less prominently today than in the past, with assets of only \$4.4 million and \$1.5 million — a reflection of the diminished importance of grain in Winnipeg's finances. Winnipeg's reduced share of the national insurance company growth over the post-war years has also been a function of the city's inability to attract non-Canadian insurance activity. In Canada, as Table 6 makes clear, this function is almost entirely undertaken by Toronto and Montreal who together control nearly 75.0% of the non-Canadian insurance assets in the country, compared to Winnipeg's bare 8.0%.

The most recent development in the insurance sector has been the establishment of the Provincially run no-fault automobile insurance plan AUTOPAC in 1972 with the creation of the Manitoba Public Insurance Corporation. This program has once again concentrated administration facilities into Winnipeg with an employment of approximately 550 persons in 1974. The overall effect of the scheme upon the city's financial status will be difficult to gauge. Unlike private insurance, the public corporation has a geographically restricted operating area within the Provincial boundaries thus limiting Winnipeg's trading area for this form of insurance. Whether the program has increased activity in Winnipeg's financial circles rests upon a number of factors, one of which is the balance between the extra-provincial auto insurance sales by Winnipeg firms prior to 1972 and the former purchases by Manitobans from non-Manitoba firms. Statistics to examine this relationship are unfortunately not available although clearly the public sector is now a fact of life in the insurance industry as well as the more traditional grain trade.

Stock market transactions upon the Winnipeg Stock Exchange have also suffered severely in the post-war period. Unlike the other financial sectors within Winnipeg and other business centres in Canada, the city's Exchange has shown an absolute and a relative decline in trading activity amounting to 66.7% over the 1963-72 period. Table 7 details this decline showing the incursions that have been made by eastern Canadian exchanges and perhaps more importantly by western exchanges such as Calgary and Vancouver. Today the continued growth of stock transactions in centres once within Winnipeg's hinterland to the west has removed much of the original economic rationale for an Exchange within the city.

More successful at adapting to Winnipeg's changing trading patterns has been the Grain and Produce Exchange, renamed in 1972 as the

TABLE 7
Value of Stock Market Transactions on Canadian Exchanges,
1963*-1972

Exchange	Value of Transactions \$'s (mil.)		Percent Change in Transactions 1963-1972	Percent of Canadian Total	
	1963	1972		1963	1962
Toronto	2,420	6,258	+158.6	68.8	68.7
Montreal**	939	2,057	+119.1	26.7	22.6
Vancouver	153	783	+411.2	4.3	8.6
Calgary	3	6	+100.0	0.1	0.1
Winnipeg	3	1	- 66.7	0.1	+
Total	3,518	9,105		100.0	100.0

* 1963 figures represent average figures from 1962-4 data.

** Figures for Montreal and Canadian exchanges combined.

+ Less than 0.1%.

Source: Kerr, D., "Some aspects of the geography of finance in Canada," *Canadian Geographer*, IX, 4, 1965, Table IV. Toronto Stock Exchange, *Annual review of the Canadian economy and equity market*, 1972, Feb. 1973, Toronto, p. 38.

Winnipeg Commodity Exchange to more appropriately reflect its new markets. To supplement the traditional markets of wheat, oats and barley that had been so affected, although not completely removed by government intervention*, the Exchange concentrated upon the new growing agricultural markets of flax, rye, rapeseed and live beef. At a time when Prairie agriculture was diversifying, this proved to be shrewd move on the part of the Exchange, substantially improving its economic future. In post-war years Wheat Board use of the Exchange has increased so that currently the major agricultural markets offered are the cash markets for grain transactions and the futures markets for other agricultural products for delivery in store at a future date. In 1972 the Exchange made a radical departure from traditional practice and opened a gold futures market.

The magnitude of business undertaken by the Commodity Exchange is difficult to assess since complete financial statistics are not available for public scrutiny. Table 8 provides some information in the area of futures trading and suggests the annual average level of activity approaches \$6 billion to which cash grain transactions would have to be added to assess the full financial position of the Exchange. In futures trading clearly non-wheat grain sales and the new gold market provide the bulk of the total value although beef sales possess a considerable volume of trading activity.

*In 1949-50, 71.8% of western Canadian grain production was marketed through the Wheat Board. By 1959-60 the proportion was 57.9% and in 1969-70 it had further fallen to 43.9%.

TABLE 8
Average Annual Futures Trading Volumes for the Five Years Ending 1973,
Winnipeg Commodity Exchange

Commodity	Trading Unit	Average Annual Trading Levels 1969-73		
		Volume	Value	
		No.	\$'million	%
Oats, Barley, Rye, Flax and Rapeseed	million bu.	764	2,833	48.6
Live Beef	25,000 lbs.	2,143	14	0.2
Gold	400 ozs.	67,884	2,987	51.2
TOTAL			5,834	100.0

*Gold values based upon average 1973 prices.

Source: Winnipeg Commodity Exchange, Special Tabulation, May 1974.

TABLE 9
Functional Breakdown of Members of the Winnipeg Commodity Exchange,
1974

Function	No.	%
Banking and Insurance	7	2.05
Bullion Smelters and Dealers	7	2.05
Canadian Wheat Board	11	3.23
Cash Brokers	10	2.94
*Country Elevators	33	9.70
Crushers, Processors and Packers	7	2.05
Domestic Shippers	13	3.82
Exporters	46	13.52
Farmers and Feeders	7	2.05
Foreign Importers	8	2.35
Futures Brokers and Pit Traders	40	11.76
Futures Commission Merchants	36	10.58
Grain Merchants	10	2.94
Lady	1	0.29
Maltsters, Brewers and Distillers	7	2.05
Millers and Feed Manufacturers	11	3.23
Private Traders	33	9.70
*Terminal Elevators	10	2.94
Vessel Owners, Agents and Brokers	14	4.11
Others	29	8.52
	340	100.0%

*75% Producer Owner Co-operatives

Source: Special Tabulation, Winnipeg Commodity Exchange, 1974.

In spite of recent developments which make the Commodity Exchange's future brighter perhaps than other financial sectors within Winnipeg, the Exchange maintains strong ties with its grain trade interests. Table 9 shows a functional breakdown of members of the Exchange in 1974. Members directly associated with grain activities today account for approximately one-third of total membership, while more purely financial interests make up another third. The numbers of members exclusively associated with the gold trade remains small at present, but might be expected to grow in view of trading volumes in this field.

The Commodity Exchange has been, and remains, an important factor in maintaining an extensive financial trading hinterland for Winnipeg. The geographical analysis of Exchange memberships shown in Table 10 and Fig. 2 indicates the strength of these connections. Developed through the grain trade, the Exchange now maintains through its memberships contacts with most other major financial centres in North America and Europe. Even though memberships have fluctuated from

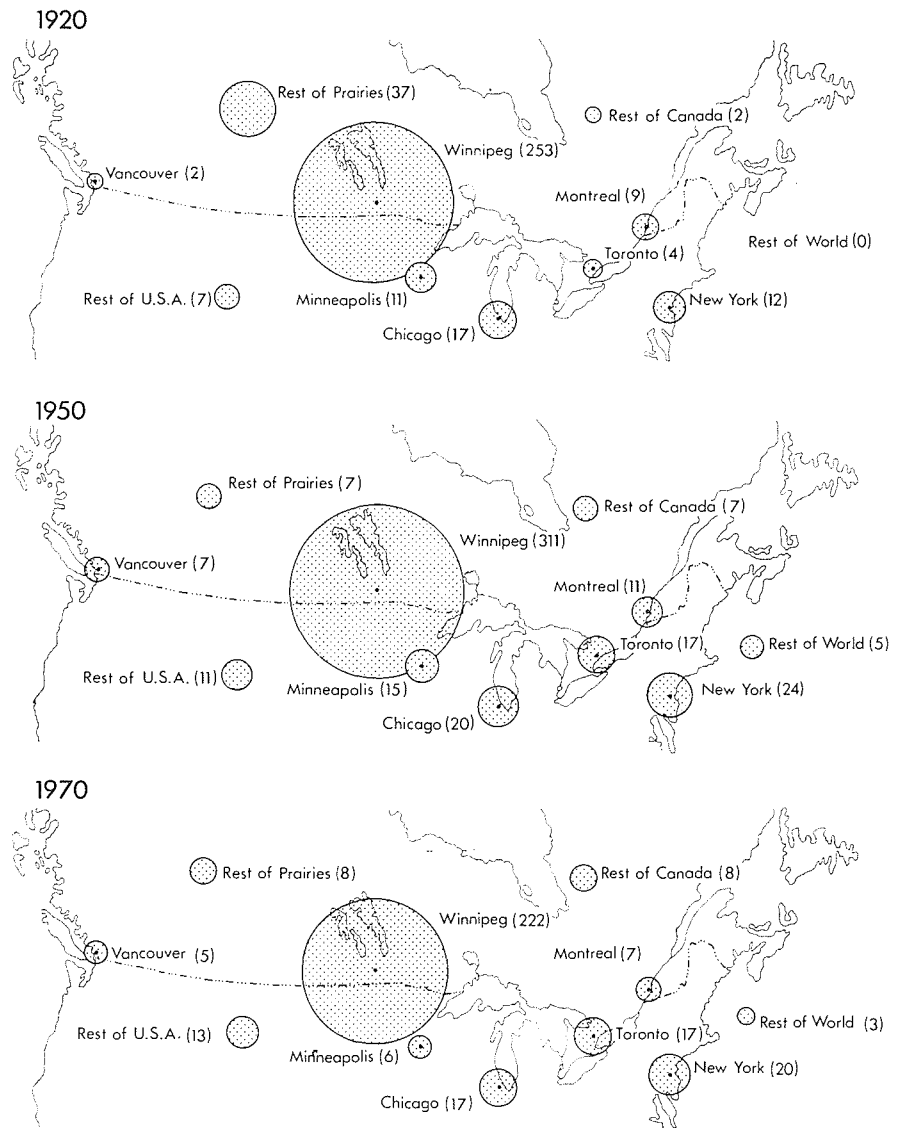
TABLE 10
Geographic Origin of Members of the Winnipeg Commodity Exchange

Place of Origin	1900	1920	1930	1940	1950	1960	1970
	Percent* of Total Membership Originating from:						
Winnipeg	72.6	71.5	72.1	72.2	71.5	70.9	68.1
Toronto	0.8	1.1	1.3	3.0	3.9	4.5	5.2
Montreal	3.2	2.5	1.8	1.6	2.5	2.6	2.1
Vancouver	0.0	0.6	0.8	0.9	1.6	1.4	1.5
Rest of Prairies	18.5	10.5	3.7	2.3	1.6	1.2	2.5
Rest of Canada	0.8	0.6	0.3	1.2	1.6	1.9	2.5
Canada	96.0	86.7	80.0	81.3	82.7	82.5	81.9
New York	0.8	3.4	6.8	6.9	5.5	5.0	6.1
Chicago	0.8	4.8	4.7	4.6	4.6	4.0	5.2
Minneapolis	2.4	3.1	3.1	2.8	3.4	2.6	1.8
Rest of U.S.A.	0.0	2.0	2.6	2.3	2.5	4.3	4.0
U.S.A.	4.0	13.3	17.4	16.7	16.1	15.9	17.2
Rest of World	0.0	0.0	2.6	2.1	1.1	0.9	0.9
Total Membership							
All Regions	124	354	380	432	435	422	326

*Percentages may not sum to 100.0 due to rounding.

Source: *List of Members, 1960, 1970*, Winnipeg Commodity Exchange, Winnipeg.
List of Members, 1900, 1920, 1930, 1940, 1950, Winnipeg Grain Exchange, Winnipeg.

FIGURE 2
GEOGRAPHIC ORIGIN OF MEMBERS OF
THE WINNIPEG GRAIN EXCHANGE



Source: *List of Members*, Winnipeg Grain Exchange, Winnipeg, 1920; 1950
List of Members, Winnipeg Commodity Exchange, Winnipeg, 1970

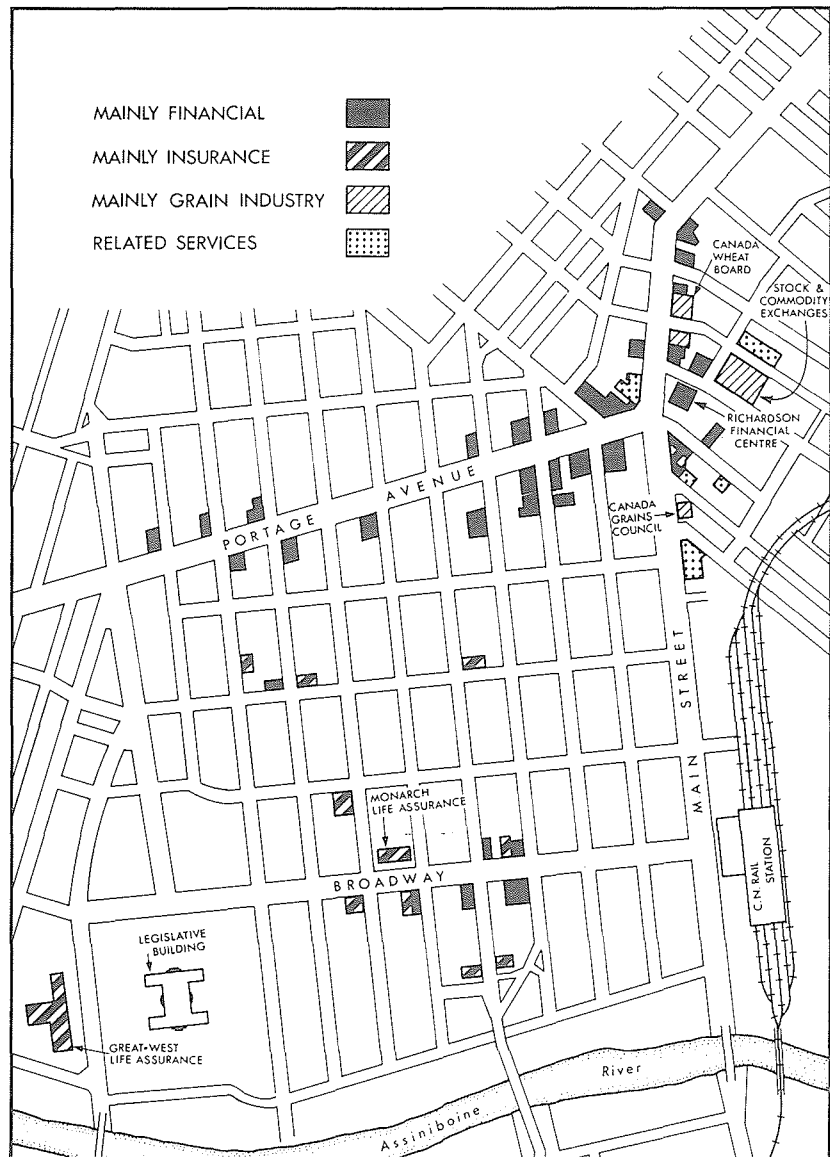
a high of 435 in 1950 to the low in 1970 of 326 (today it stands at 340) fully 30% of these have consistently originated from outside Winnipeg. Such spatial interaction with other financial markets is probably an important key to Winnipeg's continuing viability as a financial centre. Fig. 2 shows clearly the expanding geography of these financial connections. In the early years of the twentieth century the local Prairie region was providing significant input to the Exchange. By the 1970's Toronto had emerged as an important Canadian centre in competition with the larger international centres of Chicago and New York. Both the Exchange and Winnipeg, of course, have benefited substantially from these stronger metropolitan connections in obtaining financing and information upon the rapidly changing international markets.

Conclusion

Finally, Winnipeg's role as a financial centre remains today. While other western centres like Vancouver, Edmonton and Regina have encroached upon the city's hinterland, a sufficiently distinct and vibrant community remains in Winnipeg with national and international connections to warrant the title "financial centre". The development of the business expertise to operate in national and international markets involves the establishment of institutions for the trading of rights and titles to goods and services. In Winnipeg, these for the most part were centred near the junction of Portage and Main Street and even today may be found in this area, although insurance companies have developed a centre of concentration further south on Broadway (see Fig. 3). Spatial juxtaposition of these institutions becomes necessary, particularly where world commodity markets may be unstable and a lack of information or decision may result in large financial losses. "Knowledge in a hurry" is considered to be the main centralizing force in such financial centres (Robbins and Terleckj, 1960). Spatial interaction may be competitive as well as complementary and certainly within this central area we find the services of all aspects of Winnipeg's financial community.

Government intervention in the grain and insurance industries has had serious effects upon the level of activity and the extent of services performed by the city and in a real sense has contributed to a reduction in Winnipeg's economic hinterland. Alternatively, however, institutionalizing certain sectors of the financial community through Provincial and Federal legislation has provided a minimum level of activity for the city so that certain functions will remain regardless of the levels of external competition.

FIGURE 3
WINNIPEG FINANCIAL DISTRICT, 1974



In spite of the considerable inroads made by eastern Canadian centres like Toronto and Montreal into Winnipeg's financial markets, the city maintains the trading traditions in rights and titles that are the essential characteristic of a financial centre. Downtown Winnipeg remains subtly, though effectively, dominated by its business district and as Kerr has noted "the vitality or decline of central areas of the city may in large measure be related to the nature and volume of financial activity" (Kerr, 1965). Winnipeg's business district is currently under renewal, a fact which may point to its health for the future.

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Statistical Appendix

TABLE A-1
Cheques Cashed in Clearing Centres, Population for Selected Urban Centres,
Canada, 1929, 1951, 1971

Centre	1929		1951		1971	
	Cheques Cashed (\$'000's)	Population	Cheques Cashed (\$'000's)	Population	Cheques Cashed (\$'000's)	Population
Halifax	425,488	59,275	1,334,026	133,931	9,472,273	222,640
Moncton	99,598	20,689	431,781	27,334	1,851,592	71,415
St. John	—	—	568,606	78,337	2,903,291	106,745
St. John's	—	—	554,032	68,620	6,150,676	131,815
Montreal	15,558,094	818,577	29,184,504	1,471,851	214,145,942	2,743,210
Quebec	788,145	130,594	3,163,125	276,242	22,764,861	480,505
Sherbrooke	137,428	28,933	381,090	50,543	2,194,477	84,570
Brantford	166,591	30,107	486,995	36,727	1,734,427	64,421
Chatham	112,271	14,569	407,332	21,218	2,429,682	35,317
Cornwall	—	—	187,013	16,899	1,093,852	47,117
Hamilton	909,897	155,547	2,996,003	280,293	16,928,597	498,525
Kingston	83,879	23,439	279,208	33,459	1,683,604	85,880
Kitchener	159,266	30,793	623,024	107,474	4,626,746	226,845
London	424,805	71,148	1,528,833	128,977	11,671,346	286,010
Ottawa	2,001,694	126,872	4,459,565	292,476	18,309,177	602,510
Peterborough	93,245	22,327	339,003	38,272	1,339,532	63,535
St. Catherines	—	—	551,346	37,984	2,524,045	303,430
Sarnia	146,820	18,191	425,660	34,697	1,651,158	78,445
Sudbury	34,117	18,518	352,305	73,826	2,239,210	155,425
Toronto	13,714,209	631,207	32,271,836	1,210,353	387,036,643	2,628,040
Windsor	594,319	63,108	1,872,211	163,618	7,809,971	258,645
Brandon	62,315	17,082	176,870	20,598	610,258	31,150
Calgary	1,253,619	83,761	3,349,247	142,315	29,754,338	403,320
Edmonton	603,871	79,197	2,459,203	176,782	21,845,007	495,705
Lethbridge	97,220	13,489	309,577	22,947	1,353,101	41,217
Medicine Hat	54,259	10,300	123,547	16,364	537,756	28,775
Moose Jaw	128,436	21,299	277,986	24,355	455,166	31,854
Prince Albert	39,151	9,905	154,871	17,149	541,733	28,464
Regina	630,264	53,209	1,759,587	71,319	12,463,808	140,730
Saskatoon	224,156	43,291	590,105	53,268	3,196,743	126,450
Winnipeg	4,788,953	218,785	10,373,940	356,813	42,555,999	540,260
Vancouver	2,365,678	246,593	8,212,946	561,960	56,335,442	1,082,355
Victoria	451,747	39,082	1,252,690	113,207	8,658,792	195,800

Source: Statistics Canada, *Cheques Cashed in Clearing Centres, 1971*, Cat. 61-201.
Statistics Canada, *Canada Year Book, 1972*.

TABLE A-2
Summary Table of the Relationship* Between Cheque Clearances
and Population for Selected Canadian Centres Including Winnipeg,
1929, 1951 and 1971

Year	N	Beta Values	r ² Values	Winnipeg Residual Value (\$'s)	Rank of Canadian Centres
1929	29	20.1	.9653	+ 948,112	2
1951	33	22.4	.9490	+3,187,811	2
1971	33	108.9	.8635	-2,855,696	23

*Cheques cleared = a + b Population

Source: Statistics Canada, *Cheques Cashied in Clearing Centres, 1971*, Cat. 61-201.
Statistics Canada, *Canada Year Book, 1972*.

TABLE A-3
Finance, Insurance and Real Estate Labour Force as % of Total Labour Force; Canada and Provinces;
1941, 1951, 1961, 1971

		1941		1951		1961		1971	
		Total Labour Force	Finance Insurance Real Estate	Total Labour Force	Finance Insurance Real Estate	Total Labour Force	Finance Insurance Real Estate	Total Labour Force	Finance Insurance Real Estate
Canada	No. %	4,183,557	89,647 (2.14)	5,276,639	143,959 (2.72)	6,458,156	228,811 (3.54)	8,626,925	358,060 (4.15)
Newfoundland	No. as % TLF	—	— (—)	106,411	610 (0.57)	112,310	1,432 (1.27)	147,990	2,615 (1.76)
Prince Edward Island	No. as % TLF	31,100	260 (0.83)	34,050	411 (1.20)	34,148	556 (1.62)	42,995	850 (1.97)
Nova Scotia	No. as % TLF	190,664	2,426 (1.27)	220,585	3,556 (1.61)	236,819	5,652 (2.38)	286,440	8,840 (3.08)
New Brunswick	No. as % TLF	146,152	1,619 (1.10)	168,762	2,686 (1.59)	178,355	3,875 (2.17)	223,525	5,975 (2.67)
Quebec	No. as % TLF	1,181,604	24,909 (2.10)	1,467,287	38,891 (2.65)	1,768,119	62,163 (3.51)	2,169,150	90,570 (4.17)
Ontario	No. as % TLF	1,452,071	38,797 (2.67)	1,882,508	61,722 (3.27)	2,393,015	98,454 (4.11)	3,354,360	155,505 (4.63)
Manitoba	No. as % TLF	264,944	6,233 (2.35)	298,034	8,832 (2.96)	342,642	12,226 (3.56)	413,920	15,810 (3.81)
Saskatchewan	No. as % TLF	315,504	3,568 (1.13)	301,645	4,706 (1.56)	325,589	7,116 (2.18)	371,065	10,595 (2.85)
Alberta	No. as % TLF	287,831	3,970 (1.37)	353,497	7,957 (2.25)	489,511	14,695 (3.00)	688,290	25,260 (3.66)
British Columbia	No. as % TLF	313,687	7,865 (2.50)	443,860	14,585 (3.28)	577,648	22,642 (3.91)	910,085	41,730 (4.58)

Source: Dominion Bureau of Statistics, *Labour Force, 1961*, Cat. 94-551, Table 12.
Statistics Canada, *Labour Force, 1971*, Cat. 94-787.

TABLE A-4
Finance, Insurance and Real Estate Labour Force
As % of Total Labour Force, Selected Metropolitan Areas, Canada,
1961, 1971

		1961		1971	
		Total Labour Force	Finance Insurance Real Estate	Total Labour Force	Finance Insurance Real Estate
Calgary	No.	99,630	5,081	177,830	9,750
	as % TLF		(5.09)		(5.48)
Edmonton	No.	120,934	5,012	218,770	9,560
	as % TLF		(4.14)		(4.36)
Hamilton	No.	137,194	4,491	212,660	8,410
	as % TLF		(3.27)		(3.95)
London	No.	67,020	4,348	129,555	7,965
	as % TLF		(6.48)		(6.14)
Montreal	No.	739,442	39,034	1,079,785	61,505
	as % TLF		(5.27)		(5.69)
Ottawa	No.	157,159	7,130	260,235	11,205
	as % TLF		(4.53)		(4.30)
Quebec	No.	116,202	4,841	178,120	7,540
	as % TLF		(4.16)		(4.23)
Toronto	No.	715,789	49,357	1,244,845	84,520
	as % TLF		(6.89)		(6.78)
Vancouver	No.	261,899	14,554	474,560	28,180
	as % TLF		(5.55)		(5.93)
Windsor	No.	62,345	2,470	105,405	4,175
	as % TLF		(3.96)		(3.96)
Winnipeg	No.	178,219	9,618	243,800	12,890
	as % TLF		(5.39)		(5.28)

Source: Dominion Bureau of Statistics, *Labour Force, 1961*, Cat. 94-543, Table 33.
Statistics Canada, *Labour Force, 1971*, Cat. 94-787.

Winnipeg

As a Transportation Centre

by R. Schmidt*

Winnipeg's early prominence as a distribution centre hinged on its southern connection via Red River cart and steamboat to St. Paul, Minnesota. On the southern tip of the vast network of Hudson's Bay Company trading posts in the northwest, Winnipeg (then Fort Garry), came to surpass York Factory in the north as a distribution point. In 1855 the Company was importing more goods via the southern route than through the north, and in 1861, the export of furs through Winnipeg began (Innis, p. 297, 1928).

Railway Transport in Winnipeg

The completion of a railway in 1878 between St. Boniface and St. Vincent on the American border strengthened this southern orientation. Prior to this, Winnipeg had become the centre for the collection of Manitoba grain and lumber destined to the northward expanding United States railhead.

If Western Canada had remained tributary to the United States, Winnipeg would have undoubtedly remained subservient to St. Paul; perhaps as one of many minor distribution points on the network of railroads radiating from the American city. The building of the Canadian Pacific Railway connecting eastern and western Canada was the single most important event in securing the continued growth and prosperity of Winnipeg.

Winnipeg's location at the junction of the Red River and the Assiniboine, of early importance for their navigational possibilities, was cited as a positive disadvantage by the C.P.R. Winnipeg had long been subjected to periodic flooding. Selkirk, twenty miles to the north, was considered the best place to bridge the Red River. This meant that Winnipeg would be left off the main line of the C.P.R.

The importance of a location on the main line cannot be over-emphasized. Bellan, in his study of the growth of Winnipeg as a metro-

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politan centre, stated, "had the C.P.R. been built through Selkirk as originally planned, the history narrated in the foregoing pages would in all likelihood have been the same, only with the name Selkirk substituted for the name Winnipeg" (Bellan, p. 461, 1958).

The final decision to build the railway through Winnipeg was not the result of a logical consideration of the merits of the two locations. Rather, the greater resources of Winnipeg, the more fully established centre, were brought to bear. In 1881, Winnipeg made concessions to the C.P.R. interests in the form of a bonus of \$200,000, a free right of way worth \$20,000, exemption from taxation in perpetuity of C.P.R. holdings within the city, and the building of a \$250,000 bridge over the Red River (Innis, p. 181, 1923). In return, Winnipeg was guaranteed not only a position on the main line, but also that the C.P.R. maintenance shops for its western operations would be located there.

Selkirk remained a potential rival until the C.P.R. demanded \$125,000 for the building of a bridge at Selkirk and the construction of a connection to the main line west of the Red River. The alternative was the straightening of the route east of the Red River so that the main line would pass exclusively through Winnipeg. When Selkirk failed to meet the railway's demands, it ceased to present any serious competition (Bellan, p. 41, 1958).

One additional rival remained, however. Emerson, on the Manitoba-United States border, hoped to capitalize on the traditional pattern of trade and become at least one of the distribution centres to the west. Its plans were abruptly halted by deliberate federal policy which sought to prevent Western Canada from becoming tributary to the United States. A newly introduced tariff sharply curtailed Canadian-American trade. In addition, the charter of Emerson's projected railway, the Emerson and North-Western, was disallowed in 1882.

From this time onwards, the dominance of Winnipeg as the major transportation centre in the Canadian West was assured. Situated near the point where the empty and unproductive Laurentian Shield gave way to the rich prairie farmland, Winnipeg was the logical focus for branch lines feeding the main line. Deliberate policy had ensured that Western Canada would be tributary to Eastern Canada, rather than the United States. Consequently, this trade would pass through Winnipeg. Winnipeg's position was analogous to that of a funnel in the collection and consolidation of eastern moving products, and in the distribution of eastern products to the smaller centres of the west.

Consolidation and Expansion

The building of the Canadian railway was premature in the sense that settlement of the Canadian west would not take place prior to the filling up of the western United States. This was one reason that the boom in Manitoba generated by railway construction was followed by a crash in 1882. Winnipeg also experienced a severe economic slowdown, but the concessions offered to the C.P.R. placed its economy on a more secure basis than any other western centre. By 1884, the C.P.R. shops employed 2,000 people (Bellan, p. 89, 1958).

The period of slow growth which followed was a time of consolidation. As the only settlement of any consequence on the Canadian Prairies, Winnipeg was able to win major concessions which further enhanced its position.

Two events are of particular importance in this respect. The first was the granting of favorable distribution rates from Winnipeg to western centres in 1886. These freight rates, applied to incoming carload lots which left Winnipeg in less than carload shipments, were vital to Winnipeg wholesalers in establishing a competitive position relative to eastern wholesalers. Initially extended only to Winnipeg in the west, they were instrumental in establishing Winnipeg as the wholesaling centre of Western Canada. The second important event, the founding of the Winnipeg Grain Exchange in 1887, was dependent on Winnipeg as a focal point for railway construction. It ensured that the buying, selling and grading of grain, along with the institutions supporting this trade, would be concentrated in Winnipeg.

To some extent Winnipeg's development was a process following naturally from its initial establishment. However, the Manitoba Government and the Winnipeg Board of Trade played an active role in this development, particularly by encouraging competitive railway building. The revoking of the C.P.R. "Monopoly Clause" in 1888 came about as the result of considerable agitation on the part of Manitobans. It allowed branch line construction in southern Manitoba by an American line, the Northern Pacific, and a new outlet to Duluth in competition with the C.P.R. line to Fort William. The advantages of competition were soon realized. For instance, C.P.R. rates on first class goods from Winnipeg immediately dropped 12 percent, while rates to Regina, a non-competitive point, remained unchanged (Innis, p. 185, 1923). Winnipeg's bargaining power enabled it to gain further reductions on merchandise rates from Eastern Canada in 1890. The so called "Trader's Tariff" of 1898 gave an exclusive rate reduction to Winnipeg-based wholesalers

amounting to approximately 15 percent. This maintained Winnipeg's competitive position as a distribution point — a position which had been jeopardized by the Crow's Nest Pass agreement under which low through rates on settlers' goods from Eastern Canada to the west had been negotiated.

Under the Manitoba Agreement of 1901, the Manitoba Government guaranteed the bonds of a rival railway, the Canadian Northern, for the construction of an outlet to Port Arthur. In return, a 15 percent rate reduction was promised on all general goods from Winnipeg along with a 4 cent. per hundredweight reduction on grain rates. These rates were matched by the C.P.R. in 1902 along with a voluntary reduction in Saskatchewan and Alberta which however amounted to only 7.5 percent.

By 1893, 12 separate railway lines converged on Winnipeg (Bellan, p. 92, 1958). As the western economy grew, the C.P.R. yards and shops continued to expand, employing 4,000 people by the early 1900's (Bellan, p. 145, 1958).

Unlike Saskatchewan and Alberta, Manitoba has a much narrower strip of agricultural land. This has left little room for the development of a northern and southern city on parallel main lines competing for their respective hinterlands. Both transcontinental railways built through Winnipeg. This meant not only a greater area tributary to Winnipeg, as new lines were built across the northern portion of the Prairies, but also the establishment of increased physical assets within the city. The National Transcontinental Transcona shops opened in 1913, and employed 2,000 people (Bellan, p. 224, 1958).

By 1911, 24 separate rail lines radiated from Winnipeg (Bellan, p. 195, 1958). With its western hinterland extending as far as the interior of British Columbia, Winnipeg had utilized its early lead as a transportation centre to acquire a dominant position in the financial structure of the west. It was the leading metropolis in Western Canada, truly deserving of the title, "Gateway to the Canadian West".

Winnipeg was not only the centre for freight transportation, but also the major clearing house for labour and immigration to the Canadian Prairies. In 1906 the cost of passage from Liverpool to Winnipeg, a distance of some 4,000 miles, was only \$30.00 (Bellan, p. 124, 1958). Approximately 10,000 seasonal farm workers per year were dispatched from Winnipeg in the early 1900's (Bellan, p. 155, 1958). This meant not only substantial wealth generated by serving this inflow, but also that Winnipeg was in a better position than most Prairie cities to capitalize on this labour supply. Along with the other benefit of a superior trans-

portation network, this gave Winnipeg an early lead relative to other western cities in the development of manufacturing.

However, this dominance was contingent on three factors:

1. Winnipeg's early development and the fact that it was for some time the centre of western settlement and the only city of any consequence on the Prairies;

2. Its freight rates which were distinctly favorable relative to other western centres;

3. The control of the grain trade and the associated financial institutions and wealth it generated.

The Legacy

It is no longer appropriate to speak of Winnipeg as "The Gateway to the Canadian West". Certainly, it continues to hold its lead as the most important transportation centre on the Prairies, but its dominant position in the western economy has been lost.

The export of grain through Vancouver began in 1910. The completion of the Panama Canal in 1914 brought low ocean freight rates to the west coast and low transcontinental railway rates from the east were quickly established to meet this competition. With the expansion of Vancouver's hinterland, Winnipeg met increased competition from which Vancouver emerged as the third largest city in Canada.

The important sources of agricultural wealth lay west of Winnipeg in Saskatchewan and Alberta. Increased development in these provinces along with urban growth nearer this development brought inevitable challenges to Winnipeg's traditional privileges. As is shown in Table 1, both Saskatchewan and Alberta generate twice as much railway tonnage as Manitoba.

TABLE 1
Revenue Freight Carried By Railways, 1972 (Tons)

Province	Loaded onto Railway Cars	Received from U.S. Rail, Destined:		Unloaded from Railway Cars	Delivered to U.S. Rail
		To Canadian Points	To U.S. Points		
Manitoba	10,745,445	482,354	1,449	8,681,345	3,635,031
Saskatchewan	27,911,111	337,165	890	3,636,184	2,769,149
Alberta	24,225,060	282,671	90	9,454,581	306,651

Source: Statistics Canada, Cat. 52-205, 1972.

This shift in power could not help but enhance their bargaining position. All of Winnipeg's exclusive rate privileges were eventually declared discriminatory and extended to other western cities. The only advantages remaining to Winnipeg are those inherent in its natural position along with the early development of its railway network and the institutions which were established there because of that network. These are considerable advantages.

Two American railways, the Burlington Northern, and the Soo Line, provide continued connections with the United States and Manitoba surpasses Alberta and Saskatchewan combined in terms of rail traffic to the United States (Table 1).

Winnipeg is the only major Prairie city on the main line of both Canadian transcontinental railways. Not only does this increase the number of direct connections possible, but there are still considerable advantages remaining in the "break-of-bulk" and distribution of goods from a point situated at the head of rail transport to the Prairies. This is particularly true since railway distribution rates only apply when the storage point is on the direct line of transit between origin and destination. Although complete recent wholesaling statistics are not available, 1961 figures indicate that this function has remained important. In 1961, Winnipeg was the leading Canadian city in terms of total sales in wholesaling with a value exceeding \$3 billion, and the fourth in terms of wholesale employment with over 12 thousand people. Approximately \$2.5 billion in sales were due to trade in grain and other primary products, a direct result of Winnipeg's early focal point in the western economy and the fact that these products are still channeled to the east through Winnipeg. (Stat. Can., Cat. 97-512, 1961. Note: Wholesaling figures given combined St. Boniface and St. James with Winnipeg.) In 1971 there were 14,205 people employed in the wholesale trade. The numbers indicate the continuing importance of this function to Winnipeg.

According to the 1971 census, railway transport (S.I.C. 503) employed 8,220 people in Winnipeg. Railway yard track capacity totals 25,800 cars. The C.P.R. Winnipeg yards are reputed to be the world's largest privately owned railway yards.

Rail transportation formed the basis for the development of Winnipeg's economy, and its excellent facilities have continued to further growth. In the face of these facts the statement that Winnipeg is no longer "The Gateway to the Canadian West" may appear paradoxical. Yet, as other articles in this volume illustrate, it is but one of many diverse functions. More accurately the title belongs to an earlier period of less maturity.

The Winnipeg Trucking Industry

With the coming of the railway, traffic via any other mode virtually ceased for some time to come. Road building was neglected and what roads existed were unreliable. In 1902 alone, floods washed out 230 bridges and damaged many roads in Manitoba (Guillet, p. 168, 1966). The Good Roads Act of 1918 stimulated provincial road building. By 1925 there were 1,600 miles classified as "superior roads" (Guillet, p. 168, 1966). Highway transport progressed slowly, however. In 1931 there were only 210 public freight vehicles operating in Manitoba, (Rpt. of Royal Commission on Railways and Transport, p. 99, 1931-32), a modest beginning compared to the 94,510 motor truck and truck-tractors registered in Manitoba in 1972 (Stat. Can., Cat. 53-219, 1972).

The growth of trucking was dependent on two complementary and parallel factors: increased road building and the growth in transport technology. The development of highways along with automobile and bus traffic has had an indirect but extremely significant effect on rail-highway freight competition. As railways continued to lose passengers to automobiles and buses, rail passenger service to smaller centres was phased out or neglected. This meant that it also became uneconomical to maintain a daily express (freight) service since these services were carried out in conjunction with passenger services. It was the need for these daily services that furthered the expansion of trucking within the province.

Road mileage expanded continuously in Manitoba, reaching a total of over 20 thousand miles in 1956. Between 1956 and 1971 road mileage more than doubled to a total of slightly over 47 thousand miles, the greatest relative increase for this period of any province in Canada (Stat. Can., Cat. 53-201, 1971). This building was stimulated in part by the federal Roads for Resources program, and a vigorous provincial road building policy.

Winnipeg was the focus for most of the major provincial highways. The complete dominance of Winnipeg over provincial trucking is striking. Brandon is the only other Manitoba centre with any significant number of carriers operating between it and other Manitoba towns. Virtually all points in Manitoba served by rail are also served by truck. As rail services are being withdrawn, trucking services are increasing. Winnipeg's focal point for road building has meant that daily, or at least overnight, service is possible from Winnipeg to all Manitoba points. This has tended to intensify the concentration of trucking in Winnipeg.

However, intra-provincial trucking is perhaps less important to the Winnipeg trucking industry than is the case in any other city in Canada. Winnipeg is the only city of any consequence in Manitoba; the lack of development of other major centres has meant that traffic within the province is rather limited. Although Winnipeg based producers have gained by the complete control which Winnipeg exerts over the distribution functions in Manitoba, truck tonnages originating or destined for Winnipeg are matched and often surpassed by many much smaller Canadian cities.

The significance of Winnipeg's trucking industry is in its truly national character. Its development was contingent on the opening of the Trans-Canada Highway and technological improvements in long distance truck transport, particularly with the use of the diesel engine. On the major route between east and west, trucking in Winnipeg realized advantages similar to those of the railways. Freight from a number of points can be collected and consolidated along with Winnipeg freight so that regular service can be maintained between eastern and western points. Individual points alone may not generate sufficient traffic to justify direct service.

National trucking's importance in Winnipeg is illustrated by the fact that, while for-hire trucking tonnage originating in Edmonton exceeded that in Winnipeg by 1.3 million tons, Winnipeg trucking revenues were greater than Edmonton's. Winnipeg is the only city west of Ontario where revenues from out-of-region movement exceed those from within-region movement. (Stat. Can., Cat. 53-224, 1970). It has been estimated that in 1972, 72 percent of a total \$128 million in provincial trucking revenues was generated by traffic originating or terminating outside the province (*Manitoba For-Hire Trucking Industry Productivity Study*, 1974, p. 4).

In 1971, 3,320 people were employed in Winnipeg by truck transport (S.I.C., 507). This figure of course excludes many of the employees of the more than 300 interprovincial firms based in smaller Manitoba centres, but operating almost exclusively between Winnipeg and these smaller centres. There are at least 150 interprovincial carriers of general and specialized freight with operating rights within Manitoba. Eight major carriers of general freight between Eastern and Western Canada maintain head offices in Winnipeg. These are A&H Express Lines, Atomic Interprovincial Transport, Bicknell Freighters Ltd., Canada Great Western Express Ltd., Imperial Roadways Ltd., Leamington Transport Ltd., Reimer Express Lines Ltd., and Soo-Security Motorways Ltd. The two latter are ranked among the largest and most up-to-date trucking

terminals in Canada. Although their head offices are elsewhere, other trucking companies have Winnipeg operations which in some cases equal or exceed those of the companies named above. These include Alltrans Express Ltd., Kingsway Freightlines Ltd., Midland Superior Express Ltd., and Trans-Canada Highway Express Ltd. Both major railways maintain extensive trucking terminals in Winnipeg along with the C.P.R. subsidiary, Smith Transport Co. Ltd. Certain of the companies named above, along with a number of smaller scale operations, maintain direct and indirect connections with the United States. The Consolidated Freightways Corporation has a relatively large terminal in Winnipeg facilitating this international movement. However, the American connections are secondary. Winnipeg's importance stems from its crossroads position between Eastern and Western Canada.

Air Transport in Winnipeg

Winnipeg attained an early position of prominence in air transport largely due to the fact that civil aviation's primary use in the early days of its development was in northern exploration and supply. Winnipeg's proximity to northern Ontario and Manitoba's north thus provided an early stimulus. A Winnipeg businessman, J. A. Richardson, organized Western Airways in 1926 — a company which played an important role in opening Canada's north.

A daily experimental mail run connecting the major western cities was begun in 1928. In 1929, Winnipeg had the largest airfield in Canada (Bellan, p. 357, 1958). Trans-Canada Airlines, later Air Canada, was formed in 1927 with its headquarters in Montreal and its training and repair base in Winnipeg.

The early advantages were diminished to some extent as the role of air transport changed from northern exploration to a concentration on passenger flight. While situated in the approximate geographic centre of the North American continent, Winnipeg is far from the major sources of population and wealth. If the top Canadian city pairs are ranked in terms of air passenger flow, the Winnipeg-Toronto corridor ranks fifth; less important than Edmonton-Calgary. Winnipeg has no major "sister" city nearby, a significant element in the generation of traffic. In the top Canadian-International city pairs with regard to charter flights, Winnipeg failed to show in the top 17. By comparison, Toronto appeared 8 times with international cities, Calgary once, and Edmonton twice; figures perhaps indicative of where the centres of wealth lie in Canada.

Although Winnipeg's scheduled flights to the United States are superior to those of any other Prairie city in terms of direct and indirect connections, the volume of this flow is relatively small. In the top ranking Canadian-American city pairs, Winnipeg does not appear in the first 25. (Stat. Can., Cat. 51-501, 1971). While the 1970 bilateral negotiations with the United States have undoubtedly enhanced Winnipeg's position with respect to direct United States connections, dramatic increases should not be expected.

Despite certain disadvantages, Winnipeg has more or less maintained its position relative to its size. Winnipeg is on the transcontinental route of both C.P. Air and Air Canada. Two scheduled international flights to Europe via the polar route emanate from Winnipeg as compared to one each for Vancouver, Calgary and Edmonton. Table 2 gives some figures on the position of air transport in Winnipeg relative to certain Canadian cities.

Winnipeg lost its fourth place Canadian position in terms of total passenger flow to Calgary in 1970. However, it has continued in fourth place in terms of cargo handled. While itinerant and total aircraft movement figures for Winnipeg are not particularly impressive, they can be explained by the fact that purely local and small aircraft movements are now carried out from St. Andrews Airport, 14 miles north of Winnipeg. In 1970 total aircraft movement at St. Andrews amounted to 160 thousand (Stat. Can., Cat. 51-501, 1971). In 1971 air transport (S.I.C. 501) employed 2,090 people in Winnipeg, with a further 205 employed in services incidental to air transport (S.I.C. 502).

TABLE 2

Relative Airport Statistics: Passengers Arriving and Emplaned, 1972;
Cargo Handled — Including Originating, Transfer, And Stop-over, 1970;
Total Aircraft Movements, 1972; Itinerant Movements, 1972*

Airport	Passengers (000)	Cargo (lbs.)	Total Movement	Itinerant Movement
Toronto Int.	7,290.7	186,862	210,449	183,025
Montreal Int.	5,926.0	208,508	186,411	158,123
Vancouver Int.	3,045.8	72,673	145,723	132,110
Calgary Int.	1,667.4	17,494	150,237	81,310
Winnipeg Int.	1,514.8	37,753	141,976	102,257
Edmonton Int., and Industrial Confirmed	1,327.3	22,932	294,498	128,642

*Note: Itinerant movement is one in which the aircraft enters or leaves the airport tower control zone.

Source: Statistics Canada, Cat. 51-501, 1971, and Cat. 51-203, 1972.

Winnipeg's traditional role as supply centre to the north has been carried on by Transair, Canada's regional airline for the Prairies and central Arctic. Although the smallest of Canada's regional airlines in terms of total assets, the range and extent of its operations throughout the north are outstanding. It has perhaps the most diversified fleet of aircraft in Canada. Its viability has improved considerably since 1971 when it was allowed to begin passenger service to Toronto via Thunder Bay and Sault Ste. Marie. Formerly, it had been hampered by low volume on most of its scheduled routes.

The Future of Transportation in Winnipeg

While the relative importance of transportation in the economy has declined, its indirect importance has increased with time. This is particularly true in Western Canada where distance from the major population centres is great. Direct, rapid, and inexpensive transportation is vital to the development of a modern economy. Winnipeg's transportation facilities are probably superior to those of any other Prairie city and have undoubtedly been the most significant factor in the important role Winnipeg plays in the western economy.

Despite the fact, there is little room for complacency. It is no exaggeration to state that future development in transportation is dependent to a large extent on federal policy, particularly with regard to rail and air transport, which are subject to federal regulation. Manitoba and Winnipeg played an active role in the past in determining transportation policy, for instance by encouraging the growth of competitive railways. National companies and national control mean that to a large extent development in transportation lies beyond local manipulation.

Early freight rate privileges granted to Winnipeg should not be misconstrued as having been superior to tariffs existing in the east. In fact, the most important of these privileges, the distribution rates of 1886, were analogous to "town tariffs" in force in Eastern Canada. These rates were discriminatory only in the sense that they were not initially extended to other western cities. As these privileges were withdrawn, and the importance of wholesaling in the economic process lessened, Winnipeg's distance from the major markets meant continued high cost of moving goods. This burden is further compounded by low competitive transcontinental freight costs which place Winnipeg producers at a relative disadvantage to eastern producers in shipping to the Pacific coast.

Certainly there is an element of "overkill" in these "competitive" rates. Traffic between Canada east and west via the Panama Canal has

been insignificant for some time. In 1969, for instance, the amount was too small to warrant recording in the shipping statistics.

When few other economic options remained open to it, Winnipeg thrived on freight rates designed primarily to move unprocessed goods cheaply from the west. These functions have already passed their peak in terms of their relative importance in Winnipeg's economy. Future progress will not be measured in terms of increased rail and truck facilities for the movement of primary products to the east. Rather, progress will be measured in terms of increased economic maturity in the west. To some extent, Winnipeg is peripheral to these developments. The relative importance of Winnipeg's traditional role as a collection and distribution centre will decline correspondingly. However, its excellent transportation facilities and strategic location between east and west ensure substantial benefits from Winnipeg's participation in western economic growth.

In air transport substantial direct gains can be expected in the future. Winnipeg has faced certain liabilities in the past. Prior to jet aircraft it was necessary that movement to Europe take place via Montreal. With the opening of the polar route, direct flight to Europe became possible, but for many years fares were computed as though it were still necessary to fly to Montreal and then to Europe. Despite Winnipeg's shorter route, international fares remain significantly higher, supposedly due to smaller volume. Winnipeg has lost ground to Montreal in other areas; specifically in Montreal's increased role in northern supply and in the concentration of Air Canada maintenance facilities there. In 1974, Winnipeg was awarded additional facilities, but these will serve only to maintain its position, not increase it. Boundaries for Canada's regional airlines have never been explicitly fixed. Future developments in air transport are to a large extent dependent on political factors and political decisions.

Ministry of Transport forecasts to 1990 indicate that air transport in Winnipeg will maintain its present rank relative to other Canadian cities. Large absolute increases are anticipated, particularly in air cargo which is expected to reach 340 thousand tons by 1990 (Stat. Can., Cat. 51-501, 1971). These developments are of course dependent on the effect which high fuel costs will have on Canadian aviation in general.

This study has reviewed objectively the growth and relative decline of Winnipeg as the transportation centre of the Canadian west. While these functions were, and are, basic to Winnipeg's continued development, the "gateway" concept was symptomatic of an underlying economic immaturity. It is a tribute to Winnipeg that its economy now rests on more secure and mature foundations.

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Culture at the Gateway

by Victor Leathers*

For a century Winnipeg has combined the functions of gateway and melting-pot; gateway to the West and ethnic crucible. In a city with such varied racial elements, we might well anticipate vigorous and varied cultural development. And indeed Winnipeggers, both native and adopted, have energetically practiced and fostered the arts of theatre, the dance, music, painting and literature.

On Stage

Manitoba theatre began in the 1840's when troops at Lower Fort Garry entertained themselves and friends with amateur productions. The sixties and seventies saw occasional popular plays mounted in Winnipeg, usually under rather primitive conditions. The first professional actor, Mr. Cool Burgess, in 1877, initiated the bringing of touring companies to Winnipeg in the roaring eighties.

The nineties saw considerable advances in theatre building. Around 1900, four theatres existed, one styled an opera house. The most notable and enduring of these was the Walker playhouse. Mr. C. P. Walker, a genuinely enterprising impresario, brought in many good companies, relaying them here from Minneapolis through his Red River Circuit of towns. He even assembled an all Canadian troupe which, with Harold Nelson as lead actor, played the Walker chain.

Two troupes stand out. Mr. E. A. McDowell, a staunch Eastern actor-manager, played repeatedly in Winnipeg and elsewhere in Manitoba. Another standard attraction was the Victorian melodrama as presented by the seven Marks brothers. The various troupes led by these actor-managers successfully played in Winnipeg in the eighties and nineties.

Between 1900 and 1930, Winnipeg's theatrical fare continued to come chiefly from the touring companies of such actor-directors as Ben Greet, Sir Johnson Forbes-Robertson, Robert Mantell, Sir John Martin-Harvey and Donald Wolfitt. Appreciative mention is also due the John Holden players whose repertory theatre gave their patrons much pleasure around the mid-thirties.

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A somewhat sporadic amateur phenomenon, the Winnipeg Little Theatre, flourished modestly, first in the twenties and later in the forties and fifties. It was sustained by the devoted efforts of a succession of enthusiasts: actors, directors and backstage buffs and, in its day, not only mounted some fine productions, but also developed a number of very sound performers. In 1957, a year-round lease of the Dominion theatre at a nominal rental gave promise of real expansion, a promise which was briefly fulfilled. The following year, however, the Manitoba Theatre Centre, brain-child of Tom Hendry, John Hirsch and Ogden Turner, with vigorous assists from many others, in effect absorbed both the Little Theatre and the year-old Theatre 77.

Along with its unique name, M.T.C. instituted an important new element, its theatre school, which expanded gratifyingly to include tours and high school visits. As well, children's theatre was greatly expanded with much excellent original material being produced. A somewhat later development, the Warehouse Theatre, an informal half-round setting offers various productions on a less pretentious scale than those of the main stage. This venture has steadily gained ground with such outstanding productions as *Jacques Brel* and *Jubalay*.

The demolition of the Dominion theatre in 1968 led to a somewhat trying interval filled with imported shows in the Centennial Hall. The happy ending came in November 1970 with the opening of the fine new M.T.C. complex, where artistic director Edward Gilbert strives to formulate annual programs appealing to the extremely varied audience which M.T.C. must satisfy. Various substantial grants, ever-expanding season ticket sales and a centennial surplus season all augur well for the future of this community theatre.

The advent of professional theatre has happily not destroyed amateur play-acting. Winnipeg, in fact, abounds in amateur theatrical associations presenting an astonishing variety of stage fare. Two of these groups quite well represent the work done by such bodies.

The first, Actor's Showcase, begun on a purely amateur basis, has not merely survived, but has built up a healthy clientèle. Showcase's success seems to rise chiefly from the fact that its director, Tony Pydee, demands a professional attitude of effort and responsibility from his actors, and consequently attracts and holds people of good and developing potential. A second factor in Showcase's popularity with the public is the remarkable variety of the productions given. In the current season, the offerings have included contemporary plays, classics ranging from Molière to Chekhov and an admirable interpretation of a Japanese

Kabuki play in which the inspired direction of Anna Friedman elicited a fine performance from her players.

Representing the contemporary theatre, the Cubiculo, headed by Kay Unruh, further asserts its modernity by staging original plays. Once again, we see devoted actors, directors, and stage crews facing and overcoming the all too familiar difficulties of such groups, whether of rehearsal space or production technicalities, to bring their plays on stage. Cubiculo is winning its way with the critics and public. It represents grass roots activity from which extraordinary results sometimes emerge.

Our list of Thespians could be greatly lengthened as we recall the varied productions of the Drama Department at the University of Winnipeg, the programs in the high schools, and church chancel plays. But the point is surely made. With all its past lapses and gaps, theatre seems to be alive and well and living in Winnipeg.

On with the Dance

Dance in early Winnipeg usually signified jigs, reels and square dances or else the more sedate ball-room forms. In this century, however, a number of remarkable dance organizations have developed here, and brought honour to the city.

If great institutions are the lengthened shadows of great men, our ballet might be called the lengthened shadows of two courageous women. In 1938 Gweneth Lloyd and Betty Farrally undertook the daunting venture of founding an amateur dance group, the Winnipeg Ballet Club. A year later, the Club presented successful public performances. Arising from these came invitations to perform in Toronto and to go on tour in the West.

After a decade of continued endeavour the troupe finally gained professional standing, a happy circumstance largely due to energetic support from a faithful supporter, Lady Tupper.

The early fifties brought triumph and tragedy. A gala command performance before Princess Elizabeth and Prince Philip came in 1951. Two years later, the young queen granted the ballet its royal charter, the first such charter in the Commonwealth. In 1954, tragedy struck when a calamitous fire destroyed all the physical resources of the company. The ruin seemed complete; nonetheless, friends of the ballet determined that such a good start should not be brought to a disastrous end, and rallied to ensure the continuance of the troupe. And, in 1957, further aid came in the form of a grant from the Canada Council, the

first of a series of increasingly substantial awards from the Council, the province, and the city.

That same year, a serious weakness of the ballet, the lack of a permanent director, was definitively removed by the appointment of Arnold Spohr to the post. A splendid lead dancer of the company for years, Mr. Spohr has since steadily demonstrated his brilliant capacities as a choreographer and artistic director. The varied important honours and awards which he has justly received have brought honour to Winnipeg.

An important adjunct of the professional company has consistently been the Ballet School, where under expert guidance a large number of young folk in varied categories follow rigorous training. The annual public presentation given by these groups is a delightful evening. And, from time to time, an outstanding student joins the company.

Thrilling highlights of the company's career have been *The Beggars' Opera*, the full length ballet *Rose la Tulippe*, a colour television first, the Paris International Dance Festival 1968, with its best company gold medal and its best female interpretation gold medal won by Christine Hennessy, *The Ecstasy of Rita Joe* 1971 and the recent *Nutcracker Suite*. In the last few years the Royal Winnipeg Ballet dancers have become Winnipeg's international ambassadors, winning enthusiastic receptions round the globe.

Working specifically in the field of contemporary dance forms Rachelle Browne has in some ten years brought her troupe (the Contemporary Dancers) from very modest amateur beginnings to the status of a first quality professional group. This organization has richly earned the plaudits which it receives on tour, as well as the grants now being accorded it by various government bodies. Beginning with a number of young people who simply loved to dance, this courageous and resourceful directress has not only created a well-disciplined troupe with an impressive repertory, but has also built up a loyal public. The Contemporary Dancers are making a distinctive and admirable contribution to the cultural scene.

With our Selkirk settler tradition, it seems natural that we should have in Winnipeg the Manitoba Highland Dancers' Association. This thriving body, which began in 1947, aims to maintain among young people the sprightly traditional Scottish dances, principally in periodic local festivals. From these the winners may advance to national competition in Eastern Canada, in the United States or overseas. An amateur group, these young folk dance for the love of it, and frequently share their pleasure by making social or charitable guest appearances. And,

as with our other dancers, they have creditably carried the name of Winnipeg far and wide.

The Rusalka Dance Ensemble, artists of which Winnipeggers are justly proud, forms another shining facet in the cultural mosaic. The troupe's formation fulfilled the dream of Peter Hladun who arrived in Canada as a boy and, in 1962, helped found a school for young dancers. From the hundreds who apply each year, the directors recruit a school of three hundred and fifty, where careful training under skilled and dedicated dancers aims to bring out the full potential of each student. The dances come from many regions of the Ukraine which lends the added interest of constant variety. The colourful authentic costumes of the dancers also make a universal appeal to the audiences of the various countries where triumphal tours have taken the company. The Rusalka directors have received some aid through grants but their chief revenue comes from public support.

Dancing of high quality is also regularly offered by other ethnic groups, in the operettas of our schools, and particularly in the summer productions of Rainbow Stage. Winnipeg is assuredly a centre of good dancing.

A Nest of Singing Birds

The citizens of Winnipeg have cause to be proud of the many choirs, clubs, ensembles and orchestras which offer them such rich musical fare.

The Philharmonic Choir has since 1922 worked under various auspices. After briefly functioning independently the choir affiliated with the Men's Music Club, a collaboration which continued until 1958. Fine choral productions were given under a series of part-time conductors. Finally in 1958 the vision and labours of those who founded the male voice choir were rewarded when the Symphony Orchestra agreed to combine with the Philharmonic Choir in the splendid choral works which Winnipeggers now enjoy.

In past years local church choirs enjoyed the inspiration of many outstanding musicians whom Stanley Osborne, Herbert Sadler, and Filmer Hubble may represent. And today many excellent young organists and choir leaders maintain the tradition.

During the thirties, forties, and fifties two musical organizations gave Winnipeggers great pleasure. The University of Manitoba Glee Club began in 1925 as a choir, but soon began mounting Gilbert and Sullivan operettas, a tradition carried on for nearly three decades. Under capable and devoted music and drama directors the students gave pro-

ductions of high quality. The Club later branched into modern operettas, their greatest triumph being their wonderful *Brigadoon*. The Winnipeg Light Opera Guild, an offshoot of the Kelvin Grads' Choir, presented throughout the fifties a dozen traditional operettas. The performers, largely local, were talented and well trained, making the productions thoroughly enjoyable.

Like the Glee Club, the musicians in the schools for many years applied themselves to offering enjoyable versions of Gilbert and Sullivan works. Recently however the schools have also tended to attempt modern musicals.

In addition to stellar dancing our Ukrainian community excels in choral productions. The male voice groups in particular have carried the name of Winnipeg with honour. As with the dances, the songs frequently carry the authentic flavour of the European homeland. As well, Ukrainian operas have been successfully produced.

Musically gifted Winnipeg girls and boys happily have the opportunity in their respective choirs of singing under devoted leadership. And their public performances well reflect the talent and effort of these young choristers. The ladies too have not neglected singing. In past years such outstanding conductors as Mrs. W. W. Musgrove, Mrs. Lola McQuarrie, and Mrs. Berythe Birse led highly trained choral ensembles in delightful concerts.

Concentrating on spectacular musicals, Rainbow Stage, in picturesque Kildonan Park, has won the battle against the elements with its protective dome and its genuinely entertaining shows. Good actors, singers and dancers, richly costumed, playing before lavish sets and well supported by the orchestra have made Rainbow a source of keen pleasure to Winnipegers and a popular tourist attraction.

A recent musical development has been the emergence of three groups dedicated to operatic productions. The Festival Lyric Opera singers periodically present Winnipeg artists in evenings featuring operatic arias and extracts. The Winnipeg Opera Company offers fully staged light operas with amateur performers of good quality. The Manitoba Opera Association, founded in 1969, after sponsoring the Canadian Opera production *Orpheus in the Underworld* gave a concert version of *Il Trovatore* combining Winnipeg musicians and imported leading artists. Following this successful pattern the association is now embarked on a season of operatic favourites.

A senior organization of music lovers is the Women's Musical Club whose members devote themselves to the presentation of distinguished

artists in recital. The club also offers scholarships to young musicians and invites the winners to perform before the members.

During the twenties and early thirties three attempts were made to found a permanent orchestra here. Finally, in 1946, the Winnipeg Musicians' Association and the Canadian Broadcasting Corporation combined to ensure existence of a permanent orchestra and in December 1948 under Conductor Walter Kaufman the symphony began a career of steady progress. When Dr. Kaufman retired a decade later Victor Feldbrill embarked on an expanded program of community service with provincial tours, children's concerts sponsored by the Women's Committee, and "pop" concerts.

The third conductor, George Cleve, was privileged to direct in the splendid facilities of the Centennial Hall. With his retirement the search for a leader culminated in the appointment of Piero Gamba. The orchestra's sensational success under Maestro Gamba's inspired conducting is reflected by the sold-out performances and increasing season-ticket sales.

Just as our junior choirs reinforce senior ranks so the orchestras, senior and junior, of our Winnipeg schools have long given sound training to large numbers of potential performing artists. Great credit is due these young people and their conscientious conductors. The best known of the junior groups, Mrs. Helen Litz's Mennonite Children's Choir, brilliantly maintains the splendid musical traditions of the many distinguished Mennonite choristers and instrumental artists of Winnipeg.

For decades, Winnipeg's Music Festival has drawn thousands of competitors from six-year-old choir members to seasoned contestants vying for the Rose Bowl. The brain-child of George Mathieson, the Festival began in 1919 as an experiment destined to become one of the largest Commonwealth festivals. All this singing and playing is done, we remark, without any idea of monetary reward; the contestants "pace each other in excellence" for the love of it.

So popular have the school choir classes become, that regional festivals within the city are required. The winners of these competitions advance to the major festival. The high and steadily rising standards of Festival performance are certainly encouraged by the adjudicators of international reputation who come yearly to judge the hundreds of vocal and instrumental classes, and the stimulation of the Festival, coupled with the capable and devoted efforts of our fine music teachers, has developed an impressive array of leading North American musicians.

Palette and Pencil

Though various artists visited Manitoba before 1870, our survey may properly begin there since Frank Lynn, the first to live here permanently, arrived about that date. He remained here as newspaper correspondent, critic, and painter until his death in 1906. Lynn depicted local scenes, occasionally executing several versions of a subject. Though completely representational his work was never primitive, and indicated some training. The most prolific painter of the nineties and after was certainly Ontario-born Victor Long. This artist produced scores of official portraits which now adorn the walls of western public buildings. His work may recall the photographic (he did sometimes copy photographs) but it was accurate and pleasing.

In 1912, after long agitation, the "Civic Art Gallery and Museum" opened under the sponsorship of public-spirited citizens. The next year Alexander Musgrove was appointed as curator and as a teacher in the Gallery Art School. Across the four succeeding decades, intermittent exhibitions were presented by his successors Franz Johnson, Keith Gebhart and others, often under stringent limitations of finance and space.

The gently dominant figure of the art scene in the thirties and forties was Lemoine Fitzgerald, who left his kindly mark on his many students and fellow artists. We rejoice to have had such a spirit among us, and to possess an ample representation of his sensitive art. His retirement in 1949 marked the end of an era. From this point, the University of Manitoba assumed responsibility for the Art School.

In 1950, the Gallery, housed since 1933 in the Winnipeg Auditorium, received its first full time professional director. During his tenure Mr. Alvan Eastman arranged three splendid assemblages of European art. Gleaned from a remarkable variety of sources, each of these showings gave visitors the feeling of being in a first class gallery.

Dr. Ekhardt's twenty year regime saw great development in the Gallery. His aim of introducing leading modern European artists brought a wide representation of current continental art in exhibitions involving painting, tapestries and crafts. The Manitoba Centennial evoked the splendid showing, "150 years of Art in Manitoba". Displayed in the Legislative Building and the Art Gallery, this panorama of Manitoba art since 1820 involved many volunteer docents and attracted a host of visitors.

The dream of an adequate Art Gallery finally took form in September 1971, as Princess Margaret officially opened the remarkable triangular structure designed by Professor Gustavo da Roza. In this

setting an increasing range of permanent and special exhibits is now available to the public, while a roomy auditorium permits lectures, films, plays, and musical events to be presented in pleasant surroundings.

A distinctive Winnipeg phenomenon for many years was the publishing firm of Fred and Arnold Brigden, two gentlemen of genuine artistic instincts. In their art department numerous fine artists were nurtured. Choice among such talented people is painful because of inevitable omissions, but Mme Pauline Boutal, Dr. Charles Comfort, and the veteran Eric Bergman can worthily represent a group which has given Canada many admirable artists.

The Winnipeg Sketch Club, which celebrates its Diamond Jubilee in 1974, has sponsored over fifty exhibitions of members' work. At the weekly meetings in the winter, live models pose for the members; summer meetings are devoted rather to outdoor subjects, especially those of historic interest. Among the many distinguished sketchers, one may represent this organization of art lovers. Miss Lynn Sissons, a life member since 1958, has served the club in many different capacities; and her international reputation as a superb water-colour artist has reflected honour on the city.

In 1920 Walter J. Phillips founded the Manitoba Society of Artists, the professional equivalent of the Sketch Club. A superlative water-colour painter and an art teacher in the schools, Mr. Phillips eventually moved to Banff to instruct in the School of Fine Arts. The Society takes as its major activity the sponsoring and arranging of jury exhibitions, which are regularly of very high quality. In some cases these showings are taken to various centres in the province.

Engaged in a specialized art carried to the highest excellence, Dr. Clarence Tillenius seeks to preserve in his pictures our Canadian fauna, some of which may face extinction. His scrupulous studies of wild animals in their natural habitat, his sympathetic depiction of them, and his impeccable technique rank him among the foremost in his field.

Except in the halls and on the grounds of the Legislature, sculpture is rather slightly represented in Winnipeg. It might justly be said that our leading sculptor, Leo Mol, is probably more widely known as a creator of fine stained glass. Mr. Mol's church windows, which he both designs and executes, are not only numerous but of excellent quality, in a mixture of traditional and modern style. Also working in this medium is Mr. Roman Koval, whose designs for church subjects are gaining increased recognition. The considerable representation of this noble art form in the province is well demonstrated in the recent volume, *Manitoban Stained Glass* by Dr. Alice Hamilton.

Any attempt to evaluate our many contemporary Winnipeg artists would produce little more than a listing of names, with later protest from anyone omitted. A large number of painters are working and exhibiting here. With the caution of the Delphic oracle I prophesy that posterity will select among them with its usual severity and final justice.

We Also Write

Attempts to dismiss Winnipeg as a literary vacuum would be both inaccurate and unjust. Although literary production was admittedly scanty until the nineteen-twenties, such writers as Ralph Connor (Rev. C. W. Gordon), Agnes Laut and Nellie McClung may worthily represent the earlier authors. But in the following half century, a varied output of considerable proportion has appeared.

The historians constitute a major category. Arthur Lower (the dean of Canadian historians), William Morton (both author and administrator), Trigvi Oleson and James Jackson all treat provincial or national themes, while the works of Mrs. R. F. McWilliams, W. J. Healy, Nan Shipley, J. W. Chafe, and others deal with more specific local topics.

Winnipeg journalists have produced work of an impressive order. The ringing editorials of John W. Dafoe, the mellow essays of J. B. Robertson, James Gray's articles and books, Professor W. T. Allison's literary contributions, the editorials and essays of his son, Carlyle, the trenchant dramatic judgements of Frank Morriss, H. S. Manor's love affairs with various European regions — all these combine insight and high literary value.

Wilhem Kristjanson's *The Icelandic People in Manitoba*, Judge Walter Lindal's similar study and various publications of Rev. J. S. Woodsworth all depict aspects of important ethnic groups. Adele Wiseman's *The Sacrifice*, and Fredelle Bruser Maynard's *Raisins and Almonds*, while composed as novels, may find a place in the ethnic group since each is a sympathetic but penetrating discussion of the problems and attitudes of our Jewish community.

The versatile and industrious author, Watson Kirkconnell, spent some twenty years in this city as a professor at Wesley, later United College. His innumerable publications include many ethnic and linguistic studies, polemical articles, translations from a wide range of ancient and modern languages, as well as original poetry.

The field of the novel has also been well represented since the First World War. Laura Salverson, whose *The Viking Heart* came in 1923, was twice winner of Governor General's awards. In 1925, Martha Os-

tenso's *Wild Geese* also merited a substantial literary prize, and inaugurated her series of successful novels. In his *As For Me and My House*, Sinclair Ross offered a serious study of local life in 1941. The Second World War quite naturally inspired a number of novelists among whom Edward Meade, in his *Remember Me*, gave perhaps the most gripping evocation of the struggle.

From across the Red River came Gabrielle Roy. Her first novel *Bonheur d'Occasion* (translated as *The Tin Flute*) not merely won a prestigious French award, but led an impressive line of regional and personal works of great power. The writings of this gifted Manitoban claim international attention and will certainly endure. Another Winnipeg literary award winner, C. E. L'Ami received his distinction for a striking historical novel *The Green Madonna*. In this fine evocation, Mr. L'Ami has skillfully integrated thorough documentation with a most readable romance.

Though well known as a provocative journalist, Shaun Herron has also gained a wide reputation as a novelist. His unsparing and deeply disturbing revelations of the dark forces which exist in Irish life prove his wide knowledge of the subject and display a vivid style.

A few other names merit mention: Kathleen Strange for her volume of essays *With the West in Her Eyes*, John Marlyn for his novel *Under the Ribs of Death*, Olive Knox for her historical writings. We finally note two remarkable woman novelists, Patricia Blondal and Margaret Laurence, both from rural Manitoba. Their brief connection with Winnipeg was their literary formation at United College.

Poetry has not been without representation in Winnipeg. Our best known poet is certainly Thomas Saunders. His work is often very close to the soil of the west, and is frequently marked by fine touches of humour. His poem on the Red River formed part of the Manitoba Centennial observances. Second in reputation is probably Paul Hiebert. His whimsical accounts of the career and examples of the poetic genius of Sara Binks, the sweet songstress of Saskatchewan, have charmed and amused a host of readers.

The constant call for Canadian plays has not received very wide response in Winnipeg. Ann Henry's local study of the depression *Lulu Street* received a moderately favourable response in the Manitoba Theatre Centre. Betty Jane Wylie's adaptation of Ibsen's *An Enemy of the People*, starring William Hutt, also had a good run in the same theatre. Mrs. Wylie is now at work on another dramatic production, a musical version of the Beowulf story, with music by Victor Davies. A distinctive form of plays for a special audience appears from time

to time in the original pantomime musicals for children presented by the Drama Department of the University of Winnipeg.

Any attempt to set forth Winnipeg's cultural richness is a humbling experience. It is indeed a matter of mortification that a host of names richly deserving mention must for lack of space be omitted. But the conclusion is inescapable — Winnipeg is no cultural desert!

PART IV

Future Economic Prospects

The Future Economic Prospects of Winnipeg: An Analytical Speculation

^{Derek}
by David Hum*

Introduction

After a careful and lengthy study of some of the problems and prospects of Canadian cities, one economist reported major deficiencies in the state of our knowledge about Urban Canada. He found few testable hypotheses, sparse data, no trends, inadequate theories and a dearth of research. He pessimistically concluded: "there (does) not exist at the present time the bases for predicting the future . . . of the cities" (Gillespie, 1971). Yet man takes special delight in wondering about the future. All of us have now become accustomed to receiving "forecasts" about tomorrow's weather conditions, "projections" of various sorts from statisticians and "predictions" of every colour from politicians and journalists. But the term, "speculation" is probably most appropriate when considering: what are the future economic prospects for Winnipeg in the next decade and a half?¹

In the period of roughly a decade it has become somewhat of a tradition for Manitobans to speculate on the course of their future. In 1969, the Commission on Targets for Economic Development (TED) looked eleven years ahead to report on *Manitoba to 1980*. A Conference on Economic Development in Manitoba in 1971 investigated "*The Challenge*" and we were asked to peer nine years into the future to "The Manitoba Economy in 1980" (Barber, 1971). But ten years into the future from Winnipeg's Centennial will take us to 1984. The vision of the future associated with 1984 established by literature however, would seem to make that date a singularly inappropriate benchmark. Perhaps, then, it might be better to focus our gaze on the next ten or fifteen year span — to 1990 and beyond.

The City of Winnipeg, as a major Prairie centre, has come to dominate the Province of Manitoba. In 1971, Metropolitan Winnipeg accounted for 54.7% of the total provincial population, 58.4% of the

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¹Superior numbers indicate footnotes at end of article.

total employed labour force in Manitoba and nearly 70% of the total provincial personal income. Industrial production per capita for Metropolitan Winnipeg for that year was nearly four times larger than the value for non-metropolitan Manitoba. Figures for 1966 also show that Metropolitan Winnipeg accounted for 62.0% of all retail sales in Manitoba, 95.0% of all wholesale sales and 71.0% of all service receipts. For fiscal 1974, of six tax sources comprising over half of all provincial government revenues, 66% of the total amount collected came from Metropolitan Winnipeg. Most of the cultural and recreational facilities of the province as well as business administration centres are located in Winnipeg. In addition, 65.4% of all provincial employees resided in Winnipeg in 1971. At the same time, nearly 60% of all federal government employment in Manitoba is located in the city. Over the past decades, Winnipeg has also enjoyed relatively faster rates of expansion in virtually every category.² In short, the Metropolitan Winnipeg area dominates the Manitoba economy in terms of population, employment, income, industrial production, and government revenues. It also appears likely that much of Manitoba's future growth will, to a large degree, be centred on Winnipeg.

Winnipeg's growth during the first decades of this century was stimulated by the surrounding grain economy and, somewhat doubtfully, on the earlier foundations laid by the National Policy.³ Wheat was the export base around which this expansion was centred and growth from this staple-exploitation created various backward and forward economic linkages conducive to urban development. Because of its key location as the "Gateway to the West" (or "Backdoor to the East" if you have Upper-Canadian ancestors) Winnipeg enjoyed prosperity also as a commercial and financial centre for the entire prairie region. This clustering of population also helped to develop some manufacturing and local export industries. But no new exports were developed by 1931; so the end of the wheat boom and the Depression saw Manitoba and Winnipeg stagnating. Post-war developments saw Winnipeg's importance as a centre further diminished with Alberta being the major beneficiary. The discovery of oil and gas led to a more rapid increase in employment in Alberta so that the traditional concerns of Manitobans have focused on the resolve to increase its relative share of national growth, minimize its loss of young people and enhance the standard of living. There lingers the problem of a narrow industrial base, with the development of secondary manufacturing being seen as the key for future expansion.

This cataloguing of Winnipeg's domination of the Manitoban economy and the cursory history of staple-led prairie growth should make

us mindful of one very important fact. The future economic prospects of Winnipeg, and those of Manitoba, will be extremely sensitive, as in the past, to the kinds of outside economic forces over which Winnipeg has little, if any, control. This painful sense of frustration must be appreciated. Hence, what Winnipeg will be like in 1990 will clearly depend upon the kind of national and international situation which other visionaries can bring to pass. Accordingly, before speculating on Winnipeg's economic future in moderate detail, it appears appropriate to enquire how the rest of the universe might unfold.

The External Environment: Provincial, National and World Prospects

Winnipeg's Centennial will surely be remembered in history as the year of the energy crisis, two-digit inflation, gold speculation, fluctuating exchange rates, rising farm prices, widespread shortages, the housing panic and the stock market plunge. The next decade may well find the economies of the world confronting simultaneous failures in achieving all major objectives — adequate growth, full employment, satisfactory balance of payments and stable prices. Placing our faith in the ability of governments to avert collectively world depression, we foresee the world economy in the near future with tendencies toward inflationary recession; that is, slower rates of growth and higher rates of inflation than in the past. Canada's position should be relatively better than most industrial nations, being a net exporter of energy, agricultural produce, fabricated materials and resource products. Even so, Canada and Manitoba cannot hope to escape higher inflation rates and slowing output growth. The world outlook for 1990, however, is especially cloudy as it remains doubtful whether international monetary reform can really take place until inflation and exchange rate fluctuations are reduced.

The heart and strength of any nation lies in its people. In 1971 Canada numbered 21.6 million with Manitoba accounting for 988,200. Canada's population is projected to grow to between 25.4 and 27.8 million in 1986 and between 26.4 and 29.7 million in 1990. Manitoba would have between 1,006,000 and 1,119,000 population by 1986 and between 1,006,200 and 1,160,100 in 1990 (Statistics Canada, 1974) with some estimates as high as 1,268,934 in 1990 (Maki, *et al*, 1973). Manitoba's percentage of total population will fall from its present level of 4.58% to between 3.96% and 4.02% in 1986, based upon alternative assumptions of high and low fertility patterns. The past deceleration in the growth

of Canada's population (7.8% in 1966-71 compared to 9.7% in 1961-66) is expected to continue for the period 1971-76; thereafter followed by a general upward trend in the next decade, 1976-86, as the baby boom generation passes through the reproductive ages in this period.

The age and sex combination of Canada's people will change. The younger population up to age 14 is not projected to grow rapidly. The projected trend for the key school-entering age of 6 indicates that the size will not in the next fifteen years reach its previous peak of 482,000 in 1967-68 unless fertility reaches very high levels. The important age-group, 15-44, consisting of the baby boom generation, will grow fastest, reaching some 12.5 to 12.9 millions in 1986, or an average increase of 200,000 to 235,000 persons annually. For 1971-86, this group will grow 15% in Manitoba, assuming medium fertility. Meantime, the 45-64 age-group will diminish between 3% to 8% in Manitoba while persons aged 65 and over will be increasing over 30%, reflecting the fastest growing segment of the population in the coming years.

In the 1971 Census, males exceeded females by 22,000. Projected trends imply an overall sex ratio in favour of females. The number of males per 1,000 females was 1,002 in Manitoba for 1971 and this will decline to 964 in 1986. In short, the population of Canada will experience over-all aging, more females, a slower increase of persons in the formative years and increases in the number of elderly, while the population in working and child bearing ages, 20-44, is expected to have record increases up to 1986 (Statistics Canada, Cat. 91-514).

This sharp increase in the working-age population will, of course, affect labour force growth. Although participation rates are highly unpredictable, an acceleration in the rate associated with the primary male group (age 25-54) and a deceleration in female participation rates seem likely. The net effect estimated by the Economic Council of Canada (ECC) is a slowdown in labour force growth to 1980 for Canada to about 2.8% compared with 3.2% for the last half of the sixties (Illing, ECC, 1972).

What other aspects of the Canadian economy can we expect? Employing a recently developed econometric model (CANDIDE), the ECC also projected to 1980 annual growth rates of 5.6% in national output, 3.8% in consumer expenditures per person, 9.7% in total government expenditures, 7.3% in non-residential construction and 4.0% in housing. Using the alternative assumption of a "less favourable" external environment, the ECC projected the rate of output at 4.6% and a rise in the unemployment rate by two percentage points from 6% to 8% (ECC, *Ninth Annual Review*). The Council, however, assumed that such un-

favourable situations would be avoided by the necessary higher transfer payments. But in light of the recent acceleration in prices of primary commodities, foodstuffs, energy and housing, and the likelihood of overall world inflationary recession, the Economic Council's projections might even seem a bit high. In sum, although Canada should outperform most of the major industrialized nations, the feeling is inescapable that our future economic performance will be very moderate — with prospects of continued high inflation and sluggish export growth quite likely.

The Winnipeg-Hinterland Link

One possible inference from Winnipeg's earlier history of grain-led growth is that the forces which shape the progress of a city are closely interwoven with developments in the national economy. Because mature urban centres like Winnipeg dominate their "hinterland" economies, progress in the overall economy is centrally tied to the economic expansion of urban areas; the result being a "mutually reinforcing process that leads, in the end, to the polarization of economic growth, and hence population, in urban areas" (Lithwick, N.H., 1974).

Not surprisingly, the future pattern of Winnipeg's population will be not unlike that for the rest of the country in 1990. The population of Manitoba is not projected to grow rapidly, with a continued decline in the rural population of every region. Winnipeg itself will grow from its 1971 level of 553,109 to 633,006 in 1980 and to 701,050 in 1990, where it will comprise 55% of Manitoba's projected population. A significant shift of the age structure will also occur with a relatively faster increase in the working age group. Again, these population changes will have implications for the Winnipeg labour force, although its expected size in 1990 is very hard to forecast. Using the age-specific participation rates developed by the ECC and applying these to Winnipeg's projected share of Manitoba's population gives an estimated labour force for the city in 1990 of 200,587 males and 101,615 females, including all ages fifteen and over (Maki, *et al*). This forecast of the city's population and employment force is essentially extrapolative and supply-oriented. The population projection must rely on a prior estimate of migration into Winnipeg and abstracts from such economic influences as job opportunities, etc. If, in fact, labour is attracted to Winnipeg when its services are required, we might consider Winnipeg's output growth as generating a demand for and determining the urban labour force. Alternative estimates of Winnipeg's population derived from projected output growth of the national economy by sectors gives a total labour force for Winnipeg

in 1991 of 310,000 males and 215,000 females. These higher projected figures are labour demand-oriented and assume that migration flows will always adjust. But since the "urban situation of migrants is unique, the potential error here might be significant." (See Lithwick, I., in Goracz, A., etc. 1971). The same study went on to project for Winnipeg in 1991, output per person of \$4,781 (in 1967 dollars) and output per worker of \$10,725.

We have stated that some of the most powerful influences on Winnipeg are to be found in the secular trends of Manitoba as well as the national economy. The city is continually adjusting to these outside and hinterland pressures. Nowhere is this more evident than in the "housing crisis" whereby rapid population growth and rising land and construction costs combine to make "housing problems" and urban problems almost synonymous. The number of families maintaining households is expected to increase from 127,300 in 1971 to 169,200 in 1991. Furthermore, of the required housing units, a higher proportion in the future will be for family households. The peak in non-family households as a proportion of all households has now been reached (48% in 1971-76) and is expected to decline to 40.0% by the end of 1991 (Goracz, 1971). The post-war baby boom will now lead to a major increase in family formation and housing demand, particularly for the very land-intensive single family dwelling units. Although relatively better off than the rest of the province (Winnipeg accounted for 69% of total new starts in the last decade while having only 55% of the total provincial population), the city will continue to feel the pressures of the housing problem in terms of costs and price. Over the decade 1961-71, the average cost of land for construction of a single new bungalow increased 70% and building costs over the same period increased by more than 45%. (*Guidelines . . . II*, 1973). And these figures fail to capture the extremely rapid increase of home prices that has occurred within the last three years and can be expected to continue for some time.

The impact on Winnipeg of urban land constraints will likely be less pronounced than that on other major cities. In recent years there have been no barriers to growth in any geographical direction with consequent development in an almost classical concentric pattern around the city area. Further growth is expected to add 24.2 to 55 square miles to the developed metropolitan area but even then, much land will remain within the metropolitan boundaries (Hornsby, 1971).

At the same time that Manitoba is witnessing a rural-to-urban flow of persons to Winnipeg, a significant and opposite phenomenon has been observed and can be expected to continue. Though not yet fully

evident, there has been an undercurrent towards reverse population movements from the City of Winnipeg to the outlying areas within the sphere of the Winnipeg region. When compared to the overall Winnipeg population, the reverse migrants have slightly larger households and families with younger children. Nearly half work in the inner city with most of the remainder in the three industrial areas of St. James-Assiniboia, St. Boniface and Fort Garry. Most (91.9%) live between 16 and 45 minutes from work and travel by car (94.5%). The "exurbanites" settle on attractive river lots, desire urban services and generally have higher income, education and skill levels than the average Winnipeg resident. Furthermore, this movement from the city appears to be increasing and promises to continue if land prices in Winnipeg should soar (. . . *Exurbia Living*, 1974).

If Winnipeg should continue in suffering a loss of its higher-income, and more skilled households to its surrounding regions, this would have wide-ranging implications for city financing. A growing city will require large capital expenditure programs on transportation, protection, education, public works, sewage treatment, refuse collection and the like. Although evidence supporting a positive relationship between capital and total expenditures is slight, the overall tendency to "fiscal imbalance" (that is, the excess of government expenditures over revenues) so much in evidence for all Canadian municipalities, could be even more pronounced for Winnipeg. Over the past years, on a provincial comparison, municipal revenues in Manitoba have grown noticeably slower (Gillespie, 1971).

The last decade has witnessed various structural changes in the Manitoban economy. Primary employment declined as a percentage of total employment, as did secondary employment. The tertiary sector, comprising trade, finances, services and public administration, increased in importance. (*Guidelines* . . . Vol: I, 1973). For Winnipeg, primary industries are expected to decrease in importance with very little prospect for rapid growth in the non-durable industries "beyond a response to increases in population and consumption". Similarly, the major stimulus for growth in transportation, communication, as well as retail trade will depend upon the city's increase in population and income (*A Structure Plan* . . . , 1969). However, the possible emergence of Winnipeg as a major convention centre is expected to increase the service sector to encompass 24% of the labour force in 1991, compared to 20.7% in 1961.

The inherent conflict between population pressures and land scarcities in urban areas has manifested itself in terms of the housing crisis. Another and potentially more significant prospect to contemplate is the

imbalance between population and energy requirements. Although Manitoba has underway large scale projects in hydro-electric development, we must bear in view the fact that 60% of the world's present energy production is from petroleum and natural gas. Manitoba has insignificant proven reserves of crude oil (only 58,330 thousand barrels of proven reserves in 1966), and no important sources of natural gas. Yet the National Energy Board estimates that by 1990, Manitoba residents will continue to demand vast amounts of petroleum products and natural gas. Manitoba, therefore, by 1990 will be a net importer of 454 million tons of coal, 29,070 million barrels of petroleum and 110.2 billion cubic feet of natural gas. Only in the area of hydro-electric power will Manitoba be self-sufficient. However, in terms of per capita energy consumption for the province in 1990, hydro power will only constitute about 30% of all energy demands in agricultural, industrial, residential and commercial uses. Transportation will remain totally dependent on petroleum. (N.E.B. estimates quoted in *Energ-City*). Though no separate projections of energy demands for Winnipeg are available, a prorated estimate based upon the city's share of population is easily found. Perhaps by 1990, it just might be possible that alternative urban patterns will have begun to evolve — including such features as smaller vehicles, mass transit systems, the elimination of the ubiquitous "service station", thereby freeing urban land for redevelopment and the construction of self-contained units of residential, commercial and industrial complexes to conserve energy and achieve compactness. But it would be foolhardy to expect this achievement by 1990. (See *Energ-City*, 1973).

Winnipeg, 1990: Adjustment to Post Staple-led Growth

Winnipeg's moderate population growth and lack of confining spaces should enable her to escape some of the harsher pressures afflicting other urban regions such as pollution, congestion, and housing crises. Residential construction should continue in an even spatial pattern and location should not significantly affect home prices.⁴ Some proliferation of higher-density accommodation is to be expected. In common with other Canadian cities, Winnipeg could suffer further "fiscal imbalance" although the province has promised increased support (*Guidelines . . . III*, 1973). The Unicity system of government is an experiment of great potential benefit but final judgement must be suspended as "it is too early to prophesy" (Axworthy, 1974). Greater involvement of the provin-

cial government must be sought, as Winnipeg's affairs are no longer local but provincial in their implications. Because of Winnipeg's place in the economy of Manitoba, the *Metropolitan Development Plan* is at one and the same time both a city plan and an economic development scheme.

As Winnipeg contemplates its next century of progress, it is tempting to provide an inspirational and uplifting vision of life in 1990. Yet the future of Winnipeg is very difficult to predict. The stimulus from the surrounding wheat economy of the earlier decades belongs now to history and the succeeding generation must face prospects of merely moderate growth and high inflation in the next few years ahead. Growth in the shares of national output for Winnipeg in both the primary and secondary sectors will be relatively sluggish (Stone, 1971), with the major thrust of urban market growth in the West centred on the far West. The post-war period has seen a decline in importance for Winnipeg as a trans-shipment centre. As a traditional distribution centre for the mid-west, Winnipeg will nonetheless continue to provide a focal point. With its already developed infrastructure of financial institutions, service industries and labour markets, "it is possible that (Winnipeg) will develop as an important centre for mid-western Canada, in much the same fashion as the cities in the mid-western United States have developed" (Lithwick, I. in Goracz, A. etc., 1971). However it is more likely that Winnipeg, having reached the level of a mature urban area capable of self-sustained growth, will remain a major city of importance; but, rather than servicing the entire prairie region market, it will emerge as a financial, commercial, transportation and communications centre for a more restricted area — mainly Manitoba and northwestern Ontario. But this, too, is uncertain. We have very few guides for projections of such a sweeping nature as Canadian history has provided no examples of an urban region in its painful adjustment to post staple-led growth. It is this task which truly represents "*The Challenge*" for Winnipeg.

Footnotes

¹Charts and graphs of all sorts as well as lengthy tables have been avoided for reasons of space and style. Generally, when quoting from studies which provide a range of alternative projections, a series reflecting assumptions most likely to prevail in the future was selected.

²See: "The Place of Metropolitan Winnipeg in the Provincial Economy", by D. Lofto, elsewhere in this publication.

³A model analysing the impact of the protective tariff for Western Canadian growth is contained in D. Hum, "The Protective Tariff, Regionalism and Canadian Economic Development", University of Manitoba, Dept. of Economics, Discussion Paper, 1972.

⁴Based upon a forthcoming study by M. Carvalho, K. Sahay and D. Hum on Housing in Winnipeg.

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