

APPENDICES

A. RATIONALE FOR CHOICE OF FOLK VARIABLES

1. Population Distribution:

Inclusion of the variable of population distribution was a necessity for the study. The variable gave information as to the number of people living in the area at a given point in time, as well as, identifying areas of population concentration and scarcity. A number of previous studies indicated that exurbanites move into the areas not heavily populated.³⁷ Therefore, it was necessary to identify the areas within the Winnipeg Region which had many or few residents.

2. Age Distribution:

Research revealed that the exurbanite appeared to be a member of a distinctive age group. P. J. Pryor discovered that age distribution for the fringe of urban areas tended to be positively skewed with a large percentage of individuals falling in the younger age groups.³⁸ He had also indicated that the fertility ratio of the fringe was quite high.³⁹ This suggested that many adults of the area were in the child-bearing age group, the 25 to 45 year age bracket. Further support for such speculation was given by the Paterson et al paper. Their research also indicated that the exurbanite had a tendency to be associated with having young children (younger being defined in their study as 15 or under). Their analysis concluded that, "a relatively large portion of the rural non-farm population of the Rural Municipality of Springfield consists of younger married couples with small children."⁴⁰ The variable of age distribution was included in the folk portion of this study to verify the fact that the exurbanite did have a distinctive age category, and that this factor held true for the Winnipeg Region as a whole.

3. Ethnic Background:

To date there has been no research to indicate that a move to exurbia has been influenced solely by the variable of ethnicity. However, it was a known fact that people did tend to migrate to areas where there were people of their own kind, that is, those of similar ethnic background.^{41,42} It was felt that the Winnipeg Region was one which possessed a high level of cultural awareness, and that

³⁷Paterson Planning and Research Ltd. Analysis of Rural Non-farm Residential Development, Rural Municipality of Springfield, Manitoba, p. 40.

³⁸Pryor, Robin J. Defining the Rural-Urban Fringe. p. 63.

³⁹Ibid., p. 63.

⁴⁰Pryor, op. cit., p. 12.

⁴¹Samuelson, Paul A. and Anthony Scott. Economics, p. 984.

⁴²Senn, Milton. Race, Religion and Suburbia, p. 160

perhaps ethnicity did serve as an element of attraction for the ex-urbanite. Thus, this variable was included in the list for intensive study.

4. Religious Affiliation:

The variable of religious affiliation was selected for largely the same reasons as those of ethnicity. There was no conclusive research available that religious affiliation influenced the direction of movement to exurbia. The possibility, however, could not be excluded and it was felt that the variable should be considered for study.

5. Education:

Thomlinson (1969) indirectly described the exurbanite as one who was relatively well-educated. His description of income and occupational levels tended to support this inference.⁴³ Thomlinson described the exurbanite as one usually found in highly paid, prestigious occupations, and these individuals as a rule did have a relatively high level of formal education. Thomlinson felt that a high level of education was a distinctive feature of the exurbanite and it was for this reason that this variable was included in the folk section of this study. It was necessary to discover if this condition held true for the Winnipeg Region.

6. Income:

Thomlinson (1969) concluded that the exurbanite was a highly paid individual (average income of approximately \$40,000 to \$45,000).⁴⁴ This finding gathered support from a work by David C. Thorns (1972).⁴⁵ It was, as a result, necessary to include income in the folk study since previous studies did indicate that the exurbanite was the member of an exclusive income group. It was also necessary to find out if the discovered features applied directly to exurbanites of this Region. The Paterson et al (1973) paper concluded that the exurbanite of the Winnipeg Region was not excessively wealthy but instead fell into a somewhat middle income category.⁴⁶ The important element to remember was that the above studies did place the exurbanite into some distinctive income bracket. It remained for this study to identify just what bracket.

⁴³ Thomlinson, Ralph. Urban Structure, p. 90.

⁴⁴ Ibid., p. 90.

⁴⁵ Thorns, David C. Suburbia, p. 78.

⁴⁶ Paterson Planning and Research Ltd. Analysis of Rural Non-farm Residential Development, Rural Municipality of Springfield, Manitoba, p. 17.

7. Employment by Industry:

Most exurbanites appeared to be employed in tertiary activities.⁴⁷ Few seemed to be involved in primary or secondary considerations. This variable of employment by industry was chosen for study for the primary purpose of gauging the number of persons in the rural areas involved in tertiary activities, and hopefully this would aid in the identification of the number of exurbanites in the area.

8. Employment by Occupation:

Many studies have been carried out which have attempted to identify the occupational structure of the exurbanite. Sectorsky (1955) described the exurbanite as being the "creative type" who worked primarily in the branches of the vast urban communications industry - advertising, commercial art, radio, television, films, magazines and playwriting.⁴⁸ These occupations were significant in that they did not require daily attendance at a downtown office or studio. The individual, as a result, was not required to commute everyday to work. Pryor (1968) discovered that residents of the urban fringe exhibited a heterogeneous occupational structure with a slightly greater percentage in the commercial and skilled worker classes.⁴⁹ His findings differed from those of Sectorsky, but did suggest a regional trend of the exurbanite towards a certain occupational category. The Paterson et al paper (1973) seems to add to the idea that the exurbanite does possess a common occupational classification, which of course could vary from region to region. The Paterson study concluded that this category in the Winnipeg Region was that of craftsman and production process workers.⁵⁰ The variable of employment by occupation was included in this study as a means of obtaining data in an attempt to support the Paterson et al findings. It was necessary to confirm if the Paterson findings were applicable to the Winnipeg Region as a whole.

9. Family Size:

The findings of the Paterson (1973) study seemed to indicate that the families of the exurbanite were of a large size.⁵¹ Having a large family could be playing an important role as a motivational determinant for an individual to move to exurbia. The Paterson study

⁴⁷Thomlinson, Ralph, Urban Structure, p. 90

⁴⁸Sectorsky, The Exurbanites.

⁴⁹Pryor, Robin J., Defining the Rural-Urban Fringe, p. 64.

⁵⁰Paterson, op. cit., p. 16.

⁵¹Paterson Planning and Research Ltd., Analysis of Rural Non-Farm Residential Development, Rural Municipality of Springfield, Manitoba, p. 31.

found that the exurbanite did place a great emphasis on children when asked reasons for making the move. The category of a "better place for children to grow up" received a high ranking in the "Reasons for Moving" section of the Springfield questionnaire.⁵² The family size variable was, therefore, included for study because of its promise as a motivational determinant for making a move to exurbia.

10. Rural Farm-Nonfarm Population:

This variable was of obvious importance. It was necessary to know the relative sizes of each population in a given area if valid future population projections were to be made pertaining to changes in size. The objective of this study overall was to determine demand (albeit latent) for exurban land in the Winnipeg Region. Study of the ratio between rural farm-nonfarm population is one means of approaching such a goal. If the ratio were changing disproportionately one way or the other, direction and magnitude of this change could be observed and used to reach some conclusion of trend.

11. Mother Tongue:

Mother tongue was considered for largely the same reasons as the variable of ethnic background. It was hypothesized that individuals who moved to exurbia might consider the language spoken in the area to which they moved as a prime factor in influencing their move. The variable obviously correlates highly with that of ethnicity but it was included for study perchance that it might produce a somewhat meaningful independent effect.

⁵²Ibid.

B. RATIONALE FOR CHOICE OF PLACE VARIABLES

1. Objectives

As previously mentioned, the Winnipeg Region Study Committee was formed to assess the nature of the demand for rural residential living within the surrounding area of the Winnipeg City Region. One aspect of this study was to quantify that part of the demand which was related to the environment within a physical and social framework.

The first step towards this goal consisted in the establishing of certain place variables which could seemingly become factors attracting a potential exurbanite. The variables as deemed pertinent for determining the factors of attraction were as follows:

A. Natural Environment

1. Basic suitability for single family dwelling
 - a. foundation
 - b. sewage and septic field
 - c. well water
 - d. safety from flood threat
2. Basic suitability for agriculture

B. Economics

1. Land values
2. Servicing costs
3. Taxes

C. Infrastructure

1. Existing land use
2. Available utilities
3. Road quality

D. Accessibility

1. Average distance to Perimeter Highway

E. Social

1. Commercial facilities
2. Recreational facilities
3. Educational facilities
4. Other community facilities

F. Perceptual

1. Scenic values
2. Historic or culturally significant areas

This final list of variables was obtained as a result of first several meetings with the Winnipeg Region Study Committee, second a comprehensive survey of currently related studies and pertinent literature and third, in order to complement what we considered to be basic knowledge, a series of discussions with other students along with faculty from the City Planning Department. The list describes a total range of what we consider the basic parameters in measuring the effect (both before and after) on the individual moving to exurbia.

2. The Nature of Resources - Variables defined

A. Natural Environment:

The natural environment can exert significant influences on the ultimate uses of land. Land of excessive slope or of irregular form is often unsuitable for urban development. On the other hand, land with a minimum slope can reduce the risk of flood, provide drainage and allow for the acquisition of certain views which may be generally attractive to exurbanites. Other natural environmental factors can be just as relevant. The physical relief of the land, its moisture retention capacity, soil quality and foundation bearing capabilities are a few of the essential characteristics.

The four specific variables which were deemed necessary to describe the basic suitability for single family residential dwellings are:

- a) foundation support capability
- b) suitability of the land for sewage and septic fields.
- c) well water capabilities
- d) safety from floods

It is through an analysis of these environmental factors, that a partial quantification of the suitability for urban and residential development in the Winnipeg Region can be achieved. The fifth factor included in the list (Basic suitability for agriculture) is given in order to complement the region's natural characteristics.

B. Economics:

The relatively inexpensive price at which land may be acquired in the Winnipeg Region, in comparison to Winnipeg's urban price of land, acts as an important attraction factor. People responding to these economic incentives and moving from Winnipeg into the region, form a significant portion of the total exurbanite movement. The economic factors of attraction are both direct and indirect. The most important direct, economic factors which are analyzed in this study are:

- a) Land values
- b) Taxation rates
- c) Costs of installing services

Examples of the indirect and practically indefinable economic elements may be varying food, gas and clothing prices between

Winnipeg and surrounding areas of the Region. These elements, however, can not be considered due to the difficulty and extended time required for the gathering of related data on them.

C. Infrastructure:

Existing land uses, such as quarries and mines, can be incompatible with housing development and thus not appealing to prospective exurbanites. On the other hand, locations that are in close proximity to wooded areas, recreational areas or areas where essential utilities such as gas, electricity, water and sewage are provided, appear to be places having a higher attraction rating. The quality of roads can affect the degree of accessibility to and the facility of movement in these potential areas of exurbanation, and can therefore be an important factor in influencing the distribution of exurbanites by reducing, in the short term, the attractiveness of some of these areas.

D. Accessibility:

It is axiomatic that all exurbanites are employed within the City of Winnipeg, thus the provision of various types of roads from Winnipeg can act as an incentive for various locations to be attractive as residences for exurbanites. Time distances from outlying areas may thus be significant in defining the attractiveness of a residential location, although psychological factors such as difficulty of the drive may also be important. Unfortunately the psychological parameters involved in measuring the pleasure or pain involved in a drive are often very hard to define in quantitative terms. For this reason we decided to obtain only such basic information as distance in miles and crude pavement/road with quality data. These two factors would seem to be the dominant ones within the Winnipeg Region, as far as a measure of accessibility is concerned.

E. Social:

The social factors affecting exurbanite families are those which influence the selection of one spatial area for habitation over another. The availability of a variety of commercial facilities of good quality, that is to say a variety of services and competitive establishments, within a reasonable distance from the area being examined would be a definite asset. Similarly the availability of a broad range of recreational facilities would serve as attractions. The quality of local schools, both their physical aspects and scholastic levels will attract the favourable attention of parents and children. The presence of social organizations such as youth clubs, women's clubs, churches, and the like are real factors in helping decide on any move. There is no evidence that this is not so in exurbia.

F. Perceptual:

The greater part of our analysis has obviously been predicated by certain essential economic contingencies that must exist within the bounds of normal Canadian existence. The one area which has

not been considered to any great extent however is the perceptual one, i.e. how the individual himself perceives it. There is strong argument for the perception of the operators in the moving decision being just as important as the actuality of that situation as seen by "outsiders".

These indications of the relative scenic or cultural value of a region may influence the decisions of middle and upper class migrants. Hence, this is the first justification for allocating scenic historic and "culturally significant" variables to specific regions within the study area. A second reason lies in a second probable perception of the environment as a source of many of life's good things, as is often demonstrated by such catch phrases as "rural living", "back to nature", etc. It is important to note that such perceptions of the environment often differ from the real nature of that same environment. The location of scenic, recreational and other related areas established in this section, when compared to the related data obtained by the questionnaire and demographic sections of this study may help to clarify the perception of the environment aspect of the Winnipeg Region Study.

G. Conclusions:

Data for each individual variable were given under certain classifications which aided comparison between the demographic variables described in another chapter of this study. Both of these were in turn used for possible correlation with questionnaire results. The specific rating system given for each variable as well as a complete legend and source of data is given in Appendix C. Besides this numerical compilation certain maps will be used in order to better illustrate existing relationships between variables.

The organization of a series of definitions for variables that deal with data of an environmental nature is a difficult process that all too often can lead to a set of over subjective value judgments. Planners responsible for the definition of these variables should proceed with extreme caution, making sure that they do not impose their own personal set of values on the population in general. Extra emphasis should be placed on the evaluation of the needs of a representative portion of all classes within that population studied and not only on those of an overly vociferous elite. The place variables were chosen with these points in mind.

C. CODING FOR PLACE VARIABLES

1. Natural Environment

A) Basic Suitability for Single Family Housing:

- 1) Basic Suitability for foundation (see Map 2): A Study of the geological conditions within the Winnipeg Region undertaken by the Water Control and Conservation Branch, Department of Mines and Natural Resources indicates that the only real areas that might prove to be very bad for house foundations are those that correlate very highly with the marsh-swamp areas within the region. In order to pinpoint these areas Canada Land Inventory maps were used and the following ratings were applied to the cells within the area.

Rating (low 1, medium 2, high 3)

Low rating - 1: area included within the cell has a high (90% or more) percentage of area as marshes or swamps.

Medium rating - 2: area within the cell has less than 30% of its area covered by swamp land.

High rating - 3: area within the cell has little or no land (less than 5%) covered by marshes or swamps.

- 2) Suitability for sewage and septic fields (see Map 3): The information for this variable had already been gathered by the Winnipeg Region Study Committee who used as their source the Manitoba Soils Survey. This information was thus analyzed on a cell basis using the following rating:

Low 1 - area included within the cell has a high percentage (90% or more) of the area unsuitable for sewage or septic fields.

Medium 2 - area included within the cell has less than 30% of area unsuitable for sewage or septic field.

High 3 - area included within the cell has little or no land (less than 5%) unsuitable for septic field or sewage.

- 3) Suitability for well water (see Map 4): The information for this variable had also been gathered by the Winnipeg Region Planning Study. Their source of data was the Department of Mines and Natural Resources.

The values given for each rating are the same as those used for sewage and septic field suitability.

- 4) Safety from flood threat (see Map 5): Information obtained from the Winnipeg Region Planning Study. Data source - the Department of Mines and Natural Resources. Rating used same as for preceding variables.

B) Basic Suitability for Agriculture (see Map 6):

The information used for this variable was obtained as a result of a combination of data gathered by the Winnipeg Region Study Committee. Source of information was the Canada Land Inventory Maps. Class category was 1-3 from the Canada Land Inventory. Rating used was the same as for preceding variables.

2. Economics

- 1) Land Values (see Map 7): The ratings given for each cell indicate the actual average land value for each cell according to the following criteria:

- i) Properties were examined for 21 rural municipalities which were totally or partly within the region.
- ii) Incorporated towns were excluded.
- iii) Only vacant lands of 1-20 acres were used.
- iv) Values were based upon valuation of sales listed in the assessment rolls. About 60% of sales could be obtained in the April 1, 1973 to September 1, 1973 rolls and the rest from the 1970 to 1973 rolls. This maintains a sample size while reducing inflationary trends.
- v) Municipal average land values were assumed on a minimum of ten sales up to thirty-seven sales.
- vi) Only sales at "arm's length", as defined by the assessment office were considered, i.e. sales in monetary terms at face value.

- 2) Servicing Costs (see Map 8): The values given were obtained as a result of a sample survey of contractors working in the Winnipeg Region. The survey sought to obtain the difference in bids as related to locational variables such as geology, quality of water and soil conditions. The ratings used were high, medium, and low according to the following criteria:

Costs of sewer and water installation (i.e. septic tank and well)

| | |
|----------|----------------------|
| Low 1 | - \$1,200 - \$1,500 |
| Medium 2 | - \$1,500 - \$1,800 |
| High 3 | - \$1,800 - \$2,100+ |

High values include some very high servicing costs.

- 3) Taxes (see Map 9): Values given are the actual taxes given in mill rates as obtained from the municipalities within the region.

Low 1 - 40 - 50 mills
 Medium 2 - 50 - 60 mills
 High 3 - 60 - 70+ mills

3. Infrastructure

- 1) Existing land use: The information was gathered from Canada Land Inventory Maps for the Winnipeg Region. Values given are the percentage area within each cell for the following classifications:

- I) a) Built-up Areas--Cities, towns, etc.
 b) Mines, Quarries, Gravel Pits.

- II) Outdoor Recreation
 - golf courses, developed ski slopes, cottages, beaches, parks.

- III) Horticulture
 - market gardens, nurseries, sod farms
 Orchards and Vineyards
 - fruit trees, hops, grapes

- IV) Cropland
 - annual field crops (cereal, oilseeds, potatoes) and associated fallow.

- V) Improved Pasture and Forage Crops
 - seeded grasses on cultivated land
 Rough Grazing and Rough Land
 - natural grassland, may have tree cover up to 25%

- VI) Woodland
 a) Productive
 - tree stands over 20 feet high and having a canopy cover of 25% or more.
 b) Unproductive
 - tree stands under 20 feet high regardless of canopy cover

- VII) Swamp, Marsh and Bog
 a) open wetlands, aquatic and muskeg type vegetation
 Unproductive Land
 a) Sand flats, dunes, and beaches
 - exposed sand, undeveloped beaches
 b) Rock and other unvegetated surfaces
 - rock outcrops, bad lands, alkali flats, slag dumps

- VIII) Water
 - permanent water bodies.

- 2) Available Utilities (see Map 11); The information was obtained from the Regional Analysis Program maps, Department of Industry and Commerce according to the following criteria:
- Low 1 - No utilities available within the cell area.
 - Medium 2 - Electricity or gas available within the cell area.
 - High 3 - Water works and/or sewage as well as gas and/or electricity available within the cell area.
- 3) Road Quality (see Map 12): The information was gathered from Regional Analysis Program maps, Department of Industry and Commerce. Ratings were given according to the following criteria:
- Low 1 - No paved or gravel roads located within the cell area.
 - Medium 2 - Mostly gravel, bordering paved roads within cell area.
 - High 3 - Mostly paved, some gravel roads within the cell area.
- 4) Accessibility: Information for this variable was obtained from the Department of Highways. Values given are actual road miles from the cell to the perimeter highway, following the shortest route.
- 5) Social (see Map 10);
- 1) Educational facilities: The information gathered was based on three broad categories. Number 1, the base value is used to indicate the presence of elementary school facilities within the cell. Due to the factor of school busses all cells received a base 1 rating. Number 2, the intermediate rating indicated the presence of a junior high school within or immediately adjoining the cell. Number 3, the best rating, signifies the presence of a high school within or immediately adjoining the cell. The data source was a list of schools compiled by the Department of Education and valid for the summer of 1973.
 - 2) Commercial facilities: This information was obtained by means of indicators:
 - Low 1 - At least a general store within cell area.
 - Medium 2 - Bank added to "1".
 - High 3 - Multiple banks within the cell area.

Indicators are based on the assumption that the presence of banks means the presence of additional services of a higher level acting as clients for the bank. Information source was the Regional Analysis Program Data book combined with on site inspection in many of these settlements in summer of 1973.

3) Recreational facilities:

- Low 1 - Cells with no recreation facilities.
- Medium 2 - Curling rink situated within cell area.
- High 3 - Curling rink, arena, sportsfield near school within cell area.

Information source - data compiled by Manitoba Housing and Renewal Corporation, Summer 1973.

4) Other Community facilities:

- Low 1 - Absolutely no public service available.
- Medium 2 - Hospital within cell area.
- High 3 - Hospital and other public services within cell area.

The data source was the Regional Analysis Maps and Manitoba Housing and Renewal Corporation data files.

6) Perceptual:

- 1) Scenic Values (see Map 13); Information gathered for this variable was obtained as a result of a study of aerial photographs produced by Lower Inventory for Tomorrow, Remote Sensing as well as Topographical Maps produced by the Surveys and Mapping Branch, Department of Mines and Technical Surveys. The rating for each cell was subjectively defined according to the following criteria:

- Low 1 - Cells having no outstanding topographical features within their area.
- Medium 2 - Cells in which at least part of the area (30%) has some above average topographical feature.
- High 3 - Cells in which a majority of the area (50% or more) has an outstanding topographical feature

Above average topographical features were deemed to include forests, hills, small rivers.

Outstanding topographical features include lakes, beaches, major rivers as well as the average features.

- 2) Historic or culturally significant factors: Information was obtained from Regional Analysis Program Maps according to the following criteria:

- Low 1 - No facilities within cell area.
- Medium 2 - Cell area having museum or point of interest and historic site.
- High 3 - Cell having same as medium and also normal recreational facilities (e.g.) golf, ski, or other; hiking, picnic, etc.

D. CELL CODES

| <u>Rural Municipality</u> | <u>R.M. Code</u> | <u>Cells Contained</u> | <u>Incorporated Centre</u> | <u>Centre Code</u> |
|---------------------------|------------------|------------------------|----------------------------|--------------------|
| Rockwood | 01 | 001-015 | Stonewall Teulon | 901 902 |
| St. Andrews | 02 | 016-031 | Winnipeg Beach Selkirk | 903 904 |
| St. Clements | 03 | 032-049 | | |
| Brokenhead | 04 | 050-059 | Beausejour | 905 |
| Springfield | 05 | 074-081 | | |
| Tache | 06 | 074-081 | | |
| Ste. Anne | 07 | 082-087 | Ste. Anne | 906 |
| Hanover | 08 | 088-095 | Niverville Steinbach | 907 908 |
| Richot | 09 | 096-103 | | |
| De Salaberry | 10 | 104-111 | Ste. Pierre | 909 |
| Morris | 11 | 112-129 | Morris | 910 |
| Macdonald | 12 | 130-144 | | |
| Cartier | 13 | 145-153 | | |
| St. Francois Xavier | 14 | 154-156 | | |
| Rosser | 15 | 157-163 | | |
| Woodlands | 16 | 164-176 | | |
| | | | Winnipeg | 920 |

Cells grouped together for the purpose of population studies:

| <u>Cells</u> | <u>Cell No. Used</u> |
|--------------------|----------------------|
| 041, 042 | 041 |
| 050, 051 | 050 |
| 096, 100 | 096 |
| 074, 080 | 074 |
| 117, 118, 124, 125 | 117 |
| 128, 129 | 128 |
| 130, 134 | 130 |
| 131, 135 | 131 |
| 145, 147 | 145 |
| 154, 155 | 154 |
| 105, 106 | 105 |

E. USES OF COMPUTER PRINTOUT IDENTIFYING HOUSEHOLDS FOR MAILING PURPOSES

A computer printout was obtained from the Municipal Services and Research Branch, Department of Municipal Affairs indicating by municipality all households occupying 20 acres or less within the Winnipeg Region. The printout gave the following information:

1. Name and address of owner
2. Roll number
3. Lot description⁵³
4. Counter number⁵⁴

⁵³The lot description varied according to the presence or absence of a plan of the lot in question. If the lot was part of a plan, the information given was the plan number, lot number and frontage. If the lot was not part of a plan, the section, township, range and acreage was given. In both cases a more detailed lot description could be obtained from the records at the Municipal Planning Branch based on the data of the computer printout. This became necessary in about 25% of the cases in order to establish the cell location of the respondents.

⁵⁴A counter number was used so that questionnaires could be assigned the same number in order to match them to lot descriptions and thereby place the respondents in appropriate cells. It should be noted that there were two sets of identical computer printouts. One set was used as a "stuffer" in the questionnaire survey to identify the address of the respondent through a window envelope. The other printout was retained as a checklist against incoming completed questionnaires in order to assign cell numbers.

F. CODING OF THE QUESTIONNAIRE

To speed the process of getting survey responses onto computer cards, coding was included on the actual questionnaire. In this way responses were key-punched directly from the questionnaire.

Before mailing, all questionnaires were marked with the code designation for the rural municipality to which it was being sent and with a counter number. The counter number allowed the identification of the parcel to which the questionnaire was sent, but in no way was this number used to identify the respondent.

As questionnaires were returned, the rural municipality and counter codes were placed in the appropriate space for key-punching. At this time the counter number was used to place the response into the proper geographical cell.*

Also prior to key-punching the questionnaire was examined and any problems corrected. The occupation specified in answer to question 3(a) (see Appendix I), was checked in the Occupational Classification Manual of Canada (1961), Dominion Bureau of Statistics. The response to question 3(b) was thus checked for accuracy and corrected if necessary.

*Cells generally follow township boundaries or river lot designations

G. CRITIQUE OF QUESTIONNAIRE

The questionnaire formulated for this study seems to be adequate. However, a few minor problems became evident as the questionnaires were examined.

Question number 2 (see Appendix I), asking for the age and sex of household members should have had a line drawn in the table to distinguish male and female members.

The possible responses for question 3(b) should include "unemployed" and "housewife". (This was added as the responses were coded in this study.)

Respondents occasionally checked more than one response to question 10(b). For this reason an additional response "More than one place in Winnipeg" is necessary and was added in this study. Also, two parts of the city were inadvertently omitted from the question. These are Tuxedo and Charleswood. Both are not large employment areas so the mistake was not severe.

The response categories for question 13 are not distinct. They should be:

After 1970
 1966-1970
 1961-1965
 1956-1960
 Before 1956

Also, the response of "Always lived in this area" should be added to separate out respondents born and raised in the area.

Question 14 needs a possible response indicating the question is not applicable since the respondent has always resided in the immediate vicinity of his current home.

In question 19(b) the response "home occupation" is unclear since it may be thought to mean occupying a home on the lot rather than the use of one's home as a place of employment. Respondents may not realize the survey is directed only to occupied parcels of land.

Analysis of survey responses revealed further considerations important to the design of any future questionnaire based on this study. Question 3(a) which asks the respondent to specify his occupation before categorizing it, is necessary. Although the question requires extra effort by researchers in the coding phase, it adds greatly to the accuracy of results. Very few respondents were able to place themselves into the correct occupation categories as defined by Statistics Canada. With question 3(a) as a basis, this problem can be overcome.

A few respondents objected to questions 4 and 5 which regard ethnicity and religion. These questions seemed to be potentially important in deriving general profiles of exurbanites. However, the results indicate religion and ethnicity are unimportant factors in the demand for exurban living and can be omitted in later surveys.

A small number of respondents questioned the confidentiality of their responses (see Appendix F regarding counter number). All responses are strictly confidential, and to ensure respondents of this fact, further surveys might include an explanation of the counter number's function.

J. R. OAKES,
SECRETARY-TREASURER

JOHN ZELYCK,
REEVE

PHONE PETERSFIELD 739-2264



OFFICE OF SECY-TREAS
CLANDEBOYE
MANITOBA

November 29, 1973

Dear Madam/Sir:

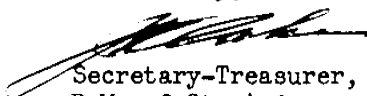
The Rural Municipality of St. Andrews is conducting a "Rural Residential Survey". With your assistance in answering the attached questionnaire, you shall be significantly improving our ability in making sure that future development results in the best possible community for all of us.

Since you live in this rural area, your views and your experience are of particular interest to us.

This questionnaire is strictly confidential, and you need not sign your name. It has also been sent to other households in St. Andrews. The survey is being conducted by the Department of Municipal Affairs which is being assisted by the University of Manitoba.

We would appreciate it very much if you would take a few minutes to answer the enclosed questionnaire and return it in the self-addressed and stamped envelope. Thank you very much.

Yours truly,


Secretary-Treasurer,
R.M. of St. Andrews

OFFICE USE ONLY
 COL 1 (CARD 1)
 COL 2-12

RURAL RESIDENTIAL SURVEY

PLEASE REPLY WITHIN
 ONE WEEK

(1) Is this dwelling used as a:

COL 13 A Permanent home _____
 B Seasonal cottage _____

(2) Please fill in the table showing how many people in your household are in the following age groups.

| | AGE | SEX | |
|-----------------------|----------------------|------|--------|
| | | Male | Female |
| COL 14-16 | <u>A</u> 0-4 years | | |
| COL 17-19 | <u>B</u> 5-9 | | |
| COL 20-22 | <u>C</u> 10-14 | | |
| COL 23-25 | <u>D</u> 15-19 | | |
| COL 26-28 | <u>E</u> 20-24 | | |
| COL 29-31 | <u>F</u> 25-29 | | |
| COL 32 -34 | <u>G</u> 30-34 | | |
| COL 35-37 | <u>H</u> 35-39 | | |
| COL 38-40 | <u>J</u> 40-44 | | |
| COL 41-43 | <u>K</u> 45-49 | | |
| COL 44-46 | <u>L</u> 50-54 | | |
| COL 47-49 | <u>M</u> 55-59 | | |
| COL 50-52 | <u>N</u> 60-64 | | |
| COL 53-55 | <u>P</u> 65 and over | | |

(3) (a) What is the occupation of the household head? _____

(b) Now, please check (✓) which of the following is closest to the occupation you listed above.

COL 56 A Clerical _____
 B Sales _____
 C Craftsman, Production Process _____
 D Farmer or Farm Worker _____
 E Service or Recreation _____
 F Managerial _____
 G Labourer _____
 H Logger, Fisherman, Miner, Quarryman _____
 J Professional or Technical _____
 K Transport or Communication _____
 L Retired _____
 M Other, specify _____

- (4) Please check (✓) which one of the following is considered to be the ethnic origin of the household head?

COL 57

A Asian _____
B British Isles _____
C French _____
D German _____
E Italian _____
F Jewish _____
G Native Indian or Eskimo _____
H Netherlands _____
J Other European _____
K Polish _____
L Russian _____
M Scandanavian _____
N Ukrainian _____
P Other, specify _____

- (5) Which one of the following is the religious affiliation of the household head?

COL 58

A Anglican _____
B Baptist _____
C Greek Orthodox _____
D Jewish _____
E Lutheran _____
F Mennonite _____
G Pentecostal _____
H Presbyterian _____
J Roman Catholic _____
K Ukrainian Catholic _____
L United _____
M Other, specify _____
N None _____

- (6) Please check the highest level of education completed by household head.

COL 59

A Grade 8 or less _____
B Grade 9 - 12 _____
C Technical or business school _____
D University _____

- (7) (a) Where did the household head and spouse spend most of their lives prior to their eighteenth birthdays? (Check only one for household head and only one for spouse).

COL 60-61

| <u>Household Head</u> | | <u>Spouse</u> | |
|-----------------------|--|---------------|------------------|
| <u>A</u> | Farm _____ | <u>A</u> | Farm _____ |
| <u>B</u> | Small Town (less than 10,000 population) _____ | <u>B</u> | Small Town _____ |
| <u>C</u> | City (10,000 and over population) _____ | <u>C</u> | City _____ |

- (b) Since the eighteenth birthday, have the household head and spouse lived in a city more than one year?

COL 62-63

| <u>Household Head</u> | | <u>Spouse</u> | |
|-----------------------|-----------|---------------|-----------|
| <u>A</u> | Yes _____ | <u>A</u> | Yes _____ |
| <u>B</u> | No _____ | <u>B</u> | No _____ |

(8) Which group of the following best describes your family income last year?

- COL 64
- A Under \$5,000 _____
B 5,000 - 9,999 _____
C 10,000 - 14,999 _____
D 15,000 - 19,999 _____
E 20,000 and over _____

(9) If neither retired nor unemployed, where does the household head work? (Please check (✓) one).

- COL 65
- A Winnipeg area _____
B At home _____
C No fixed location of work _____
D In your municipality _____
E Other, specify _____

(10) If the household head works in Winnipeg,

(a) How long does it take him (her) to travel to work?

- COL 66
- A 0 - 15 minutes _____
B 16 - 30 minutes _____
C 31 - 45 minutes _____
D 46 - 60 minutes _____
E Over 1 hour _____

(b) In what part of the city does he (she) work?

- COL 67
- A Inner city _____
B St. James - Assiniboia _____
C West Kildonan _____
D East Kildonan _____
E North Kildonan _____
F St. Boniface _____
G Transcona _____
H St. Vital _____
J Fort Garry _____

(11) If the household head does not work at home, how does he (she) travel to work?

- COL 68
- A Car or truck _____
B Car pool _____
C Bus _____
D Other, specify _____

(12) How many passenger vehicles are owned by this household?

- COL 69
- A None _____
B 1 _____
C 2 _____
D 3 or more _____

(13) What year did you locate here?

- COL 70
- A After 1971 _____
B 1966 - 71 _____
C 1961 - 66 _____
D 1956 - 61 _____
E Before 1956 _____

(14) Where was your last place of residence?

- COL 71
- A Winnipeg area _____
B In another Manitoba community,
specify _____
C Other, specify _____

(15) If you last lived in the Winnipeg area, how long did you live there?

- COL 72
- A Less than 1 year _____
B 1 - 2 years _____
C 3 - 5 years _____
D 6 - 10 years _____
E Over 10 years _____

(16) What type was your previous residence?

- COL 73
- A Single-family _____
B Two-family _____
C Apartment _____

(17) Did you rent your previous residence?

- COL 74
- A Yes _____
B No _____

(18) (a) Was the previous owner of the property on which you now live:

- COL 75
- A A friend _____
B A relative _____
C A contractor or real estate agency _____
D Other _____

(b) Did you inherit this property?

- COL 76
- A Yes _____
B No _____

(19) (a) What use(s) do you make of your lot or property?

- COL 77
- A Home occupation _____
B Farming _____
C Gardening or other hobbies _____
D Keeping pets and/or other animals _____
E No special uses _____
F Other, specify _____

(b) Did you intent to make a profit from any of the above activities?

- COL 78
- A Yes _____
B No _____

(20) What is the lot size of your present home? (For example, a lot of 200 feet by 200 feet is approximately 1 acre).

COL 79

- A Less than .5 acres _____
- B .5 - .9 acres _____
- C 1 - 2.9 acres _____
- D 3 - 4.9 acres _____
- E 5 - 9.9 acres _____
- F 10 - 14.9 acres _____
- G 15 - 19.9 acres _____
- H 20 or more acres _____

(21) (a) Is the size of your lot or property:

COL 80

- A Suitable _____
- B Too small _____
- C Too large _____

(b) If too small or too large please explain why: _____

COL 1-5 (CARD 2)

(22) Please answer part (a) and then in (b) rank in order only your four most important reasons noted in (a). Use the number 1 for the most important.

(a) When you were looking for a place to live, what appealed to you about coming here?

(b) Please rank by number your four most important reasons.

COL 6-13

- A better schools _____
- B lower taxes _____
- C attractive landscape (trees for example or river location) _____
- D wanted more land _____
- E area less crowded _____
- F could keep animals _____
- G personal activities less restricted _____
- H less travel time to job _____
- J friends and relatives close by _____
- K people friendlier _____
- L more visual privacy around home _____
- M lower prices for housing _____
- N fewer building regulations _____
- P interested in farming _____
- Q other, specify _____

(23) (a) When you were deciding to move to your present home, were you also considering homes in Winnipeg?

COL 14 A Yes _____
 B No _____

(b) Were you aware of the prices of houses in Winnipeg which were comparable to your present home?

COL 15 A Yes _____
 B No _____

(c) If the answer to part (b) is "yes", how did your present home compare? Check one of the following:

COL 16 A It was more expensive than a comparable house in Winnipeg _____
 B It was about the same price as a comparable house in Winnipeg _____
 C It was less expensive than a comparable house in Winnipeg _____

(24) (a) Are you affected by neighbouring farm activities?

COL 17 A Yes _____
 B No _____

(b) If "yes", please comment _____

(25) Do you feel that the distance from your house to neighbouring houses is:

COL 18 A Suitable distance _____
 B Too close _____
 C Too far _____

(26) Were any neighbouring houses constructed after you located where you are now?

COL 19 A Yes _____
 B No _____

(27) Would your satisfaction be reduced if more houses were added to those neighbouring yours?

COL 20 A Yes, severely _____
 B Yes _____
 C No _____
 D No, not at all _____

(28) How many houses are within 200 feet of your residence?

COL 21 A None _____
 B 1 _____
 C 2 _____
 D 3 _____
 E 4 or more _____

(29) How is your sewage disposed of?

- COL 22
- A Septic tank and field _____
B Septic tank and pumpout _____
C Out-house _____
D Sewer system _____
E Other, specify _____

(30) (a) If you and your neighbours dispose of your sewage by septic tank and field, have you had any trouble with that method of disposal?

- A Yes _____
B No _____

COL 23

(b) If "yes", what was the trouble? _____

(31) (a) How is your water supplied?

- COL 24
- A Individual well _____
B Group well _____
C Municipal Water System _____
D Hauling _____
E Other, specify _____

(b) Has your water supply always been adequate to meet your needs?

- A Yes _____
B No _____

COL 25

(c) If "no", what was the trouble? _____

(32) (a) Which of the following services do you feel you need, but do not have?

- COL 26
- A Weed control _____
B Snow clearance _____
C Gravel road maintenance _____
D Drainage _____
E Fire _____
F Police _____
G Street pavement _____
H Street lighting _____
J Sidewalks _____
K Other, specify _____

(b) What services do you feel are inadequate and need improvement?

- COL 27
- A Weed control _____
B Snow clearance _____
C Gravel road maintenance _____
D Drainage _____
E Fire _____
F Police _____
G Street pavement _____
H Street lighting _____
J Sidewalks _____
K Other, specify _____

(33) If you feel this questionnaire has not covered some items of concern to you as a rural resident, please feel free to comment.

THANK YOU!

J. ADDITIONAL CONCERNS EXPRESSED BY QUESTIONNAIRE RESPONDENTS

The last page on the questionnaire asked respondents to voice any concerns which they felt were not covered sufficiently in other parts of the survey. A number of respondents (exurbanites and non-exurbanites) chose to express themselves in this regard and this appendix presents a general description of the results. The first section is an overview of the total responses from all the municipalities surveyed and the subsequent sections explain responses from each individual municipality.

Overview

Poor road conditions and lack of highway maintenance were the major complaints voiced by the total number of respondents from the five surveyed municipalities. A significant proportion of these complaints related to excessive dust conditions. The next most mentioned problem was inadequate telephone service with emphasis on high costs and dislike of party lines.

Septic fields seem to present many problems for rural residents, and many respondents feel the need for better sewage systems. In addition, several respondents requested more adequate water supplies. Better control of dogs was a need mentioned by respondents from all five municipalities.

A frequent request concerned lot sizes. Some respondents wanted lots to be kept large while others would like to subdivide their property into a number of relatively small lots. The requests for regulations permitting smaller lot sizes outnumbered those for larger lot sizes by a ratio of 3 to 1. Numerous requests for better cultural and recreational facilities were recorded. The last major concern was the fear that certain areas of the Winnipeg Region might become over-populated.

Other concerns less frequently mentioned across the five municipalities included requests for better bus service, garbage collection, snowmobile and motorcycle controls, pollution control, greater regulation of land uses, more adequate mail delivery, fire protection and landscaping in towns and along roadways.

Some respondents expressed great satisfaction with their homes and neighbourhoods. Good neighbours, large lot size, low cost of property and lack of pollution were reasons given to explain their enjoyment of life in the Winnipeg Region.

Rockwood

In Rockwood the most frequent complaint pertained to the poor quality and maintenance of the roads in the area. The second most frequent complaint concerned the lot size. It was felt that governmental regulations should permit smaller lot sizes in the area. Complaints about telephone service were also received with the emphasis being on high costs and the

dislike of party lines. Several complaints were received regarding poor bus service to Winnipeg, the lack of good recreational facilities, and the need for a better sewage system (dislike of septic fields). Some concern was shown towards the possibility of the area becoming overpopulated. Numerous controls were requested but these were very diverse and of a personal nature. Controls were requested on such things as snowmobiles, building permits, dogs, dust, hunting, pollution, and livestock.

Macdonald

In Macdonald it was observed that the two major complaints related to inadequate water systems and lack of proper sewage systems. This municipality showed a greater fear of overpopulation than the rural municipality of Rockwood. Numerous complaints were received regarding the telephone service and the poor roads in the municipality. Several requests were made for garbage collection, weed control, dog control, better recreational facilities and more adequate land use and zoning regulations.

St. Andrews

The comments from the municipality of St. Andrews placed road conditions as the major complaint also. Nearly half the complaints concerning the roads in St. Andrews pertained to excessive dust. Poor telephone service again occurred as one of the major complaints. The third highest complaints regarded the inadequacy of septic fields and the lack of dog control. The needs for garbage collection, better recreational facilities, mail delivery, and better land use and zoning controls were also expressed. A fear of overpopulation in the area was evident.

Richot

The comments from the municipality of Richot were more diverse and few complaints received special emphasis. The major complaint concerned the need for smaller lot sizes. This was followed by the desire to have better cultural and recreational facilities and a need for dog control. Some concern was shown regarding the telephone service and the need for better bus service. The complaints pertaining to roads were more specific than the comments from other rural municipalities. These concerns ranged from the need for sidewalks and street lights to the need for bridges over the floodway. There were also requests for controls of pollution, snowmobiles and highway speed. Some requests were made for garbage collection, fire protection, parks, a better sewer system and more effective development planning.

St. Francois Xavier



In the municipality of St. Francois Xavier complaints were similar to those of the other municipalities. The request for better bus service is the only complaint mentioned more than once.


MAPS

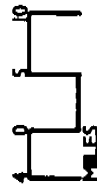
MAP 1

LEGEND

ADMINISTRATIVE BOUNDARIES

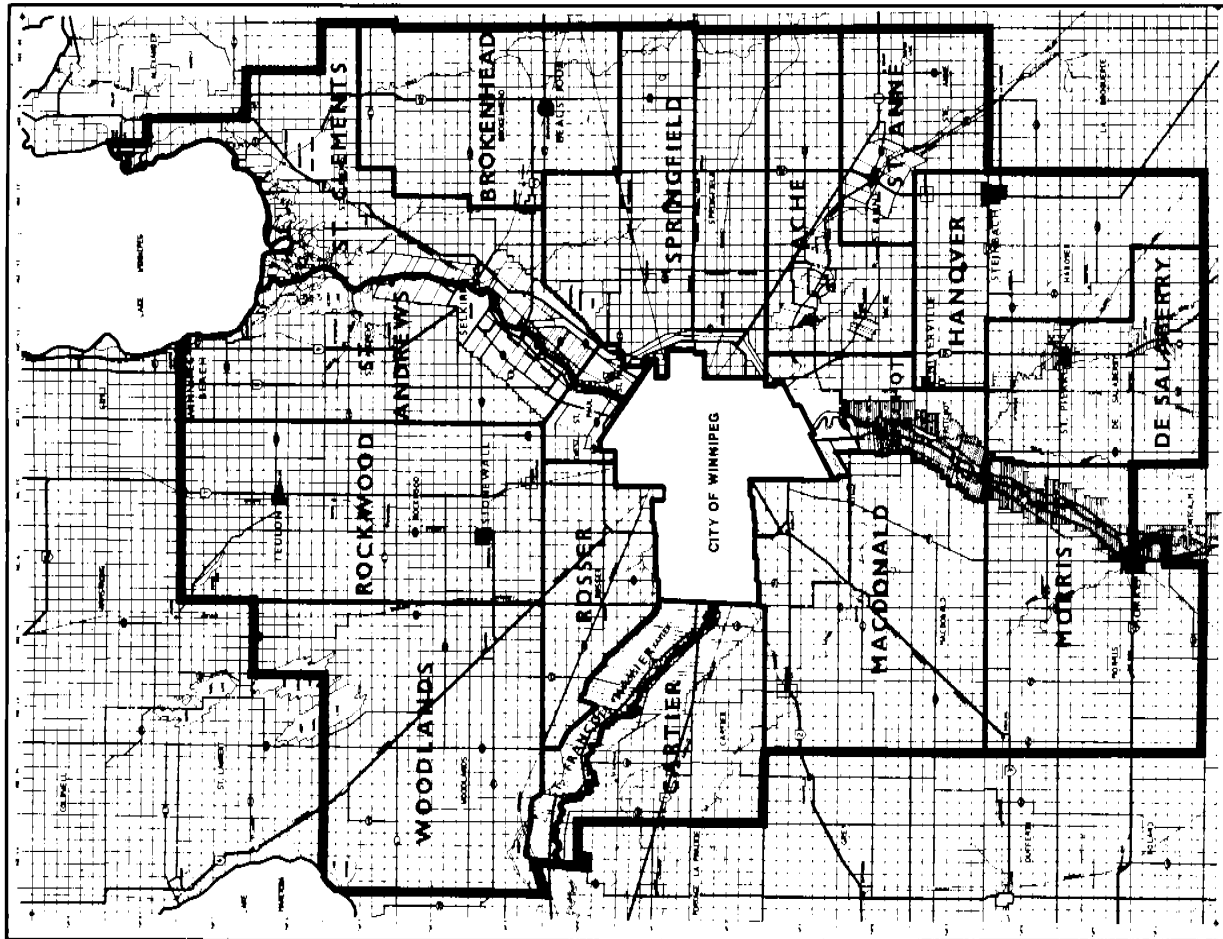
-  Rural Municipalities
-  Incorporated Towns and Villages (as of 1971)

STUDY AREA - 



WINNIPEG REGION STUDY
 DEPT. OF CITY PLANNING
 U. OF MANITOBA
 1973

SOURCE: WINNIPEG REGION STUDY GROUP



MAP 2

LEGEND

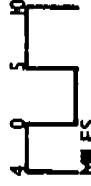
BASIC FOUNDATION
SUITABILITY FOR SINGLE
FAMILY DWELLINGS



GOOD
FAIR
POOR

SOURCE: Mines and Natural Resources
Water Control and Conservation
Branch

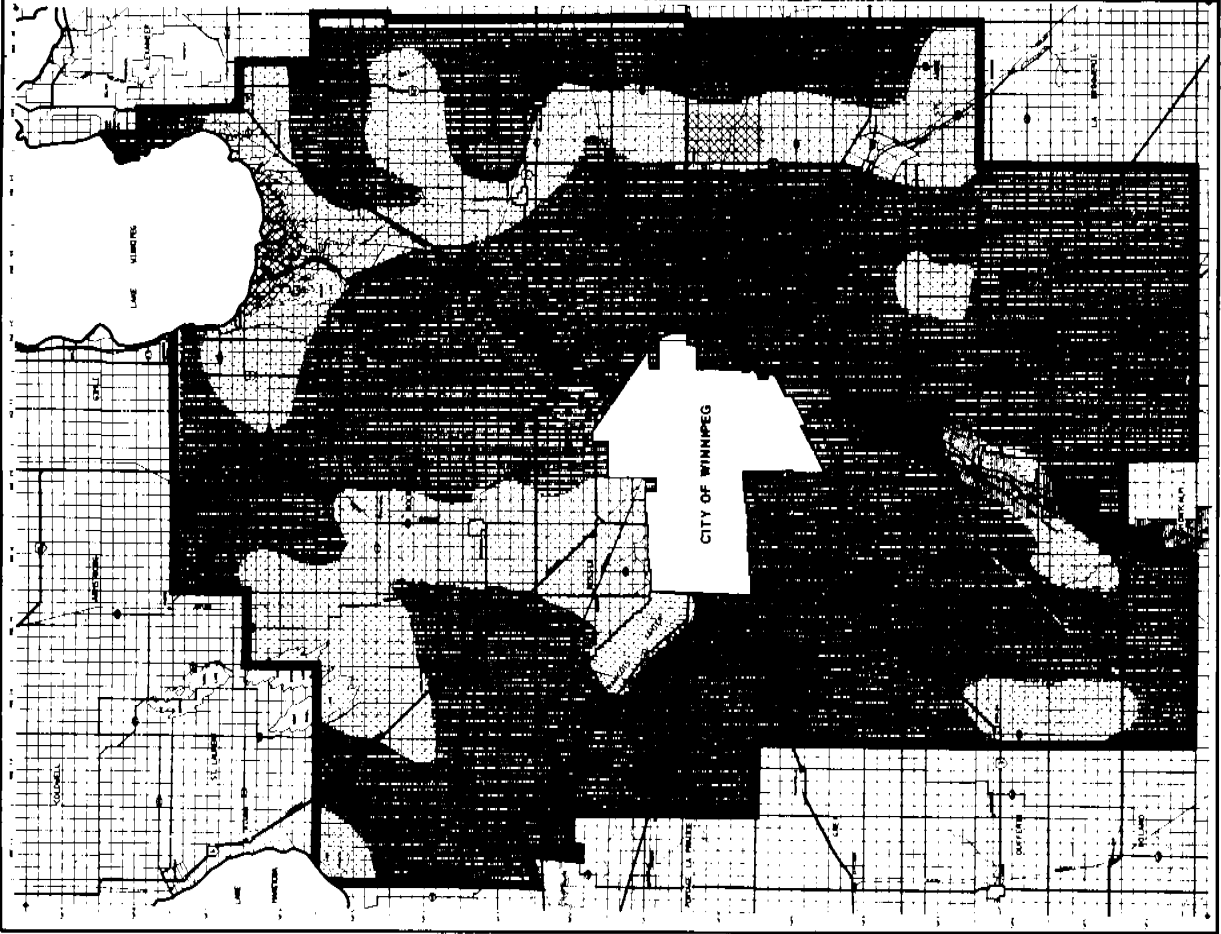
STUDY AREA -



WINNIPEG REGION STUDY

DEPT. OF CITY PLANNING
U. OF MANITOBA
1973

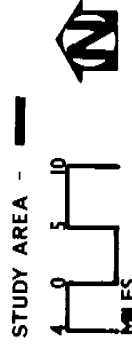
SOURCE: WINNIPEG REGIONAL STUDY GROUP



MAP 4

LEGEND

- GROUNDWATER UNSUITABLE FOR DOMESTIC USE
- SOURCE: Mines and Natural Resources



**WINNIPEG
REGION
STUDY**
DEPT. OF CITY PLANNING
U. OF MANITOBA
1973

SOURCE: WINNIPEG REGION STUDY GROUP

