AN EVALUATION OF THE FUNCTIONS AND CHARACTERISTICS OF A REGIONAL SHOPPING CENTRE - POLO PARK, WINNIPEG

A Thesis

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by

R. GEOFFREY J. MORRIS

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To my Mother

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ABSTRACT

It is the purpose of this thesis to examine the functions and characteristics of an integrated suburban shopping centre, Polo Park, Winnipeg. In order to evaluate its position in the context of the Metropolitan area of Greater Winnipeg as a whole, it was necessary not only to trace the historical background, but also to describe the more recent and wider technological, economic, and sociological changes which have contributed to shopping centre development elsewhere. A locational and descriptive account of Polo Park shopping centre follows, in order to acquaint the reader fully with the subject of the dissertation. In reading Chapter IV, which is a detailed account of the fieldwork undertaken in Winnipeg and of the subsequent compilation of statistical data, continuous reference should be made to the series of map transparencies, which have been placed in the accompanying folder to facilitate comparative analysis. These maps are as vital to this thesis as the text itself.

In the concluding chapter certain recommendations were made with regard to the future status of downtown Winnipeg and of the Polo Park shopping centre, and finally, a discussion of the position which these, and other major suburban shopping centres, might occupy in the future retail structure of Greater Winnipeg.

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CHAPTER I

INTRODUCTION

During the two decades which have elapsed since the end of the second world war, the topic of shopping centres has attracted a considerable degree of attention, not only on municipal and metropolitan planning boards, but also in the offices of real estaters and professional planning consultants. This is also a subject which has caused some anxiety to the executives of large department store organizations, the managers of drive-in supermarkets and other retail chains, and the owners of the ubiquitous neighbourhood corner store.

In addition, the phenomenon of shopping centres both large and small, has prompted enquiry from the market research team, the city planner and the urban geographer, with much of this interest being concerned either with the siting, morphology and layout of integrated outlying centres, with the impact of their development and expansion on the retail functions of downtown districts, or in the context of the conceptual position which lately they have come to occupy within the hierarchical structure of retail and service centres of cities.

A good deal of the analysis of late has revolved around the central theme that "regional" shopping centres are responsible for the atrophy and decay of the central business district, evidence for this being static or slowly increasing downtown retail sales, set against an overall picture of expanding urban markets characterized by increasing population and a rising per capita volume of real income.

Undoubtedly there has been justification for such an emphasis, since changing retail patterns, and the health of the downtown area, are of primary concern to the student of urban areas. Yet often the shopping centre has not been afforded the comment it deserves, and has been treated with scant respect. Some writers see this most recent component of the urban retail structure through the aperture of a local drainpipe, a 'parvenu' development important only owing to its effects on the profit margins of pre-existing facilities and foci. Indeed, much of the research, the comment and the criticism directed towards the suburban retail centre has too often been unaware, or unwilling to recognize, that this is a 'de facto' and permenent response (especially in North American cities) to changing social and economic conditions.

The survey undertaken at Polo Park makes no apology for assuming that in Canada and the United States, shopping centres serving a regional or sub-regional threshold are now part and parcel of modern urban living. Even in western Europe, to an increasing extent, they are coming to be regarded as a necessity if maximum convenience of consumer time and effort is to be realized in the affluent society.

Thus, from the outset it was thought only realistic to regard Polo Park centre as an entity in its own right, whilst being an integral part of the metropolitan area of Greater Winnipeg as a whole. For the shopping centre has reached maturity, and cannot any longer be studied from the previous standpoint of problematic infancy, as has often been the case.

Some authorities have underlined the major stimuli which have caused the development and proliferation of a variety of centres. These shopping centres can be seen on entering any large North American city by automobile. There is the large scale complex, usually peripheral to the built up area of the city, with acres of parking space, and often located at the junction of major freeway arteries. Then there can be recognized a large grouping of shops surrounding, and supported by, a junior department or chain drugstore, this community centre being dependent on the traffic captured by its commercial ribbon highway location. On a less comprehensive scale is the neighbourhood centre, again orientated to faciliate drive-in patronage of its variety store and secondary shops.

This hierarchy described can be determined whether one is travelling through Los Angeles or Vancouver, or approaching Minneapolis or Montreal. For certainly, in the past twenty years the retail structures of North American cities have been subject to such dynamic re-locational forces, as to combine to introduce wider changes in retail consumer patterns than at any other comparable period in the history of retailing.

The reasons for these remarkable post-war reorientations of shopping habits have been dealt with extensively, notably by Hoyt, Vance, Applebaum, Gruen, and many others. An attempt here is made to sum up briefly the factors which can be held responsible for the recent proliferation of suburban shopping facilities, since they are also of great relevance to the situation in Winnipeg.

The complex causal forces behind the multiplication of large outlying shopping centres can be grouped under three major categories, namely technological, socio-economic, and that of planning controls. Though these are dealt with separately in the paragraphs following, it should be stressed that they are in fact inextricably related to one another.

That the mid-century years 1940-1965 have experienced unbounded technological advances is commonly appreciated, but the revolution of mass production and its impact upon our daily existence, and upon the environment in which we live, is little examined and scarcely understood. This is true whether one considers the newest gadget for easing the domestic chores of the housewife, the neat factory-fabricated compartments of millions of new suburban dwellings, the latest prestige automobile model gracing the driveway, or the vast rows of canned, frozen, or cellophane-packed foods on the supermarket shelf. Henry Ford's mass-produced "model T" available in any colour as long as it was black, was the pre-requisite for reversing the traditional fixation of the metropolitan area to its central business district, whilst at the same time increasing the problems of traffic and parking congestion downtown. Large scale private car ownership introduced the "degenerative cycle" or "downtown spiral" of public transport systems, which still serve cities radially (i.e., between suburbs and downtown) and not circumferentially (i.e., intersuburban).

Bottled natural gas, the septic tank, refrigeration, faster roads and automobiles, more effective house cooling and warming techniques, extensive telephone and electricity line services, tank-water supply and other delivery services, new well drilling methods and local piping: all these are the tools of man's advancing technology, enabling him to create the far-flung medium, and low-density suburban development outside the reach of city utilities. And all these "significant events in the evolution of human ecology,"[1] have increased the "automobility" of the suburbanite, decreased the attraction of regular downtown shopping visits, and have reacted in favour of the creation and extension of shopping centre retailing in the suburbs.

The second group of factors relevant to the promotion of shopping centres, are sociological and economic in character. For example, since

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[1]See Schneider, K., "Urbanisation in the California Desert", <u>Journal American Institute of Planners</u>, Vol. 28. No. 1, 1962, p. 18-23.

the turn of the twentieth century the middle and high income classes have gradually moved from the central area, so that the downtown has become isolated from its traditional backbone. In increasing numbers, the customers which were its mainstay are now intercepted by the shopping centre. The majority of department stores have adopted the policy of positive retrenchment - improving the downtown location to maintain C.B.D. sales, whilst at the same time gaining a slice of the new market with an additional shopping centre department store, along the maxim "if you can't beat 'em, join 'em."

Further, the increase in urban population; significant changes in per capita real income and the volume of purchasing power; advertising techniques advocating the virtues of standardization; mass wholesaling; all these have combined to create an outlook which no longer tolerates the inadequacies of shopping time and effort suffered by our predecessors. This is especially true of shopping for food and everyday household needs, the objectives of which are best achieved quickly and without the crowds, the traffic, and the parking difficulties implicit with downtown shopping visits - "Contrast this with the mental and physical comfort of shopping centres."[1] It may well be that these are "the signs of ultimate dispersal" which have prompted Schneider[2] to question if the old city culture has become antiquated during this process of urban metabolism; and which, with families deciding to spread themselves apart, have favoured the new, and depreciated the old shopping patterns

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[1] Vance, J. E., Jr., "Factors shaping the downtown core"; an address given at a course on city centre development called "Focus on Downtown;" presented by the Community Planning Association of Canada, in Winnipeg, January 26 & 27, 1966.

[2] See Schneider, K., Op. Cit., p. 18-23.

The lack of application of planning controls, by allowing uncontrolled suburban expansion, have also contributed in no small measure to the disintegration of the tradition of urban unity manifested by the downtown centre of gravity. 'Ad hoc' satellite centres of attraction have arisen in the 'laissez-faire' North American commercial climate, and in some cases over-subdivision of retail tributary areas has occurred. Further, lack of controls on private enterprise has, according to Vance,[1] caused the wasteful use of space by the vast majority of recent suburban developments, and which, on a number of counts, has stimulated shopping centre popularity in North American cities.

The grid-iron framework of inter-urban routes allows easy inter-suburban movement by car in relatively low density areas poorly served by the central mass transit system, and thus opening up new dimensions in city travel - "community without propinquity."[2] This changing geography of urban commercial activities promotes the viability of the shopping centre. Planning does not demand that new peripheral housing be strategically located on the mass transit routes focussed on the central area. Nor does the capitalist system require that the developer provide commercial facilities and other close community services. In addition, any residential zonation is often aimed at the consolidation of shopping outlets, and the abolition of isolated shops helps the growth of integrated shopping centres.

Nor does building in suburban areas whether retail, office or

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[1] See Vance, J. E., Jr., "Emerging Patterns of Commercial Structure in American Cities." Paper presented to Lund Symposium on Problems of Urban Geography, 19th International Geographical Congress, 1960, and found in the <u>Proceedings of the Lund Symposium.</u>

[2] From a lecture by Dr. F. Boal, February, 1965 in the <u>Department of Geography, Queen's University of Belfast</u>.

industrial, find any great restriction outside of the cries emanating from the moneyed protests of outraged residential action groups. Thus the mutual beneficialism of shops in proximity to offices, on which the core area thrives, has been projected to the suburban business centre, now a detached piece of downtown. Homer Hoyt[1] points out another significant development when he states that: "The new Federal Highway pattern...will be the primary factor in locating the regional centres of the 1960's." For as is intimated in the text above (see concluding chapter), there is currently much debate concerning how much governmental control should be levered against private enterprise taking locational advantage of public investment in urban freeway programmes. It is not easy to say whether or not calculated application of restriction would go a long way towards solving many of the problems of "disequilibrium" mentioned by Vance.[2] What is certain, however, is that in North America planning controls do little to inhibit the rush of commercial centres and 'ribbons' emerging in Metropolitan areas.

These then are the considerations which have stimulated the rapid expansion of shopping centres in the 'Fifties and 'Sixties, in the larger urban areas of the United States and Canada. That there has been a remarkable proliferation of these retail outlets can be inferred by the preoccupation of many urbanists with shopping centres, as evidenced by innumerable publications devoted to them.[3]

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[1] See Hoyt, H. "Classification and Significant characteristics of shopping centres"; Appraisal Journal, 26 (1958).

[2] Vance, J. E. Jr., "Factors shaping the downtown core." An unpublished address given at a course on city centre development called, "Focus on Downtown," presented by the Community Planning Association of Canada, in Winnipeg, January 26th: and January 27th; 1966.

[3] See Berry, B. J. L., and Pred, A., "Central Place Studies", sections 9 to 12, Bibliography Series No.1. Regional Science Research Institute. 1961.

One of the chief concerns has been the problem of the classification of the variety of shopping centres in terms of their position in a hierarchy of retail service centres within cities, and a list of the major authorities can be found in the bibliography; but any detailed discussion in the test is without the scope of this dissertation. For as with the methodological explanation and justification, the proper balance and content of this work was thought to be best attained by reference to appendices, if certain supplementary information is desired. Many believe that theses have a tendency to become initially bogged down with methodological and academic justification, or with the traditional lengthy review of the pertinent literature, and this opinion is shared by G. T. Trewartha, who claims that ..."consequently many theses, like a heavily loaded aeroplane, take a long time to get off the ground."[1]

This present research embraces an evaluation of the functions and characteristics of a planned regional integrated shopping centre, and its impact upon the Metropolitan setting. To this end it is necessary to discuss the retail facilities and the urban setting prior to the opening of Polo Park, and also to gather certain information in order to determine the market area. This was achieved by means of a questionnaire, by undertaking an automobile licence number survey, and by analyzing credit account samples.

Subsequently, the problem of assessing the position and impact of Polo Park on Greater Winnipeg was attempted by analyzing the following - the past trends, the causal factors, and the present distribution and density of population (with some reference to the ethnic composition of Winnipeg); the levels and concentration of income and purchasing power; data on the arterial

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[1] In conversation, June 1966, Madison, Wisconsin.

pattern, including schedules of the mass transit network, time-distance statistics, and traffic flow diagrams; reference to physical and cultural barriers; and the competition experienced by Polo Park from other shopping centres and commercial ribbons. Various observations and conclusions are stated, based on interpretation and inference from the data assembled.

The methods used and the logic of approach should become self-evident in the chapters which follow. The techniques employed, and their merits and disadvantages are discussed, but for the purpose of brevity and because the field techniques are widely used in the geography of market research, the methodological justification is confined to where it is demanded in the text.[1] Definition of terms can be found in Appendix A.[2]

The concluding chapter deals with both the broader, theoretical implications, and with the prospective developments likely on a local scale.

Thus, this study might hopefully be of value firstly to the interested layman, on the ground that his interests and welfare are at stake in the consumer war presently being conducted on a free-for-all basis within the confines of Winnipeg's perimeter highway. This may be of benefit also to the management of Polo Park centre, since it is aware of the necessity to keep astride of activity in the sphere of marketing geography. Lastly, the planner and the urban geographer might make use of this research, and perhaps not only in the offices of the Planning Division of the Metropolitan Corporation of Greater Winnipeg, but also as a case study, it might be utilized in Britain by those interested in developments which could well recur there.

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[1] For example see pages 41-43

[2] In addition the methods of drawing up various of the overlay diagrams can be found in Appendix L.

In striving to reach the interests of each of these groups there is a danger that the content satisfies none, but the most important object for the author to achieve was to go beyond the purely academic, and produce something which might be not only of some general interest but which might be applied to some specific problem or other, however small. If this is achieved he will be well satisfied, for this should be the essence of geographical scholarship.

CHAPTER II

AN OUTLINE OF THE PHYSICAL AND COMMERCIAL GROWTH OF WINNIPEG

The processes of growth peculiar to Winnipeg during the nineteenth and twentieth centuries have contributed to produce a very marked bias of urban development westward. Whether one considers such factors as the local hydrology,[1] the Indian trails,[2] early steamboat navigation,[3] the Hudson's Bay land reserves,[4] or the alignment of the C.P.R. rail marshalling yards,[5] the end result has been the creation of a western imbalance of growth.

This has many geographical implications; clearly a case of appreciating historical events in order to understand the present.

Within the framework of the general alignments imposed upon the city

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[1] From the earliest Selkirk settlers it was recognized that because of bridging and severity of flooding..."the two rivers, the Red and Seine, created a double barrier to eastward development." (Quote from H. Hosse, "The Areal Growth and Functional Development of Winnipeg - 1870 to 1913;" unpublished M.A. thesis, University of Manitoba, 1959.)

[2] The missouri or Mandan Indian trail became known as "The Great Highway" (Portage Avenue), and invited suburban and commercial development.

[3] A. S. Morton in his "History of Prairie Settlement" points out that major steamboat navigation down the Assiniboine was chiefly responsible for the settlement of the area west from Winnipeg between 1875 and 1881.

[4] The Hudson's Bay Company released its reserves' of land in order to capitalize on the real estate boom of the 1880's. "The spread of the built-up area was largely influenced by speculative manipulations of the Hudson's Bay Company," (H. Hosse - "The Areal growth and Functional Development of Winnipeg" - 1870 to 1913, Op. Cit.)

[5] The western expansion of the urban area in the 20th century has been funnelled along the constriction between 'C.P.R. town' and the Assiniboine River.

of Winnipeg by eighteenth and nineteenth century historical precedents[1] it is necessary to appreciate the more recent history of the twentieth century western growth of residential areas of the metropolitan area. (See diagram 7 and Appendix N.)

From the earliest days of pioneer settlement at the junction of the Red and Assiniboine rivers it has remained true that Winnipeg looks west, and the extent and nature of the residential 'fringe' or the urban area fast replacing rural arable and grazing land, both to the north and to the south of the Assiniboine River, is most significant to a study of Polo Park Shopping Centre. Of the various factors governing the distribution of shoppers visiting Polo Park (as represented in diagrams A - I), the character of twentieth century residential expansion west of the Red River is among the most important.

The "Atlas of Manitoba"[2] gives a general description of the progressive stages of residential development, and classifies housing by use of seven criteria, in detail.[3] The relationships between these different residential sectors, and the degree of orientation of the income groups associated with them, towards Polo Park, is discussed above (see Chapter IV, pp. 65-73).

Only 23% of the metropolitan area is contained east of the Red River.

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[1] If further detail or information is required on the historical geography, a comprehensive study has been made by Hosse, H., "The Areal Growth and Functional Development of Winnipeg, 1870 to 1913," unpublished M.A. thesis University of Manitoba, 1959.

[2] Edited by T. Weir, published by the Provincial Government of Manitoba.

[3] See Appendix N, and Diagram 7.

The location of Polo Park centre is not an accident,[1] (see concluding chapter), for the traditional push of the city outwards, beyond the western peripheries, finds continuance in the decade of the 'sixties. This is not to say that new dimensions are not being added to other parts of the city. Considerable suburban development is evident in the municipalities of Fort Garry and St. Vital to the south (see Diagram 7 and Conclusion), whilst Kildonan is expanding, and industrial Transcona is sprawling eastwards.

If Diagram P is placed as an overlay on Diagram L, it becomes clear that only three of the total of 20 neighbourhood and community centres are not sited in direct proximity to that urban area established within the last decade. West of the Red River and south of the C.P.R. tracks, in that half of Winnipeg most relevant to this study, every single shopping centre is found in these sectors of most recent development. That is, "Grant Park Plaza" located along an avenue outstanding in Winnipeg for its dual mushrooming of apartment blocks and denominational churches in the 1960's; the 'high class' Tuxedo neighbourhood shopping centre catering for the highest income[2] groups associated with census tract 58; and similarly the shopping centres which have arisen in the newest housing projects "Charleswood," "Kirkfield Park," "Westwood" and Glendale" - are designed to serve shopping requirements on a 'local' (high "convenience good" component) rather than 'regional' (including high "shopping good" component) scale.

It is of the highest significance that Polo Park Shopping Centre itself is not situated in these new peripheral suburban areas, but in the old-established inner suburbia of St. James.[3] Thus it is able to serve

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[1] Seventeen alternate locations to that of the present site were considered, but all of them were in the western half of Winnipeg. (Information obtained from David Slater &Co., Real Estate, Winnipeg).

[2] For definition see footnote page 66 (footnotes 2 and 3).

[3] The city of St. James was incorporated in 1880.

collectively most of the western suburban districts at maximum convenience in terms of minimum time-cost.

The advent of innovations in private and public transport, and other technological advance has caused dislocation of the old urban unity moulded by dependence on downtown Winnipeg. The large expansion of residential areas has favoured the growth of commercial establishments along major thoroughfares, and at main intersections further away from the core area.

The suburban customer calls the tune. No longer can the Winnipeg merchant rely upon the patronage of "the Johnny below zero" - the seasonal spending spree of the hunter, trapper or pioneer farmer. "The days are gone when Eaton's and Hudson's (downtown stores) were looked upon as the Alpha and Omega."[1]

The history of the areal and commercial growth of Winnipeg has been climaxed in the last decade by the impact of intervening opportunities - alternative retail outlets to that of the central business district. The strategy of this commercial warfare can be determined, but its full effects upon Winnipeg and upon the daily life of its inhabitants, cannot yet be measured.

With the completion of its new extensions, (totalling an additional floor area of about 350,000 square feet), Polo Park will be the second largest regional shopping centre in Canada,[2] after Yorkdale, Toronto. Just as the sales of Winnipeg's downtown retail complex have been subject to

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[1] Mr. Lionel Urch, Manager, David Slater Real Estate Ltd., Winnipeg, in conversation, January, 1966.

[2] Mr. John Johns, Head Market Research Department, T. Eaton & Co., Winnipeg Manitoba. In conversation, August, 1966.

competition from Polo Park, so the latter in turn has experienced rivalry from discount houses and other centres. Nor is this process likely to rest, if the plans proposed recently[1] are as good an indication of the future as the past is of the present.

In the twentieth century two great trading concerns have dominated the retail sales market of Greater Winnipeg. The Hudson's Bay Company store, situated on South Main Road in close proximity to its fur exchange and warehousing facilities, had no major competitor in supplying the needs of the population of nineteenth century Winnipeg. Then, at the turn of the century, a commercial enterprise founded in Toronto by an Irishman, Timothy Eaton from Ballymena,[2] located a vast new department store on Portage Avenue, Winnipeg. This structure, built in 1905,[3] was regarded as one of the finest buildings of its type in Canada. The range and quality of goods it contained were a wonder to behold.

Such facilities captured the patronage of the majority of the population of Winnipeg, a good indication of the sharp opportunism of the company in its awareness of the expanding future retail market of the city. It was not until 1927 that the Hudson's Bay Company, fast falling behind in the consumer market, gathered its rèsources together to provide effective retail competition.

"The Bay" constructed its present department store on Portage at Memorial, four blocks west from that of the establishment of the T. Eaton and

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[1] See pages 93 and 95 with reference to the proposed new St. Vital centre, and Metropolitan Plan for Greater Winnipeg.

[2] The Eaton Park in Ballymena is testimony to his origins and his benevolence.

[3] This was during the great decade of the "Second Boom" in Winnipeg. (See Hans Hosse: "The Areal Growth & Functional Development of Winnipeg - 1870 to 1913" - unpublished M.A. thesis, University of Manitoba, 1959.)

Company. This delay in regaining an effectively competing position, against Eaton's combined mail-order and shopping complex at Donald, caused "The Bay" to inherit second place behind its rival. This situation remains true to the present day.

The result of the early twentieth century shift of the retailing capacity in downtown Winnipeg from Main to Portage, was to project westward orientation of new stores along Portage. Main Street, north of its junction with Portage, became isolated from the mainstream owing to the constricting influence of the C.P.R. station and railtracks, and also to the development of the financial district and grain exchange. South Main held the C.N.R. station, hotels, railyards, and warehousing. Along Notre Dame Avenue, growth of retailing was inhibited by proximity to the unsavoury environment of the wholesaling and garment manufacturing district.

Thus Portage was the one remaining avenue of major importance which could accommodate commercial expansion. Once the big departmental stores had established themselves, cumulative attraction pulled in less important retailing business. And so, even beyond the limits of the C.B.D., Portage has become the most important shopping avenue in Winnipeg, its "ribbon development" stretching almost unbroken to the Perimeter Highway.

For half a century downtown Portage, focussed on Portage and Donald, was the Mecca for the shopping public of Winnipeg. The department stores of Eaton's and the Hudson's Bay Company pulled in patronage like the force exerted by a strong magnet upon iron filings. For there were no alternative comparative centres of attraction.

However, by the late 1950's the population of the Winnipeg Metropolitan area was approaching half a million.[1] Distances between the C.B.D. and homes

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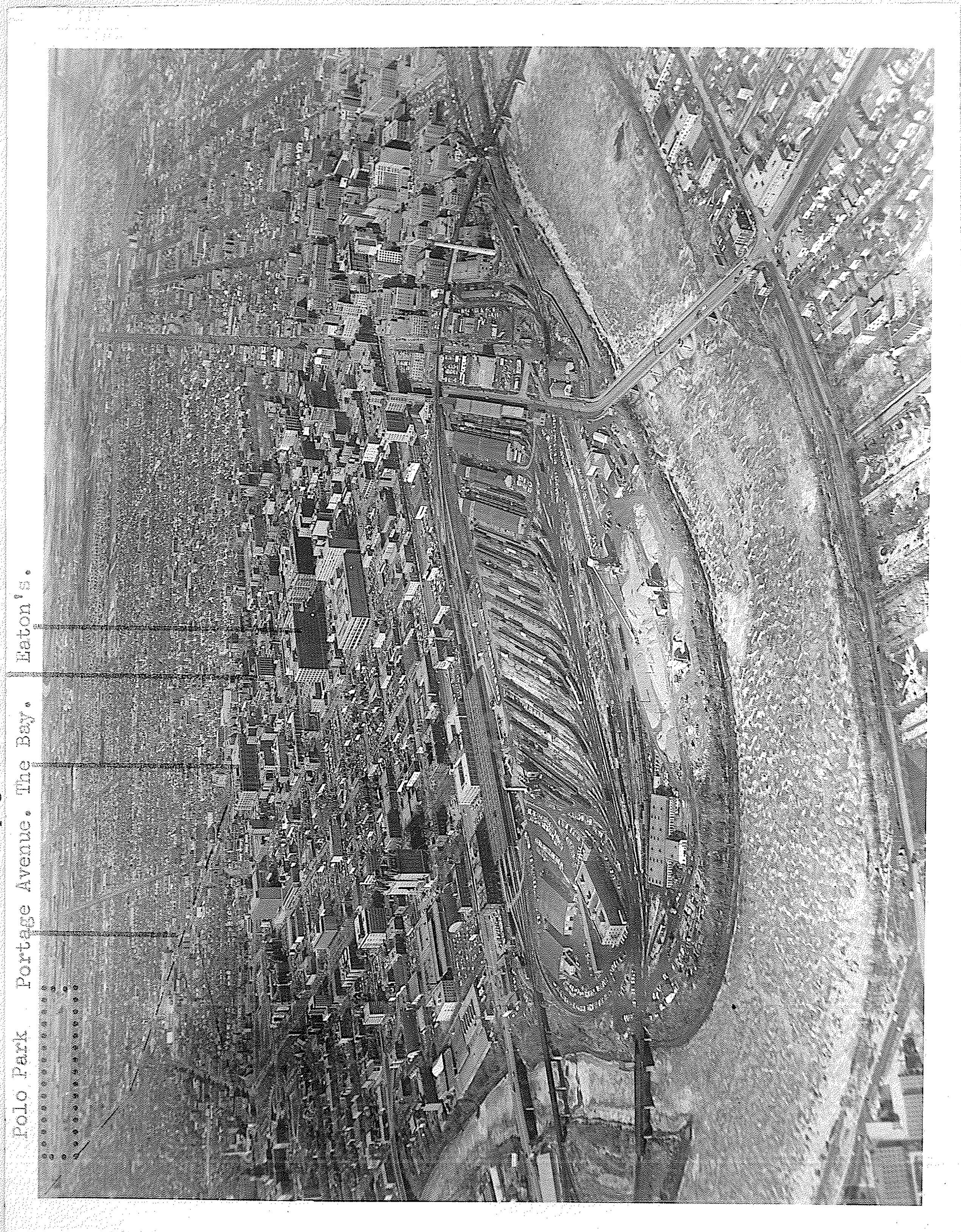
[1]The D.B.S. Census 1961, gave the population of Metropolitan Winnipeg as 475,989. See also Appendix L (ii) for an updated figure.

PLATE A. DOWNTOWN WINNIPEG IN RELATION TO POLO PARK. (LATTER CAN BE SEEN TOP LEFT HAND BACKGROUND.)



Source: Department of Mines and Technical Surveys.

in the suburbs was becoming greater. Downtown traffic and parking problems were causing great inconvenience. The Department stores, once remarked upon for their variety of goods and excellence of service, were becoming inadequate to meet the demands of the increasing affluence of an increasing population. The two major downtown stores have not grown with the city.[1] Pushing along the crowded store aisles, with or without children, is not the most pleasant of experiences. Nor is the 1600 foot four block walk often necessary between Eaton's and the Bay (see Plate A), especially in the sub-zero temperatures of the Manitoba winter. In the latter half of the fifties, therefore..."it was no longer heresy to advocate a major suburban alternative"[1] to the downtown centre.

The tradition in Winnipeg of shopping downtown had strong bonds, and this still remains a factor of significance[2] to consider in any attempts to persuade people to shop more in modern suburban centres. For as Tiebout has remarked: "Like old shoes, traditional concepts are more comfortable, and new ideas are apt to be upsetting."

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[1]Mr. Lionel Urch, Manager, David Slater & Co., Real Estate, Winnipeg, in conversation, 25th July, 1966.

[2]Further reference is made to this below; See also Appendix D. (Disadvantage 8).

CHAPTER III

A LOCATIONAL AND DESCRIPTIVE ACCOUNT OF POLO PARK SHOPPING CENTRE

When Polo Park was officially opened on August 20th, 1959, it was the first integrated shopping outlet in Winnipeg which had been comprehensively planned from the beginning. At a cost of $7 million[1] it was built on forty acres of land formerly belonging to the Polo Park Race Track,[2] whence it derived its name. It is situated close to the junction of a bridging point of the Assiniboine River with Portage Avenue (see Plates C and D). Subsequently, the execution of plans for an additional bridge, modern clover-leaf interchange, and underpass, have enhanced the advantages of location on two major intra-urban arteries. There has been, therefore, a large scale modification and addition to the road system in the vicinity of Polo Park centre (compare Plates B and C and Diagram 1).

Portage Avenue is the major eight-lane thoroughfare serving that part of the city which embraces the greatest portion of the population of Winnipeg,[3] and which shows the fastest growth - namely the west, north of the Assiniboine.

In addition, Polo Park is situated on the "Home-Going" side (north) of Portage Avenue, an important influence on sales volumes, according to market

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[1]Does not include interior finishing and furnishings. This and other figures quoted without reference to footnote source, is information provided by Mr. Harrison, Manager of Polo Park Centre.

[2]See Plate B.

[3]According to Mr. David Slater, (Manager, David Slater Real Estate Co., Winnipeg), in 1959 308,000 people lived within 15 minutes 20 m.p.h. driving distance of Polo Park.

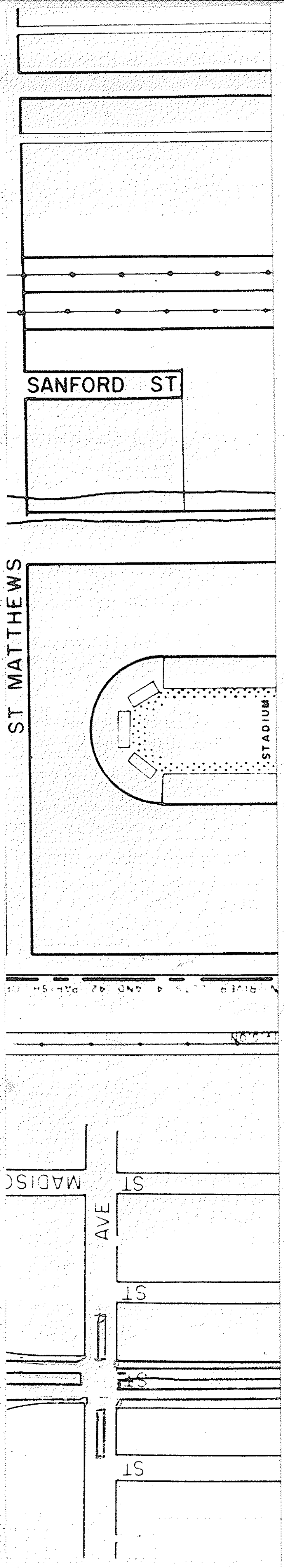
PLATE B. VERTICAL AERIAL VIEW OF POLO PARK RACE TRACK TAKEN MID 1950s PREVIOUS TO CONSTRUCTION OF THE NEW ST. JAMES BRIDGE.

Source: Western Photogrammetry, Winnipeg.
(Note difference in scale compared to Diagram C.)

PLATE C. VERTICAL AERIAL VIEW OF POLO PARK TAKEN MID 1960s, SHOWING THE SHOPPING CENTRE, NEW ST. JAMES BRIDGE AND ACCESS ROUTES.

Source: Western Photogrammetry, Winnipeg.

Diagram 1



STREET PLAN POLO PARK VICINITY

1966

DIAGRAM

SCALE ONE INCH TO 400 FEET

research teams. Three thousand seven hundred car spaces, arranged on all sides of the shopping area (i.e., "split parking") for convenient walking distances (see Plates D and E), are provided to ensure ease of parking at all but the peak hours.[1] Underground truck deliveries segregate service vehicles from private cars for the most part, whilst buses, bringing shoppers from downtown and the suburbs, terminate at the entrances near the department store.

Yet initially, the internal structure of the shopping centre left something to be desired. The pedestrian mall, roofless and open to the elements (see Plate F),[2] was stifling hot in summer and subject to the cold whip of wind and snow in winter.

Compared with the longer walk between Eaton's and "The Bay," Polo Park had only its traffic-free character to commend it to the pedestrian. Early sales figures[3] experienced by store owners reflected the general dissatisfaction of shoppers with the open mall arrangement.

Many of the store lease-holders hardly made ends meet during the first two years (or even longer) after opening. "One must come in prepared to

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[1] The peak shopping hours are usually Thursday evenings, Friday evenings, and Saturday mornings; before public holidays and during pre-Christmas shopping spree. Parking difficulties are also encountered when shopping hours clash with sports or other entertainments at the Winnipeg Stadium and arena, (for example, football games and the Red River Exhibition). Using the parking index method Polo Park should have some 2,500 - 3,000 spaces. Using the parking ratio method Polo Park should have 3,750 car spaces. (See S. J. Staseson - "The planning of Shopping Centres" M. Arch. Thesis, April, 1965, Dept. of City Planning, University of Manitoba.)

[2] This can also be seen on Plate D.

[3] See Appendix F.

PLATE D. AERIAL VIEW. POLO PARK AND SURROUNDING SUBURBAN AREAS.

Source: Department of Industry and Commerce, Provincial Government of Manitoba.

PLATE E. PARKING LOTS AND POLO PARK (EAST SIDE).

PLATE F. POLO PARK MALL 1960 - PREVIOUS TO ROOF ENCLOSURE.

face a loss for the first couple of years or so."[1] One or two stores even closed down (for example, Betty Winthrow - Ladies Clothing). However, during the last two years there has been a upward swing in sales, and this process is, in part, generally characteristic of the early stages in shopping centre operations. Much work remains to be done as regards this cycle of economic viability experienced by shopping centre tenants, but to go into the pattern evolving at Polo Park in any great detail is without the scope of this research, for it would demand a thesis in its own right.

In the Fall of 1963, at a cost of $600,000.00, the covering of the Mall was completed (see Plate G). The statistical impact of this, "the first major architectural concession to climate in Winnipeg,"[2] was almost immediate (see Appendix F). The rapid increase in sales since 1962 can be attributed largely to the enclosing of the Mall, but also of significance was the completion of the new St. James bridge and access routes (see Aerial Plates B and C). This was a precondition for extension of Polo Park's influence to the population south of the Assiniboine. By this time, people were also more aware of the benefits of shopping at the centre, and coupled with this was the promotional vigour shown by new management at Polo Park.[3]

In retrospect it is hardly possible to measure these factors separately, but their cumulative impact caused individual concerns to make percentage

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[1] John Cholakis, Manager of Broadway Florists, Polo Park; in conversation November, 1965. This is also the impression gained from many conversations which the author had with managers and employees of the individual stores in Polo Park.

[2] Personal communication from Green, Blankstein, Russell Associates - Architects, Winnipeg, (January, 1966).

[3] See Plates I, J, and K in Appendix I.

PLATE G. THE ENCLOSED MALL, POLO PARK SHOPPING CENTRE; ARCHITECTURAL CONCESSION TO CLIMATIC EXTREMES.

profit gains varying from 5% to 60%, averaging at 20%.[1] The fact that during customer opinion surveys[2] people stated that the chief advantage of shopping at Polo Park was the air-conditioned comfort of the enclosed mall (cool in summer, warm in winter), is some measure of the importance of the innovation. Since the roofing was completed four years ago, the financial outlay necessary has been repaid many times through increased sales benefiting the entire centre.[3]

Besides a two studio basement theatre and a large bowling alley, there are also offices of various insurance and other businesses, both above and below ground (shopping) level.[4] Polo Park at present contains forty-eight different stores of a variety of types and sizes (see Diagram 2), which total a combined sales floor area of 252,000 square feet.

Originally, the tenants of the shops within Polo Park were carefully selected to avoid duplication of trades, and also to ensure that only those occupants evaluated as possessing a good chance of permanent success were included. Although a few of the less favourably located stores did 'fold,' this policy together with letting on a percentage rent basis[5] was successful.

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[1] Figures provided by the Management of Polo Park centre.

[2] See Diagram 3.

[3] Opinion of Mr. Harrison, Head of Polo Park Management Committee.

[4] This non-retail occupancy totals 42,984 square feet of the 538,202 square feet of occupied leasable area.

[5] The percentage rent lease system is a good scheme because (a) in a new shopping enterprise it is difficult to know what the level of rent should be; (b) it keeps the developer fully occupied in making the scheme work; and (c) because it encourages obligatory and active participation in a tenants trading association, in order to ginger up trade as a whole.

In Diagram 2, the shops and services contained by Polo Park shopping centre could be divided (on an intuitive basis) into "convenience good" and "shopping good" establishments. Clearly there will be a good deal of overlapping within this definition based on type of goods sold.[1]

Yet whatever the line drawn, it is clear that Polo Park does contain sufficient speciality stores to attract the low-middle and middle income groups[2] it is designed predominantly, to serve. Any neglect of lowest income shoppers is met by the separate discount store of Topps's nearby, whilst it is hoped that new developments will encourage the patronage of high income[3] shoppers from the River Heights and Tuxedo communities.

There are sufficient convenience stores to allow shoppers to complete all, or most of their shopping, in one trip. For example, housewives are given the choice of patronizing one or two rival chain supermarkets; and drugstores, shoe-shops and ladies fashion stores are duplicated to facilitate "comparison" shopping and to promote competitive prices.

The department store which presently dominates the shopping centre, gives the customer additional choice,[4] and when the future Eaton's department

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[1]For example, retailing concerns like Reitman's and Kresge & Co. sell many goods (shoes, clothing, etc.) over and above those available in a local drugstore; but each would be characteristic of establishments which are components of local community and neighbourhood shopping districts. In this sense they can be defined as local and convenience establishments.

[2]For definition see footnotes 3 and 4 page 66

[3]For definition see footnote page 66

[4]It is almost true to say that if all the other heterogeneous shops in Polo Park were regarded as under one compact ownership, they would constitute another department store of the scope of Simpson-Sears.

store, and the smaller shops which will accompany this development are opened, these combined facilities will further project Polo Park as a second downtown.

In addition, a department store under the separate control of the Simpson-Sears Company, and not bound by the decisions of the majority rule of the Management Committee for the rest of Polo Park,[1] boasts an average of 8,000 customers per day,[2] shopping in a gross floor area (G.F.A.) of 278,480 square feet.[3] Thus, the total for all the retail capacity found within Polo Park shopping centre is over 500,000 square feet,[4] arranged in a plan which possesses similarities to that of Yorkdale centre in Toronto. Taking $45.00 square foot[5] of G.F.A. as an approximate criterion of sales volume, the annual sales of the department store would total about $12.5 millions. If the annual sales of all the other shops in Polo Park can be stated as being $25 millions,[6] the combined total sales volume of the entire centre is over $35 millions in 1966.[7] However, it is only during the last two years, which

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[1] S. J. Stasesion (Op. Cit.) criticizes this lack of unity in administration.

[2] Customer volumes varies from 3,500-20,000 people per day. (J. Staseson, (Op. Cit.)

[3] Source of these figures available from the author on request.

[4] Thus Polo Park possesses about one seventh of the total of major competitive retail space on Winnipeg, (See Appendix B) and is truly "regional" according to Hoyt's and other classifications.

[5] Figure computed by K. G. Dawson, Market Analyst, Hudson's Bay Company, Winnipeg.

[6] Figures quoted by Management at Polo Park.

[7] These figures are only approximate and are quoted merely as a guide to the economic strength of Polo Park centre.

have witnessed great sales increases, that these figures have been attained.

Besides its location in an expansive residential area, Polo Park benefits from location near a number of large office[1] and apartment blocks,[2] proximity to the airport, and within a mile radius of Polo Park centre a long list of plants and warehouses can be drawn up.[3] Not only do these business concerns bring more customers to Polo Park, as a result of the cumulative "pull," and owing to the multi-purpose nature of many trips, but the employees of many of these offices and industries provide a substantial portion of the lunchtime and evening sales, especially those within easy walking distance of the mall.

This close proximity of retail and office land-use has always been one of the basic generators of downtown prosperity. But it is no longer exclusive to that district. To a lesser extent Polo Park is a centre which also, like downtown, is "devoted to people, paperwork, and parcels,"[4] and can be classified as an outlying "self-contained business district,"[5] such centres being referred to by Hoyt as "...satellites similar in structure to the C.B.D."[6]

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[1]For example, the Manitoba Telephone System, and the Motor Vehicle Branch.

[2]These are situated immediately to the east of Polo Park, and west along Portage Avenue.

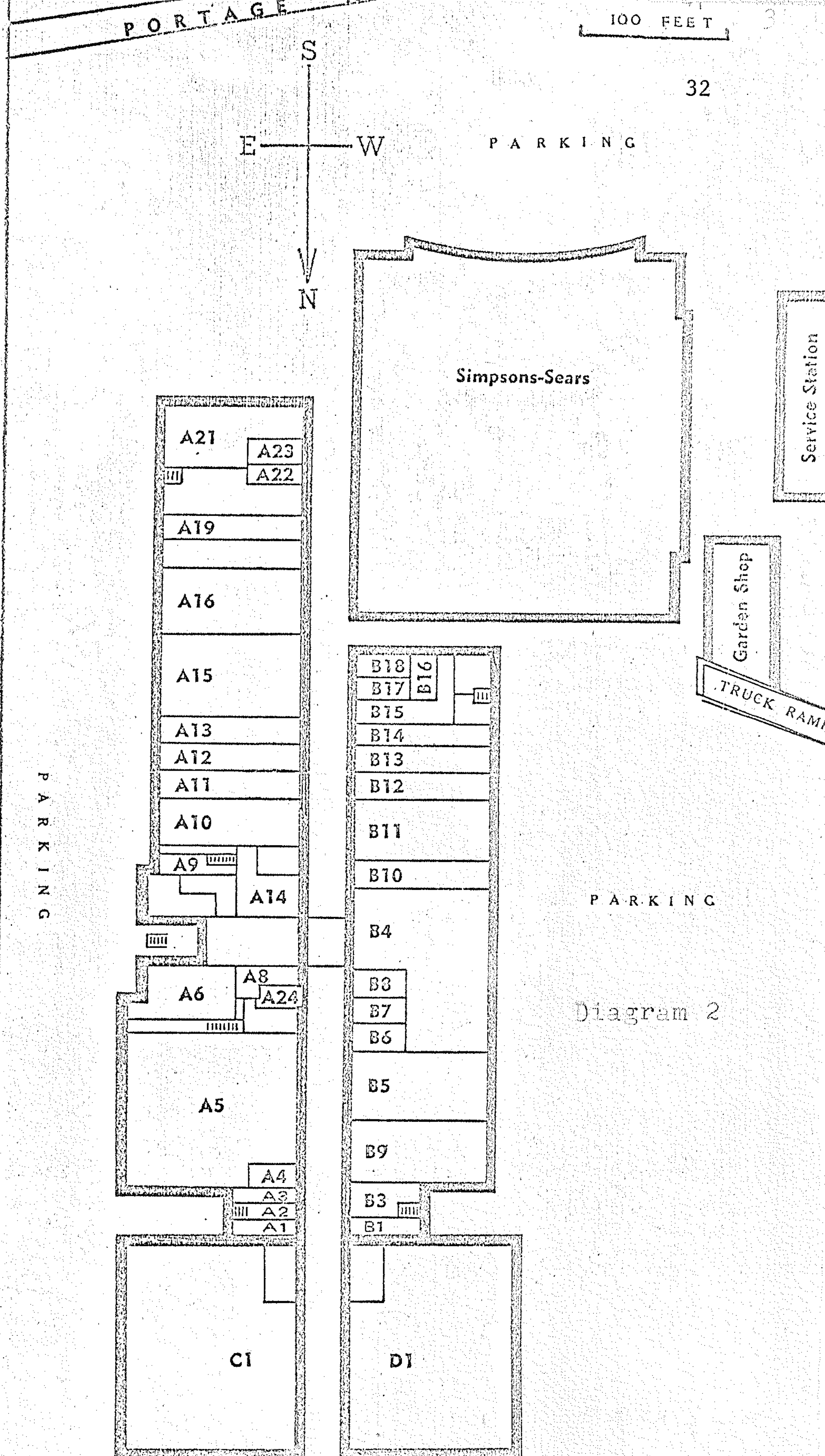
[3]See Appendix G. Many of these concerns surrounding Polo Park can be seen in Plate D.

[4]This is how the C.B.D. is described eppigrammatically by Horwood, E. and Boyce, R. R. in "Studies of the C.B.D. and Urban Freeway Development." Seattle, University of Washington Press, 1959.

[5]Marcel Villaneuva, "Planning Neighbourhood Shopping Centres," National Committee on Housing Inc., New York. (1945)

[6]H. Hoyt: "The Classification and Significant Characteristics of Shopping Centres," Appraisal Journal, 26, (1958).

Agnew Surpass Shoes	B12
Bata Shoe	B10
Broadway Florists	B18
Canadian Bank of Commerce	A21
Cardinal Ties	A4
D'Allaird's	B3
Dayton's	A15
Dominion Stores	C1
Empire Wallpaper & Paint Co.	A3
Fabric Centre	B13
Fashionette Hair Stylists	A9
Floors Moderne	B1
Garden Shop	G
Genser & Sons Ltd.	A16
Gordi's Delicatessen	A12
Hanford-Drewitt (Suburban) Ltd.	A22
Henry Birks and Sons (Man.) Ltd.	A14
Liquor Control Commission	A6
Loblaw Groceterias Co. Ltd.	D1
Mario's Hairdressing	A1
Monarch Lumber	B9
National-Radex Ltd.	B8
O'Brien World Travel Service	A2
Pauline Johnson Candies	A24
Pennington's	A10
Perth Dry Cleaners	A19
Pia's	B16
Reitman's	B11
Rene's for Gifts	A23
Reward Shoes	A13
Richardson Bros.	B6
Sally Shops	B14
Service Station	F
Simpsons-Sears	E
S. S. Kresge Co. Ltd.	B4
Strains	B17
Sweet Sixteen	A11
Tamblyn Drug Stores	B5
Tip Top Tailors	B15
Uncle John's Hobby Shop	B7
United Cigar Stores	A8
Wasson's Bowling Alley	Basement
Zeller's Limited	A5



POLO PARK
STORE ARRANGEMENT
1965

Polo Park centre, according to the plans made public during the first half of 1966, will be considerably expanded during the next two years. The major department store in downtown Winnipeg (T. Eaton & Co.) has announced its intention of developing a suburban outlet at Polo Park, of similar proportions to that of Simpson-Sears. Further, thirty smaller shops are projected for the centre, and on their completion, these plans promise even greater potential than the enclosing of the mall or the completion of the St. James bridge. Certainly these developments deserve more detailed attention in the concluding chapter.

By 1970 many of the shortcomings generally associated with shopping centres, and particularly apparent at Polo Park to anyone with a keen eye and discerning taste, should be eradicated. Polo Park is undergoing as many significant modifications and expansions as in the metropolitan area as a whole. For it is a part of the wider process involving the decentralization of the retail structure of Greater Winnipeg, which is proceeding apace in the latter half of the 'sixties.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF SURVEY RESEARCH AND OTHER STATISTICAL DATA

In order to evaluate the functional importance and to assess the salient characteristics of Polo Park Shopping Centre, it is necessary to determine the extent of its tributary area and to gauge whether it is succeeding, not only as a financial investment, but, in addition, to judge whether it meets adequately the demands of the population it is designed to serve.

It is hardly possible to ascertain the physical, economic and sociological impact of this integrated shopping district upon the urban area of Greater Winnipeg, without paying due respect to the three precepts which fashion the enquiries, the doctrines, and the practices of market research teams.

The first is accessibility, and related phenomena, which can be conveniently subdivided as follows:

A. The use made of the arterial pattern of main and secondary roads by automobile owners.

B. The network and frequency of mass transit routes.

C. Limitations imposed by physical barriers.

Secondly, the retail structure of the city, and the extent and location of commercial competition, is also worthy of attention.

Lastly, reference to the social milieu is necessary, and again, is capable of subdivision into:

A. Numbers, distribution and density of population.

B. The distribution and levels of income.

C. Cultural and ethnic group patterns.

Although the triumvirate of categories (accessibility, commercial competition, and the social milieu) has been enumerated and will be dealt with separately for convenience, when one weighs the cumulative effect of these influences, the inter-relationships existing between them almost make them indivisible of each other.[1]

The attempt to measure the factors outlined, and any correlations between them which have emerged, was facilitated by employing well-established research methods of data-gathering, and the various characteristics and distributions of persons shopping at Polo Park Centre were established.

Three main data-gathering techniques were taken advantage of in establishing the patterns of shopper distribution in relation to Polo Park Shopping Centre; these also serve as excellent indices of its franchise trading area[2] within the metropolitan trading area as a whole.

Firstly, by means of a schedule (questionnaire)[3] survey, respondents were asked to give their specific street address.

In addition, complete answers to a number of other questions posed (see interview schedule, p. 38) provided further factual information. The

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[1] So that the relationships between these variables can be seen as clearly as possible, a separate folder has been provided for Maps A to T. By using the cartographic technique of map overlays, a comparative study can better be presented.

[2] See Definition of Terms, Appendix A.

[3] See Definition of Terms, Appendix A.

most significant information was derived from the questions listed below.[1]

What percentage of the total interviewed came to Polo Park shopping centre once a week? Twice a week? Three times a week? Once every two weeks? Once a month? Once every six months or more? (See Frequency of Visits, Diagram 3.) What percentage of the total interviewed came to Polo Park shopping centre by bus? By car? By bicycle? By foot? By taxi? (See Mode of Travel, Diagram 3.) What percentage of the total interviewed came from home? From downtown? From place of work? Other? (See Origin of Trip, Diagram 3.) What percentage of the total interviewed named each of the particular advantages and disadvantages enumerated? (See Diagram 5, p. 72.) In addition, much useful data concerning the change-over of shopping from downtown and local stores to Polo Park subsequent to the opening of the shopping centre, was obtained.

The data furnished by these interview questions was supplemented by extensive sampling of the automobile licence plates of the cars parked in the lots surrounding Polo Park shopping centre, the home addresses of the automobile owners being obtained from the records of the Motor Vehicle Branch of the Provincial Government of Manitoba.[2]

In conjunction with this, permission was given to take a 5% sample[3] of

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[1] In addition to these enquiries, further breakdown was possible on a separate day basis (Appendix D); also information derived from questions 5 and 6, and various other interview results (Appendices C and J) whilst being of only limited application in the terms of reference of this thesis, would clearly be of relevance to further detailed enquiry.

[2] By kind permission of K. N. Gateson, Superintendant of the Motor Vehicle branch.

[3] The 1 in 20 sampling technique is known as "selection at regular intervals from a list." (M. Parten). Selecting the sample cases "at evenly spaced intervals...guarantees a cross-section of the entire universe will be secured." (M. Parten - "Surveys, Polls and Samples," Op. Cit.)

credit account addresses from the files of the major Department Store at Polo Park.[1] Access to the credit documents of a speciality store ("Broadway Florists") was also forthcoming, and together these provided a useful tool in constructing the distribution of a large category of shoppers at Polo Park.

From material published by the Dominion Bureau of Statistics, Ottawa, and from published and unpublished demographic research of the Planning Division of the Metropolitan Corporation of Greater Winnipeg, maps were drawn to illustrate the distribution, density, and income of Winnipeg's populace.

A good many of the figures given in the text are based upon unpublished articles and confidential facts. Wherever possible the sources of these have been quoted, but limitations were necessary in cases where the source of information requested to remain anonymous.

The footnotes quoted indicate major sources of published data, from which other maps such as 'bus routes (Diagram K), and salary and income groups (see Diagrams P and Q and Diagrams R and S), were constructed.

Although most urban geographers will agree that it is an asset to be factually objective, some referenceswas necessary on an intuitive level - such phenomena as the significance of physical and cultural barriers was difficult to quantify, even if capable of some measurement. It was found that the quantitative alone was insufficient, and the subjective opinion of qualitative assessment in some instances holds validity in a systematic investigation.

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[1] Information provided by arrangement with the Management, Simpson-Sears, Polo Park.

DEPARTMENT OF GEOGRAPHY
UNIVERSITY OF MANITOBA

POLO PARK CUSTOMER QUESTIONNAIRE

CODE

TIME ________ DATE ________ LOCATION ________

MALE ☐ FEMALE ☐ COUPLE ☐
If Accompanied by Children mark "Y"

1. How often do you visit Polo Park shopping centre:
   1. Once a week ☐ 2. Twice a week ☐
   3. Three times a week ☐ 4. Once every 2 weeks ☐
   5. Once every month ☐ 6. Once every 6 months or more ☐

2. By what means did you travel to Polo Park this trip:
   1. Bus ☐ 2. Foot ☐ 3. Car ☐ 4. Other (specify) ________

3. From what place did your present trip originate:

	Tick	
Home		(Address)
Downtown		
Work place		(Specify)
Other		(Specify)

4. Where do you do most of your shopping for the following goods: (tick column 1)

	Polo Park	Other Shopping Centre		Local Stores		Downtown		Other	
		1	2	1	2	1	2	1	2
Clothes									
Food									
Shoes									
Furniture									
Appliances									
Dry Cleaning									
Shoe Repairs									

5. (If commodities now bought mostly in Polo Park) Where did you do most of your shopping before Polo Park was opened: (tick column 2)

6. Have you any opinions, comments or suggestions to make on Polo Park shopping centre
   List Under
   (i) Advantages ________

   (ii) Disadvantages ________

7. (If not found in Q. 4.) Could you please give me your street address:
   ____

LOCATION	
A	19.54
B	20.61
C	12.93
D	11.85
G	35.04

SEX OF RESPONDENTS	
Male	9.97
Female	64.42
Together	25.60
Accompanying Children	36.6

FREQUENCY OF VISIT	
once per week	32.88
2 times per week	14.95
3 times per week	8.89
Once a fortnight	16.57
Once a month	18.05
> 6 months	8.62

MODE OF TRAVEL	
Bus	24.79
Walk	8.89
Car	66.03
Other	0.26

ORIGIN OF TRIP	
Home	75.06
Downtown	10.64
Work-place	10.24
Other	4.04

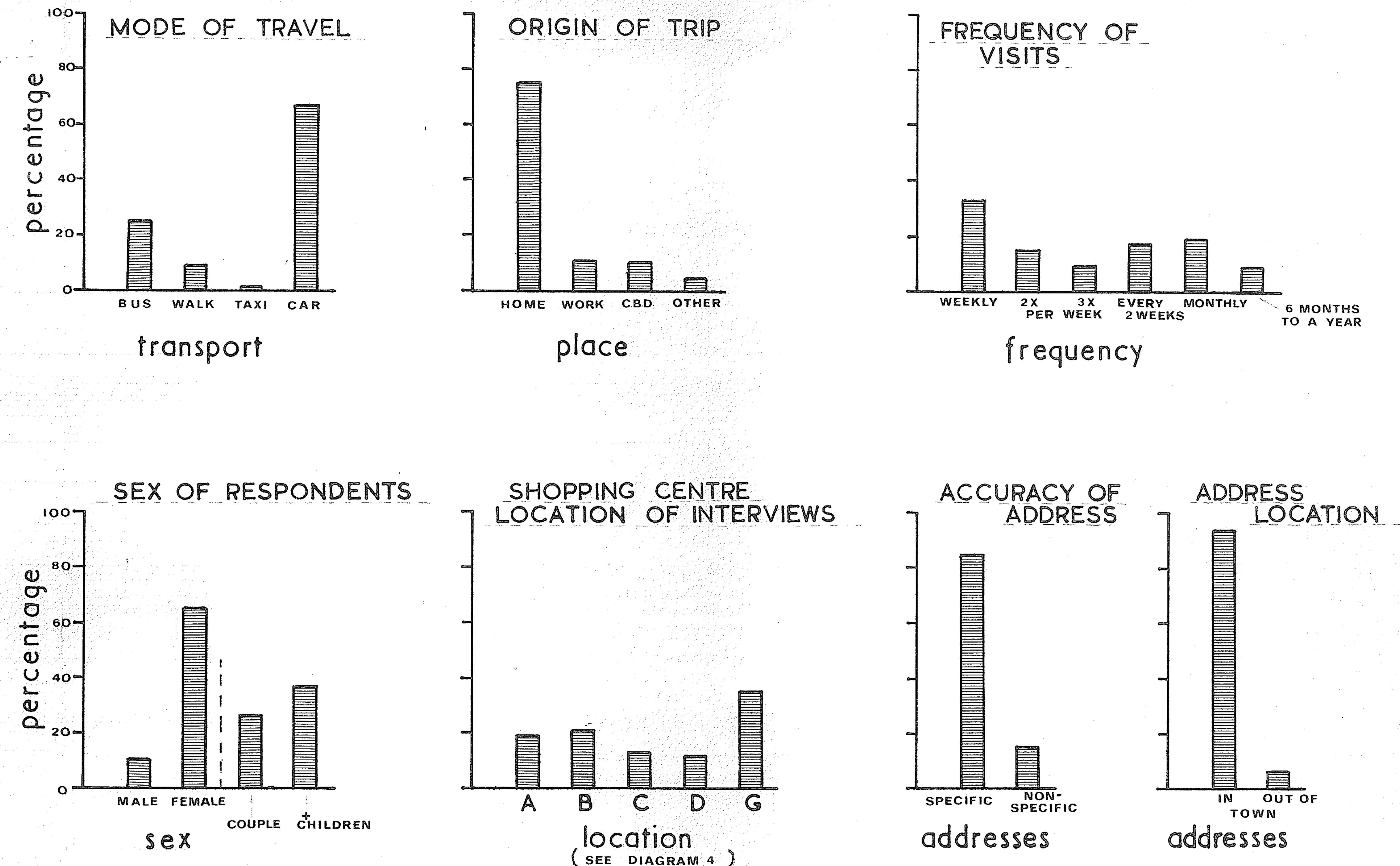
ADDRESSES OF RESPONDENTS	
Non-specific	15.49
Specific	84.51
Out of town	6.73
In town	93.26

Questionnaire Data by Percentage.

DIAGRAM 3

QUESTIONNAIRE ANALYSIS

TOTAL PERCENTAGES OF RESPONDENTS



During the week October 18 - 23, inclusive, and various days during November 1965,[1] a total of 742 persons were interviewed by the writer at various points in and around Polo Park centre[2] - namely at the four main entrances and exits of the mall[3] and generally[4] within the mall and outside in the parking lot, and the 'bus terminal. In this manner as random and as representative[5] a cross section as possible was obtained. The response to the schedule questions (see p. 38) was good,[6] only about a dozen shoppers refusing to answer the schedule (mostly because they were in a hurry).

At this point it is perhaps necessary to describe the methods by which the schedule survey was completed at Polo Park, since most of the conclusions of this research were based on interpretation of statistics compiled from the 742 interviews.

In her book, "Surveys, Polls and Samples,"[7] Mildred Parten states that it is not easy to achieve random sampling of human populations, since there are often situations and conditions which favour certain units over

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[1]Detailed times and dates can be seen in Appendix D.

[2]See Appendix C (location section) and Diagram 2, for exact location and interview emphasis.

[3]At +A, +B, +C, +D, in Diagram 2, p. 32.

[4]+G in Diagram 2.

[5]See page 42.

[6]The question which drew most negative replies was that requesting specific street addresses, but this invasion of privacy was unacceptable to only 15%. "Obtaining the respondents' address...is the item of information on which the greatest resistance, if any, is encountered." (B. J. Epstein, Op. Cit.)

[7]Further critque of the means by which statistics were collected for this research can be found in the text (especially pages 70 to 80).

others. However, by alternating the time spent at the four fixed locations of interviewing shoppers at Polo Park,[1] and by emphasis on walking throughout the shopping centre and the various parking lots, the effort was made to gain the most universal sample possible.

In addition, in each instance the method of interviewing the third shopper following each completed interview was employed, in order to avoid bias. The author did not hire interviewers, in order that the schedule returns should be uniform and to ensure that there was true and accurate recording of answers. By these safeguards the interview survey was as near to being accurate and as random and representative as possible.[2]

The term "random sampling" is most often used to convey the method of selection by chance - that is, when the method of selection assures each individual in the universe an equal chance of representation. The fact that in the vast majority of cases the differences between the percentages resulting from those interviewed on successive days during the shopping week October 18 - 23, 1965, and the percentages resulting from those interviewed on non-successive shopping days during the period 12 - 24, November, 1965, vary by only a few percent,[3] would indicate that a representative sample of

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[1] For complete breakdown of these locations, the percentages interviewed at each point and the dates of interview see Diagram 2 (p. 32) and Appendix C (Location section).

[2] With incalculable manual help perhaps the actual number of shoppers using the entire centre could have been counted, and mathematically a percentage might have been calculated for the number of interviewed. However, in "Surveys, Polls, and Samples", M. Parten points out that..."if a choice must be made between employing a non-mathematical approach which might do mo more than guarantee that the sample is unbiased, and using a theoretically efficient sampling design which in practice might permit the introduction of biased errors, the former if preferable."

[3] See comparative percentages in Appendix D.

the universe was in fact obtained. Although no specific comparisons were possible owing to "Company Policy", the author was assured by John Johns, head of the Winnipeg Market Research Department at T. Eaton and Co. that both the percentages seen in Appendix C; of income grouping (see Diagram 6); and of the various distributions seen in the folder diagrams, were very similar to the total percentages and distributions which resulted from a previous independent unpublished survey, undertaken by the T. Eaton Company prior to the establishment of a second department store at Polo Park.

Other than this evidence it is difficult to state categorically that the interview sample taken in this research was a large enough one, because it is almost impossible to establish the exact number of customers who actually use Polo Park daily (only estimates are possible, according to Mr. Campbell, the Manager of Simpson-Sears Ltd., Polo Park), but if one assumes that the estimates made by S. J. Staseson (footnote 2, p. 30) are roughly accurate, and assuming a total of 150 people (which includes families) were interviewed each day of the survey, then the sample varies from being about 1 in 20 to about 1 in 100, depending upon the variability of the number of shoppers at Polo Park each day. If it can be assumed that there are 4,500 shoppers visiting Polo Park on an average day, and an average of about 75 interviews (at about 4 minutes each interview) were completed on each day of the sample, then the sample size is roughly 1 to every 60, which seems reasonable enough; but this average figure, however, is conjectural rather than accurate, and the judgment, whether this sample size is large enough in terms of percentage of daily shoppers should be made on the basis that the survey does conform with modern schedule sampling practice at shopping centres.

Without exception, the nine maps (Diagrams A to I) showing distribu-

DIAGRAM 4

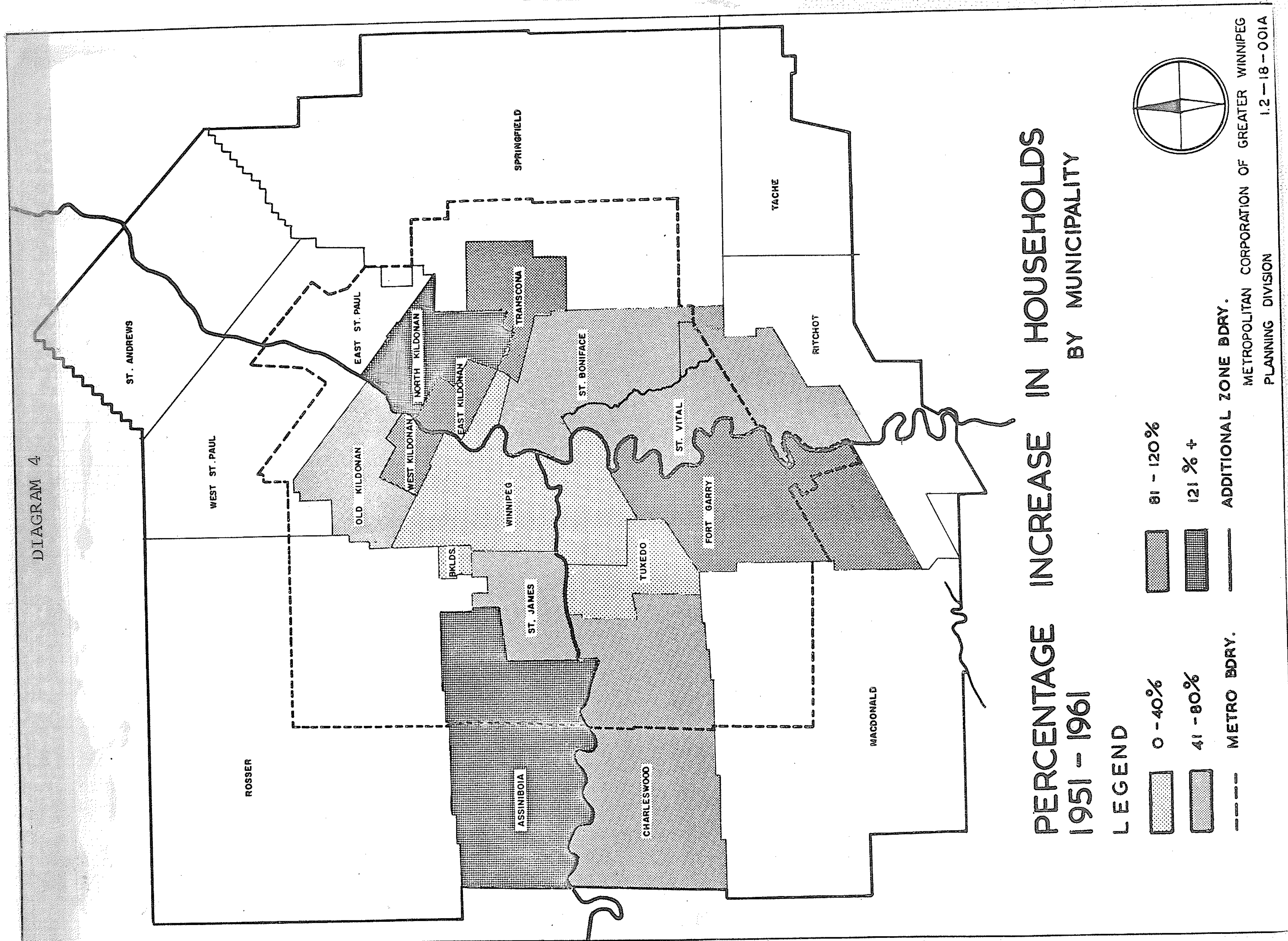
DIAGRAM 4
PERCENTAGE INCREASE IN HOUSEHOLDS
1951 - 1961
BY MUNICIPALITY
LEGEND
0 - 40%
41 - 80%
81 - 120%
121 % +
METRO BDRY.
ADDITIONAL ZONE BDRY.
METROPOLITAN CORPORATION OF GREATER WINNIPEG
PLANNING DIVISION
1.2—18—001A
ST. ANDREWS
WEST ST. PAUL
EAST ST. PAUL
SPRINGFIELD
TRANSCONA
NORTH KILDONAN
EAST KILDONAN
WEST KILDONAN
OLD KILDONAN
WINNIPEG
ST. BONIFACE
ST. VITAL
FORT GARRY
TUXEDO
ST. JAMES
BKLDS.
ASSINIBOIA
CHARLESWOOD
ROSSER
MACDONALD
RITCHOT
TACHE

tion and origin of Polo Park shoppers, exhibit a very marked western bias, and especially so north of the Assiniboine River, as would be expected. From its inception, Polo Park was intended as a response to the historical lopsidedness of growth to the west, even now reflected by continued expansion of residential areas in that direction. (See Diagram 5 and Appendix L (i).)

Diagram A, B, C, D, E, and F, constructed from tabulation of schedule response, can be explained in terms of cost in time and energy of travelling from home to Polo Park.

The majority of those people who visit Polo Park most frequently - two and three times (or more) each week - live within easy reach of the shopping centre. Those shopping only very occasionally at Polo Park (i.e., every six months or more) are much more peripheral in location.

There can be recognized a gradation between the extremes of high and low shopping frequency at Polo Park. The higher the frequency of shopping visit category, the lower the percentage becomes with increasing distance from the shopping centre. Examination of the maps A, B, C, D, and J in conjunction with the tables (pp.47 & 48) showing the ratios between frequency of visit and automobile travel time distances, lends support to this contention. Not a single car-travelling respondent interviewed in the survey who visited Polo Park less than once weekly, (i.e., who shopped only once every two weeks, once monthly, or once every six months or more), came from within the 0 - 2 minute automobile travel time zone. This is the preserve of those who show a high frequency of visits (two or three trips weekly), whilst almost all low frequency shoppers come from outside the 10 to 15 minutes travel time zone.

The highest frequency of visit (once, twice, three times weekly) percentages reach their apogee in the 2-5 minute zone. The middle frequency category (one visit every two weeks) has marked density of distribution in the 5-10 minute zone.

A large percentage of the lowest frequency categories (24.5% of persons shopping once monthly, and 56% of respondents visiting six months or less), lived outside the metropolitan area of Greater Winnipeg (see Diagram 5).[1] These two categories alone account for all the out-of-town automobile shoppers.

The reasons for the apparent paradox of lower incidence of higher frequency shoppers (8.3% of the total) in the 0-2 minute car travel time zone, compared to the percentage (14.5%) found in the 2-5 (and 5-10 minute) zone (see Table (i)), is that much of the housing formerly in the immediate proximity of Polo Park centre has been subject to redevelopment. Construction of new highway overpass and interchange, and office blocks and drive-in facilities, have taken the place of the former residential areas. In addition, much of the area immediately north of Polo Park is devoted to an expanding industrial estate. The low population base within walking distance of Polo Park (i.e., the two minute time zone) implies a lower percentage of the total (11.4%), compared to the percentage of shoppers emanating from less accessible but more densely populated zones (i.e., 26%, and 15.5% found in the 2-5, 5-10 and 10-15 minute zones).

From Table (ii) it will be seen that within the isochrone of five minute travelling time surrounding Polo Park shopping centre, (see Diagram J), there is found the origin of trip of 37.4% of car travellers interviewed. (Overlay Diagram A on J). Over 88% of these respondents shop frequently

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[1] See page 50.

TABLE (i)

Percentage of The Total Car Travellers Interviewed who came from Within Particular Automobile Travel Time Zones, by Frequency of Visit Category of Car Travellers

Frequency of Visit Category of Car Travellers	Automobile Travel Time Zones							
	0 - 2 Minutes	2 - 5 Minutes	5 - 10 Minutes	10 - 15 Minutes	15 - 20 Minutes	20 - 25 Minutes	25 Min. or More	Out of Town Location
Three times weekly (High frequency)	8.3	14.5	8.5	1.7	---	---	---	---
Twice weekly	2.4	5.0	4.5	3	---	---	---	---
Once weekly	0.6	3.6	3.1	1.3	0.2	0.2	---	---
Once every two weeks. (Medium frequency)	---	1.6	6.8	4.9	2.1	0.7	0.4	---
Once monthly	---	1.2	4.5	3.3	2.1	1.9	0.5	4.5
Once every six months or more (low frequency)	---	0.25	0.6	1.3	0.9	0.25	0.4	4.8
All frequency categories	11.4	26.15	28.0	15.5	5.3	3.05	1.3	9.3

TABLE (ii)

Percentage of Each Frequency of Visit Category of Car Travellers Interviewed Who Came from Within Particular Automobile Travel Time Zones

Automobile Travel Time Zones	Frequency of Visit Category of Car Travellers						
	Three Times Weekly	Twice Weekly	Once Weekly	Once Every Two Weeks	Once Monthly	Once every Six Months or More	All Frequency Categories
0-2 Minutes	25.5	16.0	7.0	---	---	---	11.4
2-5 Minutes	42.5	33.0	40.0	10.0	6.5	3.0	26.15
5-10 Minutes	27.0	31.0	33.5	42.0	24.5	7.0	28.0
10-15 Minutes	5.0	20.0	15.0	30.0	18.5	15.5	15.5
15-20 Minutes	---	---	2.5	12.0	13.0	11.0	5.3
20-25 Minutes	---	---	2.0	4.0	10.0	3.0	3.05
25 Minutes or More	---	---	---	2.0	3.0	4.5	1.3
Out-of-Town Location	---	---	---	---	24.5	56.0	9.3
Frequency of Visit Category as Percentage of Total Car Travellers	33.0	15.0	9.0	16.5	18.0	8.5	100

at Polo Park (i.e., once a week or more), 55% of this 88% shop three times or more each week, 20% of them shop twice per week; 13% shop once weekly.

The vast majority of these higher frequency shoppers live in the trapezoid bounded on the north by Sargent Avenue and the southern limits of the International Airport, to the east by Maryland Street, to the south by the Assiniboine River, and by the western boundary of the City of St. James. (See Street map of Winnipeg, in folder). This area can be delimited as the franchise trading[1] area of Polo Park shopping centre. Although there are outliers of the higher frequency category, concentration in the vicinity of the junction of Notre Dame and Arlington Streets, and at Corydon and Kenaston, clearly in real terms and within the area defined, the trading area of Polo Park is highly localized according to this criterion of origin by schedule sample. Certainly, on this basis one can question how regional in scope is this "regional" shopping centre.[2]

When the distribution established by origin of respondents travelling by automobile (Diagram E) is compared to the map showing distribution of those travelling to Polo Park by public transport (Diagram F), as would be expected the former shows a much wider spread, which can be explained in terms of the inherent flexibility, and the time-distance advantages, of the private car. On the other hand, the origins of 'bus travellers are tied very much to lines of direct mass transit linkage between Polo Park and other parts of the city. (Overlay Diagram F on Diagram K.)

Of those respondents who travelled by 'bus from residential areas

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[1] See definition of terms, Appendix A.

[2] See concluding chapter for further discussion on this point.

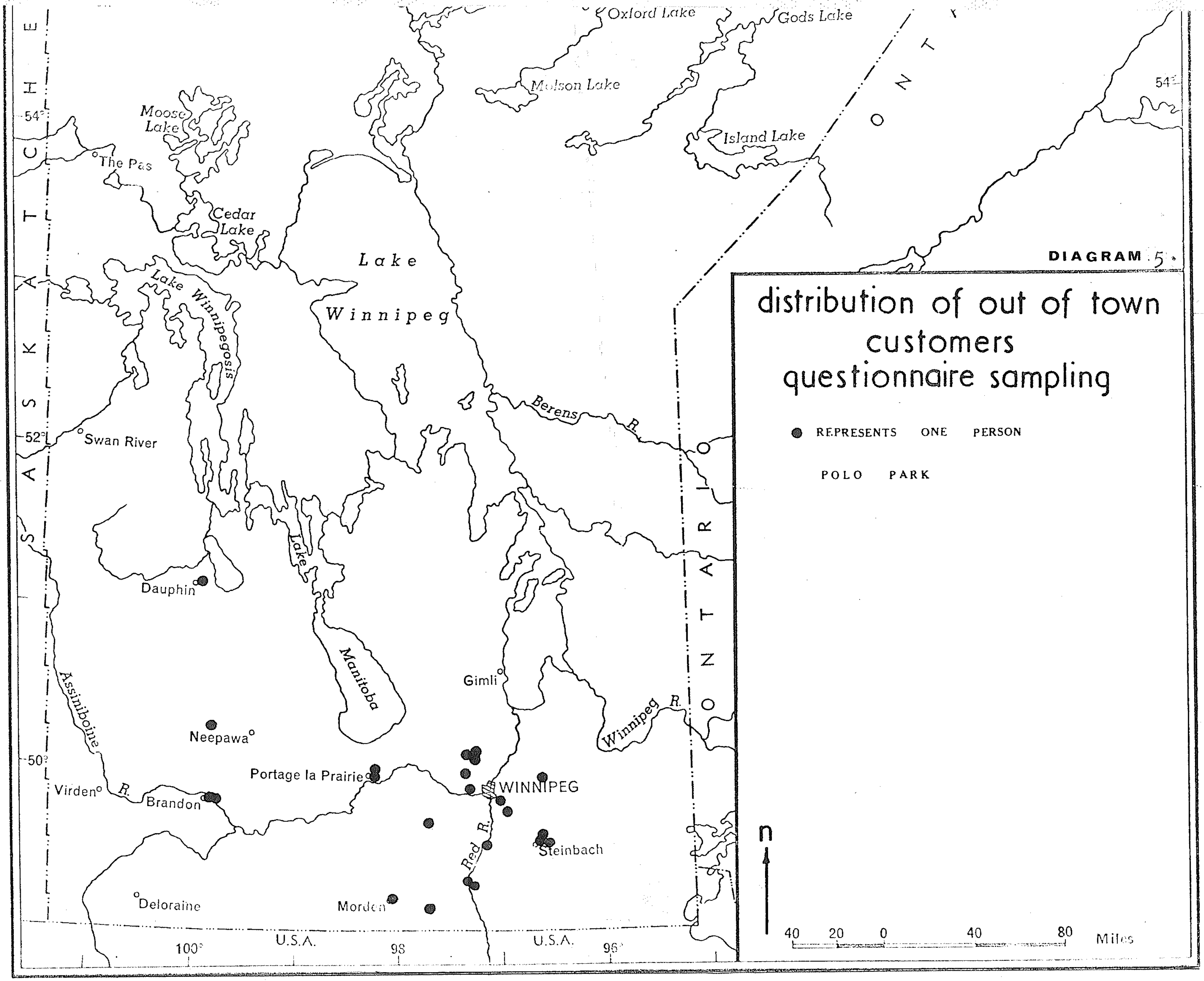

DIAGRAM 5

distribution of out of town customers questionnaire sampling found south of the Assiniboine River to Polo Park shopping centre, 50% actually gave addresses on the direct 'bus route, and 75% gave their origin of trip as being within close proximity (i.e., only a few blocks walk) of a direct 'bus route. The corresponding figures for those 'bus travellers from north of the Assiniboine was 60% and 85% respectively. Of the total respondents interviewed who stated their means of transport to Polo Park as being public transport,[1] 51% had an origin of trip on a direct 'bus route, and 65% were within easy walking distances. Even isolated 'bus travellers are connected, for the most part, by good transfer points, and these strong correlations existing between distribution and major routes of 'bus transport emphasize the confining influence exerted by the inflexibility of fixed lines of mass transit.

Although these "patterns" might be as expected, the exercise does serve to illustrate that because an important percentage of the patrons of Polo Park travel by 'bus[2] (see 'Mode of Travel' p. 39), it is clear that an extension of the network of routes giving direct access to the shopping centre would attract more Polo Park shoppers (and/or ease future parking difficulties at the shopping centre). Thus, efforts have been made to tap new residential estates, if possible; for example, in July 1966 the Polo Park 'bus routes were further extended into the St. Charles, Westwood, and Assiniboine residential developments, in western Winnipeg.

By comparison of Diagrams E and K, it can be seen that pockets of concentration of automobile travellers exist in areas in the city made inaccessible to Polo Park by poor or indirect 'bus services to the shopping

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[1] Approximately 25% of the 742 interviewed came by 'bus. (see 'Mode of Travel,' p. 39).

[2] Approximately 25% of the 742 interviewed came by 'bus. (see 'Mode of Travel,' p. 39).

centre. For example, all those respondents coming from the city of Transcona in eastern Winnipeg, travelled to Polo Park by automobile, since this reduces time - distance by one half, to 30 minutes compared with an hour's 'bus travel and transfer time. The same is true for the other more distant parts of the metropolitan area. Thus, the high percentages of car shoppers are apparent amongst those travelling from Winnipeg east of the Red River (82% by car, 18% by 'bus), from Fort Garry Municipality and south along Pembina Highway (95% by car, 5% by 'bus), and from the district of recent extension of residential development west along Portage Avenue towards the Perimeter Highway (88% by car, 12% by 'bus).

One can conclude that comparatively few people not favoured by proximity of home to a direct route will tolerate the time and effort of 'bus transfer, in order to make a shopping trip to Polo Park.

If the map of average automobile travel time isolines relevant to Polo Park are examined with the map illustrating the distribution of respondents travelling by automobile (overlay Diagram J on Diagram E), concentration is evident where the isochrones bend along main arteries to obey the increased traffic speeds of dual carriageways. (For example, along Portage and Ness Avenues, and associated sidestreets.) There are also small clusters in those suburban areas with inadequate access to Polo Park by 'bus (i.e., Fort Garry area), as stated previously.

From Table (iii), p. 54, the 2-15 minute isochrones are found to embrace by far the largest proportion of respondents travelling by car - in fact 83%. The small percentage (3%) held within the 0-2 minute travel time zone around Polo Park is explained by the fact that there is a comparatively small population in the area contained within this isochrone. In addition, two minutes driving time is only a short walk for local residents (overlay

Diagram F on Diagram J). Only 8% of the total respondents travelling by car are found in the 15-20 minute zone, and from Table (iii) it can be inferred that beyond the 15 minute isochrone the "wooing force" of the shopping centre is decidedly weakened.

The relatively high proportion (30%) of 'bus travellers amongst those people whose shopping trips to Polo Park began downtown, can be explained in part by the fact that Polo Park is only a 15 minute trip by frequent public transport from downtown Portage Avenue (13% of all 'bus travellers interviewed came from downtown). The request-stopping Portage - Polo Park 'bus, which drops shoppers at the shopping centre terminus, and the Portage Express 'bus which is almost as convenient, support frequent linkage with the central shopping district. Direct service accounts for the emphasis of distribution along Portage, Ellice, and Arlington Avenues, and along the 'bus routes on the opposite bank of the Assiniboine to Polo Park, as stated previously (p. 51).

The physical barrier of the C.P.R. railyards also brings its influence to bear on the time travel contours - if Diagram J is compared with Diagram M, it is found that north of Portage Avenue and east of St. James Street the 5, 10, and 15 minute isochrones approximate roughly with the one, two, and three mile radial distances from Polo Park. The ten minute isochrone comes to an almost abrupt halt just to the south of the C.P.R. tracks. This is at a radial distance of about only two miles from Polo Park, and to the north the 15 minute isochrone takes the driver little more than 3 miles from the shopping centre. In contrast a car at 10 minute, and 15 minutes, driving time west along Portage Avenue can cover 3 1/2 and 5 miles respectively.

Throughout the late nineteenth and early twentieth centuries the

TABLE (iii)

Automobile Travel Time Zone	Those Travelling by Automobile as % of Total Automobile Travelling
Minutes	%
0 - 2	3.0
2 - 5	20.0
5 - 10	38.0
10 - 15	25.0
15 - 20	8.0
20 - 25	4.0
> 25	2.0

PLATE H. THE CANADIAN PACIFIC RAILYARDS WINNIPEG - PHYSICAL AND CULTURAL BARRIER.

residents of Winnipeg's "North End" have always been faced by the problem of negotiating this barrier. It is no less a problem today (Plate H). From most areas of the North End it is as quick to go to downtown shopping facilites by 'bus as it is to drive south by car across the tracks to Polo Park. This appears to be the obstruction which causes the dearth of schedule respondents giving an address in this North End portion of high - and middle - density of population. Only 5% of the total automobile travelling respondents (4% of the total of 742 people interviewed) came from the urban area north of the C.P.R. tracks and west of the Red River. Indeed it will be realized, from a glance at any of the Diagrams A to F, that Winnipeg north of the Assiniboine is sliced in half by the south-east to north-west trending railyards, which are as significant an obstacle to extension of the franchise trading area of Polo Park as the rivers, or downtown competition.

An outline of the competitive retail centres in the metropolitan area of Greater Winnipeg can be found in Map L. If overlays of the distribution of respondents by frequency of shopping visits (Diagrams A, B, C, and D) are used in conjunction with Map L, the significance of these alternative shopping districts becomes evident. For example, because of the commercial developments along Portage Avenue west of Polo Park (arterial ribbon, two neighbourhood centres and one community centre), there were fewer respondents (only 8% of the total interviewed) from flats and residential areas along this major artery and branch streets, than from such areas associated with Ness Avenue (12% of the total interviewed), which is almost devoid of retail ribbon development. Again, only 4% of the total interviewed come to Polo Park from those residential districts (including Crescentwood and much of River Heights) within a one mile radius of Grant Park Plaza community shopping centre. The corresponding proportions for a one mile radius surrounding Northland community centre on McPhillips Street, and surrounding that on Portage, is only 2% and 6% respectively. With the exception of downtown Winnipeg (for the reason stated on page 53), there is no significant focus of Polo Park respondents surrounding other community, neighbourhood, or ribbon commercial developments.

Whilst it is true that the other variables outlined also influence the market allegiance of particular areas to particular retail centres, it would appear from comparison of Diagram A and L that each of these retail nodes successfully attracts the patronage of its immediate locale, with most of the respondents interviewed at Polo Park being distributed in the intervening spaces devoid of competition. Since the great majority of these competing community and neighbourhood centres were established in the first half of the sixties, subsequent to the opening of Polo Park, it appears that local stores are encroaching to some extent upon the trade of this regional centre.

By the same token there can be little doubt that Polo Park has taken a slice of the retail dollar once dominated by C.B.D. stores. This is part of the general process whereby the urban market has become subject to finer divisions.

The greatest single source of respondents is the downtown focus of Winnipeg (see Diagram A). In fact from this centre originates the trip of 10.6%[1] of the total interviewed at Polo Park, of whom 60% travelled by automobile (see Diagram E). It emerges that 60% of this 10.6% were rush hour or early evening shoppers - that is, people who work downtown and who frequent Polo Park on their way home along Portage Avenue between 5 p.m. and 6 p.m. Thus, the importance of the site of Polo Park (see Plate D) at a main junction

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[1] See p. 39, "Origin of trip" section.

of routes, on the homegoing side[1] of the major artery, so facilitating capture of the evening commuter traffic. An easy right turn and inviting empty parking spaces are persuasive beckoning forces. The remaining 33% were probably mostly "secondary shoppers" - that is, people who shop at Polo Park hoping to find goods which thay are looking for after a previous, but unsuccessful, visit to the C.B.D.

It has been noted that Winnipeg downtown, by far the largest retail complex in the urban area, is also the greatest source (10%) of Polo Park shoppers, as indicated by Diagram A, of distribution of respondents by place of origin or trip. The highest percentages of Polo Park shoppers coming from downtown on interview days which included evening opening hours[2] - that is, 13% on Monday 18th, 9.3% on Thursday 21st, and 14.4% on Friday 22nd October, 14.3% on Friday 12, 17.6% on Thursday 18th, and 23.1% on Monday 22nd. November,[3] would indicate attraction to home-going commuter traffic. The high percentage of respondents stating once-a-week frequency of visit[4] and the high proportion of couples[5] shopping on these corresponding evening dates, lend support to this argument. It would appear that the majority of shopping trips originating downtown were characterized by couples shopping during the early

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[1] Only two major shopping centres in Winnipeg are sited on the downtown going side of the street. Indeed, large supermarkets have found it advantageous to invest in a shift of site to the side most convenient for the evening commuter-shopper (i.e., Safeway Supermarket at Southdate on Pembina Highway).

[2] Polo Park stores presently stay open until 9 p.,. on Monday, Thursday, and Friday of each week.

[3] See Appendix D, "Origin of trip", section - for comparative figures.

[4] See Appendix D, "Frequency of visit" section - for comparative figures.

[5] See Appendix D, "Sex of respondents" section.

evening, on their way home from downtown places of work, with a regular once-a-week visit to Polo Park.

It was also apparent from interviews taken during lunchtime that many of the respondents came from offices and companies in close proximity.[1] This is as would be expected during this period compared to other hours of the day.

Other than these differences there does not appear to be any other divergence of patterns discenible between daytime, evening, and lunchtime shopping.

It is true that although downtown Winnipeg is a major source of Polo Park shoppers, it presents also an inpenetrable barrier to extension of the commodity trading area of Polo Park shopping centre. This can be seen not only from the almost total void of respondent distribution in the area immediately surrounding the C.B.D. (see Diagram A), but also from the analysis of the statistics in Tables A to G following (pp. 60-63).

Of the total interviewed, only 22.6% shop for half or more of their clothes at Polo Park (Table C), whilst 44.5% still go downtown to buy half or more of their clothes there (Table A). Of the total respondents, more than three times as many people shop downtown for half or more of their appliances compared with Polo Park, whilst the corresponding domination of downtown over Polo Park for furniture, is over eight times; and for shoes 2 1/2 times (compare Tables C and G).

Whilst it is true that since Polo Park opened there has been a considerable shift in shopping patterns from downtown to Polo Park, especially as regards clothes (compare Tables A and B), and to Polo Park from local stores

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[1] An average of 18% of those interviewed between 12 a.m. and 2 p.m. on weekdays, came from workplaces within about 1 mile of Polo Park.

INTERVIEW DATA - TOTALS: CHANGE IN SHOPPING HABITS

TABLE (A)

Percentage of total interviewed at Polo Park who used to shop downtown for half or more than half of the commodities listed, before Polo Park was opened

Clothes	88.5%
Food	5.5%
Furniture	90.8%
Appliances	88.2%
Shoes	87.2%

TABLE (B)

Percentage of those interviewed at Polo Park who, previous to the opening of Polo Park, shopped downtown for half or more than half of the commodities listed, but who now have changed to shop at Polo Park for half or more than half of the commodities listed.

Clothes	44.5%	(of 88.5%)
Food	2.8%	(of 5.5%)
Furniture	19.4%	(of 90.8%)
Appliances	29.8%	(of 88.2%)
Shoes	32.2%	(of 87.2%)

TABLE (C)

Percentage of the total interviewed at Polo Park who shop at Polo Park for half or more than half of the commodities listed.

Clothes	22.6%
Food	19.9%
Furniture	8.8%
Appliances	15.6%
Shoes	21.9%

TABLE (D)

Percentage of total interviewed at Polo Park who used to shop at local stores for half or more than half of the commodities listed, before Polo Park was opened.

Clothes	3.6%
Food	77.5%
Furniture	2.2%
Appliances	5.0%
Shoes	3.0%

TABLE (E)

Percentage of those interviewed at Polo Park who, previous to the opening of Polo Park, shopped at local stores for half or more than half of the commodities listed, but who now have changed to shop at Polo Park for half or more than half of the commodities listed.

Clothes	1.8%	(of 3.6%)
Food	29.4%	(of 77.5%)
Furniture	0.1%	(of 2.2%)
Appliances	1.2%	(of 5.0%)
Shoes	1.5%	(of 3.0%)

TABLE (F)

Percentage of the total interviewed at Polo Park who shop at local stores for half or more than half of the commodities listed.

Clothes	1.1%
Food	56.5%
Furniture	0.9%
Appliances	2.2%
Shoes	1.7%

TABLE (G)

Percentage of the total interviewed at Polo Park who shop downtown for half or more than half of the commodities listed.

Clothes	44.7%
Food	1.2%
Furniture	71.9%
Appliances	55.1%
Shoes	57.4%

as regards food (Tables D and E), it is quite clear also that there are very few people who are "shopping centre shoppers." The vast majority of the interview samples actually did more shopping for clothes, for furniture, and for appliances downtown than at Polo Park, except for perhaps the small proportion (less than 9%) who shopped very frequently (three times or more per week) at Polo Park.

It can be stated, therefore, that although certain projections have been attempted in mapping the influence of Polo Park upon the shopping patterns of the populace of Winnipeg, there is no such thing as "the" trading area of Polo Park - that is, an exclusive orientation of a locality (or localities) toward the shopping centre. There are merely zones where its impact is stronger than that of the competing centres. This impact varies considerably according to different commodity criteria. For instance, a particular urban area may be dominated by Polo Park retail of clothes and appliances, but perhaps for furniture, the same population prefer downtown shopping, and for food, frequent local food stores and not the large supermarkets at Polo Park shopping centre. In fact, the diagrams of distribution, and market area delimitations based on them, are simplifications of a very complex whole. And these simplifications are only truly meaningful if this complexity is kept in perspective.

It is quite certain, however, that downtown competition is as much an obstacle to the extension of Polo Park's trading area as physical limitations. The C.B.D. of Winnipeg, together with the North-South barrier of the Red River, succeeds in confining interview respondents to that part of the city west of the Maryland/Arlington Avenue area (see Street Map in folder). Notice the almost total absence of respondents east of Maryland Avenue, with its localized "convenience" shopping;[1] whilst as regards "non-convenience" shopping[1] this area appears to be the exclusive domain of downtown. It is probable that a similar situation exists in the urban area east of the Red River. The ring of residential landuse surrounding the central area of Winnipeg probably relies completely on downtown stores for shopping goods," to the permanent exclusion of any major suburban shopping centre development.

By cartographic comparison of the diagrams indicating total distribution of respondents (Diagram A), and those of residential landuse[2] (Diagram 7, p. 69), and of average income by census tracts (Diagram R and S), it can be inferred that Polo Park attracts mostly middle income shoppers. The consideration of the spatial arrangement of income groups in western Greater Winnipeg emerges as a variable of considerable and measurable importance in an evaluation of the scope and influence of Polo Park. In Tuxedo[3] (census tract 58), the highest income[4] area of highest residential land values (i.e., class A Diagram 7), Polo Park shoppers are significant only by their absence.

The number of respondents with an origin in the lower high[5] income

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[1]"Shopping goods" ("non-convenience goods") can be defined as those commodities which demand comparative shopping - that is, other than the everyday needs ("convenience goods") available at the local drugstore, supermarket or corner store.

[2]For classification of residential categories in Diagram 7, see Appendix N.

[3]For lacation see Index of census tracts, Diagram Q.

[4]That is, those have an income of 7,500 dollars, or more, per annum.

[5]That is, those have an income of between 6,500-7,500 dollars per annum.

and higher middle[1] income groups, located in the "prestige" River Heights area (census tracts 46, 47, 48, and 65), is alsosmall despite the much improved access of Polo Park from this area south of the Assiniboine River, by the St. James bridge link (Plate C).

Conversely, it is true that the low income residential and rooming-house area (i.e., class D in Diagram &) found north and south of the C.P.R., and the fringe area of the C.B.D., again support very few of the Polo Park interview sample.

The overwhelming majority of Polo Park shoppers do, in fact, come from the lower middle[2] and medium middle[3] income areas of the city of St. James, and from the area enclosed to the east by Maryland, to the north by Notre Dame, and to the south by the Assiniboine River. Middle income outliers are also found in the Fort Rouge and Wildwood areas (east of Pembina Highway), and in South Crescentwood (see Street Location Map in folder).

Further evidence in support of the thesis that Polo Park relies mainly on the patronage of the middle income groups, west of the river, is provided by a graph (Diagram 6) based on income data[4] of department store credit account customers.[5] The obvious inference can be drawn from the high incidence of accounts grouped in the \$3,500 to \$5,500 range of middle

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[1]That is, those having an income of between 5,500-6,500 dollars per annum.

[2]That is, those having an income of between 3,500-4,500 dollars per annum.

[3]That is, those having an income of between 4,500-5,500 dollars per annum.

[4]See Appendix K.

[5]Figures courtesy of the Management, Simpson-Sears, Polo Park.

income. In addition, the character of the stores found in Polo Park, and the goods they sell, are more likely to lower and medium income rather than to higher income tastes. Almost one in five of those people interviewed had the opinion that Polo Park lacked quality compared to downtown shopping (see Diagram 8). Further, Staseson[1] remarks that "Polo Park is catering to the lower middle class, but is fast up-grading its image."

Of the 19.4% of respondents who were of the opinion that the stores in Polo Park lack the quality of downtown shopping, many were more than slightly critical of the "budget" lines (especially as regards clothes, shoes, and furniture) found in the shopping centre. "Polo Park serves only the needs of its own suburban locality...it is a high class Eaton's basement."[2]

"It (Polo Park) has volume rather than specialized lines - fine for average things, but if we want anything special then downtown is the place to go."

"The stores (in Polo Park) have a medium price range for medium income people, and it suits us."

These are statements in response to question 6 on the schedule, and should not be dismissed from the mind without some thought.

There can be no doubt that there is a heavy accent upon promotional sales at Polo Park. The managers and lease-holders in Polo Park have found that goods in the medium price range yield the best return. However, this policy has attached a certain image to this shopping centre - if quality is desirable then downtown shopping is preferrable to a visit to Polo Park.

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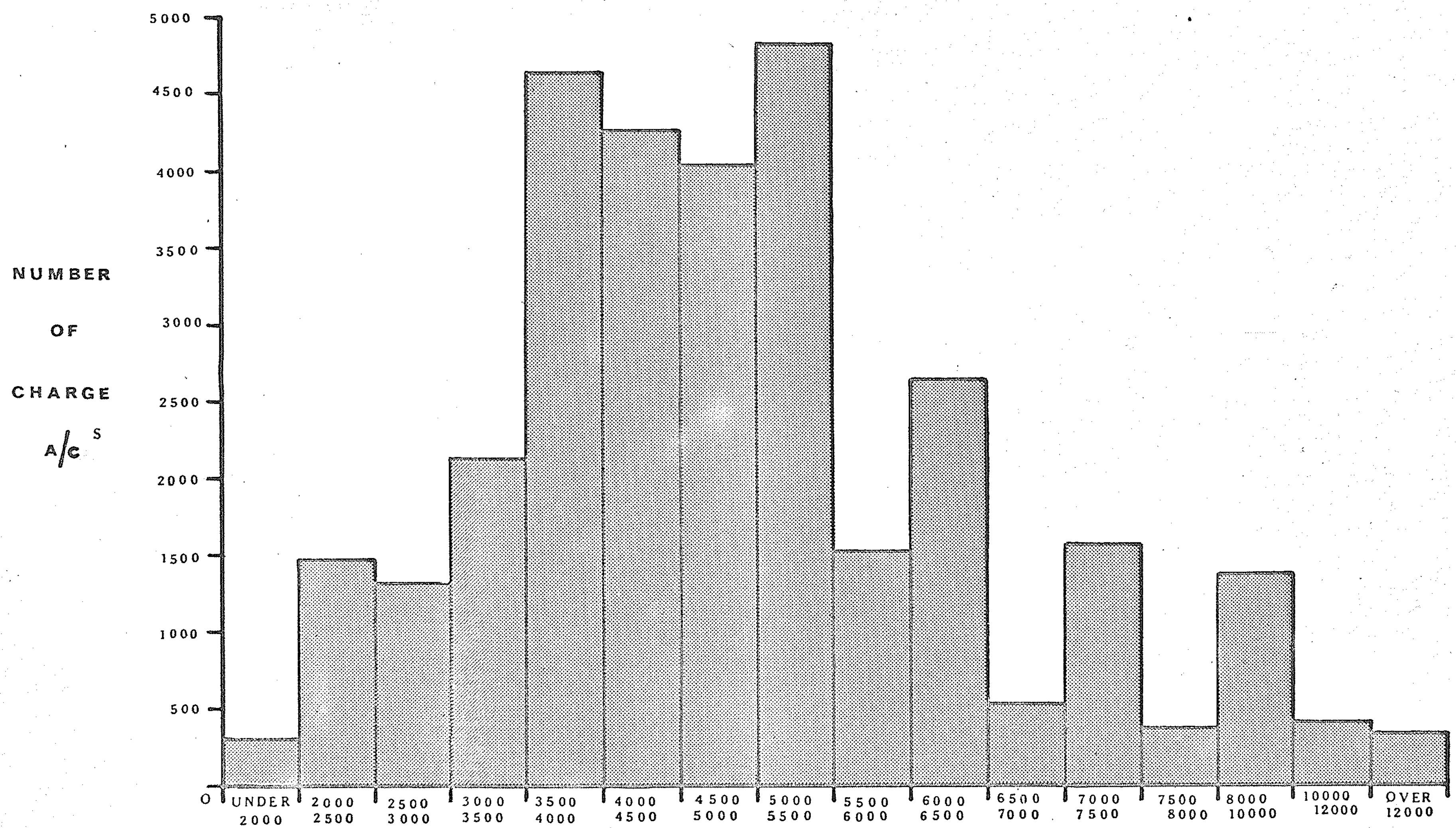
[1] S. J. Staseson, "The Planning of Shopping Centres," unpublished M.A. Thesis (1965); Department of City Planning, University of Manitoba.

[2] The basement is usually the "bargain" section found in the downtown department stores.

DIAGRAM 6 INCOME GROUPING OF DEPARTMENT STORE CUSTOMERS *1965*

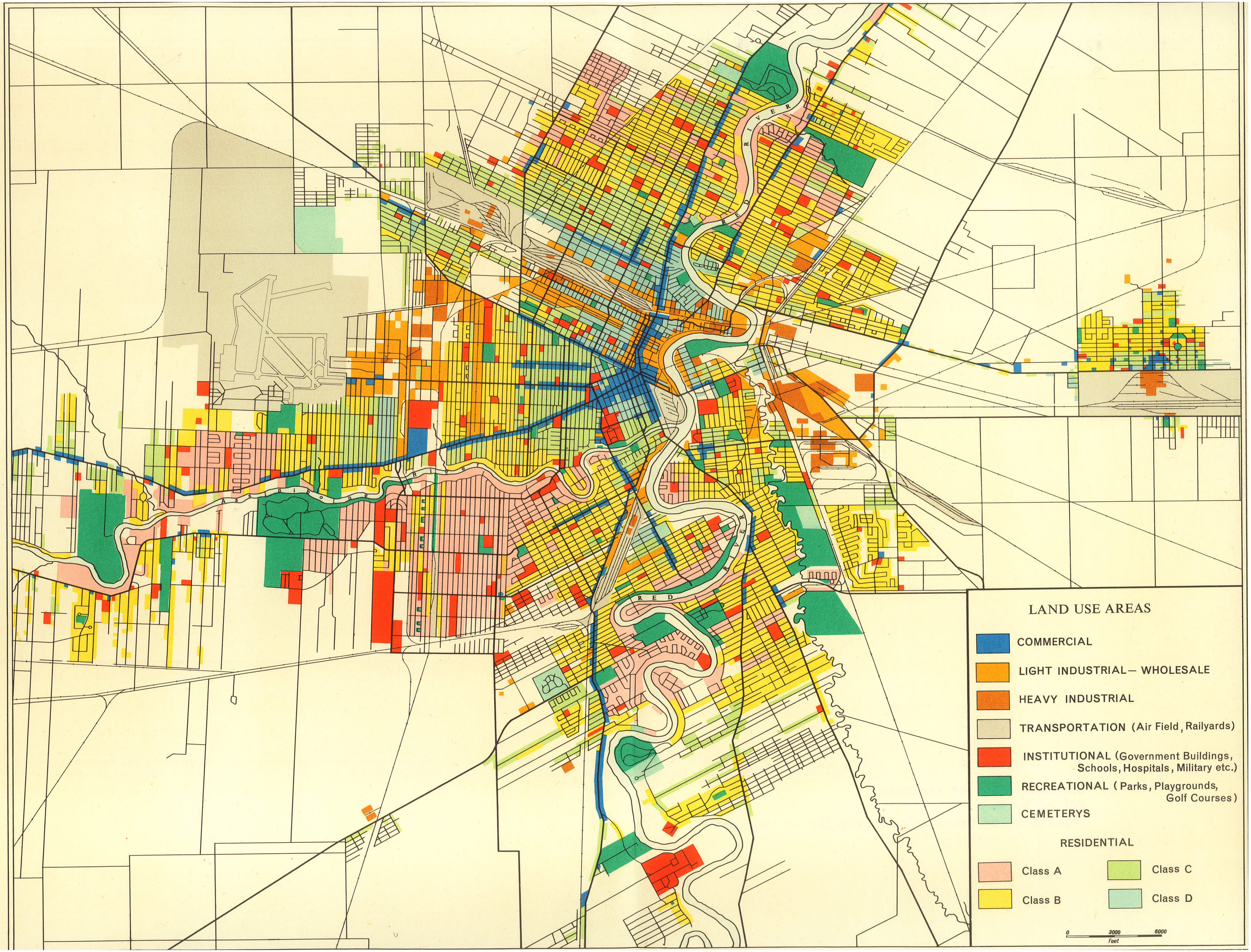


INCOME (DOLLARS/YEAR)

* See Appendix K for data Source

Diagram 7

SOURCE: Economic Atlas of Manitoba
Edited by T. R. Weir, PhD.
Department of Geography, University of Manitoba


LAND USE AREAS
COMMERCIAL
LIGHT INDUSTRIAL— WHOLESALE
HEAVY INDUSTRIAL
TRANSPORTATION (Air Field, Railyards)
INSTITUTIONAL (Government Buildings, Schools, Hospitals, Military etc.)
RECREATIONAL (Parks, Playgrounds, Golf Courses)
CEMETERYS
RESIDENTIAL
Class A
Class B
Class C
Class D
0 3000 6000
Feet
RED RIVER
RED RIVER

Yet this situation is almost certain to be tranformed within the next two years. Drastic innovations and extensions to the shopping centre have passed the planning board stage, as a response to two factors of overriding importance.

Firstly, the continuance of the trend of imbalance of income distribution favouring western Greater Winnipeg. (Compare Diagrams N and O.)[1] West of St. James Street all those census tracts containing a major source of the sample interviewed at Polo Park have improved their position relative to the urban area as a whole. Over 20% of the total respondents have an origin of trip in the census tracts 60, 61, 78, and 80; that is, census tracts having $10 millions or more income in 1965.[2] (Overlay Diagrams A and S); immediately east of Polo Park, census tracts 25, 29, 30, and 32 (all of which contain over $6 millions income in 1965)[2] embrace 16% of the total of 742 interviews; to the south of St. James bridge is found census tracts 47, and 48 ($6 millions or more income in 1965), which account for the origin of 4.5% of total respondents interviewed. Also, the majority of these census tracts show outstanding gains in relative income distribution between 1961 and 1965, (compare Diagrams N and O, and Diagrams R and S). It becomes clear that any expansion of facilities and content of Polo Park shopping centre would be warranted on these grounds. Eaton's new department store, and associated specialty shops, are steps taken in overcoming the present low-middle income bias at Polo Park.

Secondly, from the census of 1961,[3] in most cases the census tracts

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[1] For methodology of construction of Diagrams N and O, see Appendix L (ii).

[2] Income figures provided by Planning Division, Metropolitan Corporation of Greater Winnipeg, see also Appendix L (ii).

[3] Published by Dominion Bureau of Statistics, Ottawa, Bulletin CT.17.

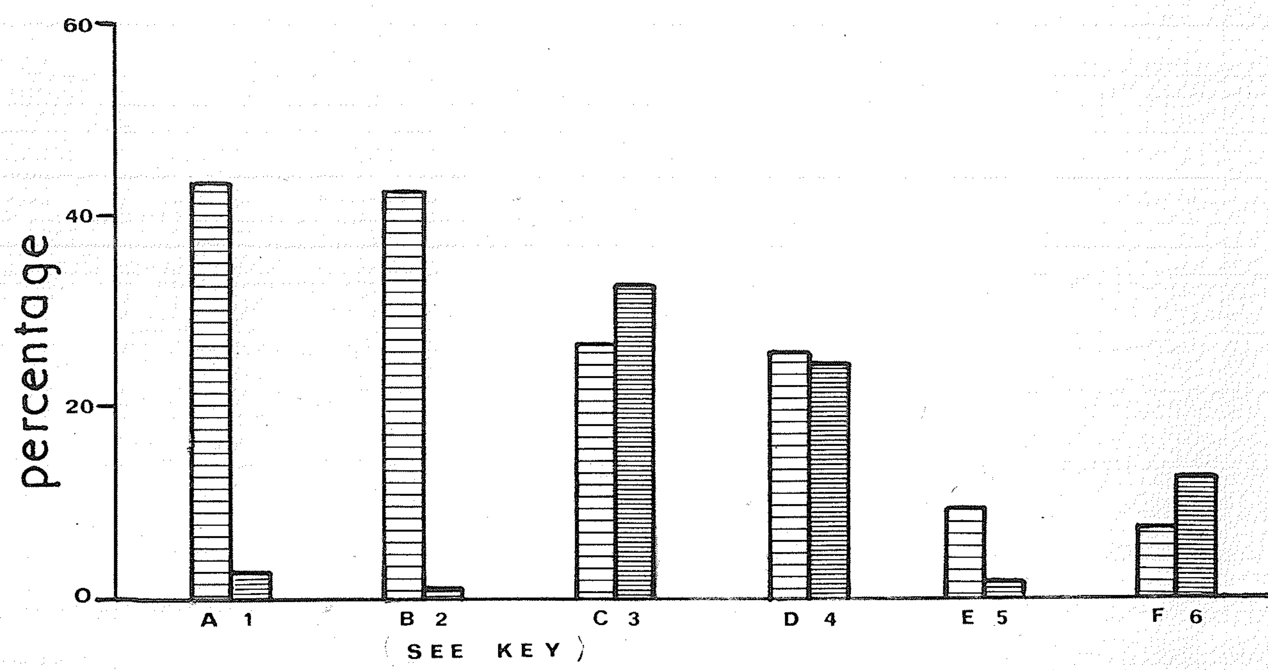
KEY	ADVANTAGES	%	KEY	DISADVANTAGES	%
A.	Ease of parking at Polo Park	43.93	1.	Parking crowded at peak hours (mostly Friday evening)	2.56
B.	A variety of stores together	42.72	2.	Stores too separated	0.5
C.	A complete range of goods	26.41	3.	Polo Park lacks variety	32.74
D.	Polo Park convenient to home	25.87	4.	Polo Park too far from home	24.25
E.	No traffic problems at Polo Park	9.29	5.	Driving nonsystematic at Polo Park*	1.07
F.	Convenient bus service to Polo Park	7.81	6.	Inconvenient bus service (transfer)	12.39
G.	Enclosed Mall shopping	59.43	7.	Polo Park lacks quality	19.40
H.	A pleasant shopping environment	37.73	8.	Habit of downtown shopping	13.34
I.	No disadvantages stated	27.22	9.	Downtown guarantee and service	5.39
J.	Parking is free	22.37	10.	Goods cost more at Polo Park	5.12
K.	Safe and interesting to bring children	15.63	11.	Better shoe store needed at Polo Park	4.31
L.	Polo Park convenient to work	6.06	12.	Polo Park lacks a good restaurant	2.56

*i.e. a 'free for all' exists.

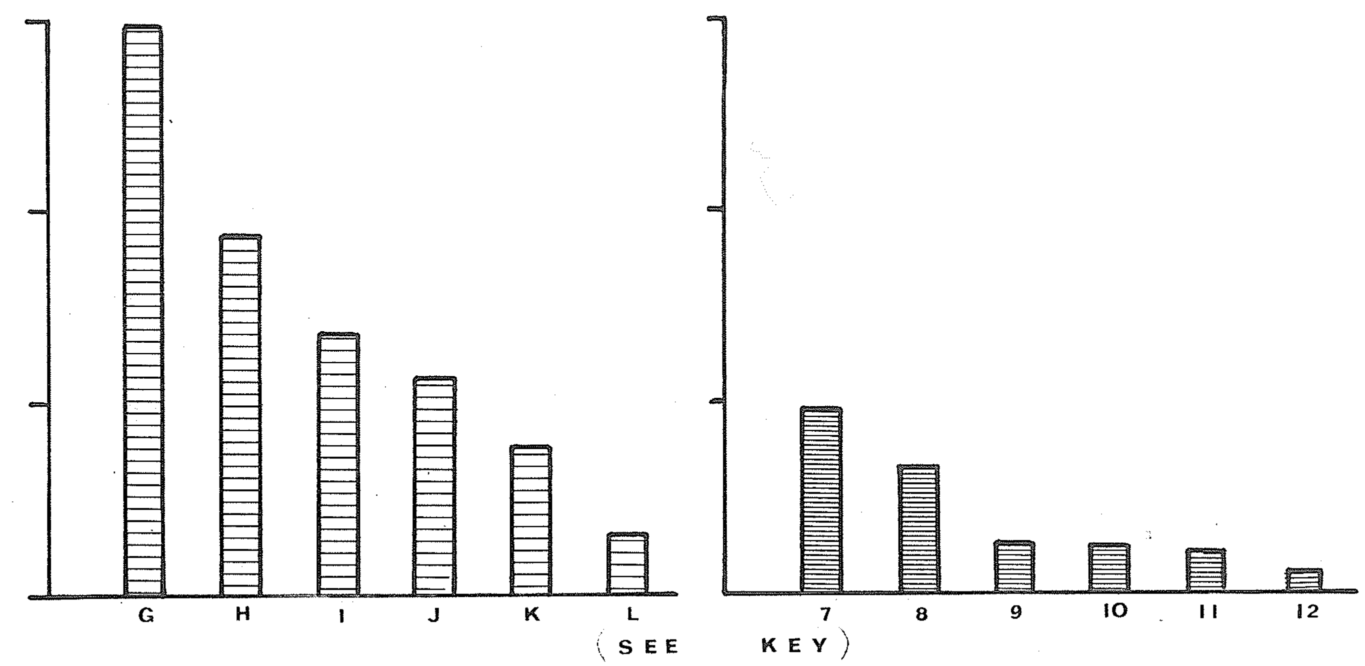
DIAGRAM 8

ADVANTAGES AND DISADVANTAGES OF SHOPPING AT POLO PARK

OPINIONS STATED BY QUESTIONNAIRE RESPONDENTS



advantages and disadvantages



advantages

disadvantages

containing those residential districts most pertinent to Polo Park shopping centre also have comparitively high family income. Each of census tracts 60, 61, 78, and 80 have average family incomes greater than $5,000.00 per year in 1961; whilst that for census tracts 47 and 48 was over $6,500.00, and only census tracts 25 and 32 had average family income levels lower than the average for the metropolitan area as a whole ($5,222.00). Most of these census tracts have the property of having middle income families, and on this basis alone there are grounds for "upgrading" the predominantly low and low-middle income image usually associated with Polo Park Shopping centre, and which charge account samples and interview results confirm.

This evidence suggests that the multi-million dollar shopping centre scheme for the comprehensive department store facilities of downtown, as well as the more exclusive specialty stores proposed,[1] are unlikely to experience the uncertainty of sales and fluctuating profits which initially characterized many of the early retail enterprises at Polo Park.

Besides a new department store complex, between 20 and 30 new shops will be established, including certain specialty stores (see Diagram 9, page 75 compare with Diagram 2, page 32). The chief change is seen to be the conversion of the supermarket premises at the north end of the Mall to non-food retail use. These changes should prove successful in attracting the higher middle income groups to Polo Park, thereby extending its trading area into River Heights and other residential districts to the south of the Assiniboine River. A survey similar to this, undertaken in a few years' time would probably reflect a re-orientation from traditional downtown shopping

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[1]Information provided by John Johns (Head, Market Research, T. Eaton & Co. Winnipeg) in conversation, July, 1966.

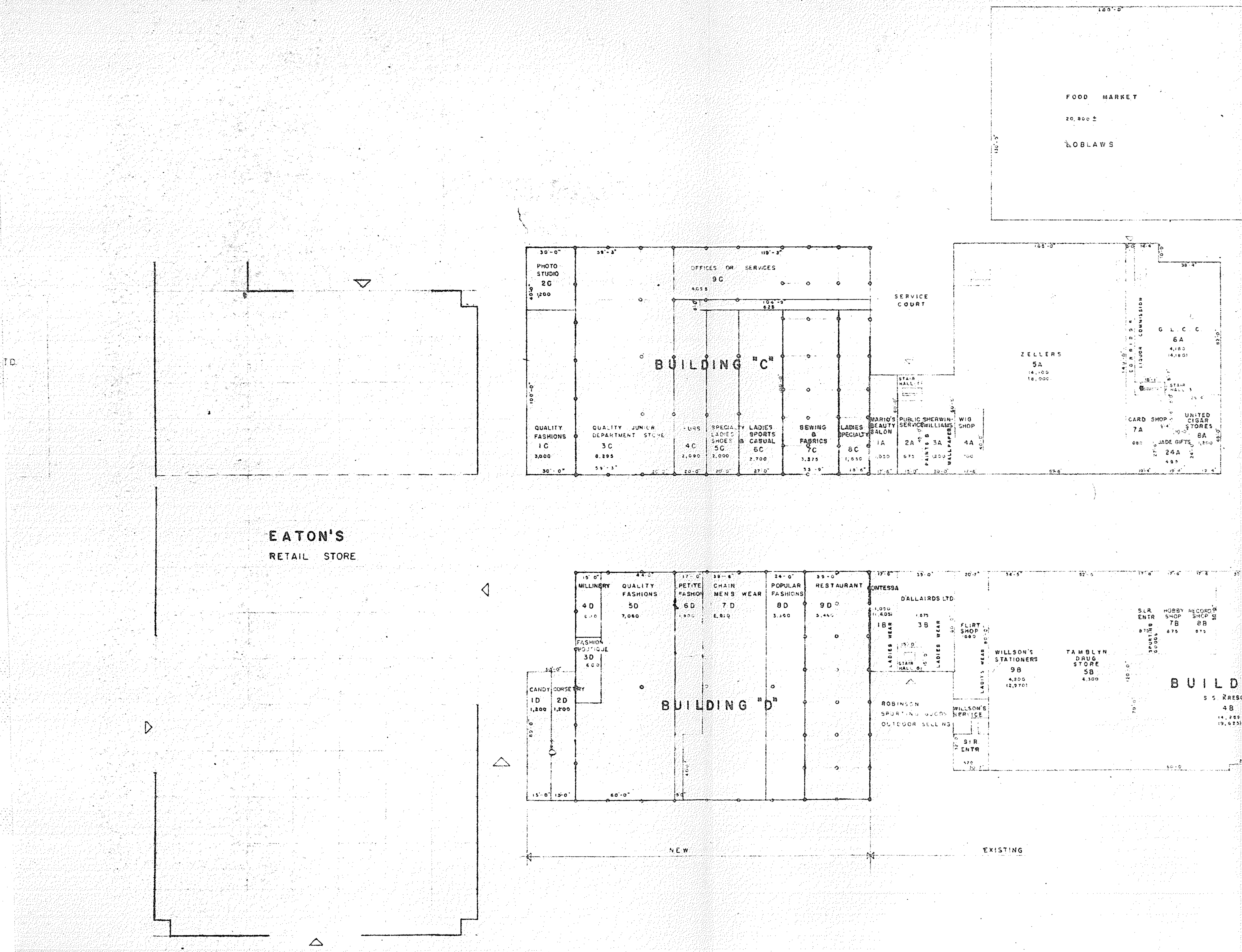
loyalties, and would serve to indicate that the content of any shopping centre is instrumental in determining the nature and extent of its trading area.

The major weight of this chapter has been placed upon the statistics and patterns which have emerged from the computer. The relationships between this information, and accessibility, commercial competition and sociological factors, have also been examined. The reason for this emphasis on questionnaire data is not only owing to the fact that the information gained from the questionnaire is the most comprehensive, but also because it is the most reliable index of the trade area, and other characteristics, of Polo Park.

As mentioned, supplementary research into shopping patterns was made by plotting addresses obtained by means of an automobile licence plate survey, and through access to a 1 in 20 sample of credit account records. Diagrams G and H show the Polo Park trade area as indicated by these research methods. A comparative glance at Diagram A will focus attention on the much more ubiquitous spread common to licence plate and credit account distributions. For example, Diagram G, which reveals the distribution of customers by automobile licence plate address, shows a pattern which, although more widespread than Diagram A (especially in the East Kildonan area), has its main features akin to the map of total distribution of respondents. The main discrepancies between the distribution of Diagrams G and A is, in fact, the absence of major licence plate foci from downtown Winnipeg, and from the immediate locale of Polo Park.

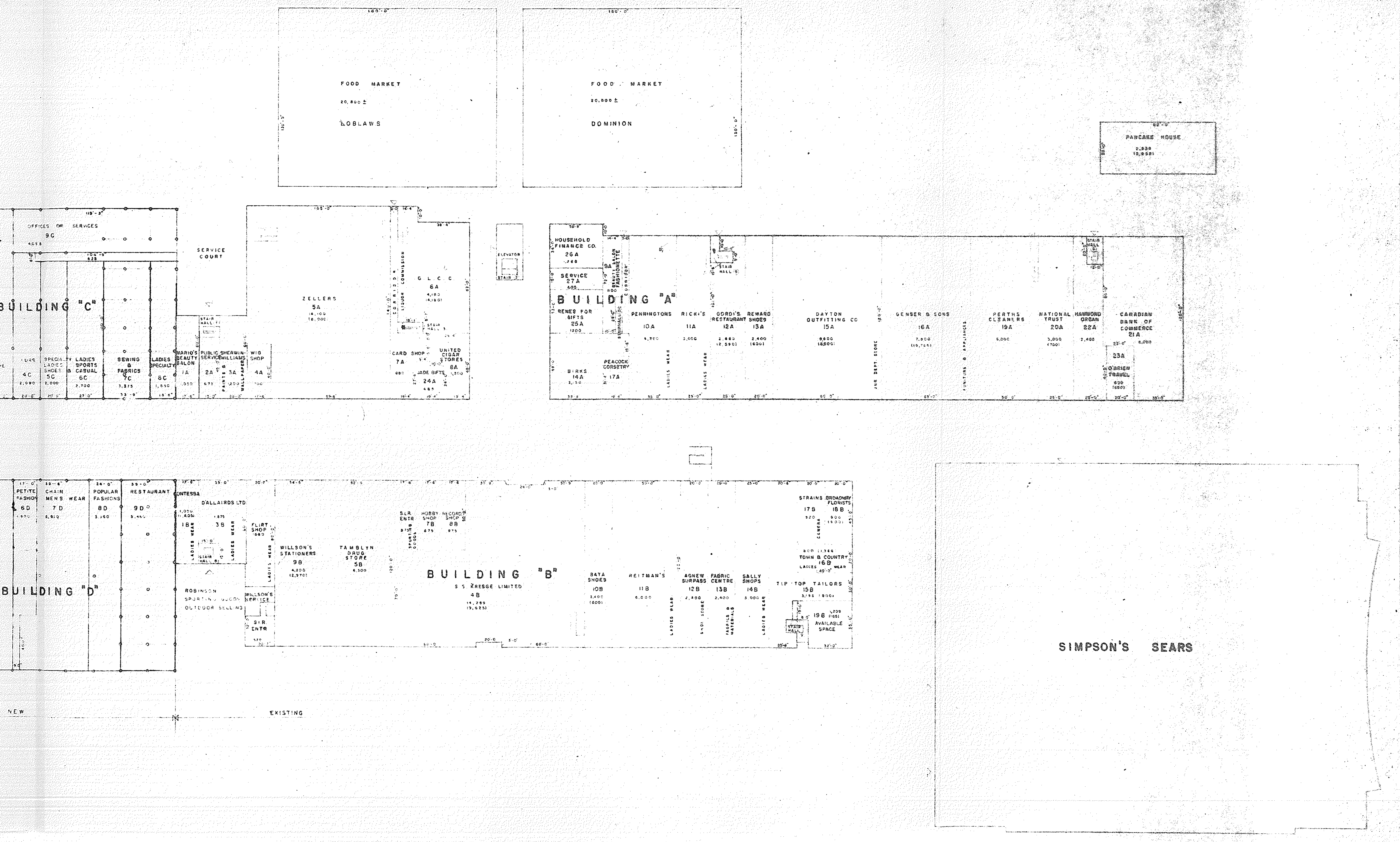
Indeed, one of the chief criticisms of employing car licence plate surveys to determine retail trade areas, is the question of whether or not the home address of the automobile owner is, in fact, the actual place of

DIAGRAM


FOOD MARKET
20,800 ±
LOBLAWS
PHOTO STUDIO
2C
1200
OFFICES OR SERVICES
9C
SERVICE COURT
BUILDING "C"
QUALITY FASHIONS
1C
3,000
QUALITY JUNIOR DEPARTMENT STORE
3C
FURS
4C
SPECIALTY LADIES SHOES
5C
2,000
LADIES SPORTS & CASUAL
6C
2,700
SEWING & FABRICS
7C
LADIES SPECIALTY
8C
MARIO'S BEAUTY SALON
1A
PUBLIC SERVICE
2A
SHERWIN-WILLIAMS
3A
PAINTS & WALLPAPER
WIG SHOP
4A
ZELLERS
5A
G.L.C.C.
6A
LIQUOR COMMISSION
CARD SHOP
7A
UNITED CIGAR STORES
8A
JADE GIFTS
24A
EATON'S
RETAIL STORE
MILLINERY
4D
QUALITY FASHIONS
5D
7,060
PETITE FASHION
6D
CHAIN MENS WEAR
7D
POPULAR FASHIONS
8D
RESTAURANT
9D
CONTESSA
D'ALLAIRDS LTD.
1B
3B
LADIES WEAR
FLIRT SHOP
FASHION BOUTIQUE
3D
CANDY
1D
1,200
CORSETRY
2D
1,200
BUILDING "D"
ROBINSON SPORTING GOODS OUTDOOR SELLING
WILLSON'S STATIONERS
9B
4,200
WILLSON'S SERVICE
STR ENTR
TAMBLYN DRUG STORE
5B
HOBBY SHOP
7B
RECORD SHOP
8B
SPORTING GOODS
BUILD
S.S. KRESGE
4B
NEW
EXISTING

DIAGRAM

POLO PARK RETAILERS
PRESENT & PROPOSED



origin for the visit to the Shopping Centre at the time of the survey. With this research method of mapping a shopping centre threshold, it is taken for granted that everyone begins their shopping trip at home. This assumption is far removed from reality, especially during the lunch-time and evening rush hour shopping periods, when "secondary" shopping and work-to-home-going traffic is highly important. There can be no doubt that many automobiles shoppers at Polo Park have an origin of trip downtown, and not that suggested by the addresses of the licence plate of their cars.

It is also to be noted that the licence plate survey takes account of only the major category of people who patronize the shopping centre--that is, those who travel by automobile (66%). Those shoppers who come by foot, or journey by public transport (and "other" means), are unaccounted for. The Polo Park questionnaire data would indicate that to rely only upon the licence plate survey would exclude a large percentage (34%) of those shopping at Polo Park who travel to the shopping centre by alternative means of transport.

In Diagram H, (showing the distribution of department store credit account customers) a major concentration is found in the city of Transcona (census tracts 54, 55, and 56), and other notable clusters also exist to the east of the Red River. One of these clusters is embraced by census tracts 15, 15, 68, and 69; another is in the west-central portion of tract 88. Others are found in census tracts 50 to 53, and 83 to 84. Diagram H also emphasizes that many people living in the "North End" of Winnipeg (i.e., north of the C.P.R. tracks), also possess department store credit accounts.

These discrepancies of emphasis apparent between Diagrams A and H underline the fact that the disadvantages of using the credit account sampling technique are serious. Firstly, it is a valid contention that a sample of the credit accounts of a good number of the stores is a prerequisite to obtain a distribution representative of the entire shopping centre, and not only from one major department store.

Conclusions based soley on the credit samples taken in this study have only limited application, therefore. Nor is it likely that the management of these stores would be unanimous in agreeing to give the research worker access to confidential records. It was not possible to gain access to sufficient credit information for a fully comprehensive cross-section at Polo Park.

Secondly, often the policy of the credit department is restrictive when the risks associated with lower income groups are involved - in the past a more favourable climate prevailed to attract middle and high income credit card users. Although a loosening of these credit restrictions is now encouraging lower income accounts, it is still open to question whether a completely representative income-group cross-section is provided by credit sampling.

Thirdly, it is often the case that management will initiate a promotional drive in parts of the trade area where the sales of its store are lagging, or where it is vital to break the monopoly of a rival chain. A case in point is the city of Transcona, where there has been a drive to further encourage patronage by facilitating the use of credit cards.

Fourthly, it is probably that a percentage of credit account users shop by mail order, or by telephone, or never bother utilizing their account except on rare occasions. In Diagram 10, many of the out-of-town credit accounts would probably fall into this category.

Lastly, even if these objections are discounted, the fact that an

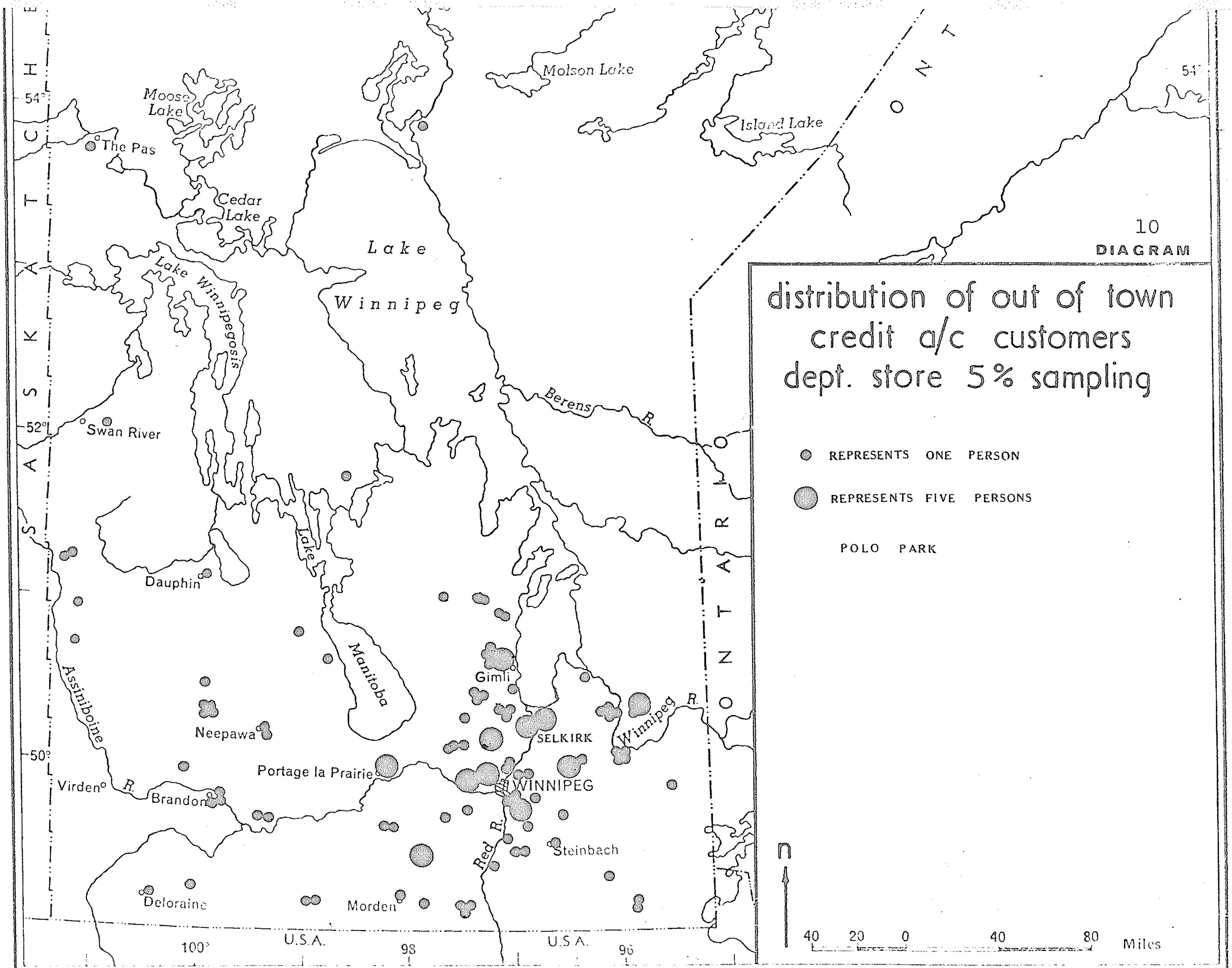


DIAGRAM 10

distribution of out of town credit a/c customers dept. store 5% sampling address has a credit account does not guarantee necessarily that a member of that household does in fact shop at the store in question. It might be that an account lies dormant for up to a year.

Generally, however, the credit account sample and the car licence plate survey tend to confirm the overall pattern of distribution which has been established by plotting addresses from interviews. With the exceptions outlined, Diagram H has a western emphasis which parallels Diagram A, and credit accounts belonging to the flower-shop at Polo Park (which is owned by a family living in western Winnipeg, and is well known and patronized by St. James residents) elaborate on this western orientation (see Diagram I). If Diagram G is compared with Diagram E showing the distribution of automobile travellers as derived from the interview sample, the only outstanding anomalies evident are those of the downtown and Polo Park origin foci - which a car licence plate survey would never bring to light, owing to the inherent disadvantage of this method, stated previously.

The comprehensiveness of the personal interview survey, as a basis for mapping and assessing franchise trading areas of established shopping centres (or stores), outlines this technique as the most reliable single method of establishing meaningful statistical characteristics, and accurate cartographic representation, of retail hinterlands.

Each of the methods should be used in conjunction with each other, but even major divergencies from patterns established by questionnaire schedule can most often be explained by the biases which are introduced when credit account and automobile licence plate samples are used. Only in the event of large scale dissimilarities will it be advantageous to examine critically the sample methods, or the execution, of the questionnaire interviews. For the other technique should always be regarded as supplementary, and not alternative.

As outlined in Chapter I, historically Winnipeg contains the most complex cultural matrix of any city in Canada, with the possible exception of Edmonton, Alberta. From analysis and comparison of demographic data contained in the Government of Canada censuses of 1951 and 1961, a study of residential segregation in the Metropolitan Winnipeg area reveals the persistence of the major ethnic group identity outlined in Appendix E.

It becomes apparent, however, that the premise that residential segregation is a significant variable in the development of the urban retail structure, and the subsequent patterns and characteristics of shopping habits, has only superficial validity. The acculturation, rather than the assimilation, of Winnipeg's ethnic minorities within the dominant "White Anglo-Saxon Prostetant" culture has proceeded sufficiently to allow the conclusion that the components of the modern affluent society possess common characteristics in satisfying shopping requirements.

There might be some local preferences, and perhaps patronizing of particular local food stores (for example, in the Jewish and Ukrainian districts), but this is negligible in the context of the urban area as a whole. The thesis that ethnic group residential segregation is of formative influence in shaping the retail patterns pertinent to Polo Park (as well as to other shopping centres in Winnipeg), can be dismissed as incapable of bearing detailed examination. It is hardly of importance when compared with the relevance of such factors as income and status groups, time-cost distances, the inequalities of the mass -transit system, the "pull" of alternative retail outlets, and the vagaries of choice implicit in the human element. Analysis of such variables, rather than of ethnic group considerations, would probably yield more positive indicators of the operation of mass-market orientation, even if a sociological study is necessary to arrive at this negative conclusion.

The final chapter will draw conclusions from the data and the diagrams which have resulted from field research at Polo Park, and which in this chapter have been explained in terms of their relationships with time-distance, economic and sociological factors.

Here it is appropriate to mention that each of these three variables should be viewed not only through the quantitative, but also from the historical standpoint; in terms of alignments imposed by the river-lines; in the coming of the railroads and the subsequent railyard developments; the Hudson Bay reserves; and the directions manifested by internal imigrant movements.

Much of the information derived from the personal interview survey has only been processed in terms of total percentages, and one or two of the more detailed inter-relationships between them. The computer can be asked to answer many more detailed questions; and it is intended that further programming and location plotting will yield a more sophisticated means of determining "franchise" and "twilight zone" trading areas. This involves detailed analysis of data from question 5 on the schedule,[1] and finding distributions of customers according to the percentage by which they have changed their commodity shopping, since Polo Park was opened. It is hoped to conduct further research in this direction.

The attempt has been made to quantify the function and characteristics of Polo Park shopping centre as accurately as possible, and also to

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[1]See page 38

map the distribution of the shoppers who frequent the centre. Even if in many instances human choice and preference are nebulous, and allowances must be made for strictly statistical evaluation, it is hoped that the conclusions which have been arrived at in the chapter which follows, prove meaningful and useful.

CHAPTER V

CONCLUSION

In a few years Polo Park will have reached maturity as an integrated regional shopping centre. The initial teething troubles of discouraging sales figures and architectural modifications have been overcome, and the present stage in its development is characterized by a shrewd and successful management and a minor "boom" of profits. This has encouraged a second major department store to locate at Polo Park, and these new premises will assume the position of being the most dominant element in the shopping centre.

One can debate the complex reasons behind the belated decision of T. Eaton Company to prise open the closing suburban retail market, by establishing a firm foothold at Polo Park; however, they appear to be summed up concisely by H. R. Imus, who in his article, "Projecting Sales Potentials for Department Stores,"[1] states:

> "In many cities department store managers postpone branches, at least temporarily. This is especially the philosophy of the stronger stores, whose branches are usually their downtown parent stores' strongest competition. Frequently the initiator of rapid branch expansion is a non-dominant store, possibly the second or third store in terms of rank based on sales volume. Such a store might attempt to improve its position at the expense of the dominant store. The latter in turn might permit such competitive action without retaliation, until such time as the competitor's branch units make substantial inroads into its sales volumes. Then a major branch facility might be undertaken by the dominant store for defensive purposes. Dominant management strategy in such cases emphasizes the fact that continued loss of position to competitors is worse than transfer of sales volumes from the parent (downtown) store to the branch (suburban) store."

This quotation could well apply to the situation existing in

[1] H. R. Imus, Economic Geography, Vol. 37, No. 1, January, 1961.

Winnipeg, for the new suburban branch of Eatons, at Polo Park centre, is a clear case of "when the tide changes, the beacon must be moved."[1]

The advent of a second major department store at Polo Park has caused some to speculate that Simpson-Sears, the rival establishment at the south end of the Mall, will experience a sharp, and perhaps permanent, decline in sales volumes.

However, the authorities on marketing geography are unanimous in their opinion that such a development, far from being a disruptive influence, generates increased trade throughout the shopping centre. For example, Baker and Funaro open their account of "Shopping Centres - Design and Operation,"[2] with the sentence: "Two stores, side by side, have always under a free enterprise system, done more than twice the business of a single store." Further, R. L. Nelson introduces the idea of "retail compatibility," or the interchange of customers between two stores to create greater business volume in both. He states[3] categorically that two department stores

> "...are complementary and feed each other. The Mall type should never be used unless there are two very strong generators. The Mall shape makes it easy for a shopper to park near a department store, enter it, and leave it to return to his car without having been exposed to the other stores. This situation emphasizes the importance of putting a second department store at the opposite end of the Mall to the first. In this manner there is created the greatest foot traffic past the smaller stores - cumulative attraction is at its peak, and impulse shopping is greatest."[4]

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[1] S. R. DeBoer, "Shopping Districts," Washington, American Planning and Civic Association, 1937.

[2] Baker & Funaro, "Shopping Centres - Design and Operation," Reinhold Publishing Co., New York. (1951).

[3] R. L. Nelson, "The Selection of Retail Location," F. W. Dodge Corporation, New York. (1958).

[4] The benefits of a second department store at Polo Park were confirmed in conversations, in November 1965, between the author and the manager (Mr. Campbell) of the Simpson-Sears Department Store.

There can be no doubt that the upward climb of retail sales at Polo Park has not yet reached its apogee. For besides promising increased patronage of the shopping centre by virtue of offering that fully comprehensive range of goods characteristic of downtown but not yet of Polo Park, the projected major department store should also encourage the upgrading of the general image of Polo Park shopping centre.

This is a consideration of no minor importance, for compared with other shopping centres of its type and size (for example, the Chinook centre, Calgary, or Yorkdale, Toronto), Polo Park in its present form still leaves much to be desired in its appearance, in its general shopping conveniences, and in its low-middle income bias of content[1] and quality.[2] The reasoning behind this statement is as follows:

It may be said that all retail transactions are the result of individual reactions to the factors of attraction and resistance, which can be grouped under four topics of discussion:

Firstly - Availability of merchandise; the type, size and variety of stores; the breadth of selection; credit and service facilities.

Secondly - Price factors; competitive prices, special sales and promotional activities.

Thirdly - Physical comforts; air conditioning and general environment, ease of inter-store circulation and collateral amenities.

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[1]See Appendix J. Nearly 33% of those interviewed stated that the content of the stores in Polo Park lacked quality compared to those downtown.

[2]See Appendix J. Of those interviewed 19% stated that the quality of downtown stores was absent at Polo Park, generally.

Fourthly - Convenience, time/cost distances and mass transit frequency.

In the first instance, at Polo Park the necessity of introducing more specialty stores (for example, a high quality shoe store[1] and "better" textile and garment stores) should be regarded as a strong recommendation of this survey, if Polo Park is to upgrade its image.

"The most successful centres have quality stores along with lower-priced stores - the centre should have both, and the owner must realize that he certainly has to sacrifice something to get the quality store into his centre."[2] Indeed, as part of the Department store scheme, a number of specialty stores are to be established,[3] though the type and content of these has not yet been determined.

Credit facilities at Polo Park have improved considerably since 1963,[4] but the same cannot be attributed to service conditions. A general complaint of shopping at the Department store was that the delivery and exchange facilities were poor,[5] but such inconveniences should be remedied when the incentive of major competition is evident at the other end of the Mall.

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[1] See Appendix J. The fact that nearly 4 1/2% of those interviewed stated that the single item of poor footwear selection and merchandising at Polo Park as a disadvantage, is indicative of this.

[2] C. Magnin, "Urban Land," September, 1962.

[3] In conversation, J. Johns, head of the Market Research Division, T. Eaton Company, Winnipeg.

[4] For example, easing of restrictions on granting Department store credit accounts to lower income families. (In conversation, Mr. Stregger, credit manager, Simpson-Sears Co. Ltd.)

[5] See Appendix J. Of those interviewed, over 5% stated this disadvantage.

Secondly, the level of prices at Polo Park can be compared favourably with those found in downtown stores, as indicated by the survey opinions concerning this. Only 5% of those interviewed aired the traditional complaint of the shopper - that of high prices (see disadvantages, page 71). The presence of Topp's discount store close-at-hand to the Polo Park centre allows any low-price void within Polo Park to be bridged by a walk across the parking lot.

The management committee of the shopping centre certainly does not lack imagination as regards running promotional activities and special sales. During the period October 1965 to September 1966 there were at least a half dozen major promotional drives,[1] including market-stall days, a book sale attraction, an automobile prize week, youth week, and a Dutch week, the latter being a very elaborate affair. In addition to these, there were the usual sales drives before Christmas and Easter, and the numerous price reduction periods of the individual stores in the centre, most of which were advertised extensively in the press, and on local television and radio stations.

Perhaps much of the effort of these activities would have been better directed towards attracting customers by improving the amenities, physical comforts and general environment of Polo Park centre. This can be illustrated by a few points which come to light from examining the responses to the last question of the interview schedule.

Litter, along the Mall and in the fountain, often gave the early evening shoppers the impression of lack of cleanliness. In some instances, female shoppers complained of the uneveness of the Mall flooring.[2] However,

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[1] An example of one of these can be seen from the photographs, Appendix I.

[2] High heels caught in cracks, and bruised knees of children, often result from poor Mall paving.

both these complaints could be taken care of if an effort is made to clean the Mall during the late afternoon; when the new flooring, costing $1.50 per square foot is completed,[1] the present interior drabness of the Mall should vanish. Yet it is doubtful whether facilities to leave children,[2] coats, and parcels for safe keeping will be initiated with the forthcoming extensions to Polo Park. If so, this is a short-sighted policy.

Nor is there a clock in any prominent position, or a shopping guide at the main entrances to indicate the layout and location of the stores. There was little provision for public conveniences. Other complaints included the absence of a dograil, a pram rail, or of pedestrian avenues in the carparks; and a lack of a pleasant coffee shop where the shoppers can relax.[3] It is to be hoped that the necessary measures are taken to improve these amenities and the general environment as part of the new $6 million investment programme. When similar shopping centres in Calgary, Minneapolis, or in Toronto are compared with Polo Park, it becomes obvious that great strides should be made towards improving both its general environment and its amenities.

Convenience of parking is a major advantage possessed by the suburban shopping centre over downtown, and this is no less applicable to Polo Park.[4] Yet there are indications that parking saturation might become as

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[1] Information obtained from the Management, T. Eaton Co., Winnipeg.

[2] Or for a children's playground.

[3] A small minority (2.5% of those interviewed, p. 71) also complained of the lack of a "good" restaurant. It would appear that the restaurant situated in the Department Store tends to escape the notice of some shoppers.

[4] See Appendix J. Ease of parking was the major advantage of shopping at Polo Park centre, as expressed by about 44% of those people interviewed. Over 22% also stated that free parking was another major advantage.

much a problem to Polo Park as it is to downtown Winnipeg. The sure signs of parking congestion - motorists weaving along the carpark aisles ready to swoop on empty spaces; a long walk to the Mall from cars parked in the far corners of the lot; and traffic jams at the entrances and exits - are evident, at Polo Park, even at the present time, during late evening opening dates, Saturday mornings, and at other peak shopping periods (especially pre-Christmas shopping).

As part of extension plans another 600 parking spaces are planned, in that area north from the new department store.[1] However, there must be grave doubt that the expected increase in traffic can be accommodated. Certainly, full parking lots will deter intending shoppers at peak hours. Investment in underground or multi-layer parking facilities,[2] to absorb twice the present 600 spaces target, would be a more realistic longterm aim.

Despite the disadvantages listed,[3] Polo Park shopping centre has made considerable inroads into certain large sections of the market area of Winnipeg west of the Red River, which was formerly dominated by downtown for "shopping" goods, and by local stores in relation to "convenience" goods. For from computation of question five of the interview survey, it it was found that of that 22% interviewed who now shop for half or more of

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[1] It should be noted that sport and entertainment at the stadium and Arena sometimes clash with peak shopping hours. On such occasions some method of eliminating "parasite" parking should be devised; for it is precisely this northern section of the carpark which will be vital for customers of the new department store, during evening shopping.

[2] This would solve the problem of the psychological impact upon customers faced by vast, half empty carparks during normal shopping hours.

[3] It might be noted that most of these are also common to downtown shopping.

their clothes ("shopping" goods) at Polo Park, 44.5% had gone to downtown stores to buy half or more of their clothes before Polo Park was opened. The corresponding figures for the other commodities listed are seen on page 61, Section A. When local stores are considered, the major shift to Polo Park is found to be in convenience (food) shopping, as would be expected - thus over 29% of the 20% of those interviewed now shopping at Polo Park for half or more of their food at Polo Park, formerly used their local corner store or supermarket.

Of the 742 people interviewed at the Shopping Centre, the fact that almost four times as many people still buy food locally rather than at Polo Park (i.e., 77.5% of those interviewed still shop at the local corner store or supermarket for half or more of their food purchases, whilst the corresponding figure for Polo Park is less than 20%), reflects the predominant "convenience" function of the neighbourhood store. By the same token, suburban encroachment upon the once traditional downtown commodities (furniture, clothes, shoes, appliances) indicates the C.B.D. is holding its own in the more specialized spheres (i.e., furniture sales - see Section C, page 62); but it would appear that inroads have been made by Polo Park sales of other commodities, on certain downtown stores. Thus, the decision of the T. Eaton Co. to promote branches in the suburbs, and speculation that the Hudson Bay Company will do likewise.

Certainly it can be substantiated that the advent of Polo Park Shopping Centre (A) had only limited effect on "convenience" grocery store supermarket trade, except in the immediate locality; and (B) it presented the first major alternative to downtown shopping. Though the exact percentage was not recorded, dozens of those interviewed, in answering question five (part 2), stated that before Polo Park was opened they did most or all of their shopping downtown, because they had no alternative shopping centre.

Of those interviewed, 13% stated that it was habit of downtown shopping which caused them to shop at Polo Park less than might be expected. The pull of past dominance still exerted by downtown is likely to weaken, however. For as Polo Park attains standing as a vital and integral part of the city, and comes to be regarded as more than merely an innovation, so will it gain also the patronage of new generations of Winnipeg shoppers, less directed by tradition.

In the works of J. E. Vance, Jr., "Half the excitement of downtown comes from the appraisal of our parents, and or our predecessor's thoughts and aspirations. Contrast this with the neutral comfort of shopping centres. The forms man creates to house his activities have changed."[1]

In the future, Polo Park, and other shopping centres in the suburbs of Winnipeg, are sure to gain an increasing share of the retail dollar. This is seen by Imus,[2] who states: "It is probable that in cities in which downtown department stores are aggressively defending their position against specialty and chainstores, there will be an increase in the department stores' share of the total market. In this manner the way may be opened for additional branch expansion and the development of still more regional shopping centres."

This encroachment upon downtown's formerly exclusive position in Winnipeg does not imply an absolute decrease in downtown sales figures.

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[1] J. E. Vance, Jr., "Factors shaping the downtown core," an address given at a course on city centre development called "Focus on Downtown," presented by the Community Planning Association of Canada in Winnipeg, January 26th and January 27th, 1966.

[2] H. R. Imus, "Projecting Sales Potentials for Department Stores in Regional Centres," Economic Geography, 37, (1961).

But it does suggest that the stores in Winnipeg's C.B.D. are experiencing a comparative decline when considering the overall increase in purchasing power of the population of the metropolitan area, and of leaping suburban centre profits.

The future success of Polo Park, and of the projected regional shopping centre at St. Vital, is almost inevitable. The impact of such developments will be further assured if the disadvantages associated with downtown - difficult parking, traffic congestion, and crowded impersonal shopping conditions in widely separated department stores - do not become characteristic of the suburban shopping centre. For there can be no dount that such shopping centres as Polo Park offer a new concept in shopping, as summed by J. W. Rouse:

> "One of the great opportunities of a shopping centre derives from the fact that it fits into the way of life of its shoppers in a manner that downtown and the old suburban centres can seldom, if ever, accomplish. The integrated plan, the convenience, the easy casual, relaxed atmosphere of the shopping centre...and special events, are designed to establish, and continually strengthen, the shopping centres' position as a real community centre."[1]

Even though it is unlikely that in the forseeable future the population of the metropolitan area of Greater Winnipeg will increase to such an extent as to support more than two regional shopping centres, in the face of great expansion of sales floor area in these and other suburban shopping centres, downtown retailers must pursue the policy of "positive

[1]From Gruen, V., & Smith, L., "Shopping Towns U.S.A." New York: Reinhold Publishing Corporation, 1960.

retrenchment" as outlined by Sternlieb.[1]

The situation in the late sixties is summed up by the statement:

> "Decentralization in Winnipeg, as in most other metropolitan areas, is inevitable. It is most probable that retailing will continue to expand in outlying areas, with a peculiar consistency of sales downtown."[2]
>
> (J. E. Vance, Jr.)

The new city centre plan goes some way towards implementation of these principles. Clearly, the historical process of accentuated growth westward along the Assiniboine River from the original focus of settlement has been the pre-condition for the location of a major suburban shopping centre in this area of Winnipeg. When the population to the south of the Assiniboine was linked with those people living on the northern bank, then the commercial viability of such an enterprise as Polo Park was hardly in doubt.

In the mid 1960's the population of metropolitan Winnipeg is arranged in three major sectors - on both banks of the Red River north of its junction with the Assiniboine; on both banks of the Red River to the south of the "forks;" and westward along both the southern and northern banks of the Assiniboine. In between these arms of development, with the exception of the industrial (suburban) city of Transcona, there are voids of residential development, although gradually these are being "filled in."

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[1] The principles of positive retrenchment as put forward by Sternlieb are as follows:

(A) C.B.D. planners must cut back marginal retailing operations in order to strengthen the viable and specialized establishments.

(B) A concentration downtown of retailing and other functions to make them physically suitable for the pedestrian.

(C) C.B.D. appeals; compact design, attractive environment, good service and ease of parking.

[2] Permission to quote from conversation, University of Manitoba, January, 1966.

In the second half of this decade, the growing population in Fort Garry and St. Vital, in the southern section, is fast approaching that situation found in the western portion during the late 1950's, with one important exception. There is not yet any bridging of the Red River to join the east and west banks in the southern section.

To reach St. Vital from Fort Garry one must decide whether it is towards downtown and across the Osborne bridge. Plans for the construction of the inner Perimeter highway, though not yet finished in detail, promise to reorientate the traditional N.-S. and downtown-suburban outlook towards a more convenient E.-W. and intersuburban movement.

In the event of completion of the proposed inner Perimeter bridge link to the south, it is realistic to consider investment in a second regional shopping centre. This is the stated intention of the T. Eaton Company.[1]

In the northern section, a similar situation exists. It would not be amiss to suggest that another large retailing complex might possibly develop at this other bridging point, if this had not been precluded by the promotion of "ad hoc" neighbourhood centres and retail "ribbon" on highway sites in West Kildonan, and between East Kildonan and Transcona (see Map L).

Perhaps the retail requirement of the post-war increase in the population of metropolitan Winnipeg, accompanied by massive technological progress, were not anticipated. The store facilities of the downtown centre became as inadequate as its road space for accommodating parked or

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[1] Winnipeg Free Press, and Tribune, May 20th, 1966. And in conversation with Market Research Division, T. Eaton & Co., September, 1966.

moving automobiles. Polo Park was proposed as the first important alternative in the suburbs. But Winnipeg's downtown is still inadequate. The inconvenience of travel and of congestion, will probably be in the same proportion for residents of southern Winnipeg in the late sixties, as that for western Winnipeg in the late fifties. When the St. Vital bridge links Fort Garry to St. Vital, it will provide a trade area warranting another major suburban shopping centre.[1]

It appears that almost exact parallel to the western Winnipeg situation will result from construction of the inner Perimeter highway. And similar developments could well occur in northern Winnipeg. Downtown Winnipeg will never regain its former complete dominance, and in fact suburban shopping has tended to act as a safety valve against a complete downtown standstill of congestion.

But with the threat of three major alternative centres, those concerned with the future integrity of Portage downtown should act swiftly along lines similar to those suggested by the Twenty Year Development Plan put forward by the Metropolitan Corporation of Greater Winnipeg.[2] Only by positive retrenchment will Winnipeg's downtown retain that importance which is appropriate to its position as <u>the</u> regional retail centre of the metropolitan area and surrounding region. The alternative is a considerable increase in the stature of integrated suburban shopping centres; satellite business districts which seriously rival the central pull of downtown Portage and Main.

It seems certain that geographically the retail market of metropolitan Winnipeg has one major regional centre - in the wider sense of the

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[1] See Diagram 12, Appendix O.

[2] Winnipeg Free Press, July 15th, 1966.

word "regional"[1] - this is downtown. From Diagrams 5 and 10, it is apparent that Polo Park attracts the loyalty of only a minute proportion of the population in the rural region surrounding, and is dependent upon, the retail facilities of Winnipeg.

Within the large market area which constitutes Metropolitan Winnipeg, the city region is capable of sub-division into "major suburban shopping centres" (i.e., Polo Park, and perhaps the new St. Vital centre), and then into "suburban centres," and lastly, into "minor suburban centres." This sophisticated hierarchy is not yet completely definable in Winnipeg, and only an increase in population and in freeway and bridge-building will make it possible.

It is certain, however, that although it qualifies to be described as a "regional" shopping centre, in terms of most accepted definitions, Polo Park does not have by any means a fully comprehensive market 'draw' area, in the context of "regional" meaning, the large homogeneous rural area surrounding Winnipeg. Even if one considers the concept of the region as embracing the urbanized area, Polo Park presently possesses a large degree of attraction only to sections of the population living west of the Red River. In real, practical terms of the word "regional", therefore, Polo Park can be designated as a major shopping centre in the western suburbs of Winnipeg. In fact, it could be termed, justifiably, a "major

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[1](Regional Centre)	Major Suburban Centres	Suburban Centres	Minor Suburban Centres
Downtown	Polo Park St. Vital ?	Southgate Highway 59 Silver Heights (etc.)	Including corner cluster and ribbon retail development

suburban shopping centre."[1]

This present sub-regional influence of Polo Park could well be greatly extended following the opening of the new department store and satellite shops by 1970, though any estimate of the increase in its scope regionally can only be guesswork until the amount of capital investment, and the quality of retailing, have been decided upon by the developers.

The great upsurge in shopping centre building in Winnipeg, was marked initially in 1959-1960, by the construction of Polo Park. This shopping centre has now reached maturity as a successful enterprise, and looks forward to consolidating its position in the urban retail hierarchy, with the plans put forward by the T. Eaton Company. In the process of execution of these plans it is to be hoped firstly, that it will result in activity on the part of downtown merchants and planning bodies towards remedying all of the inadequacies of congestion and environment associated with C.B.D. retailing. For, in the case of downtown Winnipeg, inaction will lead eventually to greater relative, if not absolute, decline in sales volumes. Finally, it is to be hoped that a Polo Park, complementary to Portage downtown, will not itself fall foul of the disadvantages of congestion and shopping environment which would result from underestimates of future parking facilities, or unwillingness to upgrade its low-middle income image. Longterm success can only be achieved by experimentation with specialty shops in conjunction with the new department store, thus encouraging the patronage of the higher middle income groups which it presently lacks.

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[1] Or, as J. E. Vance, Jr., states "an integrated suburban shopping centre." In conversation, Winnipeg, January, 1966.

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A P P E N D I C E S

APPENDIX A. DEFINITION OF TERMS

It is necessary to define various terms (which are enumerated below) in order to avoid any confusion in the pages which precede. In this way exact meanings and bounds can be determined so that accuracy and the interpretations made can be assessed more easily.

Residential Segregation

"When a disproportionately larger number of people of the same ethnic group concentrate in a given section of the urban area." (E. E. Bergel "Urban Sociology", McGraw-Hill Co. Inc., New York 1955).

Metropolitan Winnipeg or Greater Winnipeg

As defined for this paper it does not correspond with boundaries of the Metropolitan Corporation of Greater Winnipeg, the political boundary of the Metropolitan Winnipeg Area, but coincides with the area of the Metropolitan Winnipeg Census Area (as defined by the Census of Canada).

Census Tract

"Census tracts provide a means of comparison of social and economic factors within an urban community which are often obscured in totals for a city or Metropolitan area as a whole. These statistical units are designed with a view to approximate uniformity in size and population, and to the inclusion of an area which is fairly homogeneous with respect to economic status and living conditions." (Census tract Bulletin 1951. No. CT 8).

Ethnic Group

"In the census a person's ethnic group is traced through his father. In 1961 each person was asked the question - "To what ethnic or cultural group did you or your ancestor (on the male side) belong on coming to this continent? The language spoken at that time by the person, or by his paternal ancestor was used as an aid in the determination of the person's ethnic group." (Census Tract Bulletin 1961. No. CT 17).

One should be aware that this census tract classification of ethnic groups has its limitations, for the practice of tracing origins through the paternal line "tends to conceal the mixed nature of an individual's ethnic background." (C.N.B. Ryder, "Interpretation of Origin Statistics", Can. Journal of Economics and Political Science, Vol. XXI, No. 4).

The "franchise trading area"

Defined here as that portion of the total trading area in which Polo Park has comparatively little competition, (i.e. that area in which it holds a dominat influence in the retail orientation of the population).

M. Parten in "Surveys, Polls and Samples" defines the following:

A "schedule"

A form carried and filled out by the investigator.

A "questionnaire"

A form, mailed out and filled in without the assistance or supervision of the interviewer.

In this thesis use of these words will stand as defined.

APPENDIX B.

WINNIPEG COMPETITIVE SPACE*

Company and Location.	Gross Area.	Wall Exclusion.	Food & Leased Area.	Net Area.
T. Eaton & Co.	1,625,045	27,195	23,500	1,574,350
Clark - Gamble Ltd. Grant Park Plaza Store) Highway 59 Store) Northgate Store) Empress St. Warehouse)	282,800	6,300	5,000	281,500
Simpsons - Sears Polo Park.	278,480	4,080	-	274,400
K - Mart.	170,140	3,840	-	166,300
Zellar's County Fair.	147,218	3,138	-	144,080
Topp's & Army & Navy Opposite Polo Park.	92,975	3,975	-	89,000
Hudson's Bay Company (Store & Service Building)			20,250	786,310
TOTAL SPACE IN WINNIPEG			38,750	3,315,940

N.B.
* Source; Requested not available for publication.

APPENDIX C. (see DIAGRAM 3 b).

QUESTIONNAIRE - COMPUTERIZED DATA (TOTALS 742)

LOCATION

A	19.54
B	20.61
C	12.93
D	11.85
G	35.04

SEX OF RESPONDENTS

Male	9.97
Female	64.42
Together	25.60
Accompanying Children	36.6

FREQUENCY OF VISIT

Once per week	32.88
2 times per week	14.95
3 times per week	8.89
Once a fortnight	16.57
Once a month	18.05
6 months	8.62

MODE OF TRAVEL

Bus	24.79
Walk	8.89
Car	66.03
Other	0.26

ORIGIN OF TRIP

Home	75.06
Down-town	10.64
Work-place	10.24
Other	4.04

ADDRESSES OF RESPONDENTS

Non-specific	15.49
Specific	84.51
Out of town	6.73
In town	93.26

APPENDIX D. CONTINUED

	18th +	19th	20th October 1965	21st + October 1965	22nd +	23rd	12th +	15th	18th + November 1965	20th November 1965	22nd +	24th
MODE OF TRAVEL												
Bus	24.00	30.00	20.00	24.41	27.47	21.87	10.71	35.71	28.57	22.80	28.20	22.22
Walk	4.00	15.71	18.66	11.62	8.79	1.56	3.57	14.28	6.59	8.77	7.69	3.70
Car	71.00	52.85	61.33	63.95	63.73	76.56	85.71	50.00	64.83	68.42	64.10	74.07
Other	1.00	1.42	0	0	0	0	0	0	0	0	0	0
ORIGIN OF TRIP												
Home	73.00	74.28	72.00	68.60	70.21	93.75	75.00	78.57	71.42	82.45	66.66	85.18
Down -Town	13.00	7.14	5.33	9.30	14.39	3.12	14.28	7.14	17.58	8.77	23.07	3.70
Work Place	13.00	8.57	16.00	11.62	9.89	1.56	10.71	14.28	8.79	8.77	10.25	11.11
Other	1.00	10.00	6.66	10.46	5.49	1.56	0	0	2.19	0	0	0
ADDRESSES OF RESPONDENTS												
Non Spec-ific	14.00	18.57	18.66	16.27	18.68	18.75	3.57	7.14	16.48	8.77	15.38	11.11
Specific	86.00	81.42	81.33	83.72	81.31	81.25	96.42	92.85	83.51	91.22	84.61	88.88
Out of Town	5.00	14.28	6.66	4.65	4.39	6.25	17.85	0	9.89	3.50	0	7.40
In Town	95.00	85.71	93.33	95.34	95.60	93.75	82.14	100.00	90.10	96.49	100.00	92.59

+ Indicates evening opening.

For total percentages for the 12 interview days see appendix C.

APPENDIX D.

QUESTIONNAIRE - COMPUTERIZED DATA (COMPARATIVE) OF INTERVIEW IN POLO PARK CENTRE (SEE MAP)

	18th	19th	20th	21st	22nd	23rd	12th	15th	18th	20th	22nd	24th
			October 1965						November 1965			
LOCATION												
A	72.00	7.14	0	11.62	7.69	0	0	0	24.17	24.56	20.51	25.92
B	28.00	25.71	1.33	36.04	15.38	0	0	92.85	32.96	14.03	25.64	0
C	0	34.28	0	32.55	13.18	0	0	7.14	15.38	21.05	10.25	3.70
D	0	32.85	0	19.76	18.68	0	0	0	10.98	17.54	28.20	0
G	0	0	98.66	0	45.05	100.00	100.00	0	16.48	22.80	15.38	70.37
Totals	100	70	75	86	91	64	28	14	91	57	39	27
SEX OF RESPONDENTS												
Male	11.00	15.71	10.66	13.95	6.59	7.81	3.57	7.14	6.59	12.28	10.25	7.40
Female	62.00	72.85	74.66	63.95	63.73	51.56	46.42	85.71	67.03	66.66	58.67	59.25
Together	27.00	11.42	14.66	22.09	29.67	40.62	50.00	7.14	26.37	21.05	30.76	33.33
FREQUENCY OF VISIT												
Once	36.00	21.42	33.33	39.53	39.56	32.81	39.28	35.71	26.37	29.82	38.46	29.62
Twice	16.00	25.71	21.33	10.46	16.48	12.50	3.57	14.28	15.38	8.77	10.25	0
Thrice	10.00	12.85	8.00	5.81	7.69	4.68	14.28	35.71	7.69	8.77	7.69	7.40
2 Weeks	12.00	14.28	21.33	19.76	16.48	14.06	7.14	7.14	16.48	22.80	20.51	18.51
Monthly	21.00	18.57	9.33	16.27	13.18	20.31	21.42	7.14	21.97	21.05	23.07	22.22
6 Months	5.00	7.14	6.66	8.13	6.59	15.62	14.28	0	12.08	8.77	0	22.22

APPENDIX E

In 1961 the Census Metropolitan Area of Winnipeg was divided into 99 census tract areas, this division into a large number of small areal units providing a basis for the detailed statistical analysis of the spatial patterns characteristic of the population within the Metropolitan Winnipeg area. Census tract numbers 1 through 48 embrace the city of Winnipeg, whilst the remaining 51 correspond with the other 15 Metropolitan area municipalities, which together contain almost all the half a million population of Greater Winnipeg.[1]

The 1961 Census of Canada classified 13 different ethnic group types which composed the population of Winnipeg[2] defined as below, with the important exception of the Jewish ethnic group which was listed under "Religion" as a better indicator of the numbers of this group - for example, in the 1961 Census for the whole of Canada, the number of Jewish people under the religion category was 254,368 compared to 173,344 for the ethnic group category, and because of this wide variation, the Census Division of the Dominion Bureau of Statistics listed this group only under the religion category for 1961.

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1 See Table 1 Appendix E.

2 See Table 2 Appendix E, and Diagram 13.

In order to measure residential segregation, it is necessary to use an index which will measure quantitatively the degree of residential segregation of ethnic groups in the Metropolitan Winnipeg Area. The method put forward by Shevky and Williams in "The Social Areas of Los Angeles",[1] measured the degree of ecological segregation by an "Index of Isolation". By the Shevky and Williams method, the selection of percentage categories was based on an array of all the percentages for each of the major ethnic groups in Metropolitan Winnipeg, from which the median and the two quartiles were established.

Historically, the ethnic groups of Winnipeg have always exhibited a marked tendancy towards residential segregation, precipitated by the necessity of sharing common facilities and religious requirements (e.g. food), by centrifugal policy of minority protection from social persecution, and by the impositions of economics. The degree of residential segregation indicates that complete assimilation has not yet manifested itself in Metropolitan Winnipeg. But indications are that acculturation into the predominant Anglo-Protestant culture of Winnipeg, and Canada in general has progressed to such an extent that it seems the new car, the $30,000 house and a "nice" neighbourhood are breaking down age old barriers imposed upon the various groups both internally and externally.

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1 For details of this method see E. Shevky and M. Williams "The Social Areas of Los Angeles", Univ. of California Press 1949, Chapter V, pgs. 47-57

POPULATION BY SPECIFIED ETHNIC GROUPS METROPOLITAN WINNIPEG – 1961

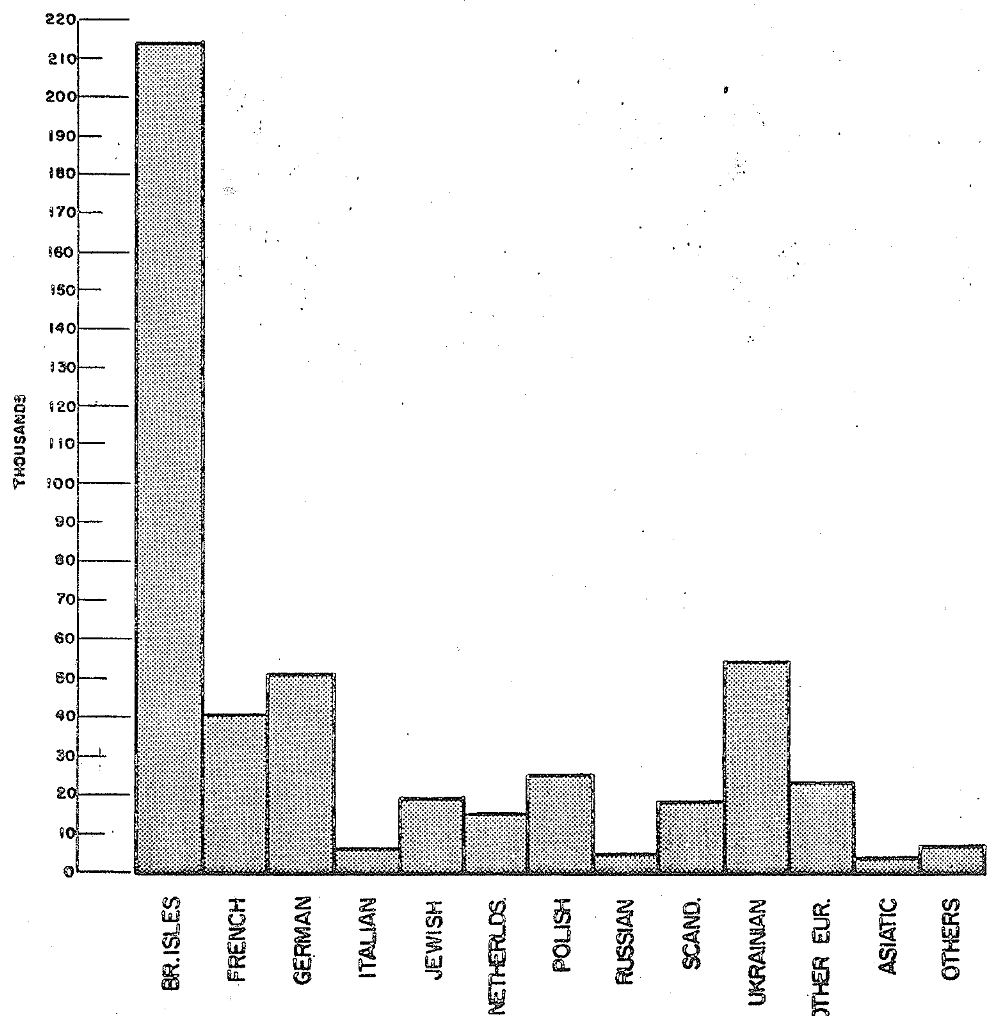


DIAGRAM II.

TABLE (i) APPENDIX E.

Metropolitan Winnipeg
Population by Specified Ethnic Groups

(DATA SOURCE: 1961 CENSUS DBS.)

Area	Total	British Isles	French	German	Italian	Jewish°	Netherlands	Polish	Russian	Scandinavian	Ukrainian	Other European	Asiatic	Other and not stated
Metro Winnipeg-	475,989	213,964	39,777	50,206	5,785	18,350	14,881	24,904	4,102	17,834	53,918	22,584	3,198	6,486
Winnipeg	265,429	113,615	13,249	30,249	4,216	11,690	6,814	16,573	2,556	10,093	35,975	13,217	2,325	4,161
Assiniboia	6,088	3,211	732	679	23	17	289	142	22	307	337	187	30	112
Brooklands	4,369	1,851	327	526	48	6	185	231	62	229	575	260	25	44
Charleswood	6,243	3,917	312	543	27	-	282	163	52	341	316	230	15	45
East Kildonan	27,305	12,075	734	3,863	170	196	1,345	1,852	227	998	4,314	1,141	164	226
Fort Garry	17,528	9,989	1,947	1,560	98	43	807	423	158	728	710	786	99	180
North Kildonan	8,888	2,257	181	3,246	46	10	743	437	118	269	922	343	64	252
Old Kildonan	1,327	422	48	195	2	17	42	116	15	63	318	73	5	11
St. Boniface	37,600	13,116	14,404	1,800	364	74	736	1,144	153	899	1,767	2,800	132	211
St. James	33,977	24,486	1,558	1,818	183	89	802	647	193	1,544	1,114	890	125	528
East St. Paul	1,982	700	36	173	24	3	187	149	10	113	443	117	-	27
West St. Paul	2,032	966	91	185	11	1	170	133	30	73	288	58	8	18
St. Vital	27,269	14,459	3,683	2,170	134	46	1,441	774	204	1,174	1,495	1,144	115	430
Transcona	14,248	6,139	1,264	1,074	360	32	647	995	126	463	2,451	612	13	72
Tuxedo	1,627	1,040	53	144	6	62	46	19	7	69	66	84	21	10
West Kildonan	20,077	5,721	462	1,981	73	6,064	345	1,106	169	471	2,827	642	57	159

° DEFINITION BY ETHNIC CATEGORY.

TABLE (ii)
APPENDIX E.

The Ethnic Composition of the Municipalities Within the Metro Area

Census 1961

	British Isles %	French %	German %	Italian %	Jewish %	Netherlands %	Polish %
Winnipeg C.	42.80	5.25	11.40	1.59	4.40	2.57	6.24
Assiniboia	52.74	12.02	11.15	.38	.28	4.74	2.33
Brooklands	42.37	7.48	12.04	1.10	.14	4.23	5.29
Charleswood	62.74	5.00	8.70	.43	-	4.52	2.61
East Kildonan	44.22	2.67	14.15	.62	.72	4.93	6.78
Fort Garry	56.99	11.11	8.90	.56	.25	4.60	2.41
North Kildonan	25.39	2.04	36.52	.52	.11	8.36	4.92
Old Kildonan	31.80	3.62	14.69	.15	1.28	3.17	8.74
St. Boniface	34.88	38.31	4.79	.97	.20	1.96	3.04
St. James	72.07	4.59	5.35	.54	.29	2.36	1.90
East St. Paul	35.32	1.82	8.73	1.21	.15	9.43	7.52
West St. Paul	47.54	4.48	9.10	.54	.05	8.37	6.54
St. Vital	53.02	13.51	7.96	.49	.17	5.28	2.84
Transcona	43.09	8.87	7.54	2.53	.22	4.54	6.98
Tuxedo	63.92	3.26	8.85	.36	3.81	2.83	1.17
West Kildonan	28.50	2.30	9.87	.36	30.20	1.72	5.51
Metropolitan Winnipeg Area	44.95	8.36	10.55	1.22	3.86	3.13	5.23

	Russian %	Scandinavian %	Ukrainian %	Other European %	Asiatic %	Others Not stated %
Winnipeg C.	.96	3.80	13.55	4.98	.88	1.57
Assiniboia	.36	5.04	5.54	3.07	.49	1.84
Brooklands	1.42	5.24	13.16	5.95	.57	1.01
Charleswood	.83	5.46	5.06	3.68	.24	.72
East Kildonan	.83	3.66	15.80	4.18	.60	.83
Fort Garry	.90	4.15	4.05	4.48	.56	1.03
North Kildonan	1.33	3.03	10.37	3.80	.72	2.84
Old Kildonan	1.13	4.75	23.96	5.50	.38	.83
St. Boniface	4.10	2.39	4.70	7.55	.35	.56
St. James	.57	4.54	3.28	2.62	.37	.37
East St. Paul	.50	5.70	2.35	5.90	-	1.36
West St. Paul	1.48	3.59	14.17	2.85	.39	.89
St. Vital	.75	4.30	5.48	4.20	.42	1.58
Transcona	.88	3.25	17.20	4.30	.09	.51
Tuxedo	.43	4.24	4.06	5.16	1.29	.61
West Kildonan	.84	2.35	14.08	3.20	.28	.79
Metropolitan Winnipeg Area	.86	3.75	11.33	4.74	1.67	1.36

APPENDIX F.

POLO PARK - PERCENTAGE INCREASE (DECREASE) OF TOTAL SALES FIGURES ANNUALLY* (1961-65)

FINANCIAL YEAR	PERCENTAGE INCREASE (DECREASE)
1961-62	+ 4%
1962-63	- 1%
1963-64	+15%
1964-65	+13%

* Figures provided by the Management of Polo Park Enterprises Limited.

APPENDIX G.

PARTIAL LIST OF MAJOR OFFICES, PLANTS AND WAREHOUSES WITHIN 1 MILE OF POLO PARK

Manitoba Telephone System

Macleod's Limited

Marshall-Wells Co. Ltd.

Gutta Percha & Rubber, Ltd.

Goodrich B F Rubber Co. of Canada Ltd.

Ford Motor Company of Canada Ltd.

MacDonald Bros. Aircraft Ltd.

Motor Coach Industries Ltd.

Kraft Foods Limited

Master Textiles Limited

Trans-Canada Air Lines

Winnipeg Supply & Fuel Co.

G. A. MacEachern Floor Co. Ltd.

Motor Vehicles Branch

Recordak of Canada Limited

Channel 7 Television

Canadian Westinghouse Co. Ltd.

National Carbon Company

RCA Victor Company, Ltd.

Goodyear Tire & Rubber Co. of Canada Ltd.

Hudson Bay Co. Wholesale Warehouse

Ray-O-Vac (Canada) Limited

Firestone Limited

Canadian General Electric Co. Ltd.

Fairfield & Sons Limited

Hilton Brothers Limited

Manitoba Medical Service

Wiley Mercury Automobile Ltd.

Empress Lanes

Stonewall Motors

Blackwood Beverages

APPENDIX H

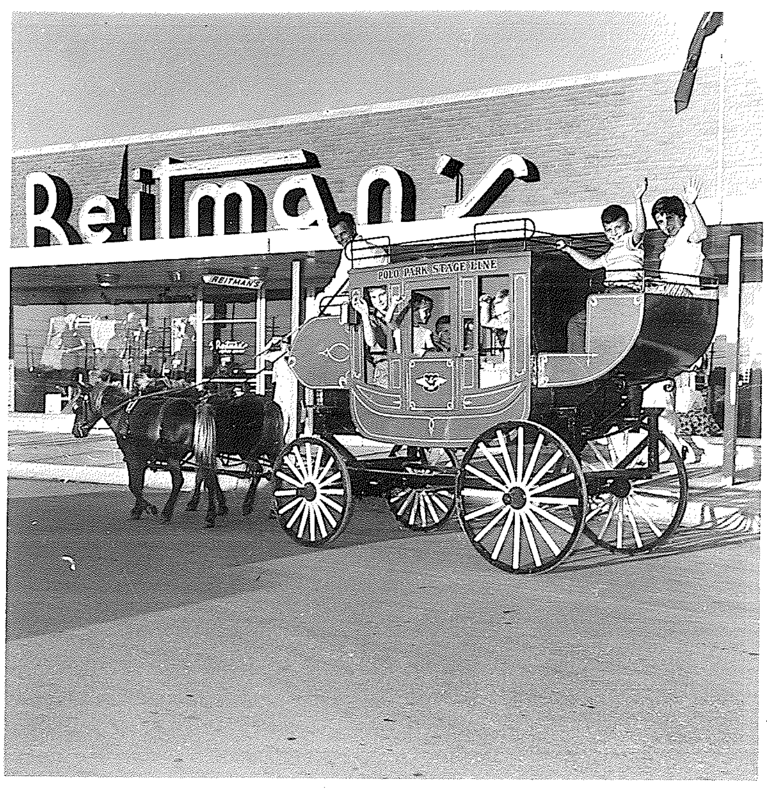
INCREASE IN THE AVERAGE WEEKLY WAGE IN WINNIPEG 1961-65*

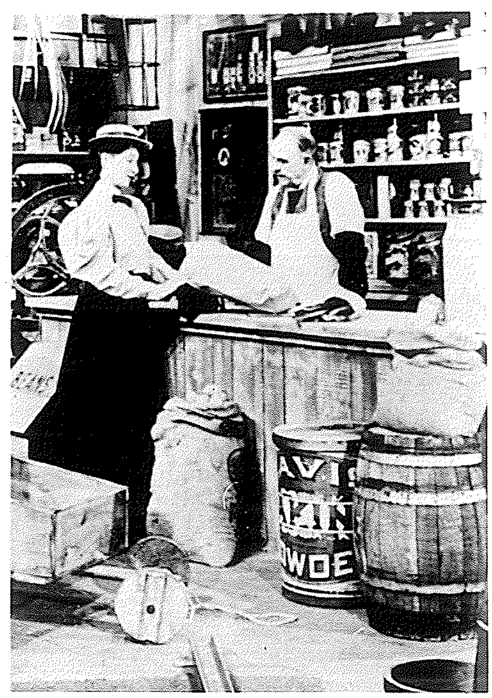
Average Wage 1961	$68.36	
Average Wage 1965	March	$75.10
	April	$75.18
	May	$77.04
	June	$77.48
	July	$77.16

* Figures from Manitoba Consumer Report December 1965

APPENDIX I.

PLATES I, J, & K. PROMOTIONAL ACTIVITIES.





An old store reconstructed
at Polo Park

APPENDIX J.

QUESTIONNAIRE - COMPUTERIZED DATA (COMPARATIVE) ADVANTAGES & DISADVANTAGES BY RESPONDENTS

CODE	OCTOBER						NOVEMBER					
	18th	19th	20th	21st	22nd	23rd	12th	15th	18th	20th	22nd	24th
A	39.00	32.85	34.66	44.18	53.84	57.81	57.14	50.00	36.26	43.85	58.97	37.03
B	44.00	44.28	49.33	44.18	34.06	53.12	53.57	28.57	41.75	45.61	30.76	25.92
C	8.00	45.71	37.33	37.20	34.06	26.56	3.57	7.14	26.37	24.56	20.51	0
D	20.00	22.85	36.00	27.9	35.17	28.12	17.85	28.57	23.07	19.29	28.2	11.11
E	12.00	4.28	13.33	15.11	9.89	12.50	3.57	0	4.39	8.77	7.69	3.7
F	3.00	5.71	2.66	3.48	12.08	10.93	0	21.42	6.59	12.28	17.94	18.51
G	42.00	60.00	49.33	5.0	60.43	53.12	82.14	92.85	65.93	70.17	79.48	77.77
H	23.00	35.71	33.33	51.16	39.56	57.81	46.42	28.57	37.36	33.33	30.76	29.62
I	41.00	41.42	30.66	18.60	17.58	21.87	10.71	7.14	37.36	24.56	15.38	18.51
J	18.00	21.42	22.66	31.39	18.68	31.25	14.28	35.71	19.78	24.56	15.38	18.51
K	7.00	5.71	16.00	22.09	13.18	10.93	28.57	42.85	12.08	24.56	28.2	18.51
L	3.00	4.28	10.66	4.65	8.79	1.56	3.57	14.28	4.39	7.01	7.69	14.81
1	4.00	0	0	5.8	13.29	0	0	7.14	2.19	7.01	0	0
2	3.00	1.42	0	0	0	0	3.57	0	3.29	0	0	0

APPENDIX J CONTINUED

CODE	OCTOBER							NOVEMBER				
	18th	19th	20th	21st	22nd	23rd	12th	15th	18th	20th	22nd	24th
3	17.00	25.71	33.33	31.39	41.75	35.93	46.42	42.85	19.78	40.35	61.53	40.74
4	14.00	12.85	13.33	27.90	27.47	32.81	35.71	14.28	24.17	33.33	33.33	40.74
6	4.00	10.00	8.00	12.79	14.28	18.75	0	21.42	16.48	10.52	25.64	18.51
7	12.00	10.00	14.66	22.09	18.68	26.56	17.85	21.42	15.38	28.07	35.89	33.33
8	3.00	2.85	14.66	15.11	13.18	15.62	21.42	21.42	9.89	14.03	30.76	37.03
9	3.00	0	0	6.97	8.79	6.25	3.57	21.42	3.29	8.77	15.38	3.7
10	10.00	4.28	1.33	4.65	4.39	4.68	3.57	14.28	9.89	1.75	0	0
11	1.00	4.28	2.66	5.81	12.08	3.12	3.57	0	2.19	3.5	7.69	0
12	4.00	5.71	1.33	2.32	1.09	0	0	0	3.29	1.75	5.12	3.7

APPENDIX K.

DATA FOR INCOME GROUPING OF DEPARTMENT STORE

CREDIT ACCOUNT CUSTOMERS (1965)*

Income	Number of Accounts	% To Total
Under 2,000	302	.95
2,000 - 2,500	1,464	4.62
2,500 - 3,000	1,312	4.14
3,000 - 3,500	2,124	6.71
3,500 - 4,000	4,620	14.60
4,000 - 4,500	4,268	13.48
4,500 - 5,000	4,032	12.74
5,000 - 5,500	4,804	15.18
5,500 - 6,000	1,516	4.79
6,000 - 6,500	2,620	8.28
6,500 - 7,000	524	1.66
7,000 - 7,500	1,588	5.02
7,500 - 8,000	384	1.22
8,000 - 10,000	1,368	4.32
10,000 - 12,000	403	1.27
	31,653	100.00%

* Statistics provided by the Management, Simpson-Sears, Polo Park Centre

APPENDIX L.

Source of data and methodological explanation of construction of diagrams N and O.

APPENDIX L (i).

INCREASE IN THE NUMBER OF HOUSEHOLDS

WINNIPEG CENSUS AREA 1961 - 1965*

Census Tracts	Increase in No. of Households 1961-65	Census Tracts	Increase in No. of Households 1961-65	Census Tracts	Increase in No. of Households 1961-65
1.	400	18	0	35	246
2.	22	19	0	36	133
3	20	20	15	37	80
4	35	21	11	38	431
5	75	22	9	39	39
6	58	23	1	40	64
7	51	24	3	41	53
8	16	25	123	42	557
9	37	26	22	43	179
10	0	27	15	44	664
11	0	28	2	45	3
12	52	29	172	46	2
13	28	30	27	47	4
14	26	31	4	48	293
15	75	32	75	49	166
16	65	33	11	50	598
17	24	34	124	51	1

* Figures given by the Planning Division, Metropolitan Corporation of Greater Winnipeg

APPENDIX CONTINUED

Census Tracts	Increase in No. of Households 1961-65	Census Tracts	Increase in No. of Households 1961-65	Census Tracts	Increase in No. of Households 1961-65
52	42	64	65	76	112
53	8	65	259	77	10
54	277	66	56	78	74
55	300	67	370	79	16
56	426	68	19	80	148
57	5	69	92	81	653
58	138	70	23	82	20
59	10	71	58	83	30
60	1815	72	330	84	19
61	72	73	56	85	393
62	107	74	60	86	212
63	132	75	35	87	7
				88	993

APPENDIX L(ii).

METHODOLOGY OF CONSTRUCTION FOR MAPS OF DISTRIBUTION OF PURCHASING POWER IN METROPOLITAN WINNIPEG 1961 & 1965

(88 CENSUS TRACTS)

DIAGRAMS N & O.

(For 1961)

Let one dot represent a constant -0.05% of total ($536,624,598) number of dots 2000.

Therefore the value of each dot will be $268,312·3.

(For 1965)+

Again let one dot represent 0.05% of total ($659,959,267) number of dots to remain constant (2000).

Therefore the value of each dot will be $329,979·6.

In order to arrive at the number of dots representative of the income of a particular census tract (i.e. the index of purchasing power), divide the income of the tract by the constant (0.05% of total).

DATA FOR MAPS OF CHANGING RELATIVE DISTRIBUTION OF PURCHASING POWER

1961 Census Tract	1961 Index of Purchasing Power	1965+ Census Tract	1965+ Index of Purchasing Power
1.	27	1.	30
2.	18	2.	16
3.	28	3.	25

+ The figures for 1965 were updated from the Census Of 1961.

APPENDIX CONTINUED

1961 Census Tract	1961 Index of Purchasing Power	1965 Census Tract	1965 Index of Purchasing Power
4.	11	4.	10
5.	24	5.	22
6.	35	6.	32
7.	26	7.	24
8.	12	8.	11
9.	16	9.	15
10.	16	10.	14
11.	5	11.	4
12.	12	12.	11
13.	19	13.	18
14.	13	14.	12
15.	18	15.	17
16.	22	16.	20
17.	20	17.	18
18.	5	18.	3
19.	16	19.	14
20.	17	20.	15
21.	33	21.	29
22.	14	22.	13
23.	6	23.	5
24.	17	24.	15
25.	49	25.	4
26.	22	26.	14

I. (ii)
APPENDIX CONTINUED

1961 Census Tract	1961 Index of Purchasing Power	1965 Census Tract	1965 Index of Purchasing Power
27.	49	27.	44
28.	15	28.	14
29.	19	29.	21
30.	21	30.	10
31.	18	31.	16
32.	36	32.	32
33.	29	33.	25
34.	22	34.	21
35.	46	35.	44
36.	6	36.	7
37.	29	37.	27
38.	31	38.	35
39.	29	39.	27
40.	33	40.	31
41.	35	41.	32
42.	23	42.	30
43.	40	43.	40
44.	35	44.	42
45.	25	45.	22
46.	24	46.	21
47.	25	47.	22
48.	55	48.	56
49.	15	49.	16

APPENDIX CONTINUED

1961 Census Tract	1961 Index of Purchasing Power	1965 Census Tract	1965 Index of Purchasing Power
50.	28	50.	34
51.	23	51.	21
52.	23	52.	21
53.	19	53.	17
54.	36	54.	35
55.	3	55.	4
56.	17	56.	22
57.	1	57.	14
58.	7	58.	8
59.	14	59.	13
60.	14	60.	73
61.	11	61.	11
62.	10	62.	11
63.	11	63.	12
64.	28	64.	25
65.	30	65.	32
66.	18	66.	18
67.	55	67.	55
68.	21	68.	19
69.	28	69.	27
70.	32	70.	26
71.	19	71.	26
72.	20	72.	25

APPENDIX CONTINUED

1961 Census Tract	1961 Index of Purchasing Power	1965 Census Tract	1965 Index of Purchasing Power
73.	42	73.	37
74.	17	74.	16
75.	3	75.	3
76.	5	76.	6
77.	6	77.	5
78.	33	78.	31
79.	12	79.	11
80.	35	80.	35
81.	74	81.	81
82.	19	82.	17
83.	19	83.	17
84.	22	84.	20
85.	17	85.	23
86.	34	86.	33
87.	7	87.	66
88.	6	88.	22

APPENDIX L (ii)

x Census Tract	Persons + per Household	No. of Households 1961	No. of Households * March 1965	Estimated Increase in No. of Households 1961 - 1965.	Estimated Population March 1965
1	4.1	1672	2072	400	8495
2	4.9	1082	1104	26	4309
3	3.8	1943	1963	20	7459
4	3.4	1001	1036	35	3525
5	3.6	2436	2511	75	9040
6	3.3	2740	2798	58	9226
7	3.4	1860	1911	71	6499
8	3.2	1009	1025	16	3280
9	3.1	1327	1364	37	4230
10	3.5	1582	1582	-	5796
11	3.8	407	407	-	1688
12	3.9	851	903	52	3869
13	3.5	1514	1542	28	5400
14	3.4	924	950	26	3230
15	3.5	1339	1414	75	4949
16	3.8	1560	1625	65	6175
17	4.0	1158	1182	24	4728
18	3.3	329	329	-	1554
19	3.5	1375	1375	-	5927
20	2.1	1699	1714	15	3955
21	3.1	2258	2269	11	7560
22	4.3	952	961	9	4576
23	4.8	427	428	1	2145
24	3.7	942	945	3	4215
25	3.5	3687	3800	123	13300

APPENDIX L(ii)

x Census Tract	Persons per Households +	No. of Households 1961	No. of Households March 1965 *	Estimated Increase in No. of Households 1961 - 1965	Estimated Population March 1965
26	3.3	1352	1374	22	4534
27	3.7	2292	2307	15	8536
28	3.5	891	893	2	3154
29	3.6	1144	1316	252	5026
30	3.6	1137	1164	27	4190
31	3.5	999	1003	4	3651
32	3.6	2241	2316	75	8338
33	3.7	1566	1577	11	5981
34	3.9	1060	1184	124	4620
35	2.8	2896	3142	246	8800
36	2.3	550	683	133	1576
37	1.8	2059	2139	80	4552
38	2.7	1831	2262	431	6110
39	3.4	1627	1666	69	5664
40	3.6	2116	2180	64	7848
41	3.6	2262	2315	53	8334
42	3.0	1386	1943	557	5829
43	3.3	2233	2412	176	7960
44	3.9	1994	2658	604	10366
45	3.2	1195	1198	3	3834
46	3.4	1162	1164	2	3958
47	3.4	1306	1310	4	4454
48	4.0	2753	3046	293	12184
49	3.6	1089	1255	166	4518
50	3.5	1934	2532	598	8763

APPENDIX L(ii).

x Census Tract	Persons per + Household	No. of Households 1961	No. of* Households March 1965	Estimated Increase in No. of Households 1961 - 1965	Estimated Population March 1965
51	3.6	1254	1255	1	4518
52	3.5	1488	1530	42	5355
53	3.8	1275	1283	8	4870
54	3.8	2418	2695	277	10241
55	5.0	25	325	300	1625
56	3.9	1153	1579	426	6158
57	4.3	115	120	5	516
58	3.7	442	580	38	2146
59	4.2	1041	1051	10	4414
60	4.1	904	2719	1815	11148
61	3.6	722	794	72	2858
62	4.1	693	800	107	3280
63	3.8	664	796	132	3025
64	3.7	1344	1409	65	5213
65	4.0	1700	1959	259	7836
66	3.8	1017	1073	56	4077
67	3.8	3044	3414	370	12973
68	3.4	1562	1581	19	5373
69	4.1	1547	1639	92	6720
70	4.1	1984	2507	23	10279
71	3.8	173	231	58	876
72	4.1	1189	1519	330	6228
73	3.5	3082	3138	56	10983
74	3.5	1164	1224	60	4284
75	4.1	305	340	35	1394

APPENDIX L(ii)

Census Tract x	Persons + per Household	No. of Households 1961	No. of Households March 1965 *	Estimated Increase in No. of Households 1961 - 1965.	Estimated Population March 1965.
76	4.7	134	246	112	1135
77	3.8	375	385	10	1463
78	3.5	2335	2409	74	8432
79	3.1	749	765	16	2381
80	3.5	1846	1994	148	6979
81	3.8	3637	4290	653	16302
82	3.4	1261	1281	20	4355
83	3.5	1241	1281	20	4484
84	3.4	1171	1190	19	4046
85	4.1	1020	1413	393	5793
86	3.9	2089	2301	212	8963
87	3.7	537	629	7	2327
88	4.0	474	529	993	2116
					493,089
					Total Estimated Population. March 1965.

N.B.

+Assumed as Constant. 1961 - 1965.

*Figures compiled by Planning Division, Metropolitan Corporation of Greater Winnipeg.

xAll Statistics taken from Census of Canada, Bulletin CT17, except where stated.

APPENDIX L (ii)

* Census Tract	Number of Males Receiving Wages 1961	Average Male Salary in Dollars 1961	Number of Females Receiving Wages 1961	Average Female Salary in Dollars 1961	Cumulative Salary In Dollars 1961		Total Salary In Dollars 1961
					Male	Female	
1	1642	3792	725	1702	6226464	1233950	7460414
2	1057	3824	512	1804	4041968	923648	4965616
3	1772	3419	929	1675	6058468	1509625	7568093
4	821	2927	432	1629	2440012	703728	3143740
5	1885	2795	849	1549	5268575	1315101	6583676
6	2284	3197	1218	1758	7301948	2163168	9465116
7	1608	3549	778	1776	5706792	1381728	7088520
8	748	3398	415	1890	2541704	784350	3326054
9	1083	3106	611	1805	3363798	1102855	4466653
10	1322	2687	583	1560	3552214	909480	4461694
11	433	2643	170	1440	1144419	244800	1389219
12	995	2679	425	1519	2665605	645575	3311180
13	1160	3434	680	1926	3983440	1309680	5293120
14	777	3673	432	2049	2853921	885168	3739089
15	1175	3469	508	1797	4076075	912876	4988951
16	1427	3449	641	1619	4921723	1037779	5959502
17	1118	4007	494	1828	4479826	903032	5382858
18	438	2164	101	1420	947832	143420	1091252
19	1574	2366	507	1444	3724084	732108	4456192
20	1103	2784	799	1965	3070752	1570035	4640787
21	2138	2851	1457	1894	6095438	2759558	8854996
22	1175	2583	605	1462	3035025	884510	3919535
23	472	2933	227	1381	1384376	313487	1697863
24	1000	3161	687	2177	3161000	1495599	4656599
25	3403	3259	2304	1938	11090377	2161152	13251529

APPENDIX L (i i)

* Census, Tract	No. of Males Receiving Wages in 1961	Average Male Salary in Dollars 1961	No. of Females Receiving Wages in 1961.	Average Female Salary in Dollars 1961	Cumulative Salary in Dollars. 1961 Male	Cumulative Salary in Dollars. 1961 Female	Total Salary in Dollars 1961.
26	1180	4020	669	2060	4743600	1378140	6121740
27	3309	3464	1007	1681	11462376	1692767	13155143
28	821	4213	360	2024	3458873	728640	4187513
29	1042	3836	543	2059	3997112	1118037	5115149
30	1120	3765	656	2248	4216800	1474688	5691488
31	926	4051	531	2133	3751226	1132623	4883849
32	2117	3308	1411	1987	7003036	2803657	9806693
33	1505	3433	1231	2235	5166665	2751285	7917950
34	1182	3191	1194	1814	3771762	2165916	5937678
35	2088	3341	2360	2357	6976008	5562520	12538528
36	400	2675	338	2100	1070000	709800	1779800
37	1139	3916	1359	2617	4460324	3556503	8016827
38	1394	3991	1211	2366	5563454	2865226	8426680
39	1323	4753	785	2159	6288219	1694815	7983034
40	1840	3914	948	1939	7201760	1838172	9039932
41	2010	3638	1199	1919	7312380	2300881	9613261
42	1107	3923	899	2245	4342761	2018255	6361016
43	1578	5334	1005	2437	8417052	2449185	10866237
44	1771	4453	807	1965	7886263	1585755	9472018
45	858	6942	358	2689	5956236	962662	6918898
46	795	6957	385	2499	5530815	962115	6492930
47	1121	5027	496	2377	5635267	1178992	6814259
48	2408	5541	844	1965	13342728	1658460	15001188
49	928	3265	568	2000	3029920	1136000	4165920
50	1663	3434	1252	1631	5710742	2042012	7752754

APPENDIX L (ii)

* Census Tract	No. of Males Receiving Wages in 1961	Average Male Salary in Dollars 1961	No. of Females Receiving Wages in 1961	Average Female Salary in Dollars 1961	Cumulative Salary in Dollars. 1961 Male	Cumulative Salary in Dollars. 1961 Female.	Total Salary in Dollars. 1961
51	1085	4657	589	2124	5052845	1251036	6303881
52	1290	3566	766	2144	4600140	1642304	6242444
53	1224	3615	518	1769	4424760	916342	5341102
54	1289	3958	828	1763	9059862	1410084	9659862
55	26	3204	-	-	83304	-	83304
56	1055	2829	394	1642	4039595	646948	4666593
57	120	3106	25	1648	372720	41200	413920
58	234	8214	121	2209	1922076	267289	2189365
59	995	3303	392	1469	3286485	575848	3862333
60	810	4242	248	1773	3436020	439704	3875724
61	600	4294	247	1892	2576400	467324	3043724
62	577	4282	191	1752	2470714	334632	2805346
63	641	4028	239	1718	2581948	410602	2992550
64	1130	5841	441	2213	6577730	975933	7553663
65	1521	4807	474	1909	7311447	904866	8216313
66	864	4814	423	2191	4159296	926793	5086089
67	2930	4283	1269	1886	12549190	2393334	14942524
68	1280	3634	659	1894	4651520	1248146	5899666
69	1540	4251	649	1735	6546540	1126015	7672555
70	1849	3994	718	1844	7384906	1323992	8708898
71	133	3598	32	1706	478534	54592	533126
72	991	4949	363	1801	4904459	653763	5558222
73	2460	3768	1150	1818	9269260	2090700	11359980
74	934	4010	475	1982	3745340	941450	4686790
75	255	3374	103	1666	860370	171598	1031968

APPENDIX L (ii)

* Census Tract	No. of Males Receiving Wages in 1961	Average Male Salary in Dollars 1961	No. of Females Receiving Wages in 1961	Average Female Salary in Dollars 1961	Cumulative Salary in Dollars. 1961 Male.	Cumulative Salary in Dollars. 1961 Female.	Total Salary in Dollars 1961
76	455	2975	120	1875	1353625	225000	1578625
77	339	3990	137	1896	1352610	259752	1612362
78	2003	3608	956	1849	7226824	1767644	8994468
79	586	4491	323	2574	2631726	831402	3463128
80	1595	4873	826	2260	772435	1866760	9639195
81	3102	5641	1130	2188	17498382	2472440	19970822
82	1104	3820	504	1797	4217280	905688	5122968
83	1042	4028	525	1907	4197176	1001175	5198351
84	971	5078	486	2323	4930738	1128978	6059716
85	905	4383	428	1809	3966615	774252	4740861
86	1983	3820	808	1935	7575060	1563480	9138540
87	426	4021	145	1758	1712946	254910	1967856
88	394	3815	159	1635	1503110	159965	1763075

$ 536,624,598.

Total Salary 1961

N.B.

* All statistics taken from Census of Canada 1961, Bulletin CT17, except where stated

APPENDIX L (ii)

* Census Tract	Total Salary 1961 Updated to March 1965 (1961 Total Salary + 10%) in Dollars.	Estimated Increase in No. of Households 1961 - 1965	Average Income per Household. In Dollars. 1961	Updated to 1965 (1961 Sal. Income + 10%)	Total Salary for Estimated Population Increase. 1961-65. In Dollars	Total Salary of March 1965 population in Dollars
1	8206455	400	4920	5412	2164800	10371255
2	5462178	26	5255	5780	150280	5612458
3	8324902	20	4640	5104	102080	8426982
4	3458114	35	3930	4323	151305	3609419
5	7242044	75	3647	4011	300825	7543669
6	10411628	58	4275	4702	272716	10684344
7	7797372	71	4776	4253	301963	8099335
8	3658659	16	4447	4891	78256	3736915
9	4913318	37	4182	4600	170200	5083518
10	4907863	-	3598	3957	-	4907863
11	1528141	-	3658	4023	-	1528141
12	3642295	52	3618	3979	206908	3849203
13	5822432	28	4794	5273	147644	5970076
14	4112998	26	5087	5595	145470	4258468
15	5488846	75	4641	5105	382875	5871721
16	6555452	65	4557	5012	325780	6881232
17	5921144	24	5192	5711	137064	6058208
18	1200377	-	3500	3850	-	1200377
19	4901811	-	3261	3587	-	4901811
20	5104866	15	3619	3980	59700	5164566
21	9740496	11	4029	4431	48741	9789236
22	4311489	9	3590	3949	35541	4347030
23	1867649	1	3794	4173	4173	1871822
24	5122299	3	4505	4955	14865	5137164
25	14576682	123	4520	4972	611556	15188238

APPENDIX L (ii)

*Census Tract	Total Salary 1961 Updated to March 1965 (1961 Total Salary + 10%) in Dollars x	Estimated Increase in No. of Households 1961 - 1965	Average Income per Household. In Dollars. 1961	Updated to 1965 (1961 Sal. Income +10%) o	Total Salary for Estimated Population Increase. 1961-65. In Dollars.	Total Salary of March 1965 Population in Dollars
26	4533914	22	5499	6048	133056	4666250
27	14470657	15	4557	5012	75180	14545837
28	4607364	2	5489	6037	12074	4619438
29	5626664	252	5254	5779	1456308	7082972
30	6260637	27	5385	5293	142911	6403548
31	5372234	4	5381	5919	23676	5395910
32	10787362	75	4472	4919	11156287	11156287
33	8709745	11	4743	5217	57387	8767132
34	6531446	124	4412	4853	601772	7133218
35	13792381	246	4727	5199	1278954	15071335
36	1957780	133	3994	4393	584269	2542049
37	8818510	80	5485	6033	482640	9301150
38	9269348	431	5400	5940	2560140	11829488
39	8781337	69	6151	6766	466854	9248191
40	9943925	64	5122	5634	360576	10304501
41	10574587	53	4759	5224	276872	10851459
42	6997118	557	5163	5679	3173229	10170347
43	11952861	176	7405	8145	1433520	13386381
44	10419220	604	5674	6241	3769564	14188784
45	7610788	3	8993	9892	29676	7640464
46	7142223	2	9242	10166	20332	7162555
47	7495685	4	6582	7240	28960	7524645
48	16501307	293	7510	8261	2420473	18921780
49	4582512	166	4560	5016	832656	5415168
50	8528029	598	4869	5355	3202290	11730319

APPENDIX L (i)

* Census Tract	Total Salary 1961 Updated to March 1965 (1961 Total Salary + 10%) in Dollars. x	Estimated Increase in No. of Households 1961 - 1965	Average Income per Household. in Dollars. 1961	Updated to 1965 (1961 Sal. Income +10%) o	Total Salary for Estimated Population Increase. 1961-65. in Dollars	Total Salary of March 1965 Population in Dollars
51	6934269	1	6234	6857	6857	6941126
52	6866688	42	4974	5471	229782	7096470
53	5875212	8	4781	5259	42072	5917284
54	10625848	277	4998	5497	1522669	12148517
55	93834	300	3832	4215	1264500	1358334
56	5133252	426	4780	5258	2239908	7373160
57	455312	5	4298	4727	23635	478947
58	2408302	38	10476	11523	437874	2846176
59	4248566	10	4191	4610	46100	4294666
60	4263296	1815	5099	5608	10178520	24441816
61	3348096	72	5352	5887	423864	3771953
62	3085878	107	5110	5621	601447	3687325
63	3291805	132	5196	5715	754380	4046185
64	8309029	65	7586	8344	542360	8851389
65	9037944	259	5845	6429	1665111	10703055
66	5594698	56	6484	7139	399392	5994090
67	16436776	370	5583	6141	2272170	18708946
68	6489630	19	4824	5306	100814	6590444
69	8373810	92	5355	5890	541880	8915690
70	9579788	23	5041	5545	127535	8707323
71	586439	58	4483	4931	285998	872437
72	6114044	330	6294	6923	2284590	8398634
73	12495978	56	5042	5546	310576	12806554
74	5078469	60	5360	5890	353400	5431869
75	1135165	35	4459	4904	171640	1306805

APPENDIX L (ii)

* Census Tract	Total Salary 1961[x] Updated to March 1965 (1961 Total Salary + 10%)	Estimated Increase in No. of Households 1961 - 1965	Average Income per Household. in Dollars. 1961	Updated to 1965[o] (1961 Sal. Inc. + 10%)	Total Salary for Estimated Population Increase. 1961-65. In Dollars.
76	1736487	112	3651	4010	449120
77	1773598	10	5038	5542	55420
78	9893915	74	4844	5328	394272
79	3809441	16	6186	6804	108864
80	10603114	148	6290	6919	1024012
81	21967904	653	6763	7439	4857667
82	5635265	20	5064	5570	111400
83	5718186	20	5228	5750	115000
84	6665688	19	6825	7507	142633
85	5214947	393	5548	6102	2398086
86.	10052394	212	4990	5489	1163668
87	2164642	7	5222	5742	40194
88	1939382	993	4932	5425	5387025

$ 590,287,058

Total Salary 1961
Updated to March 1965

$ 69,672,209

Total Salary for
Estimated Population
Increase 1961 - 1965

Census Tract	Total Salary of March 1965 Population in Dollars
76	2185607
77	1829018
78	10288187
79	3918305
80	11627126
81	26825571
82	5746665
83	5833186
84	6808321
85	7613033
86	11216052
87	2204836
88	7326407

$ 659,959,267

Grand Total Salary of
Population March 1965

N.B.
*All figures taken from Census of Canada 1961, Bulletin CT17, except where stated

[o]Figures derived from data provided by Planning Division, Metropolitan Corporation Greater Winnipeg.

[x] Data Source: Appendix H

APPENDIX M.

TIME/DATE SCHEDULE OF CAR SAMPLE SURVEY 1965

Thursday October 28th	2.00 to 5.00 p.m.
Tuesday November 2nd	2.00 to 5.00 p.m.
Friday November 5th	2.00 to 5.00 p.m.
Monday November 8th	2.00 to 5.00 p.m.
Friday November 12th	6.00 to 9.00 p.m.
Monday November 15th	12.30 a.m. to 1.30 p.m. and 7.00 to 8.00 p.m.

APPENDIX N.

RESIDENTIAL LAND CLASSIFICATION °

(See Text Page 85)

Seven criteria were selected in order to differentiate between classes of residential land based on *desirability* of residence. A numerical value or index was attached to each as indicated below. The sum of values placed each block of similar dwellings in one of four major classes.

Use of Dwelling	Index
Single	4
Duplex	3
Multiple	2
Rooming	1

Age of Dwelling	Index
Post-War II	4
1930-1945	3
1918-1930	2
Before 1918	1

Number of Rooms	Index
8 and over	3
5 to 7	2
4 or less	1

Neighborhood	Index
Good	3
Fair	2
Poor	1

Condition	Index
Good	3
Fair	2
Poor	1

Lot Size	Index
75 ft. and over	4
50 to 75	3
35 to 49	2
Under 35	1

Landscaping	Index
Good	3
Fair	2
Poor	1

Classes	Total Index
Class I	19+
Class II	14 to 18
Class III	11 to 13
Class IV	10–

° REPRODUCED FROM ATLAS OF MANITOBA, EDITED BY DR. T. R. WEIR.

Appendix N.

7. Residential

The seventh category, by far the largest both in area and daytime population, is residential. About 55 percent of the daytime population is found within it. The basis of subdividing the residential area of the city into classes was "desirability for residence." It was decided that seven criteria were involved in this definition. By weighting these criteria and applying them to city blocks, the pattern shown on the map emerged. The criteria used with their weighted indices are listed in the Appendix, page 81.

The residential pattern conforms most closely to the Burgess concentric land-use zone theory.[2] Adjacent to the city centre is a zone of obsolescent housing (Class D) which on the north side is intermixed with light industrial and wholesale uses. This is the poorer class rooming-house area with some tenement dwellings and old apartment buildings ante-dating World War I. This zone is being rapidly invaded on the south by the C.B.D. but remains fairly static on the north and west sides. Daytime population is very high, from 100 to 500 per acre. An extension of class D housing follows a wide block of land both west and east of Main Street adjacent to the C.P.R. yards. To the north of the yards is the "North End" district characterized by a considerable diversity of ethnic groups. South of the yards is an area marked for urban renewal. Similar housing flows into Point Douglas.

Next in order is the zone of "fair" desirability (class C). That part lying between Broadway and the Assiniboine River was built between 1890 and 1900 with large, expensive homes. Today these are mostly multiple dwellings. It is now being invaded by better class apartment dwellings. Its counterpart lies across the river from it. To the west of the C.B.D. is an extensive segment of older dwellings built before the First World War, now almost entirely multiple units. A very considerable area of similar housing is located in the North End. Densities are moderately high, from 25 to 50 per acre.

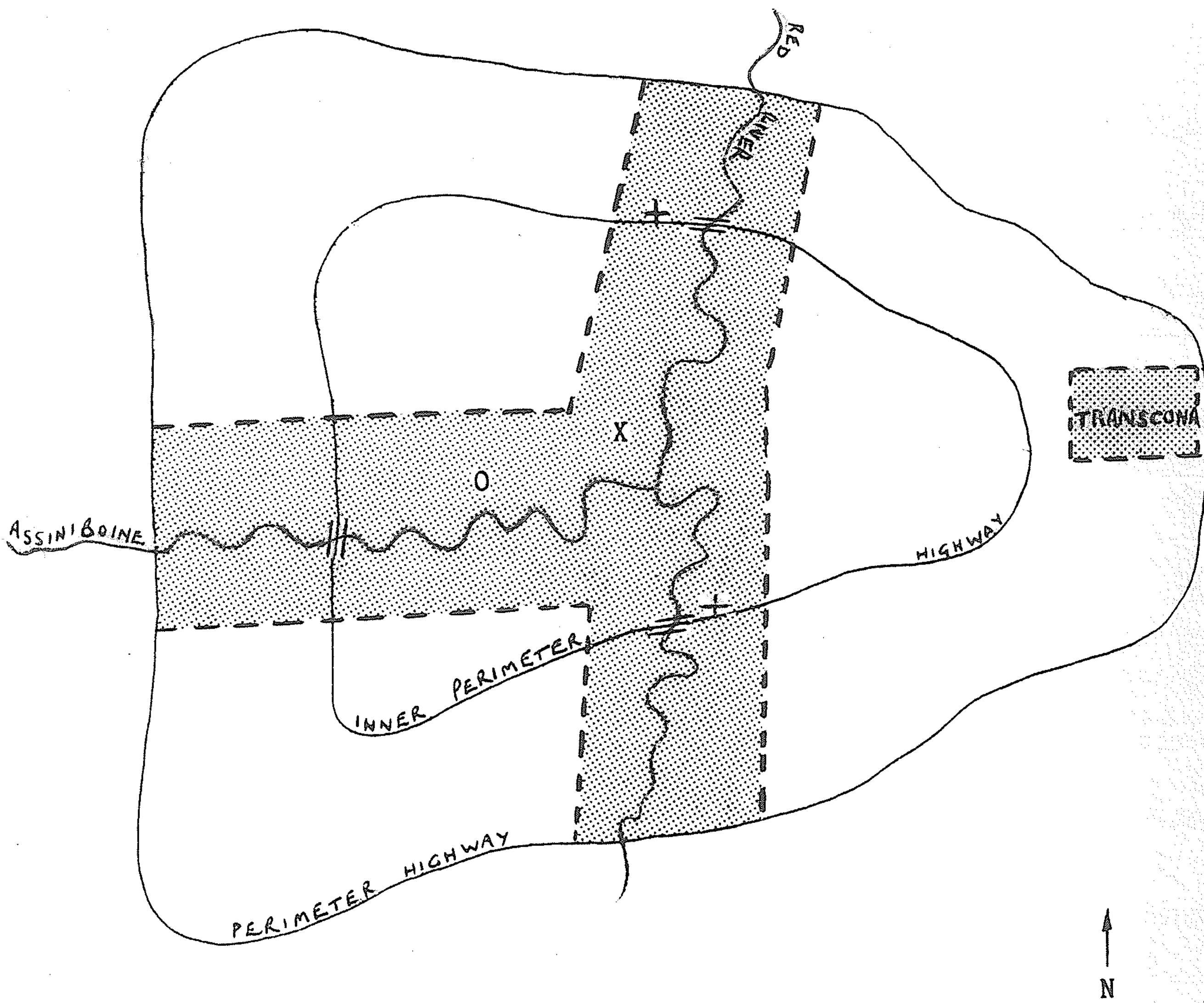
Peripheral to class C residential is a zone of "good" residential desirability (class B). Some are larger dwellings built just prior to the first World War as in Elmwood, Crescentwood and Norwood. Some are bungalows built in the twenties and early thirties (see map of urban growth, plate 37). Most of the larger older units have been "duplexed," but residences dating from the post-war period are mainly single dwellings. An extension of this class of housing into the more recently built-up fringes of the city (West Kildonan, East Kildonan, the West End, St. Vital and parts of Fort Garry) has occurred since the Second World War. These are mainly four- and five-roomed bungalows.

The class A district, rated the most desirable (appendix), lies in blocks mostly in the outer zone. Some areas as in "old River Heights" were built up during the late twenties and thirties; others as seen in St. James, Fort Garry, West Kildonan and "new River Heights" are mostly post-war.

The fringes of the built-up area are expanding rapidly, especially on the west of the city where speedy transportation is afforded along Portage Avenue, and river lots are an attraction. To a lesser extent north Main Street and Pembina Highway have drawn residents to the edges of the city producing the familiar star-shaped pattern. In recent years the eastern margin, restricted by the expansion of heavy industry, has seen a rapid growth in residential use.

Diagram I2.

SCHEMATIC REPRESENTATION OF POSSIBLE LOCATIONS OF FUTURE REGIONAL SHOPPING CENTRES IN WINNIPEG .



Not To Scale.

KEY

Major Sections Of Urban Growth
Projected Bridging Points
Possible Shopping Centre Sites
O Location Of Polo Park
X Downtown Portage-Main

DIAGRAM K AREAS DIRECTLY CONNECTED TO POLO PARK BY 'BUS

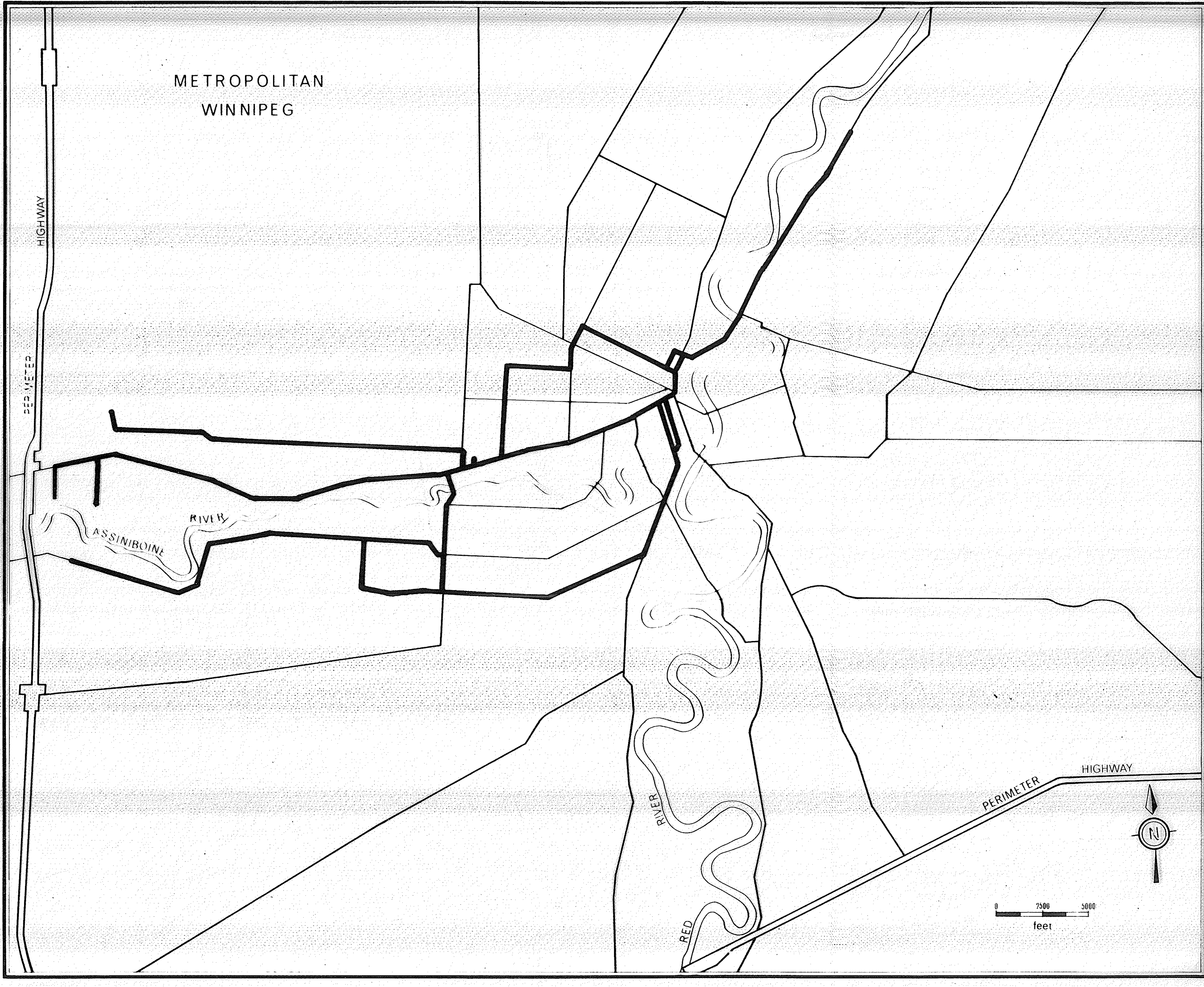


DIAGRAM N RELATIVE INCOME DISTRIBUTION BY CENSUS TRACT 1961

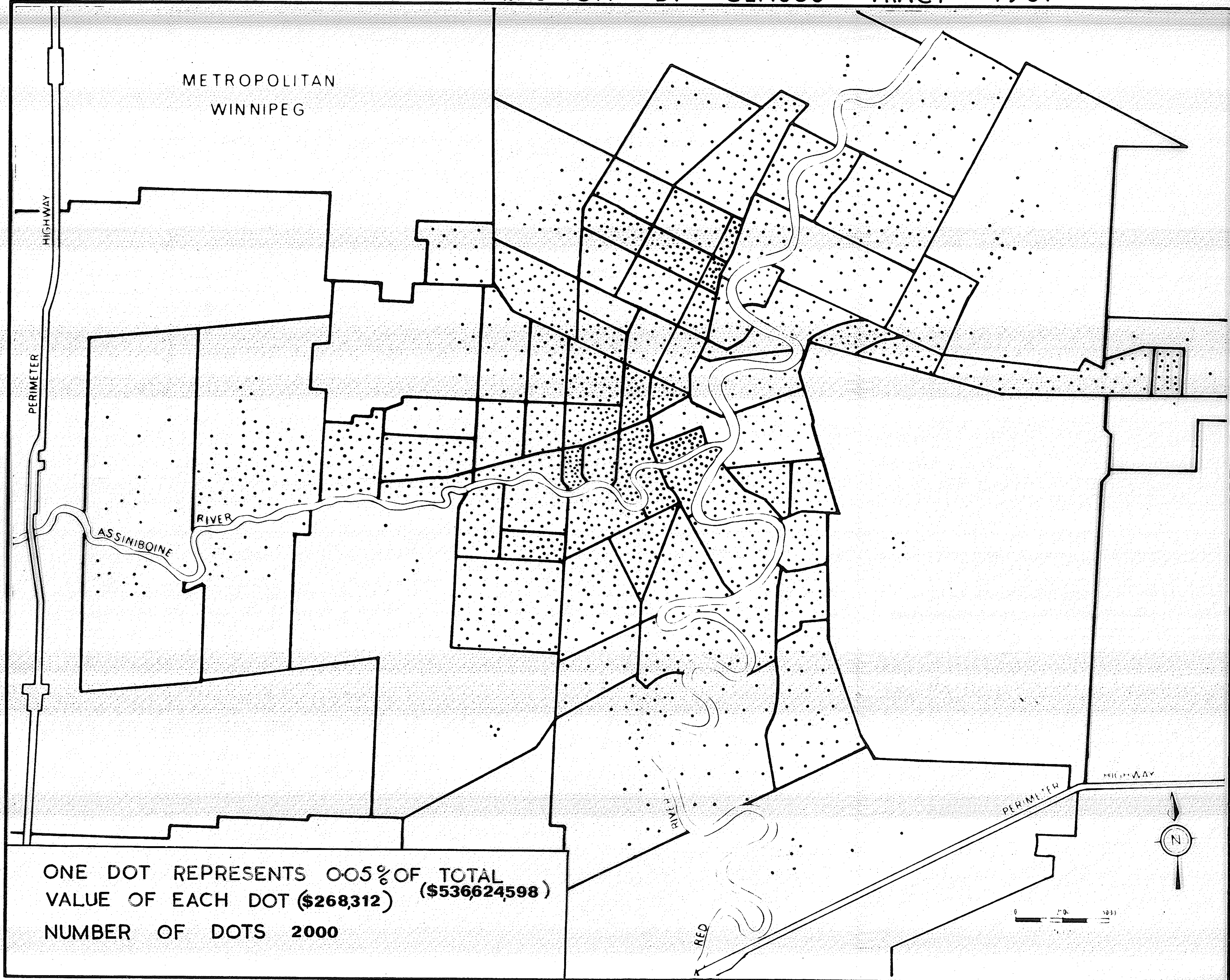
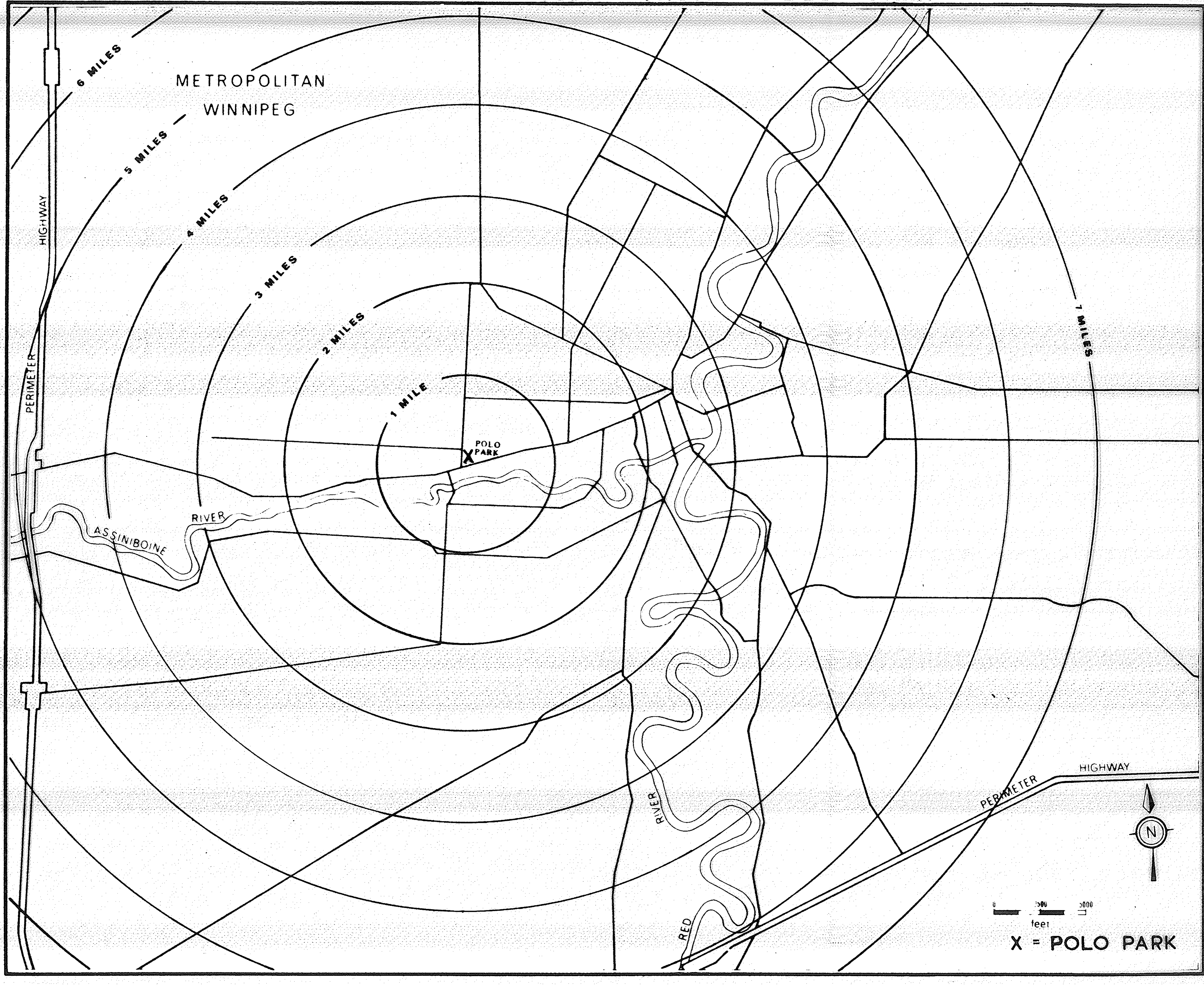
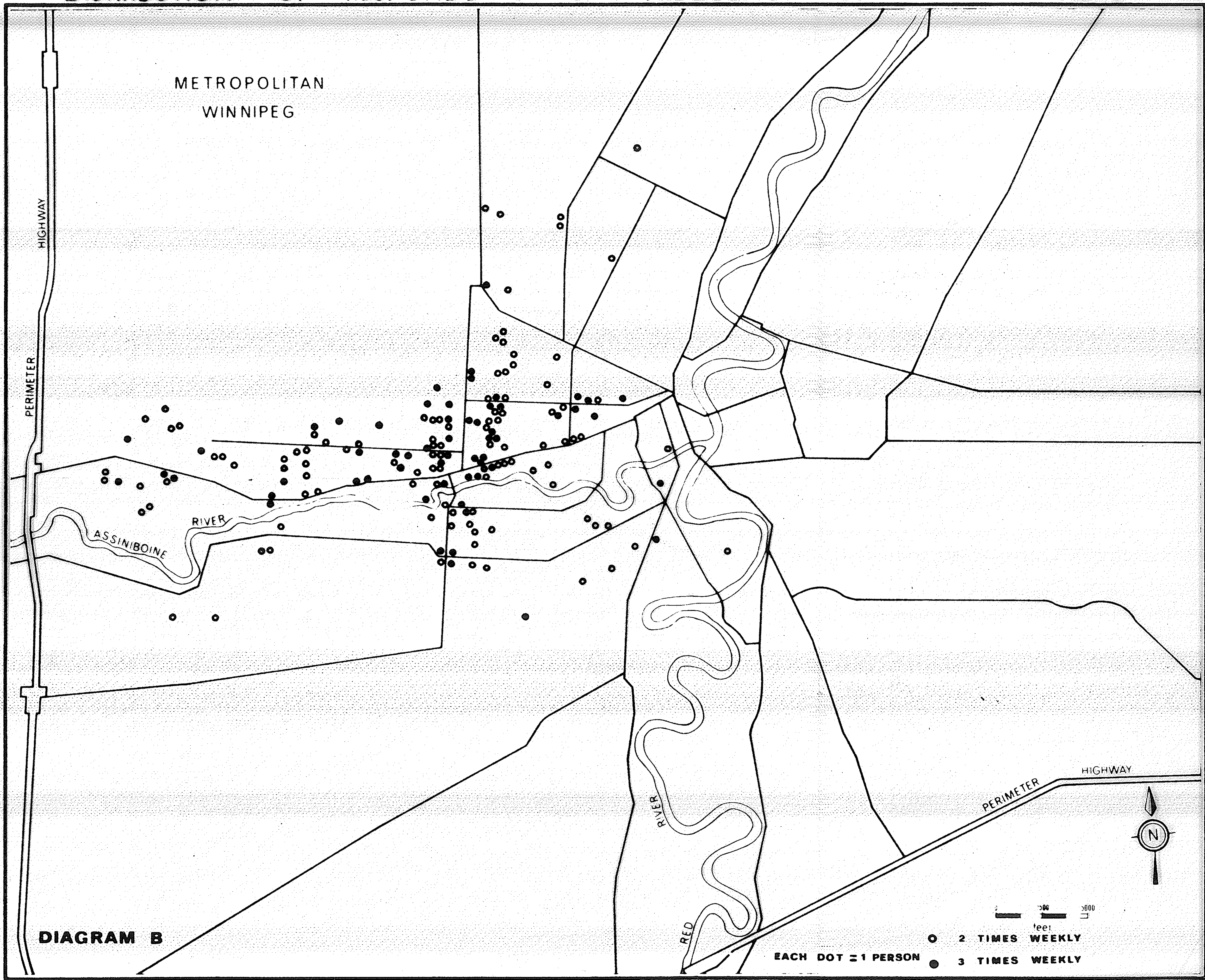


DIAGRAM M RADIAL DISTANCES FROM POLO PARK



DISTRIBUTION OF RESPONDENTS BY FREQUENCY OF SHOPPING VISITS



INDEX OF CENSUS TRACTS

METROPOLITAN
WINNIPEG

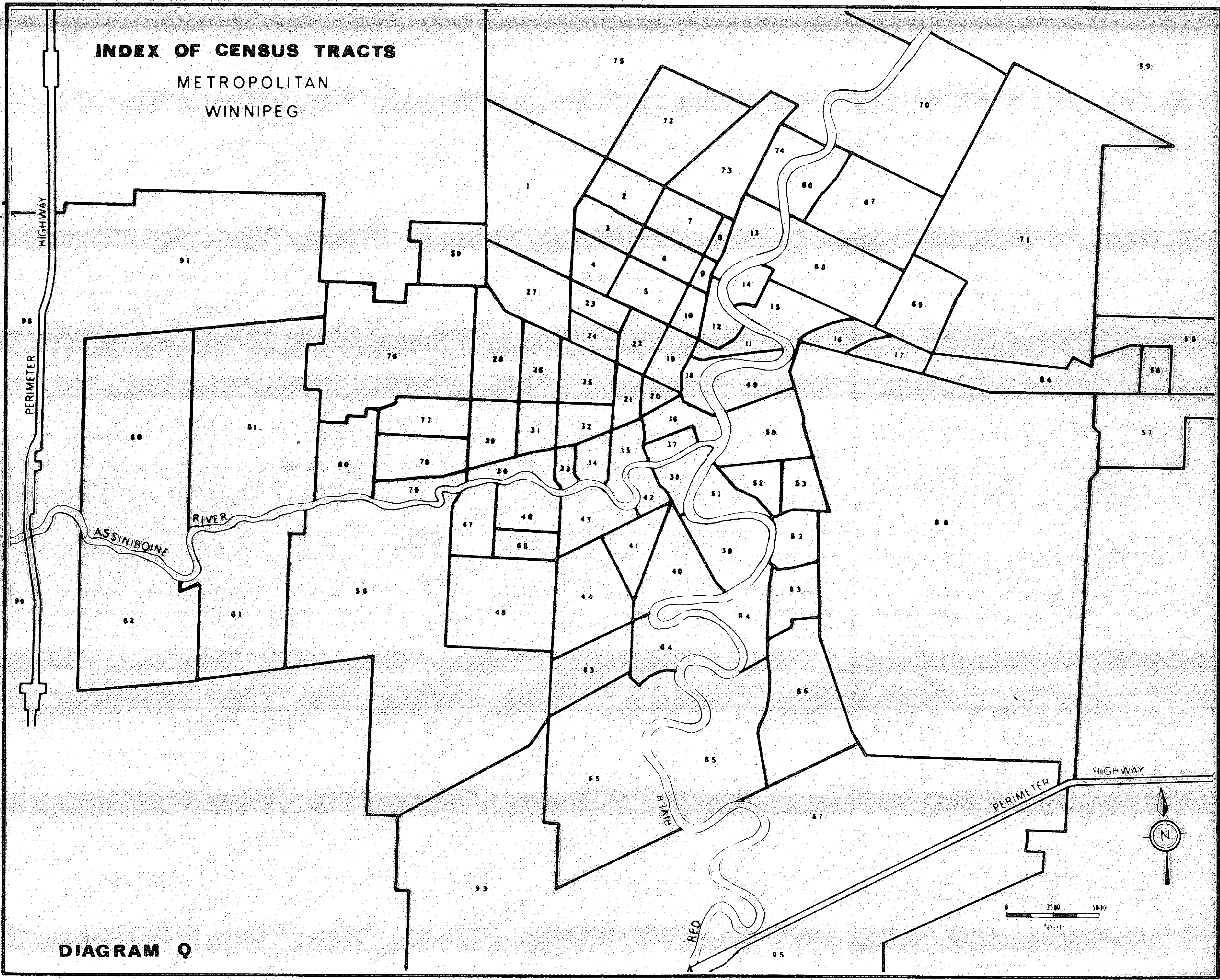


DIAGRAM Q

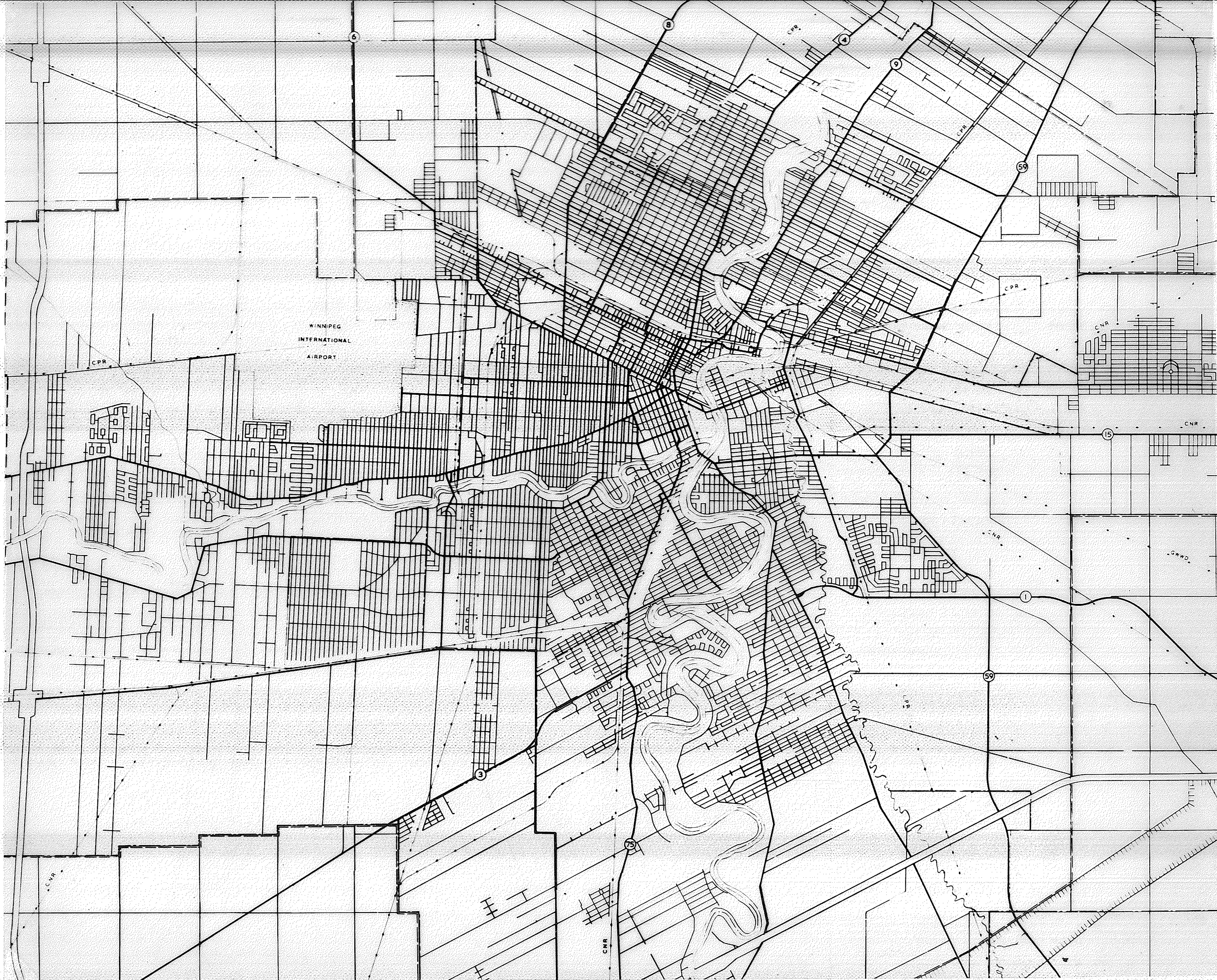

WINNIPEG
INTERNATIONAL
AIRPORT
CPR
CNR
GWWD
1
3
4
6
8
9
15
59
75

DIAGRAM G DISTRIBUTION OF CUSTOMERS BY AUTOMOBILE LICENCE PLATE ADDRESS

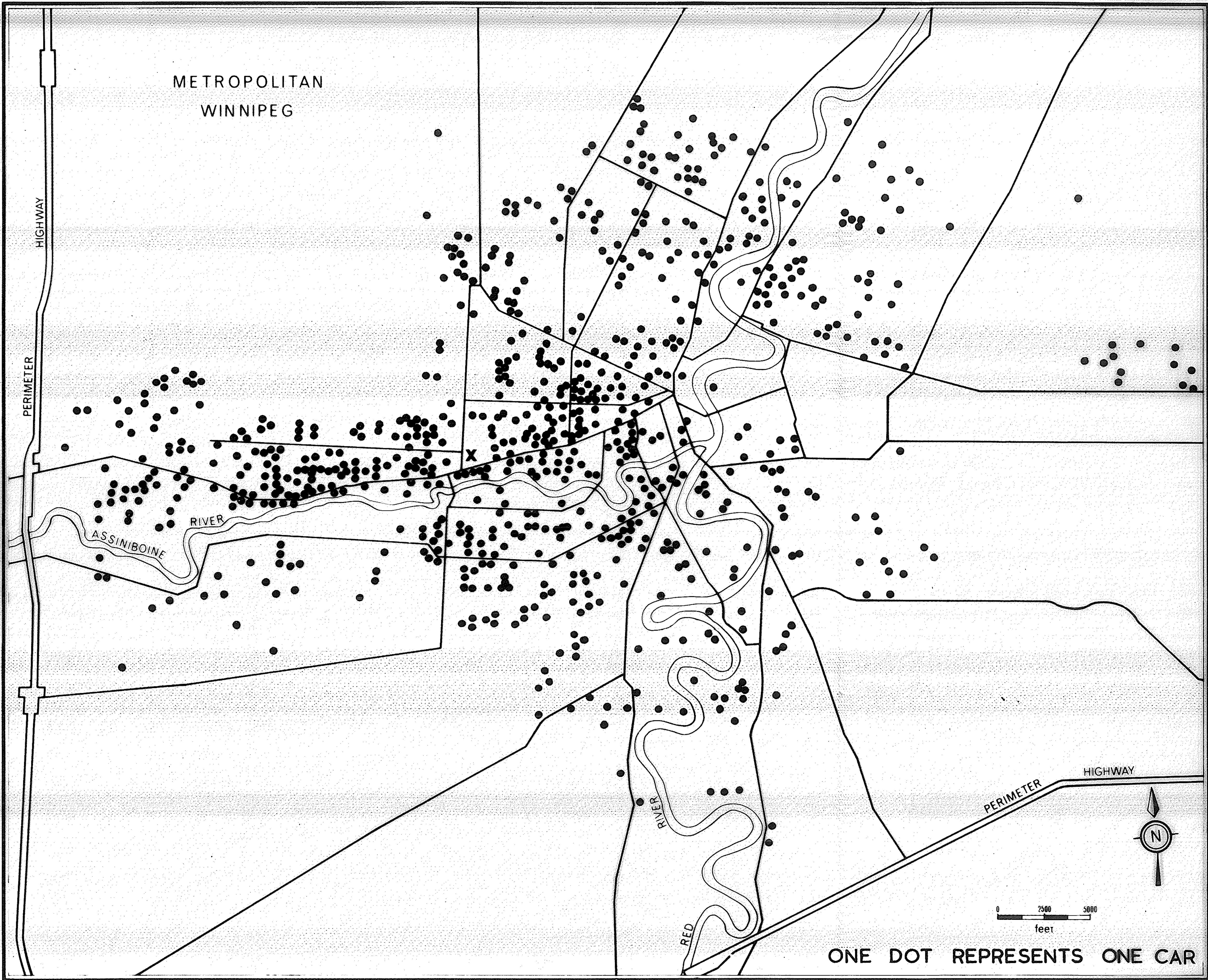


DIAGRAM L MAJOR SHOPPING DISTRICTS 1966

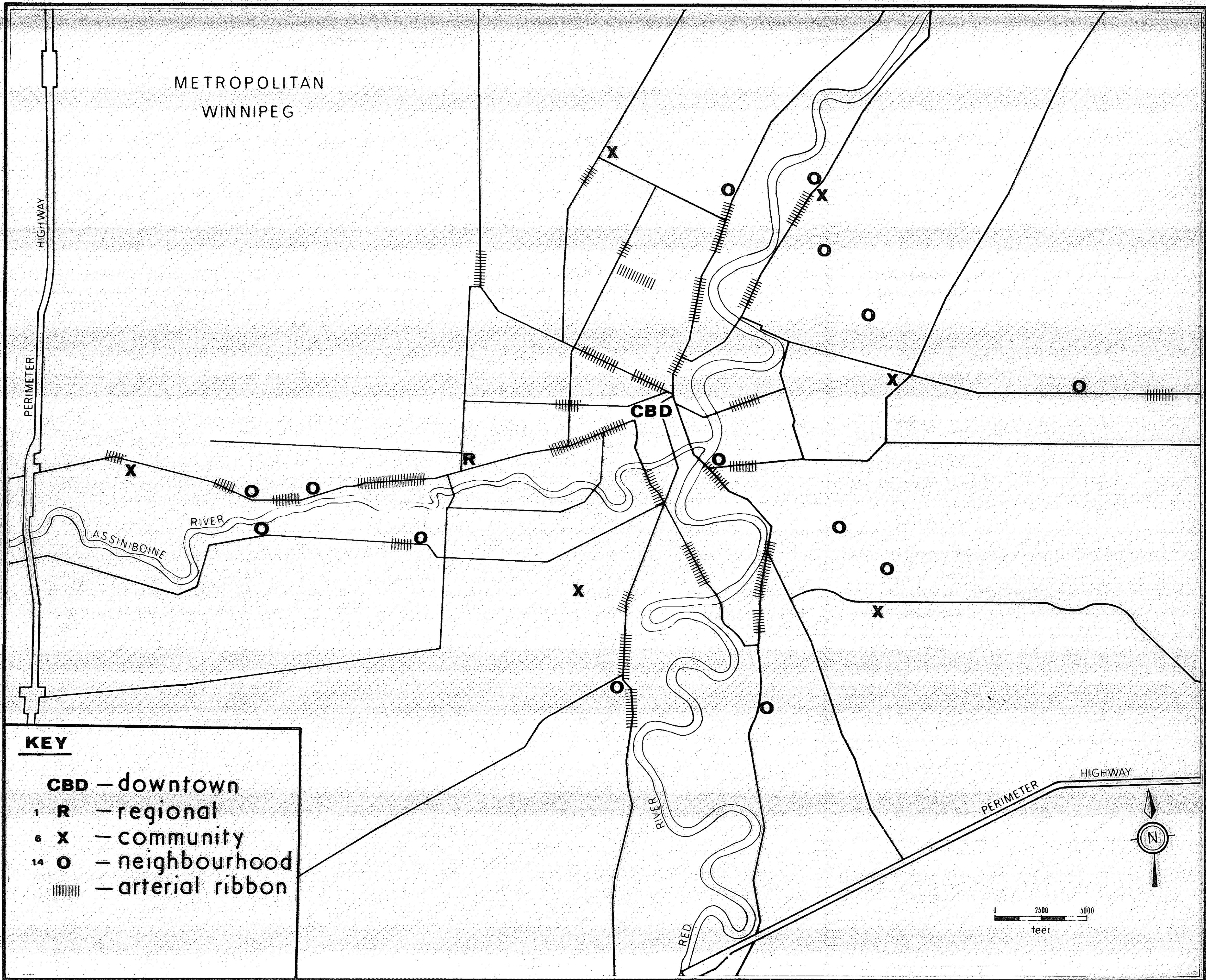


DIAGRAM I DISTRIBUTION OF FLOWER SHOP CREDIT ACCOUNT CUSTOMERS

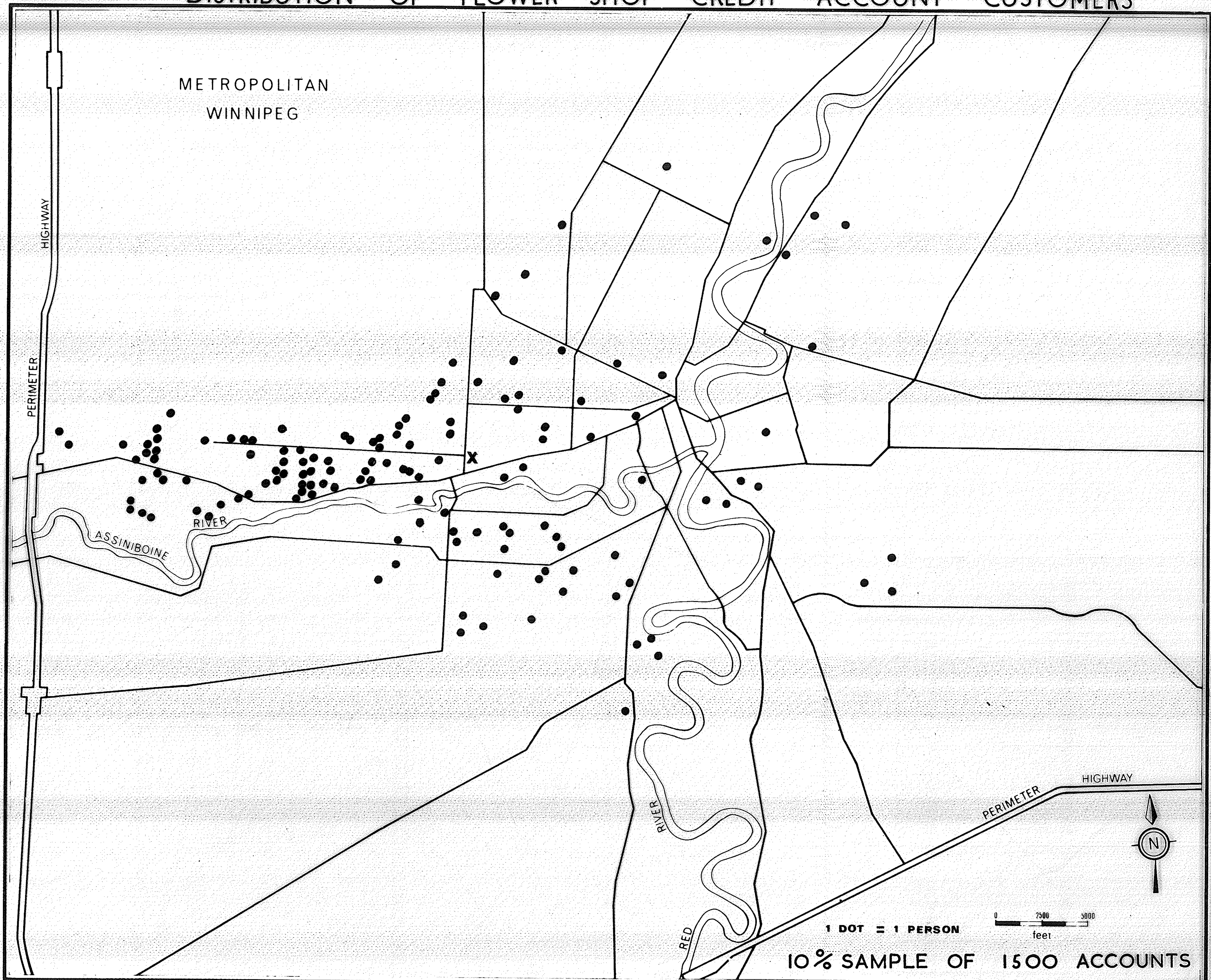
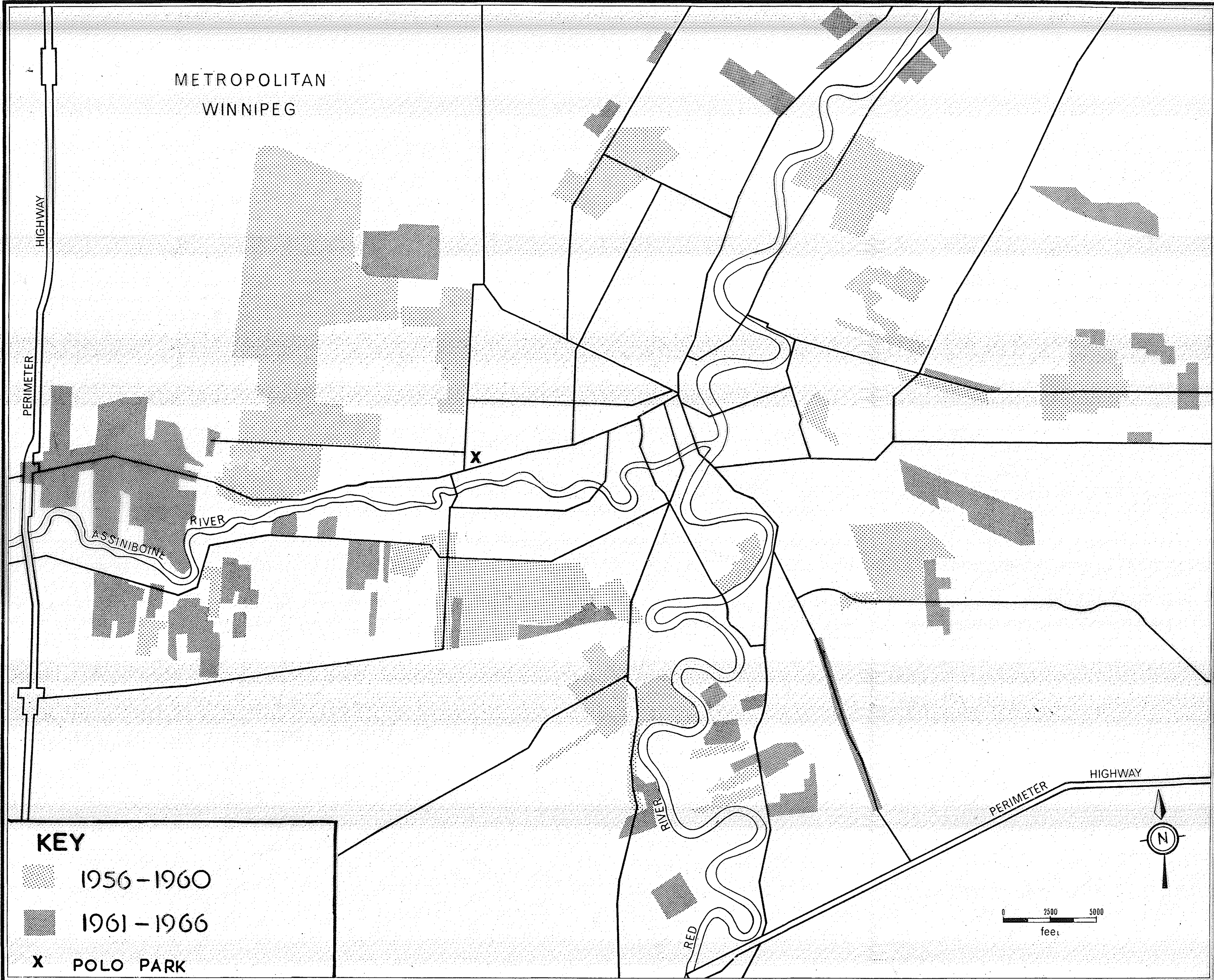


DIAGRAM P EXPANSION OF THE BUILT-UP AREA OF METROPOLITAN WINNIPEG 1956–1966



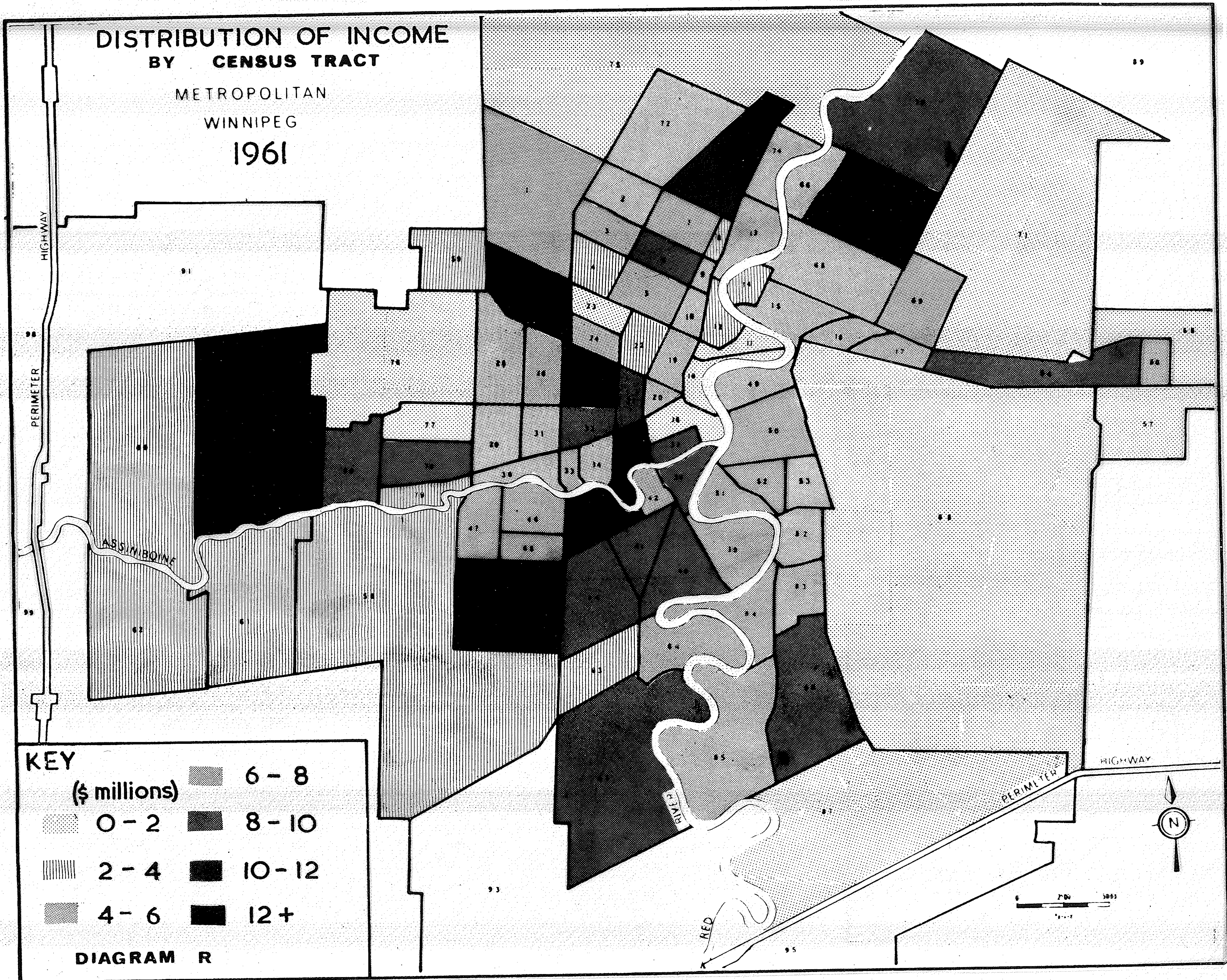

DISTRIBUTION OF INCOME
BY CENSUS TRACT
METROPOLITAN
WINNIPEG
1961
KEY
($ millions)
0 - 2
2 - 4
4 - 6
6 - 8
8 - 10
10 - 12
12 +
DIAGRAM R
ASSINIBOINE
RED
RIVER
PERIMETER HIGHWAY
N

DIAGRAM O RELATIVE INCOME DISTRIBUTION BY CENSUS TRACT 1966

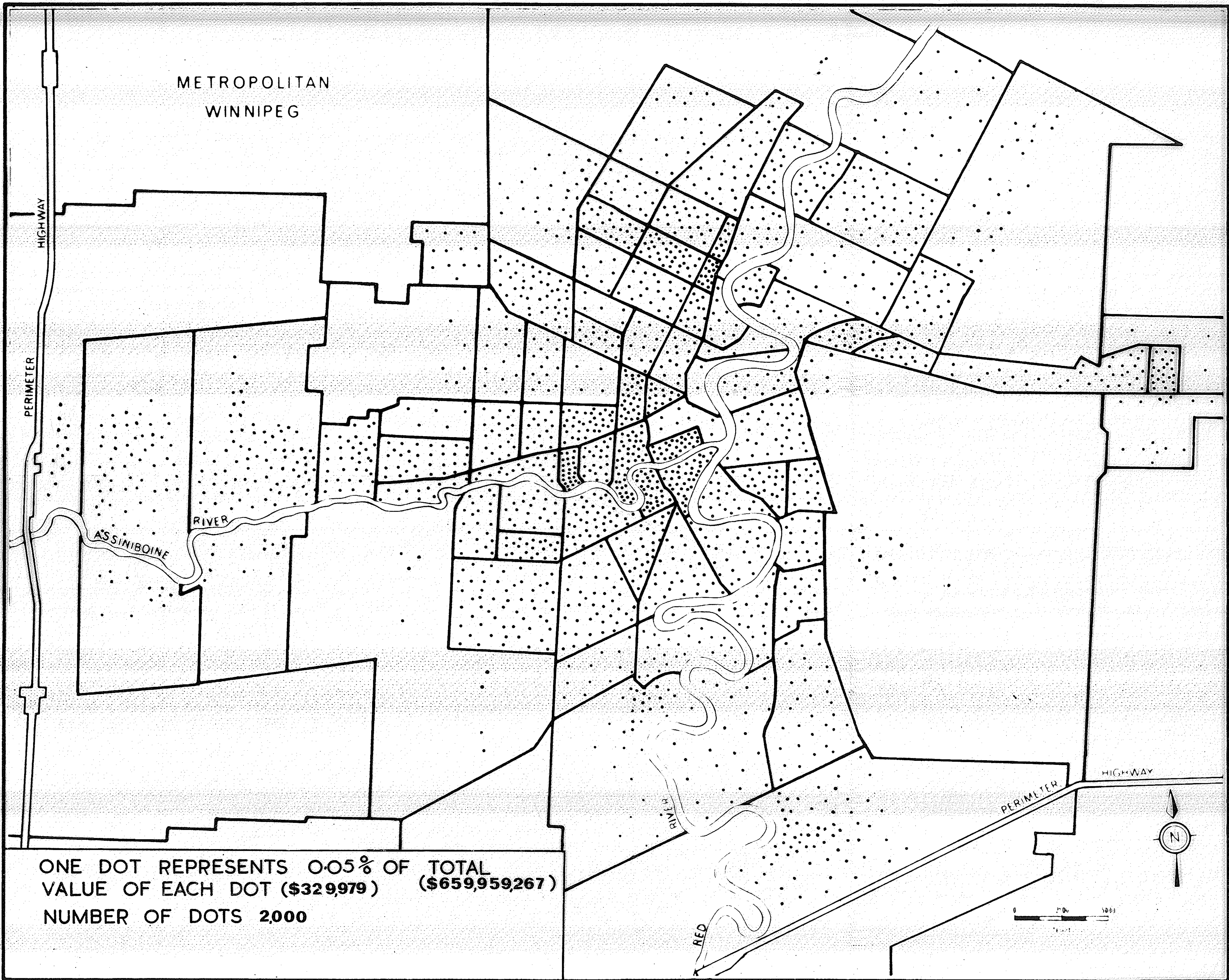
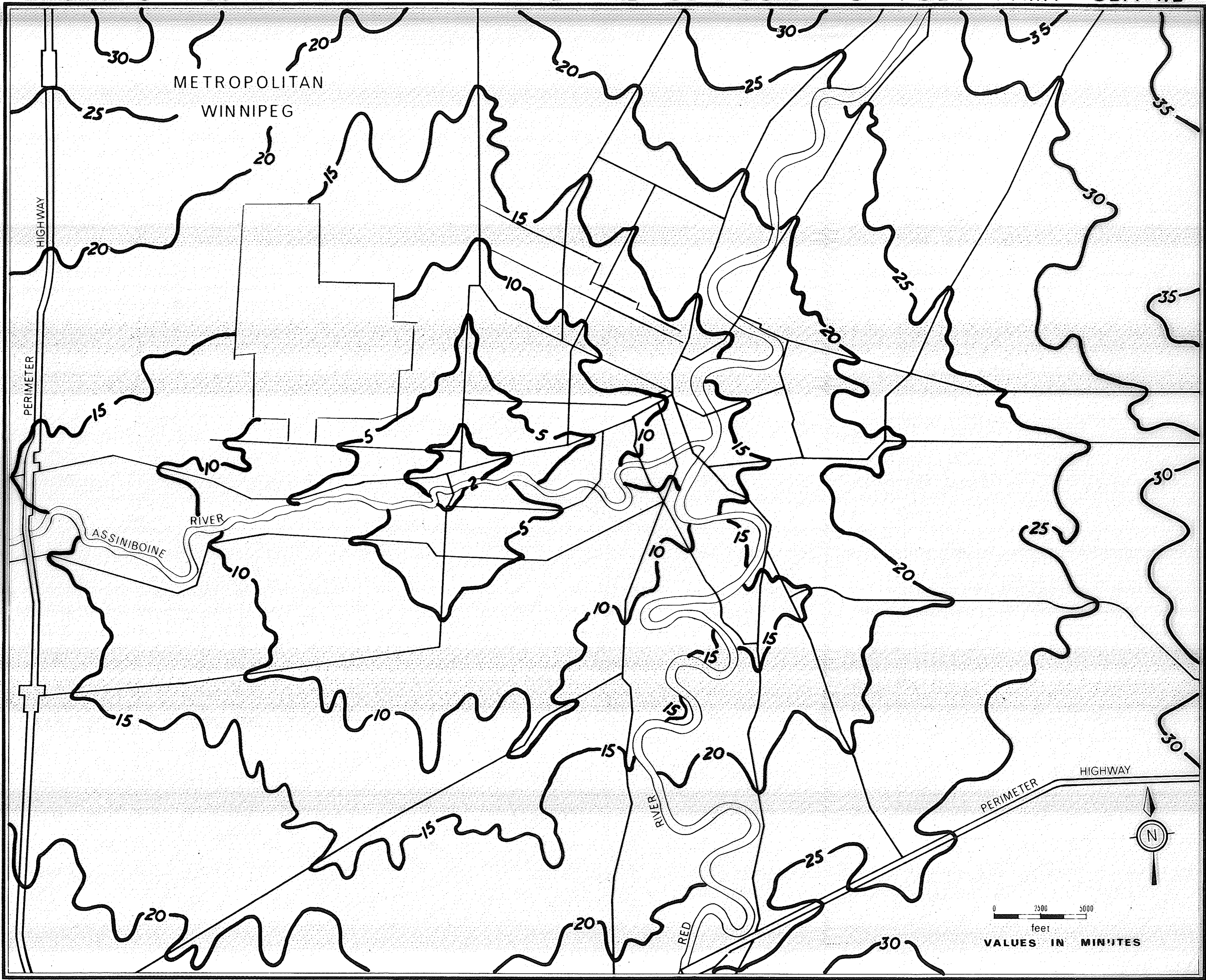
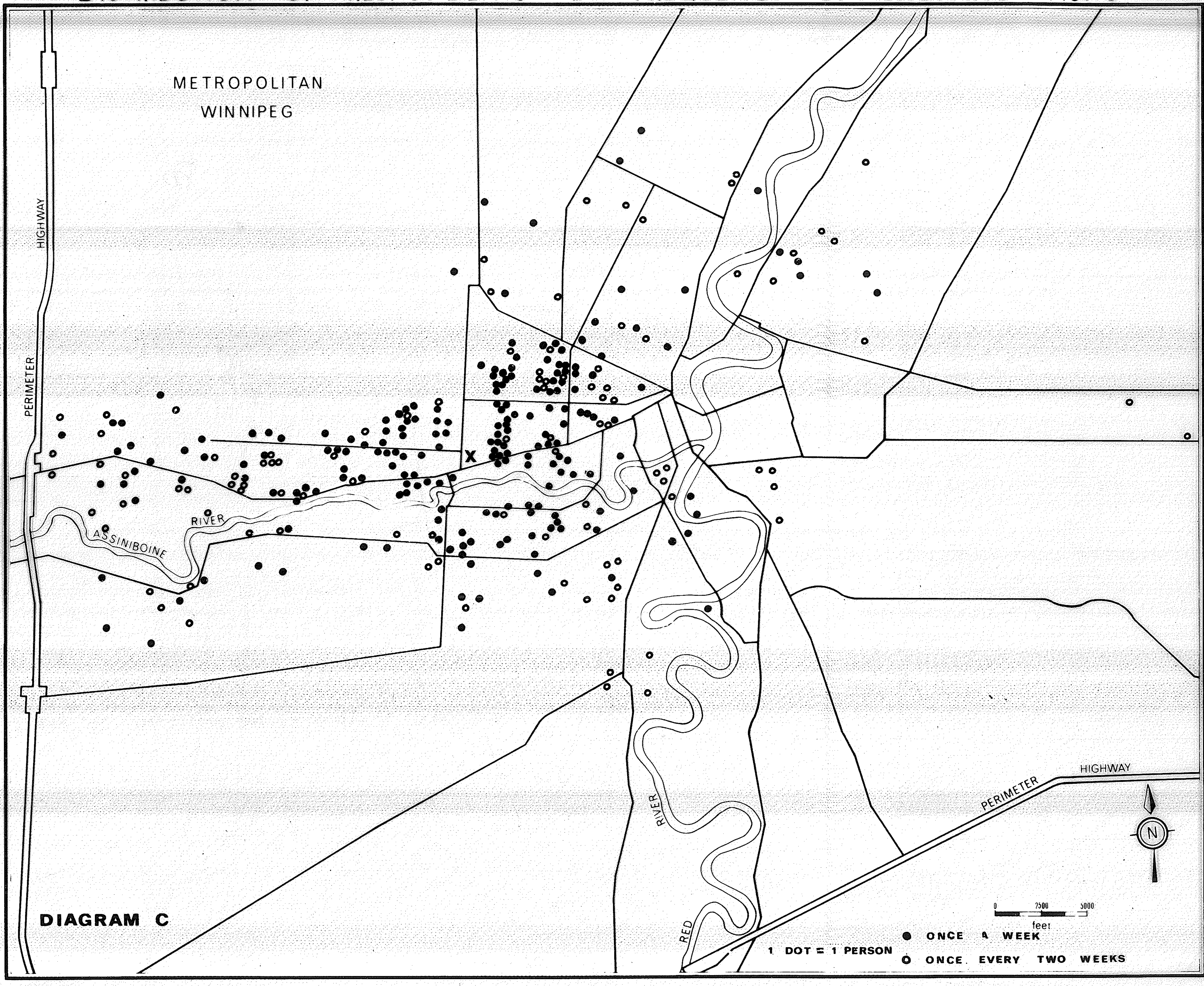


DIAGRAM J AVERAGE AUTOMOBILE TRAVEL TIME CONTOURS TO POLO PARK CENTRE



DISTRIBUTION OF RESPONDENTS BY FREQUENCY OF SHOPPING VISITS



DISTRIBUTION OF RESPONDENTS BY FREQUENCY OF SHOPPING VISITS

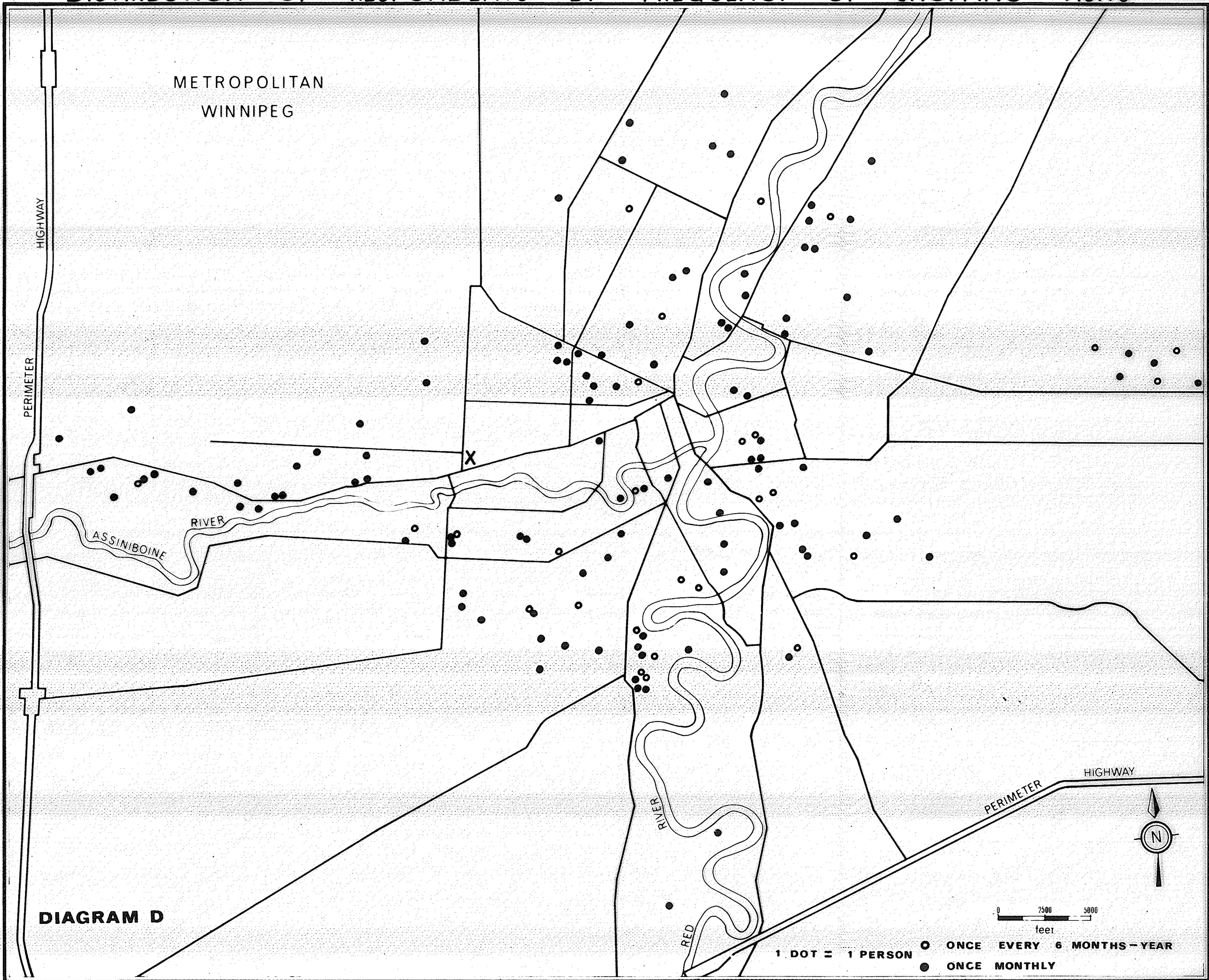


DIAGRAM D

DISTRIBUTION OF RESPONDENTS TRAVELLING BY AUTOMOBILE

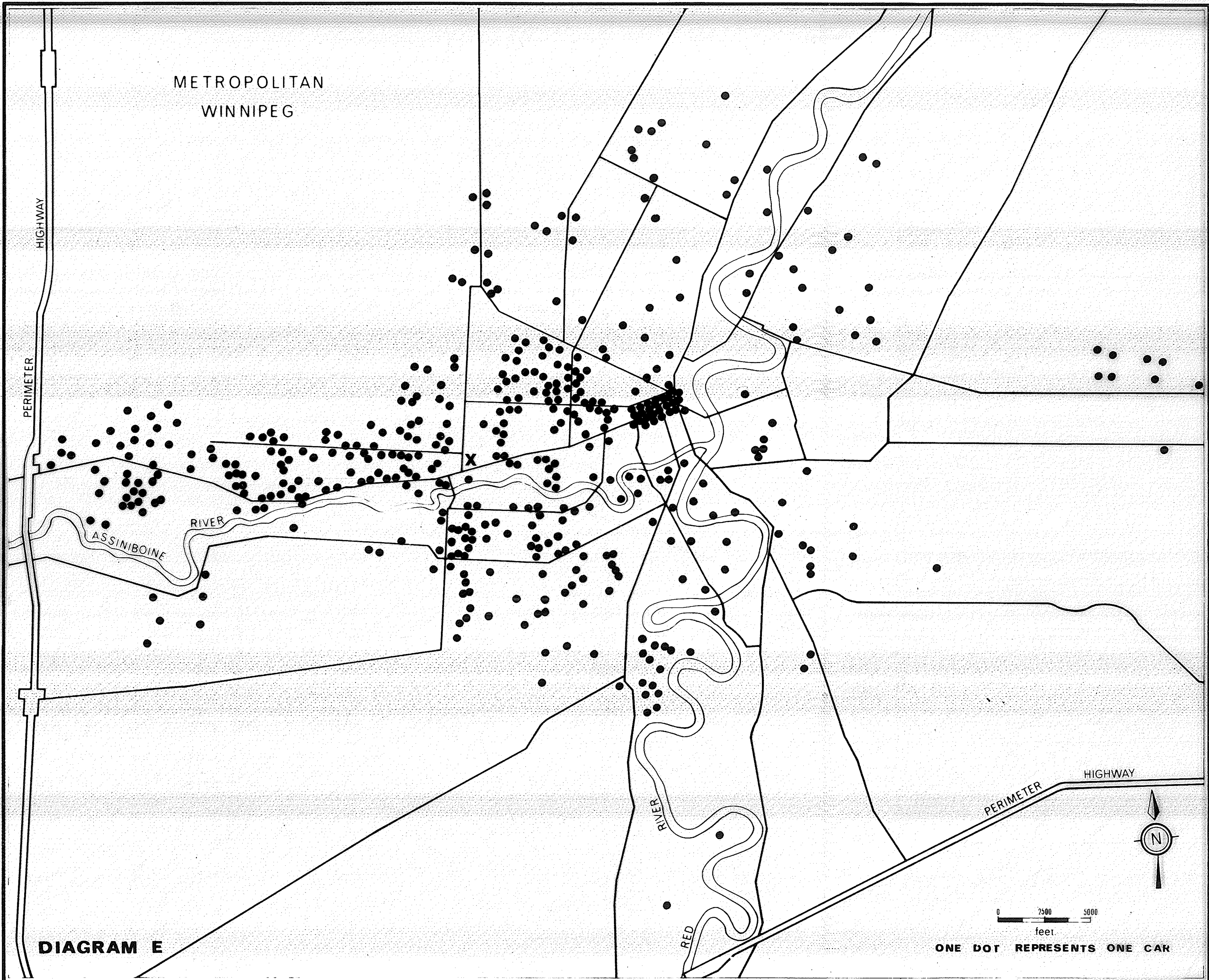
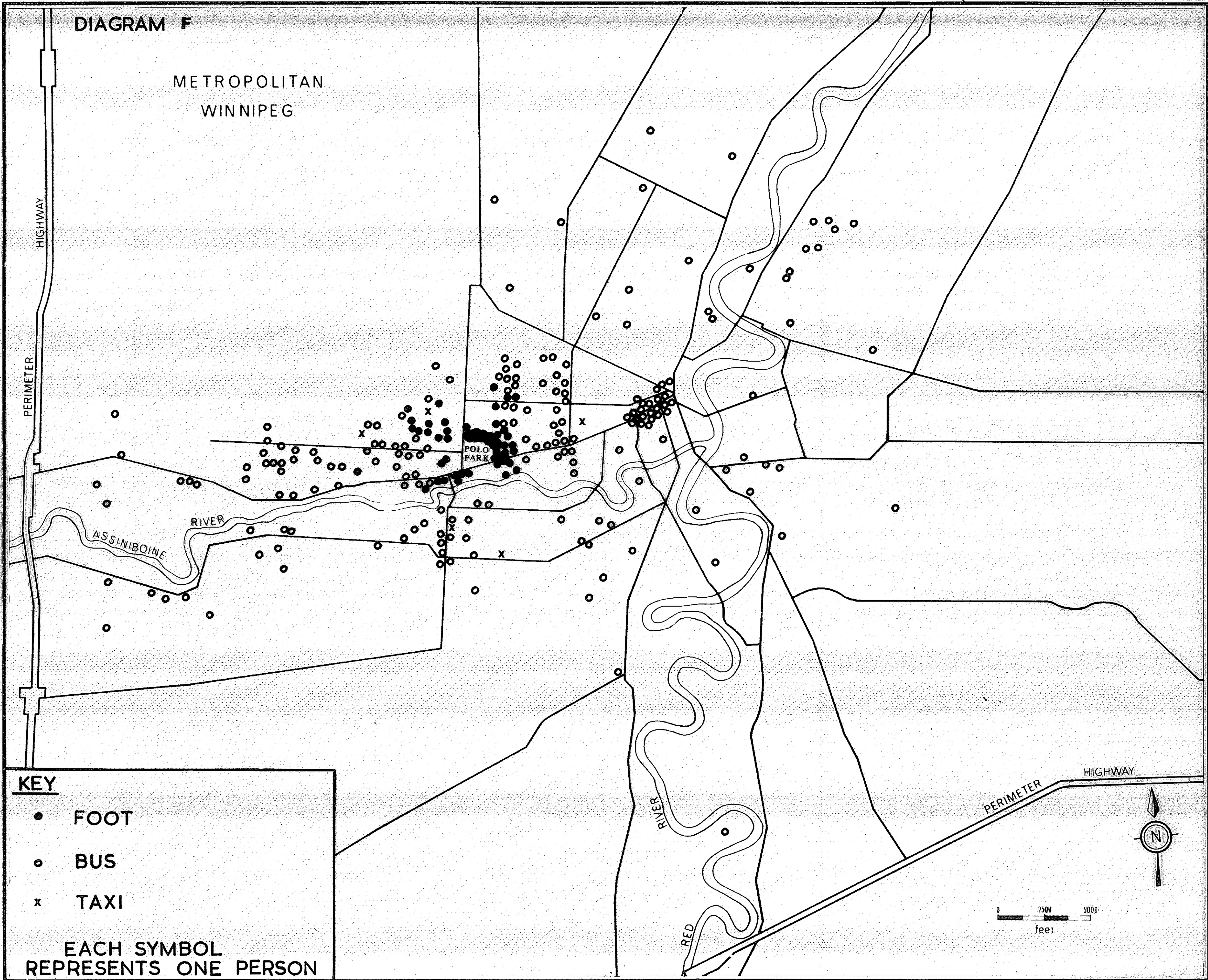
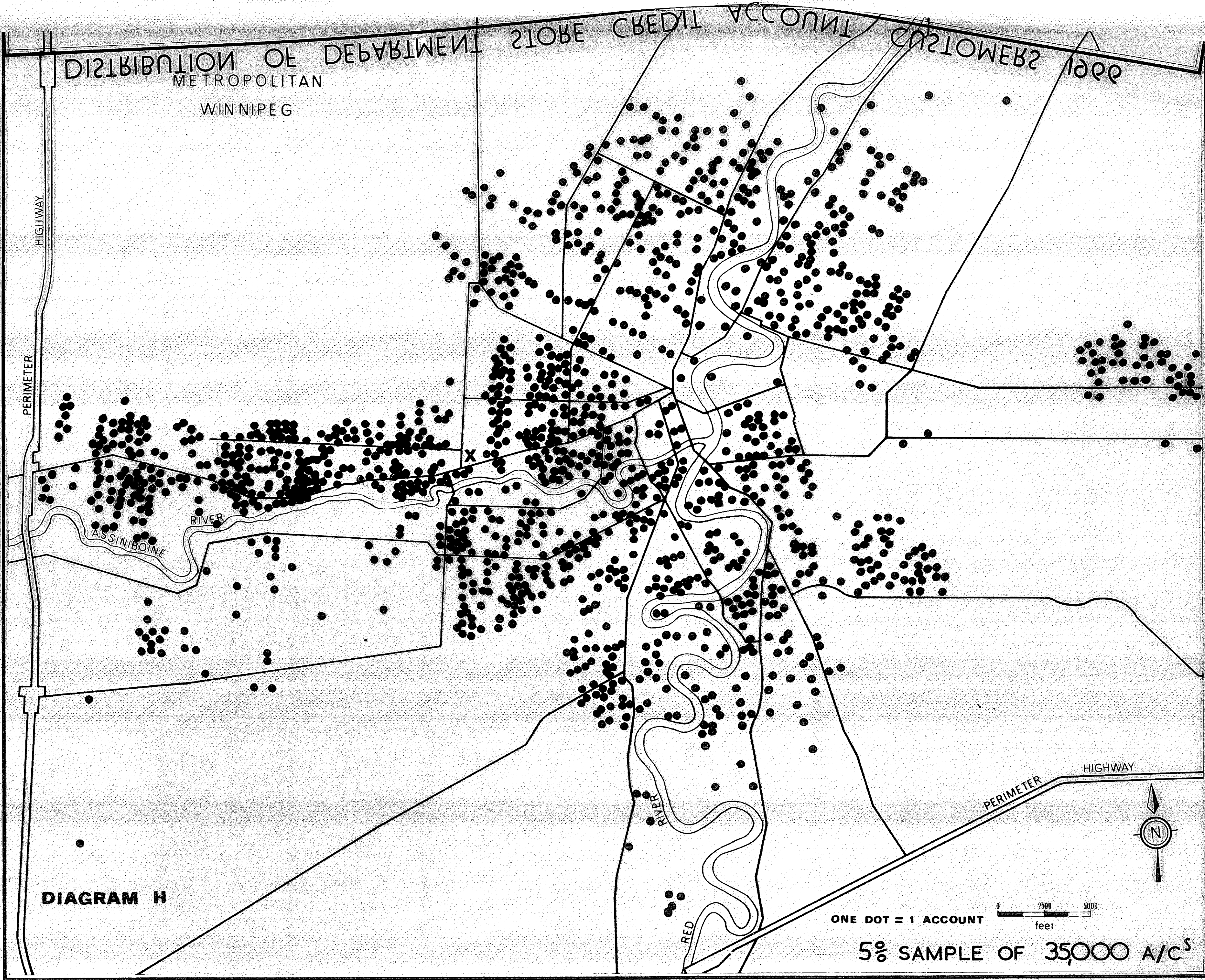


DIAGRAM E

DISTRIBUTION OF RESPONDENTS TRAVELLING BY 'BUS, FOOT AND TAXI




DISTRIBUTION OF DEPARTMENT STORE CREDIT ACCOUNT CUSTOMERS 1966
METROPOLITAN
WINNIPEG
PERIMETER
HIGHWAY
ASSINIBOINE
RIVER
RED
RIVER
PERIMETER
HIGHWAY
N
X
DIAGRAM H
ONE DOT = 1 ACCOUNT
0
2500
5000
feet
5% SAMPLE OF 35,000 A/C'S

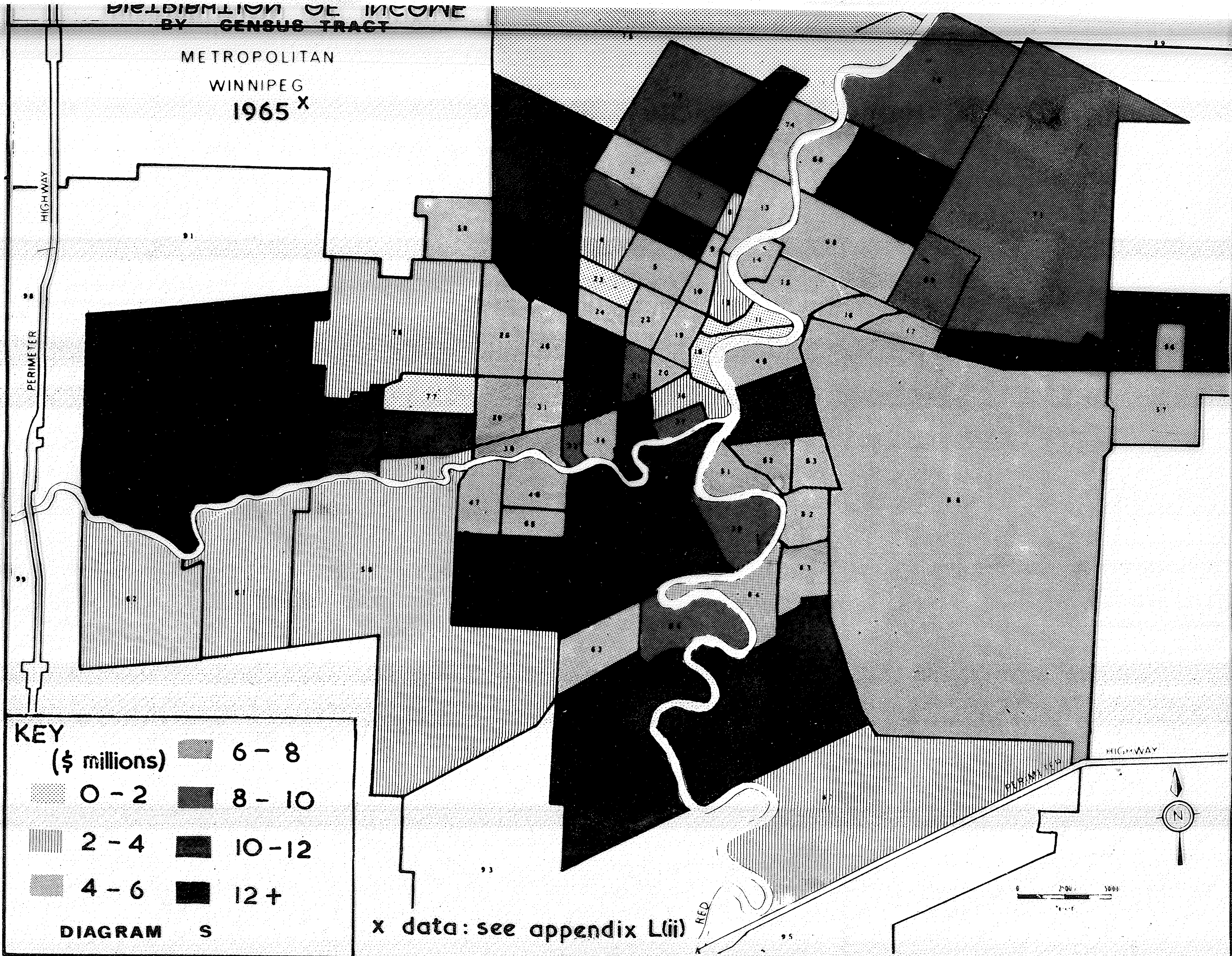

METROPOLITAN
WINNIPEG
1965 x
PERIMETER
HIGHWAY
KEY
($ millions)
0 - 2
2 - 4
4 - 6
6 - 8
8 - 10
10 - 12
12 +
DIAGRAM S
x data: see appendix L(ii)
RED

DIAGRAM A

TOTAL DISTRIBUTION OF RESPONDENTS BY PLACE OF ORIGIN OF TRIP