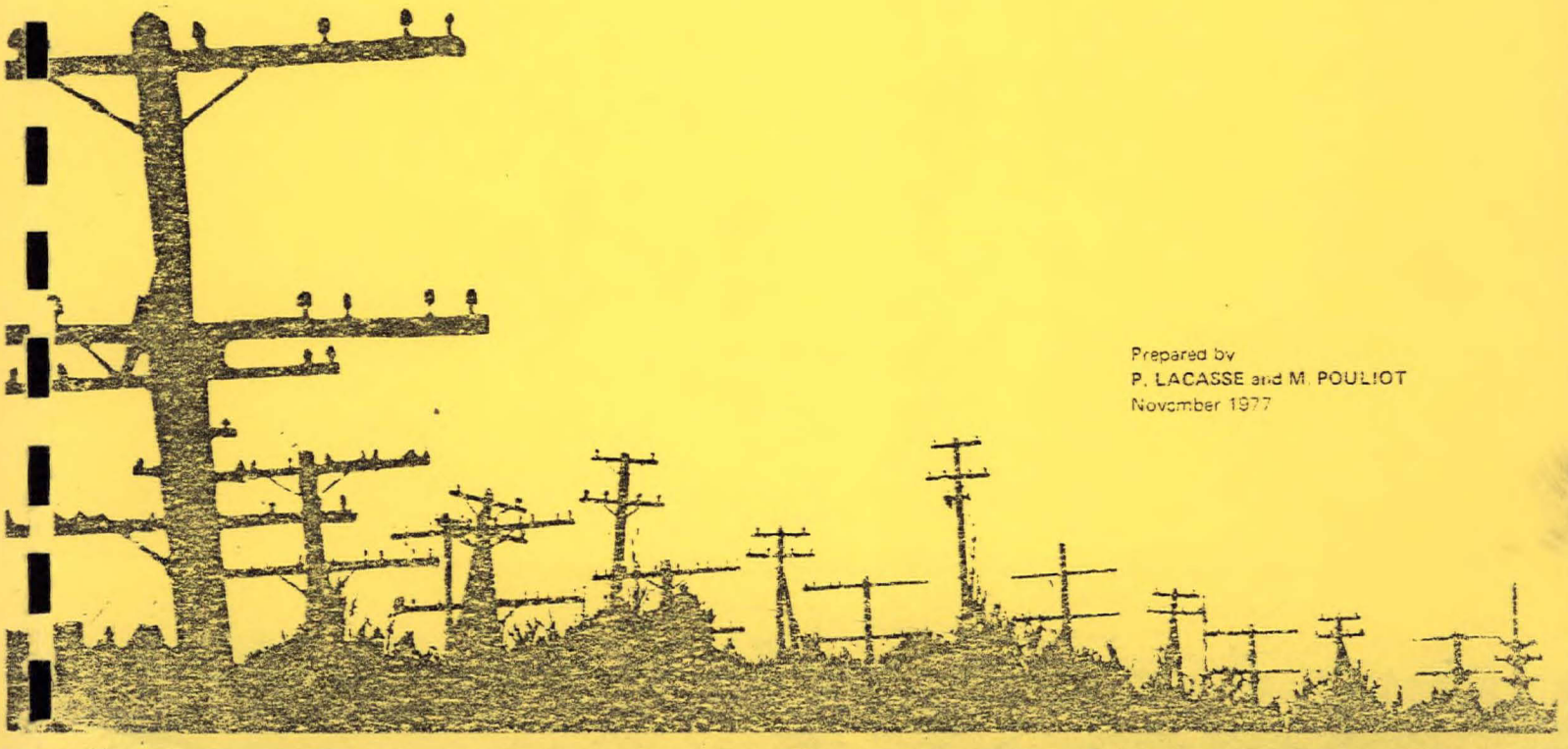
CENTRE DE RECHERCHE
EN AMÉNAGEMENT RÉGIONAL
UNIVERSITÉ DE SHERBROOKE

DEMOGRAPHIC STUDIES for the RURAL COMMUNICATIONS PROGRAM

The Quebec-Ontario region

THE FEDERAL DEPARTMENT OF COMMUNICATIONS
OTTAWA, CANADA



Prepared by
P. LACASSE and M. POULIOT
November 1977

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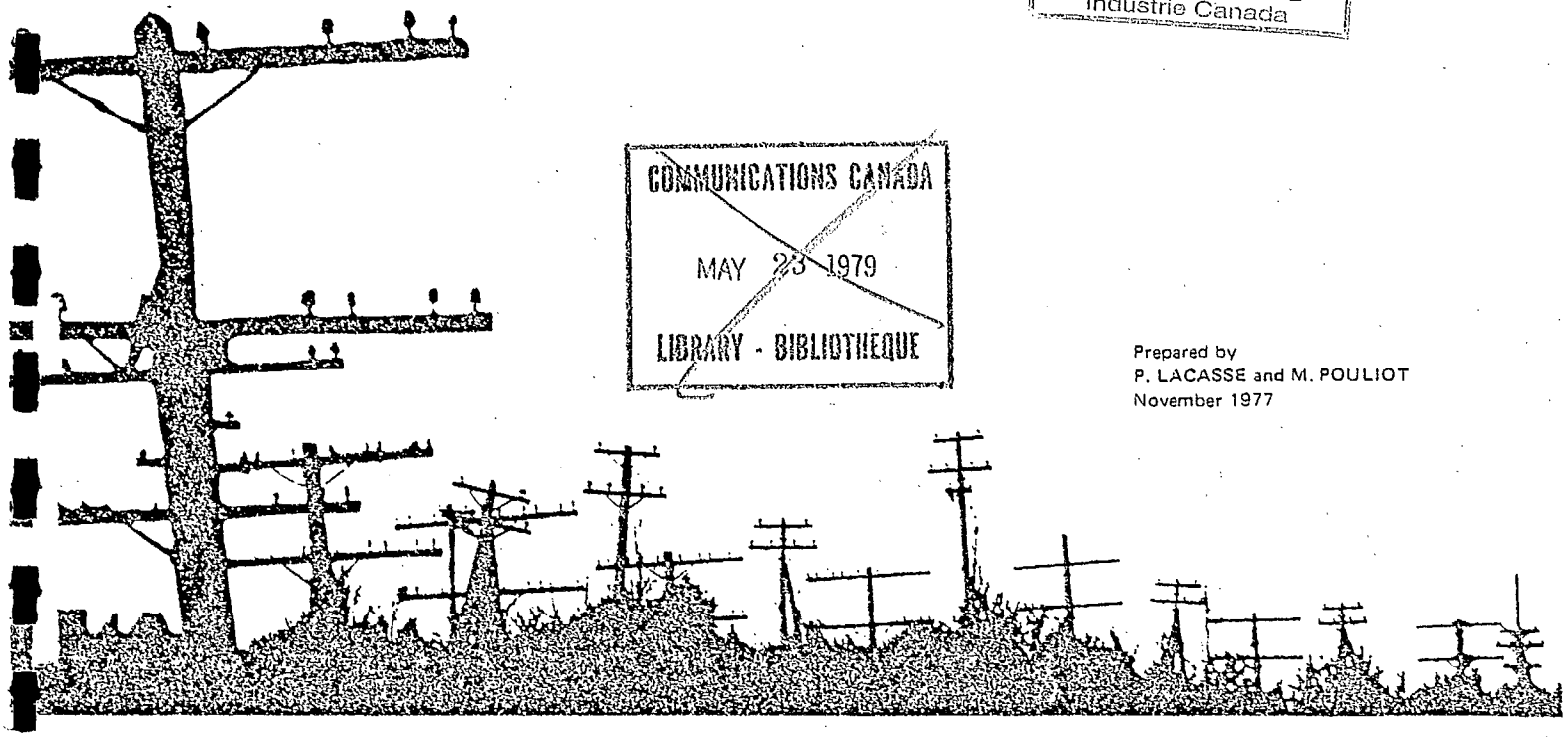

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November 1977

REGIONAL DEMOGRAPHIC STUDIES
QUEBEC - ONTARIO REGION
INTRODUCTION

This study fits into the Federal Department of Communications Rural Communications Program, which is designed to provide the engineering and economic framework for the development of Federal policies directed towards extending and improving economically all communications services supplied to the rural population. As part of this program, studies in rural demography were conducted Canada-wide and will complement technological, economic and institutional considerations to provide a complete picture of rural communications service levels, needs and costs.

This study is referred to as Phase I of demographic studies designed to gather available data for analysis and to produce an aggregate picture of the Quebec-Ontario Region, for which representative areas were chosen.

Phase II will study the representative areas in more detail and attempt to determine needs and ability to pay for various communications services.

The different sources of data to document this geographic and socio-economic analysis and to examine how well the rural population is currently served with telephone services were twofold (for complete detailed sources for each type of data, see Appendix I):

A. Demography and Socio-economic Data

- Statistics Canada, Ottawa, Toronto, and Montreal offices; census tapes, special tabulations and publications;
- Ontario Industry & Tourism;
- Ontario Statistical Centre;
- Ontario Manpower and Immigration;
- Quebec Bureau of Statistics;
- Office de Planification et de Développement du Québec (Regional Profiles);
- Hydro-Quebec and Hydro-Ontario
- Ministry of Revenue: taxation statistics;
- Financial Post Survey of Markets 1976-1977.

B. Telephone Services

- Bell Canada, Quebec Region and Ontario Region;
- Quebec Telephone;
- Ontario Department of Transport & Communications;
- Ontario Telephone Service Commission;
- Quebec Department of Communications;
- Régie des Services Publics (Québec).

The report which follows is divided into four main sections. Section 1 is concerned with a general description of the territory, to provide a better understanding of the Rural Study Area environment and to describe geographical, physiographical and economic regional traits. Section 2 describes the Rural Study Area in its demographic and socio-economic characteristics. Section 3 provides a complete description of rural telephony, companies, subscriber types, penetration rates and mapping descriptions. Finally, Section 4 makes a brief analysis of socio-economic and telephony data and presents selection and description of representative areas. Appendix I gives the data sources by type of data, referring to different tables;Appendix II deals with regional physiographical zones; Appendix III deals with regional climate; Appendix IV deals with agricultural zones; and Appendix V shows on maps the household penetration rates by County and Sub-Region (See Figures 41 to 50 for Quebec, and 51 to 60 for Ontario).

In the report all data presentations and analyses will be given in the following manner. Regional profiles will be given first, then province detailed profiles, followed, when applicable, by sub-regional descriptions; sub-regions are equivalent to census regions in each province, closely associated with economic regions. There are 10 subs in each province, as far as the Rural Stydy Area is concerned.

ACKNOWLEDGEMENTS

This study was made possible by the collaboration of a great number of persons from different departments, agencies and companies. First, the Department of Communications itself, which from Ottawa, as well as from offices in Toronto and Montreal, provided advice and documentation. In particular the following officers should be mentioned: Mr. J.R. Marchand, director, Rural Communications Program, Mr. A. Schindler, Mr. K. Richardson, Mr. C. Billowes, Mr. S. Acker; from Toronto: Mr. B. Gracie, and from Montreal, Mr. D. Lachance.

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. Quebec Téléphone: Mr. C. Mercier (Vice-President, Operations), Mr. K.H. Zément

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. Transportation & Communications: Mr. D. Hobbs;
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. Ontario Telephone Service Commission: Mr. W.J. Withers;
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As far as the project realization is concerned, the following persons worked in the different phases and fields:

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  - Marcel POULIOT/DEPT. OF GEOGRAPHY, UNIVERSITE DE SHERBROOKE: Telephony

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. Assistants
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  - Yvan OUELLETTE/Student, Dept. of Psychology.
  - Marie DUBE/Student, Dept. of Psychology.

OBJECTIVES

The major objectives of this study can be summarized as follows:

A. Define Rural Areas

Determine the applicability of rural definitions to region.
Identify any areas requiring special consideration.

B. Assemble and Quantify Geographic and Socio-economic Data Useful to Understand the Telephone Service Penetration in Rural Quebec & Ontario

C. Gather and Quantify Available Data on Telephone Service in Rural Areas

- Subscriber concentration;
- Type of services;
- Estimate of number and location of unserved subscribers.

D. Associate Demographic & Socio-economic Data with Telephone Service Data and Analyse to Determine Major Regional Factors Involved in Service Penetration

E. Identify Small Representative Areas for Further Study and Communication Needs Analysis

F. Develop a Methodology for Assessing Rural Communication Needs

This major task has already been completed and submitted to the Department of Communication in July, 1977.

DEFINITION OF TERMS

A. The Study Area

The study area (henceforth R.S.A.) consists of the rural parts of the provinces of Quebec and Ontario. For purposes of this study, "rural" will be considered to exclude both urban areas and "remote territories" as defined below.

B. "Remote Territories"

Considered as "remote" are all areas beyond the limits of continuous population distribution and beyond the continuity of regular transportation and communication systems. As Figure 1 shows, the study area includes certain strips of unorganized territories, the villages of which usually lie along railway lines or the TransCanada highway. In general, all the area north of a line that follows roughly the 51st parallel is considered remote (See Figure 1). There are, incidentally, in the northern parts of both provinces current programs for communications improvement.

For Ontario, more precisely, the "remote" line passes just above Lac Seul, keeping Ear Falls in the study area. The line then curves a little downward, touching the head of Lake Nipigon, parallel to the Canadian National Railway, retaining all the villages along the railway.

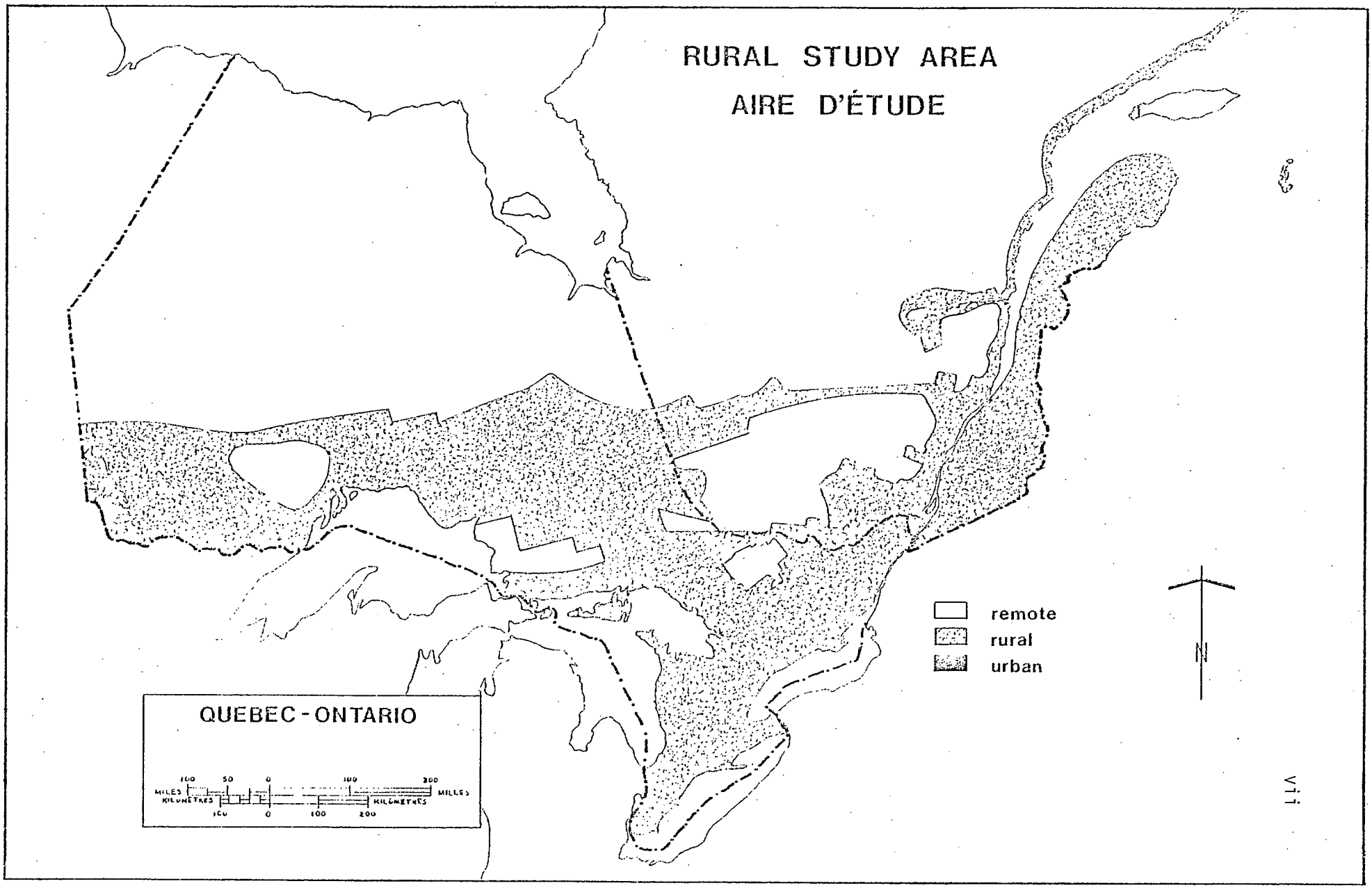
As far as Quebec is concerned, the line falls just above the 49th parallel, starting by Lake Abitibi and running east above Lac St-Jean, being at that point a little less than halfway between the 49th and 50th parallels. As it reaches the St. Lawrence North Shore sub-region, the line curves up to the Labrador frontier. The strip thus retained corresponds to the organized territories of the North Shore sub-region.

Additional details on the boundaries of the remote areas will be given when each sub-region is considered.

C. Urban Areas

For purposes of this study, the definition of urban differs from that of Statistics Canada in that it comprises: 1) All incorporated municipalities with

Figure 1


RURAL STUDY AREA
AIRE D'ÉTUDE
remote
rural
urban
N
QUEBEC - ONTARIO
100 50 0 100 200
MILES
KILOMETRES
100 0 100 200
KILOMETRES
MILES

a population of 2,500 and over, at the 1971 census, and having the legal status of city, town or village; 2) Unincorporated centers of 2,500 population and over with a population density of at least 1,000 per square mile.

D. The Rural Study Area (R.S.A.)

Excluding what has been defined as remote, the R.S.A. thus includes: 1) All incorporated rural municipalities (i.e., not having the legal status of city, town or village), all unincorporated localities, unorganized territories and Indian Reserves, having at the 1971 census a population density of less than 1,000 per square mile; 2) All incorporated cities, towns and villages with populations less than 2,500.

It should be noted that figures given in the report with reference to "rural territory" or "rural county" are based on the definitions above and come from specific tabulations. For this reason, these figures will differ from those of Statistics Canada rural tabulations.

All the data that do not fall under this general rule, as far as possible, have been indicated on the statistical tables and in the text.

TABLE OF CONTENTS

	Page
Introduction	i
Acknowledgements	iii
Objectives	v
Definition of Terms	vi
A. The Study Area	vi
B. "Remote Territories"	vi
C. Urban Areas	vi
D. The Rural Study Area (R.S.A.)	viii
Table of Contents	ix
List of Tables	xvi
List of Figures	xxiii
1.0 GENERAL DESCRIPTION OF TERRITORY	1
1.1. The Quebec-Ontario Region	2
A. Area	2
B. Population	2
C. Population Growth	2
D. Organized Territory	2
1.2. Comparative Profiles of Quebec and Ontario	3
A. Land Area	3
B. Populations	3
C. Economy	3
1. Income	3
2. Economic Activities	10

		Page
1.3.	Detailed Profiles of Quebec and Ontario	10
	A. Quebec:	10
	Population and Area	10
	Organized territory	13
	Urban and Rural Organized Territory	14
	Sub-regions	16
	Economy of Sub-regions	24
	1. Income	24
	2. 1976 Personal Disposable Income	26
	3. Economic Activities	26
	B. Ontario:	29
	Population and Area	29
	Organized Territory	29
	Urban and Rural Organized Territory	31
	Sub-regions	31
	Economy of Sub-regions	39
	1. Income	39
	2. 1976 Personal Disposable Income	39
	3. Economic Activities	39
1.4.	The Sub-regions	44
	A. Quebec	44
	Sub-region 1: Gaspesia-Lower St.Lawrence	44
	Sub-region 2: Saguenay-Lac St-Jean	47
	Sub-region 3: Quebec	51
	Sub-region 4: Trois-Rivières	55
	Sub-region 5: Eastern Townships	59
	Sub-region 6C: Montreal-Central	62

Sub-region 6N: Montreal-North 62

Sub-region 6S: Montreal-South 67

Sub-region 7: Outaouais 70

Sub-region 8: Abitibi-Témiscamingue 74

Sub-region 9: North-Shore 77

B. Ontario 80

Sub-region 1: Eastern Ontario 80

Sub-region 2: Lake Ontario 84

Sub-region 3: Central Ontario 87

Sub-region 4: Niagara 90

Sub-region 5: Lake Erie 92

Sub-region 6: Lake St.Clair 95

Sub-region 7: Mid-Western Ontario 98

Sub-region 8: Georgian Bay 101

Sub-region 9: Northeastern Ontario 104

Sub-region 10: Northwestern Ontario 108

2.0 THE RURAL STUDY AREA - SPECIFIC PROFILE 113

2.1. The Quebec-Ontario Comparison 113

A. Land Area 113

B. Population 113

C. Communities 113

D. R.S.A. Demography 115

E. R.S.A. Housing 122

F. Socio-economic Characteristics 125

2.2. Rural Territory (R.S.A.) - By Province 135

A. Quebec

1. Territory Description - Summary 135
2. Sub-regional Comparisons 135
3. Distances by Sub-region 141
4. Quebec R.S.A. Demography 142
   a. Province Summary
   b. Sub-regional Comparisons
5. Quebec R.S.A. Housing Characteristics 155
   a. Province Summary
   b. Sub-regional Comparisons
6. Quebec R.S.A. Socio-economic Characteristics 159
   a. Province Summary
   b. Sub-regional Comparisons

B. Ontario 172

1. Territory Description - Summary 172
2. Sub-regional Comparisons 173
3. Distances by Sub-region 177
4. Ontario R.S.A. Demography 180
   a. Province Summary
   b. Sub-regional Comparisons
5. Ontario R.S.A. Housing Characteristics 190
   a. Province Summary
   b. Sub-regional Comparisons
6. Ontario R.S.A. Socio-economic Characteristics 196
   a. Province Summary
   b. Sub-regional Comparisons

3.0 RURAL TELEPHONY 210

3.1. The Methedology Used 210

1. Cartographical Information 210
2. The Available Statistical Information 211
3. Data Analysis 212

3.2. The General Situation 214

A. The Province by Province Approach 214

B. The Approach According to Telephone Companies 215

3.3. Presentation by Sub-region 219

3.4. The Telephone Penetration Rates by Province 225

3.5. Penetration Rates and Services 240

3.6. The Penetration Rates - Regional Classification by Penetration Rates 244

A. Penetration Rates in Quebec

1. High-Rate Value Sub-regions (Category #1) 244

2. The Moderately High-Rate Value Sub-regions (Category #2) 246

3. The Moderately Low-Rate Value Sub-regions (Category #3) 246

4. The Low-Rate Value Sub-regions (Category #4) 247

B. Penetration Rates in Ontario 247

1. High-Rate Value Sub-regions (Category #1) 247

2. Moderately High-Rate Value Sub-regions (Category #2) 248

3. Moderately Low-Rate Value Sub-regions (Category #3) 248

4. The Low-Rate Value Sub-regions (Category #4) 249

4.0 ANALYSIS 250

4.1. Socio-economic and Telephony Data Analysis and Sub-region Characterization 250

A. Quebec

1. Gaspesia 250

2. Saguanay-Lac St-Jean 251

3. Quebec 252

4. Trois-Rivières 253
5. Eastern Townships 254
6. Montreal-North 255
7. Montreal-South 256
8. Outaouais 257
9. Abitibi-Témiscamingue 258
10. North-Shore 259
B. Ontario 261
1. Eastern Ontario 261
2. Lake Ontario 262
3. Central Ontario 262
4. Niagara 263
5. Lake Erie 264
6. Lake St.Clair 265
7. Mid-Western Ontario 266
8. Georgian Bay 267
9. Northeastern Ontario 268
10. Northwestern Ontario 269
4.2. Choice of Representative Areas 270
A. Quebec 271
B. Ontario 280
4.3. Typical Areas 289
A. Quebec 289
a. Summary of typical Areas 289
b. Detailed Description of typical Areas 289

1. Racine 289

2. Rivière-du-Gouffre 291

3. St-Isidore 294

B. Ontario 297

a. Summary of Typical Areas 297

b. Detailed Description of Typical Areas 299

1. White River 299

2. Loughborough 302

3. Bayham and Springfield 305

LIST OF TABLES AND FIGURES

A. LIST OF TABLES

		Page
1.	1971 Population Data	4
2.	Population Change, 1961-1971	4
3.	Family & Personal Income - 1971	8
4.	Taxation Statistics - 1973	9
5.	Farm & Family Income (1975); Personal Income Estimate (1976)	11
6.	Economic Activities/Manufacturing (1973); Market (1976)	12
7.	Land Area & Population (Quebec) - 1971	15
8.	Quebec Sub-Regions Whole Territory - General Statistics	20
9.	Urban/Rural Organized Territory (Quebec) - Land Area & Population, by Sub-Region	21
10.	Organized Territory Densities, Quebec by Sub-Region	22
11.	Quebec Communities & Urban Areas, by Sub-Region	23
12.	Quebec Taxation Statistics (1973), by Sub-Region	25
13.	Farm & Personal Income (1975, 1976) by Economic Region, Quebec	27
14.	Quebec Economic Activities, by Sub-Region	28
15.	Land Area & Population (Ontario) - 1971	30
16.	Ontario Sub-Regions Whole Territory - General Statistics	34
17.	Urban/Rural Organized Territory (Ontario) - Land Area & Population by Sub-Region	36

LIST OF TABLES

		Page
18.	Organized Territory Densities, Ontario, by Sub-Region	37
19.	Ontario Communities & Urban Areas, by Sub-Region	38
20.	Ontario Taxation Statistics (1973), by Sub-Region	40
21.	Farm & Personal Income (1975, 1976), by Economic Region, Ontario	41
22.	Ontario Economic Activities by Sub-Region	43
23.	Land Areas (Quebec - Ontario) (R.S.A.)	114
24.	1971 Population & Densities (R.S.A.)	114
25.	Communities by Size, 1971/Quebec - Ontario R.S.A.	117
26.	Agricultural Intensity - 1966, 1971, Quebec - Ontario R.S.A.	118
27.	R.S.A. Population Change (1966-1976) Quebec - Ontario	118
28.	Age Groups, 1971, R.S.A. Population/Quebec-Ontario	119
29.	Household Heads by Age Group, 1971/Quebec-Ontario R.S.A.	121
30.	Dwellings Occupation/Quebec-Ontario R.S.A.	123
31.	Dwellings & Commodities/Quebec-Ontario R.S.A.	124
32.	Secondary Houses & Automobiles/Quebec-Ontario R.S.A.	126
33.	Census Farms Economic Activities (1971)/Quebec - Ontario	130
34.	R.S.A. Farm Management & Labour Force (1971)/Quebec - Ontario	132
35.	R.S.A. Farm Economic Classes (1971)/Quebec-Ontario	133
36.	Quebec R.S.A. Sub-Region Land Areas	136

LIST OF TABLES

		Page
37.	Quebec R.S.A. Sub-Regions Population and Density, 1971	137
38.	Quebec R.S.A. Sub-Regions Territory Units, by Status (1971)	139
39.	Quebec R.S.A. Sub-Regions Communities, by Size (1971)	140
40.	Quebec R.S.A. Sub-Regions Agricultural Intensity	145
41.	Quebec R.S.A. Sub-Regions Population Change, 1966-1976	146
42.	Quebec R.S.A. Sub-Regions Age Groups (1971)	148
43.	Quebec R.S.A. Sub-Regions Mother Tongue & Ethnic Groups (1971)	149
44.	Quebec R.S.A. Sub-Regions Households (1971)	150
45.	Quebec R.S.A. Sub-Regions Household Heads Age Groups (1971)	153
46.	Quebec R.S.A. Sub-Regions Families & Family Heads Schooling (1971)	154
47.	Quebec R.S.A. Sub-Regions Housing Occupation (1971)	157
48.	Quebec R.S.A. Sub-Regions Housing Commodities (1971)	158
49.	Quebec R.S.A. Sub-Regions Labour Force (1971)	160
50.	Quebec R.S.A. Sub-Regions Labour Force by Industry (1971)	161
51.	Quebec R.S.A. Sub-Regions Labour Force by Place of Work (1971)	163
52.	Quebec Sub-Regions Farm Census - Land, Population & Change, 1966-1976	164
53.	Quebec Sub-Regions Farm Census - Farm value, Sales (1971, 1976)	166
54.	Quebec R.S.A., Sub-Regions Farm Activities - Farm Management, Economic Classes (1971)	168

LIST OF TABLES

		Page
55.	Quebec R.S.A. Sub-Regions Trade Activities (1971)	169
56.	Quebec R.S.A. Sub-Regions Manufacturing Activities (1972)	171
56B.	Ontario R.S.A. Sub-Regions Land Areas	174
57.	Ontario R.S.A. Sub-Regions Population and Density, 1971	175
58.	Ontario R.S.A. Sub-Regions Territory Units, by Status (1971)	176
59.	Ontario R.S.A. Sub-Regions Communities, by Size (1971)	178
60.	Ontario R.S.A. Sub-Regions Agricultural Intensity	183
61.	Ontario R.S.A. Sub-Regions Population Change, 1966-1976	184
62.	Ontario R.S.A. Sub-Regions Age Groups (1971)	185
63.	Ontario R.S.A. Sub-Regions Mother Tongue & Ethnic Groups (1971)	186
64.	Ontario R.S.A. Sub-Regions Households (1971)	188
65.	Ontario R.S.A. Sub-Regions Household Heads Age Groups (1971)	191
66.	Ontario Sub-Regions: Families (R.S.A. 1971); Population schooling (total area, 1971)	192
67.	Ontario R.S.A. Sub-Regions, Housing Occupation (1971)	194
68.	Ontario R.S.A. Sub-Regions, Housing Commodities (1971)	195
69.	Ontario R.S.A. Sub-Regions Labour Force (1971)	197
70.	Ontario R.S.A. Sub-Regions Labour Force by Industry (1971)	198

LIST OF TABLES

		Page
71.	Ontario R.S.A. Sub-Regions Labour Force by Place of Work (1971)	200
72.	Ontario Sub-Regions Farm Census - Land, Population and Population Change, 1966-1976	202
73.	Ontario Sub-Regions Farm Census - Farm value, Sales, (1971, 1976)	203
74.	Ontario R.S.A. Sub-Regions Farm Activities - Farm Management, Economic Classes (1971)	205
75.	Ontario R.S.A. Sub-Regions Trade Activities (1971)	206
76.	Ontario R.S.A. Sub-Regions Manufacturing Activities (1972)	207
77.	R.S.A. Telephony Comparative Figures (1975)/Quebec-Ontario	216
78.	Quebec-Ontario, exchange and R.S.A. subscriber types (1975)	217-218
79.	Classification of Telephone Companies/Quebec (1974)	222
80.	Exchange areas by Company/Quebec R.S.A. (1975)	223
81.	Exchange areas by Company/Ontario R.S.A. (1975)	224
82.	Quebec R.S.A. Sub-Regions Number of Companies and Exchanges	226
83.	Quebec R.S.A. Sub-Regions Percent Distribution of Telephones by Type (1975)	227
84.	Quebec R.S.A. Sub-Regions Percent of Main & Extension Residence & Business telephones	228
85.	Quebec R.S.A. Sub-Regions Main Residence & Business Phones Percent Distribution, by Subscriber Type (1975)	229
86.	Ontario R.S.A. Sub-Regions Number of Companies and Exchanges	230

LIST OF TABLES

		Page
87.	Ontario R.S.A. Sub-Regions Percent Distribution of Telephones, by Type (1975)	231
88.	Ontario R.S.A. Sub-Regions Percent of Main & Extension Residence & Business Telephones	232
89.	Ontario R.S.A. Sub-Regions Main Residence & Business Phones Percent Distribution, by Subscriber Type (1975)	233
90.	Tests of Correlation Between Telephone Penetration Rates/Quebec-Ontario R.S.A.	234
91.	Average Telephone Penetration Rates/Quebec-Ontario R.S.A. (1975)	235
92.	Telephones by Province, May 1976	236
93.	Examples of High M.R.T./100 h Values in Quebec - Ontario R.S.A. (1975)	237
94.	Secondary Residences by Province, 1976.	239
95.	Comparative Telephone Distribution Data: Iles-de-la-Madeleine and Quebec R.S.A. (1975)	241
96.	Comparative Penetration Rates: Iles-de-la-Madeleine and Quebec R.S.A. (1975)	242
97.	Quebec R.S.A. Sub-Regions Comparative Rates (Category #1)	244
98.	Sub-Regions Classification/Quebec-Ontario	245
99.	Quebec R.S.A. Sub-Regions Comparative Rates (Category #2)	246
100.	Quebec R.S.A. Sub-Regions Comparative Rates (Category #3)	246
101.	Quebec R.S.A. Sub-Regions Comparative Rates (Category #4)	247
102.	Ontario R.S.A. Sub-Regions Comparative Rates (Category #1)	247
103.	Ontario R.S.A. Sub-Regions Comparative Rates (Category #2)	248
104.	Ontario R.S.A. Sub-Regions Comparative Rates (Category #3)	248
105.	Ontario R.S.A. Sub-Regions Comparative Rates (Category #4)	249

LIST OF TABLES

		Page
106.	Quebec Sub-Regional Clustering Indexes	272
107.	Quebec High Cluster Indexes	276
108.	Quebec Medium Cluster Indexes	277
109.	Quebec Low Cluster Indexes	278
110.	Ontario Sub-Regional Clustering Indexes	281
111.	Ontario High Cluster Indexes	284
112.	Ontario Medium Cluster Indexes	285
113.	Ontario Low Cluster Indexes	286
114.	Telephone Data Shefford C.D. Typical Area	292
115.	Telephone Data Charlevoix-Ouest C.D. Typical Area	295
116.	Telephone Data Témiscamingue C.D. Typical Area	298
117.	Telephone Data Algoma C.D. Typical Area	301
118.	Telephone Data Frontenac C.D. Typical Area	304
119.	Telephone Data Elgin C.D. Typical Area	307

B. LIST OF FIGURES

		Page
1.	Rural Study Area	vii
2.	Rural-Urban Population, 1871-1971	5
3.	Rural Farm Population, 1931-1971	6
4.	Rural Non-Farm, 1931-1971	7
5.	Map of Quebec and Sub-Regions	17
6.	Map of Ontario and Sub-Regions	33
7.	Gaspesia Sub-Region	45
8.	Saguenay Sub-Region	48
9.	Quebec R.S.A. Definition by Sub-Region	49
10.	Quebec Sub-Region	52
11.	Trois-Rivières Sub-Region	56
12.	Eastern Townships Sub-Region	60
13.	Montreal-Central Sub-Region	63
14.	Montreal-North Sub-Region	64
15.	Montreal-South Sub-Region	68
16.	Outaouais Sub-Region	71
17.	Abitibi Sub-Region	75
18.	North-Shore Sub-Region	78
19.	Eastern Ontario Sub-Region	81
20.	Lake Ontario Sub-Region	85
21.	Central Ontario (Toronto Metropolitain) Sub-Region	88
22.	Niagara Sub-Region	91
23.	Lake Erie Sub-Region	93

LIST OF FIGURES

		Page
24.	Lake St.Clair Sub-Region	96
25.	Mid-Western Ontario Sub-Region	99
26.	Georgian Bay Sub-Region	102
27.	Northeastern Sub-Region	105
28.	Ontario R.S.A. Definition by Sub-Region	106
29.	Northwestern Ontario Sub-Region	109
30.	Quebec R.S.A. Population, 1976	144
31.	Quebec Household sq. mi. and linear Densities Correlation Test	152
32.	Ontario R.S.A. Population, 1976	182
33.	Ontario Household sq. mi. and linear Densities Correlation Test	189
34.	Telephone Companies, Quebec	220
35.	Telephone Companies, Ontario	221
36.	Typical Areas/Quebec-Ontario	279
37.	Physiographic Regions/Quebec-Ontario	Appendix 2
38.	Climatic Region/Quebec-Ontario	Appendix 3
39.	Farming Capacity/Quebec	Appendix 4
40.	Farming Capacity/Ontario	Appendix 4
41. - 50.	Household Penetration Rates by Sub-Region/ Quebec	Appendix 5A
51. - 60.	Household Penetration Rates by Sub-Region/ Ontario	Appendix 5B

1.0: GENERAL DESCRIPTION OF TERRITORY

Before making a thorough analysis of the R.S.A., this section has been prepared to meet the following objectives.

1) To give the reader a complete picture of the total area in which the R.S.A. is located and to throw some light on the environmental characteristics which influence the R.S.A.

2) To provide general figures for urban/rural comparisons, and to permit the insertion of Statistics Canada official rural figures which differ from the R.S.A. specific computations.

3) To provide a certain number of figures from different sources which would have been useful for a better comprehension of the R.S.A., but which were not available on a R.S.A. basis (example: market data, taxation statistics).

4) To give a complete description of each sub-region as a whole, indicating census divisions as well as remote territory involved and urban areas excluded from the study, and to give general aspects of the territory (physiography, climate) which are not unique to the R.S.A.

1.1: The Quebec-Ontario Region

A. Area

The total area of the region is 878,476 square miles (22.8% of total Canadian area).

B. Population

Total population in 1971 was 13,731,000; urban-rural proportions were as follows:

- Urban : 11,205,000 (or 81.6% of total)
- Rural : 2,526,000 (or 18.4%)
- Farm : 669,000 (26.5% of rural)
- Non-farm: 1,857,000 (73.5% of rural)

C. Population Growth

Total population growth from 1966 to 1971 was 6.8%; from 1971 to 1976, growth was only 3.6%.

D. Organized Territory

Occupied agricultural land is 47,987 square miles, productive forest 385,192 square miles, for a total of 433,197 square miles (49.3% of total regional area). The total remote area excluded from the present study is 679,889 square miles, with a population of 55,035. The organized territory has an area of 108,171 square miles with a population of 13,586,427, giving a density of 125.6 persons per square mile. The urban land area (with 6,990 square miles) counts for only 6.46% of the organized territory. Total number of communities is 2,515, only 3.12% of which have populations of 5,000 or more.

For purposes of this study, 63 urban agglomerations and a total of 393 urban communities have been excluded (total population of 10,372,135 in 1971, or 76.34% of total).

1.2: Comparative Profiles of Quebec and Ontario

A. Land Area

The total land area of Quebec is 524,253 square miles, that of Ontario is 354,223. The remote territories of Quebec as defined in 1.3 cover 87.1% of the total land area, and of Ontario 65.0%. The rural study area, as defined in 1.3, covers 12.9% of Quebec and 35.0%, of Ontario.

B. Populations

Provincial populations, as reported by Statistics Canada, are presented in Table 1. Projection figures of 6,378 for Quebec and 9,188 for Ontario by the year 1981 have been put forward by Statistics Canada, on the basis of a conservative hypothesis.[1]

Population change is presented in Table 2 giving percentages from 1961 to 1971, urban and rural. Those S.C. figures show an urban increase of 6% and 5% for Quebec and Ontario. While the rural farm population decreased rapidly, the non-farm remained fairly stable, especially in Quebec; Ontario non-farm population decreased by 1.6%.

Figures 2 to 4 provide curves of population change, comparing urban and rural.

C. Economy

1. Income - Income is dealt with using data from different sources for different years.

Table 3 shows the principal figures (1971 Census, family and personal income with an urban/rural breakdown). Quebec income figures are lower in all categories, but the rural difference is less than the urban.

Table 4 gives the 1973 taxation statistics by class of revenue.

---

[1] S.C. Catalogue 91-154, p.123.

Table 1971 POPULATION [1] DATA/
Tableau 1 DONNEES DE POPULATION 1971
(000)

	Farm	Rural [2] Non-farm	Total	Rural %	Urban	Total
Quebec	305	861	1,166	19.4	4,862	6,028
Ontario	364	996	1,360	17.4	6,343	7,703

PROJECTION [3] - 1981

Quebec total 6,378,000 Ontario total 9,188,000

1 Statistics Canada/Profile Studies, Cat. No. 99-702 (rounded figures)

2 Census rural

3 S.C. population projections, Cat. No. 91-514, Proj. B.

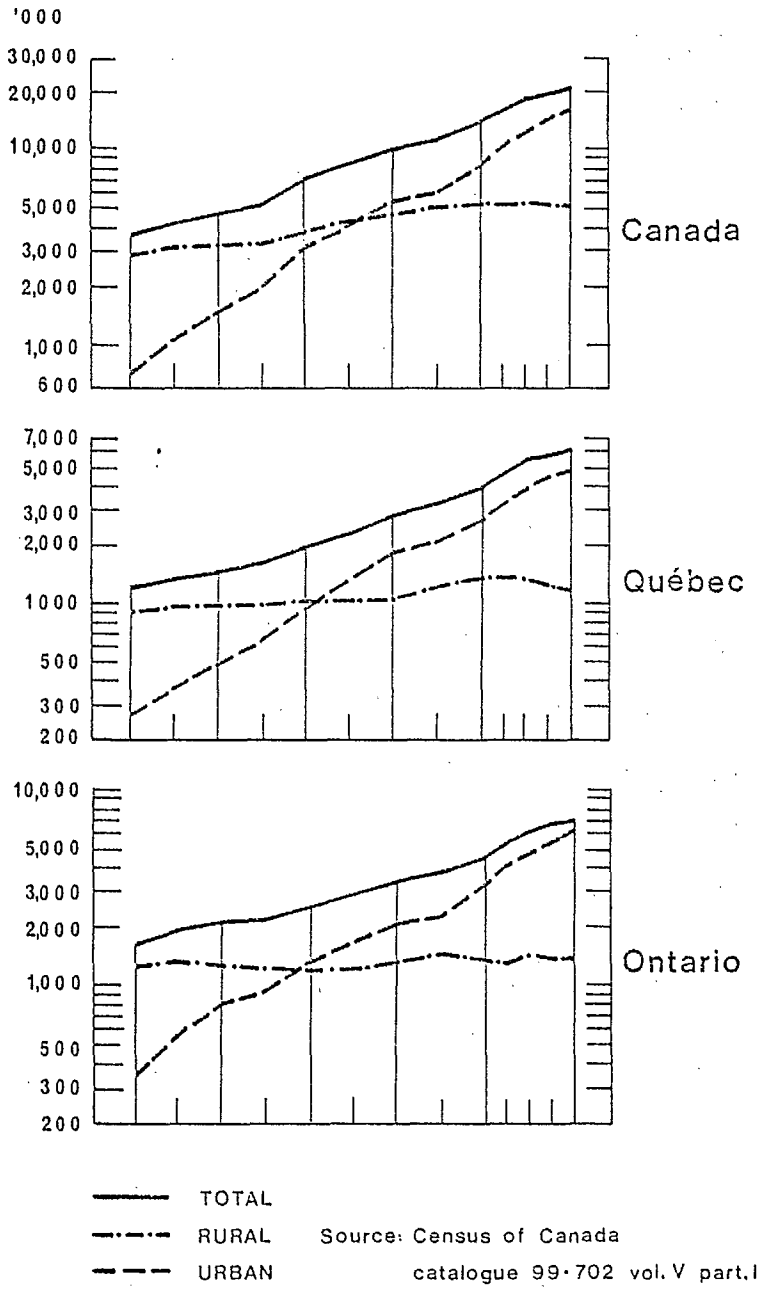
Table POPULATION CHANGE 1961-71/
Tableau 2 EVOLUTION DE LA POPULATION

		Quebec	Ontario
Urban: :	1961	74.3%	77.3%
	1971	80.6%	82.4%
Rural: :	1961	25.7%	22.7%
	1971	19.4%	17.6%
Farm: :	1961	10.7%	8.1%
	1971	5.1%	4.7%
Non-farm:	1961	15.0%	14.5%
	1971	14.3%	12.9%

Figure 2.

Rural-Urban Population,

Canada and Regions, 1871-1971

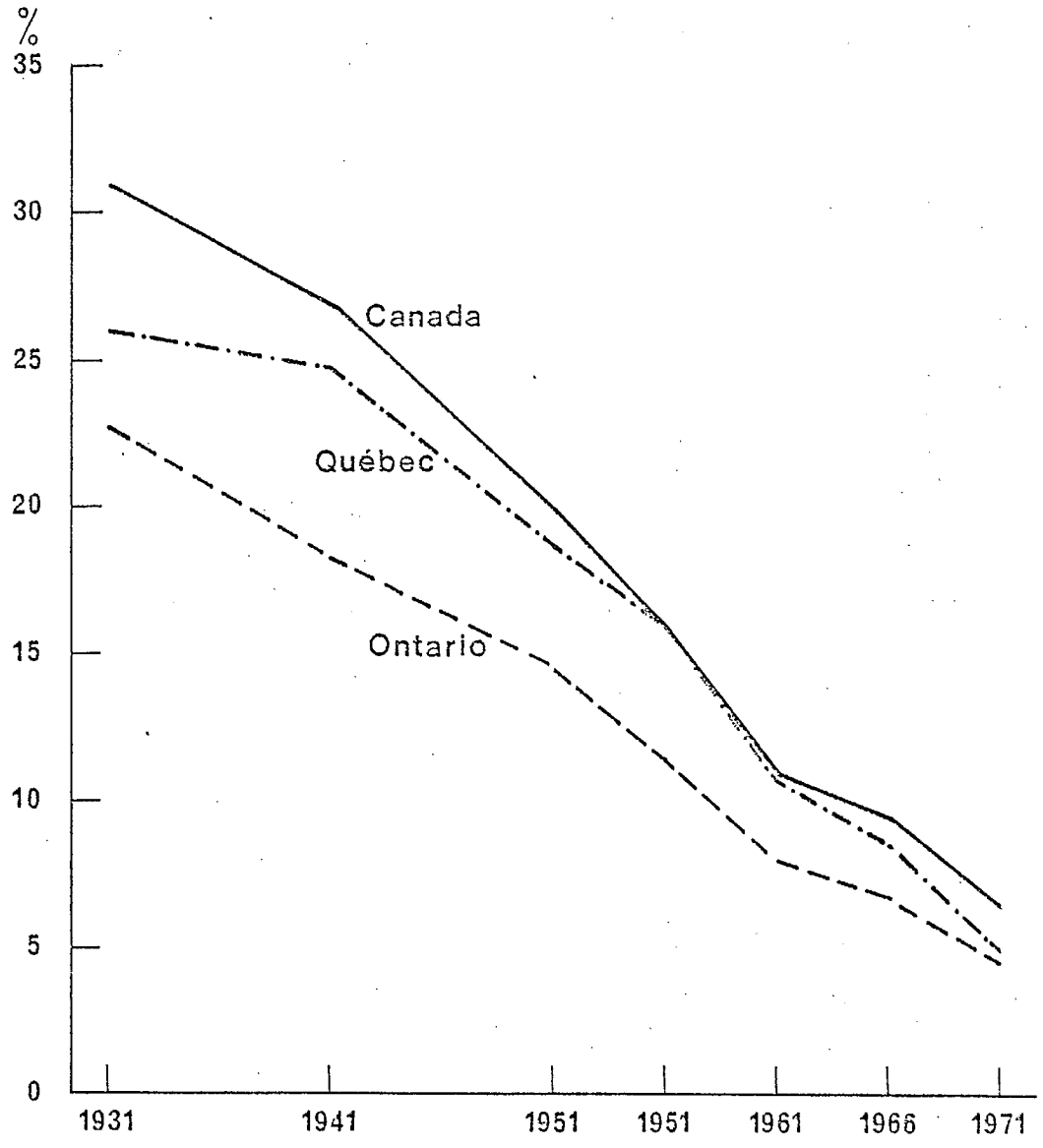


Source: Census of Canada
catalogue 99-702 vol. V part. I

Figure 3

Percentage of Population, Rural Farm,

Canada and Regions, 1931-1971

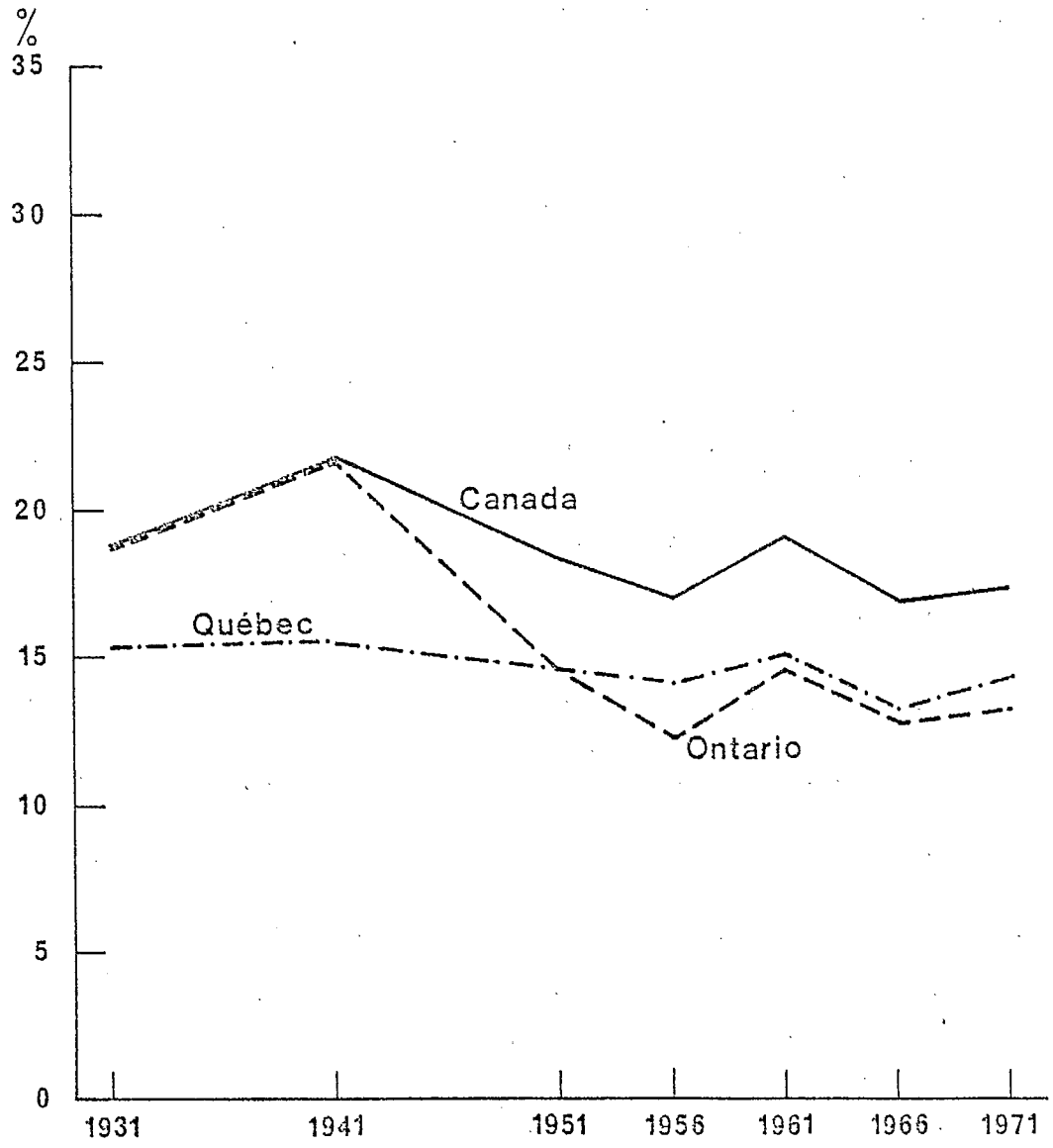


Source: 1971 Census of Canada
catalogue 99-702 vol. V part. I

Figure 4

Percentage of Population, Rural Non-Farm

Canada and Regions, 1931-1971



Source: 1971 Census of Canada
catalogue 99-702 vol.V part.I

Table FAMILY AND PERSONAL INCOME, URBAN & RURAL 1971 CENSUS [1] /

Tableau 3 REVENUS PERSONNELS ET FAMILIAUX, URBAIN ET RURAL, RECENSEMENT 1971

	QUEBEC	ONTARIO
Family Income (1971) Revenu familial (1971)		
- Urban average/ Moyenne urbaine	$9,766.	$11,092.
- Rural average/ Moyenne rurale	$6,859.	$ 8,560.
Personal Income average (1971) Revenu personnel moyen		
Male/Hommes		
- Urban/urbain	$6,691.	$ 7,566.
- Farm/agricole	$4,041.	$ 4,955.
Female/Femmes		
- Urban/urbain	$3,078.	$ 3,182.
- Farm/agricole	$2,145.	$ 2,230.

[1] The Financial Post Survey of Markets 1976-77.

Table TAXATION STATISTICS 1973/

Tableau 4 DECLARATIONS D'IMPOT 1973

	QUEBEC	ONTARIO
Total returns/ Nombre de déclarants	2,729,743.	4,182,649.
Income class/ Classe de revenu	%	%
- Under 1,000./ Moins de 1,000.	6.09	7.82
- 1,000. - 2,000.	8.73	12.51
- 2,000. - 3,000.	8.99	9.31
- 3,000. - 4,000.	9.40	8.39
- 4,000. - 5,000.	10.13	8.03
- 5,000. - 7,000.	18.30	15.05
- 7,000. - 10,000.	19.90	18.66
- 10,000. - 15,000.	13.34	17.67
- 15,000. - 20,000.	3.29	4.93
- Over 20,000./ Plus de 20,000.	2.57	3.61
Average income/ Revenu moyen ($)	6,457.38	6,579.09

It will be noted that although income in Quebec is less than in Ontario, especially in the $10,000 and over category, a higher percentage of individuals earn low salaries (under $3,000) in Ontario than in Quebec.

Taxation statistics show an average income very similar in both provinces, that of Ontario being slightly superior. This table, it should be noted, takes into account the total revenues of individuals.

Table 5 shows more recent figures about income; these come from the Financial Post Survey of Markets and are estimates for 1975 and 1976. Quebec farm income is about 50% less than that of Ontario; the income rating index is 90 compared to 109, Canada being 100.

2. Economic Activities - Table 6 shows figures on manufacturing (1973) and market activities. Both activities are substantially higher in Ontario than in Quebec; this situation is not so in the R.S.A., which will be studied later (Section 2.1.F.4). Marketing in Quebec, as put forward by the Financial Post Survey of Markets, is 8% below the national average while Ontario is 3% above; yet the per capita retail sales in Quebec are approaching those of Ontario (2,330 as compared to 2,660).

1.3. Detailed Profiles of Quebec and Ontario

A. Quebec

Population and Area - The 1971 Quebec population was 6,027,765, up 4.1% or 246,920 persons since the previous census report. With a land area of 524,253, the population density was 11.5 persons per square mile in 1971. The estimates for the period 1971-76 give a growth in population of 1.9%.

For administrative purposes, Quebec communities and territory units have been classified into seven groups:

- Cities & Towns : 257
- Villages : 285
- Parishes : 502
- Townships (including united townships) : 168

Table PERSONAL, FAMILY AND FARM INCOME (1975 and 1976)/ [1]

Tableau 5 REVENU PERSONNEL, FAMILIAL ET AGRICOLE (1975 et 1976)

	QUEBEC	ONTARIO
Estimated (1975) Family Income/ Revenu familial estimé	14,929	17,780
Farm net income/ Revenu de ferme (1975)	$449,112,000.	$921,268,000.
% Canadian total/ % du total Canadien	13.65	26.05
Income (1976)/ Revenu (1976)	10% below nat. aver.	9% above nat. aver.
Personal Disp. Inc./ Revenu personnel disponible	$30,150. millions	$48,985. millions
% of Canadian total/ % du total Canadien	24.29	39.46
Per capita	$4,830.	$5,880.
Income rating index/ Indice de revenu	90	109

[1] The Financial Post Survey of Markets, 1976-77.

Table ECONOMIC ACTIVITIES/ [1]

Tableau 6 ACTIVITES ECONOMIQUES

	QUEBEC	ONTARIO
Manufacturing (1973)/ Manufacturier (1973)		
- Tot. added value/ Valeur ajoutée	$8,102,655. millions	$16,441.815. millions
- Plants no./ Nombre d'entreprises	9,947.	12,397.
- Employees/ Employés	533,759.	861,767.
- Salaries/ Salaires (000)	$4,166,825.	$ 7,947,955.
Market/Marché	8% below nat. aver.	3% above nat. aver.
- Retail sales (1976)/ Ventes au détail	$ 14,529 millions	$ 21,627.4 millions
- % of Canadian total/ % du total Canadien	24.85	36.99
- Per capita	$ 2,330.	$ 2,660.
- Market index/ Indice du marché	92	103

[1] The Financial Post Survey of Markets, 1976-77.

- Without designation	:	382
- Unorganized territories	:	34
- Indian reserves	:	16
TOTAL	:	1,644

For statistical purposes and as reported by Statistics Canada, the unorganized territories as well as Indian Reserves are generally grouped in one figure for each county. There are 47 unorganized territories and 30 Indian Reserves non-adjacent units.

Organized Territory - Local government structures are multiple, but there are in fact two large categories that must be noted to understand population settlements and densities. These categories are the organized and the unorganized territories. In the organized territories are found only incorporated localities or those having some sort of local government structure.

Unorganized territories are usually vast areas sparsely populated without local government structure. The population figure for such a territory is given globally by Statistics Canada, and there is no way of telling exactly where the population is settled.

Figures here are given separately for organized and unorganized territories to avoid misinterpretations in appreciating the real density of populated territories. For example, it is said that the population density of Quebec is 11.5 inhabitants per square mile, but when the unorganized land area and its population are set aside, density becomes 108.3.

In the rural study area, the difference is smaller but is still there: the total R.S.A. has a density of 21.7, but its organized area alone has 27.7. The unorganized R.S.A. density alone is 2.2.

One precision should be made about size and legal status of localities in the organized territories; there are incorporated municipalities which do not have the legal status of city, town or village but which are well over

2,500 or even over 5,000 population and have a density of less than 1,000 per square mile. These are rural municipalities and are given the name of parishes, townships or "without designation" in Quebec, and in Ontario they are called townships or improvement districts: these are usually considered as rural in this study.

For Quebec, organized territories are found in the "remote" area as well as in the urban/rural area. Table 7 gives some figures (land & population) on organized territory as well as on unorganized. The remote population organized and unorganized accounts for 0.6% of the total population and its density is 0.08 persons per square mile.

The organized part of the area covers 55,164 square miles with a population of 5,975,552 persons, for a density of 108.3 persons per square mile. The organized remote population is 21,235 on a territory of 116 square miles; that of the "urban & rural" part is 5,954,317.

Urban & Rural Organized Territory - The total population is 5,954,317 on a territory of 55,048 square miles; the density is 108.2. There are 1,610 communities, which represent a density of 29.31 communities per 1,000 square miles. These communities are distributed as follows:

Classes		
C1 (1-499)	:	311
C2 (500-999)	:	518
C3 (1,000-1,499)	:	294
C4 (1,500-1,999)	:	145
C5 (2,000-2,499)	:	57
C6 (2,500-2,999)	:	47
C7 (3,000-3,499)	:	51
C8 (4,000-4,999)	:	42
C9 (5,000 & +)	:	145
TOTAL	:	1,610

There are only 9.01% in class C9.

Table LAND AREA & POPULATION/QUEBEC (1971)
Tableau 7

	ORGANIZED TERRITORY	UNORGANIZED	TOTAL
Land area (sq. mi.)			
Total area:	55,164	469,089	524,253
Remote:	116	453,182	453,298
Urban & rural*:	55,048	15,907	70,955
Urban:	3,386	--	3,386
R.S.A.:	51,662 (76.5%)	15,907 (23.5%)	67,569
Population			
Total area:	5,975,552	52,213	6,027,765
Remote:	21,235	17,250	38,485
Urban & rural*:	5,954,317	34,963	5,989,280
Urban:	4,523,640	--	4,523,640
R.S.A.:	1,430,677	34,963	1,465,640

* Urban: Study definition
Rural: R.S.A.

There are 34 urban agglomerations in the total area; 230 communities were considered as urban and excluded from the study. The population of these 230 communities was in 1971 4,523,640, which represents 75.97% of the total organized territory population or 75.05% of the province's total population. The urban area is 3,386 square miles, which is 6.17% of total "urban/rural" organized territory.

Sub-regions - A sub-regions is essentially the grouping of a certain number of census divisions which correspond to a certain socio-economic reality. For Quebec, the sub-regions correspond exactly to the Office de Planification et de Développement du Québec census regions, described in the Dossier d'inventaire et d'analyse, Les caractéristiques sectorielles interrégionales (collection: Les schémas régionaux), mai 1976. The Quebec census regions (or sub-regions in our study) differ slightly from the government administrative (formerly economic) regions, the limits of which do not respect the census division or county boundaries (census division being understood as that of Statistics Canada, for which the most detailed and complete census data are available).

It should be noted that in this study, county and census division are different wordings to describe the same unit.

For Quebec, there are 11 sub-regions, one of which, Montreal central, is completely urban: Gaspesia, Saguenay-Lac St-Jean, Québec, Trois-Rivières, Eastern Townships, Montreal Central, Montreal North, Montreal South, Outaouais, Abitibi-Témiscamingue and North Shore (See Figure 5).

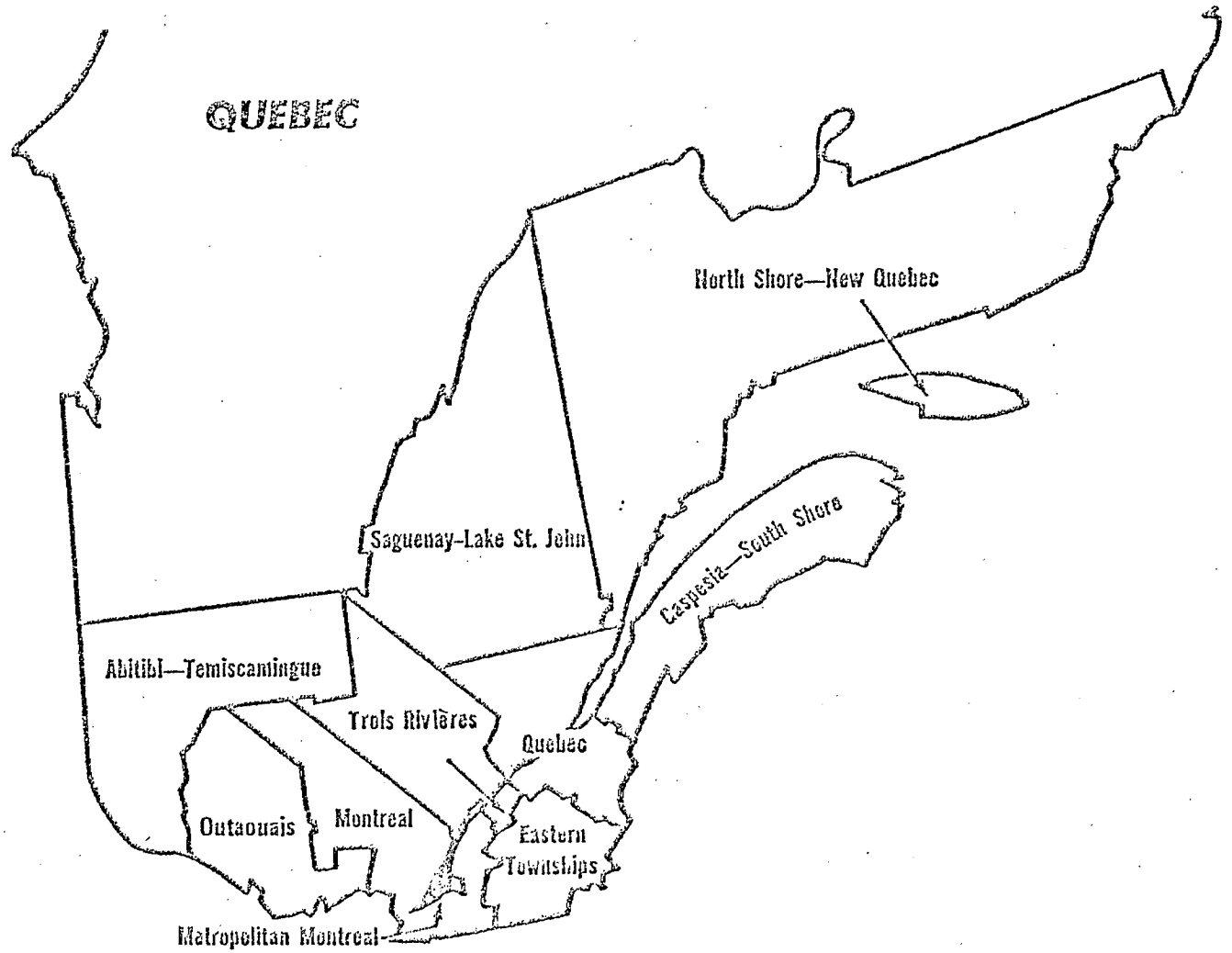
Global Physiography, Land Area and Population Density - (Global Territory)

Table 8 presents the whole territory by sub-region.

Physiography - Three different zones (See Appendix 2) characterize Quebec:

The Appalachian, that characterizes the southeastern part (Quebec, and especially Eastern Townships and Gaspesia sub-regions); the Canadian Shield

Figure 5



source: The Financial Post
Survey of Markets 1976-77

that covers most of Saguenay, Trois-Rivières, Abitibi and North-Shore subs, and part of Quebec, Montreal North and Outaouais sub-regions; finally the St. Lawrence Lowlands found especially in Montreal Central and South, and also in Montreal North and Outaouais. Altitude ranges from 450' to 2,000'. Montreal is relatively low; most of the subs are over 1,000 feet above sea level. Climate apart from a few maritime zones is generally of the temperate continental type, fourth category (See Appendix 3) cool summers and cold winters; this climate affects totally or partly, eight sub-regions (See Table 8). Four sub-regions (totally or in part) have a climate without dry season: Montreal Central, North and South, and Outaouais. Saguenay, Abitibi, and North Shore have rigourous winters; and North-Shore is in part in the subartic climate zone.

Land Area and Population - The largest sub-region (remote excluded) is the North Shore, followed by Saguenay-Lac St-Jean. The smallest is Montreal Central, and the next to the smallest is the Eastern Townships sub-region. The population, apart from that of Montreal is high in the Quebec sub-region and very low in the North Shore sub-region. Densities vary from 1.3 (North Shore) to 184.7 (Montreal South), excluding Montreal Central.

Table 9 gives land area and population figures for the remote territory and the organized urban and rural territory. The remote population is found only in Abitibi and North Shore, the remote land area being spread among seven sub-regions. The largest organized urban/rural sub-region area is that of Quebec and North Shore, closely followed by Gaspesia, the smallest, apart from Montreal Central, being Abitibi, followed by Saguenay Lac St-Jean. The highest urban populations are found in Montreal Central, Montreal South and Quebec sub-regions; the lowest is found in the North Shore. The organized rural population spreads among the sub-regions, from 41,000 (North Shore) to 294,000 (Quebec).

Table 10 shows densities derived from the figures of the previous table. The urban/rural densities range from 11.5 to 184.8 (Montreal Central apart). The organized rural has some very low densities: North Shore 4.9; Outaouais 16.1; Abitibi 17.8; the other sub-regions vary from 24 to 46. Montreal South is highest with 60.85 persons per square mile.

Communities & Urban Localities/Organized Territory - The number of communities including Indian Reserves in the total organized areas varies among sub-regions from 32 to 317; the average number is 146 (See Table 11).

All sub-regions have generally more than one agglomeration; Gaspesia, Eastern Townships and Abitibi have only one and Montreal South has 11.

The number of urban communities excluded from the study varies from 5 to 49.

Table

Tableau 8

QUEBEC SUB-REGIONS WHOLE TERRITORY/

ENSEMBLE DU TERRITOIRE, SOUS-REGIONS DU QUEBEC

Sub-regions/ Sous-régions	Physiographic zone/ Zone physiographique	Mean altitude/Altitude moy.	Climate zone/Zone climatique	Total population/ Population totale (000)	Pop. as % of prov. tot./% du total provincial	% pop. change, 66-71 % changement, 66-71	Total land area/Superficie totale (000)	Density/ Densité
Gaspesia/ Gaspésie	3	1,600'	1,4	326	5.4	- 3.7	16.4	19.85
Saguenay-Lake St. John/Saguenay Lac St-Jean	1	1,700'	4,5	263	4.4	- 1.6	3.7^{3} 40.9^{4}	71.08^{3} 6.44^{4}
Québec	1,3	1,400'	4	848	14.06	4.5	8.8^{3} 14.2^{4}	96.36^{3} 59.78^{4}
Trois-Rivières	1	1,000'	4	403	6.68	- 0.7	5.5^{3} 14.7^{4}	73.27^{3} 27.4^{4}
Eastern Townships/ Cantons de l'Est	3	1,400'	4	244	4.04	1.5	4.2	58.09
Montreal central/ Montréal centre	2	500'	3	2,187	36.28	3.1	0.30	7,290.0
Montreal north/ Nord de Montréal	1,2	1,100'	3,4	387	6.41	12.6	4.0^{3} 9.8^{4}	96.75^{3} 39.2^{4}
Montreal south/ Montréal rive-sud	2	450'	3	841	13.94	10.7	4.6	182.82
Outaouais	1,2	1,300'	3,4	247	4.1	7.6	7.3^{3} 15.9^{4}	33.84^{3} 15.5^{4}
Abitibi-Témiscamingue	1	1,600'	4,5	143^{1} 167^{2}	2.37^{1} 2.77^{2}	$- 8.0^{1}$	6.9^{3} 88.1^{4}	20.72^{5} 1.9^{6}
North-Shore/ Côte-Nord	1	2,000'	1,5,6	101^{1} 115^{2}	1.68^{1} 1.92^{2}	2.6^{1}	9.3^{3} 315.2^{4}	10.86^{5} 0.36^{6}
TOTAL	--	--	--	$5,990^{1}$ $6,028^{2}$	99.36^{1} $100.$	4.1^{2}	71.0^{3} 524.3^{4}	84.4^{5} 11.5^{6}

[1] Excluding remote population
[2] Including remote population
[3] Excluding remote land area
[4] Including remote land area
[5] Excluding remote land area and pop.
[6] Including remote land area and pop.

Table
Tableau 9

QUEBEC SUB-REGIONS URBAN/RURAL ORGANIZED TERRITORY & REMOTE-Land area and population/
TERRITOIRE URBAIN/RURAL ORGANISE ET TERRITOIRE ELOIGNE DES SOUS-REGIONS DU QUEBEC-Superficie et population

Sub-regions/ Sous-régions	LAND AREA/SUPERFICIE TERR.				POPULATION			
	remote/ éloigné	Org. urban & rural/ Urbain et rural org.	org. urban/urbain	Org. RSA/ Aire d'étude	Remote/ Eloignée	Org. urban & rural/ Urb. et rurale	Org. urb./ Urbaine	Org. RSA/ Aire d'étude
Gaspesia/ Gaspésie	---	7,436	935	6,501	---	323,305	128,160	195,145
Saguenay-Lake St. John/Saguenay Lac St-Jean	37,152	3,512	75	3,437	---	261,435	172,620	88,815
Québec	5,390	8,723	410	8,313	---	846,575	552,420	294,155
Trois-Rivières	9,169	4,075	343	3,732	---	400,565	261,525	139,040
Eastern Townships/ Cantons de l'Est	---	4,131	59	4,072	---	243,635	144,715	98,920
Montreal central/ Montréal centre	---	285	285	---	---	2,187,160	2,187,160	---
Montreal north/ Nord de Montréal	5,844	3,961	387	3,574	---	386,265	219,835	166,430
Montreal south/ Montréal rive-sud	---	4,551	502	4,049	---	840,795	594,405	246,390
Outaouais	8,566	6,838	65	6,773	---	247,115	137,875	109,240
Abitibi-Témiscamingue	81,243	3,034	130	2,904	24,010	119,610	67,800	51,810
North-Shore/ Côte-Nord	305,934	8,502	195	8,307	14,475	97,857	57,125	40,732
TOTAL	453,298	55,048	3,386	51,662	38,485	5,954,317	4,523,640	1,430,677

Table QUEBEC SUB-REGIONS ORGANIZED TERRITORY DENSITIES/
Tableau 10 DENSITES DES TERRITOIRES ORGANISES, SOUS-REGIONS DU QUEBEC

Sub-regions/ Sous-régions	Org. urb. & rur. density/ Densité urb. & rur. org.	Org. urban density/Densité urbaine organisé	Org. rural density/Densité rural organisé	Remote density/Densité terr. éloigné
Gaspesia/ Gaspésie	43.5	137.1	30.0	---
Saguenay-Lake St. John/Saguenay Lac St-Jean	74.4	2,301.6	25.8	---
Québec	97.1	1,347.4	35.4	---
Trois-Rivières	98.3	762.5	37.3	---
Eastern Townships/ Cantons de l'Est	59.0	2,452.8	24.3	---
Montreal central/ Montréal centre	7,674.2	7,674.2	---	---
Montreal north/ Nord de Montréal	97.5	568.1	46.6	---
Montreal south/ Montréal rive-sud	184.8	1,186.4	60.85	---
Outaouais	36.1	2,121.2	16.1	---
Abitibi-Témiscamingue	39.4	521.5	17.8	0.296
North-Shore/ Côte-Nord	11.5	292.9	4.9	0.0473
TOTAL	108.2	1,336.0	27.7	0.085

Table QUEBEC COMMUNITIES AND URBAN LOCALITIES, BY SUB-REGION (ORGANIZED TERRITORY)

Tableau 11 COMMUNAUTES ET MUNICIPALITES URBAINES DU QUEBEC, PAR SOUS-REGION (TERRITOIRE ORGANISE)

Sub-regions/ Sous-régions	No. of communities/ Nbre de localités	No. of urban agglomeration Nbre d'aggl. urbaine	No. of excluded urban comm./Municipalités urbaines exclues	Urb. pop. % of tot. organized terr./Pop. urb. % total org.	Urb. land area % of tot. organized/superficie urb. % total org.	Exclud. urb. % of tot. comm./ Comm. urb. excl. % tot.
Gaspesia/ Gaspésie	215	1	19	39.6	12.6	8.7
Saguenay-Lake St. John/Saguenay Lac St-Jean	87	2	13	66.0	2.1	14.9
Québec	317	3	40	65.3	4.7	12.6
Trois-Rivières	174	4	18	65.3	8.4	10.3
Eastern Townships/ Cantons de l'Est	129	1	12	59.4	1.4	9.3
Montreal central/ Montréal centre	32	2	32	100.	100.	100.
Montreal north/ Nord de Montréal	151	4	26	56.9	9.8	17.2
Montreal south/ Montréal rive-sud	263	11	49	70.7	11.0	18.6
Outaouais	135	3	9	55.8	0.95	6.7
Abitibi-Témiscamingue	69	1	7	56.7	4.3	10.1
North-Shore/ Côte-Nord	38	2	5	58.4	2.3	13.2
TOTAL:	1,610	34	230	75.9	6.2	14.3

The lowest proportions of excluded urban communities are found in Gaspesia, 8.7%, Outaouais, 6.7%, and Eastern Townships, 9.3%. The highest, apart from Montreal Central, is Montreal South, 18.6%.

Urban population accounts for a larger portion in Saguenay, Quebec, Montreal South.

The urban land area is negligible except in Montreal (Central, North & South), Gaspesia and Trois-Rivières.

Economy of Sub-Regions -

1. Income - Table 12 gives taxation statistics by class of revenue and average income. The North Shore sub-region has the highest average along with Montreal Central; the others are in the average ($6,000), with four exceptions: Trois-Rivières, Quebec, Gaspesia, and Eastern Townships; the last two averaging $5,700.

More larger salaries exist in Quebec, Montreal Central and South, and in the North Shore sub-regions. The North Shore has an especially high figure (22.2 & 8.0%) in the $10,000 to $15,000 and $15,000 to $20,000 classes. Saguenay high percentages are found in $7,000 to $10,000 and $10,000 to $15,000 classes.

The highest percentage (8%) of the lowest class is found in the Eastern Townships, followed by Gaspesia (7.4%).

Montreal South, Outaouais and Abitibi have a fairly good number of medium salaries ($7,000 to $15,000).

No one factor can explain these high and low differences; for example, the presence of the National Capital can explain part of the Outaouais high number of medium range salaires; on the other hand, how can it be explained that Gaspesia and Eastern Townships both have a high number of low salaries, while as we shall see later on, the Eastern Townships have a high manufacturing index compared to a very low one in Gaspesia?

Table QUEBEC PERSONAL INCOME TAXATION STATISTICS/1973

Tableau 12 REVENUS PERSONNELS, DECLARATIONS D'IMPOT, 1973

Sub-regions/ Sous-régions	Total returns/ N. de déclarants (000)	INCOME CLASSES/ CLASSES DE REVENU (%)										Average Income/ Revenu Moyen ($)
		under 1000/ moins de 1000	1,000 - 2,000	2,000 - 3,000	3,000 - 4,000	4,000 - 5,000	5,000 - 7,000	7,000 - 10,000	10,000 - 15,000	15,000 - 20,000	Over 20,000 Plus de 20,000	
Gaspesia Gaspésie	115	7.4	10.7	9.1	11.7	12.2	18.8	18.1	9.2	1.7	1.1	5,717.
Saguenay-Lake St. John/Saguenay Lac St-Jean	97	5.9	7.7	9.3	8.5	8.6	16.0	25.1	15.5	2.2	1.2	6,667.
Québec	383	6.0	8.9	8.9	9.6	11.0	19.0	19.5	11.9	3.0	2.3	5,947.
Trois-Rivières	174	6.4	9.4	10.1	10.4	10.7	19.1	19.4	10.7	2.1	1.7	5,993.
Eastern Townships/ Cantons de l'Est	105	8.0	8.8	9.9	11.6	10.9	16.8	19.8	10.8	2.0	1.4	5,708.
Montreal central/ Montréal centre	1,071	5.6	8.6	8.8	9.1	10.2	17.1	19.5	13.8	3.7	3.6	7,412.
Montreal north/ Nord de Montréal	175	6.9	8.7	10.1	10.2	10.2	29.2	18.4	13.5	2.9	1.6	6,171.
Montreal south/ Montréal rive-sud	394	5.9	8.5	8.8	9.2	9.2	17.6	20.2	14.6	3.6	2.1	6,434.
Outaouais	107	6.6	7.9	8.9	8.0	9.8	17.6	21.6	14.8	3.3	1.6	6,138.
Abitibi-Témiscamingue	62	6.0	8.8	8.3	7.8	9.0	18.7	23.5	13.7	2.5	1.6	6,661.
North-Shore Côte-Nord	47	6.3	8.8	5.7	6.3	6.6	11.2	22.2	22.2	8.0	2.8	8,184.
TOTAL:	2,730	6.1	8.7	9.0	9.4	10.1	18.3	19.9	13.3	3.3	2.6	6,457.

Table 13 presents the 1975 Farm cash income. From this table it can be seen that farm activity in Quebec is in Montreal (North and South), the Eastern Townships and the Quebec economic regions.

Apart from Montreal Central, North Shore, Abitibi, Outaouais and Saguenay, the regions have a very low farming activity.

2. 1976 Personal Disposable Income - Judging by the income rating index (The Financial Post Survey of Market), 100 being for Canada, one can easily distinguish four classes of sub-regions:

- the high class: Montreal Central and North Shore
- the medium class: Outaouais, Montreal, Quebec and Saguenay;
- the low class: Abitibi, Trois-Rivières, and Eastern Townships;
- the very low class: Gaspesia.

3. Economic Activities - The figures given here all come from the Survey of Market 1976-77 and will cover 1973 manufacturing activity and 1976 market data.

Manufacturing/1973 - Apart from Montreal, manufacturing activities are particularly found in Trois-Rivières, the Eastern Townships and Quebec (See Table 14). The lowest rating indexes are found in Gaspesia, Outaouais, North Shore, Quebec and Abitibi; the Eastern Townships have a high index along with Montreal Central.

Market Data/1976 - High retail sales are found in Montreal, Quebec and the Eastern Townships, while Gaspesia and Outaouais, on a per capita basis, have low sales. Both latter economic regions are very weak in almost all economic activities.

No definite conclusion can be drawn from these figures because other factors have to be taken into account, and the economic regions do not match completely with the study sub-regions. Nevertheless, it can be noted that the more affluent regions are Montreal, Eastern Townships, Trois-Rivières, and to a good extent Quebec and Saguenay.

Table QUEBEC, FARM AND PERSONAL INCOME (1975 and 1976), BY ECONOMIC REGION/ [1]
bleau 13 REVENU DE FERME ET PERSONNEL, PAR REGION ECONOMIQUE

Sub-regions/ Sous-régions	Farm income 1975 Revenu fermes		1976 pers. disposable income/ Rev. pers. disponible-1976			
	Cash inc./ Ventes ($millions)	% Can. total/ % total Canad.	Income/ Revenu ($millions)	% Can. total/ % total Canad.	Per capita ($)	Income rating index/ Indice du Revenu
Gaspesia/ Gaspésie	111.5	1.1	1,212.6	.99	3,290	61
Saguenay-Lake* St.John/Saguenay Lac St-Jean	53.9	0.6	1,197.2	.97	4,430	82
Québec	234.6	2.4	3,633.3	2.9	4,620	86
Trois-Rivières	129.7	1.3	1,264.9	1.0	4,200	78
Eastern Townships/ Cantons de l'Est	255.2	2.6	2,029.5	1.6	3,990	74
Montreal central/ Montréal centre	9.1	0.1	13,310.6	10.7	5,550	103
Montréal	502.7	5.1	4,959.8	4.0	4,630	86
Outaouais	30.8	0.3	1,142.8	.92	4,740	88
Abitibi-Témiscamingue*	24.1	0.2	723.1	.58	4,250	79
North-Shore/* Côte-Nord	1.4	0.01	676.2	.54	5,390	100
TOTAL:	1,353.	13.6	30,150.	24.3	4,830	90

[1] * - The Quebec economic regions correspond to the study sub-regions in only three (3) cases, marked with (*); the exact boundaries of those economic regions can be found in the Financial Post Survey of Markets, 1976-77, pp. 199 to 209.

-Source: The Financial Post Survey of Markets.

Table

Tableau 14

QUEBEC ECONOMIC ACTIVITIES [1] BY ECONOMIC REGIONS/

ACTIVITES ECONOMIQUES PAR REGION ECONOMIQUE

Sub-regions/ Sous-régions	Manufacturing 1973/ Données manufacturières					Market data, 1976/ Données du marché			
	Tot. added value/ Valeur ajoutée (000)	No. of plants/ Nbre d'entreprises	Employees no. Employés	Salaries/ Salaires (000)	industry rating index/ indice industr.	Retail sales Ventes détail (000)	% Can. tot./ % tot. Can.	Sales/ Ventes, per capita ($)	Market rating Index/ Indice marché
Gaspesia/ Gaspésie	180,058	470	12,581	83,193	35	658.4	1.12	1,790	71
Saguenay-Lake* St. John/Saguenay Lac St-Jean	284,864	220	15,808	153,196	78	566.5	.96	2,100	83
Québec	528,480	917	34,503	244,718	54	1,912.2	3.28	2,430	96
Trois-Rivières	453,053	601	31,146	226,028	93	636.6	1.09	2,110	84
Eastern Townships/ Cantons de l'Est	746,727	955	55,797	374,977	108	1,183.7	2.03	2,330	92
Montreal central/ Montréal centre	4,132,323	4,933	258,159	2,014,414	121	6,101.0	10.43	2,230	100
Montréal region	1,249,219	1,533	80,159	602,494	92	2,385.4	4.08	2,540	88
Outaouais	146,787	127	8,522	73,290	47	448.1	.77	1,860	73
Abitibi-Témiscamingue *	123,757	129	6,369	48,065	54	362.5	.62	2,130	84
North-Shore/ * Côte-Nord	70,510	62	3,421	37,388	45	274.6	.47	2,190	87
TOTAL	8,102,655	9,947	533,759	4,166,825	95	14,529.0	24.85	2,330	92

[1] Source: The Financial Post Survey of Markets (1976-77).

* Correspond to the study sub-region/Région économique correspond à sous-région dans ce cas.

B. Ontario

Population and Area - Ontario's population was 7,703,105 in 1971, an increase of 725,677 persons (or 9.5%) since the previous census. With a land area of 354,223, the population density was 21.7 persons per square mile. Estimates for the period 1971-76 give a growth in the population of 5.3%. For administrative purposes, Ontario communities and territory units have been classified in six groups as follows:

- cities & towns	:	191
- villages	:	144
- townships (including united township)	:	530
- improvement districts	:	17
- unorganized territories	:	10
- Indian reserves	:	23
TOTAL		915

For statistical purposes and as reported by Statistics Canada the unorganized territories as well as Indian Reserves are generally grouped in one figure for each county. In fact, there is a total of 15 unorganized and 40 Indian Reserves non-adjacent units disseminated in the whole territory.

Organized Territory - As mentioned, Indian Reserves and improvement districts are considered as organized communities. Ontario density, considering organized and unorganized, is as follows: 21.7 (org. & unorg.); 143.6 (organized alone). Other Ontario densities are:

- R.S.A. (total) density	:	14.81
- R.S.A. (organized) density	:	35.6
- R.S.A. (unorganized) density:		1.01

Table 15 gives some figures (land & population) on organized territory as well as on unorganized. The remote population organized and unorganized accounts for 0.2% of the total population and its density is 0.07 persons per square mile. The organized part of the area covers 53,007 square miles with a population of 7,610,875 persons, for a density of 143.6 persons per square mile.

Table — LAND AREA & POPULATION/ONTARIO

Tableau 15 — SUPERFICIE ET POPULATION

LAND AREA	Organized terr./ Terr. organisé	Unorganized/ Non organisé	Total
Total area/ Aire totale	53,007	301,216	354,223
Remote/ Eloigné	---	226,592	226,592
Urban & rural/* Urbain et rural	53,007	74,624	127,631
urban/ urbain	3,604	---	3,604
R.S.A./ Aire d'étude	49,403 (39.8%)	74,624 (60.2%)	124,027
POPULATION			
Total area/ Aire totale	7,610,875	92,230	7,703,105
Remote/ Eloigné	---	16,550	16,550
Urban & rural/* Urbain et rural	7,610,875	75,680	7,686,555
urban/ urbain	5,848,495	---	5,848,495
R.S.A./ Aire d'étude	1,762,380	75,680	1,838,060

* URBAN: Study definition/Urbain: According to our definition
RURAL: R.S.A./

Urban & Rural Organized Territory - The Communities: There are 905 communities, which represent a density of 17.07 communities per 1,000 square miles. These communities are distributed as follows:

Classes		
	C1 (1-499)	105
	C2 (500-999)	148
	C3 (1,000-1,499)	117
	C4 (1,500-1,999)	104
	C5 (2,000-2,499)	81
	C6 (2,500-2,999)	49
	C7 (3,000-3,499)	77
	C8 (4,000-4,999)	39
	C9 (5,000 & +)	185
	TOTAL	905

It should be noted that 20.44% of communities are in class C9.

One precision should be make about size and legal status of localities in the organized territories; there are incorporated municipalities that do not have the legal status of city, town or village, which are well over 2,500 or even over 5,000 of size and have a density of less than 1,000 per square mile; these are rural municipalities and are considered as such in this study.

Urban Territory - There are 29 urban agglomerations[1] in the total area; 164 communities were considered as urban and excluded from the study. Their population was 5,848,495 in 1971, which represents 76.84% of the total organized territory population, or 75.92% of the total province population.

The urban area is 3,604 square miles, which is 6.8% of the total "urban/rural" organized territory.

A sub-region has been defined as a grouping of census divisions. For Ontario the sub-regions correspond exactly to the 1971 Statistics Canada census regions and Ontario Government economic regions. As for Quebec,

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[1] Urban agglomerations: cities or towns of 25,000 and over (1971).

the sub-regions respect the exact boundaries of the census divisions (or counties).

In Ontario there are 10 sub-regions: Eastern, Lake Ontario, Central Ontario, Niagara, Lake Erie, Lake St.Clair, Mid-Western, Georgian Bay, Northeastern, and Northwestern Ontario (See Figure 6).

Physiography, Land Area and Population - Density (Global Territory) -

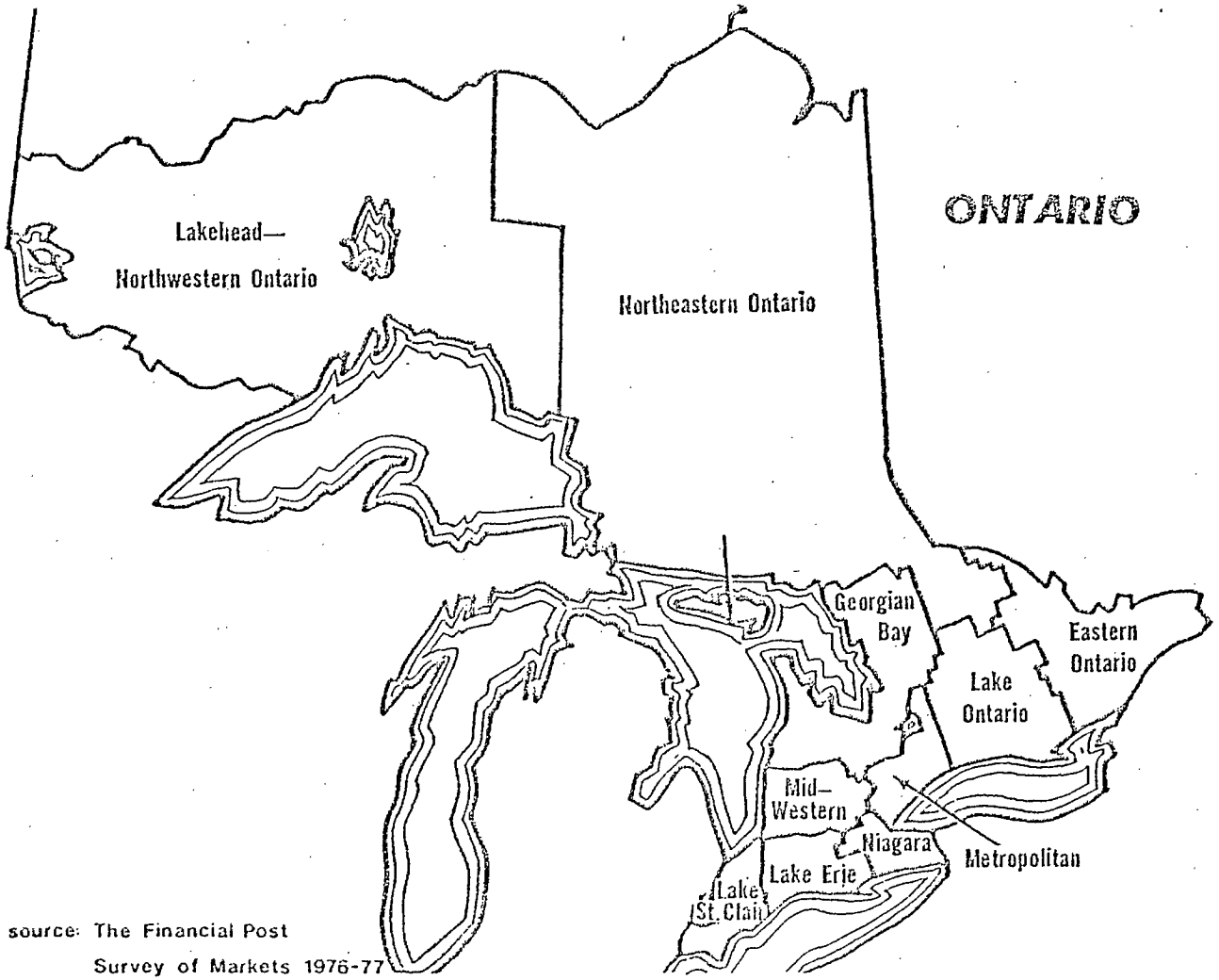
Table 16 presents the whole territory by sub-region.

Physiography - Ontario subs spread in two physiographical zones: (See Appendix 2) the Canadian Shield that covers the two northern sub-regions, and partly Eastern, Lake Ontario, and Georgian Bay. The second zone is the St.Lawrence Lowlands, which affect, totally or in part, eight sub-regions.

Altitude - Ranges from 400' to 1,750'. Southeastern sub-regions are low, northern are generally higher.

Climate - (See Appendix 3), three sub-regions (Niagara, Lake Erie and St.Clair) are of the humid temperate continental climate, and their summers are warm. Six sub-regions have cool summers, without dry seasons (zone 3). Colder and even subarctic climate is found in northern sub-regions.

Figure 6



source: The Financial Post
Survey of Markets 1976-77

Table ONTARIO SUB-REGIONS WHOLE TERRITORY/

Tableau 16 ENSEMBLE DU TERRITOIRE, SOUS-REGIONS DE L'ONTARIO

Sub-regions/ Sous-régions	Physiographic zone/ Zone physiographique	Mean altitude/Altitude moy.	Climate zone/Zone climatique	Total population/ Population totale (000)	Pop. as % of prov. tot./% du total provincial	% pop. change, 66-71 % changement, 66-71	Total land area/Superficie totale (000)	Density/ Densité
Eastern Ontario/ Ontario Est	1,2	400'	3,4	922.5	11.98	7.8	10.0	91.9
Lake Ontario/ Lac Ontario	1,2	900'	3,4	375.2	4.87	6.5	9.2	40.6
Central Ontario/ Ontario Centre (Toronto)	2	825'	3	2,897.3	37.61	13.3	2.6	1,116.0
Niagara	2	800'	2	878.6	11.41	5.7	2.1	426.1
Lake Erie/ Lac Erié	2	825'	2,3	483.1	6.27	9.4	3.4	140.1
Lake St. Clair/ Lac St-Clair	2	650'	2	521.8	6.77	7.0	2.8	183.8
Mid-Western Ontario/Ontario centre-ouest	2	1,250'	3	478.5	6.21	11.1	3.7	129.4
Georgian Bay/ Baie Georgienne	1,2	1,050'	3,4	368.6	4.79	11.1	10.9	33.6
Northeastern Ontario/Ontario nord-est	1	1,700'	4,5	552.1(1) 553.1(2)	7.17(1) 7.18(2)	6.5(1)	54.1(3) 107.4(4)	10.2(5) 5.1(6)
Northwestern Ontario/Ontario nord-ouest	1	1,750'	5,6	208.7(1) 224.4(2)	2.71(1) 2.91(2)	-6.6(1)	28.8(3) 202.1(4)	7.2(5) 1.1(6)
TOTAL	--	--	--	7,686.4(1) 7,703.1(2)	99.79(1) 100.	9.5(2)	127.6(3) 354.2(4)	60.2(5) 21.7(6)

(1) Excluding remote population
(2) Including remote population
(3) Excluding remote land area
(4) Including remote land area
(5) Excluding remote land area and pop.
(6) Including remote land area and pop

Land Area and Population - The largest sub-regions are the two northern ones. The three smallest are Niagara, Central and Lake St. Clair. Population, apart from the Central sub, ranges from 200 to 900 thousand. Density ranges from 7 to 426 persons per square mile (Central excluded).

Tables 17 to 19 give figures on the organized territory, with a few comparisons with the remote area and R.S.A. territory. Table 17 gives land area and population figures for the remote territory and the organized urban and rural territory (urban and rural to be understood as our definition of those terms). The remote population is found only in the northern subs.

The largest organized urban/rural sub-region area is that of Eastern, followed by Lake Ontario. The average area is 5,301 square miles, the smallest being Niagara with 2,062 square miles.

The highest urban populations are found in Central, Eastern and Niagara. The organized rural population ranges from 49 (Northwestern) to 376 thousand (Eastern).

Table 18 shows densities derived from the figures of the previous table. The average organized rural density is 35.6 persons per square mile; Northwestern is only 14.7 and Lake Ontario 22.8. Central and Niagara have respectively 93.5 and 87.1 persons per square mile.

Communities & Urban Localities - The number of communities including Indian Reserves in the total organized areas varies among sub-regions from 48 to 153; the average number is 91 (See Table 19). All sub-regions have generally more than one agglomeration; Georgian Bay and Northwestern have only one and Central Ontario has 5. The number of urban communities excluded from the study varies from 6 to 28; the average is 16.

The lowest proportions of urban excluded communities are found in Lake Ontario (9.0%), Northwestern (12.5%), Georgian Bay and Eastern (13.1% each). Central has the highest with Niagara (54% and 36%). Urban population ac-

Table ONTARIO SUB-REGIONS URBAN/RURAL ORGANIZED TERRITORY & REMOTE-Land area and population/

Tableau 17 TERRITOIRE URBAIN/RURAL ORGANISE ET TERRITOIRE ELOIGNE DES SOUS-REGIONS DE L'ONTARIO-Superficie et population

Sub-regions/ Sous-régions	LAND AREA/SUPERFICIE TERR.				POPULATION			
	remote/ éloigné	Org. urban & rural/ Urbain et rural org.	org. urban/urbain	Org. RSA/ Aire d'étude	Remote/ Eloignée	Org. urban & rural/ Urb. et rurale	Org. urb./ Urbaine	Org. RSA/ Aire d'étude
Eastern Ontario/ Ontario Est	---	10,031	141	9,890	---	922,505	546,455	376,050
Lake Ontario/ Lac Ontario	---	9,236	63	9,172	---	375,185	165,665	209,520
Central Ontario/ Ontario Centre (Toronto)	---	2,596	988	1,608	---	2,897,300	2,746,945	150,355
Niagara	---	2,062	561	1,501	---	878,640	747,865	130,775
Lake Erie/ Lac Erié	---	3,448	97	3,351	---	483,085	318,780	164,305
Lake St. Clair/ Lac St-Clair	---	2,839	93	2,746	---	521,825	355,270	166,555
Mid-Western Ontario/Ontario centre-ouest	---	3,698	117	3,581	---	478,545	341,730	136,815
Georgian Bay/ Baie Georgienne	---	8,649	782	7,868	---	364,555	160,445	204,110
Northeastern Ontario/Ontario nord-est	53,369	6,943	612	6,331	935	497,800	323,380	174,420
Northwestern Ontario/Ontario nord-ouest	173,223	3,505	150	3,355	15,615	191,435	141,960	49,475
TOTAL	226,592	53,007	3,604	49,403	16,550	7,610,875	5,848,495	1,762,380

Table ONTARIO SUB-REGIONS ORGANIZED TERRITORY DENSITIES/

Tableau 18 DENSITES DES TERRITOIRES ORGANISES, SOUS-REGIONS DE L'ONTARIO

Sub-regions/ Sous-régions	Org. urb. & rur. density/ Densité urb. & rur. org.	Org. urban density/Densité urbaine organisé	Org. rural density/Densité rural organisé	Remote density/Densité terr. éloigné
Eastern Ontario/ Ontario Est	92.6	3,875.6	38.0	---
Lake Ontario/ Lac Ontario	40.6	2,629.6	22.8	---
Central Ontario/ Ontario Centre (Toronto)	1,116.1	2,780.3	93.5	---
Niagara	426.1	1,333.1	87.1	---
Lake Erie/ Lac Erié	140.1	3,286.4	49.0	---
Lake St. Clair/ Lac St-Clair	183.8	3,820.1	60.6	---
Mid-Western Ontario/Ontario centre-ouest	129.4	2,920.8	38.2	---
Georgian Bay/ Baie Georgienne	42.1	205.2	25.9	---
Northeastern Ontario/Ontario nord-est	71.7	528.4	27.6	0.02
Northwestern Ontario/Ontario nord-ouest	54.6	946.4	14.7	0.09
TOTAL	143.6	1,622.8	35.6	0.07

Table ONTARIO COMMUNITIES AND URBAN LOCALITIES, BY SUB-REGION (ORGANIZED TERRITORY)

Tableau 19 COMMUNAUTES ET MUNICIPALITES URBAINES DE L'ONTARIO, PAR SOUS-REGION (TERRITOIRE ORGANISE)

Sub-regions/ Sous-régions	No. of communities/ Nbre de localités	No. of urban agglomeration/ Nbre d'aggl. urbaine	No. of excluded urban comm./Municipalités urbaines exclues	Urb. pop. % of tot. organized terr./Pop. urb. % total org.	Urb. land area % of tot. organized/superficie urb. % total org.	Exclud. urb. % of tot. comm./ Comm. urb. excl. % tot.
Eastern Ontario/ Ontario Est	153	3	20	59.2	1.4	13.1
Lake Ontario/ Lac Ontario	122	2	11	44.1	0.6	9.0
Central Ontario/ Ontario Centre (Toronto)	52	5	29	94.8	38.0	55.8
Niagara	47	4	17	85.1	27.2	36.2
Lake Erie/ Lac Erié	72	3	10	66.0	2.8	13.9
Lake St. Clair/ Lac St-Clair	69	3	15	68.1	3.2	21.7
Mid-Western Ontario/Ontario centre-ouest	79	3	19	71.4	3.2	24.1
Georgian Bay/ Baie Georgienne	137	1	18	44.0	9.0	13.1
Northeastern Ontario/Ontario nord-est	126	4	19	65.0	8.8	15.1
Northwestern Ontario/Ontario nord-ouest	48	1	6	74.2	4.3	12.5
TOTAL	905	29	164	76.1	6.8	18.0

counts for a larger portion in Central, Niagara and Mid-Western. The urban land area is relatively large in only two subs: Central and Niagara.

Economy of Sub-regions -

1. Income - Table 20 give taxation statistics by class of revenue and average income. The highest averages are found in Central Ontario and Lake St. Clair, the others are in the province average ($6,579), except Lake Ontario ($5,765), Georgian Bay & Eastern ($6,000). The highest number of high class salaries are found in Eastern, Central, and St. Clair. Northwestern, Northeastern, Niagara have high percentages of the medium-high classes ($7,000 to $15,000). The highest percentages of low salaries are found in Northwestern, Northeastern, Georgian Bay, Lake Ontario and Eastern subs. The low salaries of Georgian Bay and Lake Ontario are confirmed by Table 21 (1976 disposable income).

Farm Income 1975 - Table 21 gives the 1975 farm cash income by sub-region. From this table it can be seen that Lake Erie, Mid-Western and Lake St. Clair generate the greatest farm activities. Next is Georgian Bay, higher than Niagara; the Niagara 1966-71 farm population change seems to be confirmed here. Very low farming activities are found in the Northern subs.

2. 1976 Personal Disposable Income - Judging by the income rating index (The Financial Post Survey of Market), 100 being for Canada, one can easily distinguish four classes of sub-regions:

- the high class : Central;
- the medium class : Lake St. Clair;
- the low class : Eastern, Northeastern, Northwestern, Lake Erie, Niagara;
- the very low class : Georgian Bay, Lake Ontario, Mid-Western.

3. Economic Activities - The figures given here all come from the Survey of Market 1976-77 and will cover the 1973 manufacturing activity, and the 1976 market data (See Table 22). In central Ontario 50% of the manufacturing activities are concentrated. Eastern Mid-Western and Niagara

Table PERSONAL INCOME TAXATION STATISTICS/1973

Tableau 20 REVENUS PERSONNELS, DECLARATIONS D'IMPOT, 1973

Sub-regions/ Sous-régions	Total returns/ N. de déclarants (000)	INCOME CLASSES/ CLASSES DE REVENU (%)										Average Income/ Revenu Moyen ($)
		under 1000/ moins de 1000	1,000 - 2,000	2,000 - 3,000	3,000 - 4,000	4,000 - 5,000	5,000 - 7,000	7,000 - 10,000	10,000 - 15,000	15,000 - 20,000	Over 20,000 Plus de 20,000	
Eastern Ontario/ Ontario Est	521.8	8.5	12.0	8.4	7.7	7.8	13.8	17.9	14.4	5.2	4.2	6,042.
Lake Ontario/ Lac Ontario	197.0	8.6	15.1	10.0	10.1	7.4	13.9	16.7	13.1	3.3	1.8	5,765.
Central Ontario/ Ontario Centre (Toronto)	1,735.9	6.6	10.5	8.2	7.5	7.3	15.3	17.7	17.3	5.2	4.4	8,232.
Niagara	533.7	7.2	12.3	8.4	8.6	6.9	12.1	18.7	18.9	4.2	2.6	6,801.
Lake Erie/ Lac Erié	280.6	7.8	12.0	9.7	8.6	7.6	15.1	17.7	14.8	3.9	2.8	6,397.
Lake St. Clair/ Lac St-Clair	278.0	6.7	12.1	8.6	8.5	8.0	11.8	15.0	19.4	6.4	3.4	7,385.
Mid-Western Ontario/Ontario centre-ouest	287.2	7.3	12.4	10.6	7.8	8.8	15.8	17.9	13.8	3.0	2.7	6,338.
Georgian Bay/ Baie Georgienne	218.9	7.5	15.1	10.4	8.3	8.9	16.1	16.2	12.4	3.2	1.8	6,038.
Northeastern Ontario/Ontario nord-est	259.9	9.5	12.6	8.8	6.9	7.3	12.0	17.2	20.0	3.8	1.8	6,341.
Northwestern Ontario/Ontario nord-ouest	118.5	9.3	11.8	9.2	7.5	7.7	11.2	19.4	18.9	4.3	1.6	6,452.
TOTAL	4,431.5	7.4	11.8	8.8	7.9	7.6	14.2	17.6	16.7	4.7	3.4	6,579.

Table ONTARIO, FARM AND PERSONAL INCOME (1975 and 1976), BY ECONOMIC REGION/ [1]
Tableau 21 REVENU DE FERME ET PERSONNEL, PAR REGION ECONOMIQUE

Sub-regions/ Sous-régions	Farm income 1975 Revenu fermes		1976 pers. disposable income/ Rev. pers. disponible-1976			
	Cash inc./ Ventes ($Millions)	% Can. total/ % total Canad.	Income/ Revenu ($Millions)	% Can. total/ % total Canad.	Per capita ($)	Income rating index/ Indice du Revenu
Eastern Ontario/ Ontario Est	246.6	2.51	5,713.7	4.60	5,800.	108
Lake Ontario/ Lac Ontario	171.0	1.71	1,990.2	1.61	4,770.	89
Central Ontario/ Ontario Centre (Toronto)	182.1	1.84	20,712.0	16.68	6,530.	121
Niagara	243.9	2.46	5,211.5	4.20	5,660.	105
Lake Erie/ Lac Erié	539.0	5.44	2,804.0	2.26	5,430.	101
Lake St. Clair/ Lac St-Clair	389.7	3.93	3,294.1	2.65	6,060.	113
Mid-Western Ontario/Ontario centre-ouest	466.2	4.70	2,796.9	2.26	5,150.	96
Georgian Bay/ Baie Georgienne	295.5	2.99	1,947.8	1.57	4,460.	83
Northeastern Ontario/Ontario nord-est	33.1	0.33	3,222.8	2.60	5,790.	108
Northwestern Ontario/Ontario nord-ouest	14.7	0.14	1,291.7	1.03	5,460.	102
TOTAL	2,581.8	26.05	48,985.0	39.46	5,880.	109

1 - The economic regions correspond to the study sub-regions/la région économique correspond à la sous-région de l'étude.

- Source: The Financial Post Survey of Markets, 1976/77, p. 102.

take from 6 to 10%. Northwestern has the lowest number of manufacturing activities. Niagara manufacturing activities generate the greatest number of jobs per activity (95), the Province average being 70. Next comes St. Clair sub with 85 jobs per activity. The lowest average job generating activities are found in Eastern and Central (58).

Market Data/1976 - High retail sales, apart from Central Ontario, are found in Eastern and Niagara. Per capita sales are the highest in Central, Niagara, Lake Erie, St. Clair and Eastern; lows are found in Georgian Bay and Lake Ontario. In general, the more affluent regions, taken as a whole (urban and rural), are Central, Niagara, and St. Clair subs.

Table

Tableau 22

ONTARIO ECONOMIC ACTIVITIES [1] BY ECONOMIC REGIONS/

ACTIVITES ECONOMIQUES PAR REGION ECONOMIQUE

Sub-regions/ Sous-régions	Manufacturing 1973/ Données manufacturières					Market data, 1976/ Données du marché			
	Tot. added value/ valeur ajoutée (000)	No. of plants/ Nbre d'entreprises	Employees no. Employés	Salaries/ Salaires (000)	industry rating index/ indice industr.	Retail sales Ventes détail (000)	% Can. tot./ % tot. Can.	Sales/ Ventes, per capita ($)	Market rating Index/ Indice marché
Eastern Ontario/ Ontario Est	880,623	847	49,316	404,641	67	2,568.4	4.39	2,610.	103
Lake Ontario/ Lac Ontario	593,038	515	32,461	264,329	111	978.3	1.68	2,340.	93
Central Ontario/ Ontario Centre (Toronto)	7,101,897	6,179	362,162	3,283,214	168	8,517.5	14.57	2,680.	106
Niagara	2,454,191	1,280	122,410	1,194,724	197	2,467.2	4.21	2,680.	106
Lake Erie/ Lac Erié	834,458	710	48,673	414,006	120	1,380.3	2.37	2,670.	106
Lake St. Clair/ Lac St-Clair	1,680,350	730	62,449	701,285	226	1,431.8	2.45	2,640.	104
Mid-Western Ontario/Ontario centre-ouest	1,252,245	1,037	76,293	599,173	181	1,333.4	2.28	2,460.	97
Georgian Bay/ Baie Georgienne	438,788	573	28,521	206,718	82	1,017.6	1.75	2,330.	92
Northeastern Ontario/Ontario nord-est	585,448	355	30,731	322,296	74	1,369.2	2.33	2,460.	97
Northwestern Ontario/Ontario nord-ouest	285,432	171	12,648	122,910	92	563.7	0.96	2,380.	94
TOTAL	16,441,815	12,397	861,767	7,947,955	148	21,627.4	36.99	2,600.	103

1 - Source: The Financial Post Survey of Markets/1976-77.
- Economic Regions correspond to the study sub-regions/Les régions économiques correspondent aux sous-régions de l'étude.

1.4: THE SUB-REGIONS

A. Quebec

Sub-Region 1: Gaspesia-Lower St. Lawrence

1. Counties or Census Divisions (See Figure 7)

There are 10 counties in Gaspesia: Bonaventure, Gaspé-Est, Gaspé-Ouest, Ile-de-la-Madeleine, Kamouraska, Matane, Matapédia, Rimouski, Rivière-du-Loup, Témiscouata.

- Remote territory: There is no excluded remote territory.

- Urban excluded areas: The 19 urban municipalities excluded from the study are by county:

- Bonaventure	(1):	New Richmond
- Gaspé-Est	(3):	Gaspé, Percé, Chandler
- Gaspé-Ouest	(3):	Cap-Chat, Murdochville, Ste-Anne-des-Monts
- Kamouraska	(2):	La Pocatière, St-Pascal
- Matane	(2):	Matane, Price
- Matapédia	(2):	Amqui, Causapscal
- Rimouski	(2):	Rimouski, Mont-Joli
- Rivière-du-Loup	(2):	Rivière-du-Loup, Trois-Pistoles
- Témiscouata	(2):	Cabano, Dégelis

Iles-de-la-Madeleine county has no urban area.

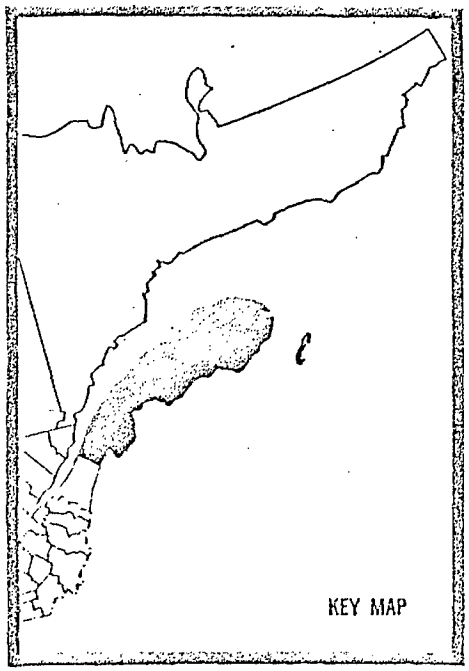
2. Global Territory Characteristics

Gaspesia sub-region is a peninsula located at the southeastern tip of the province; its land area is of 16,404 square miles. Its total population (1971) was 325,785 inhabitants, and its density was 19.85 persons per square mile. The change rate, from 1966 to 1971 was -3.7%, an absolute decrease of minus 12,379 persons.

3. Physiography

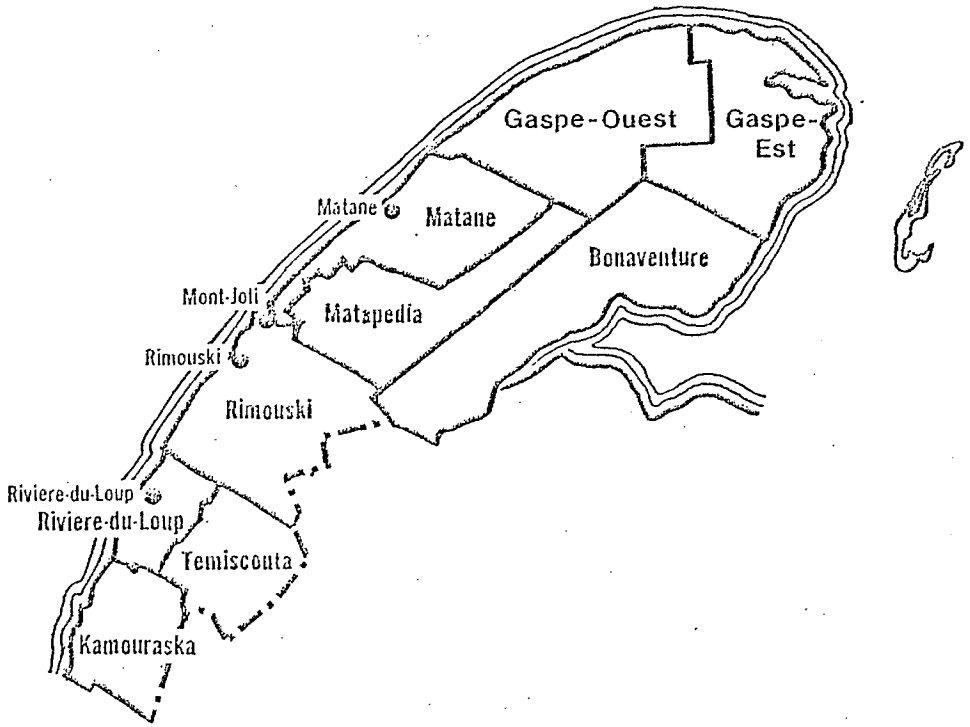
Gaspesia is part of the Appalachian Mountains, composed of sandstone, calcareous rocks, shale and conglomerates, with metal layers of copper,

Figure 7



source: The Financial Post
Survey of Markets 1976-77

GASPESIA-LOWER ST.LAWRENCE
GASPÉSIE-BAS ST-LAURENT



lead and zinc. The Appalachian Relief gives the shape of the entire sub-region, and as one travels towards the tip of the peninsula, the mountains become bigger (especially on the north side). A coastal plain six to 10 miles wide stretches along the Baie des Chaleurs.

The mean altitude is 1,600'; although the area also has the highest summit of southern Quebec: Jacques-Cartier Mountain, 4,160'.

The hydrography of Gaspesia consists of the ocean along the coasts and several important rivers, transversal to the mountain ridges. Primary rivers are Madawaska, Matapédia, and Cascapédia, which flow in south-east directions. There are also 10 other secondary rivers. The presence of these rivers facilitated the establishment of forest industries.

Gaspesia has a continental climate, but humidity is high and temperature rather cool all year round. The climate factor is a major constraint for farming purposes. Only the Kamouraska and "Baie des Chaleurs" coastal plains have more than 2,500 degree-days of growing season. The ocean, or course, greatly influences the Gaspesia climate.

4. Organized Territory Characteristics

The organized land area is 7,437 square miles or 45.3% of the total area. The unorganized rural land area is 8,968 square miles, and a population of 2,480 inhabitants is settled in these territories.

- The Communities (organized territory) - There are 215 localities in Gaspesia, 117 of which have fewer than 1,000 population; 74 have between 1,000 and 2,500. Seven communities have more than 5,000 population, one of which is at least of agglomeration size: Rimouski. The majority of communities are parishes and without-designation municipalities. There is one I.R. statistical unit (two non-adjacent territories).

- The Urban Territory - There are 19 urban municipalities, with a total population of 128,160 inhabitants, or 39.6% of the sub-region organized total population. The land area is 935 square miles, or 5.7% of the total area.

5. Gaspesia R.S.A.

- Rural land area (organized & unorganized) - 15,469 square miles.
- Total population - 197,625, or 60.7% of total (rural organized, 195,145, is 60.4% of urban-rural organized total).
- Density - 30.0 (organized); and 12.8 (including unorganized land and population).
- Number of territory units - 205.
- Population change, 1971-76: -6.2%.

Sub-Region 2: Saguenay-Lac St-Jean

1. Counties or Census Divisions (See Figure 8)

There are three counties in Saguenay: Chicoutimi, Lac St-Jean Ouest, Lac St-Jean Est.

Excluded remote land area (See Figure 9) is 37,152 square miles. There is no excluded remote population. The remote line affects two census divisions: 1) Chicoutimi, where the rural study area is limited to a strip of organized municipalities on both sides of the Saguenay River; 2) Lac St-Jean Ouest, where the R.S.A. confines itself to the organized municipalities around Lac St-Jean.

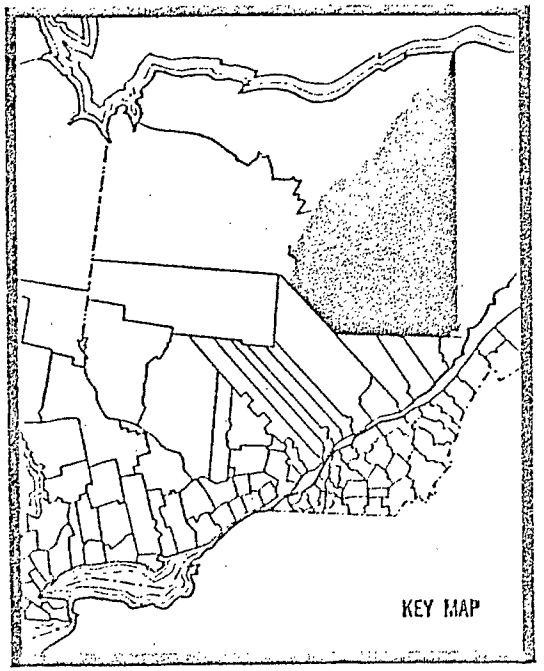
- Urban excluded areas - The 13 excluded urban municipalities are by county:

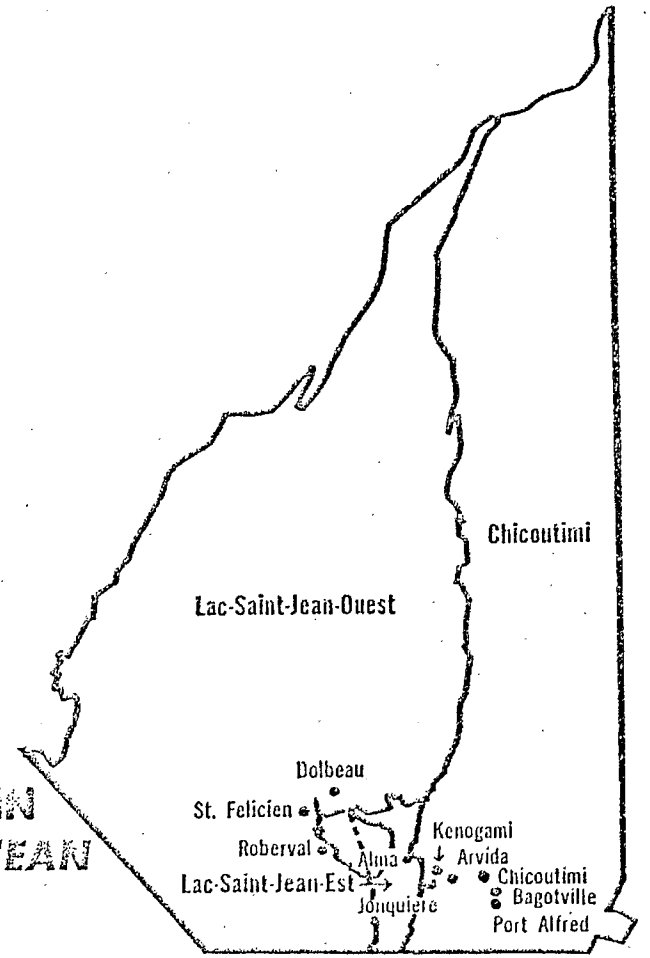
- Chicoutimi	(8):	Arvida, Chicoutimi, Chicoutimi-nord, Jonquière, Kénogami, Bagotville, Port-Alfred, Rivière-du-Moulin
- Lac St-Jean Est	(1):	Alma
- Lac St-Jean Ouest	(4):	Roberval, Dolbeau, Mistassini, St-Félicien

2. Global Territory Characteristics

Saguenay is located between the St. Lawrence River and the north coast to the east, bordered in the north by the James Bay territory, Abitibi

Figure 8

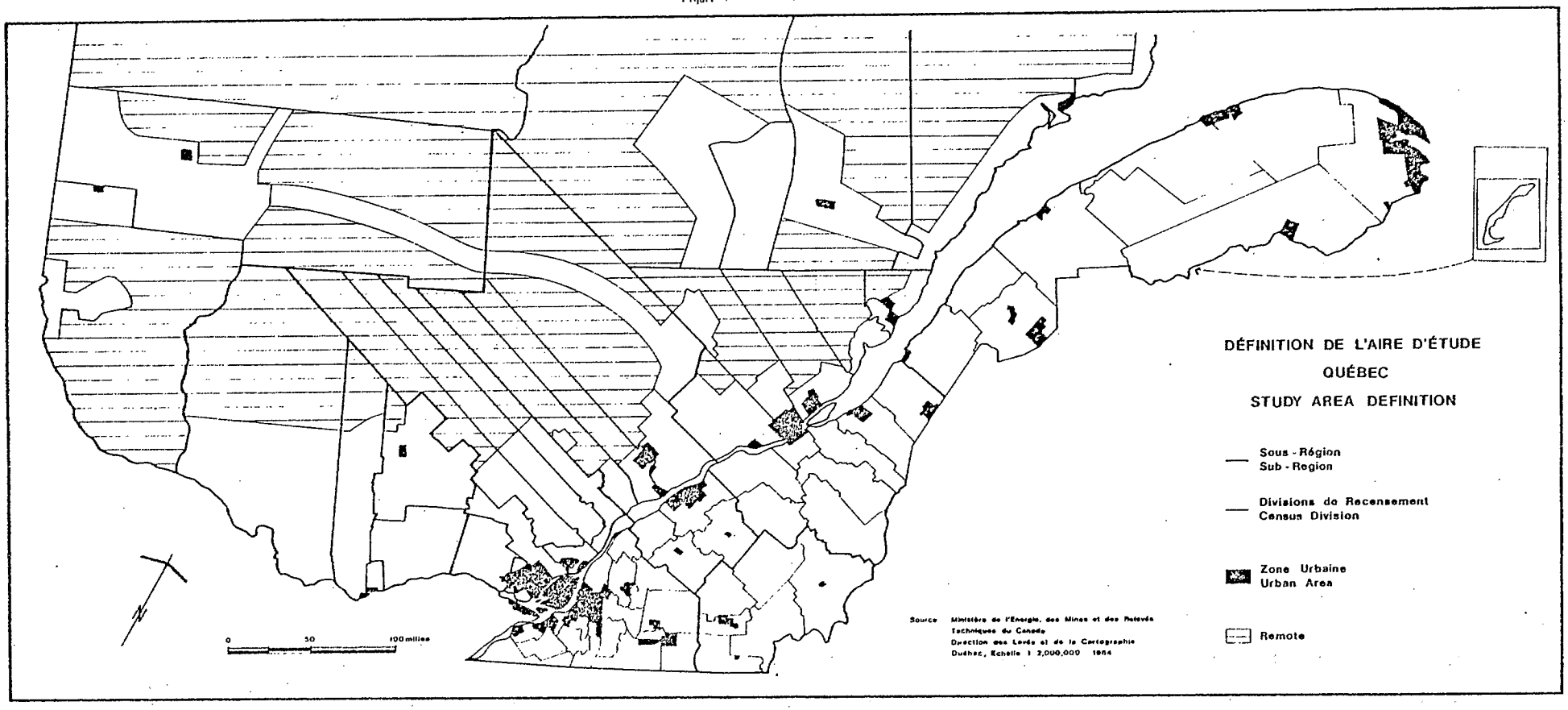




SAGUENAY- LAKE ST.JOHN
SAGUENAY — LAC-SAINT-JEAN

source: The Financial Post
Survey of Markets 1976-77

Figure 4


DÉFINITION DE L'AIRE D'ÉTUDE
QUÉBEC
STUDY AREA DEFINITION
Sous - Région
Sub - Region
Divisions de Recensement
Census Division
Zone Urbaine
Urban Area
Remote
0
50
100 milles
Source Ministère de l'Energie, des Mines et des Ressources Techniques du Canada
Direction des Levés et de la Cartographie
Québec, Echelle 1 2,000,000 1964

to the west and Quebec to the south. Its total area is 40,906 square miles. The population of this resource area, wedged in a forested region is 263,545 (1971); its density is 71.08 (remote area excluded). The change rate, from 1966 to 1971 was -1.6%, an absolute decrease of 4,137 persons.

3. Physiography

The region is part of the Canadian Shield and belongs mainly to the Grenville province. One part lies in the Churchill province and another in the Superior province. All the rock formations are Precambrian.

Topographically, there are two distinct structural units, i.e. the Laurentian Plateau and the Saguenay-Lac St-Jean Basin. Most of the region, which is a mountainous area, belongs to the Laurentian Plateau, whereas only a small part of it — around Lac St-Jean and the upper Saguenay River — lies in the Saguenay Basin. The latter is a sinkhole zone and resembles a plain. It is covered by sedimentary deposits consisting chiefly of limestone and clayslate.

The average altitude is 1,700', but the inhabited region, around Lac St-Jean, has an altitude that does not reach 1,000'.

Water constitutes an important resource of this sub-region. Its hydrography is mainly constituted in Lac St-Jean (390 square miles); its tributary rivers are Mistassini, Péribonka, Chamouchouane. The Saguenay River is the outlet of Lac St-Jean.

This sub-region has a fairly dry climate all year round, with the Lac St-Jean lowlands having mild temperatures.

4. Organized Territory Characteristics

The organized land area is 3,512 square miles, or 8.6% of the total area. Unorganized rural land area is small: 242 square miles; and population in the unorganized area is 2,100 inhabitants (1971).

- The Communities (Organized Territory) - There are 87 communities in Saguenay, 31 of which have fewer than 1,000 population; 40 have populations of 1,000 to 2,500. Ten communities have more than 5,000 population, two of which are at least of the agglomeration size: Chicoutimi and Jonquière. Mainly villages and without-designation municipalities are found in the area. There is one I.R.

- The Urban Territory - There are 13 urban municipalities, with a total of 172,620 population, or 66.0% of the sub-region organized total. The land area is 75 square miles, or 2.13% of total organized area.

5. Saguenay R.S.A.

- Total rural land area - 3,673 square miles.
- Total population - 90,915 or 34.5% of the sub-region total (rural organized, 88,815, is 34.0% of urban-rural organized total).
- Density - 25.8 (organized); and 24.8, including unorganized.
- Number of territory units - 75.
- Population change, 1971-76: -15.7%.

Sub-Region 3: Quebec

1. Counties and Census Divisions (See Figure 10)

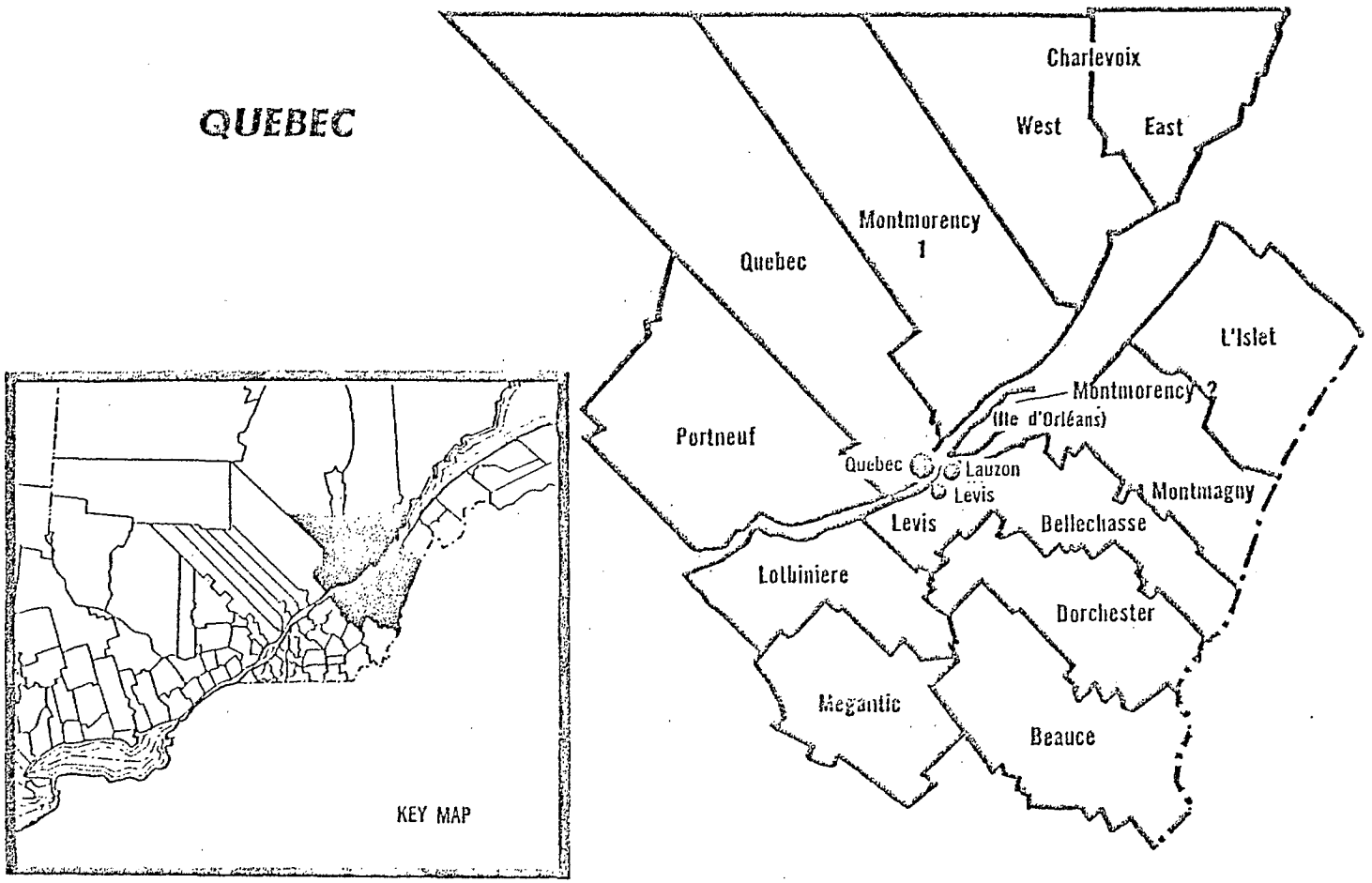
There are 14 counties in Quebec: Beauce, Bellechasse, Charlevoix-Est, Charlevoix-Ouest, Dorchester, Lévis, L'Islet, Lotbinière, Mégantic, Montmagny, Montmorency no. 1, Montmorency no. 2, Portneuf, Québec.

- Remote Territory (See Figure 9) - There are 5,391 square miles of excluded remote land area. There is no excluded remote population.

  The remote line affects five census divisions:

  In three counties, Charlevoix-Est & Ouest, and Montmorency no. 1 the remote line delineates a narrow strip of mostly organized territories on the North Shore of the St. Lawrence River. For Quebec C.D., a larger territory at the south tip. is kept in the R.S.A. (also corresponding to the organized territory boundary); also retained in the

Figure 10



source: The Financial Post
Survey of Markets 1976-77

R.S.A. is the isolated unit of Lac Edouard (northwest of the county). Finally, in Portneuf, there is a very small portion of remote at the northeast, adjacent to the Quebec county.

- Urban Excluded Areas: 40 urban communities were excluded:

- Beauce	(4):	St-Georges, St-Georges-Ouest, St-Joseph-de-Beauce, Ste-Marie
- Charlevoix-Est	(2):	Clermont, La Malbaie
- Charlevoix-Ouest	(1):	Baie St-Paul
- Dorchester	(1):	Lac Etchemin
- Lévis	(5):	Lauzon, Lévis, St-Romuald d'Etchemin, Charny, St-David de l'Auberivière
- L'Islet	(1):	St-Pamphile
- Mégantic	(3):	Thetford-Mines, Black Lake, Plessisville
- Montmagny	(1):	Montmagny
- Montmorency no. 1	(2):	Beaupré, Château-Richer
- Portneuf	(4):	Donnacona, St-Romuald, Pont-Rouge, St-Marc-des-Carrières
- Québec	(16):	Beauport, Charlesbourg, Giffard, Lorretville, Québec, Ste-Foy, Sillery, Ancienne Lorette, Bélair, Courville, Montmorency, N.D. des-Laurentides, Orsainville, Vanier, Villeneuve, St-Emile

Three counties have no urban area: Bellechasse, Lotbinière, Montmorency no. 2.

2. Global Territory Characteristics

South of the Saguenay sub-region, the Quebec line runs west-east, from Trois-Rivières sub to the Tadoussac River on the North Shore; the sub-region extends to the South Shore, where it is bordered to the south-west by the Eastern Townships, south by the Maine, U.S. border, and south-west by the Gaspesia sub.

Its total land area is 14,177 square miles. Its population in 1971 was 847,550 inhabitants. Its density (remote land excluded) was 96.36 persons per square mile. The change rate, from 1966 to 1971 was of 4.5%, an absolute increase of 37,946 persons.

3. Physiography

The Quebec sub is characterized by varied surfaces. It covers three geologic zones: the Laurentian Plateau to the North, a mountainous region of the Precambrian era, rich in lakes and rivers. The lowlands of the St. Lawrence form a narrow plain extending from the southwest to the northeast as far as Cap Tourmente. The Appalachian Mountains to the South are a zone of primitive rock folds.

The average altitude is 1,400'; but the south shore part is lower than the north, where one of the summits, Mount Ste-Anne, reaches 2,675'.

There is no very important hydro basin in this sub-region. The main rivers, south shore, are La Chaudière and Etchemin; north shore: Montmorency, Malbaie, and Jacques-Cartier.

Quebec has a humid continental type climate, relatively warm summer, with cold winter (very cold in the Laurentides Park zone). Rain and snowfalls are quite uniform all year round. The growing season is moderately long varying from 2,200 to 2,500 degree-days of 45° F and over.

4. Organized Territory Characteristics

The organized land area is 8,723 square miles, or 61.5% of the total area. Unorganized rural land area is very small: 64 square miles; and its population was 1,015 in 1971.

- The Communities (Organized Territory) - There are 317 communities in Quebec, out of which 149 have fewer than 1,000 inhabitants: 118 have a population of 1,000 to 2,500, while 22 communities have more than 5,000 population, three of which are at least of the agglomeration size: Quebec, Lévis and Thetford Mines.

The most numerous territory unit is the parish; there are also a great number of villages and without-designation units; only one I.R.

- The Urban Territory - There are 40 urban municipalities, with a total of 552,420 inhabitants, or 65.3% of the sub-region organized total. The land area is 410 square miles, or 4.7% of total organized area.

5. Quebec R.S.A.

- Total rural land area - 8,377 square miles
- Total population - 295,170, or 34.8% of the sub-region total (rural organized, 294,155 is 34.7% of urban-rural organized total).
- Density - 35.4 (organized); and 35.2, including unorganized.
- Number of territory units - 279.
- Population change, 1971-76: 0.1

Sub-Region 4: Trois-Rivières

1. Counties or Census Divisions (See Figure 11)

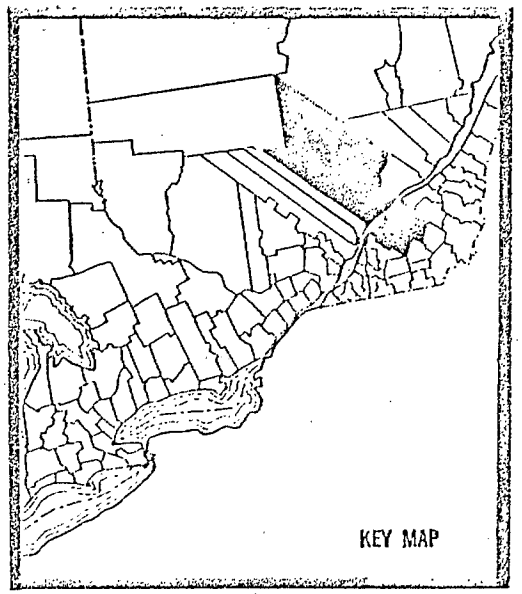
There are seven counties in Trois-Rivières: Arthabaska, Champlain, Drummond, Maskinongé, Nicolet, St-Maurice, Yamaska.

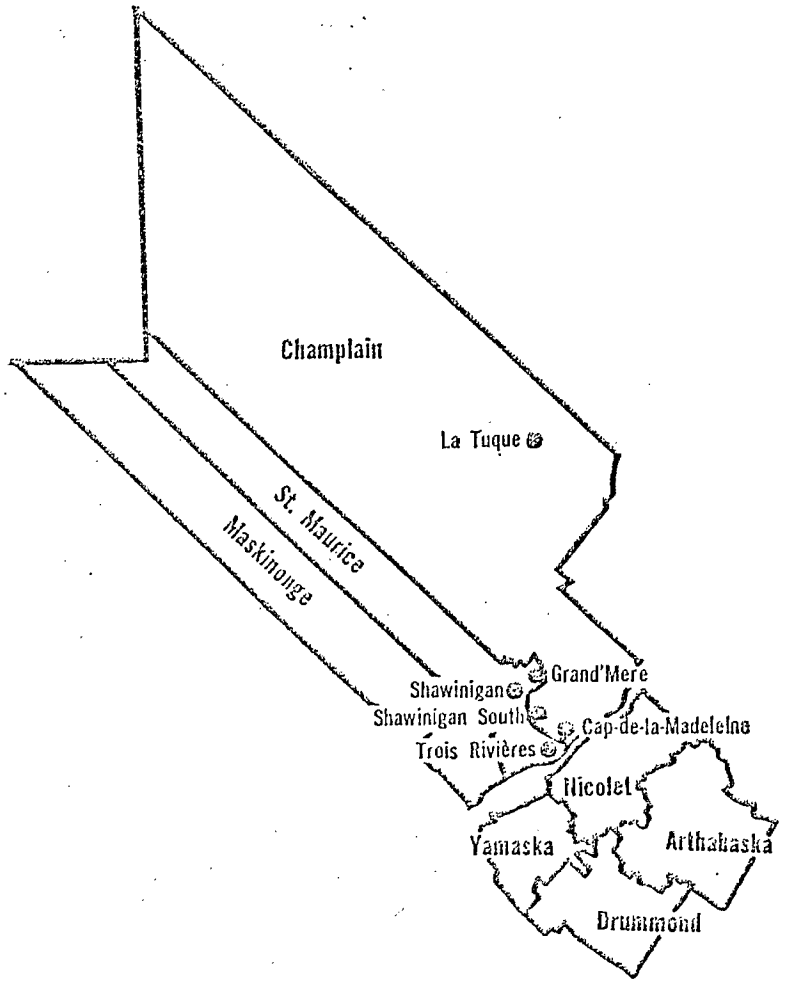
- Remote Territory (See Figure 9) - Total excluded remote land area is 9,169 square miles. There is no excluded remote population.

  The remote territory affects three counties: Champlain, where the R.S.A. restricts itself to the boundaries of the organized territories of Langelier, Haute-Mauricie and Boucher. Also kept in the R.S.A. is a narrow strip of land starting from La Tuque and curving upward towards Abitibi, following the railroad line (CN). The main locality along this strip is Parent. Also affected are St-Maurice and Maskinongé where the remote line is that of the organized territories of Belleau and Saint-Gérard-des-Laurentides. In Maskinongé, there is an isolated territory (Masson) which is also part of the R.S.A.

Figure 11

TROIS-RIVIÈRES





Source: The Financial Post
Survey of Markets 1976-77

- Urban Excluded Areas: There are 18 urban municipalities excluded:

- Arthabaska	(4):	Arthabaska, Princeville, Victoriaville, Warwick.
- Champlain	(5):	Cap-de-la-Madeleine, Grand-Mère, La Tuque, St-Tite, Shawinigan-Sud.
- Drummond	(2):	Drummondville, Drummondville Sud.
- Maskinongé	(1):	Louiseville.
- Nicolet	(2):	Bécancour, Nicolet.
- St-Maurice	(4):	Shawinigan, Trois-Rivières, Trois-Rivières Ouest, St-Boniface-de-Shawinigan.

There is no urban area in Yamaska.

2. Global Territory Characteristics

Trois-Rivières, located on both sides of the St. Lawrence River, is in the center of the Quebec inhabited area. It is surrounded by the following subs: Montreal, Eastern Townships, Quebec, Saguenay and Abitibi. Its total land area is 14,721 square miles; its population is 402,905 (1971) with a density of 73.27 (remote area excluded). The change rate, from 1966 to 1971, was -0.7, an absolute decrease of 2,819 persons.

3. Physiography

The relief of Trois-Rivières is characterized to the north by the forested highlands of the Laurentian Plateau, a mountainous region of the Precambrian era which abounds in lakes and rivers. The lowlands of the St. Lawrence, in the middle of the region, include the main urban centers. The Appalachian mountains, to the far south, are a zone of primitive rock folds.

The average altitude is about 500' on the south shore of the St. Lawrence, but averages from 1,200' to 1,300' in the north because of the presence of the Laurentians. Even though there is a very localized important drop of level, the global relief is not too pronounced, comprising a few summits reaching at most 2,000 feet or so.

Lakes are numerous, and a large number of water courses belonging to the St. Lawrence River basin drain this region. The most important of these rivers is the St. Maurice (one of the largest rivers in southern Quebec); its tributaries are: "la Vermillon", "la Croche", "la Bostonnais", "le Mattawin", and "la Mékinac". Other rivers, originating in the Canadian Shield, flow directly to the St. Lawrence, draining a part of the St. Lawrence plain; they are "la Maskinongé", "la Rivière-du-Loup", "la Batiscan", and "la Sainte-Anne".

The climate is relatively mild in the St. Lawrence plain, but deteriorates in the northern parts (in the boreal forested cover).

The average rainfalls per year are: north: 698 mm., south: 775 mm.; the number of days without frost are in average: north: 99, south: 130.

4. Organized Territory Characteristics

The organized land area is 4,075 square miles, or 27.7% of the total area. Unorganized rural land area is fairly large: 1,475 square miles; population in unorganized territories is 2,325 inhabitants (1971).

- The Communities (Organized Territory) - There are 174 communities in Trois-Rivières; 106 have fewer than 1,000 population; 46 have populations of 1,000 to 2,500. Eleven have more than 5,000 inhabitants, four of which are at least of the agglomeration size: Victoriaville, Drummondville, Trois-Rivières, and Cap-de-la-Madeleine.

  The territory units are mainly parishes, more than twice the villages and without-designation localities. Three I.R.s are found on the territory.

- Urban Territory - There are 18 urban municipalities, with a total of 261,525 inhabitants, or 65.3% of the sub-region organized total. The land area is 343 square miles, or 8.4% of total organized land area.

5. Trois-Rivières R.S.A.

- Total rural land area - 5,209 square miles.

- Total population - 141,365, or 35.1% of the sub-region total (rural organized, 139,040, is 34.7% of urban-rural organized total).
- Density - 37.3 (organized); and 27.1, including unorganized.
- Number of territory units - 157.
- Population change, 1971-76: 5.2%.

Sub-Region 5: Eastern Townships

1. Counties or Census Divisions (See Figure 12)

There are six counties in the Eastern Townships: Compton, Frontenac, Richmond, Sherbrooke, Stanstead, Wolfe.

- Remote Territory: none

- Urban Excluded Areas: There are 12 excluded urban municipalities:
  - Compton (1): East-Angus
  - Frontenac (1): Lac-Mégantic
  - Richmond (5): Asbestos, Bromptonville, Danville, Richmond, Windsor Mills
  - Sherbrooke (2): Sherbrooke, Lennoxville
  - Stanstead (2): Magog, Coaticook
  - Wolfe (1): Disraëli

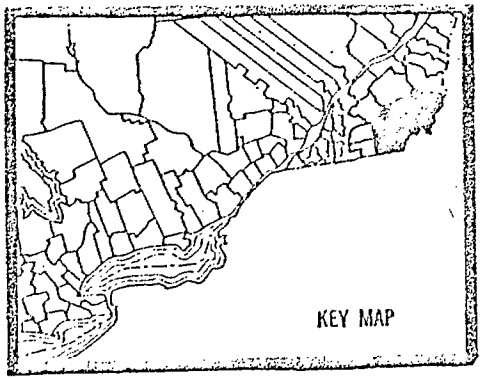
2. Global Territory Characteristics

The Eastern Townships occupy the southeastern part of the Province of Quebec bordering the U.S. (New Hampshire and Vermont states) and surrounded by Montreal South, Trois-Rivières and Quebec sub-regions. Total area is 4,153 square miles. The population amounted to 243,650 persons in 1971 with a density of 58.09. The change rate from 1966 to 1971 was 1.5%, an absolute increase of 3,678 persons.

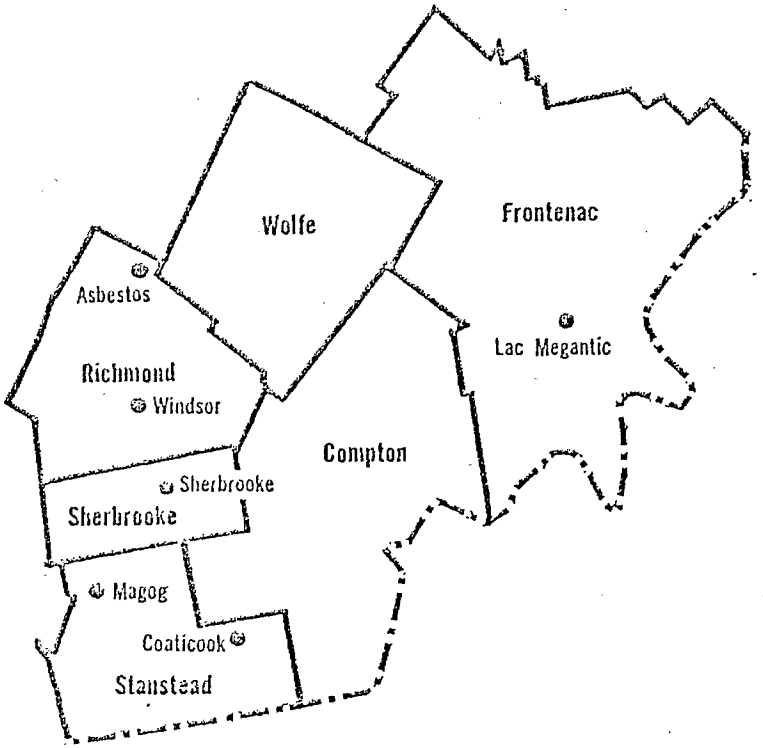
3. Physiography

The relief of the Eastern Townships sub-region, which is almost entierly in the Appalachian zone, is distinguished by its northeast —

Figure 12



EASTERN TOWNSHIPS
CANTONS DE L'EST



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southwest direction. It consists of a parallel alignment of three series of low mountains, presenting the general aspect of a wavy plateau, slightly sloping towards the northwest in the direction of the St. Lawrence Valley. Mineral resources include asbestos, lead, copper, zinc, gold and silver; there are also numerous granite, limestone and slate quarries.

Altitudes vary from 500' to about 3,880' (Mount Gosford); average altitude is 1,400'. Mount Orford is 2,500' while Mont Mégantic reaches 3,640' above sea level.

There are five hydro basins in the Eastern Townships, the most important of which being that of Saint-François River. The others are la Chaudière, la Nicolet, la Bécancour and la Connecticut. The southeast boundary of the sub-region coincides with that of the Atlantic watershed and of the St. Lawrence basin.

Because of the rising altitudes, the climate becomes more severe as one moves from the northwest to the southeast. Temperature variations are larger than in Quebec and Montreal. The vegetation season is shorter by 8 or 15 days than that enjoyed in the plain of Montreal. On the whole, the climate is more like that prevailing in Quebec than in Montreal.

4. Organized Territory Characteristics

The organized land area is 4,131 square miles, or 99.5% of the total area. Unorganized rural land area is 21.7 square miles. No population is attached to the unorganized territory.

- The Communities (Organized Territory) - There are 129 communities in the Eastern Townships, out of which 89 have fewer than 1,000 inhabitants; 24 have populations between 1,000 and 2,500. Seven have more than 5,000 population, one of which, Sherbrooke, is at least of agglomeration size. Townships and without-designation localities are numerous; there are no Indian Reserves.

- The Urban Territory - There are 12 urban municipalities, with a total of 144,715 persons, or 59.4% of the sub-region total. The land area is 59 square miles, or 1.4 of the total organized area.

5. Eastern Townships R.S.A.

- Total rural land area - 4,094 square miles.
- Total population - 98,920, or 40.6% of the sub-region total.
- Density - 24.3 (organized).
- Number of territory units - 118.
- Population change, 1971-76: 9.0%.

Sub-Region 6C: Montreal-Central

1. Counties or Census Divisions (See Figure 13)

There are two counties: Ile-de-Montréal, Ile-de-Jésus. There is no remote territory, and the total sub-region is excluded from this study.

2. Global Territory Characteristics

Montreal Central Island is located in the southwest portion of the St. Lawrence River about 30 miles from Eastern Ontario boundaries. Its total area is 285 square miles, its population 2,187,160 (1971); its density 7,290. The change rate, 1966-1971 was 3.1, an absolute increase of 67,894 persons.

3. Urban Territory Characteristics

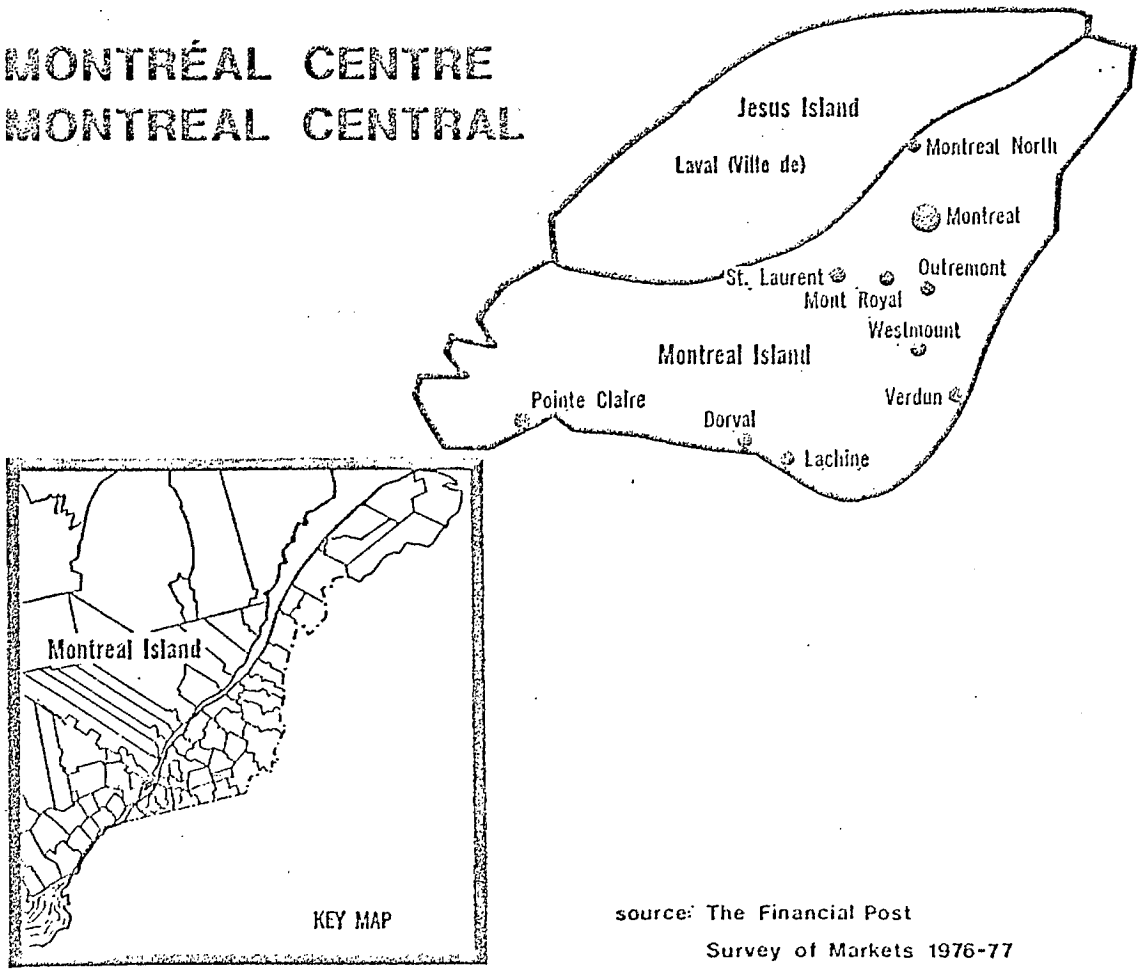
There are 32 urban municipalities, 24 of which are of 5,000 and over population; the two important cities are Montreal and Laval. The territory units are: 29 cities or towns, one village, and two without-designation localities.

Sub-Region 6N: Montreal-North

1. Counties and Census Divisions (See Figure 14)

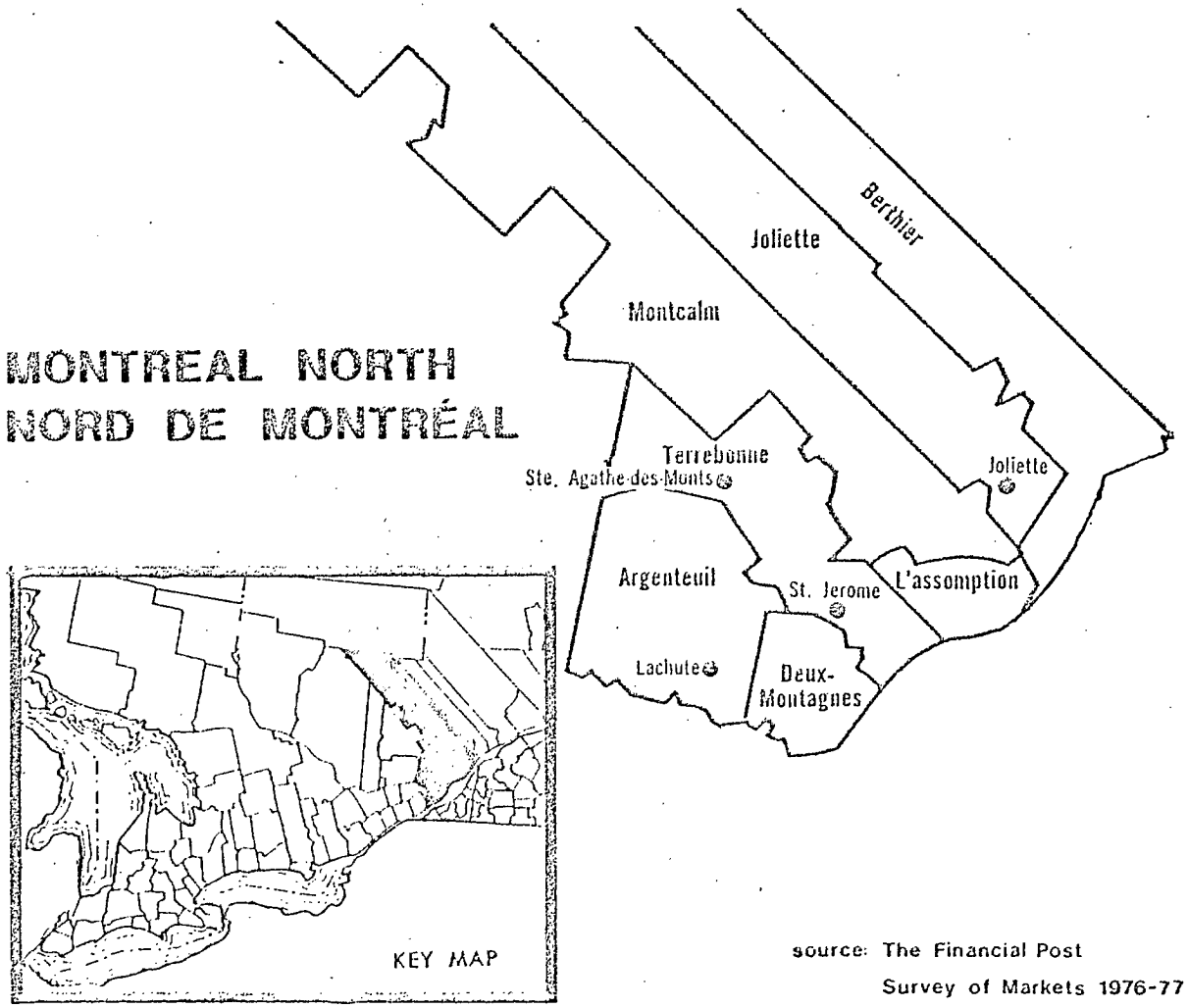
There are seven counties: Argenteuil, Berthier, Deux-Montagnes, Joliette, L'Assomption, Montcalm, Terrebonne. Excluded remote land area

Figure 13



source: The Financial Post
Survey of Markets 1976-77

Figure 14



source: The Financial Post
Survey of Markets 1976-77

(See Figure 9) is 5,844 square miles; there is no remote population. The remote line affects three census divisions: 1) Berthier, where the remote starts at the boundary of the organized locality of St-Michel-des-Saints. 2) Joliette, where remote starts north of Saint-Come and Ste-Emilie. Part of the R.S.A. though, is the St-Guillaume-North territory, wedged in the remote area, but only partly isolated because of its link with St-Michel-des-Saints in Berthier Co. 3) Montcalm, where the remote line passes north of the last organized territories of Val-des-Lacs and St-Donat.

- Urban Excluded Areas: There are 26 urban excluded municipalities:

- Argenteuil	(2):	Lachute, Brownsburg
- Berthier	(2):	Berthierville, St-Gabriel
- Deux-Montagnes	(3):	Deux-Montagnes, Ste-Scholastique, St-Eustache
- Joliette	(1):	Joliette
- L'Assomption	(5):	Charlemagne, L'Assomption, L'Epiphanie, Mascouche, Repentigny.
- Montcalm	(1):	Rawdon
- Terrebonne	(12):	St-Jérôme, Ste-Thérèse, Blainville, Lorraine, Rosemère, Ste-Agathe-des-Monts, St-Antoine, Ste-Thérèse-Ouest, Terrebonne, Bois-des-Filions, Lafontaine, St-Jovite.

2. Global Territory Characteristics

Montreal North is limited west (Argenteuil Co.) by the Ontario frontier; south by the St. Lawrence River; northwest by the Abitibi and Outaouais subs, and northeast by the Trois-Rivières sub-region. Its total population is 386,620, and land area is 9,841 square miles. The density is 96.75 (remote land area excluded). The change rate, 1966-1971 was 12.6%, an absolute increase of 48,460 persons.

3. Physiography

The Laurentian Plateau occupies most of the territory; it consists of till-over precambrian rock of the Grenville series, appearing as a

hilly area rich in rivers and lakes. The southern part of the sub-region is integrated to the lowlands of the St. Lawrence, consisting of low, clay plains.

The average altitude is 500' near Montreal, but the presence of the Laurentian Mountains in this sub-region brings the average altitude up to 1,100'.

A few rivers of low capacity flow through this area: they are la Rouge and la Rivière du Nord, which go into the Ottawa River, and Mascouche and Milles Isles, which empty into the St. Lawrence River directly.

Montreal lowlands have a truly continental climate, warmer in every season than that prevailing in other subs. While temperature variations are pronounced and snow fairly abundant, the frost-free period and growth season are longer than elsewhere in the province. However, the Laurentian plateau is colder and receives more snow than the plain.

4. Organized Territory Characteristics

The organized land area is 3,961 square miles, or 40.3% of the total area. The unorganized rural land area is very small, 35 square miles; its population is 300 inhabitants (1971).

- The Communities (Organized Territory) - There are 151 communities in Montreal-North, 63 of which have fewer than 1,000 population; 46 have populations between 1,000 and 2,500; 16 communities are over 5,000, four of which are at least of agglomeration size: St-Jérôme, Joliette, Ste-Scholastique, Repentigny.

  The parish is the most common unit, and there are two Indian Reserves.

- The Urban Territory - There is a total population of 219,835 inhabitants, or 56.9% of the sub-region organized total, in the 26 urban localities. The land area is 387 square miles, or 9.8% of the total organized area.

5. Montreal-North R.S.A.

- Total rural land area - 3,609 square miles.
- Total population - 166,730, or 43.1% of the sub-region total (rural organized, 166,430 is 43.1% of urban-rural organized total).
- Density - 46.6 (organized); and 46.2%, including unorganized.
- Number of territory units - 126.
- Population change, 1971-76: 12.6%.

Sub-Region 6S: Montreal-South

1. Counties or Census Divisions (See Figure 15)

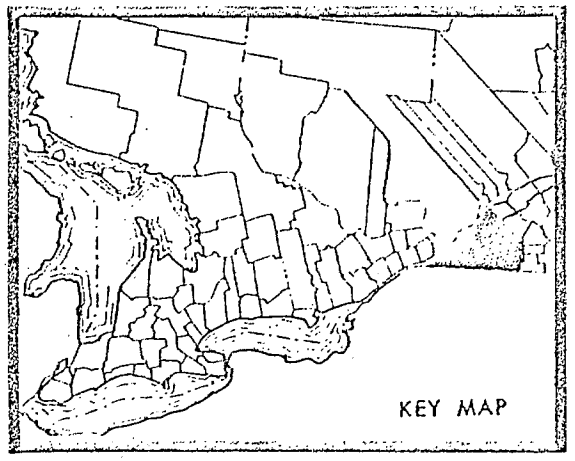
There are 18 counties in Montreal-South: Bagot, Beauharnois, Brome, Chambly, Châteauguay, Huntingdon, Iberville, Laprairie, Missisquoi, Napierville, Richelieu, Rouville, St-Hyacinthe, St-Jean, Shefford, Soulanges, Vaudreuil, Verchères.

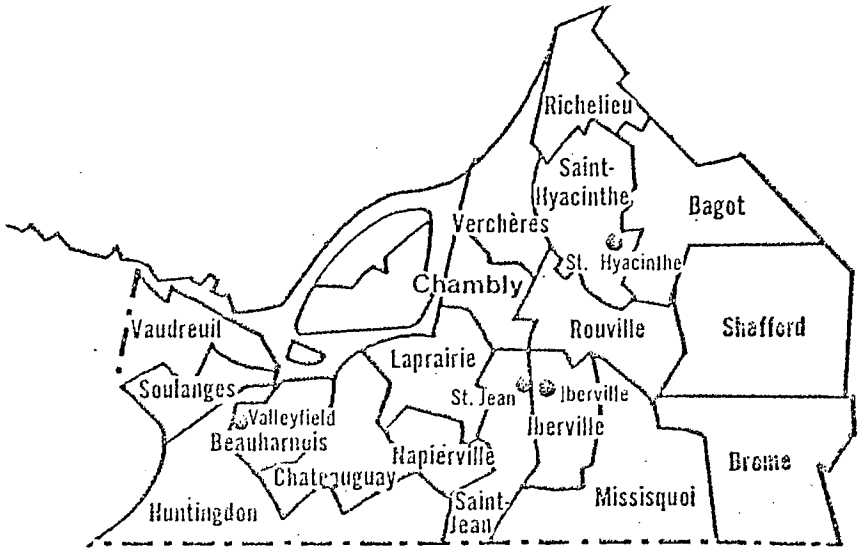
- Remote Territory: none

- Urban Excluded Areas: 49 urban localities have been excluded:
  - Bagot (1): Acton Vale
  - Beauharnois (2): Beauharnois, Valleyfield
  - Brome (1): Lac Brome
  - Chambly (11): Total county is excluded as urban
  - Châteauguay (3): Châteauguay, Châteauguay Centre, Mercier
  - Huntingdon (1): Huntingdon
  - Iberville (1): Iberville
  - Laprairie (4): Brossard, Candiac, Delson, La Prairie
  - Missisquoi (3): Farnham, Bedford, Cowansville
  - Richelieu (3): Sorel, St-Joseph-de-Sorel, Tracy
  - Rouville (3): Marieville, Mont St-Hilaire, Otterburn Park
  - St-Hyacinthe (4): St-Hyacinthe, Douville, La Providence, St-Joseph

Figure 15

MONTRÉAL RIVE-SUD
MONTREAL SOUTH





source: The Financial Post
Survey of Markets 1976-77

- St-Jean (2): St-Jean, St-Luc
- Shefford (2): Granby, Waterloo
- Vaudreuil (5): Dorion, Hudson, Ile-Perrot, Pincourt, Vaudreuil
- Verchères (3): Beloeil, Contrecoeur, McMasterville.

Napierville and Soulanges counties are totally rural.

2. Global Territory Characteristics

Located on the south shore of the St. Lawrence River, Montreal South is bounded to the south by the American border, to the east by the Eastern Townships, to the northeast by Trois-Rivières and to the west by Eastern Ontario. Its total area is 4,551 square miles and its population 840,725 (1971). Density is 182.8 persons per square mile. The change rate from 1966 to 1971 was 10.7%, an absolute increase of 89,767 persons.

3. Physiography

There are two types of terrain. The lowlands of the St. Lawrence are clayey plains containing a few isolated mountains (the "Montéringiennes" hills) and cut into parts by the St. Lawrence and the Richelieu Rivers. In the southeast part of the region, the Appalachian area is a mountainous zone of primary rock folds whose highest mountains reach some 3,000 feet.

The average altitude is 450'; but among the "Montéringiennes" are Mount St-Bruno - 715' and Mount St-Hilaire - 1,350'. Altitude increases as one approaches the Eastern Townships sub-region.

The Richelieu River is the most important stream of Montreal South. There is also the Yamaska River, and the presence of Lake Champlain on this territory; the Quebec portion of the lake is called Baie Missisquoi.

The Montreal South sub has a truly continental climate which along with the lowlands of Montreal North is warmer in every season than that prevailing in any other region of Quebec. While temperature variations

are pronounced and snow is fairly abundant, the frost-free period and the growth season are definitely longer than elsewhere in the province. However, there are local differences; the Appalachian heights are colder and receive more snow than the St. Lawrence plain.

4. Organized Territory Characteristics

The organized land area is 4,551 square miles, or 100% of the total area.

- The Communities - There are 263 communities in the sub-region; 112 have fewer than 1,000 inhabitants; 93 have between 1,000 and 2,500. Twenty-nine have more than 5,000 population, eleven of which are at least of agglomeration size: St-Hyacinthe, Valleyfield, Granby, Longueuil, Châteauguay, St-Jean, Brossard, Sorel, Marieville, Dorion, Beloeil.

  Parishes are the most common units, and there are two Indian Reserves.

- The Urban Territory - The 49 urban municipalities group 594,405 persons or 70.7% of the sub-region total. The land area is 502 square miles, or 11.0% of the total area.

5. Montreal-South R.S.A.

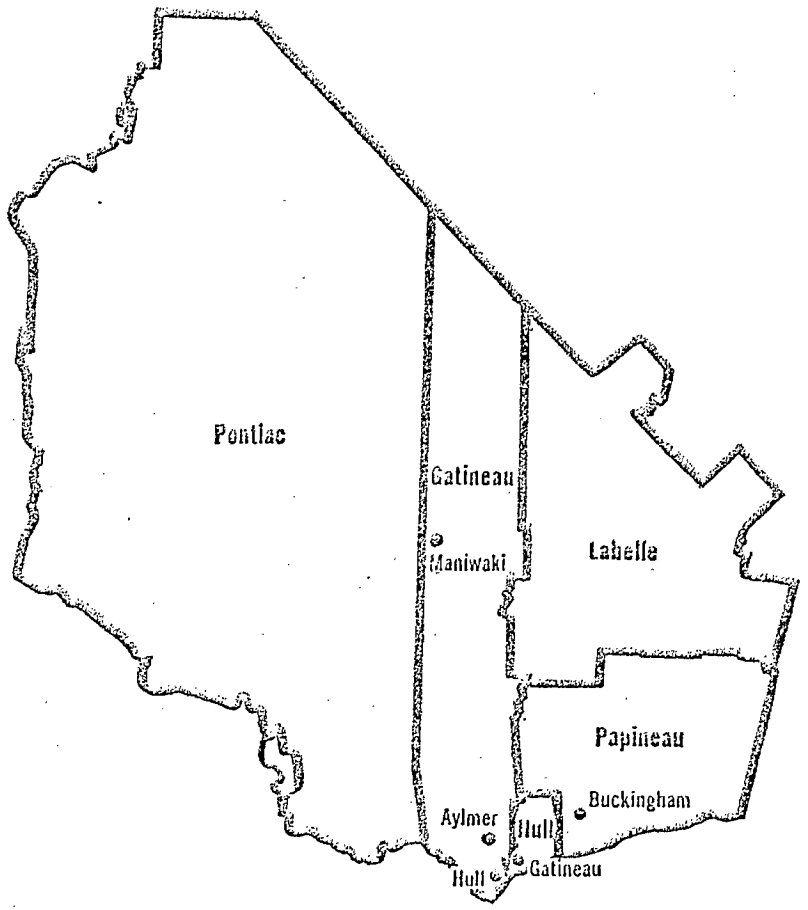
- Total rural land area - 4,049 square miles.
- Total population - 246,390, or 29.3% of the sub-region total.
- Density - 60.85 persons per square mile.
- Number of territory units - 214.
- Population change, 1971-1976: 11.5%.

Sub-Region 7: Outaouais

1. Counties or Census Divisions (Figure 16)

There are five counties in Outaouais: Gatineau, Hull, Labelle, Papineau, Pontiac. Excluded remote land area (See Figure 9) is 8,567 square miles. There is no excluded remote population.

Figure 16



OUTAOUAIS

Source: The Financial Post
Survey of Markets 1976-77

Remote affects the following three counties: Gatineau and Labelle, which have a small portion of remote in their northern (northwestern) tips, where the line corresponds to that of the unorganized territories, and Pontiac, the major part of which is remote; only a narrow strip of organized municipalities running from Mansfield (and Pontefract) to Rapides-des-Joachims, is considered as part of the study area.

- Urban Excluded Area - There are nine excluded urban municipalities:
  - Gatineau (2): Aylmer, Maniwaki
  - Hull (4): Hull, Gatineau, Pointe-Gatineau, Templeton
  - Labelle (1): Mont-Laurier
  - Papineau (2): Buckingham, Thurso

Pontiac is totally rural.

2. Global Territory Characteristics

The sub-region borders on Ontario (Ottawa River) and runs parallel to the Dumoine River, along the edge of the Abitibi-Témiscamingue sub-region. It is bordered to the northwest by the Trois-Rivières sub. Its total area is 15,928 square miles, and total population in 1971 was 247,195 inhabitants. The population density was 33.84 (remote area excluded). The change rate, from 1966 to 1971 was 7.6, an absolute increase of 18,569 persons.

3. Physiography

Geologically the Ottawa Valley area forms part of the Grenville series of the Laurentian Plateau. The substratum belongs to the Precambrian era, and the relief is characterized by round, heavy and eroded shapes. This hilly plateau ranging from 600 to 1,400 feet in height is furrowed by several rivers.

The lowlands form a narrow band five to 10 miles wide and 175 miles long on the Ottawa River side. The Canadian Shield covers for its part up to 90% of the sub-region land area, forming a vast plateau covered

with forest, scoured by a few valleys, running in a north-south direction.

The average altitude is 1,300, except for the Ottawa River Valley, where the average altitude is 500'.

The most important rivers are Gatineau, Liêvre, Coulonge and Noire, all flowing into the Ottawa River. The vast lake reservoirs (Cabonga, Baskatong, Dozois, Kiamida) and the numerous natural drainage basins in particular demonstrate the topographic divisions which become more marked towards the South. The northern limit of the sub-region coincides with the Hudson Bay watershed.

The lowlands climate is favourable to farming activities, and the Ottawa River valley is characterized by a moderately warm summer and a moderately cold winter. Rains or snowfalls are quite uniform all year round, althouth northern areas have fresher summers and more rigourous winters.

4. Organized Territory Characteristics

The organized land area is 6,838 square miles, or 42.9% of the total land area. Unorganized rural land area is 523 square miles, and there were only 60 inhabitants in 1971.

- The Communities (Organized Territory) - There are 135 communities in Outaouais, 94 of which have fewer than 1,000 inhabitants. Twenty-nine have populations between 1,000 and 2,500; nine communities are of 5,000 and over, three of which are at least of the agglomeration size (1971): Hull, Aylmer, Buckingham.

  Townships are the most common units; there are two Indian Reserves.

- The Urban Territory - The nine urban communities count a total population of 137,875, or 55.8% of the sub-region organized total. The land area is 65 square miles, or 0.95% of the organized total area.

5. Outaouais R.S.A.

- Total rural land area - 7,296 square miles.
- Total population - 109,300, or 44.2% of the sub-region total (rural organized, 109,240, is 44.2% of urban-rural organized total).
- Density - 16.1 (organized); and 15.0, including unorganized.
- Number of territory units - 126.
- Population change, 1971-1976: -8.1%.

Sub-Region 8: Abitibi-Témiscamingue

1. Counties or Census Divisions (See Figure 17)

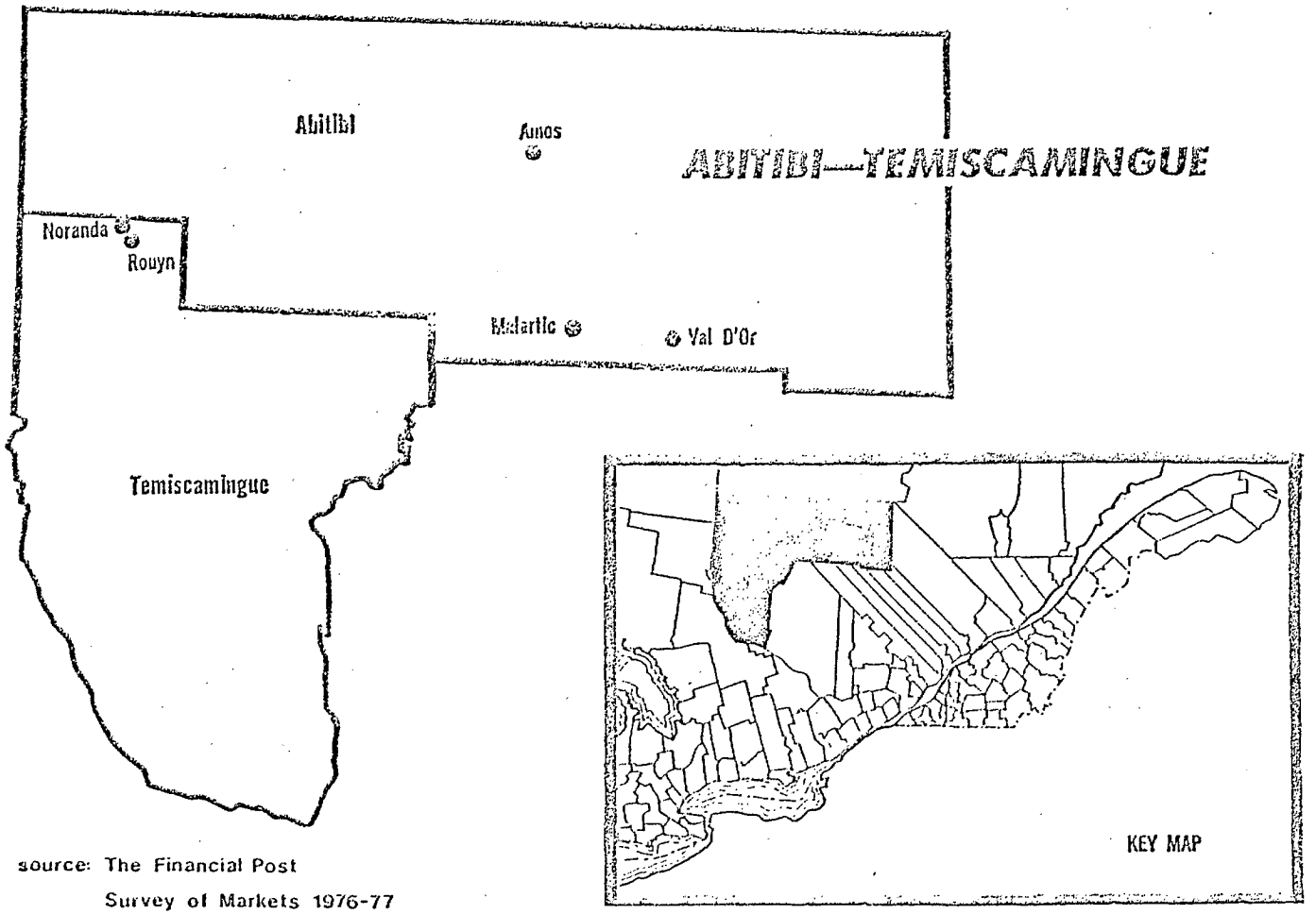
There are two counties in the northwest sub-region: Abitibi and Témiscamingue. Excluded remote land area (See Figure 9) is 81,193 square miles. Its population is 24,010 and is confined to the Abitibi territory. Remote line by county: In Abitibi all the unorganized territories are excluded except for a narrow strip that follows the Canadian National Railroad and which links Abitibi to La Tuque (Trois-Rivières sub). Another strip retained in the R.S.A. starts from Barraute, north direction, turning left to reach Matagami in the Abitibi territory (always following the railroad). Also included in the R.S.A. is all the area located south of Roquemaure down to Senneterre. In Témiscamingue unorganized territory is remote, except for a section in the north, which is at the same latitude as Val-D'Or, and another strip that stretches from St-Edouard-de-Fabre to the South of Témiscamingue.

- Urban Excluded Areas - There are seven excluded urban areas:
  - Abitibi (5): Amos, La-Sarre, Malartic, Senneterre, Val-D'Or
  - Témiscamingue (2): Noranda, Rouyn.

2. Global Territory Characteristics

Abitibi is the northwestern sub-region of Quebec, bordering Ontario and part of the Hudson Bay watershed. Its west boundaries are common with Saguenay-Lac St-Jean sub-region. Its total land area is 88,108 square miles. Total population is 166,890 inhabitants (1971); its

Figure 17



source: The Financial Post
Survey of Markets 1976-77

density is 20.72 (remote area and population excluded), and 0.36 persons per square mile, including remote land and population. The change rate was -8.0% (1966 to 1971), an absolute decrease of 12,323 persons.

3. Physiography

Part of the Canadian Shield, it forms a transition between the lower lands of James Bay and the mountain chain running along the St. Lawrence plain. It is a large domain of lakes and forest, containing areas of clay. There are rich lands around Lake Abitibi and Lake Témiscamingue, separated by hills delineating the watersheds.

The altitude varies very little from one part to another of this low plateau zone, and average is about 1,600 feet, with a few summits of about 1,900' above sea level.

This sub-region has a great number of streams in two water basins, the Ottawa River draining the southern streams toward the St. Lawrence, the northern part being drained toward James Bay by many rivers, especially the Harricana and Bell and the grouping Nottaway-Broadback-Rupert.

The sub-region's continental climate is marked by cold dry winters and hot summers. The number of days without frost varies from 90 to 120. The rainfalls extend from May to September and reach an annual total of 35 inches. The snowfalls are less abundant than in the south of Quebec.

4. Organized Territory Characteristics

The organized land area is 3,034 square miles, or 3.4% of the total land area. Unorganized rural land area is 3,931 square miles, with a population of 23,285 (1971). The unorganized rural population is in this case considered to be all located in the above-described R.S.A. included zones.

- The Communities (Organized Territory) - There are 69 communities in the Abitibi sub-region, 46 of which have fewer than 1,000 population.

Sixteen have populations between 1,000 and 2,500. Six communities are over 5,000, one of which Rouyn-Noranda, is at least of the agglomeration size. Without-designation territory units are the most common. There are two Indian reserves on the territory.

- The Urban Territory - The seven urban municipalities count 67,800 inhabitants, which is 56.7% of the sub-region organized total. Urban land area is 130 square miles, or 4.3% of total organized area.

5. Abitibi R.S.A.

- Total rural land area - 6,834 square miles.
- Total population - 75,095, or 52.5% (remote excluded) of the sub-region total (rural organized, 51,810, is 43.3% of urban-rural organized total).
- Density - 17.8 (organized); and 11.0, including unorganized.
- Number of territory units - 64.
- Population change, 1971-1976: -7.3%.

Sub-Region 9: North-Shore

1. Counties or Census Divisions (See Figure 18)

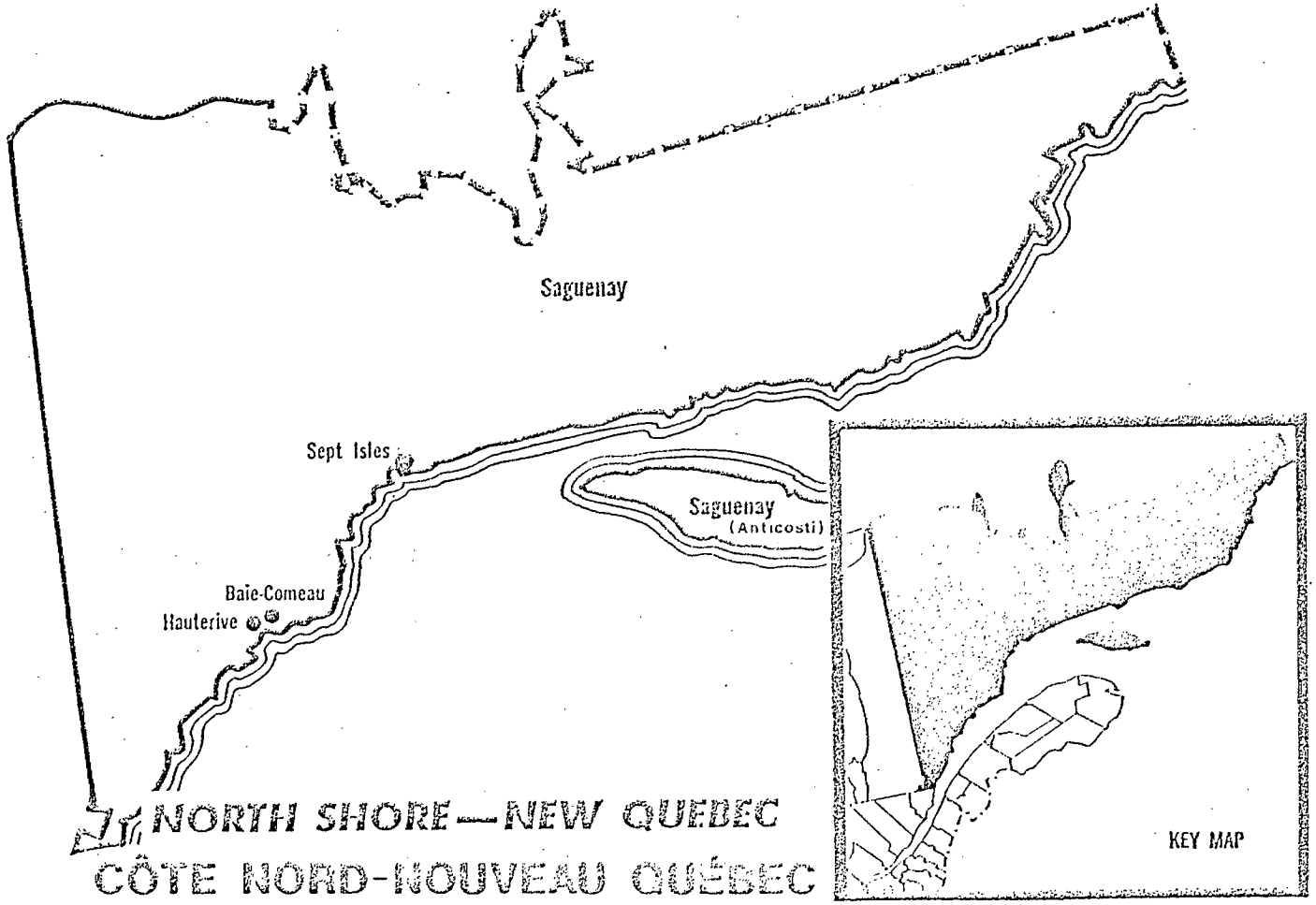
The only county of this region is Saguenay. Excluded remote land area (See Figure 9) is 305,835 square miles, with a total excluded population of 14,475. The remote line defines a narrow band along the St. Lawrence River to be kept in the R.S.A. This band starts from the Saguenay River mouth and ends at Henley Harbour (latitude 52° N, and longitude 55°50' W). Anticosti Island is considered as remote, except for the western tip or Port Menier and Baie Ste-Claire.

- Urban Excluded Area - There are five urban excluded municipalities: Sept-Iles, Baie Comeau, Gagnon, Hauterive, Port-Cartier.

2. Global Territory Characteristics

The North-Shore sub runs from the Saguenay River mouth to Labrador,

Figure 18



NORTH SHORE—NEW QUEBEC
CÔTE NORD-NOUVEAU QUÉBEC

source: The Financial Post
Survey of Markets 1976-77

including Anticosti Island. To the west it is bounded by the Saguenay Lac St-Jean sub-region. It possesses 800 miles of ocean coast; the coast is generally divided in three parts: the upper, the intermediate, and the lower north coast. Its total land area is 315,177 square miles. This resource sub-region is the least populated of Quebec subs, having only 115,740 inhabitants (1971), including the remote population; the density is 10.86 (excluding remote land and population). The change rate, from 1966 to 1971 was of 2.6%, an absolute increase of 2,588 persons.

3. Physiography

Most of the area belongs to the Canadian Shield, but there are some tertiary rocks (limestone), particularly on Anticosti Island and in the Mingan sector. The influence of the glacial periods predominates. The surface is very uneven up to the Port-Cartier-Sept-Iles area, and there are cliffs along the coast, below Mingan the coast being very jagged.

The average altitude is 2,000'. This Mountain system has a summit of 3,009' - Mount Wright. There are a few lowlands north of Sept-Iles.

There are numerous rivers and lakes, the most important being la Manicouagan with a draining basin of 17,600 square miles, la Moisie, la Betsiamites, and Outardes River, each draining around 7,400 square miles. To be noted is the presence of the Manicouagan reservoir with an area of 800 square miles.

The sub-region benefits along the coasts from an ocean-moderated climate; summers are cool and winters cold, with much rain and snow. In the Mountain system, climate becomes very cold and rigourous, leaving a very short vegetative season.

4. Organized Territory Characteristics

The organized land area is 8,502 square miles, or 2.7% of the total area. Unorganized rural land area is 840 square miles, with a population of 3,408 inhabitants (1971). This population is considered as

a part of the above described (see remote) R.S.A. strip of land.

- The Communities (Organized Territory) - There are 38 localities in the North Shore sub, 21 of which have fewer than 1,000 population. Nine have populations between 1,000 and 2,500. Four have more than 5,000 population, two of which are at least of the agglomeration size: Sept-Iles and Baie Comeau/Hauterive. There is one Indian Reserve on the territory.

- The Urban Territory - The five urban municipalities account for a total of 57,125 inhabitants, or 58.4% of the sub-region organized total. The land area is 195 square miles, or 2.3% of the total organized area.

5. North-Shore R.S.A.

- The rural land area - 9,147 square miles.
- Total population - 44,130, or 43.6% (remote population excluded) of the sub-region total (rural organized, 40,732, is 41.6% of urban-rural organized total).
- Density - 4.9 (organized); and 4.8, including unorganized.
- Number of territory units - 34.
- Population change, 1971-1976: 4.7%.

B. Ontario

Sub-Region 1: Eastern Ontario

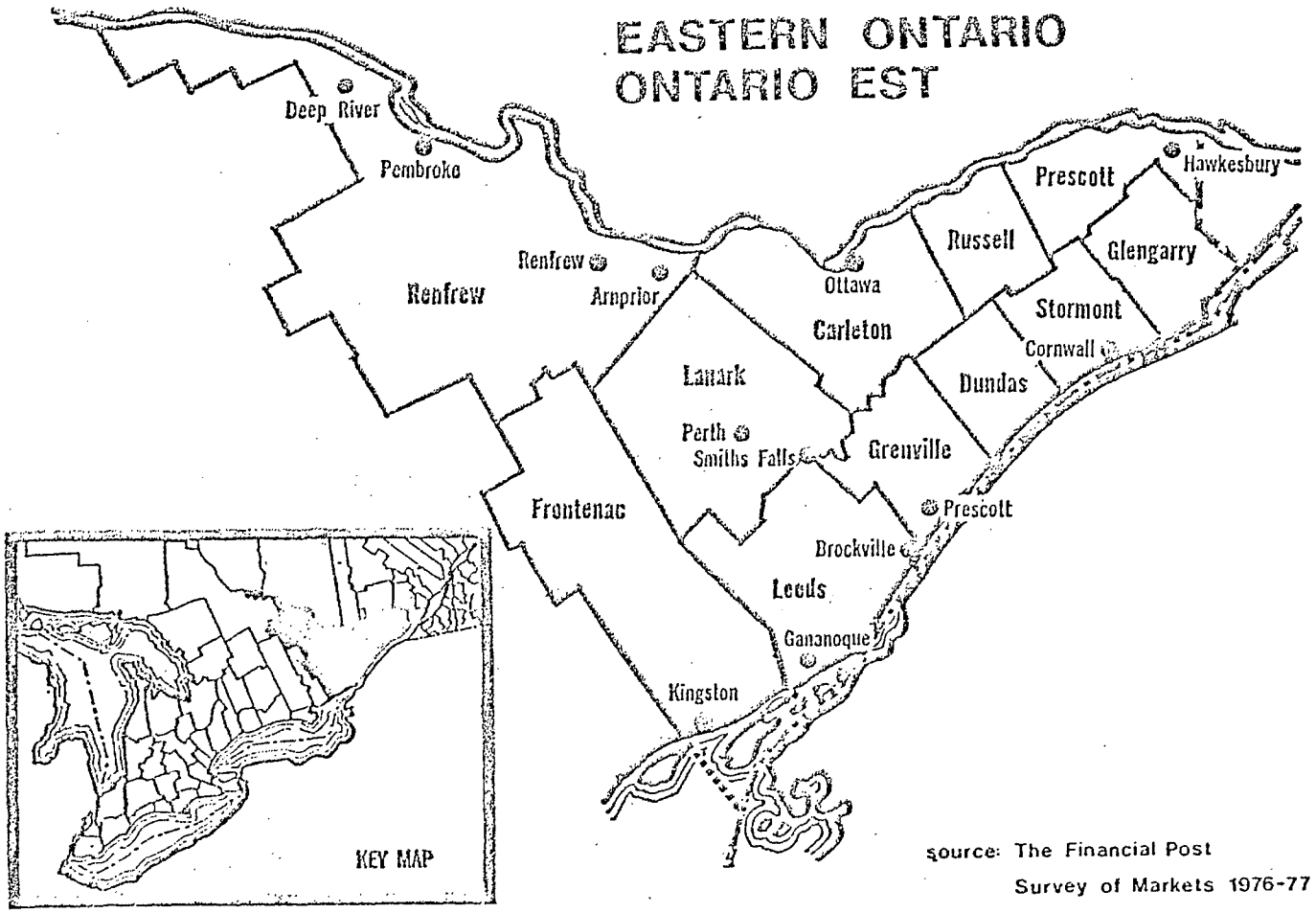
1. Counties or Census Divisions (See Figure 19)

There are 11 counties in Eastern Ontario: Dundas, Frontenac, Glengarry, Grenville, Lanark, Leeds, Ottawa-Carleton, Prescott, Renfrew, Russell, Stormont.

There is no remote territory.

- Urban Excluded Areas - Excluded from this study are the following 20 urban municipalities, listed by county:

Figure 19



source: The Financial Post
Survey of Markets 1976-77

- Frontenac	(1):	Kingston
- Glengarry	(1):	Alexandria
- Grenville	(1):	Prescott
- Lanark	(4):	Alimonte, Carleton Place, Perth, Smiths Falls
- Leeds	(2):	Brockville, Gananoque
- Ottawa-Carleton	(3):	Ottawa, Vanier, Rockcliffe Park
- Prescott	(1):	Hawkesbury
- Renfrew	(5):	Pembroke, Arnprior, Deep River, Renfrew, Petawawa
- Russell	(1):	Rockland
- Stormont	(1):	Cornwall

Dundas county has no urban area.

2. Global Territory Characteristics

The Eastern Ontario sub-region has a total area of 10,031.3 square miles and is located at the southeastern tip of the province. Its total population in 1971 was 922,470 inhabitants, and the density was 91.9. The growth rate from 1966 to 1971 was 7.8%, which is an increase of 71,549 persons.

3. Physiography

Classified in the physiographic zones no. 1 & 2 (See Appendix 2) it possesses a mix of the St. Lawrence lowlands of the Canadian Shield. The lowlands are formed of sand, clay, and till plains; the Canadian Shield portion forms the highlands.

This region is located in the South Slopes Ontario climatic zone, which is characterized by warm summers, mild winters and abundant rainfalls. This climate is favourable to a long farming season.

The territory mean altitude is 400'. Renfrew, Lanark, and Frontenac

counties are 600' and over; Prescott, Glengarry, and Russell range from 200' to 280' above sea level.

This sub-region is drained by the Ottawa River basin, which covers an area of 44,200 square miles extending to the Timiskaming County. There are many lakes, especially in the northern and western parts. The main rivers are Petawawa, Bonnechere, Madawaska, Rideau, Mississippi.

4. Organized Territory Characteristics

The Eastern Ontario sub-region is totally organized, which means that there is no unincorporated territory. For the sake of this study, Indian Reserves are considered as organized localities.

- The Communities - The sub-region comprises 153 communities out of which 100 have fewer than 2,500 inhabitants; 125 have fewer than 5,000 and 28, 5,000 plus. Out of those 28 municipalities, three are at least urban agglomerations i.e. 25,000 population or more in 1971 (Cornwall, Kingston, and Ottawa). Townships are the most common units, and there are two Indian Reserves on the territory.

- The Urban Territory - The number of urban communities is 20, their population (546,455) accounting for 59.2% of the total sub-region population. The urban area covers 140.6 square miles, which is 1.4% of the total sub-region area.

5. Eastern Ontario R.S.A.

- Total rural land area - 9,890 square miles.
- Total population - 376,050, or 40.8% of the sub-region total.
- Density - 38.0 persons per square mile.
- Number of territory units - 133.
- Population change, 1971-1976: 14.6%.

Sub-Region 2: Lake Ontario

1. Counties and Census Divisions (See Figure 20)

There are eight counties in Lake Ontario: Durham, Haliburton, Hastings, Lennox-Addington, Northumberland, Peterborough, Prince Edward, Victoria.

There is no remote territory.

- Urban Excluded Areas - Eleven urban municipalities have been excluded:

- Durham	(2):	Bourmanville, Port Hope
- Hastings	(2):	Belleville, Trenton
- Lennox-Addington	(1):	Napranee
- Northumberland	(3):	Campbellford, Cobourg, Brighton
- Peterborough	(1):	Peterborough
- Prince Edward	(1):	Picton
- Victoria	(1):	Lindsay

Haliburton has no urban territory.

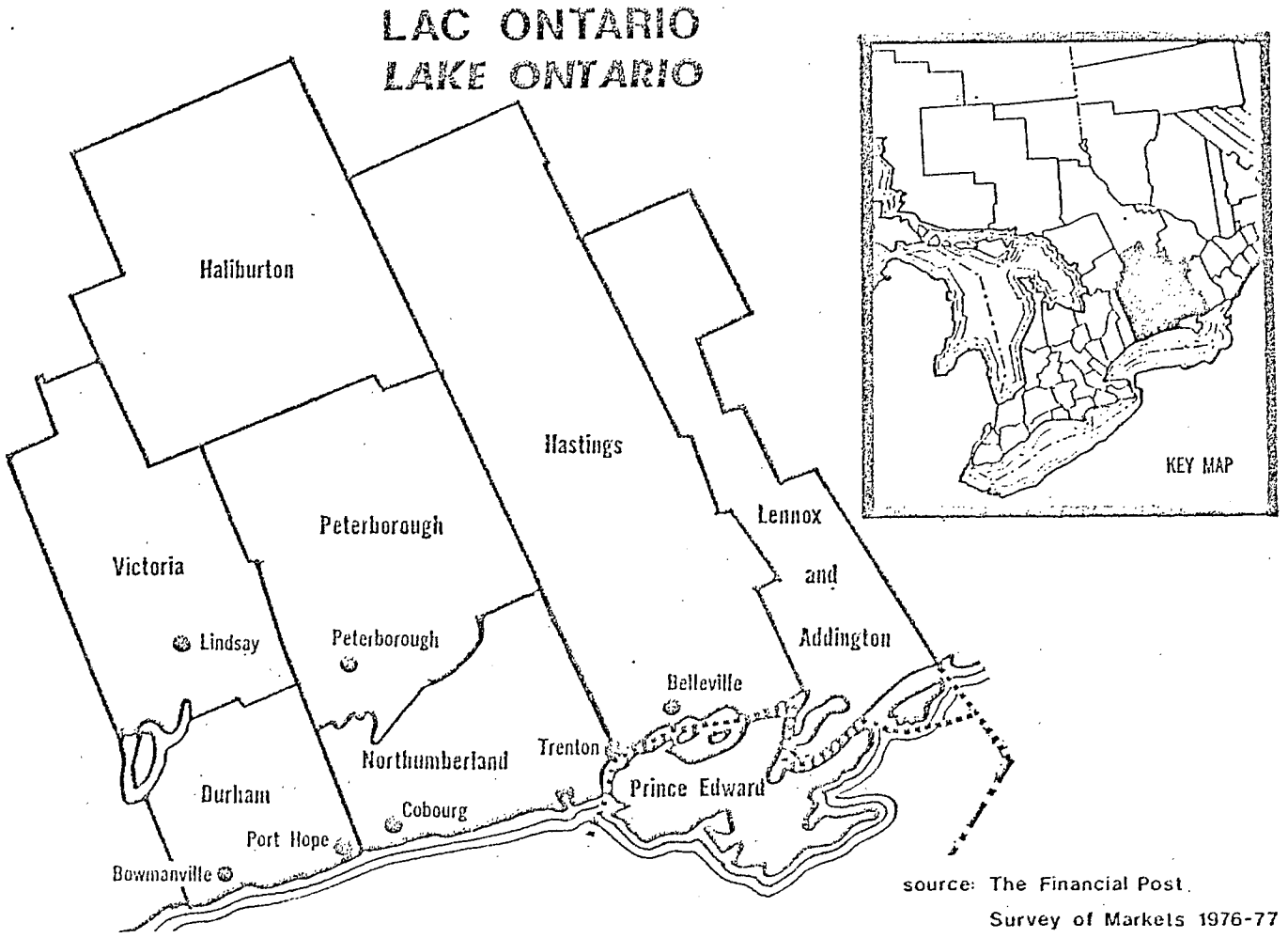
2. Global Territory Characteristics

Located on the north shore of Lake Ontario, this sub is bounded to the east by Eastern Ontario, southwest by Central Ontario, northwest by Georgian Bay, and north by Northeastern sub-regions. Its total area is 9,236 square miles, with a population (1971) of 375,185; density is 40.6 persons per square mile. The change rate from 1966 to 1971 was 6.5%, an absolute increase of 24,292 persons.

3. Physiography

The Canadian Shield occupies most of this sub-region, with its hills, the summits of which reach 1,600' north of Haliburton Co., and its low plateaus that form the entire northern part of the sub. In the south, there are the St. Lawrence Lowlands; towards the west, there are calcareous plains, then sand, till and clay plains.

Figure 20



source: The Financial Post
Survey of Markets 1976-77

The average altitude is 900', with altitudes ranging from 325' (Prince Edward) to 1,300' (Haliburton).

This sub-region is overwhelmed with lakes and water. All lakes seem to join each other to form water streams. The lakes show more important than rivers, with the most important being Sturgeon, Scugog and Rice Lakes. Trent River is the biggest with a drainage basin of 4,790 square miles; there are also the Otonabec and Moira Rivers worth mentioning.

Summer climate is characterized from warm in the south to fresh in the north, bringing precipitation quite evenly spread over the year; winters are moderately mild, although cold in Haliburton region. The vegetative season ranges from moderately short to moderately long, going from north to south.

4. Organized Territory Characteristics

The organized land area is 9,236 square miles, or 100% of the total area.

- The Communities - There are 122 communities in Lake Ontario sub-region, 42 of which are under 1,000 of population; 46 count from 1,000 to 2,500 inhabitants. Fifteen municipalities have 5,000 and over population, two of which are at least of the agglomeration size: Peterborough and Belleville/Trenton.

  Townships are the most common units; there are three Indian Reserves on the territory.

- The Urban Territory - The 11 urban areas count 165,665 inhabitants, or 44.1% of the sub-region total. The land area is 63 square miles, or 0.68 of the total area.

5. Lake Ontario R.S.A.

- Total rural land area - 9,172 square miles.
- Total population - 209,520, or 55.8% of the sub-region total.

- Density - 22.8 persons per square mile.
- Number of territory units - 111.
- Population change, 1971-1976: 13.3%.

Sub-Region 3: Central Ontario

1. Counties or Census Divisions (See Figure 21)

There are five counties: Halton, Ontario, Peel, Toronto, York.

There is no remote territory.

- Urban Excluded Areas - There are 29 excluded urban municipalities which are:
  - Halton (5): Acton, Burbington, Georgetown, Milton, Oakville
  - Ontario (6): Oshawa, Ajax, Uxbridge, Whitby, Pickering, Port Perry
  - Peel (5): Brampton, Mississauga, Port Credit, Streetsville, Bolton
  - Toronto : Totally urban
  - York (6): Aurora, Markham, New-Market, Richmond Hill, Vaughan, Whitchurch-Stouffville.

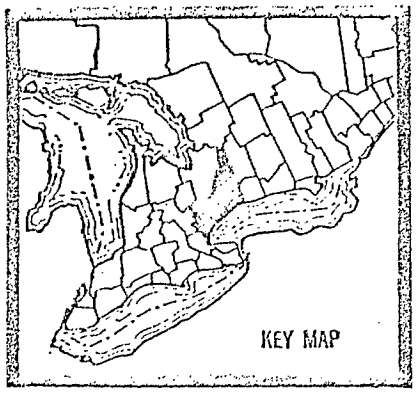
2. Global Territory Characteristics

Located at the northwestern tip of Lake Ontario, Central Ontario sub is bordered north by Georgian Bay, east by Lake Ontario, southwest by Niagara, and west by Mid-Western sub-regions. Its total area is 2,596 square miles, with a population of 2,897,300 (1971) and a population density of 1,116 persons per square mile. The change rate, from 1966 to 1971, was 13.3%, an absolute increase of 384,213 persons.

3. Physiography

There are low plateaus north and west (corresponding to the Niagara escarpment) within the St. Lawrence Lowlands, formed of till, sand and clay.

Figure 21



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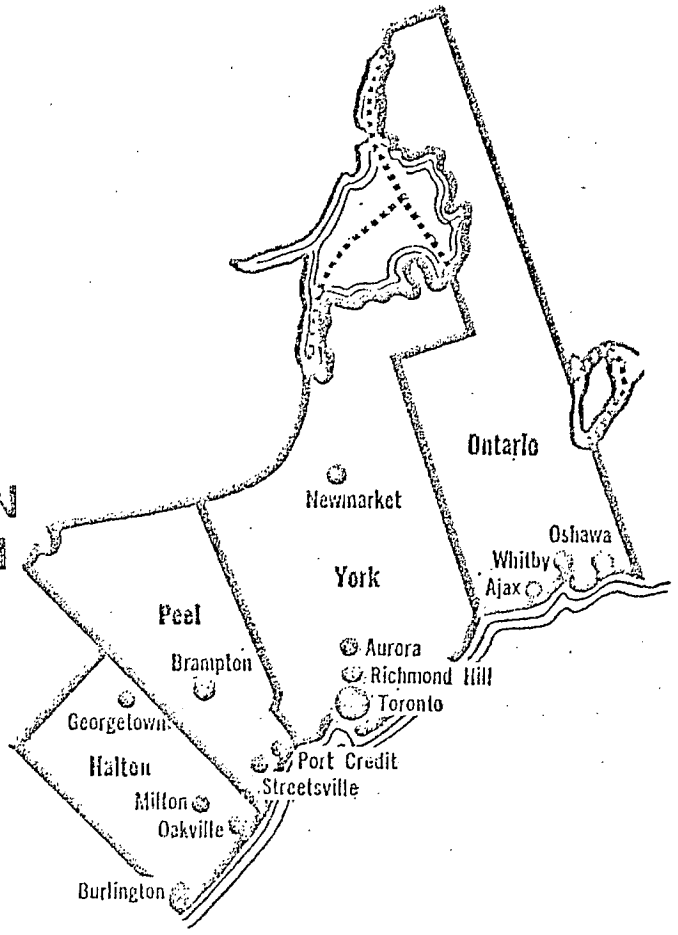
TORONTO METROPOLITAN



source: The Financial Post
Survey of Markets 1976-77

Average altitude is 825'; and only Toronto is much lower than the average, 550' above sea level.

There are very few rivers: Etobicoke, Humber, Don and Rouge Rivers, which all flow into Lake Ontario, and Holland River, a source of Lake Simcoe.

Summers are warmer and winters milder than elsewhere in Ontario. There is no dry season, and the vegetative season is long, generally 3,500 degree-days and over.

4. Organized Territory Characteristics

The area is totally organized.

- The Communities - There are 52 municipalities in Central Ontario, only four having fewer than 1,000 inhabitants. Five count from 1,000 to 2,500 population; five others are at least of the agglomeration size: Burlington, Brampton, Oshawa, Toronto, Markham.

  Towns are the most common units; there are two Indian Reserves.

- The Urban Territory - The 29 urban areas account for a total of 2,746,945 inhabitants, or 94.8% of total area. The land area is 988 square miles, or 38.1% of total land area.

5. Central Ontario R.S.A.

- Total rural land area - 1,608 square miles.
- Total population (1971) - 150,355, or 5.2% of the sub-region total.
- Density - 93.4 persons per square mile.
- Number of territory units - 23.
- Population change, 1971-1976: -24.0%.

Sub-Region 4: Niagara

1. Counties or Census Divisions (See Figure 22)

There are four counties in Niagara: Brant, Haldimand, Niagara, Wentworth. There is no remote territory.

- Urban Excluded Areas - There are 17 excluded urban municipalities:
  - Brant (2): Brantford, Paris
  - Haldimand (2): Caledonia, Dunville
  - Niagara (10): Niagara Falls, Port Colborne, St-Catharines, Welland, Fort Erie, Grimsby, Lincoln, Niagara-on-the-Lake, Pelham, Thorold
  - Wentworth (3): Hamilton, Dundas, Stoney Creek.

2. Global Territory Characteristics

Niagara sub-region is located southwest of Lake Ontario and northeast of Lake Erie, bordered west by Lake Erie and north by Mid-Western sub-regions. Its total land area is 2,062 square miles, and its population 878,640 (1971). Population density is 426.1 persons per square mile. The change rate, from 1966 to 1971, was 5.7%, an absolute increase of 49,583 persons.

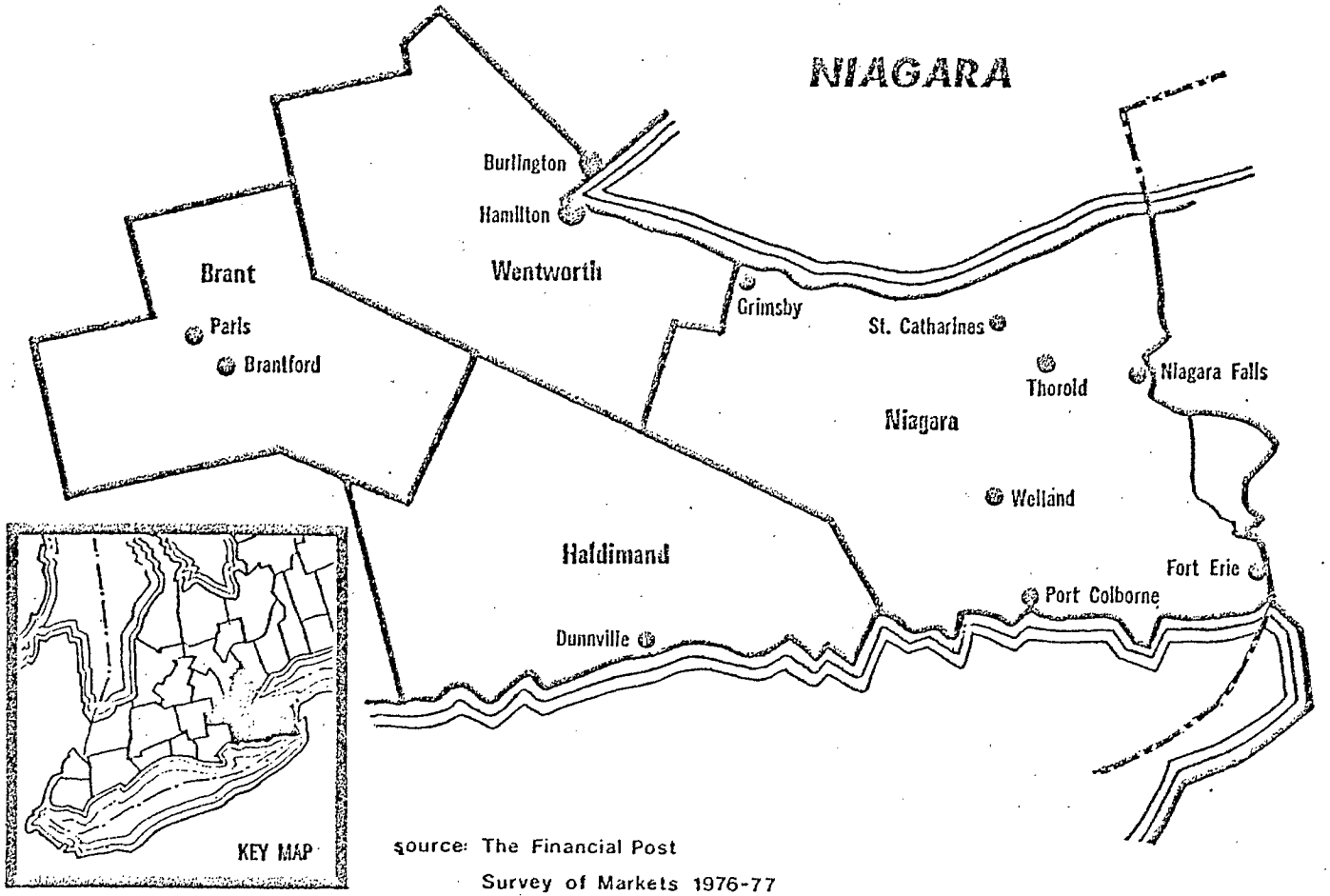
3. Physiography

This sand and clay plains sub-region is the prolongation of the Niagara "escarpment", which ends with the falls of the same name, the level drop of which is 200'.

The average altitude is 800'; Haldimand, and especially Niagara counties have a lower average altitude (750' and 675' above sea level).

The major streams are Grand River, the draining basin of which is 2,600 square miles, and of less importance the Welland River, which in Welland constitutes the canal of the same name. The Niagara River, joining Lake Erie and Ontario, forms the border line between U.S. and Canada.

Figure 22



source: The Financial Post
Survey of Markets 1976-77

Summers are warm in Niagara, and winters are mild; the "growing" period is 215 days or 3,900 degree-days, which is very long. Farming is further fostered by a short frost period.

4. Organized Territory Characteristics

Niagara territory is totally organized.

- The Communities - There are 47 localities in Niagara, four of which have a population of fewer than 1,000. Eleven communities are between 1,000 and 2,500; 26 have 5,000 and over population. Out of these, four are at least of agglomeration size: Brantford, Hamilton, Niagara, St. Catherines.

  Townships and towns are the most common territory units; there are two Indian Reserves.

- The Urban Territory - The 17 urban municipalities account for 85.1% of the total population, or an absolute number of 747,865. The urban land area is 561 square miles, or 27.2% of the sub-region total area.

5. Niagara R.S.A.

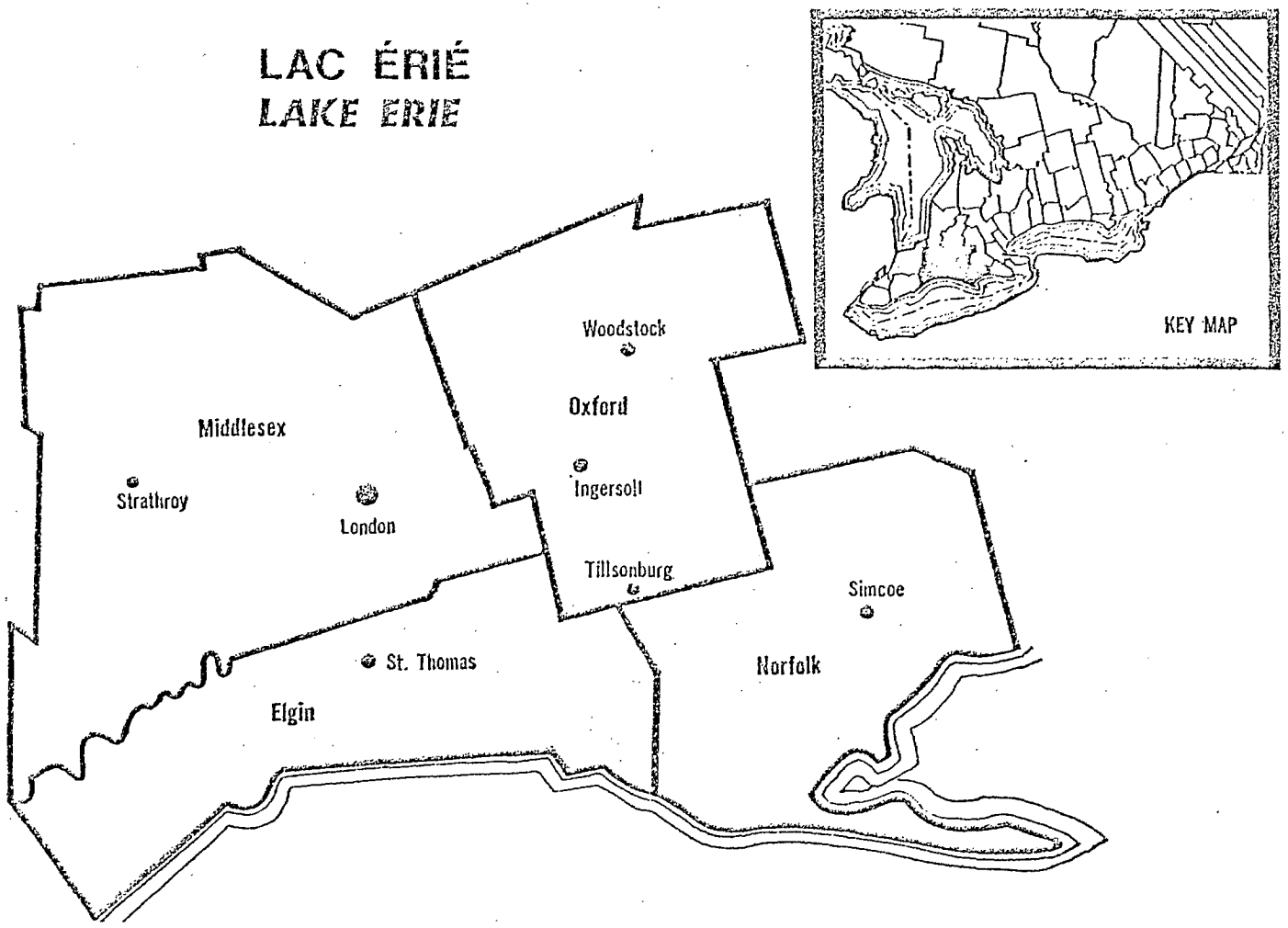
- Total rural land area - 1,501 square miles.
- Total population - 130,775, or 14.9% the sub-region total.
- Density - 87.1 persons per square mile.
- Number of territory units - 30.
- Population change, 1971-1976: 0.8%.

Sub-Region 5: Lake Erie

1. Counties and Census Divisions (See Figure 23)

There are four counties in Lake Erie: Elgin, Middlesex, Norfold, Oxford. There is no remote territory.

Figure 23



source: The Financial Post
Survey of Markets 1976-77

- Urban Excluded Areas - There are 10 excluded urban municipalities:
  - Elgin (2): St. Thomas, Aylmer
  - Middlesex (2): London, Strathroy
  - Norfolk (3): Delhi, Port Dover, Simcoe
  - Oxford (3): Woodstock, Ingersoll, Trillsonburg.

2. Global Territory Characteristics

Lake Erie sub-region is located in the central part of Lake Erie northern shore; bordered to the east by Niagara, west by St. Clair and north by Mid-Western sub-regions. Total land area is 3,448 square miles, with a population amounting in 1971 to 483,085, for a density of 140.1 persons per square mile. The change rate, from 1966 to 1971, was of 9.4%, or an absolute increase of 45,179 persons.

3. Physiography

Lake Erie sub has a relief fairly even (flat), with a few hills in Oxford county. This area is located in the till, sand and clay Lowlands plain of the St. Lawrence.

Average altitude is 825'; the highest summits of Oxford being about 1,000'. Lower altitudes are found in Norfolk and Elgin counties.

There are a few small rivers and one more important, the Thames River, the draining basin of which is 2,260 square miles, and which flows into Lake St. Clair.

The climate is similar to that of Niagara, except that the vegetative season is a little shorter (5 days or 200 degree-days less).

4. Organized Territory Characteristics

Lake Erie sub-region is totally organized.

- The Communities - There are 72 communities, 12 of which have populations of fewer than 1,000, 26 of 1,000 to 2,500. Seventeen have 5,000

inhabitants and over, three of which are at least of the agglomeration size: St. Thomas, London, Woodstock. Townships are the most common units; there is one Indian Reserve.

- The Urban Territory - The 10 urban areas account for 66% of the sub-region total, with 318,780 inhabitants. The urban land area is 97 square miles, or 2.8% of the total land area.

5. Lake Erie R.S.A.

- Total rural land area - 3,351 square miles
- Total population - 164,305, or 34.0% of sub-region total.
- Density - 49.0 persons per square mile.
- Number of territory units - 62.
- Population change, 1971-1976: 1.9%.

Sub-Region 6: Lake St. Clair

1. Counties or Census Divisions (See Figure 24)

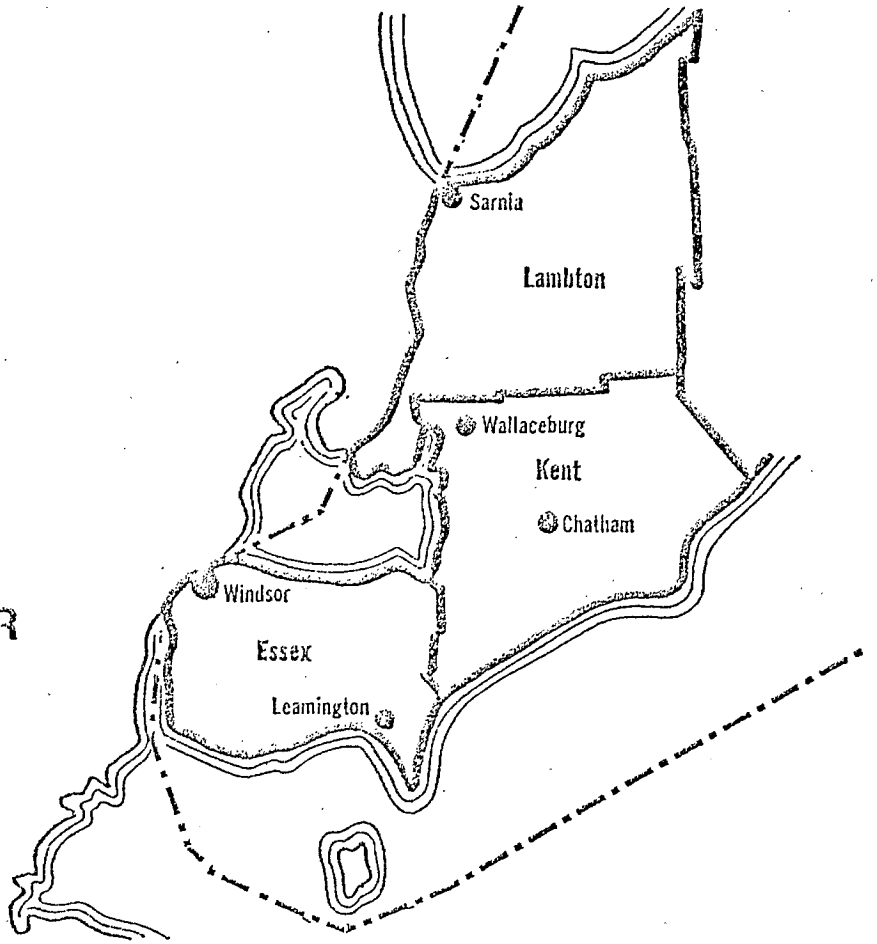
The three counties are: Essex, Kent, Lambton. There is no remote territory.

- Urban Excluded Areas - The 15 urban excluded areas are:
  - Essex (7): Windsor, Amberstburg, Belleriver, Essex, Kingsville, Leamington, Tecumseh
  - Kent (5): Chatham, Blenheim, Ridgetown, Tilbury, Wallaceburg
  - Lambton (3): Sarnia, Petrolia, Point Edward

2. Global Territory Characteristics

St. Clair sub is located at the southwestern tip of Ontario, bordered on the south by Lake Erie, west by the U.S., north by Lake Huron, and east by Lake Erie sub-region. Its total area is 2,839 square miles, and its population 521,825 (1971). The density is 183.8 persons per square mile.

Figure 24



LAC ST-CLAIR
LAKE ST. CLAIR

source: The Financial Post
Survey of Markets 1976-77

The change rate, from 1966 to 1971, was 7.0%, an absolute increase of 36,271 persons.

3. Physiography

The sub-region has the very flat relief of the St. Lawrence Lowlands; the plains are formed of sand, clay and till.

Average altitude is 650'.

The main rivers are the Thames, previously described, the Sydenham, and two other rivers which both serve as border lines, St. Clair and Detroit Rivers, linking respectively Lake Michigan to Lake St. Clair, and Lake St. Clair to Lake Erie.

St. Clair has the warmest climate of Ontario, with very warm summers and mild winters; it also has a good deal of rainfall and a nearly continuous growing period especially in the region of Leamington.

4. Organized Territory Characteristics

St. Clair sub-region is totally organized.

- The Communities - There are 69 communities in St. Clair, 12 of which have fewer than 1,000 population; 17 have populations between 1,000 and 2,500. Sixteen have more than 5,000 inhabitants, three of which are at least of the agglomeration size: Windsor, Sarnia, Chatham.

Townships are the most common territory units; there are two Indian Reserves.

- The Urban Territory - The 15 urban municipalities contain 355,270 persons, or 68.1% of the sub-region total. The land area is 93 square miles, or 3.2% of the total area.

5. St. Clair R.S.A.

- Total rural land area - 2,746 square miles.

- Total population - 166,555, or 31.9% of the sub-region total.
- Density - 60.6 persons per square mile.
- Number of territory units - 54.
- Population change, 1971-1976: 6.4%.

Sub-Region 7: Mid-Western Ontario

1. Counties or Census Divisions (See Figure 25)

The four counties are: Huron, Perth, Waterloo, Wellington. There is no remote territory.

- Urban Excluded Areas - The 19 excluded urban municipalities are:
  - Huron (4): Clinton, Exeter, Goderich, Winghan
  - Perth (4): Stratford, Listowel, Mitchell, St. Mary's.
  - Waterloo (8): Galt, Kitchener, Waterloo, Elmira, Hespeler, Newhamburg, Preston, Bridgeport
  - Wellington (3): Guelph, Fergus, Mount Forest.

2. Global Territory Characteristics

Mid-Western sub-region is located east of the southern tip of Lake Huron. It borders on the following sub-regions: south, Lake Erie and Niagara; east, Central; and north, Georgian Bay. Its total land area is 3,698 square miles, with a population of 478,545 (1971) and a density of 129.4 persons per square mile. The change rate from 1966 to 1971 was 11.1%, an absolute increase of 52,755 persons.

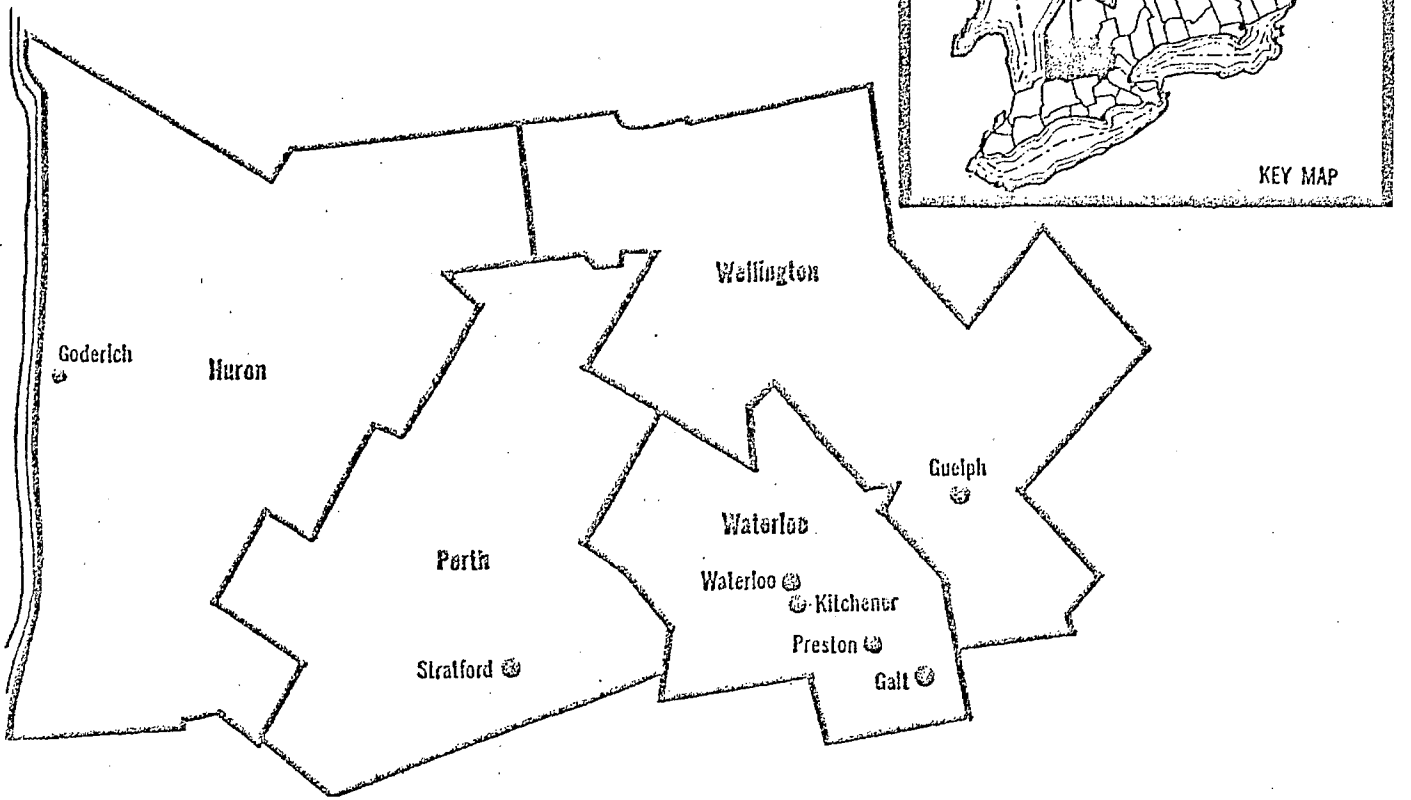
3. Physiography

A portion of Mid-Western is part of the St. Lawrence Lowlands; but the major part of the territory is on a higher level (1,000 plus). The northern portion of Wellington county is part of Dundalk Highlands.

Average altitude is 1,250'; but Huron Co. averages 1,050', while Wellington has an average of 1,400' above sea level.

Figure 25

MID-WESTERN ONTARIO
ONTARIO-CENTRE-OUEST



source: The Financial Post
Survey of Markets 1976-77

There are many small rivers. The only river of some importance is Maitland River. To be noted here is that the Thames river, mentioned in Lake Erie and Lake St. Clair subs, stretches its drainage basin as far as Huron Co.

So far as climate is concerned, humidity is high and summers are rather warm, winters cold, especially in highlands. There is a good growing season, more than 3,200 degree-days, with a mean temperature of 42° F and over.

4. Organized Territory Characteristics

Mid-Western sub is totally organized.

- The Communities - There are 79 communities in this sub-region, eight of which have fewer the 1,000 people; 37 count from 1,000 to 2,500 inhabitants. There are 13 communities of 5,000 and over, three of which are at least of the agglomeration size: Kitchener/Waterloo, Guelph, and Stratford. Townships and cities and towns are the most common units. Indian Reserves are absent from this territory.

- Urban Territory - The 19 urban areas account for 71.4% of the total population, or 341,730 persons. Urban land area is 117 square miles, or 3.2% of the sub-region total land area.

5. Mid-Western R.S.A.

- Total rural land area - 3,581 square miles
- Total population - 136,815, or 28.6% of the sub-region total
- Density - 38.2 persons per square miles
- Number of territory units - 60.
- Population change, 1971-1976: 10.0%

Sub-Region 8: Georgian Bay

1. Counties or Census Divisions (See Figure 26)

The six counties are the following: Bruce, Dufferin, Grey, Muskoka, Parey Sound, Simcoe.

There is no remote territory.

- Urban Excluded Areas - There are 18 urban excluded areas:

- Bruce	(3):	Kincardine, Port Elgin, Walkerton
- Dufferin	(1):	Orangeville
- Grey	(3):	Owen Sound, Hanover, Meaford
- Muskoka	(3):	Bracebridge, Gravenhurst, Huntsville
- Parry Sound	(1):	Parry Sound
- Simcoe	(7):	Barrie, Orillia, Alliston, Bradford, Collingwood, Midland, Penetanguishene

2. Global Territory Characteristics

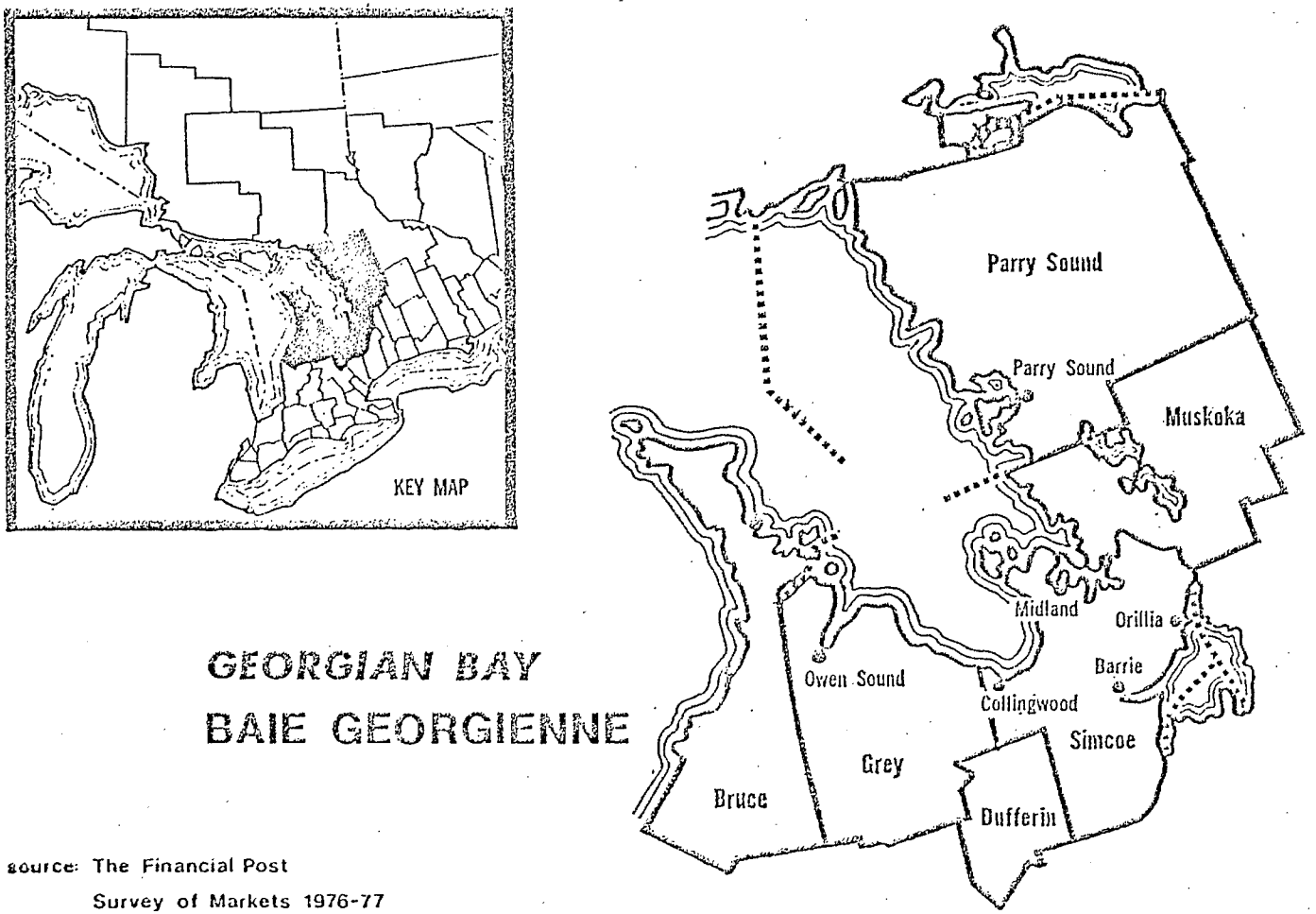
This sub-region encircles Lake Huron's Georgian Bay. It is bounded to the south by Mid-Western, southeast by Central Ontario, west by Lake Ontario, and north by Northeastern sub-regions. Its total land area is 10,953 square miles. The total population is 368,600 inhabitants (1971), with a density of 33.6 persons per square mile. The change rate, from 1966 to 1971, was 11.1%, an absolute increase of 40,657 persons.

3. Physiography

Counties in the south of Georgian Bay are part of the St. Lawrence Lowlands (sand, clay and till). Bruce County peninsula is a calcareous plain from which starts the Niagara escarpment, that succeeds to the Dundalk Highlands. Muskoka and Parry Sound counties, east to the Bay, are part of the Canadian Shield hill and lake Laurentian Region.

Average altitude is 1,050', but Simcoe county is only 775' above sea level, and Dufferin and Gray Co. Highlands exceed 1,600' of altitude.

Figure 26



source: The Financial Post
Survey of Markets 1976-77

In the south, there are many small rivers, the most important being Saugeen and Nottawasaga Bay Rivers; further north, streams and lakes increase, with Lake Simcoe, part of Severn River basin (2,400 square miles), and the Muskokas lakes. There are a great many rocky islands on the northeast shore of Georgian Bay.

Lake Huron and Georgian Bay regions benefit from a mild and humid climate; but inland, summers are fresher and winters colder, and the growing season is thus shorter (2,800 degree-days, especially in the Highlands.

4. Organized Territory Characteristics

The organized land area is 8,649 square miles, or 79.0% of the total area. Unorganized area is 2,304 square miles and is localized in Parry Sound county only. The unorganized area population was 4,035 in 1971.

- The Communities (Organized Territory) - There are 137 communities (the second highest number of communities after Eastern Ontario), 46 of which have fewer than 1,000 in population. Fifty-five group from 1,000 to 2,500 inhabitants each; and 18 count 5,000 and over of population, one of which, Barrie, is at least of the agglomeration size.

Units are mainly townships in Georgian Bay; there are four Indian Reserves on its territory.

- The Urban Territory - The 18 urban municipalities account for 44.0% of the sub-region organized total population, or 160,445 inhabitants. The urban land area is 782 square miles, or 9.0% of the total organized land area.

5. Georgian Bay R.S.A.

- Total rural land area - 10,172 square miles
- Total population - 208,145, or 56.4% of the sub-region total (rural organized, 204,110, is 56.0% of urban-rural organized total).
- Density - 25.9 persons per square mile (organized; and 20.5 including unorganized).

- Number of territory units - 120.

- Population change, 1971-1976: 14.9%.

Sub-Region 9: Northeastern Ontario

1. Counties or Census Divisions (See Figure 27)

The six counties are the following: Algoma, Cochrane, Manitouli, Nipissing, Sudbury, Timiskaming.

Excluded remote land area (See Figure 28) is 53,369 square miles. The excluded remote population is 935, which is all located in Cochrane Co.

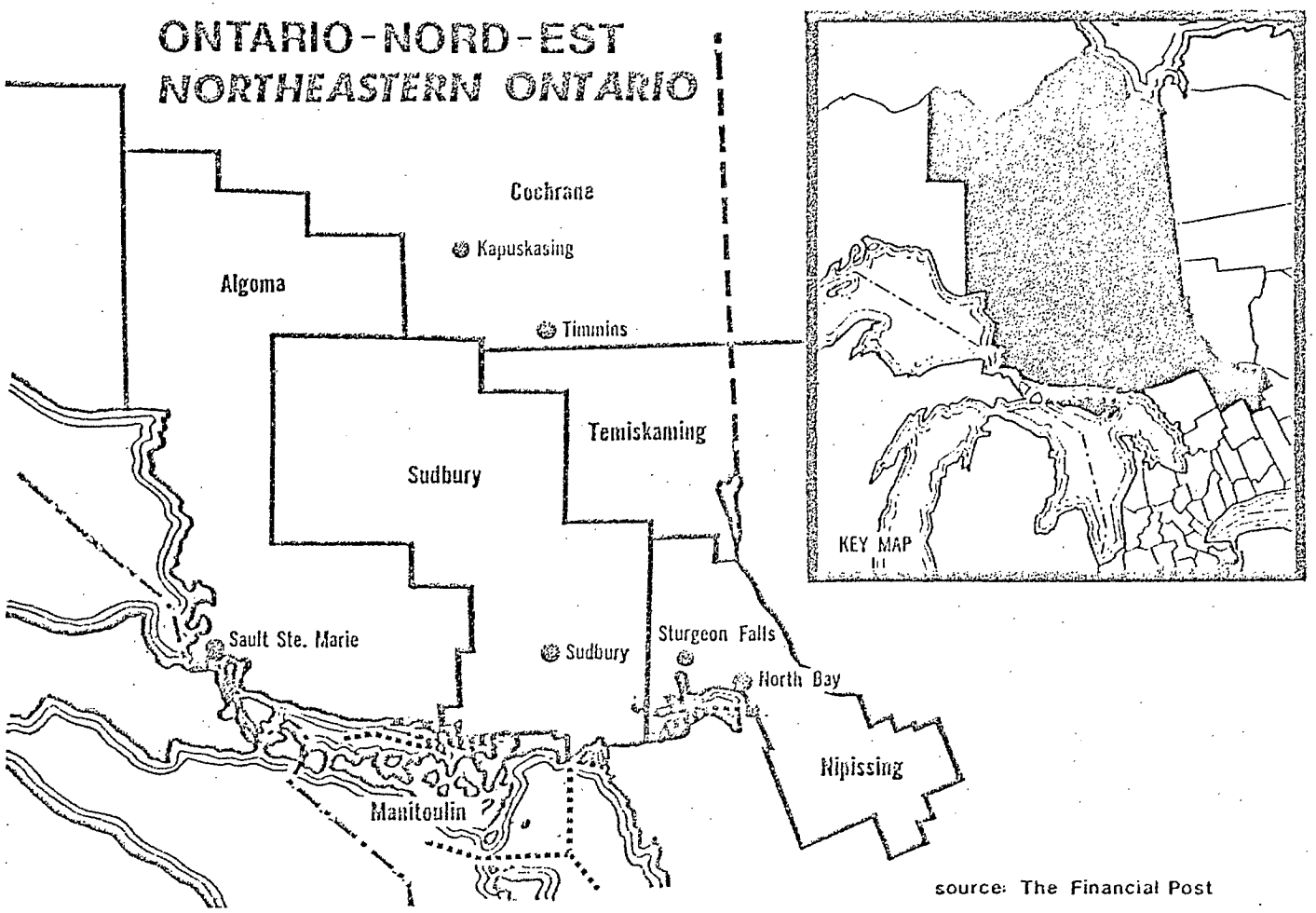
The remote line affects three counties: 1) Nipissing, which is mostly remote, except for a central strip of territory running southeast to northwest, from Thorne, generally corresponding to organized territory, but including in the R.S.A. a good deal of unorganized. Equally part of the R.S.A. is the northeastern tip of Nipissing, directly attached to Timiskaming, which is completely rural (i.e. part of R.S.A.).
2) Cochrane, the southern part of which is totally included in R.S.A., the remote line passing north of Cochrane, Kapuskasing and Hearst; the R.S.A. extends also in a northern strip so as to include Calstock.
3) Algoma, where the remote area is restricted to a southern portion (nearly half of the territory though), just below Wawa, and ending north of Sault Ste-Marie (at west) and Elliot Lake (at east).

The R.S.A. northern portion of Algoma is a communication corridor, where two railroads link Northeastern to Northeastern parts of the province of Ontario.

- Urban Excluded Areas - There are 19 excluded urban municipalities:

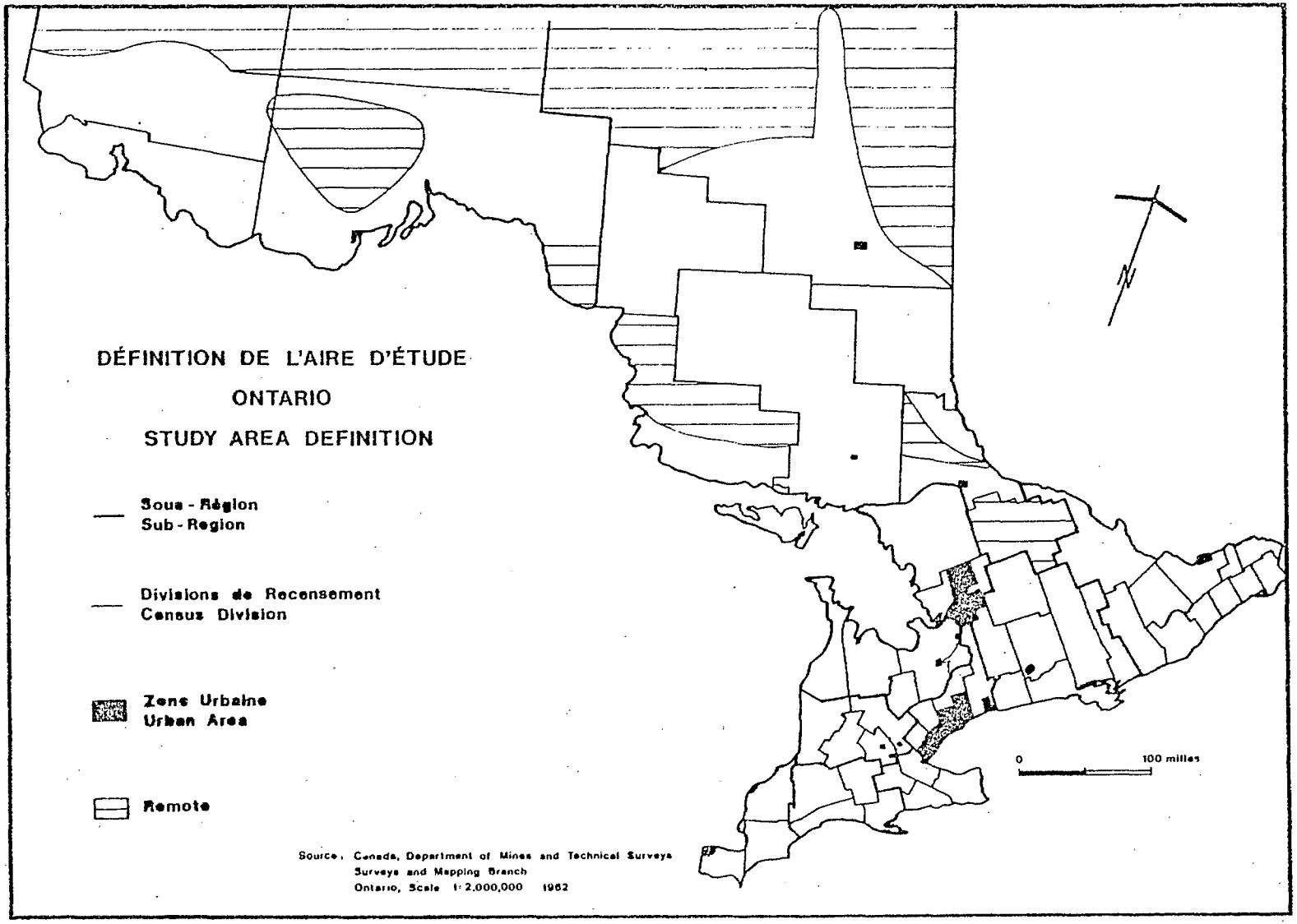
- Algoma	(2):	Sault Ste-Marie, Blind River
- Cochrane	(5):	Cochrane, Hearst, Iroquois Falls, Kapuskasing, Timmins
- Nipissing	(3):	North Bay, Mattawa, Sturgeon Falls
- Sudbury	(7):	Sudbury, Capreol, Coniston, Coppercliff, Espanola, Levack, Lively

Figure 27



source: The Financial Post
Survey of Markets 1976-77

Figure 28


DÉFINITION DE L'AIRE D'ÉTUDE
ONTARIO
STUDY AREA DEFINITION
Sous - Région
Sub - Region
Divisions de Recensement
Census Division
Zone Urbaine
Urban Area
Remote
0
100 milles
Source: Canada, Department of Mines and Technical Surveys
Surveys and Mapping Branch
Ontario, Scale 1:2,000,000 1962

- Timiskaming (2): Haileybury, New Liskeard.

Manitoulin has no urban excluded areas.

2. Global Territory Characteristics

Northeastern sub-region is bordered by the Quebec boundry to the east, by James Bay and the Albany River, to the north by the Northwestern sub (Thunder Bay county), to the west and south by Georgian Bay, Lake Ontario and Eastern sub-regions. Its total land area is 107,363 square miles, with a population of 552,140, for a density of 5.1 (remote land area and population included), 10.2 excluding remote. The change rate, from 1966 to 1971, was of 6.5%, an absolute increase of 35,912 persons.

3. Physiography

South is a mountainous zone, with a few clay plains near Lake Nipissing and Sault Ste-Marie region. Manitoulin Island is a Calcareous plain. Upper north has outcropping rock and clay plains, stretching from Lake Abitibi to Hearst. Finally, in the most northern part are the Hudson Bay lowlands.

Altitude varies a lot, averaging 600' in Manitoulin and reaching an average of 1,700' in the central part, where the Penokeennes Hills are found, one summit of which (Mount Batchawana) reaches 2,700'. Altitude then diminishes progressively toward the north.

Two large basins divide this lake and river area: the Great Lakes basin, where Lake Nipissing and French River (draining 7,260 square miles) are found, and that of Hudson Bay, with the Abitibi, and Mattagami Rivers, and Lakes Abitibi and Timiskaming.

Summer is mild in Northeastern, but fresher and shorter in the north, and winter is cold in all parts, becoming more and more rigourous towards north. The greatest rainfalls happen generally in July and September.

4. Organized Territory Characteristics

The organized land area is 6,943 square miles, or 6.5% of the total area. Unorganized rural land area is 47,051 square miles; and population in unorganized is 54,305 (1971).

- The Communities (Organized Territory) - There are 126 localities in Northeastern, 63 of which have fewer than 1,000 people, 30 have a population between 1,000 and 2,500. Seventeen communities are of 5,000 and over, four of which are at least of the agglomeration size: Sault Ste-Marie, Timmins, Sudbury, North Bay. Townships and towns are the most common units; there are five Indian Reserves on the territory.

- The Urban Territory - The 19 urban areas account for 65.0% of the sub-region organized total, or 323,380 persons. The urban land area is 612 square miles, or 8.8% of total organized area.

5. Northeastern R.S.A.

- Total rural land area - 53,383 square miles
- Total population (1971) - 228,725, or 41.4% of the sub-region total population (remote excluded); rural organized population, 174,420, is 35.0% or urban rural organized total.
- Density - 27.5 (organized); and 4.3, including unorganized.
- Number of territory units - 113.
- Population change, 1971-1976: -2.1%

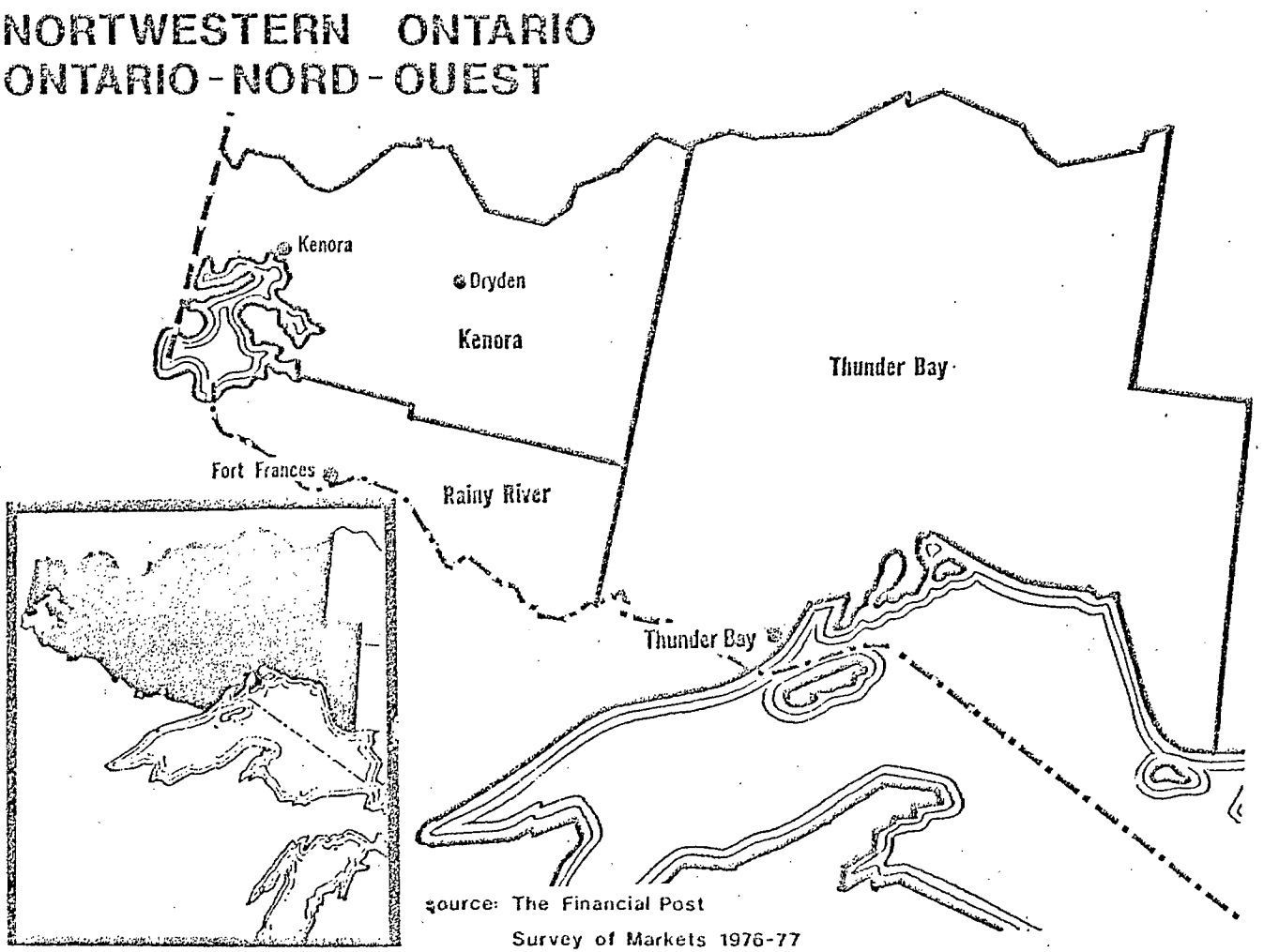
Sub-Region 10: Northwestern Ontario

1. Counties or Census Division (See Figure 29)

Three counties form this sub-region: Kenora, Rainy River and Thunder Bay.

The excluded remote land area (See Figure 28) is 173,223 square miles. Remote population, 15,615 persons.

Figure 29


NORTWESTERN ONTARIO
ONTARIO - NORD - OUEST
Kenora
Dryden
Kenora
Thunder Bay
Fort Frances
Rainy River
Thunder Bay
Source: The Financial Post
Survey of Markets 1976-77

The remote line affects two census divisions: 1) Thunder Bay, where the northern third, just over the railroad passing through Collins and Nakina, is chopped off. A large pocket of its western territory is also excluded as remote, north of Thunder Bay city, leaving north a narrow band of land, corresponding to the railroad passage. The rest of the unorganized, as well as the organized territories, are retained in the R.S.A. 2) Kenora, where all territories north of Minaki and of Sioux Lookout are excluded.

- Urban Excluded Areas - The six excluded municipalities are the following:
  - Kenora (3): Dryden, Kenora, Sioux Lookout
  - Rainy River (1): Fort Frances
  - Thunder Bay (2): Thunder Bay, Geraldton

2. Global Territory Characteristics

Northwestern Ontario is bounded west and northwest by Manitoba, north and northeast by Hudson and James Bay, east by Thunder Bay sub-region, and south by Lake Superior and the U.S. Its total land area is 201,994 square miles. The population is 224,390 (1971) for a density of 7.2 (remote excluded) and 1.1, including remote land and population. The change rate, from 1966 to 1971, was -6.6%, an absolute decrease of 14,734 persons.

3. Physiography

The southern part of Northwestern is composed of the Canadian Shield plateaus and the Nipigon plain, around the lake of the same name, and of a few hills in the immediate surrounding of Thunder Bay. To the north stretch underlating rocks into the Hudson Bay lowlands.

Average altitude in the south (1,750') is due to the presence of Port-Arthur Hills; one of the highest points of the sub-region is Mount Tip Top (2,120'). To the north, average altitude drops to 1,000 feet above sea level.

Lake Nipigon (1,870 square miles) is part of the Lake Superior drainage basin. Rainy River and Kenora zones are drained toward Lake Winnipeg. The most important river of the area is English River with a drainage basin of 20,000 square miles; Lake Seul and the Lake of the Woods are part of this basin. In the north, numerous rivers are found, especially Kenogami River (20,600 square miles) and Albany River (51,700 square miles), which are part of the Hudson Bay watershed.

Climatewise, the temperature is fresh in summer and cold and rigourous in winter. Southern areas enjoy milder weather, but the vegetative season is short; the growing season becomes nearly non-existent the more one moves toward the north.

4. Organized Territory Characteristics

The organized land area is 3,505 square miles, or 1.7% of the total area. Unorganized rural land area is 25,268 square miles; the population, unorganized area, is 17,340 inhabitants (1971).

- The Communities (Organized Territory) - There are 48 communities in Northwestern Ontario, 21 of which are under 1,000 in population; 16 have a population between 1,000 and 2,500. Five communities count 5,000 and over inhabitants, one of which, Thunder Bay, is at least of the agglomeration sinze. Township is the main unit sub-region, and there are three Indian Reserves.

- The Urban Territory - The six urban areas account for 74.2% of the sub-region organized total, or 141,960 inhabitants. Urban land area is 150 square miles, or 4.3% of the total organized.

5. Northwestern Ontario R.S.A.

- Total rural land area - 28,623 square miles.
- Total population - 66,815 persons or 32.0% (remote population excluded) of the sub-region total (rural organized, 49,475 is 25.8% of urban-rural organized total).

- Density - 14.7 (organized); and 2.3 persons per square miles, including unorganized.
- Number of territory units - 44.
- Population change 1971-1976: 6.3%.

2.0: THE RURAL STUDY AREA SPECIFIC PROFILE

2.1: The Quebec-Ontario Comparison

A. Land Area

Table 23 shows that the R.S.A. land area is respectively 12.8% and 35.0% of Quebec and Ontario total land areas. The Quebec R.S.A. organized territory is 76.5% of its total 67,569 land area; Ontario R.S.A. organized is 39.8% of its 124,027 total land area. Both provinces have just about the same size of organized territory (See Section 1.3, Table 7 & 15).

B. Population

The total R.S.A. population for Quebec is 1,465,640 and for Ontario is 1,838,060, which are respectively 25.5% and 23.9% of the total Province population. For Quebec, the population of the R.S.A. organized territory is 1,430,677 and the non-organized, 34,963; for Ontario in organized territories there are 1,762,380 inhabitants and 75,680 in non-organized (See Table 24).

The density of Quebec's R.S.A. organized territory is 27.7, Ontario's is 35.6.

C. Communities

The status of the territorial units is given below by province:

	QUEBEC	ONTARIO
Cities & towns/ Cités et villes	43	36
Villages	271	135
Parishes/ Paroisses	502	- -
Townships/ Cantons	168	530
Improvement dist. or without designation/ Dist. en développement ou sans désignation	380	17
Unorganized territory/ Non organisé	20	9
Indian Reserves/ Réserves indiennes	14	23
TOTAL	1,398	750

Table 23 — LAND AREAS/R.S.A.
Tableau — SUPERFICIES

	Québec	Ontario
Province total (square miles)/ Total provincial	524,253 [1]	354,223 [2]
Rural study area/ Aire d'étude	67,569	124,027
R.S.A., % of total land area/ Aire d'étude, % territ. total	12.89	35.0
Remote area, % of total land area/ Terr. éloigné, % territ. total	86.47	63.96

1 Urban %: 0.64
2 Urban %: 1.04

Table — 1971 POPULATION AND DENSITY/R.S.A.
Tableau 24 — POPULATION ET DENSITE, 1971

	Québec	Ontario
POPULATION		
Organized territory/ Territoire organisé	1,430,677	1,762,380
Non-organized/ Non-organisé	34,963	75,680
TOTAL	1,465,640	1,838,060
DENSITY/DENSITE		
Organized/ Organisé	27.7	35.6
TOTAL	21.7	14.8

The few cities and towns that were kept in the R.S.A. are those with fewer than 2,500 inhabitants; the majority of the villages of both provinces have been retained in the study area; all other units are essentially rural municipalities, whatever the size.

Even though there are only 20 unorganized territories for Quebec and nine for Ontario, and 14 Indian reserves for Quebec and 23 for Ontario, reported as statistical units by Statistics Canada, there are in fact 22 and 15 non-adjacent unorganized territories for Quebec and Ontario, while non-adjacent Indian reserves are respectively 25 and 36.

As for the size of the communities, Table 25 gives a complete enumeration of nine size categories with the number of communities for each and the population covered.

The great majority of Quebec's communities are under 2,000 of population; in Ontario, only 63.3% fall in that category, there being a considerable number of communities over 3,000. The total number of communities under 5,000 is in Quebec: 1,390 (i.e. 99.4%), and in Ontario 672 (i.e. 89.6%). The average number of communities per 1,000 square miles is 20.68 for Quebec and 6.04 for Ontario. The average distance between communities is for Quebec 6.9 miles and for Ontario, 8.1. The average distance to the nearest urban agglomeration[1] is 7 to 335 miles in Quebec and 7 to 215 in Ontario.

D. R.S.A. Demography

1. Farm Non-Farm Activity (1971) - Table 26 shows for Quebec and Ontario the agricultural intensity of the R.S.A. in 1966 and 1971. In both provinces the R.S.A. farming activity is about 20% of rural population in 1971.

Table 27 shows in percentages the rural, farm and non-farm population from 1966 to 1976. It will be noted that farming activity has decreased heavily in Quebec: 36.9% (66-71); while non-farm activity is not too

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[1] 25,000 population and over (1971).

different in both provinces, and increasing. The rural population increased from 1971 to 1976 but more noticeably in Ontario. There is a definite trend toward rural increase in both provinces, and definitely population is running away from urban cores.

The R.S.A. population was for Quebec: 1,502,595; for Ontario: 1,964,491.

2. Population Characteristics - Age Groups - The distribution of population among the main age groups is given (Table 28) as a percent of the total population. In Quebec, a total of 1,121,525 or 76.3% persons are under 45 years old, which is higher than Ontario, 1,365,725 or 73.4% of total. The difference is especially due to the 10-19 age group.

3. Mother Tongue and Ethnic Group - The mother tongue proportions in the R.S.A. are as follow:

Quebec:	English	7.0%
	French	91.7%
	Other	1.3%
Ontario:	English	81.7%
	French	9.2%
	Other	9.1%

Quebec's majority is higher than that of Ontario, and Ontario's minorities are multiple compared to Quebec's; this shows particularly in ethnic groups of the R.S.A. which are listed in the table below:

	QUEBEC	ONTARIO
-British	99,500	1,162,925
-French	1,322,255	242,470
-Asian	705	6,205
-German and Austrian	7,405	144,980
-East European	2,905	59,610
-Italian	2,955	20,730
-Native Indians	16,140	34,140
-Jewish	635	3,590

Table 25 NUMBER OF COMMUNITIES IN RURAL STUDY AREA, 1971/
Tableau MUNICIPALITES SELON LA GROSSEUR, 1971

Size of communities/ Grosseur des municipalités	QUEBEC		ONTARIO	
	Number/ Nombre	Population	Number/ Nombre	Population
449 and less/et moins	321	104,110	105	31,770
500 - 999	521	383,435	148	110,065
1,000 - 1,499	293	357,250	117	144,575
1,500 - 1,999	145	252,005	105	180,890
2,000 - 2,499	58	128,615	79	177,085
2,500 - 2,999	24	66,390	35	96,265
3,000 - 3,999	19	67,895	55	186,065
4,000 - 4,999	9	40,925	28	123,515
5,000 and over/et plus	8	64,885	78	787,815
TOTAL	1,398	1,465,640	750	1,838,060

Table 26 AGRICULTURAL INTENSITY (1966 & 1971)/
Tableau INTENSITE AGRICOLE (1966 et 1971)

	QUEBEC		ONTARIO	
	1966	1971	1966	1971
R.S.A. Tot. pop./ Pop. rurale tot.	1,499,349	1,465,640	1,790,352	1,838,060
Total farm/ Total agricole	495,316	312,410	488,387	366,185
Total non-farm/ Total non-agricole	1,004,033	1,153,230	1,301,965	1,471,875
Non-farm, % of rural Total/ Non-agricole, % rural	66.9	78.7	72.7	80.0

Table 27 R.S.A. POPULATION CHANGE (66 - 76)/
Tableau EVOLUTION DE LA POPULATION, AIRE D'ETUDE (66 - 76)

	QUEBEC	ONTARIO
% change rural 66-71/ Changement rural	- 2.2	+ 2.6
% change farm 66-71/ Changement agricole	- 36.9	- 25.1
% change non-farm 66-71/ Changement non-agricole	+ 14.9	+ 13.1
% change rural 71-76/ Changement rural 71-76	+ 2.5	+ 6.4

Table 28 AGE GROUPS AS % OF THE TOTAL R.S.A. POPULATION/1971

Tableau GROUPES D'AGE - POPULATION RURALE ET POURCENTAGES

AGE GROUPS/ GROUPES D'AGE	QUEBEC		ONTARIO	
	NUMBER/ NOMBRE	%	NUMBER/ NOMBRE	%
0 - 9	305,225	20.7	386,105	20.8
10 - 19	372,960	25.4	408,840	21.9
20 - 44	443,340	30.2	570,780	30.7
45 - 64	242,955	16.5	339,845	18.3
65 +	105,295	7.2	154,510	8.3

	QUEBEC	ONTARIO
- Scandinavian	2,770	101,155
- Other	5,225	58,870

Quebec's minorities, apart from English, are small, only the native Indians and German groups being appreciable. Ontario to the contrary has many important ethnic groups, apart from French: Asian, German, Italian, Native Indians and Scandinavian.

4. Households - The total number of households in Quebec and Ontario are 331,895 and 491,485 and the density is respectively 4.9 and 3.9. If we restrict the computation to only the R.S.A. organized territory, density for Quebec becomes 6.4 households per square mile, and for Ontario, 9.5; the linear density for Quebec is 16.68, and for Ontario, 14.58. These figures are based on hydro subscribers.

The average number of persons per household is 4.4 in Quebec and 3.66 Ontario.

Table 29 gives the number of household-heads per age group and the percentage of total. Quebec and Ontario R.S.A. household heads age groups are comparative; in both provinces two thirds of the household heads are under 55 years old. The big proportions are found in the 25-34, 35-44, and 45-54 age groups.

The total number of families is 302,775 in Quebec and 435,990 in Ontario. The average number of persons per family is 4.42 and 3.83. The average number of children per family is respectively for Quebec and Ontario, 2.21 and 1.79.

The family head schooling as a percent of total family heads (for Quebec only) is: grade 7 and less 62.3%; 8 to 10th grade: 24.4%, 11 to 13th: 9.04%; and university level: 4.2%.

Table 29 HOUSEHOLD HEADS, BY AGE GROUPS, 1971/
Tableau CHEFS DE MENAGES, PAR GROUPES D'AGE, 1971

AGE GROUPS/ GROUPES D'AGE	QUEBEC		ONTARIO	
	NUMBER/ NOMBRE	%	NUMBER/ NOMBRE	%
- 20	700	0.21	1,250	0.25
20 - 24	12,380	3.73	21,615	4.40
25 - 34	67,775	20.42	96,700	19.68
35 - 44	70,380	21.20	104,790	21.32
45 - 54	68,000	20.48	97,075	19.75
55 - 64	57,055	17.19	80,510	16.38
65 - 69	22,340	6.73	33,085	6.73
70 +	33,265	10.02	56,460	11.49
TOTAL	331,895	---	491,485	---

For Ontario, only total population (5 years plus) figures were available; Ontario total population schooling[1]: 8th grade and less: 35.2% 9 to 13th grade: 55.06%, university level: 9.74%.

E. R.S.A. Housing

1. Dwelling Occupation and Persons - The total number of dwellings in Quebec and Ontario is 331,880 and 491,140, 77.2% (for Quebec) and 79.1% (for Ontario) of which are owned. Table 30 gives figures on occupation, rent, occupation length, and construction period. Around 20% of the dwellings are rented in both provinces, but the rent cost is 40% higher in Ontario than in Quebec. These figures are for the non-farm dwellings only.

The occupation lengths tend to be long in both provinces, but predominantly in Quebec, where 63.27% of the dwellings are occupied for more than 6 years, compared to Ontario with 56.19%.

The majority of dwellings in rural Quebec as well as Ontario were built before 1961, indicating a low construction rate and very little development of the rural communities.

The occupants of dwellings, as far as the number per room is concerned, are as follows: for Quebec, 81.9 of the dwellings are occupied at a rate of 1.0 person and less per room, which leaves 18.1% at a rate of 1.1 person and plus per room; for Ontario, 90.78% are in the 1.0 less category and 9.22% in the 1.1 plus. Ontario's rural population is thus more spaciously accommodated.

2. Commodities - Table 31 gives figures on commodities. Figures on water supply show a higher percentage without running water in Ontario, but the great majority having running water have hot and cold facilities; Quebec has fewer dwellings with both hot and cold.

Concerning appliances, there are more dwellings in Ontario with the more essential appliances (freezer and dryer) than in Quebec; the dish-washer,

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[1] These figures include urban as well as rural (total 5 years plus: 5,136,415).

Table 30 DWELLINGS OCCUPATION/

Tableau OCCUPATION DES LOGEMENTS

	QUEBEC	ONTARIO
Total dwellings/ Total des logements	331,880	491,140
Mobile homes as % of total/ % maisons mobiles	1.1	1.4
Total owned/ total possédés	256,200	388,605
Rented, as % of total/ % loués	22.8	20.9
Rent, non-farm dwellings ($)/ Coût du loyer, loyer non-agricole	62.78	87.90
Occupation length/ Durée d'occupation (%)		
- Less than 1 year/ Moins de 1 an	11.01	13.32
- One to 2 years/ Un à 2 ans	12.50	14.77
- 3 to 4 years/ 3 à 4 ans	13.23	15.72
- 6 to 10 years/ 6 à 10 ans	16.10	15.89
- 10 years plus/ 10 ans et plus	47.17	40.30
Construction period/ Période de construction (%)		
- Before 1961/ Avant 1961	78.45	75.47
- From 1961 to 1968/ De 1961 à 1968	16.12	17.70
- From 1969 to 1971/ De 1969 à 1971	5.43	6.83

Table 31 DWELLINGS & COMMODITIES/

Tableau LOGEMENTS ET COMMODITES

	QUEBEC	ONTARIO
Water supply/ Alimentation en eau (%)		
- Hot & cold water/ Eau chaude et froide	84.86	88.18
- Cold only/ Froide seulement	11.48	4.34
- No running water/ Sans eau courante	3.66	7.48
Household appliances/ Appareils ménagers (%)		
- Freezer/ Congélateur	41.42	54.80
- Automatic dryer/ Sécheuse automatique (%)	44.38	47.82
- Dish-washer/ Laveuse à vaisselle (%)	25.59	8.16
Television (%)		
- B. & W. + colour/ N. et B. et couleur	5.02	8.04
- B. & W. only/ N. et B. seulement	86.85	87.15
- Colour only/ Couleur seulement	4.59	6.42
- No T.V. set Sans télévision	3.27	4.64

on the other hand, which is still often considered as a luxury, is in a much higher proportion in Quebec than in Ontario.

T.V. sets are present in about 95% of the dwellings in Ontario and Quebec (the percentage being a little higher in Quebec, but colour sets are predominant in Ontario).

Table 32 gives the percentage of dwellings with secondary houses and automobiles. For secondary houses, Quebec and Ontario are just about equal, Quebec being a little higher again; but speaking of automobiles, Ontario shows a greater wealth.

F. Socio-economic Characteristics

1. Labour Force - The R.S.A. Quebec labour force in 1971 was 460,290, which is 46.88% of the total population of 15 years and over; the activity rate for Ontario is higher with 59.55%, its labour force being 731,050 persons.

The unemployment rate in Quebec was 11.01% and in Ontario 5.43%.

The labour force is distributed among industries as follows, as a percent of the total force:

	QUEBEC	ONTARIO
Farm/agriculture	14.66	15.52
Forest/forêt	3.66	0.69
Hunting & fishing/Chasse et pêche	0.29	0.11
Mining/Mines	1.71	2.90
Manufacturing & construction/ Manufacturier et construction	27.03	25.30
Services	42.38	47.73
Unspecified/indéterminé	10.27	7.75

The predominant activities in both provinces are services and manufacturing, but these activities, as well as farming, are higher in Ontario. Farming activity accounts only for about 15% in both provinces. For Quebec,

Table 32 SECONDARY HOUSES & AUTOMOBILES/

Tableau MAISONS SECONDAIRES ET AUTOMOBILES

	QUEBEC	ONTARIO
Secondary houses/ Maisons secondaires (%)		
- One/une	6.38	5.0
- Two/deux	0.37	0.18
- Total number of secondary house/ Total de maisons secondaires	22,290	25,415
Automobiles/ Automobiles (%)		
- One/une	66.53	60.87
- Two/deux	10.86	23.45
- Three and plus/ Trois et plus	1.67	3.55

the forest activity should be added to have a more realistic figure of the rural farm or farm-like activity. As a summary of labour force by industry, the following grouping may be proposed:

	QUEBEC	ONTARIO
Labour force/ Main-d'oeuvre		
- In resource industry/ Primaire	20.3	19.2
- Trade & services/ Commerce et services	42.4	47.7
- Other/ Autres	37.3	33.1

Even though the resource industries are relatively high in both provinces, they are greatly surpassed by the other types.

The labour force by status can be summarized as follows (in percent):

	QUEBEC	ONTARIO
Salaried workers/ Salariés	74.1	79.63
Independant workers/ Travailleurs indépendants	14.9	13.34
Unpaid family workers/ Travailleurs familiaux sans salaire	11.0	7.03

Independent workers tend to be higher in Quebec, while the unpaid family workers are just about the same.

2. Place of Work and Residence - In Quebec 67,690 workers or 16.52% of the employed labour force living in rural areas work in urban areas of their own counties; these workers travel an average distance of 7.7 miles from home to work. There are 27,175 or 6.63% of the employed labour force living in rural areas, who work in urban areas in the same sub-region, but outside of their own home county; their travel distance is 16.09 miles. Finally there are 34,910 workers or 8.52% of the employed labour force living in rural areas and working outside of their own sub-region; these people travel an average distance of 49.10 miles. Even though not specified,

these 34,910 workers may be thought of as urban workers, at least in the great majority of the cases.

From these figures certain conclusions may be derived: first, at least 68.33% of the workers reside in rural areas and work in rural areas; secondly, 31.67% (or just about) of the workers reside in rural areas and work in urban areas; thirdly, 15.15% of the workers living in the R.S.A. work outside of their own home counties, and predominantly in urban areas.

The figures do not tell how many people reside in urban areas and work in the R.S.A., but we may assume this figure to be very low.

For Ontario, there are 229,135 workers or 33.14% living in rural and working in urban areas of the same county; they travel 8.06 miles. This figure is twice that of Quebec, which means that the urban attraction is much higher in Ontario than in Quebec. There are 44,785 workers or 6.48% living in rural and working in urban areas in another county but in the same sub-region of residence; they travel 19.7 miles. Finally there are 29,725 workers or 4.3% living in rural and working outside of their own home sub-region; they travel 53.78 miles. As far as mileage is concerned, one can conclude that workers from Ontario travel longer distances for work than the Quebec workers.

Derived from these figures are the following conclusions: first, at least 56.08% of the workers who reside in the R.S.A. work in rural areas, secondly, about 43.92% of the workers who reside in the R.S.A. work in urban areas; thirdly, 10.78% of the workers living in the R.S.A. work outside of their own home counties, and predominantly in urban areas.

3. Income - The only R.S.A. income figures available are those of the 1971 Census, reporting 1970 salaries. The figures are as follows:

	QUEBEC	ONTARIO
Income/Revenu		
Average salary (1970)/Salaire moyen	$4,341.	$5,136.
Average total household revenue (1970)/ Revenu total moyen des mênages	$8,704.	$8,961.

There is not too much a difference in income between Quebec and Ontario, especially for households; since the personal income is relatively lower, one can assume that there would normally be on the average, more people working per household in Quebec than in Ontario.

4. Economic Activities - Farm - The figures given here are those derived from the 1966 and 1971 farm census, i.e. as reported by S.C. and comprising the farming activities in our urban excluded areas (these activities represent a very low percentage of the total farm activities); and from our special computations on the exact rural study area according to 1971 data.

The number of farms in Quebec passed from 80,294 in 1966 to 61,257 in 1971, a decrease of 23.7%, which is nearly twice the decrease that happened in Ontario in the same time: from 109,907 to 94,722, which is -13.8% change. The 1971-76 decrease was: -29.6% for Quebec, and -18.7% for Ontario. The farm land area also decreased considerably:

	QUEBEC	ONTARIO
1966 land area/Superficie (acre)	12,886,069	17,826,050
1971 land area/Superficie (acre)	10,801,116	15,963,056
% change/Diminution (%)	-16.2%	-10.5%
% change/Diminution (71-76)	-17.3%	- 7.6%

The 1971 number of uninhabited farms in Quebec was 2,033 compared to 5,714 in Ontario. Table 33 gives economic values to present a concrete picture of farming activities. Ontario farm economic activities are more profitable than those in Quebec, but both appear to be very low: more than 50% of Quebec farms sold for less than $5,000., and 44% of Ontario farms were also under this value.

R.S.A. Farm Activities - The number of farms and values are given below:

	QUEBEC	ONTARIO
Total number of farms/ Nbre total de fermes	60,562	94,432
Aver. number of persons per farm/ Nbre moyen de personnes par ferme	5.16	3.88

Table 33 CENSUS FARMS ECONOMIC ACTIVITIES/

Tableau ACTIVITES ECONOMIQUES DES FERMES DE RECENSEMENT (1971)

	QUEBEC	ONTARIO
Land and buildings value/ Valeur des terres et bâtiments	$1,321,791,800.	$5,183,419,400.
Value of products sold/ Valeur des produits vendus; Percent of farms/ Pourcentage de fermes:		
- Under $2,500./ Moins de $2,500.	33.06	30.61
- $2,500. - $4,999.	18.52	14.07
- $5,000. and over/ $5,000. et plus	48.41	55.32
Number of cattle heads/ Nombre total de bovins	1,780,773.	3,082,015.
Cattle average per farm/ Nbre moyen de bovins par ferme	29.07	32.54

	QUEBEC	ONTARIO
R.S.A. farms, as % of total census farms/ % du total des fermes de recensement	98.87	99.7
Land & build. value/ Valeur des terres et bâtiments	$1,120,776,700.	$4,545,406,200.
Number declaring woodland/ Nbre déclarant de la terre à bois	39,794 (65.7%)	48,042 (50.9%)

With 55.9% more farms than Quebec, Ontario has a farm value (land & buildings) four times that of Quebec. Proportionally the wood land (and presumably the wood cutting activity) is higher in Quebec.

Tables 34 and 35 give figures on labour and farm management, and on economic classes of farms. Table 34 clearly indicates the predominance of individual farming, but Ontario tends to have more of other management types, especially the association mode. About 30% of farms hire outside workers; and a great number of farms declare out of farm work, especially in Ontario: 39%.

Table 35 shows that there are a great number of farms (30%) in the lowest economic class ($50. to $2,499) in both provinces, and that the highest percentage (27%) of the high economic classes ($15,000. and over) is found in Ontario, the Ontario figure being about twice that of Quebec.

As a brief conclusion to this farm activities section, it can be said from the above figures that there are proportionally more people in Quebec living on farms for less farming revenue than in Ontario, and workers of both provinces are seeking work off the farm to make ends meet.

5. Commerce and Industry Activities - The R.S.A. trade activity can be summarized as follows:

	QUEBEC	ONTARIO
N. of activities/Nbre de commerces (1971)	13,159	12,827
Sales (000)/Ventes	1,081,717	1,583,579
N. of owner workers/ Nbre de travailleurs propriétaires	11,879	11,930
N. of employees/Nbre d'employés	15,768	26,780
Average salary/Salaire moyen ($)	4,027.	4,566.

Table 34 R.S.A. FARM MANAGEMENT AND LABOUR FORCE/(1971)

Tableau ORGANISATION DES FERMES ET MAIN-D'OEUVRE

	QUEBEC	ONTARIO
Farm management/ Organisation des fermes	%	%
- Individual farms/ fermes gérées par individus	94.8	90.41
- Association management/ Gérées par association	2.21	7.53
- Community pastures/ Pâturages communautaires	0.14	0.08
- Inc. family farms/ Fermes familiales inc.	2.75	1.68
- Inc. non-family farms/ Fermes inc. non-familiales	0.11	0.30
- Other organization/ Autre organisation	---	0.003
Labour force/ Main-d'oeuvre		
- Farms declaring hired labour/ Fermes déclarant main-d'oeuvre engagée	30.43	34.63
- Farms declaring out of farm work/ Fermes déclarant travail hors ferme	29.85	38.94

Table 35 R.S.A. FARMS BY ECONOMIC CLASSES/

Tableau FERMES PAR CLASSE ECONOMIQUE/1971

Economic classes/ Classes économiques	QUEBEC %	ONTARIO %
- $35,000 and over/ $35,000 et plus	2.83	9.14
- $15,000. - $34,499.	11.02	18.23
- $7,500. - $14,999.	20.85	18.05
- $2,500. - $7,499.	32.36	24.06
- $50. - $2,499.	32.94	30.62

Quebec trade activities generate 1.2 jobs per activity (apart from the owner worker); Ontario activities generate 2.09 jobs.

Sales are 46.4% higher in Ontario than in Quebec, the average salary is slightly higher in Ontario.

R.S.A. manufacturing activities can be summarized as follows:

	QUEBEC	ONTARIO
N. of plants (1972)/ Nbre d'établissements	2,355	2,151
N. of owner workers/ Nbre de propriétaires actifs	1,039	1,003
N. of employees/ Nbre d'emploi total	88,682	90,606
Average salary/ Salaire moyen ($)	7,173	8,279
Shipment value/ Valeur de livraison (000)	3,469,296	3,210,965
Added value/ Valeur ajoutée	1,302,827	1,422,635

It is interesting to note than the R.S.A. manufacturing activities in Quebec do not reflect the same tendency as the total area (urban and rural); indeed, there are more plants in Quebec R.S.A. than in Ontario. But still the number of jobs created in Ontario is higher than in Quebec: 42.12 in Ontario compared with 37.66 jobs per activity or plant in Quebec. Nevertheless, the shipment value is higher in Quebec than in Ontario, and the added value, even though smaller, is near that of Ontario.

This whole phenomenon can be partly explained by the fact that in Quebec there are many small plants (often of the family type) located in rural areas. while in Ontario the manufacturing activity tends to be higher (and with bigger plants) but concentrated in urban areas; thus the great difference noticed previously between the total provincial shipment values appears to be mostly an urban phenomenon; this means that Quebec's rural economic activities are in good shape, especially in the manufacturing area.

Salaries in Ontario, as previously noted, are here again higher than in Quebec, a difference of $1,000.

2.2: Rural Territory (R.S.A.), by Province

A. Quebec

1. Territory description - summary

Density - The Quebec R.S.A. total land area is 67,569 square miles, 76.3% of which is organized territory; its unorganized territory population accounts for 2.39% of its total 1,465,640 inhabitants. The total rural area (R.S.A.) density is 21.69, that of the organized territory alone being 27.75 persons per square mile. The total territory units of the province of Quebec is 1,398, 3.08% of which are cities or towns; the other units are distributed as follows:

- villages :	19.38%	- without designation:	27.18%
- parishes :	35.91%	- unorganized :	1.43%
- townships:	12.02%	- indian reserves :	1.00%

The percent of communities by size is as follows:

- 1 - 499 :	22.96%	- 2,000 - 2,499:	4.15%
- 500 - 999 :	37.27%	- 2,500 - 2,999:	1.72%
- 1,000 - 1,499:	20.96%	- 3,000 - 3,999:	1.36%
- 1,500 - 1,999:	10.37%	- 4,000 - 4,999:	0.64%
		- 5,000 & over :	0.57%

Most of the territory units are parishes or without designation rural incorporated municipalities; they usually cover a large territory, and their typical population is under 1,500 inhabitants. The average distance between the communities for all but one sub-region ranges from 4.5 to 7.2. The North-Shore sub has an average distance of 17.0.

2. Sub-Regional Comparisons- As can be seen in Table 36, the total rural land area ranges from 3,609 square miles to 15,468 among the sub-regions. Only three of these have large chunks of unorganized territory: Trois-Rivières, and specially Abitibi, and Gaspesia (See Table 36).

The population ranges from 44,000 (North Shore) to 295,170 (Quebec); the R.S.A. population, as a percent of the total population is high in Gaspesia, Outaouais and Abitibi (more than 50%); the other sub-regions range from 34 to 44%. The big portion of the unorganized territory population is found in Abitibi (23,285 persons) (See Table 37).

Table 36 QUEBEC R.S.A. SUB-REGIONS LAND AREAS/

Tableau SUPERFICIE DES SOUS-REGIONS

Sub-regions/ Sous-régions	R.S.A. tot. land area/ Superficie tot. (sq. mi.)	R.S.A., % of tot. land area/ % de superficie totale	Organized area, as % of total R.S.A. land area/ Territ. org., % rural total
Gaspesia/ Gaspésie	15,468.	94.29	42.0
Saguenay-Lake St. John/Saguenay Lac St-Jean	3,673.	8.98	93.6
Québec	8,376.	59.08	99.2
Trois-Rivières	5,208.	35.38	73.6
Eastern Townships/ Cantons de l'Est	4,094.	98.58	99.4
Montreal north/ Nord de Montréal	3,609.	36.67	99.0
Montreal south/ Montréal rive-sud	4,049.	88.99	100.0
Outaouais	7,296.	45.81	92.8
Abitibi-Témiscamingue	6,834.	26.78[1]	42.5
North-Shore/ Côte-Nord	9,147.	12.06[2]	90.8
TOTAL:	67,569.	12.89	76.5

[1] Excluding the remote Abitibi & Mistassini territories land area (including them, the result would give 6.40%);

[2] Excluding the "Nouveau Quebec" territories land area (including them, the result would give 2.40%);

Table 37 QUEBEC R.S.A., SUB-REGIONS POPULATION AND DENSITY 1971/

Tableau POPULATION ET DENSITE DES SOUS-REGIONS, AIRE D'ETUDE

Sub-regions/ Sous-régions	POPULATION				DENSITY/DENSITE	
	RSA tot. pop./ pop. tot.	RSA pop., % of tot./ % pop. totale	Pop. org. territ., as % of tot. RSA pop./ Terr. org. % pop. rurale	Unorganized territory, tot. pop./ Pop. terr. non-org.	Tot. RSA land area & pop./ Aire rurale totale	RSA org. territ. only/ territ. organisé
Gaspesia/ Gaspésie	197,625	60.7	98.75	2,480	12.78	30.0
Saguenay-Lake St. John/Saguenay Lac St-Jean	90,915	34.5	97.70	2,100	24.75	25.8
Québec	295,170	34.8	99.66	1,015	35.24	35.3
Trois-Rivières	141,365	35.0	98.36	2,325	27.14	36.3
Eastern Townships/ Cantons de l'Est	98,920	40.6	100.	---	24.16	24.3
Montreal north/ Nord de Montréal	166,730	43.1	99.82	300	46.20	46.5
Montreal south/ Montréal rive-sud	246,390	37.8	100.	---	60.90	60.9
Outaouais	109,300	63.8	99.95	60	14.98	16.1
Abitibi-Témiscamingue	75,095	52.5	68.99	23,285	10.99	17.8
North-Shore/ Côte-Nord	44,130	43.5	92.30	3,408	4.82	4.9
TOTAL:	1,465,640	24.3	97.61	34,963	21.69	27.75

The low density sub-regions, if we look only to the organized territories, are North-Shore, Abitibi, and Outaouais (below 20 persons per square mile); the others range from 24 to 47 with one exception, Montreal South, with 60.9. Including the unorganized territories, Gaspesia has a fairly low density (12.8). The North-Shore has the lowest density (4.9).

All the sub-regions have all types of municipalities (there are only three exceptions (See Table 38). Towns are more numerous in Quebec, Montreal South and Abitibi; there is an average of 27 villages per region, although some have very few (Abitibi and North-Shore); townships are spread quite evenly throughout the sub-regions, only Outaouais and the Eastern Townships sub-regions having many more (50 and 37); the unorganized territories are found more particularly in Gaspesia — 9 units (in fact 10 non-adjacent territories), in Quebec — 3 units, and Abitibi — 2 units (in fact 3 non-adjacent territories). Montreal South has none, and the others have only one; the Indian reserves are found in all but one sub-region: the Eastern Townships. In all, fourteen statistical I.R. units, but 25 non-adjacent territories are distributed as follows:

- Gaspesia	2	- Montreal North:	2
- Saguenay	1	- Montreal South:	2
- Quebec	1	- Outaouais :	1
- Trois-Rivières:	3	- Abitibi :	7
		- North Shore :	6

The majority of the population (See Table 39) is found in towns of 500 to 999 inhabitants, except in Montreal South and North, where the majority lives in communities of 1,500 to 1,999 inhabitants, and Quebec and Saguenay, where the majority of the population lives in communities of 1,000 to 1,499 inhabitants. The highest numbers of the smallest size communities are found in Outaouais, Trois-Rivières, Quebec; most of the sub-regions have communities of 2,500 and over but the greatest number is found in Montreal North (16), South (9), and Quebec (10).

Table 38 QUEBEC SUB-REGION R.S.A. TERRITORY UNITS, BY STATUS (1971)/

Tableau STATUT DES UNITES TERRITORIALES

Sub-regions/ Sous-régions	Cities & towns/ Villes	Villages	Parishes/ Paroisses	Townships/ Cantons	Without designation/Sans désignation	unorganized territories/ territoires non-organisés	Indian reserves/ Réserves Indiennes	TOTAL
Gaspesia/ Gaspésie	1	21	89	10	74	9	1	205
Saguenay-Lake St. John/Saguenay Lac St-Jean	2	19	16	11	25	1	1	75
Québec	10	57	124	12	72	3	1	279
Trois-Rivières	--	36	78	8	31	1	3	157
Eastern Townships/ Cantons de l'Est	4	27	16	37	33	1	--	118
Montreal north/ Nord de Montréal	5	19	59	9	31	1	2	126
Montreal south/ Montréal rive-sud	11	54	100	17	30	--	2	214
Outaouais	1	23	7	51	42	1	1	126
Abitibi-Témiscamingue	7	6	11	9	27	2	2	64
North-Shore/ Côte-Nord	2	9	2	4	15	1	1	34
TOTAL	43	271	502	168	380	20	14	1,398

Table 39 R.S.A. COMMUNITIES BY SIZE, QUEBEC SUB-REGIONS/

Tableau MUNICIPALITES RURALES SELON LA GROSSEUR, PAR SOUS-REGION DU QUEBEC

Sub-regions/ Sous-régions	1-499		500-999		1000-1499		1500-1999		2000-2499		2500-2999		3000-3999		4000-4999		5000 et +	
	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.
Gaspesia/ Gaspésie	40	6.6	86	31.9	45	27.5	19	16.1	10	11.0	5	6.9	-	-	-	-	-	-
Saguenay-Lake St. John/Saguenay Lac St-Jean	5	1.1	27	22.1	25	33.5	10	19.1	5	12.0	-	-	2	7.2	1	5.1	-	-
Québec	47	5.0	104	26.2	76	31.5	31	18.2	11	8.2	5	4.7	4	4.6	1	1.8	-	-
Trois-Rivières	50	12.7	56	29.5	32	27.3	8	9.8	7	10.9	2	3.7	1	2.8	1	3.3	-	-
Eastern Townships/ Cantons de l'Est	37	11.3	53	39.3	17	21.8	7	12.0	-	-	1	2.8	1	3.4	1	4.4	1	5.2
Montreal North/ Nord de Montréal	33	5.5	31	15.1	20	15.3	22	23.4	4	5.2	5	8.1	7	14.9	3	8.1	1	4.4
Montreal south/ Montréal rive-sud	37	5.5	75	22.6	46	16.2	35	24.5	12	11.0	4	4.6	3	4.8	1	2.0	1	2.3
Outaouais	50	14.6	44	27.4	18	19.2	8	13.5	3	6.0	1	2.7	-	-	-	-	2	16.7
Abitibi- Témiscamingue	16	8.2	30	27.9	10	15.9	2	4.9	4	12.0	-	-	-	-	-	-	2	31.0
North-Shore/ Côte-Nord	6	3.5	15	24.2	4	11.3	3	12.1	2	10.8	1	6.8	1	8.6	1	11.1	1	11.6
TOTAL	321	7.1	521	26.2	293	24.4	145	17.2	58	8.8	24	4.5	19	4.6	9	2.8	8	4.4

3. Distances by Sub-region

The distances between the communities vary from one sub-region to another; the range is 4.5 to 17 miles. For Gaspesia, the average distance is 6.2 miles and the average distance to reach the nearest urban agglomeration (Rimouski) ranges from 15 to 190, with one big exception, Ile-de-la-Madeleine county, 335 miles. Murdochville is completely isolated in unorganized territories; St-Athanase and Pohénégamook are also isolated municipalities.

Saguenay-Lac St-Jean

- Average distance between communities: 6.4 miles
- Distance range for nearest agglomeration (Chicoutimi): 20 to 60 miles.

Quebec

- Average distance: 5.3 miles
- Nearest agglomerations (Québec, Thetford, Lévis, Chicoutimi): 10 to 60 miles. Lac Edouard is an isolated community in unorganized territory; the average distance does not take this fact into account.

Trois-Rivières

- Average distance: 5.2 miles
- Agglomerations: Trois-Rivières, Victoriaville, Cap-de-la-Madeleine, Drummondville: 10 to 23 miles. Six communities in Champlain county are isolated by an unorganized territory, their average distance being 22.5 miles. Two other communities in Maskinongé county are isolated by an unorganized territory.

Eastern Townships

- Average distance: 5.8 miles
- Agglomerations: Sherbrooke, Thetford: 9 to 35 miles.

Montreal North

- Average distance: 5.0 miles
- Agglomerations: St-Jérôme, Joliette, Repentigny, Ste-Scholastique: 10 to 25 miles.

Montreal South

- Average distance: 4.5 miles
- Agglomerations: Beloeil, Dorion, Valleyfield, Granby, St-Jean, St-Hyacinthe, Marieville: 8 to 14 miles.

Outaouais

- Average distance: 6.7 miles
- Agglomerations: Hull, Aylmer, Buckingham: 8 to 72 miles.

Abitibi

- Average distance: 7.2 miles
- Agglomeration: Rouyn-Noranda: 50 to 57 miles. One group of communities in Témiscamingue county is isolated by an unorganized territory; their average distance is 5 miles.

North Shore

- Average distance: 17.0 miles
- Agglomeration: Sept-Iles: 100 miles. In the North-Shore sub, there are many communities separated one from another by unorganized territories; Anticosti Island is equally separated from the others.

4. Quebec R.S.A. Demography

a. Province summary

Population - The rural population from 1971 to 1976 has generally increased or at least the decrease rate has been slow in all but two sub-regions, Saguenay and Outaouais, thus following the general trend of the Province; and this increase is to the advantage of the non-farm portion of the rural areas, which are in many cases associated with the surrounding urban areas. The R.S.A. Quebec population is relatively young. French and English represent roughly 97% of the population of Quebec; French is predominant in all the sub-regions. Native Indians represent 1.1% of the R.S.A. population.

Households - There is a high average number of persons per household (4.0 plus), except in a few sub-regions. Households are unevenly

distributed among the sub-regions; and square mile and linear densities each explain a different phenomenon. Square mile density gives a rough figure compared to the whole territory; linear density explains household distribution. The age groups of household heads confirm that the young population is relatively higher in the northern sub-regions; 54% of the Province household heads are over 45 years of age.

Families in Quebec have an average of 2.21 children; and the Montreal sub-regions have under 2.0. Education level of family heads varies among sub-regions; family heads with some university training range from 2.0% to 7.4%.

b. Sub-regional Comparisons

1- Farming Intensity - Tables 40 et 41 show the rural farm, non-farm population figures and the changes that took place from 1966 to 1976. Figure 30 gives the 1976 population by census division.

Four sub-regions have witnessed a rural population increase from 1966 to 1971: Montreal North, Outaouais, Montreal South, and the Eastern Townships; and this trend (but to a higher rate) was maintained from 1971 to 1976 in Montreal, South and North, and in the Eastern Townships. This rural increase is especially due to non-farm activities, and this population presumably is concentrated in urban fringe areas. Trois-Rivières, North Shore and Quebec also had an increase in their rural population from 1971 to 1976.

In all cases, the farming activity decreased from 1966 to 1971; and the worst drops indicated are in Abitibi, Gaspesia and Saguenay.

Four sub-regions had a rural decrease from 1971 to 1976: Saguenay (-15.7%), Outaouais, Abitibi and Gaspesia; in Saguenay, the decrease curve has maintained a downward position from 1966 to 1976, while Outaouais, after an increase from 1966-1971, has decreased from 1971 to 1976.

Figure 30

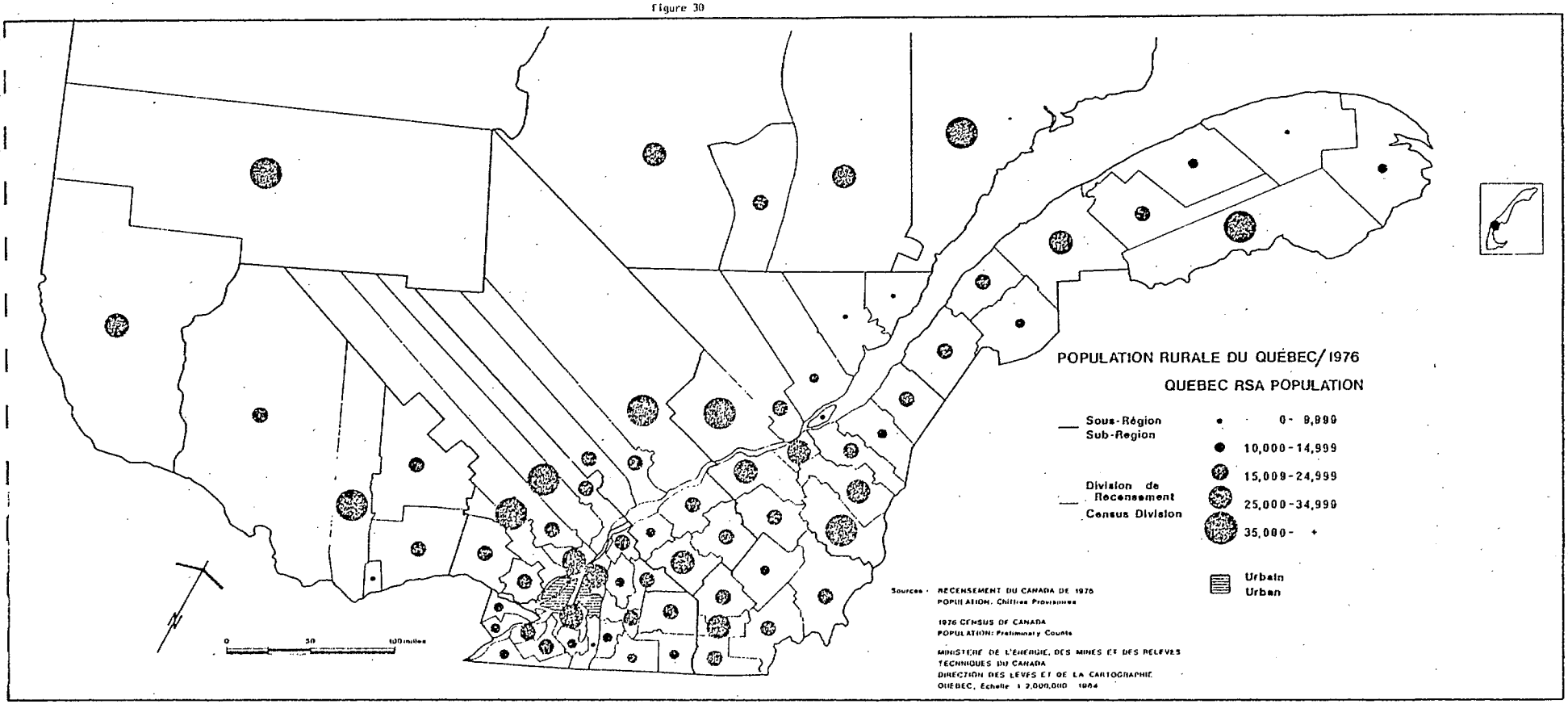

POPULATION RURALE DU QUÉBEC/1976
QUEBEC RSA POPULATION
Sous-Région
Sub-Region
Division de Recensement
Census Division
0- 9,999
10,000-14,999
15,000-24,999
25,000-34,999
35,000- +
Urbain
Urban
0
50
100 miles
Sources : RECENSEMENT DU CANADA DE 1976
POPULATION, Chiffres Provisoires
1976 CENSUS OF CANADA
POPULATION: Preliminary Counts
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RELEVÉS TECHNIQUES DU CANADA
DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE
QUÉBEC, Échelle 1:2,000,000 1984

Table 40 QUEBEC AGRICULTURAL INTENSITY, BY SUB-REGION (RSA)/
Tableau INTENSITE AGRICOLE PAR SOUS-REGION RURALE

Sub-regions/ Sous-régions	RSA tot. pop./ Pop. rurale totale (000)		Tot. farm pop./Pop. agr. (000)		Total non-farm/ Pop. non agricole (000)		Non-farm % of rural tot./ Non-agr. % rur.	
	1966	1971	1966	1971	1966	1971	1966	1971
Gaspesia/ Gaspésie	230	198	85	42	145	156	62.9	78.9
Saguenay-Lake St. John/Saguenay Lac St-Jean	99	91	29	18	70	73	70.1	80.4
Québec	297	295	105	72	191	223	64.2	75.5
Trois-Rivières	144	141	60	42	84	99	58.6	70.2
Eastern Townships/ Cantons de l'Est	98	99	38	26	60	73	60.7	73.9
Montreal north/ Nord de Montréal	147	167	39	24	108	143	73.4	85.6
Montreal south/ Montréal rive-sud	241	246	81	59	160	187	66.6	76.0
Outaouais	106	109	25	15	81	94	76.1	86.0
Abitibi-Témiscamingue	87	75	30	14	57	61	65.4	80.9
North-Shore/ Côte-Nord	48	44	1	1	47	43	97.7	98.2
TOTAL:	1,499	1,466	495	312	1,004	1,153	66.9	78.7

Table 41 R.S.A. POPULATION CHANGE - 1966-76 SUB-REGION/
Tableau EVOLUTION DE LA POPULATION RURALE 1966-76

Sub-regions/ Sous-régions	% rural change 66-71/ Evolution rurale	% change, farm, 1966-71/ Evolution agricole	% change non-farm 66-71/ Evolution non-agricole	% rural change 71-76/ changement rural
Gaspesia/ Gaspésie	- 14.2	- 51.1	7.1	- 6.2
Saguenay-Lake St.John/Saguenay Lac St-Jean	- 8.6	- 40.1	4.7	- 15.7
Québec	- 0.6	- 32.2	14.5	0.1
Trois-Rivières	- 2.1	- 29.7	14.9	5.2
Eastern Townships/ Cantons de l'Est	0.9	- 33.3	18.6	9.0
Montreal north/ Nord de Montréal	11.8	- 38.9	24.4	12.6
Montreal south/ Montréal rive-sud	2.0	- 26.8	14.1	11.5
Outaouais	3.0	- 39.6	14.1	- 8.1
Abitibi-Témiscamingue	- 13.7	- 52.6	6.3	- 7.3
North-Shore/ Côte-Nord	- 9.2	- 29.3	- 8.7	4.7
TOTAL:	- 2.2	- 36.9	14.9	2.5

Finally, three sub-regions that had a negative change from 1966 to 1971 have experienced a rural population increase from 1971 to 1976: North Shore, Trois-Rivières and Quebec.

2. Population Characteristics

Age groups - One noticeable characteristic of the age groups is that the northern sub-region population is younger: See Saguenay, Abitibi and North-Shore, on Table 42. The oldest population is found in Montreal North and Trois-Rivières.

Mother tongue and ethnic group (See table 43) - Though the French majority is predominant in every sub-region, the English mother tongue is highly represented (10%) in four sub-regions: Outaouais, Eastern Townships, Montreal South and North Shore. Outaouais has a high percentage of English, due to proximity to the National Capital; the Eastern Townships had a well-known historical English predominance for many years, which explains the high percentage of 15.6.

Most of the ethnic groups represented in Quebec sub-regions are British, French, European, and native Indians. A good number of Germans are found in Outaouais, Italians mostly in Montreal North. The native Indians are specially found in the North Shore, Abitibi, Montreal South, and Saguenay sub-regions.

Households - Table 44 on households gives their distribution among the sub-regions, the average number of persons per household and densities. The highest percentages of households are found in Quebec, Montreal South and North, and Gaspesia sub-regions. The households are more densely distributed in Montreal South and North, followed by Quebec and Trois-Rivières. Linear density does not always correspond to square mile density; Gaspesia and North Shore have high linear densities and low square mile densities, which can be explained easily: these two sub-regions have the largest land area and households are confined to small scale communities scattered along the coast.

Table 42 R.S.A. AGE GROUPS, BY SUB-REGION/
Tableau GROUPES D'AGE PAR SOUS-REGIONS RURALES, 1971

Sub-regions/ Sous-régions	% 0 - 19	% 20 - 44	% 45 - 64	% 65 & +
Gaspesia/ Gaspésie	48.7	27.8	16.6	7.0
Saguenay-Lake St. John/Saguenay Lac St-Jean	51.4	31.3	12.8	4.5
Québec	44.2	31.2	17.1	7.5
Trois-Rivières	44.9	29.2	17.7	8.2
Eastern Townships/ Cantons de l'Est	48.0	27.4	16.8	7.8
Montreal north/ Nord de Montréal	42.4	32.2	17.4	8.0
Montreal south/ Montréal rive-sud	44.5	31.2	16.9	7.4
Outaouais	45.7	30.0	16.7	7.6
Abitibi-Témiscamingue	52.7	27.3	14.6	5.4
North-Shore/ Côte-Nord	50.4	32.7	12.9	4.0
TOTAL:	46.1	30.2	16.5	7.2

Table 43

Tableau

R.S.A. MOTHER TONGUE & ETHNIC GROUPS/

LANGUE ET GROUPES ETHNIQUES

Sub-regions/ Sous-régions	Mother tongue (%) Langue maternelle			Ethnic groups (%)/ Groupes ethniques						
	English/ Anglais	French/ Français	Other/ Autre	British/ Britannique	French/ Français	German & Austrian/ All. & austr.	Italian/ Italien	Native indians/ Ind. autochtones	Scandinavian/ Scandinaves	Other/ Autre
Gaspesia/ Gaspésie	3.6	95.8	0.6	4.5	94.2	.22	.09	.69	.05	.25
Saguenay-Lake St. John/Saguenay Lac St-Jean	1.7	97.9	.49	2.1	96.0	.31	.10	1.2	.13	.16
Québec	1.9	97.9	.21	2.3	96.7	.27	.09	.31	.05	.28
Trois-Rivières	1.2	98.3	.50	2.1	96.6	.17	.08	.58	.07	.40
Eastern Townships/ Cantons de l'Est	15.6	83.9	.53	14.9	83.5	.36	.26	.11	.22	.65
Montreal north/ Nord de Montréal	6.7	91.9	1.4	6.7	90.2	.60	.48	.46	.23	1.33
Montreal south/ Montréal rive-sud	10.7	87.0	2.3	9.4	86.0	.88	.36	1.7	.44	1.22
Outaouais	24.4	74.1	1.6	20.8	74.6	1.7	.20	.83	.44	1.43
Abitibi-Témiscamingue	3.7	93.7	2.6	3.0	93.2	.29	.10	2.9	.13	.38
North-Shore/ Côte-Nord	10.1	81.5	8.4	11.3	79.6	.25	.16	8.4	.07	.22
TOTAL:	7.0	91.7	1.3	6.8	90.5	.51	.20	1.1	.19	.70

Table 44 R.S.A. HOUSEHOLDS BY SUB-REGION/
Tableau MENAGES PAR SOUS-REGION

Sub-regions/ Sous-régions	Households % of Que. total/% de ménages	Aver. n. of pers. per household/ N. moyen de personnes	Density per sq. mi./ Densité au mi. car.	Linear[1] density/ Densité linéaire	Org. territ. density sq. mi./ Densité, territoire organisé
Gaspesia/ Gaspésie	12.18	4.74	2.6	16.86	6.1
Saguenay-Lake St. John/Saguenay Lac St-Jean	5.17	5.11	4.8	14.50	4.8
Québec	19.70	4.29	7.8	19.49	7.8
Trois-Rivières	9.91	4.20	6.3	16.90	8.4
Eastern Townships/ Cantons de l'Est	6.95	4.16	5.6	10.42	5.6
Montreal north/ Nord de Montréal	12.65	3.82	11.6	25.44	11.7
Montreal south/ Montréal rive-sud	18.30	3.96	15.8	20.14	15.8
Outaouais	7.97	4.01	3.6	13.45	3.9
Abitibi-Témis Témiscamingue	4.67	4.64	2.2	9.4	3.7
North-Shore/ Côte-Nord	2.47	5.04	0.9	20.24	0.9
TOTAL:	100.	4.39	4.9	16.68	6.4

[1] Compiled from Hydro-Quebec subscribers and miles of wire data.

Figure 31 gives the result of a correlation test made between square mile and linear household densities. All the counties are represented and the number represents the sub-region:

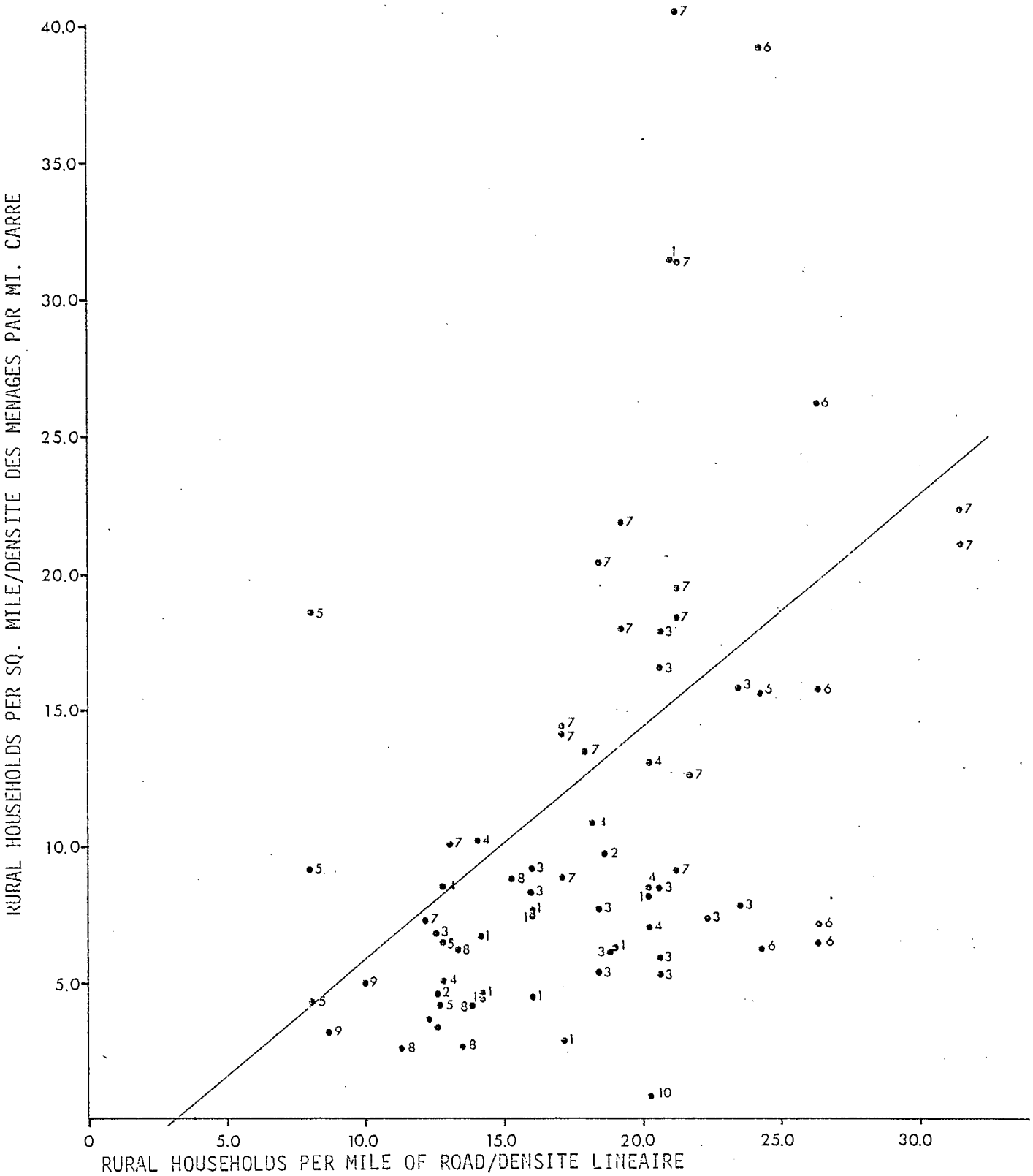
1: Gaspesia	5: Eastern Townships	9: Abitibi
2: Saguenay	6: Montreal North	10: North-Shore
3: Québec	7: Montreal South	
4: Trois-Rivières	8: Outaouais	

The coefficient of correlation between these two variables is 0.477 with a degree of significance of 0.00001 (which means that the sample was great enough to give a 99.99% correct correlation test). But the correlation itself, even though positive, is nevertheless quite low (it is generally considered that under 0.7 indicates a fairly low correlation).

As it can be seen on Graph 31, the cloud of points, locating each of the 72 Quebec rural counties, forms an upward and rather thick band. To be noted is that a few sample units stretch far away from the estimative straight line, thus influencing the degree of liason between the two variables; the data involved concern the following counties: Iles-de-la-Madeleine, Deux-Montagnes, Beauharnois, and Laprairie, which have respectively 31.5, 39.1, 31.4, and 40.6 for their square mile densities, and 21.17, 24.21, 21.25, and 21.25 for their linear household densities.

One might also mention the hypothesis of a lack of complete exactness in the linear densities estimations. Certainly one can doubt the linear relation between those two densities, because it does not appear to be representative of the total picture; and as it is, this linear curve assumes that an increase of 10 households per mile would lead to an increase of 7.6 households per square mile. The curve that would best support the supposed link between the two variables for the totality of the observations would be that of a parabolic function, which would imply that the linear density tends to stabilize the more the square mile density increases.

Figure 31



RURAL POPULATION DENSITY CHARACTERISTICS/QUEBEC
CARACTERISTIQUES DE LA DENSITE DE LA POPULATION RURALE/QUEBEC

Table 45 R.S.A. HOUSEHOLD HEADS AGE GROUPS BY SUB-REGION/
Tableau AGE DES CHEFS DE MENAGES, SOUS-REGIONS RURALES

Sub-regions/ Sous-régions	(%) Under 20/ 20 ans -	(%) 20 - 44	(%) 45 - 64	(%) 65 +
Gaspesia/ Gaspésie	.27	40.4	41.9	17.43
Saguenay-Lake St. John/Saguenay Lac St-Jean	.17	52.3	34.9	12.63
Québec	.20	44.1	38.8	16.9
Trois-Rivières	.15	41.9	39.6	18.35
Eastern Townships/ Cantons de l'Est	.32	42.9	38.8	17.98
Montreal North/ Nord de Montréal	.25	47.2	35.5	17.05
Montreal south/ Montréal rive-sud	.14	47.5	35.9	16.46
Outaouais	.21	46.4	35.8	17.59
Abitibi-Témiscamingue	.29	46.8	37.7	15.21
North-Shore/ Côte-Nord	.18	54.8	33.8	11.22
TOTAL	.21	45.35	37.67	16.75

Table 46 R.S.A. FAMILIES AND FAMILY HEADS SCHOOLING/

Tableau FAMILLES ET SCOLARITE DES CHEFS DE FAMILLES RURALES (1971)

Sub-regions/ Sous-régions	Families/ Familles		Family heads schooling/ Scolarité des chefs de familles (%)			
	Total no./ Nbre tot.	Aver. no. of children/ N. moy. d'enf.	Under 8 grade/ - de 8	8 - 10	11 - 13	University/ Université
Gaspesia/ Gaspésie	38,710	2.32	67.6	23.8	6.1	2.5
Saguenay-Lake St. John/Saguenay Lac St-Jean	16,765	2.59	58.7	29.6	8.8	2.8
Québec	59,635	2.15	67.4	20.9	7.8	3.9
Trois-Rivières	29,855	2.08	65.9	23.9	7.3	2.9
Eastern Townships/ Cantons de l'Est	20,675	2.14	61.7	25.0	8.1	5.2
Montreal North/ Nord de Montréal	36,955	1.87	55.8	26.2	12.2	5.7
Montreal South/ Montréal rive-sud	54,335	1.96	57.7	26.8	10.5	5.0
Outaouais	23,510	2.03	55.1	24.1	13.5	7.4
Abitibi-Témiscamingue	14,210	2.48	69.1	20.8	7.1	3.0
North-Shore/ Côte-Nord	8,125	2.53	66.4	20.0	7.6	2.0
TOTAL	302,775	2.21	62.3	24.4	9.04	4.2

The average number of persons per household is high, 5.0 plus in Saguenay and North Shore, and low, under 4.0 in the Montreal sub-regions. It is interesting to note that the high household density sub-regions have the lowest average number of persons per household.

Household densities are also given for the organized territory only, providing a more realistic view on the household distribution.

Table 45 gives information on househead age groups. The highest percentages of older households are found in Gaspesia, Trois-Rivières and Eastern Townships sub-regions.

As indicated in Table 46, the number of families range from 8,000 to 60,000 among the sub-regions; the smallest subs in terms of family number (North Shore, Abitibi, and Saguenay) have the highest average number of children: 2.48 to 2.59. Montreal has the lowest average number of children, as is the case with the average number of persons per household. Education level is high in Outaouais and Montreal, low in Gaspesia, Trois-Rivières, and Abitibi.

5. Quebec R.S.A. Housing Characteristics

a. Province Summary

Occupation and Persons - Three quarters of the dwellings are owned in Quebec, and the rented dwellings average $62.78 a month (1971), the North Shore sub-region being much higher; 47% have been occupied for more than 10 years; 78% of the dwellings were built before 1961. There are 82% of the dwellings sheltering one person or less per room.

Related Commodities - A low percentage (3.7%) of dwellings have no running water — Outaouais though is high (7.4) as is Gaspesia (6.0). One quarter of the dwellings have dishwashers; 3.27% of the dwellings have no T.V. sets, and a very low percentage have both black & white and colour televisions.

There are 6% of dwellings with one secondary house, and only 10% owning two cars.

b. Sub-Regional Comparisons - Table 47 gives the main figures on occupation and related variables. The total number of dwellings ranges from 8,000 to 65,000 and the average percentage of owned dwellings ranges from 73 to 83%. The number of persons per room ranges from 67.9 to 85.4% for dwellings having one or fewer persons per room. The highest numbers of persons per room are found in the North Shore, Saguenay, and Abitibi subs.

The ten years plus length of occupation is found in a higher percentage in Gaspesia, Quebec and Trois-Rivières subs. The three lowest percentage are found in the highest non-farm sub-regions: Montreal North, North Shore, and Outaouais; but there is not necessarily a high correlation between those two variables. The lowest number of dwellings constructed before 1961 is also found in the same three sub-regions. The oldest dwellings are found in the Gaspesia, Abitibi, Quebec, Trois-Rivières, Eastern Townships sub-regions.

The monthly rent (1971) ranges from $50.00 (Trois-Rivières) to $80.00 (North Shore).

As Table 48 indicates, four sub-regions have a high percentage of dwellings without running water: North Shore, Outaouais, Gaspesia, and Abitibi. Montreal South is relatively high (3.2%) for that part of the Province.

The distant sub-regions (North Shore excepted) have a relatively high percentage of dwellings with dish washers, though Montreal North and Quebec have the highest.

Saguenay and Montreal South have the highest percentages of BW and Colour T.V. Only three subs are under the provincial average (96.73) for the number of dwellings with television: North Shore (82.4%), Outaouais (94.7%), and Abitibi (95.4%); the highest are Montreal South and Saguenay with 98% plus.

Table 47 R.S.A. HOUSING (OCCUPATION, CONSTRUCTION PERIOD AND RENT), BY SUB-REGION, 1971/

Tableau HABITATION ET LOGEMENT (OCCUPATION, LOYER) PAR SOUS-REGIONS RURALES, 1971

Sub-regions/ Sous-régions	Tot. no. dwellings/ N. de logements	N. pers. per room/ N. pers. par pièce		Occupation		% const. before 61/ % const. av. 1961	$ rent, non-farm dwell./ $ loy. non-agr.
		(%) 1.0 & less/et moins	(%) 1.1 & over/et plus	% dwel. owned/% loy. poss.	% 10 yrs + occ./ % 10 ans +		
Gaspesia/ Gaspésie	40,405	77.9	22.1	83.0	56.5	85.6	56.68
Saguenay-Lake St. John/Saguenay Lac St-Jean	17,160	72.7	27.3	73.0	46.6	80.8	61.79
Québec	65,470	83.8	16.2	79.2	53.0	83.2	65.36
Trois-Rivières	32,940	82.8	17.2	78.4	51.4	82.7	50.40
Eastern Townships/ Cantons de l'Est	23,040	83.2	16.8	77.8	46.2	82.7	57.40
Montreal north/ Nord de Montréal	41,995	85.4	14.6	73.3	37.2	69.0	67.71
Montreal south/ Montréal rive-sud	60,725	85.4	14.6	73.9	43.0	76.3	61.69
Outaouais	26,470	81.3	18.7	78.6	41.8	70.6	66.95
Abitibi-Témiscamingue	15,495	74.3	25.7	76.3	44.1	83.3	58.03
North-Shore/ Côte-Nord	8,180	67.9	32.1	74.4	40.3	67.1	80.26
TOTAL	331,880	81.9	18.1	77.2	47.17	78.45	62.78

Table 48 R.S.A. HOUSING COMMODITIES, BY SUB-REGION, 1971/

Tableau COMMODITES ET APPAREILS PAR SOUS-REGIONS RURALES, 1971

Sub-regions/ Sous-régions	% no. runn. water/ sans eau courante	% dish washer/ % lave-vaiselle	TELEVISION (%)		% dwell. with 1 sec. house/1 maison sec.	% with 2 cars/% avec 2 autos
			BW - colour/ NB - couleur	With T.V./ Avec T.V.		
Gaspesia/ Gaspésie	6.0	25.1	1.7	96.7	5.9	7.9
Saguenay-Lake St. John/Saguenay Lac St-Jean	2.4	26.3	6.1	98.7	10.2	11.4
Québec	1.7	27.5	5.3	97.6	7.2	10.1
Trois-Rivières	2.6	22.8	3.8	97.0	5.8	9.6
Eastern Townships/ Cantons de l'Est	2.3	22.3	2.8	96.6	6.9	11.8
Montreal north/ Nord de Montréal	2.7	28.4	7.4	97.4	5.8	11.2
Montreal south/ Montréal rive-sud	3.2	25.7	6.6	98.0	3.8	12.7
Outaouais	7.4	24.4	5.5	94.7	7.7	14.1
Abitibi-Témiscamingue	4.6	26.4	3.2	95.4	9.1	9.1
North-Shore/ Côte-Nord	10.8	17.5	4.9	82.4	6.9	6.9
TOTAL	3.66	25.59	5.02	96.73	6.38	10.86

The percentage of secondary houses ranges from 3.8% (Montreal South) to 10.2% (Saguenay); more central sub-regions have relatively fewer secondary houses (Gaspesia and Eastern Townships making an exception to this phenomenon).

Concerning the dwellings where two cars are owned, it can be observed with only one exception (Saguenay sub-region) that the more central the sub-region, the higher percentage of two owned cars (9.6% plus).

6. Quebec R.S.A. Socio-Economic Characteristics

a. Province Summary

Labour Force and Income - An average of only 47% of the 15-year-old and over population constitutes the labour force of Quebec; high rates of unemployment are found in Gaspesia, North Shore, Abitibi and Saguenay.

Resource industry hires an average 20.3% of the labour force, manufacturing 27%, and services 42%. A certain percentage (2 to 7%) residents of distant R.S.A. subs travels very long distances for work (from an average of 120 to 205 miles).

Income was low in 1971, especially in Gaspesia, Trois-Rivières and the Eastern Townships.

b. Sub-Regional Comparisons

1- Labour Force - The labour force activity rate (See Table 49) ranges from 42% of 15-year-old and over population to 52%. High activity is found in Montreal South, the Eastern Townships and Outaouais, low in Gaspesia and Saguenay. The highest rates of unemployed are found in the distant subs.

Three-quarters of the labour force are salaried workers, except in Trois-Rivières (60%) and North Shore (85%). The highest percentages of independent workers are found in Quebec, Trois-Rivières, the Eastern Townships and Montreal South. The highest number of unpaid family workers is found in Gaspesia and Saguenay.

As indicated in Table 50, the sub-regions of low-resource industry labour force are Montreal North and South, and Outaouais; Abitibi is high. Manufacturing predominates in Montreal, the Eastern Townships and Trois-Rivières. Services are high in North Shore, Outaouais and Montreal North.

Table 49 QUEBEC R.S.A. LABOUR FORCE, BY SUB-REGION, 1971/

Tableau POPULATION ACTIVE, PAR SOUS-REGIONS RURALES

Sub-regions/ Sous-régions	LABOUR FORCE ACTIVITY/ ACTIVITE DE LA MAIN-D'OEUVRE			LABOUR FORCE STATUS/ STATUT DE LA MAIN-D'OEUVRE		
	Tot. labour force/main-d'oeuvre tot.	Activity rate/taux d'activité	% unemployed/ % chômeurs	% salaried workers/% salariés	% independant workers/% trav. ind.	% family unpaid workers/ trav. fam. non rémun.
Gaspesia/ Gaspésie	54,860	42.8	17.8	71.8	14.6	13.6
Saguenay-Lake St. John/Saguenay Lac St-Jean	24,615	43.7	14.7	73.4	12.4	14.2
Québec	94,260	47.3	9.1	72.7	16.0	11.3
Trois-Rivières	45,925	48.4	10.9	69.2	18.7	12.1
Eastern Townships/ Cantons de l'Est	32,045	50.0	8.7	72.6	16.3	11.1
Montreal north/ Nord de Montréal	55,030	48.8	10.2	77.5	13.7	8.8
Montreal south/ Montréal rive-sud	85,755	52.1	7.9	73.2	16.4	10.4
Outaouais	34,880	49.3	9.9	79.1	11.4	9.5
Abitibi-Témiscamingue	20,685	44.9	15.0	78.8	10.7	10.5
North-Shore/ Côte-Nord	12,235	45.4	16.6	85.4	7.4	7.2
TOTAL	460,290	46.9	11.01	74.1	14.9	11.0

Table 50 R.S.A. LABOUR FORCE BY INDUSTRY, BY SUB-REGION, 1971/
Tableau MAIN-D'OEUVRE PAR INDUSTRIE, PAR SOUS-REGIONS RURALES

Sub-regions/ Sous-régions	% resource ind./primaire	% manufacturing & construction/ secondaire	% services/ tertiaire	unspecified/ indetermine
Gaspesia/ Gaspésie	24.1	22.0	42.2	9.8
Saguenay-Lake St. John/Saguenay Lac St-Jean	23.0	22.9	43.2	11.0
Québec	21.3	25.2	42.9	10.5
Trois-Rivières	23.0	31.3	36.2	9.5
Eastern Townships/ Cantons de l'Est	22.2	32.6	36.3	8.9
Montreal north/ Nord de Montréal	12.5	29.7	45.7	12.0
Montreal south/ Montréal rive-sud	18.8	32.6	38.9	9.7
Outaouais	15.4	19.9	54.1	11.1
Abitibi-Témiscamingue	25.7	21.5	42.5	10.3
North-Shore/ Côte-Nord	19.2	18.7	52.9	9.2
TOTAL	20.3	27.0	42.4	10.3

Table 51 shows percentages of the employed labour force (R.S.A. residents) and the different place-of-work patterns (urban & rural workers, inside and outside the sub-region workers), and average distances for work. Complete analysis of this table would need several pages, but here are the principal considerations. The range of minimum percentages of R.S.A. residents working in rural areas goes from 60% to 82%; the highest rural-worker percentages are found in the North Shore, Gaspesia, and Quebec subs. The range of minimum percentages of R.S.A. residents working in urban areas goes from 15% to 30%; the highest urban-worker percentages are found in the Eastern Townships, Saguenay and Trois-Rivières subs. The highest percentages of the employed labour force working outside of their county of residence are found in the Outaouais and Montreal subs (20 to 30%).

The average working distance of the urban workers within the same sub-region (outside the county of residence) ranges from 10 to 45 miles. It should be noted that there are two sub-regions with a high percentage of out of sub-region workers: Outaouais, and Montreal North.

2- Farm Activities - The Farm Census reveals that there were 43,097 farms in 1976; there was a higher rate of farm decrease from 1971 to 1976 (-29.6%) than from 1966 to 1971 (-18.7%). Land area equally decreased but less drastically; and this decrease was accompanied by an average farm land area increase. An average of 74.5% of the farms had sales of $5,000 and over in 1976. There is a very low percentage of the highest economic class among the R.S.A. farms: only 2.83% are in the $35,000 and over class. R.S.A. farms are in majority managed by individual farmers.

Table 52 deals with agricultural zoning, farm changes from 1966 to 1976, land area, and farm population. Agricultural zones[1]: cultivated land as a percent of cleared land is a good indicator of the farm land capacity; sub-regions were given an index figure to indicate this percentage, one

[1] See Appendix 4.

Table 51 R.S.A. LABOUR FORCE PLACE OF WORK, BY SUB-REGION (1971)/

Tableau LIEU DE TRAVAIL PAR SOUS-REGIONS RURALES

Sub-regions/ Sous-régions	Labour force living in R.S.A./Main-d'oeuvre résidant dans l'aire d'étude								
	% working in urban area same county/tr. urbain même comte (%)	Aver. dist. for work/Distance moyenne (Mi.)	% urban work, other co. same sub/Tr. urb., autre cté, même région	Aver. dist. for work/Distance moy. (Mi)	% working in other sub-region/Tr. autre sous-region	Aver. dist. for work/ Dist. moy. (Mi)	Min. % work in urban/ Minimum urbain	% work out of res. co./% trav. hors cté de résidence	Min. % working in rural/ Min. trav. rural
Gaspesia/ Gaspésie	14.8	10.6	2.7	44.9	4.7	152.	17.5	7.4	77.8
Saguenay-Lake St. John/Saguenay Lac St-Jean	27.3	7.4	1.8	24.4	4.0	134.	29.1	5.8	66.9
Québec	13.4	6.2	10.9	18.6	2.0	120.	24.3	12.9	73.7
Trois-Rivières	21.7	5.8	6.1	13.0	5.0	53.	27.8	11.1	67.2
Eastern Townships/ Cantons de l'Est	22.2	4.8	7.2	13.3	3.0	92.	29.4	10.2	67.6
Montreal north/ Nord de Montréal	17.5	4.8	3.6	13.1	18.7	28.	21.1	22.3	60.2
Montreal south/ Montréal rive-sud	15.2	5.4	8.6	10.6	12.3	28.	23.8	20.9	63.9
Outaouais	7.7	8.9	8.6	13.4	22.0	23.	16.3	30.6	61.7
Abitibi-Témiscamingue	21.5	11.4	1.9	21.3	7.1	120.	23.4	9.0	69.5
North-Shore/ Côte-Nord	15.4	53.4	---	---	2.2	205.	15.4	2.2	82.4
TOTAL	16.5	7.7	6.6	16.1	8.5	49.	23.1	15.1	68.4

Table 52 FARMS CENSUS[1] CHANGES, LAND AREA AND POPULATION (1966 to 1976), BY SUB-REGION/

Tableau RECENSEMENT AGRICOLE, FERMES, SUPERFICIE ET POPULATION DE 66 à 76, PAR SOUS-REGION.

Sub-regions/ Sous-régions	Agri-cultural zone/ Zone agri-cole[2]	CHANGES 66-76/CHANGEMENTS 66-76						1971 farm popu-lation/ Popula-tion 1971	N. of un-inhabited farms, 1971/Fer-mes in-habitées
		N. of farms % change 66 -71/N. fermes, % changem. 66-71	% change n. of farms 71-76/ % chan-gement 71-76	Tot. n. of farms 76/Nbre de fermes 1976	Tot. land area % change/ Change-ment, su-perficie 66-71	Tot. land area % change 71 -76/% chang. superfi-cie 71-76	Ave. 1976 farm land area/Sup. moy. des fermes, 1976 (acres)		
Gaspesia/ Gaspésie	3	- 32.5	- 40.8	4,184	- 18.9	- 19.5	277	44,419	210
Saguenay-Lake St. John/Saguenay Lac St-Jean	1	- 28.1	- 32.5	1,833	- 16.1	- 17.1	277	18,206	75
Québec	3	- 23.8	- 30.4	9,272	- 17.8	- 17.0	194	75,964	341
Trois-Rivières	3	- 19.0	- 29.9	6,213	- 13.3	- 14.5	188	45,878	249
Eastern Townships/ Cantons de l'Est	2	- 26.6	- 32.0	3,259	- 16.6	- 19.4	271	26,081	134
Montreal central/ Montréal centre	4	- 13.0	- 17.5	383	- 19.9	- 15.0	56	2,266	44
Montreal north/ Nord de Montréal	4	- 17.7	- 24.4	4,202	- 12.5	- 19.7	136	28,335	200
Montreal south/ Montréal rive-sud	5	- 16.2	- 21.2	10,181	- 10.1	- 16.1	160	62,529	594
Outaouais	1	- 26.3	- 34.2	2,098	- 18.1	- 24.1	289	15,677	122
Abitibi-Témiscamingue	1	- 43.2	- 38.0	1,396	- 28.1	- 6.6	399	14,419	52
North-Shore/ Côte-Nord	1	- 19.1	- 36.1	76	- 19.4	- 10.7	372	805	12
TOTAL		- 23.7	- 29.6	43,097	- 16.2	- 17.3	207	334,579	2,033

1 Correspond to S.C. farm census/Recensement agricole de S.C.

2 Figures correspond to the predominant characteristic (See Appendix 4)

being low and five being high percentage of cultivated land.

Poor lands are found in Saguenay, Outaouais, Abitibi, North Shore, and Eastern Townships; a few of these have high quality land in specific counties: Compton in the Eastern Townships, and Hull in Outaouais. The other sub-regions have fairly good lands, and especially Montreal; one county in Trois-Rivières is classified 4.

Farm changes - The striking fact revealed by these figures is that for all sub-regions, the number of farms as well as the land area decreased in both the 1966-1971 and 1971-1976 periods. In all but one (Abitibi) the decrease in the number of farms was greater between 1971 and 1976. The farm land area also decreased to a greater degree between 1971 and 1976, but the difference was not very high, and there are a few exceptions: Montreal Central, North-Shore, and especially Abitibi.

An important fact not explicitly indicated by the figures is that the average farm land area has been increasing: the number of farms have decreased, but they have become bigger. Abitibi and North Shore have a high average farm land area.

The uninhabited farms range from 12 to 594. The farm population is very low in the North Shore sub (805 persons), but high in Quebec and Montreal South, the average number (1971) being 33,500 inhabitants.

Table 53 deals more directly with farm economic activities. Farm values range from $12,000 to $56,000. The poorest subs are Abitibi, North Shore, and Gaspesia. High values are found in Montreal. All the sub-regions have a greater percentage of $5,000 sales in 1976 than in 1971. Inflation accounts for a great part of this increase; but to be noted is that Gaspesia, Abitibi and North Shore have the highest increase: this is probably due to farm consolidation. The highest 1976 percentages of $5,000 plus sales are found in Trois-Rivières and Saguenay. The highest number of cattle is found in Quebec, Montreal South being very near.

Table 53 FARM CENSUS: FARM VALUE, SALES, AND CATTLE BY SUB-REGION/
Tableau VALEUR DES FERMES DE RECENSEMENT, VENTES ET BOVINS

Sub-regions/ Sous-régions	Land & building value (1971)/Valeur des terres et bâtiments (000)	Percent N. of farms with $5,000. sales plus/ % de fermes avec ventes de $5,000 et plus		Tot. no. of cattle/Nombre total de bovins 1971	1971 Ave. land & build value per farm/ Valeur moy. par ferme ($)
		1971	1976		
Gaspesia/ Gaspésie	99,916.	33.5	68.7	191,340.	14,140.
Saguenay-Lake St. John/Saguenay Lac St-Jean	58,977.	53.6	81.1	109,835	21,715.
Québec	232,074.	45.7	74.0	376,904.	17,410.
Trois-Rivières	160,833.	55.0	81.2	266,271.	18,151.
Eastern Townships/ Cantons de l'Est	86,499.	48.9	77.8	170,834.	18,051.
Montreal central/ Montréal centre	25,859.	41.1	60.5	1,974.	55,730.
Montreal north/ Nord de Montréal	168,519.	53.7	74.1	115,865.	30,315.
Montreal south/ Montréal rive-sud	392,080.	59.6	77.8	370,869.	30,370.
Outaouais	67,887.	28.9	52.8	104,021.	21,288.
Abitibi-Témiscamingue	27,397.	31.5	62.2	69,945.	12,171.
North-Shore/ Côte-Nord	1,750.	22.9	56.6	2,915.	14,706.
TOTAL	1,321,792.	48.4	74.5	1,780,773.	21,578.

As indicated in Table 54, though the woodland as such does not give a direct understanding of farm economic activity, it is interesting to note where the most forested areas are. The very existence of wood land does not give proof of its exploitation. Nevertheless the Eastern Townships and Quebec subs declare the highest percentage of wood land.

A relatively high percentage of farms declare work out of farms, and it is interesting to compare these figures with those of Table 51 on the minimum percent of labour force working in rural areas. The figures are somewhat complementary; for example, in the North Shore sub, 82.4% is the minimum for farm workers and the percent out of farm work is 16.1. Only the Gaspesia figures seem to depart from this pattern.

Farms with hired labour range from 22% to 35%, with one exception, North Shore, where only 4.2% of farms declare hired labour.

Farms are generally managed by individuals, a small percentage being incorporated family farms or associations, especially in Saguenay, and Montreal South.

Montreal has the highest percentage of $15,000-plus farm values. Most of the sub-regions have a high percentage of the lowest economic class, especially North Shore, Abitibi, Outaouais, and Gaspesia.

3- Commerce and Industry Activities - There is in Quebec a high number of low job-generating trade activities. Average salary was $4,027 in 1971. Manufacturing activities generate 88,682 jobs with an average salary of $7,173. Salary and added value are relatively high in three sub-regions, North Shore, Saguenay and Outaouais.

Table 55 shows the 1971 trade figures for the R.S.A. by sub-regions. The trade activity is high in Quebec and Montreal South and relatively high in Gaspesia and Montreal North.

Table 54 R.S.A. FARM ACTIVITIES, BY SUB-REGION/

Tableau ACTIVITE DES FERMES, AIRE D'ETUDE, PAR SOUS-REGION

Sub-regions/ Sous-régions	1971 % farms declar. woodland/ % declarant, terre à bois	Labour force/ Main-d'oeu. 1971		Farm management/ Organ. des fermes, 1971			Farm Economic classes, 1971/ Classes économiques (%)			
		% farms declaring hired labour/M. d'oeu. engagée	% declar. out of farm work/ % declar. trav. hors ferme	managed by association/ Gérées par ass. (%)	Inc. family farms/F. familiales inc. (%)	Individ. & other types (%) individus & autre org.	$15,000. & over/ et plus	$7,500 - $14,999	$2,500 - $7,499	$50. - $2,499.
Gaspesia/ Gaspésie	74.7	23.2	32.5	1.19	2.17	96.64	3.6	15.9	36.0	44.5
Saguenay-Lake St. John/Saguenay Lac St-Jean	53.3	31.9	31.9	3.1	3.5	93.4	11.1	24.3	38.7	25.9
Québec	81.4	29.5	28.9	1.4	2.6	96.0	11.7	18.9	35.8	33.6
Trois-Rivières	68.2	34.7	28.3	1.6	2.0	96.4	15.1	24.9	31.9	28.1
Eastern Townships/ Cantons de l'Est	85.4	34.8	37.3	2.1	2.1	95.8	12.2	23.2	30.7	33.9
Montreal north/ Nord de Montréal	43.7	25.3	21.0	1.8	2.5	95.7	18.7	22.1	30.2	29.0
Montreal south/ Montréal rive-sud	50.1	35.1	28.3	3.0	2.8	94.2	23.6	24.1	27.2	25.1
Outaouais	64.9	26.9	37.2	2.5	1.7	95.8	6.1	11.9	32.6	49.4
Abitibi-Témiscamingue	49.3	22.7	35.6	1.1	2.6	96.3	3.3	14.4	32.9	49.4
North-Shore/ Côte-Nord	38.1	4.2	16.1	.84	---	99.16	4.3	4.2	34.7	56.8
TOTAL	65.7	30.4	29.8	2.21	2.75	95.04	13.8	20.9	32.4	32.9

Table 55 R.S.A. TRADE ACTIVITIES, BY SUB-REGION (1971)/
Tableau ACTIVITES COMMERCIALES ET INDUSTRIELLES, PAR SOUS-REGION.

Sub-regions/ Sous-régions	N. of trade activities/N. commerces	Sales/ Ventes (000)	N. owner workers/ N. travailleurs propr.	Tot. employee n./ Nbre d'employés	Aver. salary/ Salaire moyen ($)
Gaspesia/ Gaspésie	1,877	132,436	1,778	1,800	4,296
Saguenay-Lake St. John/Saguenay Lac St-Jean	809	79,550	688	1,580	4,202
Québec	2,747	224,095	2,639	3,168	4,323
Trois-Rivières	1,396	96,588	1,361	1,366	3,876
Eastern Townships/ Cantons de l'Est	787	61,006	731	926	4,134
Montreal north/ Nord de Montréal	1,507	125,450	1,436	1,977	4,052
Montreal south/ Montréal rive-sud	2,062	197,588	1,991	2,684	4,265
Outaouais	954	77,655	920	1,024	4,490
Abitibi-Témiscamingue	626	45,866	279	612	4,055
North-Shore/ Côte-Nord	394	41,483	56	631	4,279
TOTAL	13,159	1,081,717	11,879	15,768	4,027

One can note the proliferation of small businesses with one owner-worker and one or two employees. Saguenay and North Shore businesses have more employees per activity. Salaries are especially low in Trois-Rivières, Montreal North and Abitibi.

Table 56 gives some figures on manufacturing. The number of plants ranges from 47 to 531. The greatest job-generating activities are found in Montreal South, Quebec, and especially Saguenay, where a relatively low number of businesses hire a great number of people. The highest salaries are earned in the North Shore, Saguenay, and Outaouais subs. Those three sub-regions generate a high added value compared to the low number of activities.

4- Income

Income 1970 personal and household incomes are as follow:

	Av. Employment Salary	Av. Household Total Income
Gaspesia	$3,635.	$ 8,453.
Saguenay	$4,245.	$ 8,874.
Québec	$4,204.	$ 8,784.
Trois-Rivières	$4,009.	$ 8,292.
Eastern Townships	$4,160.	$ 8,038.
Montreal North	$4,564.	$ 9,174.
Montreal South	$4,634.	$ 8,426.
Outaouais	$4,863.	$ 8,704.
Abitibi	$4,538.	$ 7,789.
North-Shore	$4,563.	$10,506.
TOTAL	$4,341.	$ 8,704.

The favoured sub-regions appear to be North-Shore, Montreal South and Saguenay. Individual salary income is very low in Gaspesia and Trois-Rivières.

Table 56 R.S.A. MANUFACTURING ACTIVITIES, 1972, BY SUB-REGION/
Tableau ACTIVITES MANUFACTURIERES RURALES PAR SOUS-REGION

Sub-regions/ Sous-régions	N. of activities/ N. d'établissements	N. owner workers/ N. prop. actifs	N. of employees/ N. d'employés	Average salary/ Salaire moyen ($)	Shipment value/Valeurs de livraison (000)	Added value/Valeur ajoutée (000)
Gaspesia/ Gaspésie	254	139	6,194	6,170	203,338	86,754.
Saguenay-Lake St. John/Saguenay Lac St-Jean	149	49	13,555	9,096	553,956	249,237.
Québec	531	245	15,478	6,217	502,315	186,408
Trois-Rivières	274	127	7,012	6,048	266,499	91,698
Eastern Townships/ Cantons de l'Est	200	75	8,050	6,162	277,707	99,206
Montreal north/ Nord de Montréal	286	147	9,623	7,457	463,001	160,644
Montreal south/ Montréal rive-sud	456	180	17,761	6,935	788,609	255,282
Outaouais	94	41	5,118	8,492	180,729	76,138
Abitibi-Témiscamingue	64	20	3,007	6,132	96,056	41,590
North-Shore/ Côte-Nord	47	16	2,884	10,239	137,086	55,870
TOTAL	2,355	1,039	88,682	7,173	3,469,296	1,302,827

B. Ontario

1. Territory Description - Summary

Density - The Ontario R.S.A. total land area is 124,027, 39.8% of which is organized territory; its unorganized territory population accounts for 4.12% of its total 1,838,060 inhabitants. The total rural area (R.S.A.) density is 14.82, that of the organized territory alone is 35.6 persons per square mile. The total number of territory units of the province of Ontario is 750, 4.8% of which are cities or towns; the other units are distributed as follows:

- villages : 18.0
- townships : 70.7
- improvement dist.: 2.7
- unorganized : 1.2
- Indian reserves : 3.1

The percent of communities by size is as follows:

- 1 - 499 : 14.0
- 500 - 999 : 19.7
- 1,000 - 1,499: 15.6
- 1,500 - 1,999: 14.0
- 2,000 - 2,499: 10.5
- 2,500 - 2,999: 4.7
- 3,000 - 3,999: 7.3
- 4,000 - 4,999: 3.7
- 5,000 & over : 10.4

Most of the territory units are townships; about 50% of the townships and villages have populations of 1,500 inhabitants and fewer. The distance

range between the communities for all but one sub-region varies from 6.5 to 11.7, the average distance being 8.1 miles.

2. Sub-Regional Comparisons -As can be seen in Table 56B, the total rural land area ranges from 1,500 square miles to 53,000 among the sub-regions. Only three of these have unorganized territories: Georgian Bay (77.3%), Northeastern and Northwestern Ontario.

The population ranges from 66.8 thousand (Northeastern) to 376.0 thousand (Eastern); the R.S.A. population, as a percent of the total population, is high in Eastern, Lake Ontario, and Georgian Bay (more than 50%); the other sub-regions range from 5.2 to 41%. The big portion of the unorganized territory population is found in Northeastern Ontario (54,305 persons - See Table 57).

The low density sub-regions, if we look only at the organized territories, are Northwestern, Northeastern, Georgian Bay and Lake Ontario (below 30 persons per square mile); the others range from 38 to 94, Central Ontario being the highest. Including the unorganized territories, Northeastern and Northwestern have very low densities of 4.3 and 2.3.

Villages and townships are the most common units of all the sub-regions in the Ontario R.S.A. All but two subs: Central and Niagara (See Table 58) include cities and towns; Georgian Bay and Northeastern having the largest number. There is an average of 13.5 villages per sub, but Central, Northeastern and Northwestern have none or very few. Townships are more numerous and more evenly spread among subs; Eastern has the largest number of townships. The improvement districts are more especially found in Northeastern and Northwestern. Unorganized territories are found in Georgian Bay (1), Northeastern (6 - with 11 non-adjacent territories), Northwestern (2), for a total of 9 (or 14 non-adjacent territories). The Indian reserves are found in all but one sub: Mid-Western. In all, 23 statistical I.R. units; but 36 non-adjacent territories distributed as follows:

Table 56B ONTARIO R.S.A. SUB-REGIONS LAND AREAS/

Tableau SUPERFICIE DES SOUS-REGIONS

Sub-regions/ Sous-régions	R.S.A. tot. land area/ Superficie tot. (sq. mi.)	R.S.A., % of tot. land area/ % de superficie totale	Organized area, as % of total R.S.A. land area/ Territ. org., % rural total
Eastern Ontario/ Ontario Est	9,890.	98.6	100.
Lake Ontario/ Lac Ontario	9,172.	99.3	100.
Central Ontario/ Ontario Centre (Toronto)	1,608.	61.9	100.
Niagara	1,501.	72.8	100.
Lake Erie/ Lac Erié	3,351.	97.2	100.
Lake St. Clair/ Lac St-Clair	2,746.	96.7	100.
Mid-Western Ontario/Ontario centre-ouest	3,581.	96.8	100.
Georgian Bay/ Baie Georgienne	10,172.	92.9	77.3
Northeastern Ontario/Ontario nord-ouest	53,383.	49.7	11.8
Northwestern Ontario/Ontario nord-ouest	28,623.	14.2	11.7
TOTAL	124,027.	35.0	39.8

Table 57 ONTARIO R.S.A., SUB-REGIONS POPULATION AND DENSITY 1971/

Tableau POPULATION ET DENSITE DES SOUS-REGIONS, AIRE D'ETUDE

Sub-regions/ Sous-régions	POPULATION				DENSITY/DENSITE	
	RSA tot. pop./ pop. tot.	RSA pop., % of tot./ % pop. totale	Pop. org. territ., as % of tot. RSA pop./ Terr. org. % pop. rurale	Unorganized territory, tot. pop./ Pop. terr. non-org.	Tot. RSA land area & pop./ Aire rurale totale	RSA org. territ. only/ territ. organisé
Eastern Ontario/ Ontario Est	376,050	58.8	100.	---	38.0	38.0
Lake Ontario/ Lac Ontario	209,520	55.8	100.	---	22.8	22.8
Central Ontario/ Ontario centre (Toronto)	150,355	5.2	100.	---	93.4	93.4
Niagara	130,775	14.8	100.	---	87.1	87.1
Lake Erie/ Lac Erié	164,305	34.0	100.	---	49.0	49.0
Lake St. Clair/ Lac St-Clair	166,555	31.9	100.	---	60.6	60.6
Mid-Western Ontario/Ontario centre-ouest	136,815	28.6	100.	---	38.2	38.2
Georgian Bay/ Baie Georgienne	208,145	56.4	98.1	4,035	20.5	25.9
Northeastern Ontario/Ontario nord-est	228,725	41.4	76.3	54,305	4.3	27.5
Northwestern Ontario/Ontario nord-ouest	66,815	32.0	74.1	17,340	2.3	14.7
TOTAL	1,838,060	23.9	95.9	75,680	14.8	35.67

Table 58 ONTARIO SUB-REGIONS R.S.A. TERRITORY UNITS, BY STATUS (1971)/

Tableau STATUT DES UNITES TERRITORIALES

Sub-regions/ Sous-régions	Cities & towns/ Villes	Villages	Townships/ Cantons	Improvement districts/ Districts en amélioration	Unorganized territories/ Territoires non-organisés	Indian reserves/ Réserves Indiennes	TOTAL
Eastern Ontario/ Ontario Est	2	27	102	---	---	2	133
Lake Ontario/ Lac Ontario	1	23	83	1	---	3	111
Central Ontario/ Ontario Centre (Toronto)	---	2	19	---	---	2	23
Niagara	---	4	24	---	---	2	30
Lake Erie/ Lac Erié	2	18	41	---	---	1	62
Lake St. Clair/ Lac St-Clair	4	14	34	---	---	2	54
Mid-Western Ontario/Ontario centre-ouest	3	13	44	---	---	---	60
Georgian Bay/ Baie Georgienne	9	31	75	---	1	4	120
Northeastern Ontario/Ontario nord-est	13	3	79	7	6	5	113
Nortwestern Ontario/Ontario nord-ouest	2	---	29	9	2	2[1]	44
TOTAL	36	135	530	17	9	23	750

- Eastern	: 2	- Lake St. Clair	: 4
- Lake Ontario	: 4	- Georgian Bay	: 5
- Central	: 3	- Northeastern Ontario	: 8
- Niagara	: 2	- Northwestern Ontario	: 6
- Lake Erie	: 2		

The highest percentage of population (See Table 59) is found in municipalities or towns of 5,000 inhabitants and over, in all but one sub-region, Mid-Western, where the highest proportion is in the 1,500 to 1,999 size group. Incidently, high percentages are found in three size groups, apart from the 5,000 plus: the 1,500-1,999, 2,000-2,499, and 3,000-3,999 groups. There are five subs where the percentage of the smallest (first two groups) communities is high: Eastern (31%); Lake Ontario (38%); Georgian Bay (76%); Northeastern (53%); and Northwestern (47%).

3. Distances by Sub-region

The distances between the communities vary from one sub-region to another; the range is 6.5 to 11.7 miles.

Eastern

- Average distance between communities: 6.9 miles
- Nearest agglomerations: Cornwall, Kingston, Ottawa.
- Distance range to nearest agglomeration: 13 to 65 miles.

Lake Ontario

- Average distance between communities: 8.6 miles.
- Nearest agglomerations: Oshawa, Peterborough, Belleville/Trenton.
- Distance range to nearest agglomeration: 14 to 50 miles.

Central Ontario

- Average distance: 6.9 miles
- Nearest agglomerations: Burlington, Oshawa, Brampton, Toronto, Markham.
- Range to nearest agglomeration: 12 to 20 miles.

Table 59 R.S.A. COMMUNITIES BY SIZE, ONTARIO SUB-REGIONS/

Tableau MUNICIPALITES RURALES SELON LA GROSSEUR, PAR SOUS-REGION DE L'ONTARIO

Sub-regions/ Sous-régions	1-499		500-999		1000-1499		1500-1999		2000-2499		2500-2999		3000-3999		4000-4999		5000 et +	
	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.	N.	% Pop.
Eastern Ontario/ Ontario Est	13	1.1	28	5.5	27	9.0	16	7.3	15	8.9	8	5.8	10	9.2	4	4.7	12	48.5
Lake Ontario/ Lac Ontario	18	2.9	24	8.5	16	9.0	18	14.3	12	12.8	6	8.0	7	10.6	2	4.1	8	29.8
Central Ontario/ Ontario Centre (Toronto)	2	.35	1	.45	4	3.3	1	1.0	--	--	1	1.7	6	14.0	2	6.4	6	72.7
Niagara	1	.35	3	1.9	5	4.9	2	2.5	4	6.8	1	2.2	3	9.0	1	3.4	10	69.0
Lake Erie/ Lac Erié	3	.68	9	4.2	11	8.3	6	6.4	9	12.2	3	5.1	6	12.3	5	13.5	10	37.4
Lake St. Clair/ Lac St-Clair	5	1.0	7	2.8	5	3.7	7	7.8	5	7.0	3	4.8	8	15.8	5	13.7	9	43.8
Mid-Western Ontario/Ontario centre-ouest	--	--	8	4.4	10	9.5	17	21.6	9	14.8	4	8.1	6	15.4	2	6.1	4	20.0
Georgian Bay/ Baie Georgienne	20	3.3	26	9.7	18	10.3	21	17.5	16	17.0	6	8.0	2	3.1	5	10.0	6	21.0
Northeastern Ontario/Ontario nord-est	32	3.5	32	10.2	13	7.0	13	9.9	4	4.0	2	2.5	4	5.5	2	3.9	11	53.5
Northwestern Ontario/Ontario nord-ouest	11	4.3	10	11.2	8	15.5	4	10.7	5	16.7	1	4.0	3	14.4	--	--	2	23.3
TOTAL	105	1.7	148	6.0	117	7.9	105	9.8	79	9.6	35	5.2	55	10.1	28	6.7	78	43.0

Niagara

- Average distance: 6.5 miles
- Nearest agglomerations: Brantford, Hamilton, Niagara.
- Range to nearest agglomeration: 7 to 18 miles.

Lake Erie

- Average distance: 7.6 miles
- Nearest agglomerations: St-Thomas, London, Brantford, Woodstock.
- Range to nearest agglomeration: 10 to 22 miles.

St. Clair

- Average distance: 7.8 miles
- Nearest agglomerations: Windsor, Chatham, Sarnia.
- Range to nearest agglomeration: 16 to 20 miles.

Midwestern Ontario

- Average distance: 7.9 miles
- Nearest agglomerations: Stratford, Kitchener, Guelph.
- Range to nearest agglomeration: 10 to 36 miles.

Georgian Bay

- Average distance: 8.5 miles
- Nearest agglomerations: Kitchener, Guelph, Barrie, North Bay.
- Range to nearest agglomeration: 18 to 75 miles.
- In Parry Sound county there are two groups of communities separated by an unorganized territory.

Northeastern

- Average distance: 9.0 miles
- Nearest agglomerations: Sault Ste-Marie, Timmins, Sudbury and North Bay.
- Range to nearest agglomeration: 20 to 90 miles.
- A certain number of municipalities in every one of the six counties of this sub-region are separated by unorganized territories, but they were included in the distance computations, except for Chapleau in

Sudbury county and a few others where distances involved are too great.

Northwestern

- Average distance: 11.7 miles
- Nearest agglomeration: Thunder Bay
- Range to Thunder Bay: 80 to 215 miles
- A certain number of communities are separated by unorganized territories: in Kenora county, Ear Falls (60 miles from Dryden) was ignored in the computations; in Rainy River Co., Atikokan (80 miles from Fort France) was ignored in the computations.
- In Thunder Bay Co., only the municipalities along Lake Superior were taken for distance computation.

4. Ontario R.S.A. Demography

a. Province Summary

Population - There was an increase trend in rural population from 1966 to 1976. A major exception was Central Ontario. Though the Ontario population is fairly young, a certain number of sub-regions show a higher percentage of 45-year-olds and over. English is spoken by 81.7% (1971), French and other languages by 18.3% of the population. A good number of ethnic groups are fairly well represented, especially Europeans.

Households - Eastern has the biggest proportion of households. The average number of persons per household is 3.66; and all subs have less than 4. Both square mile and linear densities correlate in most cases. Only a few subs have a relatively high density.

Over 50% of the household heads are more than 45 years old. Central Ontario and Northeastern have more young household heads.

Families in Ontario have an average of 1.79 children; and the North-Eastern sub-region has an average of 2.03. Due to inconsistant data on education of R.S.A. family heads, replacement figures were compiled for the total area population schooling. The Ontario population has reached at least the 9-13 grade level in the proportion of 66%. Central

and Eastern Ontario have a high percentage of university level.

b. Sub-regional Comparisons

1- Farming Intensity

Tables 60 and 61 show the rural farm, non-farm population figures and the changes that took place from 1966 to 1976. Figure 32 gives the 1976 R.S.A. population by census division.

The largest rural populations are found in Eastern, Lake Ontario, Georgian Bay and Northeastern Ontario. Five sub-regions have a non-farm proportion higher than the province average (80%): Eastern, Central, Niagara, Northeastern and Northwestern Ontario.

Farming proportions are higher in Lake Erie and Midwestern Ontario.

The rural population, from 1966 to 1976, was generally increasing, and the increase rate was higher from 1971 to 1976 than from 1966 to 1971. This general trend is not followed though by Eastern, Central, Lake Erie and Lake St. Clair sub-regions (See Table 61); but only Central Ontario has a high rural decrease, and this can be explained by the Toronto Metropolitan urban development. Non-farm population shows a positive change in all sub-regions from 1966 to 1971, except Niagara, Northeastern and Northwestern, and in those cases, the farm decrease is much greater than the non-farm.

In summary, the rural dropping curve seems to stabilize and in many cases to take an upward direction.

2- Population Characteristics

Age groups - One noticeable characteristic of the age groups is that the northern sub-region population is younger: see Northeastern and Northwestern, on Table 62. The oldest population is found in Georgian Bay, Lake Ontario, and Lake Erie.

Mother tongue and ethnic groups (See Table 63) - The English mother tongue is predominant in all subs, but is especially low in Northeastern (54.7%). French is high in Eastern and Northeastern. The other groups are well represented in Niagara, Lake Erie, Mid-Western and Northwestern.

Figure 32

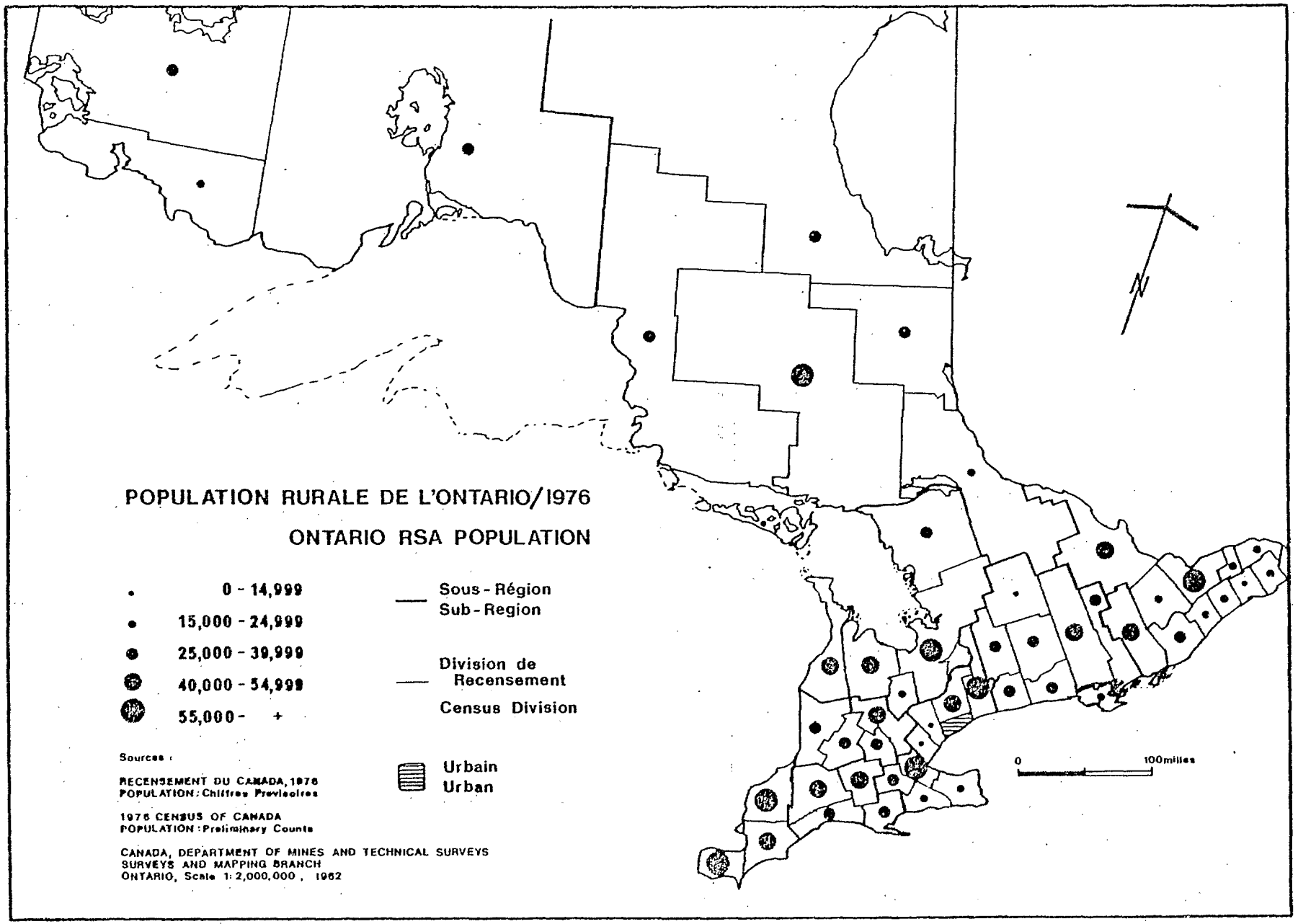

POPULATION RURALE DE L'ONTARIO/1976
ONTARIO RSA POPULATION
0 - 14,999
15,000 - 24,999
25,000 - 39,999
40,000 - 54,999
55,000 - +
Sous-Région
Sub-Region
Division de Recensement
Census Division
Urbain
Urban
Sources :
RECENSEMENT DU CANADA, 1976
POPULATION : Chiffres Provisoires
1976 CENSUS OF CANADA
POPULATION : Preliminary Counts
CANADA, DEPARTMENT OF MINES AND TECHNICAL SURVEYS
SURVEYS AND MAPPING BRANCH
ONTARIO, Scale 1: 2,000,000 , 1962
0
100 miles

Table 60 ONTARIO AGRICULTURAL INTENSITY, BY SUB-REGION (RSA)/

Tableau INTENSITE AGRICOLE PAR SOUS-REGION RURALE

Sub-regions/ Sous-régions	RSA tot. pop./ Pop. rurale totale (000)		Tot. farm pop./Pop. agr. (000)		Total non-farm/ Pop. non agricole (000)		Non-farm % of rural tot./ Non-agr. % rur.	
	1966	1971	1966	1971	1966	1971	1966	1971
Eastern Ontario/ Ontario Est	318	376	81	61	238	315	74.7	83.9
Lake Ontario/ Lac Ontario	192	209	54	42	137	167	71.6	79.8
Central Ontario/ Ontario centre (Toronto)	142	150	34	18	108	132	75.9	87.9
Niagara	167	131	46	26	121	105	72.6	80.3
Lake Erie/ Lac Erié	154	164	62	52	92	112	59.6	68.3
Lake St. Clair/ Lac St-Clair	151	167	53	44	98	123	65.0	73.7
Mid-Western Ontario/Ontario centre-ouest	132	137	63	54	69	83	52.0	60.3
Georgian Bay/ Baie Georgienne	202	208	65	52	137	156	67.6	74.9
Northeastern Ontario/Ontario nord-est	239	229	23	13	216	216	90.4	94.4
Northwestern Ontario/Ontario nord-ouest	93	67	7	4	86	63	92.0	93.5
TOTAL	1,790	1,838	488	366	1,302	1,472	72.7	80.0

Table 61/R.S.A. POPULATION CHANGE, 1966-76, BY SUB-REGION/

Tableau EVOLUTION DE LA POPULATION RURALE 1966-76

Sub-regions/ Sous-régions	% rural change 66-71/ Evolution rurale	% change, farm, 1966-71/ Evolution agricole	% change non-farm 66-71/ Evolution non-agricole	% rural change 71-76/ changement rural
Eastern Ontario/ Ontario Est	15.4	- 24.6	24.7	14.6
Lake Ontario/ Lac Ontario	8.6	- 22.2	18.0	13.3
Central Ontario/ Ontario Centre (Toronto)	5.1	- 47.3	18.1	- 24.0
Niagara	- 21.7	- 43.6	- 13.5	0.8
Lake Erie/ Lac Erié	6.5	- 16.1	18.3	1.9
Lake St. Clair/ Lac St-Clair	9.7	- 16.8	20.3	6.4
Mid-Western Ontario/Ontario centre-ouest	3.4	- 14.5	16.7	10.0
Georgian Bay/ Baie Georgienne	2.8	- 20.3	12.3	14.9
Northeastern Ontario/Ontario nord-est	- 4.3	- 43.9	- 0.2	- 2.1
Northwestern Ontario/Ontario nord-ouest	- 28.2	- 41.6	- 27.1	6.3
TOTAL	2.6	- 25.1	13.1	6.4

Table 62 R.S.A. AGE GROUPS, BY SUB-REGION/

Tableau GROUPES D'AGE PAR SOUS-REGIONS RURALES, 1971

Sub-regions/ Sous-régions	% 0 - 19	% 20 - 44	% 45 - 64	% 65 & +
Eastern Ontario/ Ontario Est	42.8	32.7	17.2	7.3
Lake Ontario/ Lac Ontario	40.3	29.7	20.3	9.7
Central Ontario/ Ontario Centre (Toronto)	43.3	33.2	16.6	6.9
Niagara	43.0	30.7	19.3	6.9
Lake Erie/ Lac Erié	40.6	29.6	19.8	9.9
Lake St. Clair/ Lac St-Clair	42.6	30.6	18.2	8.6
Mid-Western Ontario/Ontario centre-ouest	42.9	28.7	18.8	9.7
Georgian Bay/ Baie Georgienne	40.0	28.2	20.5	11.3
Northeastern Ontario/Ontario nord-est	47.3	31.0	15.8	5.9
Northwestern Ontario/Ontario nord-ouest	46.5	31.2	17.0	5.4
TOTAL	42.7	30.7	18.3	8.3

Table 63 ONTARIO R.S.A. MOTHER TONGUE & ETHNIC GROUPS, BY SUB-REGIONS/

Tableau LANGUES ET GROUPES ETHNIQUES, PAR SOUS-REGIONS RURALES

Sub-regions/ Sous-régions	Mother tongue (%) Langue maternelle			Ethnic groups (%)/ Groupes ethniques						
	English/ Anglais	French/ Français	Other/ Autre	British Britannique	French/ Français	German & Austrian/ All. & Autriche	Eastern European /Europe de l'Est	Native indians/ Ind. autochtones	Scandinavian/ Scandinaves	Other/ Autre
Eastern Ontario/ Ontario Est	79.0	15.6	5.4	62.7	20.3	5.8	2.9	0.43	4.1	3.77
Lake Ontario/ Lac Ontario	94.9	1.0	4.1	81.0	4.1	4.1	1.7	1.1	5.3	2.7
Central Ontario/ Ontario Centre (Toronto)	89.6	1.3	9.1	75.4	3.3	6.5	2.9	0.52	5.4	5.98
Niagara	86.2	1.0	12.8	62.6	2.9	9.0	5.5	3.5	10.1	6.4
Lake Erie/ Lac Erië	85.3	0.89	13.81	66.1	2.7	9.3	5.0	1.1	9.1	6.7
Lake St. Clair/ Lac St-Clair	82.0	7.4	10.6	58.8	15.4	6.4	3.3	1.8	6.2	8.1
Mid-Western Ontario/Ontario centre-ouest	86.3	0.6	13.1	59.9	2.8	25.6	1.4	0.14	7.5	2.66
Georgian Bay/ Baie Georgienne	91.2	2.8	6.0	74.9	6.0	9.3	1.8	1.3	3.9	2.8
Northeastern Ontario/Ontario nord-est	54.7	35.4	9.9	38.9	40.9	3.5	3.4	4.6	1.8	6.9
Northwestern Ontario/Ontario nord-ouest	73.5	6.7	19.8	42.5	13.1	7.4	9.4	9.9	8.3	9.4
TOTAL	81.7	9.2	9.1	63.3	13.2	7.9	3.2	1.9	5.5	5.0

The highest percentage by ethnic groups are as follows:

- British in Lake Ontario; French in Mid-Western; Eastern European in Northwestern; Native Indians in Northwestern; Scandinavian in Niagara.

Households - Table 64 on households gives their distribution among the sub-regions, the average number of persons per household and densities. The highest percentage of households is found in Eastern Ontario. The households are more densely distributed in Central, Niagara, and Lake St. Clair subs.

Linear and square mile densities have a fairly good correspondence: the highest and the lowest linear densities correspond to the highest and lowest square miles densities. Generally, the linear density is higher than the square mile density; two subs have the reverse situation: Lake Erie and Mid-Western; no explanation can be given except that they are both fairly small subs (around 3,000 square miles), both having a relatively high number of communities (around 60).

Figure 33 gives the result of a correlation test made between square mile and linear household densities. All the counties are represented and the number corresponds to the sub-region:

1:	Eastern	5:	Lake Erie	9:	Northeastern
2:	Lake Ontario	6:	St. Clair	10:	Northwestern
3:	Central	7:	Mid-Western		
4:	Niagara	8:	Georgian Bay		

The correlation between the 53 observations, each representing a county of Ontario, is of 0.570, with a level of significance of 0.00001.

Graph 33 shows a wide ascending band, with a few distant observations from the straight estimation line; these points represent the counties of Ottawa-Carleton, Ontario and Wentworth, which respectively have 36.2, 20.2, and 44.9 as per-square-mile densities, and 15.26, 43.05, and 28.55 for their household linear densities.

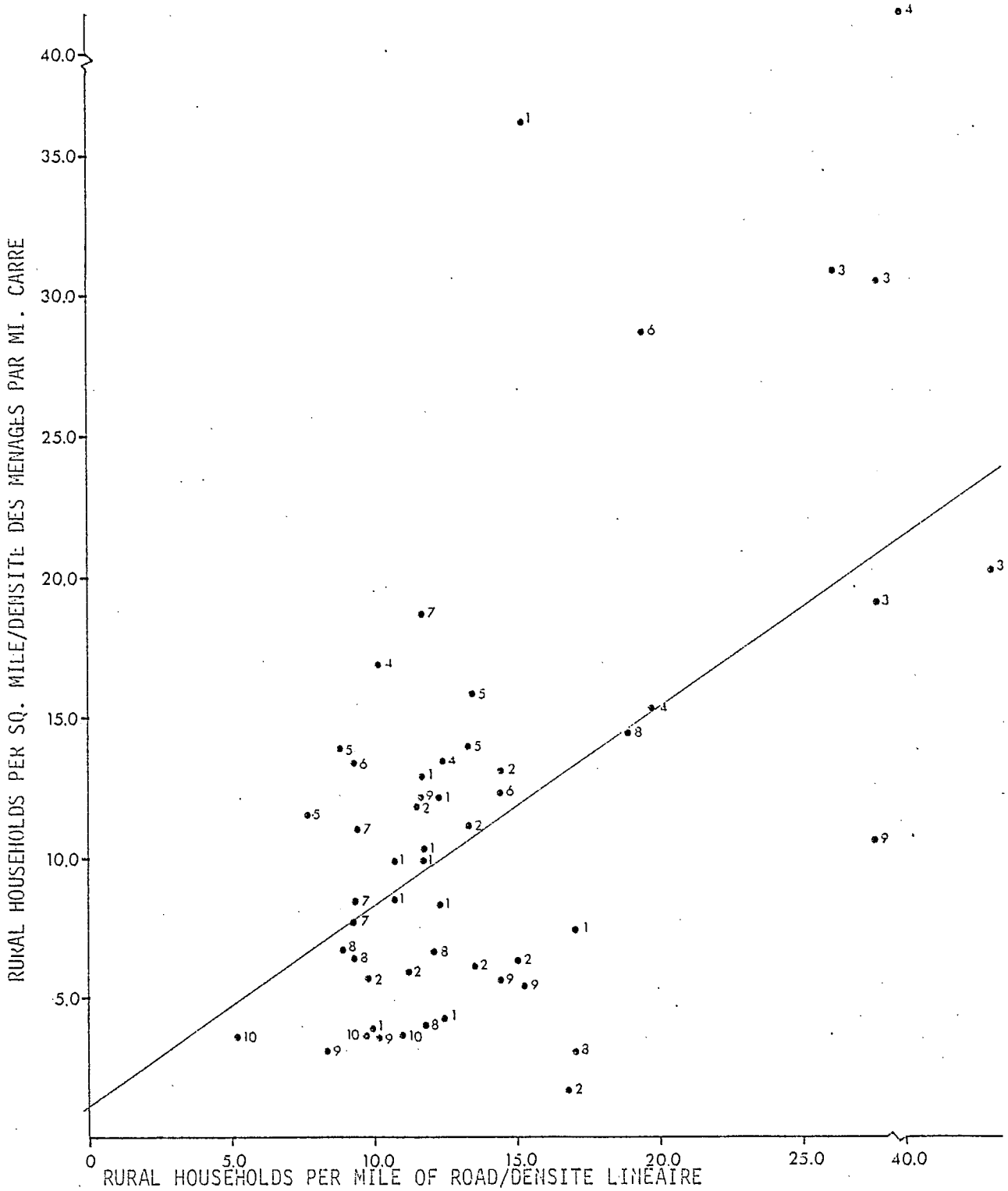
Table 64 R.S.A. HOUSEHOLDS BY SUB-REGION/

Tableau MENAGES PAR SOUS-REGION - 1971

Sub-regions/ Sous-régions	Households % of Ont. total/% de ménages	Aver. n. of pers. per household/ N. moyen de personnes	Density per sq. mi./ Densité au mi. car.	Linear[1] density/ Densité linéaire	Org. territ. density sq. mi./ Densité, territoire organisé
Eastern Ontario/ Ontario Est	19.9	3.74	9.9	12.35	9.9
Lake Ontario/ Lac Ontario	12.0	3.48	6.4	13.22	6.4
Central Ontario/ Ontario Centre (Toronto)	8.0	3.74	24.5	31.1	24.5
Niagara	7.0	3.78	22.8	17.73	22.8
Lake Erie/ Lac Erié	9.1	3.55	13.4	10.81	13.4
Lake St. Clair/ Lac St-Clair	9.3	3.58	16.7	14.40	16.7
Mid-Western Ontario/Ontario centre-ouest	7.4	3.68	10.2	9.6	10.2
Georgian Bay/ Baie Georgienne	12.2	3.41	5.9	12.99	7.4
Northeastern Ontario/Ontario nord-est	11.5	3.93	1.1	14.56	6.8
Northwestern Ontario/Ontario nord-ouest	3.5	3.78	0.6	8.68	3.6
TOTAL	---	3.66	3.9	14.58	9.5

[1] Compiled from Hydro-Ontario subscribers and miles of installed wires data/ Compilé à partir des données d'abonnés à l'Hydro-Ontario et de milles de lignes installées.

Figure 33



RURAL POPULATION DENSITY CHARACTERISTICS/ONTARIO.
CARACTERISTIQUES DE LA DENSITE DE LA POPULATION RURALE/ONTARIO

Here again one can doubt the linear relation between the two variables, for the straight line does not seem to represent the totality of the observations; it implies that an increase of 10 households per mile leads to an increase of 7.4 households per square mile, which is not necessarily the case.

The average number of persons per household is high (3.93) in Northeastern, and low (3.41) in Georgian Bay.

Table 65 gives information on househead age groups. The highest percentages of older households are found in Lake Ontario, Lake Erie, Mid-Western, and Georgian Bay. There are more young household heads in Central and Northeastern. There are only 45.65% household heads in Ontario under 45 years old.

As indicated in Table 66, the number of families ranges from 15 to 88 thousand among the sub-regions. The average number of children per family in Ontario is 1.79. Northeastern has 2.03, and this in the sub-region where the French population is highest. The lowest average number of children is found in Georgian Bay and Lake Ontario.

Education level is high in Ontario, 64.8% of the population having grade nine or higher. The low-level-of-schooling subs are Georgian Bay, Northeastern, and Northwestern.

5. Ontario R.S.A. Housing Characteristics

a. Province Summary

Occupation and Persons -

An average of 90.8% of dwellings shelter one person or less per room. 40% of the dwellings have been occupied for more than 10 years, and 75% were built before 1961; 20.9% dwellings are rented and the 1971 rent averaged $87.90 for Ontario.

Related Commodities -

7.5% of Ontario dwellings have no running water, which is a high percentage. A low percentage of dwellings have a dish-washer: 8.2%. 95% have T.V. sets; and 8% had both Black & White and Colour sets in 1971.

Table 65 R.S.A. HOUSEHOLD HEADS AGE GROUPS BY SUB-REGION/

Tableau AGE DES CHEFS DE MENAGES, SOUS-REGIONS RURALES

Sub-regions/ Sous-régions	(%) Under 20/ 20 ans -	(%) 20 - 44	(%) 45 - 64	(%) 65 & -
Eastern Ontario/ Ontario Est	0.2	49.7	34.6	15.5
Lake Ontario/ Lac Ontario	0.2	39.6	38.0	22.2
Central Ontario/ Ontario Centre (Toronto)	1.8	53.2	33.0	13.0
Niagara	0.1	45.0	39.5	15.4
Lake Erie/ Lac Erié	0.3	41.9	37.5	20.3
Lake St. Clair/ Lac St-Clair	0.3	44.8	35.4	19.5
Mid-Western Ontario/Ontario centre-ouest	0.3	41.8	37.2	20.7
Georgian Bay/ Baie Georgienne	0.3	38.1	37.3	24.3
Northeastern Ontario/Ontario nord-est	0.4	51.6	34.4	13.6
Northwestern Ontario/Ontario nord-ouest	0.5	49.5	36.4	13.6
TOTAL	0.25	45.4	36.13	18.22

Table 66 R.S.A. FAMILIES, AND TOTAL AREA POPULATION SCHOOLING (1971)

Tableau FAMILLES RURALES ET SCOLARITE DE LA POPULATION DES SOUS-REGIONS ENTIERES (1971)

Sub-regions/ Sous-régions	Families/ Familles		Population[1] schooling, 5 years and over presently not studying full time/ Scolarité, population(1) 5 ans et plus ne fréquentant plus l'école à plein temps		
	Total no./ Nbre tot.	Aver. no. of children/ N. moy. d'enf.	(%) Under grade 9/ - de 9	(%) 9 - 13	(%) University/ Université
Eastern Ontario/ Ontario Est	88,000	1.83	32.2	54.7	13.1
Lake Ontario/ Lac Ontario	51,485	1.65	37.2	56.5	6.2
Central Ontario/ Ontario Centre (Toronto)	36,520	1.78	31.5	56.5	12.0
Niagara	31,715	1.81	37.5	55.3	7.2
Lake Erie/ Lac Erié	39,455	1.71	34.8	57.0	8.2
Lake St. Clair/ Lac St-Clair	40,440	1.74	37.6	54.4	8.0
Mid-Western Ontario/Ontario centre-ouest	31,940	1.82	38.8	53.6	7.9
Georgian Bay/ Baie Georgienne	50,890	1.63	41.6	52.7	5.7
Northeastern Ontario/Ontario nord-est	50,485	2.03	43.7	49.9	6.4
Northwestern Ontario/Ontario nord-ouest	15,060	1.94	43.3	49.8	6.9
TOTAL	435,990	1.79	35.2	55.06	9.74

[illegible]

Secondary houses are not very common in Ontario, only 5.0% of the total dwellings; the percentage of car ownership is high (23.4%); Niagara and Central have 31.6%.

b. Sub-Regional Comparisons

Table 67 gives the main figures on occupation and related variables. The total number of dwellings ranges from 17,000 to 98,000, and the average percentage of owned dwellings ranges from 70 to 84%. The number of persons per room ranges from 80 to 94% for dwellings having one or fewer persons per room, which is indeed a high ratio. Northeastern and Northwestern both have around 20% of their population living in dwellings of more than 1.1 person per room.

The ten years plus length of occupation is found in a higher percentage in Mid-Western, Lake St. Clair, and Lake Erie. Central has a low percentage (29.2%) of 10 years-and-over dwelling occupation. The average number of dwellings constructed before 1961 ranges from 60 to 84%; old dwellings are found in Mid-Western and Lake Erie, newer are found mostly in Central and Eastern.

The monthly rent (1971) ranges from $67.98 (Northwestern) to $119.25 (Eastern).

As Table 68 indicates, a high percentage of dwellings without running water is found in Ontario, more specifically in Northwestern (18.1) and Lake Ontario (11.7).

The percent of dishwashers ranges from 4 to 13; Eastern has the highest.

Dwellings with television range from 91% to 97%: Central, St. Clair and Eastern being first; Northwestern has the lowest percentage. Two subs have a high number of BW & Colour sets: Central (12.2%), and Niagara (10.9%). The lows are found in Northwestern, Georgian Bay and Lake Ontario.

Table 67 R.S.A. HOUSING (OCCUPATION, CONSTRUCTION PERIOD AND RENT) BY SUB-REGION, 1971/

Tableau HABITATION ET LOGEMENT (OCCUPATION, LOYER) PAR SOUS-REGIONS RURALES, 1971

Sub-regions/ Sous-régions	Tot. no. dwellings/ N. de logements	N. pers. per room/ N. pers. par pièce (%) 1.0 & less/Et moins	(%) 1.1 & over/Et plus	Occupation % dwel. owned/% loy. poss.	% 10 yrs + occ./ % 10 ans +	% const. before 61/ % const. av. 1961	$ rent, non-farm dwell./ $ loy. non-agr.
Eastern Ontario/ Ontario Est	97,550	91.7	8.3	76.8	36.6	66.0	119.25
Lake Ontario/ Lac Ontario	59,000	92.1	7.9	81.3	43.0	79.1	80.91
Central Ontario/ Ontario Centre (Toronto)	39,475	93.4	6.6	83.4	29.2	60.2	113.59
Niagara	34,255	92.6	7.4	84.1	42.6	78.9	94.69
Lake Erie/ Lac Erié	44,895	94.2	5.8	79.6	45.6	83.4	75.45
Lake St. Clair/ Lac St-Clair	45,860	93.0	7.0	81.1	45.8	80.4	85.05
Mid-Western Ontario/Ontario centre-ouest	36,525	93.7	6.3	82.4	48.6	84.4	78.47
Georgian Bay/ Baie Georgienne	59,830	92.1	7.9	81.3	42.3	78.9	84.98
Northeastern Ontario/Ontario nord-est	56,685	80.1	19.9	70.6	35.3	76.0	78.63
Northwestern Ontario/Ontario nord-ouest	17,065	81.5	18.5	71.6	35.4	75.9	67.98
TOTAL	491,140	90.8	9.2	79.1	40.3	75.4	87.90

Table 68 R.S.A. HOUSING COMMODITIES, BY SUB-REGION, 1971/

Tableau COMMODITES ET APPAREILS PAR SOUS-REGIONS RURALES, 1971

Sub-regions/ Sous-régions	% no. runn. water/ sans eau courante	% dish washer/ % lave-vaiselle	TELEVISION (%)		% dwell. with 1 sec. house/1 maison sec.	% with 2 cars/% avec 2 autos
			BW + colour/ NB + couleur	With T.V./ Avec T.V.		
Eastern Ontario/ Ontario Est	8.9	12.9	9.9	96.6	6.4	24.0
Lake Ontario/ Lac Ontario	11.7	5.7	5.6	95.5	5.8	22.6
Central Ontario/ Ontario centre (Toronto)	3.5	9.5	12.2	97.3	6.4	31.6
Niagara	5.9	7.1	10.9	96.3	4.1	31.6
Lake Erie/ Lac Erié	4.8	8.8	7.8	95.9	2.6	26.1
Lake St. Clair/ Lac St-Clair	3.6	7.1	9.3	96.9	2.3	25.4
Mid-Western Ontario/Ontario centre-ouest	3.7	6.0	6.0	91.4	3.2	22.6
Georgian Bay/ Baie Georgienne	7.0	5.5	5.8	95.3	4.7	20.6
Northeastern Ontario/Ontario nord-est	9.4	8.2	6.5	93.2	6.8	14.6
Northwestern Ontario/Ontario nord-ouest	18.1	3.9	5.0	91.1	5.7	16.9
TOTAL	7.5	8.2	8.0	95.4	5.0	23.4

The percentage of dwellings with one secondary house ranges from 2.3 to 6.8%; those having 2 cars range from 14.6 to 31.6. The most central subs have a higher percentage of two-car ownership.

6. Ontario R.S.A. Socio-Economic Characteristics

a. Province Summary

Labour Force and Income -

An average of 59% of the 15-year-old plus population constitutes the labour force of Ontario, which is a fairly high proportion. The average rate of unemployment is low: 5.4%.

Resource industry hires an average 18.8% of the labour force, manufacturing 24.8%, and services 46.8%. A certain percentage (0.9 to 2.1%) of the northern as well as east and south subs travel very long distances for work (from an average of 124 to 253 miles).

Income was low in 1971, especially in Georgian Bay; average employment salary was $5,136 for the total province; household income average was $8,961.

b. Sub-Regional Comparisons

1- Labour Force

The labour force activity rate (See Table 69) ranges from 54% of the 15-year-old and over population to 63%. High activity is found in Mid-Western, Central, low in Northeastern and Lake Ontario. Employment rate was low in 1971, the highest rate being found in Northeastern; there were only 3.1% unemployed in Mid-Western.

Three-quarters or more of the labour force are salaried workers, except in Niagara, Mid-Western, and Georgian Bay. There were 19 and 20% independent workers in Lake Erie and Mid-Western. Unpaid family workers are mostly found in Mid-Western, Georgian Bay and Lake Erie.

As indicated in Table 70, the sub-regions of low resource industry labour force are Central, Eastern, Lake Ontario, and Niagara; Lake Erie and Mid-Western are high. Manufacturing predominates in Niagara, Central and Lake St. Clair. Services are high in Eastern, Central and Georgian Bay.

Table 69 ONTARIO R.S.A. LABOUR FORCE, BY SUB-REGION, 1971/

Tableau POPULATION ACTIVE, PAR SOUS-REGIONS RURALES

Sub-regions/ Sous-régions	LABOUR FORCE ACTIVITY/ ACTIVITE DE LA MAIN-D'OEUVRE			LABOUR FORCE STATUS/ STATUT DE LA MAIN-D'OEUVRE		
	Tot. labour force/main-d'oeuvre tot.	Activity rate/taux d'activité	% unemployed/ % chômeurs	% salaried workers/% salariés	% independant workers/% trav. ind.	% family unpaid workers/ trav. fam. non rémun.
Eastern Ontario/ Ontario Est	149,015	59.5	5.2	81.8	10.5	7.7
Lake Ontario/ Lac Ontario	82,805	56.7	6.5	77.3	13.8	8.9
Central Ontario/ Ontario Centre (Toronto)	61,160	61.8	5.3	84.1	9.8	6.1
Niagara	53,730	61.0	5.0	80.9	11.2	7.9
Lake Erie/ Lac Erié	69,480	61.3	3.9	71.3	19.2	9.5
Lake St. Clair/ Lac St-Clair	66,670	59.1	5.6	76.8	15.3	7.9
Mid-Western Ontario/Ontario centre-ouest	59,015	63.8	3.1	67.8	20.6	11.6
Georgian Bay/ Baie Georgienne	84,780	58.3	5.5	73.1	17.2	9.7
Northeastern Ontario/Ontario nord-est	78,550	54.2	8.0	87.1	6.2	6.7
Northwestern Ontario/Ontario nord-ouest	25,845	60.0	6.0	87.1	7.5	5.4
TOTAL	731,050	59.6	5.4	79.63	13.34	7.03

Table 70 ONTARIO R.S.A. LABOUR FORCE BY INDUSTRY, BY SUB-REGION, 1971/

Tableau MAIN-D'OEUVRE PAR INDUSTRIE, PAR SOUS-REGIONS RURALES

Sub-regions/ Sous-régions	Labour % in resource ind./primaire	% manufacturing & construction/ secondaire	Labour % in services tertiaire	Unspecified/ indéterminé
Eastern Ontario/ Ontario Est	12.0	19.6	59.4	9.0
Lake Ontario/ Lac Ontario	14.5	29.2	46.8	9.5
Central Ontario/ Ontario centre (Toronto)	10.2	32.7	48.5	8.6
Niagara	15.2	34.2	41.3	9.3
Lake Erie/ Lac Erié	32.2	17.1	37.6	13.1
Lake St. Clair/ Lac St-Clair	19.8	31.4	41.3	7.5
Mid-Western Ontario/Ontario centre-ouest	29.0	27.6	36.5	6.9
Georgian Bay/ Baie Georgienne	18.7	24.8	47.2	6.3
Northeastern Ontario/Ontario centre-ouest	24.5	18.1	45.5	11.9
Northwestern Ontario/Ontario nord-ouest	22.8	20.8	46.6	9.8
TOTAL	19.22	25.3	47.73	7.75

Table 71 shows percentages of the employed labour force (R.S.A. residents) and the different place-of-work patterns (urban & rural workers, inside and outside the sub-region workers), and average distances for work. Complete analysis of this table would need several pages, but here are the principal considerations. The range of minimum percentages of R.S.A. residents working in rural areas goes from 40% to 77%; the highest percentages of rural workers are found in Northwestern and Northeastern. The range of minimum percentages of R.S.A. residents working in urban areas goes from 20% to 56%; the highest urban-worker percentages are found in Central, Eastern and Lake St. Clair. The highest percentages of the employed labour force working outside of their county of residence are found in Central (36.1%), and Lake Ontario (19.0%).

The average working distance of the urban workers within the same sub-region (outside the county of residence) ranges from 11.3 to 24 miles, Northeastern and Northwestern being exceptions to the rule, workers there traveling respectively 80 and 142 miles. It should be noted that there are three sub-regions with a high percentage of out-of-sub-region workers: Lake Ontario (11.5%), Georgian Bay (8.1%), and Niagara (7.3%).

2- Farm Activities - The Farm Census reveals that there were 76,938 farms in 1976; there was a higher rate of farm decrease from 1971 to 76 (-18.7%) than from 1966 to 71 (-13.8%). There was also a land area decrease in all subs: -18.1% on the average from 1966 to 1976.

The average land area per farm was 192 acres in 1976. The farm population in 1971 was on the average 39,172 per sub. There was an average of 571 uninhabited farms per sub-region in 1971. Buildings and land value were $54,722 per sub. An average of 72.2% of the farms had sales of $5,000 and over in 1976.

In Ontario, more than 25% of R.S.A. farms are of the highest economic class ($15,000 and over); Northeastern sub has 53.4% of the lowest economic class. Non-operating farms constitute 39%. Farm management is highly individual with Lake Erie having 10.9% managed in association.

Table 71 ONTARIO R.S.A. LABOUR FORCE PLACE OF WORK, BY SUB-REGION (1971)/

Tableau LIEU DE TRAVAIL PAR SOUS-REGIONS RURALES

Sub-regions/ Sous-régions	Labour force living in R.S.A./Main-d'oeuvre résidant dans l'aire d'étude								
	% working in urban area same county/Tr. urbain même comte (%)	Aver. dist. for work/Distance moyenne (Mi.)	% urban work, other co. same sub/Tr. urb., autre cté, même région	Aver. dist. for work/Distance moy. (Mi)	% working in other sub-region/Tr. autre sous-région	Aver. dist. for work/ Dist. moy. (Mi)	Min. % work in urban/ Minimum urbain	% work out of res. co./% trav. hors cté de résidence	Min. % working in rural/ Min. trav. rural
Eastern Ontario/ Ontario Est	45.2	7.3	5.4	23.6	1.7	124.7	50.6	7.1	47.7
Lake Ontario/ Lac Ontario	24.2	7.4	7.5	11.3	11.5	33.3	31.7	19.0	56.8
Central Ontario/ Ontario Centre (Toronto)	23.7	8.9	32.8	18.9	3.3	32.7	56.5	36.1	40.2
Niagara	42.2	6.9	5.6	17.2	7.3	22.6	47.8	12.9	44.9
Lake Erie/ Lac Erié	31.4	7.4	4.4	14.8	3.2	46.0	35.8	7.6	61.0
Lake St. Clair/ Lac St-Clair	46.9	8.9	2.4	18.0	1.1	134.	49.3	3.5	49.6
Mid-Western Ontario/Ontario centre-ouest	28.9	6.7	3.6	16.9	4.1	44.	32.5	7.7	63.4
Georgian Bay/ Baie Georgienne	24.1	7.5	2.5	17.6	8.1	51.	26.6	10.6	65.3
Northeastern Ontario/Ontario nord-est	27.7	11.6	1.2	80.6	0.9	253.	28.9	2.1	70.2
Northwestern Ontario/Ontario nord-ouest	20.1	13.3	0.5	142.	2.1	125.	20.6	2.6	77.3
TOTAL	33.1	8.1	6.5	19.7	4.3	53.8	39.6	10.8	56.1

Table 72 deals with agricultural zoning, farm changes from 1966 to 1976, land area and farm population.

Agricultural Zones (See Appendix 4)

Farm land capacity is medium to high in Ontario subs, but in Georgian Bay, Northwestern and Northeastern is fairly poor; a few counties in these subs are better though: Simcoe and Timiskaming (classed 4), and Thunder Bay (classed 3). Eastern has about 50% of its counties in class 3. The other subs have good to excellent land capacities; St. Clair has the highest rate with Niagara.

Farm Changes

Farm number decrease is noticeable in Ontario from 1966 to 1976; the range of change goes from -21% to -54%. The decrease rate from 1971 to 1976 is higher in all subs, as compared to 1966 to 1971. The greatest changes happened in Northern subs, in Central and Eastern Ontario. Land area decrease was much slower from 1971 to 1976 than during the first five years of the 1966-76 decade.

The average farm land area is high in Northern subs, in Eastern, Lake Ontario and Georgian Bay. The more populated subs, so far as farms are concerned, are Mid-Western, Georgian Bay, Lake Erie, and especially Eastern Ontario. The number of uninhabited farms ranges from 42 to 922.

Table 73 deals more directly with farm economic activities. Farm values range from $24,000 to $115,000, with the lowest values being found in Northern and Eastern subs. Central high can be explained by the proximity of Toronto.

Sales of $5,000 and over range from 50% to 85% among the sub-regions. The highest sales are found in Lake Erie, Lake St. Clair and Mid-Western.

The average number of cattle heads per sub is 308,202; Eastern, Mid-Western and Georgian Bay subs raise the highest number of cattle.

Table 72 FARMS CENSUS[1] CHANGES, LAND AREA AND POPULATION (1966 to 1976), BY SUB-REGION/

Tableau RECENSEMENT AGRICOLE, FERMES, SUPERFICIE ET POPULATION DE 66 à 76, PAR SOUS-REGION.

Sub-regions/ Sous-régions	Agri-cultural zone/ Zone agri-cole[3]	CHANGES 66-76/CHANGEMENTS 66-76						1971 farm popu-lation/ Popula-tion 1971	N. of un-inhabited farms, 1971/Fer-mes in-habitées
		N. of farms % change 66 -71/N. fermes, % changem. 66-71	% change n. of farms 71-76/ % chan-gement 71-76[2]	Tot. n. of farms 76/Nbre de fermes 1976[2]	Tot. land area % change/ Change-ment, su-perficie 66-71	Tot. land area % change 71 -76/% chang. superfi-cie 71-76[2]	Ave. 1976 farm land area/Sup. moy. des fermes, 1976 (acres)[2]		
Eastern Ontario/ Ontario Est	2	- 17.6	- 23.2	10,936	- 13.8	- 13.9	239	60,864	626
Lake Ontario/ Lac Ontario	3	- 13.7	- 22.3	10,017	- 13.1	- 11.9	216	42,612	506
Central Ontario/ Ontario Centre (Toronto)	4	- 14.1	- 26.6	3,229	- 13.8	- 8.3	155	27,111	570
Niagara	5	- 11.8	- 21.6	9,218	- 7.8	- 7.8	120	37,881	507
Lake Erie/ Lac Erié	4	- 9.1	- 14.5	8,394	- 2.1	- 2.3	173	52,398	763
Lake St. Clair/ Lac St-Clair	5	- 12.3	- 14.2	9,557	- 2.1	- 1.5	153	44,465	772
Mid-Western On-tario/Ontario centre-ouest	4	- 9.5	- 12.4	11,414	- 3.9	- 2.9	171	54,746	922
Georgian Bay/ Baie Georgienne	1	- 13.7	- 18.5	11,047	- 11.8	- 6.9	210	53,162	907
Northeastern On-tario/Ontario nord-est	2	- 31.8	- 18.3	2,327	- 22.8	- 5.9	371	13,347	99
Northwestern On-tario/Ontario nord-ouest	2	- 34.3	- 19.6	844	- 21.2	- 6.9	378	5,127	42
TOTAL		- 13.8	- 18.7	76,983	- 10.5	- 7.6	192	391,713	5,714

[1] Correspond to S.C. farm Census/Recensement agricole de S.C. / [2] See note 1, table 73; voir note 1, tableau 73

[3] Figure correspond to the predominant characteristic (See appendix 4).

Table 73 FARM CENSUS: FARM VALUE, SALES, AND CATTLE BY SUB-REGION/

Tableau VALEUR DES FERMES DE RECENSEMENT, VENTES ET BOVINS

Sub-regions/ Sous-régions	Land & building value (1971)/Valeur des terres et bâtiments (000)	Percent N. of farms with $5,000. sales plus/ % de fermes avec ventes de $5,000. et plus		Tot. no. of cattle/Nombre total de bovins 1971	1971 Ave. land & build value per farm/ Valeur moy. par ferme ($)
		1971	1976[1]		
Eastern Ontario/ Ontario Est	463,388.	45.5	61.4	551,829.	32,546.
Lake Ontario/ Lac Ontario	436,334.	41.4	59.3	372,891.	40,657.
Central Ontario/ Ontario Centre (Toronto)	756,290.	47.4	66.0	185,185.	115,253.
Niagara	608,408.	50.2	74.8	142,955.	67,842.
Lake Erie/ Lac Erié	904,524.	70.7	84.8	349,823.	71,731.
Lake St. Clair/ Lac St-Clair	638,471.	63.1	82.8	156,979.	57,324.
Mid-Western Ontario/Ontario centre-ouest	663,171.	71.4	84.5	578,374.	50,923.
Georgian Bay/ Baie Georgienne	618,132.	54.1	69.1	609,464.	45,615.
Northeastern Ontario/Ontario nord-est	68,648.	30.7	49.3	98,185.	24,087.
Northwestern Ontario/Ontario nord-ouest	26,058.	35.9	50.7	36,330.	24,817.
TOTAL	5,183,419.	55.3	72.2	3,082,015.	54,722.

[1] The 1976 computations of tables 72 & 73 are in conformity with the 1976 Census divisions warding.
Les calculs de 1976 des tableaux 72 et 73 sont conformes au découpage des divisions de recensement de 1976.

As indicated in Table 74, though the woodland as such does not give a direct understanding of this activity, one can see its potential: 50% of the Ontario farms declare woodland. The highest woodland percentages are declared in Georgian Bay, Mid-Western and Lake Erie.

Out-of-farm work declared ranges from 28% to 50%; Ontario shows a high percentage of outside workers, and more especially in Northwestern, Lake St. Clair, Lake Ontario, and Georgian Bay. Percent of Farms declaring hired labour ranges from 23 to 48%.

Farms are generally managed by individuals, but it is important to note 7.5% managed in association.

Sub-regions with high percentage of high economic classes are Lake Erie and Mid-Western. The greatest number of lower economic classes is found in Northeastern, Northwestern and Lake Ontario.

3- Commerce and Industry Activities

An average number of 1,283 trade activities per sub-region generate about two jobs each, apart from the owner-workers; salaries are low compared to manufacturing.

Manufacturing generates 90,606 jobs, an average of 42 jobs per activity. Salary and added value are high in Northern subs and Central Ontario.

Table 75 shows the 1971 trade figures for the R.S.A. by sub-regions. Trade activity is high in Eastern, Lake Ontario, Georgian Bay, and Northeastern, low in Northwestern.

On the average, there are two employees per activity; Eastern shows three and Mid-Western only 1.79. Average salary is low, $4,566 (1971), and is very similar from one sub to another.

Table 76 gives some figures on manufacturing. The number of plants ranges from 77 to 329. The greatest job-generating activities are found in

Table 74 ONTARIO R.S.A. FARM ACTIVITIES, BY SUB-REGION/

Tableau ACTIVITE DES FERMES, AIRE D'ETUDE, PAR SOUS-REGION

Sub-regions/ Sous-régions	1971 % farms declar. woodland/ % declarant, terre à bois	Labour force/ Main-d'oeu. 1971		Farm management/ Organ. des fermes, 1971			Farm Economic classes, 1971/ Classes économiques (%)			
		% farms declaring hired labour/M. d'oeu. engagée	% declar. out of farm work/ % declar. trav. hors ferme	managed by association/ Gérées par ass. (%)	Inc. family farms/F. familiales inc. (%)	Individ. & other types (%) individus & autre org.	$15,000 & over/ et plus	$7,500 - $14,999	$2,500 - $7,499	$50. - $2,499.
Eastern Ontario/ Ontario Est	56.4	34.9	38.0	5.6	1.8	92.6	15.6	18.7	27.8	37.9
Lake Ontario/ Lac Ontario	55.5	32.9	43.6	6.5	1.2	92.3	15.1	15.4	28.0	41.5
Central Ontario/ Ontario Centre (Toronto)	31.9	30.9	31.8	6.3	1.5	92.2	27.1	12.6	21.4	38.9
Niagara	31.2	25.9	28.2	6.3	1.0	92.7	26.8	15.0	22.7	35.5
Lake Erie/ Lac Erié	58.1	48.4	36.1	10.9	2.0	87.1	47.0	15.9	17.2	19.9
Lake St. Clair/ Lac St-Clair	30.4	37.2	45.7	8.7	1.8	89.5	29.8	21.9	26.7	21.6
Mid-Western Ontario/Ontario centre-ouest	61.7	33.2	38.3	5.7	1.5	92.8	39.1	22.8	20.0	18.1
Georgian Bay/ Baie Georgienne	63.4	32.2	43.4	5.8	1.3	92.9	22.6	20.0	27.3	30.1
Northeastern Ontario/Ontario nord-est	45.3	23.7	39.5	4.5	1.5	94.0	11.5	12.1	23.0	53.4
Northwestern Ontario/Ontario nord-ouest	57.5	30.2	50.0	4.6	1.3	94.1	15.2	12.2	23.9	48.7
TOTAL	50.9	34.6	38.9	7.5	1.7	90.8	27.3	18.0	24.0	30.7

Table 75 R.S.A. TRADE ACTIVITIES, BY SUB-REGION (1971)/

Tableau ACTIVITES COMMERCIALES, PAR SOUS-REGION.

Sub-regions/ Sous-régions	N. of trade activities/N. commerces	Sales/ Ventes (000)	N. owner workers/ N. travailleurs propr.	Tot. employee n./ Nbre d'employés	Aver. salary/ Salaire moyen ($)
Eastern Ontario/ Ontario Est	2,203	377,416	1,975	6,534	4,766.
Lake Ontario/ Lac Ontario	1,726	168,656	1,661	2,860	4,252.
Central Ontario/ Ontario Centre (Toronto)	794	104,164	758	1,775	4,462.
Niagara	746	99,042	697	1,725	4,616
Lake Erie/ Lac Erié	1,158	114,874	1,126	1,817	4,297.
Lake St. Clair/ Lac St-Clair	1,025	135,053	931	2,378	4,561.
Mid-Western Ontario/Ontario centre-ouest	1,037	111,695	978	1,861	4,522.
Georgian Bay/ Baie Georgienne	2,016	188,586	2,033	3,039	4,322.
Northeastern Ontario/Ontario nord-est	1,520	204,124	1,275	3,406	4,786.
Northwestern Ontario/Ontario nord-ouest	602	79,969	496	1,385	4,761.
TOTAL	12,827	1,583,579	11,930	26,780	4,566.

Table 76 R.S.A. MANUFACTURING ACTIVITIES, 1972, BY SUB-REGION/

Tableau ACTIVITES MANUFACTURIERES RURALES PAR SOUS-REGION

Sub-regions/ Sous-régions	N. of activities/ N. d'établissements	N. owner workers/ N. prop. actifs	N. of employees/ N. d'employés	Average salary/ Salaire moyen ($)	Shipment values/Valeurs de livraison (000)	Added value/Valeur ajoutée (000)
Eastern Ontario/ Ontario Est	329	151	11,995	7,647.	455,885	199,793
Lake Ontario/ Lac Ontario	288	124	10,308	6,730.	318,485	149,207
Central Ontario/ Ontario Centre (Toronto)	161	54	10,300	8,188.	374,793	179,054
Niagara	181	79	5,818	8,008.	257,460	99,102
Lake Erie/ Lac Erié	184	89	3,784	6,682.	154,654	56,598
Lake St. Clair/ Lac St-Clair	163	75	4,437	8,249.	226,012	93,144
Mid-Western Ontario/Ontario centre-ouest	280	138	6,233	6,505.	263,174	77,430
Georgian Bay/ Baie Georgienne	252	155	3,447	6,059.	110,334	42,828
Northeastern Ontario/Ontario nord-est	236	92	28,661	9,829.	804,425	419,144
Northwestern Ontario/Ontario nord-ouest	77	46	5,623	9,457.	245,743	106,335
TOTAL	2,151	1,003	90,606	8,279.	3,210,965	1,422,635

Northeastern, Northwestern and Central, where a relatively low number of businesses hire a great number of people. Average salary is $8,279 (1972); and the highest salaries are earned in the Northern subs, in Central, Niagara and Lake St. Clair.

Northern subs and Central generate a high added value compared to the low number of activities.

4- Income 1970 personal and household incomes are as follows:

	Av. Employment Salary	Av. Household Total Income
Eastern Ontario	$5,701.	$ 9,878.
Lake Ontario	$4,585.	$ 7,815.
Central Ontario	$5,907.	$10,670.
Niagara	$5,590.	$10,006.
Lake Erie	$4,656.	$ 8,699.
Lake St. Clair	$5,378.	$ 9,353.
Mid-Western Ontario	$4,403.	$ 8,096.
Georgian Bay	$4,273.	$ 7,375.
Northeastern Ontario	$5,516.	$ 8,763.
Northwestern Ontario	$5,354.	$ 8,956.
TOTAL	$5,136.	$ 8,961.

The most favoured sub-regions appear to be Central, Niagara, Eastern and Lake St. Clair. Individual salary income is very low in Georgian Bay, Mid-Western and Lake Ontario.

3.0: RURAL TELEPHONY

This section of the report includes descriptions of the research methodology used, the major characteristics of the study area and an analysis of the rural telephony problems affecting Quebec's and Ontario's sub-regions.

3.1: The Methodology Used

The first step was to gather all cartographical information pertinent to rural telephony in the study area, including detailed statistical data from various sources. This information was needed to establish the various telephone penetration rates in the R.S.A.

Existing Information

It should be stated at the start that very little official information and documentation on telephony compiled on a geographical basis is available. The various governmental agencies and departments dealing with statistics that were consulted do not keep telephony data in a form that could be used for the purpose of this project. The required information was thus obtained from various private sources, principally from the telephone companies involved in the study area.

1. Cartographical Information - It was soon established that the telephone exchange was to become the geographical basis used in this project for the purpose of compiling and analysing data. The use of such a spatial unit while respecting the boundaries of various companies facilitated data compilation and integration at a micro-level and corresponded to the objectives set forward for this study. A number of maps dealing with the exchanges boundaries for Quebec and Ontario were obtained [1]. These turned out to be incomplete documents and had to

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[1] - Min. of transportation and Communications, Ontario, Independant Telephone Systems-Ontario, Scale 1: 11.3 miles, June 1976.

- Bell Canada, Bell Canada Ontario Region Exchange Boundaries. Southern Ontario/Northern Ontario, 2 maps, 1:887,000, 1974.
- Min. des Communications, Quebec, Cartes des circonscriptions téléphoniques au Québec, 12 planches, Echelles diverses.

be frequently corrected after consultation with their authors. They must still be considered as working documents however.

By use of these maps it was possible to regroup the different exchanges within the natural boundaries of the counties in which they were situated. A second stage dealt with exchanges that did not fit wholly in a county but which straddled many county lines, thus forcing the placement of parts of some exchanges in more than one county. This was accomplished with the help of maps that outlined municipal and townships boundaries; topographical maps at 1:50,000 scale were also used to correctly divide such telephone exchanges. Eventually it was possible to compile lists of telephone exchanges county by county for Quebec and Ontario.

The list of counties was further specified by identifying each exchange as rural, urban or urban/rural. The urban and rural classifications were decided upon by applying the same criteria used in the socio-economic section of this project. The urban/rural exchanges are those which contain both urban and rural sections. For the purpose of our study, the urban sections of each exchange were disregarded and only the rural sections were considered. Elimination of the urban areas was based on documents listing all municipalities and townships according to populations and respective exchanges.

2. The Available Statistical Information - In view of the lack of statistical information on telephony in the study area, the main source of data was the major telephone companies. Further data was obtained from the particular governmental agencies[1] that regulate the activities of the smaller telephone companies. These number 25 in Quebec and 34 in Ontario.

The information received from these sources was contained in forms known as Summary of Telephones and Lines. These forms listed in detail all existing types of telephones and lines in each exchange of the

[1] - Ontario Telephone Service Commission. Government of Ontario
- La Régie des Services Publics. Gouvernement du Québec.

study area. Consultation of additional sources dealing with the same information verified the viability and exactitude of the statistics received from the above-mentioned sources.

The following is a list of the type of data received:

a) The name of the company;
b) The number of residential telephones according to subscribers;
c) The number of residential extension telephones;
d) The number of business telephones according to subscribers;
e) The number of business extension telephones;
f) The number of coin-operated telephones;
g) The number of residential lines according to subscribers;
h) The number of business lines according to subscribers;
i) The number of special telephones (Centrex, P.B.X., W.A.T.S., Mobile);
j) The total of all types of telephones.

In order to obtain uniform data for Québec and Ontario, statistics were requested for the month of December, 1975.

The study then proceeded to apply the statistics (a-j) to the lists of county by county telephone exchanges for Quebec and Ontario. Thus it was possible to obtain county totals for all the articles mentioned in a-j. In addition, socio-economic data was considered in order to permit the establishing of telephone penetration rates; these data were for the year 1976.

3. Data Analysis - The final stage of treating the statistics consisted in isolating particular data such as: 1) The type of equipment, i.e., the percentages of residential telephones as compared to business telephones, percentages of main telephones as compared to extension telephones; 2) The maximum number of penetration indexes allowing a classification and evaluation of the importance of the telephone in each county.

These indexes are:

a) T./100 Pop. - The Total Number of Telephones per 100 Inhabitants

This index is generally used in communication penetration studies. It has the advantage of using elementary statistics. It is, however, vague and imprecise because it takes into consideration both residential and business equipment.

b) R.T./100 Pop. - The Total Number of Residential Telephones per 100 Inhabitants

This index is more precise than the above-mentioned (T./100 Pop.) because it does not include business telephones. It is therefore a more precise tool when analysing the phenomena of the individual person in relation to a mode of communication. However, there are two misleading factors in the index: 1) the existence of "non-essential" extension telephones and 2) a large proportion of inhabitants who could be considered as non or low users. This would include, for example, young children.

c) M.R.T./100 h - The Total of Main Residential Telephones per 100 Households

This particular index attempts to correct inexactitudes found in the calculation of the first two indexes. It is based upon the number of main residential telephones. These are defined as the ordinary telephones generally found in private homes and apartments. They correspond to an individual subscriber who possesses a single telephone number. Furthermore, to eliminate the previously mentioned problem of "non and low users" this index attempts to deal with the notion of households. In this manner, comparing the number of main residential telephones to the actual number of households in a particular area, an attempt was made to discover the number of households that did not benefit from telephone service. For example, if a particular area contained 100 m.r. telephones and 100 households, there was an index of 100, meaning that no households were without service and that 100 percent of the households were served. This index is considered as highly significant.

d) C.T./1,000 Pop. - The Total Number of Coin-Operated Telephones per 1,000 inhabitants

This index is representative of particular situations found in isolated and low-populated areas. In such places the coin-operated telephone is frequently used by people who do not have phones in their homes. It is also used in emergency situations by non-residents.

e) B.T./B. - The Total Number of Business Telephones per Business Establishment

This is an index which can be used for comparison purposes from one county to another, but which on its own is of little value. However, when used for comparing the general business telephone situation among various counties, it is a valuable tool. The number of business establishments equals the number of commercial establishments (1971) plus the number of manufacturing locations (for 1972).

f) T./m^2 - The Total Number of Telephones per Square Mile

This index is used to indicate the degree of dispersion or concentration of telephones in specific areas. The calculated surface in square miles relates to the surface of the organized territory and not to the surface of the R.S.A.

3.2: The General Situation

A. The Province by Province Approach

The project's study area is composed of 1,133 telephone exchanges; of this total, 539 exchanges are found in Quebec and 594 in Ontario. These telephone exchanges cover respectively a surface of 51,662 square miles in Quebec (organized territory) and 49,403 square miles in Ontario, indicating that the typical telephone exchange is smaller in size in Ontario than in Quebec.

Table 77 presents the general characteristics of the study area by comparing Quebec and Ontario. It can be said in general that the telephony equipment distribution follows the population distribution pattern with Ontario appearing to be a little better equipped than Quebec in terms of infrastructure. The population density (1976) is also higher in Ontario, with a ratio of 39.7 inhabitants/mi^2 compared to Quebec's 29 inhabitants/mi^2. It should also be noted that the number of persons per household is lower in Ontario (3.73 pers./household) than in Quebec (4.39 pers./household) in 1976.

Table 78 shows that on an interprovincial basis the number of urban telephone exchanges is higher in Ontario. This is most likely due to the fact that urbanization here is more widespread. Furthermore, the table indicates that the proportions of residential telephones by type of subscriber is practically equal in the two provinces. It appears, however, that there are more residential extension telephones in Ontario than in Quebec.

The business telephone distribution pattern is different from one province to another; business telephones with two or more subscribers are more frequent in Quebec, and the role played by extension telephones appears to be less important in Quebec than in Ontario.

The distribution of telephones according to type of telephone (residential, business, coin-operated) is almost identical in Quebec and in Ontario. The same can also be said for distribution of telephone lines in the two provinces.

B. The Approach According to Telephone Companies

In order to obtain a better comprehensive view of the general telephone situation in the rural study area, an attempt was first made to distinguish one telephone company from another. This approach was found to be impossible to follow through with however, because data needed to be calculated according to a particular unit, the county (census division). In some instances there were as many as ten companies in a single county.

Table 77 A COMPARISON OF TELEPHONY DATA IN R.S.A. OF QUEBEC AND ONTARIO (1975)

Tableau LES STATISTIQUES DE TELEPHONE EN MILIEU RURAL; COMPARAISON QUEBEC-ONTARIO (1975)

	Telephone Exchanges/ Circonscriptions		Residential telephones/ Appareils résidentiels	Business telephones/ Appareils commerciaux	Coin telephones/ Taxiphones	Total/ Grand total	Telephone lines/ Lignes téléphoniques	Population (est.1976)	Households (est. 1976)/ Ménages (est. 1976)	Surface mi^2 Superficie[4] 1971
	Urb./ Rur.	Rur.								
Quebec	101	438	439,183	125,844	4,376	569,403	316,975[1]	1,502,595	342,015	51,662 m^2
% du total/ % of total	54.3	46.2	40.3%	41.3%	42.9%	40.6%	42.1%	43.3%	39.3%	51.1%
Ontario	85	509	648,325	178,826	5,808	832,959	435,269[2]	1,964,491	526,517	49,403 m^2
% du total/ % of total	45.6	53.7	59.6%	58.7%	57.0%	59.3%	57.8%	56.6%	60.6%	48.8%
TOTAL	186	947	1,087,508	304,670	10,184	1,402,362	752,244[3]	3,467,086	868,532	101,065

[1] Excluding the counties of Abitibi and Temiscamingue/Exclut les comtés Abitibi et Témiscamingue.

[2] Excluding the counties of Cochrane and Timiskaming/Exclut les comtés Cochrane et Timiskaming.

[3] Excluding the four above-mentioned counties/Exclut les 4 comtés ci-haut.

[4] Surface in square miles: organized territory/Superficie en milles carrés: territoire organisé.

Table 78 A

TELEPHONE STATISTICS IN R.S.A., QUEBEC AND ONTARIO (1975) (Part 1)

Tableau

LES STATISTIQUES DE TELEPHONE EN MILIEU RURAL, QUEBEC ET ONTARIO (1975) (1ère partie)

	Telephone exchanges/ Circonscriptions téléphoniques			Residential telephones/ Appareils téléphoniques résidentiels					Business telephones Appareils téléphoniques commerciaux			
	Urb.	Ur/Ru.	Rural	1 sub./ 1 abon.	2 sub./ 2 abon.	4 + sub./ 4 + abon.	Main/ Princip.	Exten./ Suppl.	1 sub./ 1 abon.	2+ sub./ 2+ abon.	Main/ Princip.	Exten./ Suppl.[1]
Quebec	55	101	438	215,580	54,774	98,679	369,033	70,149	43,035	6,099	49,134	76,710
% of Quebec % du Québec	9.3	17.0	73.7	58.4	14.8	26.8	84.0	16.0	87.6	12.4	39.0	61.0
Ontario	99	85	509	288,780[2]	72,855[2]	129,808[2]	505,327	142,998	55,774[2]	6,299[2]	64,175	114,651
% de l'Ontario % of Ontario	14.3	12.2	73.5	58.8	14.8	26.4	77.9	20.1	89.9	10.1	35.9	64.1

[1] Including extension phones, Centrex, P.B.X., W.A.T.S., Mobile/Inclut appareils supplémentaires, Centrex, P.B.X., W.A.T.S., Mobile.

[2] Excluding the counties of Cochrane and Timiskaming/Exclut comtés Cochrane et Timiskaming.

Table 78 B — TELEPHONE STATISTICS IN R.S.A., QUEBEC AND ONTARIO (1975) (Part 2)

Tableau — LES STATISTIQUES DE TELEPHONE EN MILIEU RURAL, QUEBEC ET ONTARIO (1975) (2ième partie)

	Total number of phones/ Total des appareils				Telephone lines/ Lignes téléphoniques		
	Res.	Business/Com.	Coin/Taxi.	Total	Res.	Business/Com.	Total
Quebec	439,182	125,844	4,376	569,403	262,962	54,013	316,975[1]
% of Quebec % du Québec	77.1	22.1	0.8	100	83.0	17.0	100
Ontario	648,325	178,826	5,808	832,959	358,419[2]	76,848[2]	435,267[2]
% de l'Ontario % of Ontario	77.8	21.5	0.7	100	82.3	17.7	100

[1] Excluding the counties of Abitibi and Témiscamingue/Exclut comtés Abitibi et Témiscamingue.

[2] Excluding the counties of Cochrane and Timiskaming/Exclut comtés Cochrane et Timiskaming.

This led to dropping the attempt to relate one particular company to a particular part of the county and to a particular part of the data. Nevertheless, it was possible to map (as in Figures 34 and 35) the respective territories of all the companies.

Table 79 illustrates the extreme variations in size and importance among telephone companies. In certain cases, these variations are so high that it becomes difficult to establish them. For example, the number of telephones owned by "Bell Canada" in Quebec represents 89.2% of the total number of telephones in the province, while the "Compagnie Guy Vézina" in l'Ile aux Grues represents 0.0016% of the same total.

However, if other aspects of the question are considered, various telephone companies emerge as more important than others. The same table (79) indicates that for net profit/per phone, the first place is held by the "Compagnie de Téléphone de Lambton" and that the "Companie Téléphone Ungava" is first according to gross revenues/per phone. Such variations in size and rank would therefore make any analysis very difficult, and this is a reason why it was decided not to take into consideration the identity of each telephone company.

The only comparison of companies established within the R.S.A. is presented in Tables 80 and 81. A brief analysis indicates that "Bell Canada" is implanted in 762 telephone exchanges in the study area over a possible number of 1,133, which is a percentage of 67.2%. The presence of Bell Canada is overwhelming in Ontario, while in Quebec it divides the market almost equally with all the other firms. Among those, the names of "Québec Téléphone", "Télébec" and "Téléphone du Nord" stand out as controlling together 44% of all the telephone exchanges in the R.S.A.

3.3: Presentation by Sub-Region

In order to give a better view of the general situation of rural telephony within the R.S.A., a series of tables is presented giving for Ontario and Quebec more specific data gathered on the basis of sub-regions.

Figure 34

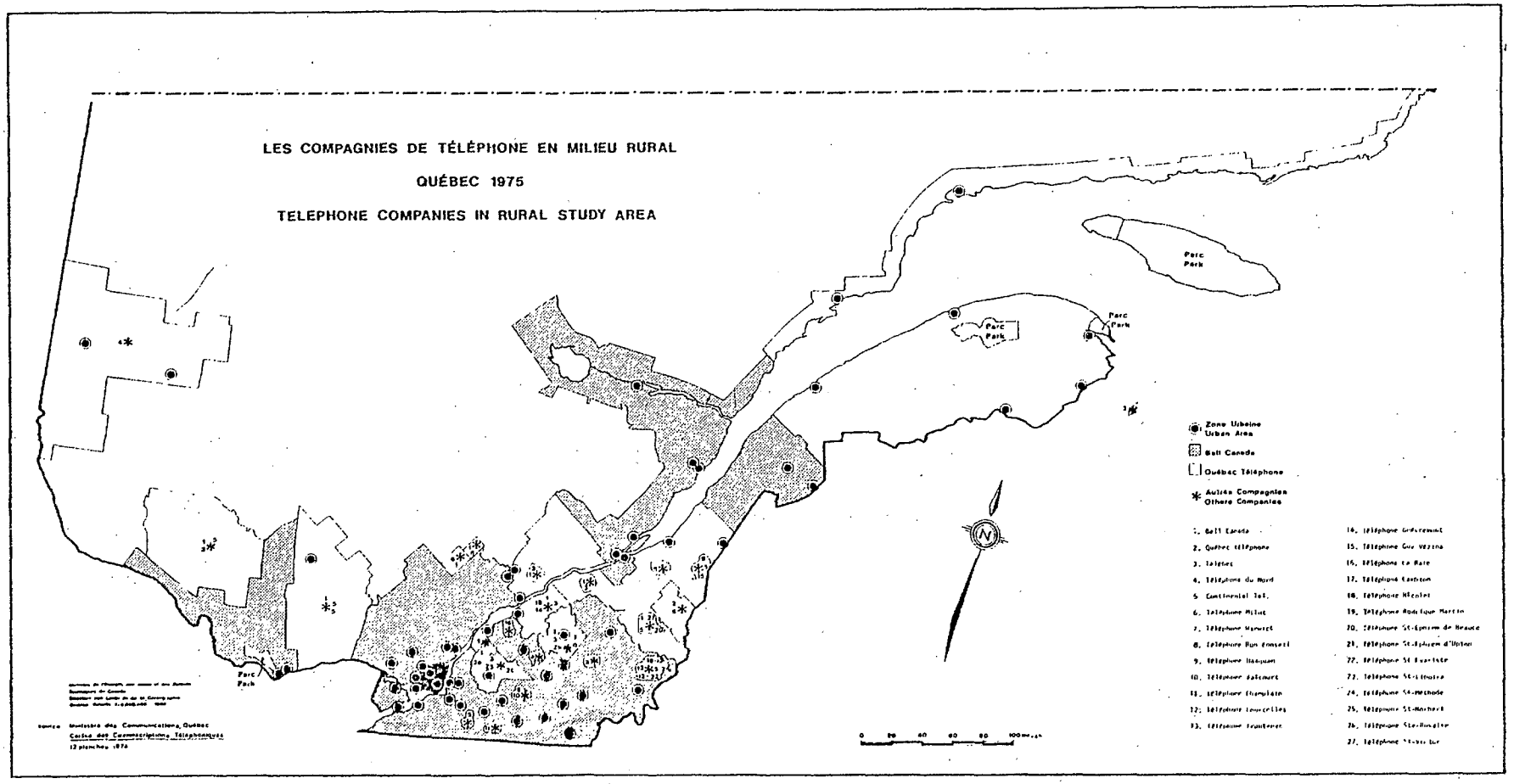
LES COMPAGNIES DE TÉLÉPHONE EN MILIEU RURAL
QUÉBEC 1975
TELEPHONE COMPANIES IN RURAL STUDY AREA
Parc Park
Zone Urbaine Urban Area
Bell Canada
Québec Téléphone
Autres Compagnies Others Companies
1. Bell Canada
2. Québec téléphone
3. Télétec
4. Téléphone du Nord
5. Continental Tel.
6. Téléphone Milot
7. Téléphone Warwick
8. Téléphone Run Conseil
9. Téléphone Hauquin
10. Téléphone Dalhousie
11. Téléphone Chamblain
12. Téléphone Lowerville
13. Téléphone Frontenac
14. Téléphone Gaspésien
15. Téléphone Cap Verte
16. Téléphone La Baie
17. Téléphone Canton
18. Téléphone Nicolet
19. Téléphone Roxton Martin
20. Téléphone St-Ephrem de Beauce
21. Téléphone St-Ephrem d'Upton
22. Téléphone St Evariste
23. Téléphone St-Ludger
24. Téléphone St-Methode
25. Téléphone St-Norbert
26. Téléphone Ste-Rosalie
27. Téléphone St-Yvon Inc

Figure 35

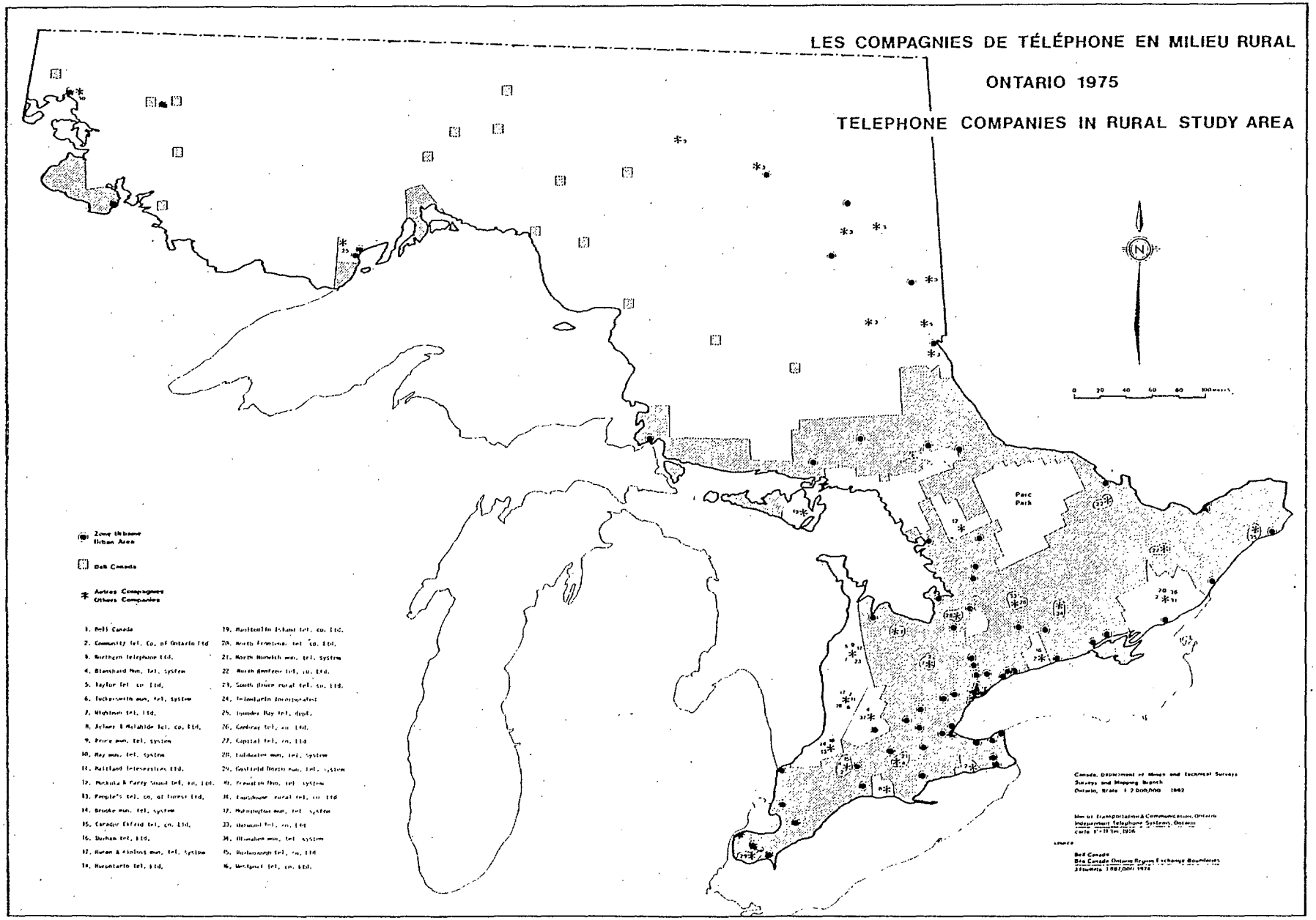
LES COMPAGNIES DE TÉLÉPHONE EN MILIEU RURAL
ONTARIO 1975
TELEPHONE COMPANIES IN RURAL STUDY AREA
N
0 20 40 60 80 100 miles
Parc
Park
Zone Urbaine
Urban Area
Bell Canada
Autres Compagnies
Others Companies
1. Bell Canada
2. Community Tel. Co. of Ontario Ltd
3. Northern Telephone Ltd.
4. Blanchard Mun. Tel. System
5. Naylor Tel. Co. Ltd.
6. Tuckersmith mun. Tel. system
7. Wightman Tel. Ltd.
8. Aylmer & Malahide Tel. Co. Ltd.
9. Prince mun. Tel. system
10. Ray mun. Tel. system
11. Maitland Telenetwork Ltd.
12. Muskoka & Parry Sound Tel. Co. Ltd.
13. People's Tel. Co. of Forest Ltd.
14. Brooke mun. Tel. system
15. Caradoc Dereil Tel. Co. Ltd.
16. Dunham Tel. Ltd.
17. Huron & Minings mun. Tel. System
18. Nasontario Tel. Ltd.
19. Manitoulin Island Tel. Co. Ltd.
20. North Frontenac Tel. Co. Ltd.
21. North Dumfrie mun. Tel. System
22. North Renfrew Tel. Co. Ltd.
23. South Bruce rural Tel. Co. Ltd.
24. Telemartin Incorporated
25. Thunder Bay Tel. dept.
26. Cardinal Tel. Co. Ltd.
27. Capital Tel. Co. Ltd
28. Tottenham mun. Tel. System
29. Eastfield North mun. Tel. System
30. Franklin Mun. Tel. system
31. Eastshore rural Tel. Co. Ltd
32. Hampton mun. Tel. System
33. Norwood Tel. Co. Ltd
34. Glenallen mun. Tel. system
35. Burlington Tel. Co. Ltd
36. Westport Tel. Co. Ltd.
Canada, Department of Mines and Technical Surveys
Surveys and Mapping Branch
Ontario, Scale 1:2,000,000 1962
Map of Transportation & Communications, Ontario
Independent Telephone Systems, Ontario
carte 1:1 mi. 1976
source
Bell Canada
Bell Canada Ontario Regions Exchange Boundaries
Limites 1:1,000,000 1976

Table 79 CLASSIFICATION OF TELEPHONE COMPANIES IN QUEBEC BY ORDER OF IMPORTANCE (RURAL AND URBAN QUEBEC, 1974)

Tableau CLASSIFICATION DES COMPAGNIES TELEPHONIQUES AU QUEBEC PAR IMPORTANCE (ENSEMBLE DU QUEBEC, 1974)

Telephone Companies/ Cies de téléphone	Number of telephones/ Nombre d'appareils	Gross revenues $000/ Revenus $000	Capital investment (rank)/ Immobilisation (rang)	Gross revenues per phone (rank)/ Revenus par appareil (rang)	Net profit per phone (rank)/ Recettes nettes par appareil (rang)
Bell Canada	2,890,336	523,500 (est.)	1 (est.)	4 (est.)	8 (est.)
Québec téléphone	197,909	47,450	2	2	5
Téléphone Nouveau-Québec	65,531	13,583	3	3	9
Télébec	46,867	6,647	4	6	21
Continental	15,393	1,600	5	14	24
Nicolet	3,208	352	9	11	19
Milot	2,567	265	8	15	10
Valcourt	2,530	379	6	5	11
Warwick	2,417	224	7	18	26
Ungava	1,896	796	-	1	3
Ste-Rosalie	1,535	117	10	28	22
Bon Conseil	1,430	151	11	13	
St-Evariste	991	115	13	10	6
St-Ephrem Upton	963	78	17	25	16
Lambton	763	66	15	21	1
St-Liboire	696	54	12	27	23
St-Victor	656	59	16	20	15
Champlain	621	49	18	26	4
St-Ephrem de Beauce	547	51	19	16	17
La Baie	471	39	21	24	14
St-Méthode	437	51	14	9	27
Courcelles	350	32	23	19	18
R. Martin	340	28	20	22	2
Daaquam	268	28	-	12	12
St-Norbert	251	21	22	23	20
Grièvemont	241	30	25	7	7
Frontenac	153	14	24	17	25
Guy Vézina	54	6	-	8	-

Source: Répertoire de la téléphonie. Min. Communications, Québec, 1976, Ch.1, p.4-9.

Table 80
Tableau

EXCHANGE AREAS BY COMPANY IN RURAL QUEBEC, 1975

LES CIRCONSCRIPTIONS TELEPHONIQUES PAR COMPAGNIES EN MILIEU RURAL, QUEBEC, 1975

Rank/ Rang	Name/ Nom	Number of telephone exchanges Nombre de circonscriptions	% of total % du total
1.	Bell Canada	269	49.9
2.	Québec téléphone	132	24.4
3.	Télébec	48	8.9
4.	Téléphone du Nord	39	7.2
5.	Continental Tel.	21	3.9
6.	Téléphone Milot	4	0.7
7.	Téléphone Warwick	3	0.5
8.	Téléphone Bon Conseil	2	0.3
9.	Téléphone Daaquam	2	0.3
10.	Téléphone Valcourt	2	0.3
11.	Téléphone Champlain	1	0.18
12.	Téléphone Courcelles	1	0.18
13.	Téléphone Frontenac	1	0.18
14.	Téléphone Guévremont	1	0.18
15.	Téléphone Guy Vézina	1	0.18
16.	Téléphone La Baie	1	0.18
17.	Téléphone Lambton	1	0.18
18.	Téléphone Nicolet	1	0.18
19.	Téléphone Rodrigue Martin	1	0.18
20.	Téléphone St-Ephrem de Beauce	1	0.18
21.	Téléphone St-Ephrem d'Upton	1	0.18
22.	Téléphone St-Evariste	1	0.18
23.	Téléphone St-Liboire	1	0.18
24.	Téléphone St-Méthode	1	0.18
25.	Téléphone St-Norbert	1	0.18
26.	Téléphone Ste-Rosalie	1	0.18
27.	Téléphone St-Victor	1	0.18
		TOTAL 539	

Table 81
Tableau

EXCHANGE AREAS BY COMPANY IN RURAL ONTARIO (1975)

LES CIRCONSCRIPTIONS TELEPHONIQUES PAR COMPAGNIE EN MILIEU RURAL, ONTARIO, 1975

Rank/ Rang	Name/ Nom	Number of telephone exchanges Nombre de circonscriptions	% of total % du total
1.	Bell Canada	493	82.9
2.	Community Tel. Co. of Ontario Ltd	20	3.3
3.	Northern Telephone Ltd	12	2.0
4.	Blanshard Mun. Tel. System	4	0.6
5.	Taylor Tel. Co. Ltd	4	0.6
6.	Tuckersmith Mun. Tel. System	4	0.6
7.	Wightman Tel. Ltd	4	0.6
8.	Aylmer & Malahide Tel. Co. Ltd	3	0.5
9.	Bruce Mun. Tel. System	3	0.5
10.	Hay Mun. Tel. System	3	0.5
11.	Maitland Teleservices Ltd	3	0.5
12.	Muskoka & Parry Sound Tel. Co. Ltd	3	0.5
13.	People's Tel. Co. of Forest Ltd	3	0.5
14.	Brooke Mun. Tel. System	2	0.3
15.	Caradoc Ekfrid Tel. Co. Ltd	2	0.3
16.	Durham Tel. Ltd	2	0.3
17.	Huron & Kinloss Mun. Tel. System	2	0.3
18.	Hurontario Tel. Ltd	2	0.3
19.	Manitoulin Island Tel. Co. Ltd	2	0.3
20.	North Frontenac Tel. Co. Ltd	2	0.3
21.	North Norwich Mun. Tel. System	2	0.3
22.	North Renfrew Tel. Co. Ltd	2	0.3
23.	South Bruce Rural Tel. Co. Ltd	2	0.3
24.	Telontario Incorporated	2	0.3
25.	Thunder Bay Tel. Dept.	2	0.3
26.	Cambray Tel. Co. Ltd	1	0.1
27.	Capital Tel. Co. Ltd	1	0.1
28.	Coldwater Mun. Tel. System	1	0.1
29.	Gosfield North Mun. Tel. System	1	0.1
30.	Keewatin Mun. Tel. System	1	0.1
31.	Lansdowne Rural Tel. Co. Ltd	1	0.1
32.	Mornington Mun. Tel. System	1	0.1
33.	Oakwood Tel. Co. Ltd	1	0.1
34.	Otonabee Mun. Tel. System	1	0.1
35.	Roxborough Tel. Co. Ltd	1	0.1
36.	Westport Tel. Co. Ltd	1	0.1
		TOTAL 594	

These sub-regions include a certain number of counties (census divisions) that were used previously as a spatial basis for analysis. It should be noted that henceforth this new basis of sub-regions will be used unless otherwise indicated.

There are eleven sub-regions in the province of Quebec, one of which is totally urban, and ten in Ontario. Tables 82 to 85 relate to the situation in Quebec and Tables 86 to 89 in Ontario.

3.4: The Telephone Penetration Rates by Province

As previously indicated in the section of the report dealing with methodology, the index establishing rates of main residential telephones per 100 households (M.R.T./100 h.) is considered the most accurate index. It is therefore retained as the best instrument to analyse the data.

In order to test the accuracy of this particular index, correlation tests were conducted between all the rates obtained for each county by comparing: M.R.T./100 h., T/100 p. and R.T./100 p. The results of these tests confirmed the validity of the indexes and of the corresponding rates. Table 90 indicates that degrees of correlation are high, particularly for Ontario. In each case the number of observations corresponds to the number of counties (census divisions) in the R.S.A.

The average rates for each index are presented in Table 91. At first glance they seem to contradict each other on a province by province basis.

The average M.R.T./100 h. rate is 107.9 for Quebec and 95.9 for Ontario. In Quebec, the variation between the highest value and lowest is great; the lowest is attributed to the counties of Huntingdon and Saint Maurice (70) and Drummondville (73), while the highest values have been found in Hull (190), Terrebonne (188) and Chicoutimi (155). In the Province of Ontario, the variation is even greater. The lowest penetration rates were found in the counties of Ontario (50), Nipissing (66) and Norfolk (67), while the highest rates related to the counties of Muskoka (200), Halton (160) and Haliburton (154). (See Maps by sub-region, Appendix 5A for Quebec, and 5B for Ontario).

Table
Tableau 82

NUMBER OF TELEPHONE COMPANIES AND EXCHANGES FOR THE QUEBEC STUDIED TERRITORY/1975

NOMBRE DE COMPAGNIES DE TELEPHONE ET NOMBRE DE CIRCONSCRIPTIONS TELEPHONIQUES DANS LE TERRITOIRE ETUDIE, QUEBEC, 1975

Sub-region/ Sous-région	N. of Companies/Nbre de compagnies	Exchanges/ Circonscriptions	Exchanges distribution in percentage/ Pourcentages de répartition des circonscriptions		
			Urban/ Urbaines	Urban/ Rural/ Urbaines/ Rurales	Rural/ Rurales
Gaspesia/Gaspésie	3	69	10.1	20.3	69.6
Saguenay-Lake St. John/ Saguenay Lac St-Jean	1	30	3.3	23.3	73.4
Québec	8	115	3.5	17.4	79.1
Trois-Rivières	10	69	11.6	14.5	73.9
Eastern Townships/ Cantons de l'Est	10	43	----	25.6	74.4
Montreal south/ Montréal Rive-Sud	8	83	10.9	20.5	68.6
Montreal central/ Montréal centre	1	12	100	----	----
Montreal north/ Nord de Montréal	1	49	8.2	26.5	65.3
Outaouais	3	41	4.9	12.2	82.9
Abitibi-Témiscamingue	2	43	7.0	7.0	86.0
North Shore/ Côte-Nord	3	40	12.5	2.5	85.0
TOTAL	27	594	9.3	17.0	73.7

Table
Tableau 83

PERCENT DISTRIBUTION OF TELEPHONE, BY TYPE, IN RURAL QUEBEC, 1975

POURCENTAGES DE REPARTITION DES APPAREILS TELEPHONIQUES PAR TYPE, EM MILIEU RURAL, QUEBEC, 1975

Sub-Region/ Sous-région	Residential phones/ Appareil résidentiel	Business phones/ Appareil commercial	Coin telephones/ Taxiphone
Gaspesia/Gaspésie	73.8%	24.3%	0.7%
Saguenay-Lake St. John/ Saguenay-Lac St-Jean	79.3%	20.0%	0.7%
Québec	77.3%	21.9%	0.8%
Trois-Rivières	76.5%	22.8%	0.7%
Eastern Townships/ Cantons de l'Est	76.1%	23.2%	0.7%
Montreal south/ Montreal Rive-sud	77.5%	21.8%	0.7%
Montreal north/ Nord de Montréal	79.3%	19.9%	0.8%
Outaouais	77.8%	21.3%	0.9%
Abitibi-Témiscamingue	74.1%	25.0%	0.9%
North Shore/ Côte-Nord	72.0%	26.8%	1.2%
TOTAL	77.1%	22.1%	0.8%

Table 84
Tableau

PERCENT OF MAIN AND EXTENSION RESIDENCE & BUSINESS TELEPHONES, IN RURAL QUEBEC/1975

POURCENTAGES DES APPAREILS PRINCIPAUX ET SUPPLEMENTAIRES, RESIDENTIELS ET COMMERCIAUX EN MILIEU RURAL, QUEBEC, 1975.

Sub-region/ Sous-région	Residential telephones/ Appareils résidentiels/		Business telephones/ Appareils commerciaux		
	Main/ Principal	Extension/ Supplémentaires	Main/ Principal	Extensions/ Supplémentaires	Other/* Autre
Gaspesia/Gaspésie	84.4	15.6	41.0	34.2	24.8
Saguenay-Lake St. John/ Saguenay-Lac St-Jean	83.3	16.7	39.4	40.4	20.2
Québec	86.5	13.5	40.8	37.0	22.2
Trois-Rivières	89.3	10.7	47.2	37.1	15.7
Eastern Townships/ Cantons de l'Est	82.8	17.2	35.8	32.4	31.8
Montreal south/ Montréal Rive-Sud	81.7	18.3	35.4	35.8	28.8
Montreal north/ Nord de Montréal	82.1	17.9	36.7	36.7	26.6
Outaouais	83.1	16.9	38.5	33.7	27.9
Abitibi-Témiscamingue	88.5	11.5	43.3	42.8	13.9
North Shore/ Côte Nord	81.7	18.3	37.7	30.8	31.5
TOTAL	84.0	16.0	39.0	36.0	25.0

* Autre: inclut P.B.X., Centrex, W.A.T.S., Mobile.
Other: included P.B.X., Centrex, W.A.T.S., Mobile.

Table 85
Tableau

MAIN RESIDENCE & BUSINESS PHONES PERCENT DISTRIBUTION, BY SUBSCRIBER IN RURAL QUEBEC, 1975

REPARTITION POURCENTUELLE DES APPAREILS TELEPHONIQUES PRINCIPAUX, RESIDENTIELS ET COMMERCIAUX SELON LE NOMBRE D'ABONNES EN MILIEU RURAL, QUEBEC, 1975.

Sub-Region/ Sous-Region	Residence telephones/ Appareils résidentiels			Business telephones/ Appareils commerciaux	
	1 subscriber 1 abonné	2 subs. 2 abonnés	4+ subs. 4+ abonnés	1 subs. 1 abonné	2+ subs. 2+ abonnés
Gaspesia/Gaspésie	56.5	17.8	25.7	85.3	14.7
Saguenay-Lake St. John/ Saguenay-Lac St-Jean	64.8	9.2	25.9	91.3	8.7
Québec	54.3	22.2	23.4	87.3	12.7
Trois-Rivières	52.6	14.8	32.6	75.5	24.5
Eastern Townships/ Cantons de l'Est	58.8	15.9	25.3	91.3	8.7
Montreal south/ Montréal Rive-Sud	64.4	13.8	21.8	92.2	7.8
Montreal north/ Nord de Montréal	58.3	10.8	30.9	92.1	7.9
Outaouais	52.9	11.4	35.7	82.8	17.2
Abitibi-Témiscamingue	52.6	10.3	37.0	83.2	16.8
North Shore/ Côte Nord	84.7	5.2	10.1	93.7	6.3
TOTAL	58.4	14.8	26.8	87.6	12.4

Table 86
Tableau

NUMBER OF TELEPHONE COMPANIES AND EXCHANGES FOR THE ONTARIO STUDIED TERRITORY/1975

NOMBRE DE COMPAGNIES DE TELEPHONE ET NOMBRE DE CIRCONSCRIPTIONS TELEPHONIQUES DANS LE TERRITOIRE ETUDIE, ONTARIO, 1975.

Sub-region/ Sous-région	N. of Companies/Nbre de compagnies	Exchanges/ Circonscriptions	Exchanges distribution in percentage/ Pourcentages de répartition des circonscriptions		
			Urban/ Urbaines	Urban/ Rural Urbaines/ Rurales	Rural/ Rurales
Eastern Ontario/ Ontario Est	8	100	3.0	14.0	83.0
Lake Ontario/ Lac Ontario	6	83	6.0	7.2	86.7
Central Ontario/ Ontario centre (Toronto)	2	64	70.3	12.5	17.1
Niagara	2	41	36.6	12.2	51.2
Lake Erie/Lac Erié	6	53	3.8	15.1	81.1
Lake St. Clair/ Lac St-Clair	6	47	6.4	23.4	70.2
Mid-Western Ontario/ Ontario-centre-ouest	9	55	3.6	25.5	70.9
Georgian Bay/ Baie Georgienne	8	92	4.3	16.3	79.3
Northeastern Ontario/ Ontario-nord-est	5	98	14.3	4.1	81.6
Northwestern Ontario/ Ontario-nord-ouest	3	60	10.0	----	90.0
TOTAL	36	693	14.3	12.2	73.5

Table 87
Tableau

PERCENT DISTRIBUTION OF TELEPHONES, BY TYPE, IN RURAL ONTARIO/1975.
POURCENTAGES DE REPARTITION DES APPAREILS TELEPHONIQUES PAR TYPE, EN MILIEU RURAL, ONTARIO, 1975

Sub-Region/ Sous-région	Residential phones/ Appareil résidentiel	Business phones/ Appareil commercial	Coin telephones/ Taxiphone
Eastern Ontario/ Ontario Est	72.5%	26.8%	0.7%
Lake Ontario/ Lac Ontario	82.4%	16.9%	0.7%
Central Ontario/ Ontario centre (Toronto)	81.2%	18.2%	0.6%
Niagara	80.8%	18.6%	0.5%
Lake Erie/Lac Erié	81.6%	17.9%	0.5%
Lake St. Clair/ Lac St-Clair	80.1%	19.4%	0.5%
Mid-Western Ontario/ Ontario-centre-ouest	81.3%	18.2%	0.5%
Georgian Bay/ Baie Georgienne	78.8%	20.4%	0.8%
Northeastern Ontario/ Ontario-nord-est	76.0%	23.1%	0.9%
Northwestern Ontario/ Ontario-nord-ouest	70.5%	28.2%	1.3%
TOTAL	77.8%	21.5%	0.7%

Table 88
Tableau

PERCENT OF MAIN AND EXTENSION RESIDENCE & BUSINESS TELEPHONES, IN RURAL ONTARIO, 1975

POURCENTAGES DES APPAREILS PRINCIPAUX ET SUPPLEMENTAIRES, RESIDENTIELS ET COMMERCIAUX EN MILIEU RURAL, ONTARIO, 1975

Sub-region/ Sous-région	Residential telephones/ Appareils résidentiels		Business telephones/ Appareils commerciaux	
	Main/ Principal	Extension/ Supplémentaires	Main/ Principal	Extensions/ Supplémentaires*
Eastern Ontario/ Ontario Est	74.6	25.4	25.3	74.7
Lake Ontario/ Lac Ontario	80.7	19.3	44.3	55.7
Central Ontario/ Ontario centre (Toronto)	73.9	26.1	38.8	61.2
Niagara	74.6	25.4	37.3	62.7
Lake Erie/Lac Erié	77.6	22.4	45.6	54.4
Lake St. Clair/ Lac St-Clair	79.0	21.0	39.0	61.0
Mid-Western Ontario/ Ontario-centre-ouest	78.0	22.0	55.6	44.4
Georgian Bay/ Baie Georgienne	81.0	19.0	37.4	62.6
Northeastern Ontario/ Ontario-nord-est	81.4	18.6	36.4	63.6
Northwestern Ontario/ Ontario-nord-ouest	81.0	19.0	35.1	64.9
TOTAL	77.9	22.1	35.9	64.1

* inclut: Supplémentaires, P.B.X., Centrex, T.W.X., Mobiles.
include Extensions, P.B.X., Centrex, T.W.X., Mobiles.

Table 89
Tableau

MAIN RESIDENCE & BUSINESS PHONES PERCENT DISTRIBUTION, BY SUBSCRIBER IN RURAL ONTARIO, 1975

REPARTITION POURCENTUELLE DES APPAREILS TELEPHONIQUES PRINCIPAUX, RESIDENTIELS ET COMMERCIAUX SELON LE NOMBRE D'ABONNES EN MILIEU RURAL, ONTARIO, 1975

Sub-Region/ Sous-région	Residential telephones/ Appareils résidentiels			Business telephones/ Appareils commerciaux	
	1 subs. 1 abonné	2 subs. 2 abonnés	4+ subs. 4+ abonnés	1 subs. 1 abonné	2+ subs. 2+ abonnés
Eastern Ontario/ Ontario Est	68.1	10.0	21.9	94.9	5.1
Lake Ontario/ Lac Ontario	45.4	17.2	37.4	88.0	12.0
Central Ontario/ Ontario centre (Toronto)	72.6	14.2	13.3	95.8	4.2
Niagara	57.3	17.7	25.0	93.1	6.9
Lake Erie/Lac Erié	49.4	20.6	30.0	92.0	8.0
Lake St. Clair/ Lac St-Clair	58.6	18.7	22.8	92.8	7.2
Mid-Western Ontario/ Ontario-centre-ouest	51.3	20.1	28.6	73.4	26.6
Georgian Bay/ Baie Georgienne	52.7	15.6	31.8	89.5	10.5
Northeastern Ontario/ Ontario-nord-est	N.D.*	N.D.	N.D.	N.D.	N.D.
Northwestern Ontario/ Ontario-nord-ouest	71.8	8.7	19.5	88.8	11.2
TOTAL	58.8	14.8	26.4	89.9	10.1

* N.D.: Data not available/Données non disponibles.

Table 90 TESTS OF CORRELATION BETWEEN TELEPHONE PENETRATION RATES IN R.S.A. QUEBEC AND ONTARIO 1975

Tableau CORRELATION DES INDICES DE PENETRATION TELEPHONIQUE EN MILIEU RURAL, QUEBEC ET ONTARIO 1975

Québec 72 counties/ 72 comtés	T./100 Pop. T./100 Pop.	R.T./100 Pop. T.R./100 Pop.	M.R.T./100 h. T.R.P./100 m.
T./100 Pop. T./100 Pop.		R: .968 S: .0001 N: 72	R: .845 S: .0001 N: 72
R.T./100 Pop. T.R./100 Pop.	R: .968 S: .0001 N: 72		R: .869 S: .0001 N: 72
M.R.T./100 h. T.R.P./100 m.	R: 845 S: .0001 N: 72	R: .869 S: .0001 N: 72	

Ontario 53 counties/ 53 comtés	T./100 Pop. T./100 Pop.	R.T./100 Pop. T.R./100 Pop.	M.R.T./100 h. T.R.P./100 m.
T./100 Pop. T./100 Pop.		R: .985 S: .0001 N: 53	R: .966 S: .0001 N: 53
R.T./100 Pop. T.R./100 Pop.	R: .885 S: .0001 N: 53		R: .974 S: .0001 N: 53
M.R.T./100 h. T.R.P./100 m.	R: .966 S: .0001 N: 53	R: .974 S: .0001 N: 53	

R: Correlation coefficient/Coefficient de corrélation

S: Degree of significance - significant @ 99.9999%/Degré de signification - significatif à 99.9999%

N: Number of observations/Nombre de cas

Table 91 AVERAGE TELEPHONE PENETRATION RATES IN R.S.A., QUEBEC AND ONTARIO (1975)

Tableau LES INDICES DE PENETRATION TELEPHONIQUE EN MILIEU RURAL, QUEBEC ET ONTARIO (1975)

	T./100 Pop. T./100 Pop.	R.T./100 Pop T.R./100 Pop	M.R.T./100 h. T.P.R./100 m.	C.T./1,000 pop. TX./1,000 pop.	B.T./B. T. COM./ACTIV.	T./m^2
QUEBEC	37.9	29.2	107.9	2.91	8.1	11.0
ONTARIO	42.4	33.0	95.9	2.96	11.9	16.9

If only the M.R.T./100 h. index is considered, it seems that Quebec's mean penetration rate of 107.9 is higher than Ontario's 95.9. When all the other indexes are taken into consideration however, Ontario penetration rates are the highest. The following is an explanation for this confusing situation.

It would appear that the M.R.T./100 households rate used for this analysis is valid, but it requires a particular interpretation in order to explain the situation found in Quebec. A rate expressing a value superior to 100 indicates that all Quebec rural households would be subscribers, and that a certain number of those would have two main residential phones.

This hypothesis does not hold, however, because other statistical sources have indicated a certain number of non-subscribers (See Table 92) in each province. Table 93 confirms this situation and indicates that higher penetration rates should be found in Ontario.

Table 92 TELEPHONES BY PROVINCE, MAY 1976
Tableau TELEPHONES PAR PROVINCE, MAI 1976

	Sample/Number of households/ Nombre de ménages	Household with phone/ Ménages avec téléphone			Households without phones/ Ménages sans téléphones
		One Un	Two Deux	Three + Trois +	
Québec	1,832	1,350	356	65	61
% of Quebec/ % du Québec		73.6	19.4	3.5	3.3
Ontario	2,622	1,727	702	127	66
% of Ontario/ % de l'Ontario		65.8	26.7	4.8	2.5

Source: Statistique Canada, Equipement ménager, Bull 64-202, 1976, p.22
Statistic-Canada, Bulletin 64-202, 1976, p.22.

After eliminating the possibility of calculation errors, it became necessary to rely for explanation on the following hypothesis. The average number of persons per household is higher in Quebec (4.39) than in Ontario (3.73). The difference in the interpretation of the M.R.T./100 households rate could come from the margin existing between different rates using population or households as their basis. It can be conceived that the M.R.T./100 households might be statistically speaking higher in Quebec, the number of phones remaining proportionnally stable between Quebec and Ontario, and the number of households being lower in Quebec. Secondly, the interpretation of results might be influenced by the existence of secondary residences in certain specific areas, as illustrated in Table 94.

These penetration rates cannot be logically explained, because it appears difficult to assume the existence of two principal residential phones per household in counties like Muskoka, Ontario, where agriculture and population are limited. The only explanation would come from the

Table 93
Tableau

EXAMPLES OF HIGH M.R.T./100 HOUSEHOLDS VALUES IN RURAL AREAS OF QUEBEC AND ONTARIO, 1975

EXEMPLES D'INDICES T.R.P./100 MENAGES ELEVES EN MILIEU RURAL, 1975

QUEBEC counties/ Comtés/QUEBEC	M.R.T./100 households rate/ T.R.P./100 ménages	ONTARIO counties Comtés/ONTARIO	M.R.T./100 households rate/T.R.P./ 100 ménages
Terrebonne	188	Muskoka	200
Chicoutimi	155	Halton	160
Montmorency 2	140	Haliburton	154
Lac St-Jean est	134	Leeds	136
Wolfe	133	Haldimand	133
Montcalm	129	Parry Sound	120

presence of a great number of secondary residences being equipped with phone services and whose population and number of households would not appear in the official census. The official statistics used, coming from two main sources, Statistics-Canada and the different phone companies involved, would then create some distortions in the effort to establish penetration rates in the study area. Accordingly, if Statistics-Canada enumerates a residence as a household in one county, it will not enumerate the same household in its list of secondary residences in a second county. The phone companies' statistics, on the other hand, will take into account one main residential phone at a secondary residence, even if this residence is not a principal one. This distortion could explain the fact that in certain areas, the number of principal residential phones exceeds the number of households, thus producing rates higher than 100.

If this finding is true and can be applied in certain areas of Quebec and Ontario, can it be generalized on a province-wide scale? The answer to this question cannot be absolute, for the statistical data on the secondary residence phenomenon are partial and incomplete.

From Table 94 it appears that 8.2% of Quebec households have secondary residences compared to 7.4% for Ontario; this higher percentage could have the effect of increasing the number of main residential phones, as long as most of these secondary residences are equipped. This cannot be verified because the results obtained for Table 94 are based on a partial sample and are not representative.

For all these reasons it can be said that the M.R.T./100 households rate can be higher in Quebec than 100 without necessarily meaning that the penetration rate is higher than in Ontario.

Table 94 SECONDARY RESIDENCES BY PROVINCE, 1976

Tableau MAISONS DE VILLEGIATURE PAR PROVINCE, 1976

	Sample-Number of households/ Echantillon-Nombre de ménages	Households with seasonal residence/Ménages avec maisons de villégiature	Households without seasonal residences/ Ménages sans maisons de villégiature
QUEBEC	1,832	150	1,683
%		8.2%	91.8%
ONTARIO	2,622	195	2,427
%		7.4%	92.5%

Source: Statistique Canada, L'équipement ménager, Mai 1976, Cat. 64-202, p.29
Source: Statistics-Canada, May 1976, Cat. 64-202, p.29.

3.5: Penetration Rates and Services

Early in this study it appeared expedient to assimilate two concepts that seemed, at first sight, to be identical, the concept of penetration related to phone service accessibility. The assumption was that in territories where the penetration rate had a high value, the phone services were easily accessible and available. After consultation, it was noticed that in certain areas such was not the case, as in Terrebonne County, Quebec, where the M.R.T./100 households rate is 187.7. Consultation indicated that accessibility to phone services is pratically non-existent in that specific area. On the other hand, in Drummondville County, Quebec, where the M.R.T./100 households rate is 73.1, there seem to be no problems related to the accessibility of phone services.

These isolated examples could be an exception to the rule, but another case to which more detailed attention was given has led to greater caution in the interpretation of penetration rates. It concerns the territory of the Iles de la Madeleine in Quebec[1]. It appears that the quality of the phone service in that area varies from very poor to average, that the technical problems are numerous and that the public in general is not satisfied. The telephone data for that specific area, as illustrated in Table 95, provides us an opportunity to establish a parallel between reality and statistical references.

It may be appropriate to affirm after reading the last table that the Iles de la Madeleine situation appears to be better than the Quebec average rural situation. Comparisons between different penetration rates as shown in Table 96, however, modify this first impression.

Even if the M.R.T./100 households rate is near the provincial average, all the other rates give a lower value profile except for the commercial phones. This suggests that penetration rates can only provide general

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[1] Conseil des Communications de l'Est du Québec. Le service téléphonique dans l'Est du Québec. Rapport d'étape, 1976, Vol. I-II.

Table
Tableau 95

COMPARATIVE TELEPHONE DISTRIBUTION DATA: ILES DE LA MADELEINE AND RURAL QUEBEC (AVERAGE DATA) in %, 1975

SITUATION COMPAREE DE LA TELEPHONIE EN MILIEU RURAL: ILES DE LA MADELEINE ET LE QUEBEC EN %, 1975

	Residential phones/ Appareils résidentiels					Business phones/ Appareils commerciaux					Phones/ Appareils			Lines/ Lignes	
	By subscriber types/ Par type d'abonnés (%)			Main/ Princ. (%)	Exten/ Suppl. (%)	By subscriber types/Par type d'abonnés (%)		Main/ Princ. (%)	Exten/ Suppl. (%)	Others Autres (%)	Res.	Bus./ Com.	Coin/ Taxi.	Res.	Bus./ Com.
	1 sub. 1 ab.	2 sub. 2 ab.	4+ sub. 4+ ab.			1 sub. 1 ab.	2 sub. 2 ab.								
Iles de la Madeleine	79.4	19.1	1.5	89.6	10.4	91.3	8.7	48.6	31.2	20.2	72.1	27.8	0.1	81.1	18.9
Québec (prov.)	58.4	14.8	26.8	84.0	16.0	87.6	12.4	39.0	36.0	25.0	77.0	22.1	0.8	83.0	17.0

* Including P.B.X., W.A.T.S., Centrex, Mobile units/Inclut P.B.X., W.A.T.S., Centrex, Mobiles.

Table 96 COMPARATIVE TELEPHONE PENETRATION RATES: ILES DE LA MADELEINE AND RURAL QUEBEC, 1975

Tableau INDICES TELEPHONIQUES COMPARATIFS: ILES DE LA MADELEINE AND RURAL QUEBEC, 1975

	T./100 Pop T./100 Pop	R.T./100 Pop T.R./100 Pop	M.R.T./100 h. T.P.R./100 m.	C.T./1,000 p. Taxi./1,000 p.	B.T./B. T.Com./Activ.
Iles de la Madel.	31.7	22.9	110.7	0.298	10.5
Québec	37.9	29.2	107.9	0.291	8.1

reference points on a comparison scale and that a minor difference in values between them does not have great impact. In an hypothetical situation where penetration rates are a little higher in zone A than in zone B, it could thus be said that the quality of phone services would be equivalent. The expression "more or less accessible" in these cases would be appropriate.

3.6: The Penetration Rates - Regional Classification by Penetration Rates

For a more systematic presentation, the study area's sub-regions have been classified in Table 98 according to their M.R.T./100 households value in an order of diminishing importance. Each sub-region has been classified under the four following categories:

Category #1: High rate value (standard deviation above average).
Category #2: Above average rate value.
Category #3: Below average rate value.
Category #4: Low rate value (standard deviation below average).

A. Penetration Rates in Quebec

1. High-Rate Value Sub-Regions - Two important sub-regions in Quebec belong to this category. These are by order of importance the Saguenay Lac St-Jean sub-region and the Montreal North region (See Table 97).

Table 97 COMPARATIVE RATES (Category #1, Sub-regions)
Tableau INDICES COMPARATIFS

C.D./Div. Recensem.	MRT/100 h TRP/100 m	T./100 P. T./100 P.	RT/100 P. TR/100 P.	CT/1000 p TX/1000 p	B.T./B. T.Com/Act	T./Mi^2 T./Mi^2
Saguenay-Lac St-Jean	133.5	38.0	30.2	2.55	6.1	8.5
Montreal North	131.1	50.6	40.1	4.21	10.7	27.0

Montreal North sub-region is generally considered to have a higher penetration rate than the Saguenay-Lac St-Jean sub-region; these two territories have an important number of secondary residences. Typical counties of these sub-regions are the Lac St-Jean East, Joliette and Montcalm Counties.

Table 98 SUB-REGIONS CLASSIFICATION IN QUEBEC AND IN ONTARIO ACCORDING TO THEIR M.R.T./100 HOUSEHOLDS RATE VALUE (1975)

Tableau CLASSIFICATION DES SOUS-REGIONS SELON L'INDICE T.R.P./100 MENAGES QUEBEC ET ONTARIO (1975)

Category	QUEBEC $\bar{x}$: 95 σ: 16.2		Category	ONTARIO $\bar{x}$: 95 σ: 10.7	
1	Saguenay-Lac St-Jean	133.5	1	Georgian Bay	111.2
1	Montreal North	131.1	1	Mid-Western Ontario	106.0
2	Outaouais	114.6	2	Eastern Ontario	101.5
2	Eastern Townships	113.7	2	Niagara	99.6
			2	St. Clair	96.7
3	Québec	106.0	3	Lake Erie	89.8
3	Gaspesia	103.4	3	Lake Ontario	88.7
3	Montreal South	101.5	3	North Western Ontario	85.2
3	North Shore	99.0			
4	Trois-Rivières	89.3	4	North Eastern Ontario	82.1
4	Abitibi	82.8	4	Central Ontario	78.2

2. The Moderately High-Rate Value Sub-Regions (Category #2) - The Quebec sub-regions that can be classified under this category are those of Outaouais and the Eastern Townships (See Table 99).

Table 99 COMPARATIVE RATES (Category #2, Sub-regions)
Tableau INDICES COMPARATIFS

C.D./Div. recensem.	MRT/100 h TRP/100 m	T./100 p. T./100 p.	RT/100 p. TR/100 p.	CT/1000 p TX/1000 p	B.T./B. T.Com/Act	$T./Mi^2$ $T./Mi^2$
Outaouais	114.6	42.8	33.3	3.77	8.9	6.5
Eastern Townships	113.7	42.1	32.0	2.61	10.7	11.2

Those two sub-regions also have a certain number of secondary residences. Typical of these are Labelle, Papineau, Frontenac and Stanstead Counties.

3. The Moderately Low-Rate Value Sub-Regions (Categorie #3) - All the following sub-regions have penetration rates that fall below the provincial average. These territories in descending order are the Quebec, Gaspesia, Montreal South and North Shore sub-regions (See Table 100).

Table 100 COMPARATIVE RATES (Category #3, Sub-regions)
Tableau INDICES COMPARATIFS

C.D./Div. recensem.	MRT/100 h. TRP/100 m.	T./100 p. T./100 p.	RT/100 p. TR/100 p.	CT/1000 p TX/1000 p	B.T./B. T.Com/Act.	$T./Mi^2$ $T./Mi^2$
Québec	106.3	35.3	27.3	2.79	7.0	12.5
Gaspesia	103.4	33.8	25.0	2.50	7.2	9.6
Montreal South	101.5	39.5	30.6	2.56	9.5	27.2
North Shore	99.0	31.3	22.5	3.86	8.8	1.7

Even with a M.R.T./100 households rate of 101.5, the Montreal South sub-region appears to be the best equipped territory in this category. The most representative counties of these sub-regions would be in order, Charlevoix-O., Lévis, Rimouski, St-Hyacinthe, Shefford Counties. The North Shore sub-region is covered by only one county, Saguenay.

4. The Low-Rate Value Sub-Regions (Category #4) - The Quebec sub-regions that can be classified in this category are those of Trois-Rivières and Abitibi (See Table 101).

Table 101 COMPARATIVE RATES (Category #4, Sub-regions)
Tableau INDICES COMPARATIFS

C.D./Div. Recensem.	MRT/100 h. TRP/100 m.	T./100 p. T./100 p.	RT/100 p. TR/100 p.	CT/1000 p. TX/1000 p.	B.T./B. T.Com/Act.	$T./Mi^2$ $T./Mi^2$
Trois-Rivières	89.3	30.3	23.2	2.12	6.2	11.8
Abitibi	82.8	26.1	19.3	2.38	6.6	6.3

Typical counties of these sub-regions are Arthabaska, Nicolet, Abitibi, and Temiscamingue.

B. Penetration Rates in Ontario

1. High-Rate Value Sub-Regions (Category #1) - The sub-regions that have a high penetration rate value in Ontario are those of Georgian Bay and of Mid-Western Ontario (See Table 102).

Table 102 COMPARATIVE RATES (Category #1)
Tableau INDICE COMPARATIFS

C.D./Div. Recensem.	MRT/100 h. TRP/100 m.	T./100 p. T./100 p.	RT/100 p. TR/100 p.	CT/1000 p. TX/1000 p.	B.T./B. T.Com/Act.	$T./Mi^2$ $T./Mi^2$
Georgian Bay	111.3	50.1	39.5	4.74	11.0	15.6
Mid-Western O.	106.0	44.5	36.3	2.06	9.4	18.9

The influence of the role played by secondary residences in these territories, mainly Georgian Bay, must be noted here. Representative counties of these two sub-regions are Bruce, Simcoe, Huron or Wellington.

2. Moderately High-Rate Value Sub-Regions (Category #2) - The Ontario sub-regions that fall under this category are those of Eastern Ontario, Niagara and St.Clair (See Table 103).

Table 103 COMPARATIVE RATES (Category #2)
Tableau INDICES COMPARATIFS

C.D./Div. Recensem.	MRT/100 h. TRP/100 m.	T./100 p. T./100 p.	RT/100 p. TR/100 p.	CT/1000 p. TX/1000 p.	B.T./B. T.Com/Act.	$T./Mi^2$ $T./Mi^2$
Eastern Ontario	101.6	48.7	35.3	3.10	22.7	21.7
Niagara	99.6	43.2	35.0	2.27	11.4	38.0
St. Clair	96.8	42.0	33.7	2.06	12.2	27.2

Typical of these sub-regions are the counties of Dundas, Frontenac, Brant and Lambton.

3. Moderately Low-Rate Value Sub-Regions (Category #3) - The Ontario sub-regions that can be classified under this category are those of Lake Erie, Lake Ontario and Northwestern Ontario (See Table 104).

Table 104 COMPARATIVE RATES (Category #3)
Tableau INDICES COMPARATIFS

C.D./Div. Recensem.	MRT/100 h. TRP/100 m.	T./100 p. T./100 p.	RT/100 p. TR/100 p.	CT/1000 p. TX/1000 p.	B.T./B. T.Com/Act.	$T./Mi^2$ $T./Mi^2$
Lake Erie	89.8	38.7	31.6	1.99	8.6	19.3
Lake Ontario	88.7	37.7	31.1	2.74	7.6	9.9
North-Western Ontario	85.3	38.2	26.9	5.12	11.3	8.1

Typical counties of these sub-regions would be Elgin, Middlessex, Durham and Rainy River.

4. The Low-Rate Value Sub-regions - The lowest penetration rates are found in Ontario in the Northeastern and Central sub-regions (See Table 105).

Table 105 COMPARATIVE VALUES
Tableau INDICES COMPARATIFS

C.D./Div. recensem.	MRT/100 h. TRP/100 m.	T./100 p. T./100 p.	RT/100 p. TR/100 p.	CT/1000 p. TX/1000 p.	B.T./B. T.Com/Act.	T./Mi^2 T./Mi^2
North-Eastern Ontario	82.1	32.9	25.0	2.95	9.7	11.6
Central Ontario	78.3	34.9	28.3	2.20	7.6	24.8

The representative counties of the Northeastern Ontario region are Timiskaming or Algoma. Central Ontario, for reasons of urban expansion and land speculation, may not be too representative of a rural area; this is the reason why no counties have been selected in that particular territory.

4.0: ANALYSIS

4.1: Socio-Economic and Telephony Data Analysis and Sub-Region Characterization

In order to make a better choice of target areas, the specific socio-economic characteristics of each sub-region will be outlined here in relation to telephone penetration. Only the R.S.A. will be considered throughout this section.

A. Quebec

1. Gaspesia: Socio-economic - This sub is the largest in size in Quebec, but it becomes the fourth largest sub when the unorganized land area is eliminated. Its 1971 total population comes third (197,625); the unorganized population amounts to 2,480. Population density is 30 persons per square mile (organized). Households account for 12% of the province total, and there are 40,405 dwelling units on its territory. Household density (organized) is 6.1 (including unorganized, it falls to 2.6). Household linear density is 16.86, which is in the province average. The number of persons per household is 4.74, slightly over the average. Number of communities (205) is the third largest in the province; 126 communities have fewer than 1,000 population; 32% of the population live in the 86 municipalities counting 500 to 999 inhabitants; another 28% live in the 45 1,000 to 1,500 localities. Gaspesia is fifth as far as farming is concerned; the other economic activities are as follows: trade activities (high), third position, and salaries over the average; manufacturing activities, fifth position as per the number of activities but seventh for employee number, salary below the average.

Telephone Service Penetration - Residence: Three-quarters of the phone terminals are residential; 25% of subscribers are on multiple-party lines, which is in the province average, and two-party lines are the second highest in Quebec. Household penetration rate is below the average (103.4). Business: 14.7% of the business subscribers are on two-party lines, which is relatively high. Number of business telephones per business: 7.2 (the fifth from the highest position). Number of telephone companies: three.

Comments - Telephone penetration seems slightly below average in Gaspesia. This can be explained by the fact that there is a high number of small communities, not too far apart (6.2 miles in average) all situated along a narrow organized strip of territory. A high household density (in the province average) also helps to explain the penetration. However, it cannot be said that the penetration is good everywhere in the sub-region; there are specific areas which may not have the same telephone service, especially the 2,500 persons of the unorganized territory. The high percentage of two-party and over business lines can probably be explained by many factors, one of which could be the low revenue that business activities have.

2. Saguenay-Lac St-Jean - Socio-economic: Saguenay organized area is next to the smallest; total sub population (90,915) is the third smallest. Unorganized population is around 2,000. Density (organized) is 25.8, close to the provincial average. Households account for 5% of the province, and there are 17,160 dwelling units on the territory. Household density is 4.8, which is lower than the provincial average (6.4); linear density 14.5, is lower than average. Average number of persons per household, 5.11, the highest number in the province.

Number of communities is 75 (third smallest number); there are 27 localities with 500 to 999 inhabitants and 25 ranging from 1,000 to 1,500. 56.7% of the population live in communities of fewer than 1,500 inhabitants. Average distance between communities is 6.4 miles. Saguenay is the third smallest in the number of farms; trade activity is low (809 activities), salaries in the average; third in the number of employees in the manufacturing activities, salaries in the highest.

Telephone Service Penetration - Residence: 79% of telephones are residential; 64.8% of the subscribers are on one-party lines, which is relatively high; still 26% are on multi-party lines. Household penetration rate is the highest in the province (133.5)

Business - Only 8.7% of the subscribers are on two-party lines. Saguenay has the lowest number (6.1) of business telephones per business place. There is one telephone company on the territory.

Comments - High residential penetration rate may be partly explained by a large number of secondary residences. Another factor that may explain this fact is an economic one; high manufacturing salaries and high manufacturing added value. This could also explain the high percentage of one-party lines.

3. Quebec - Socio-economic: Quebec sub has the largest organized territory. Its 1971 total population (295,170) comes first also; unorganized population is relatively low (1,000). Population density (35.3) is over the average. Households account for nearly 20% of the province total, and there are 65,470 dwelling units on the territory. Household density is 7.8 (over the average), and linear density 19.49 is relatively high. The number of persons per household is 4.29 (in the average). Number of communities (279) is the highest in the province; 151 communities have fewer than 1,000 inhabitants; 26.2% of the population live in the 104 communities of 500 to 999 inhabitants; another 31.5% live in the 76 localities of 1,000 to 1,500 persons. Average distance between communities is 5.3 miles. Quebec is second in the number of farm activities (9,272), first in the number of trade activities, the salaries of which are the second highest in the province. Manufacturing activities come first (531), but salaries are low, and added value is relatively low.

Telephone Service Penetration - Residence: 77.3% of all telephones are residential. One-party line subscribers are relatively low (54.3%). Quebec has the highest rate of two-party line subscribers (22.2%). Household penetration rate is slightly below the average (106.3).

Business - There are 12.7% of multi-party line subscribers, the fifth highest in the province. The number of business telephones per business is 7.0 (below the average).

Number of telephone companies: eight.

Comments - A high farming activity and relatively low business revenues may explain partly the high percentage of two- and multi-party subscribers, both residential and business. A fairly high household density (both square mile, and linear) is probably a factor of an average penetration rate.

4. Trois-Rivières - Socio-economic: Trois-Rivières organized territory is the fourth smallest, with 3,833 square miles. Its total population (141,365) comes in the fifth position; unorganized population is 2,325. Population density (organized) is 36.3, a relatively high density. Households account for around 10% of the province total, and there are 32,940 dwelling units on its territory.

Household Density (organized) is 8.4 (the third highest density); linear density is 16.90 (above the average). The number of persons per household is 4.2, slightly below the average. The number of communities is 157, the fourth largest number in the province; 106 municipalities have fewer than 1,000 inhabitants; 69.5% of the population live in municipalities of fewer than 1,500 inhabitants. Average distance between communities is 5.2 miles. The number of farming activities is 6,213 (coming third in the province). Trade activities are in the province average (1,396) and salaries are the lowest. Manufacturing activities come fourth (with 274 enterprises), and the region ranks sixth for the number of employees (7,012), average salary being the lowest in the province.

Telephone Service Penetration - Residence: Three-quarters of all telephones are residential; 32.6% of the subscribers are on multiple-party lines, this percentage being high. It has, with Abitibi, the lowest percentage of single-party subscribers (52.6%). Household penetration rate is very low (89.3).

Business: 24.5% of the businesses are on multi-party lines, which is the highest percentage in the province; the number of business telephones per business is 6.2, one of the lowest rates in the province.

Number of telephone companies: 10

Comments - Telephone penetration rates show a rather poor situation in Trois-Rivières. Among the socio-economic reasons to explain this fact it may be worth mentioning the very low level of rural business activities and low salaries. A quite high number of farming activities may explain also the high multi-party percentage. Rural areas are traditionally served by multi-party lines. High household density does not always explain the penetration; other factors should be looked at.

5. Eastern Townships - Socio-economic: Eastern Townships territory is in the average with 4,069 square miles (organized). Population (98,920) is the fourth smallest. Population density is 24.3, which is below the province average. Households account for 7% of the province; and there are 23,040 dwelling units on the territory. Household density (5.6) is relatively low. Linear density is one of the lowest (10.42 households per mile). The number of persons per household is 4.16, which is below average.

The total number of communities (118) is the fourth smallest in the province; 90 localities have fewer than 1,000 inhabitants; 72.4% of the population live in the 107 municipalities of fewer than 1,500 of population. Average distance between communities is 5.8 miles. The Eastern Townships come sixth in the number of farm activities (1976). Trade activities are third from the last, salaries are over average. In the middle or average position as far as manufacturing activities and job generating; the salaries are below average.

Telephone Service Penetration - Residence: About three-quarters of all telephones are residential; 25.3% of the subscribers are on multi-party lines. Single-party subscribers are in the provincial average. Household penetration rate (113.7) is the fourth highest in the province.

Business: 91.3% of the businesses are on single-party lines, which is high. Number of business telephones per business place is 10.7, the highest with Montreal North.

Number of telephone companies: 10

Comments - Telephone penetration is above average, especially for business. Household density does not seem to be a determining factor. A high number of very small communities not too far apart could give a partial explanation. Economic factors could play a small role; economy is in relatively good shape. Farming activities are dropping fast. The secondary residence phenomenon has to be considered (Eastern was in the provincial average in 1971, but the the phenomenon is increasing rapidly for the last five years) to explain a high M.R.T/100 h rate.

6. Montreal-North - Socio-economic: This sub is the third smallest as far as land area is concerned. Its total population is the fourth largest (166,730) for 1971. Unorganized territory population is negligible. Population density is the second highest with 46.5 persons per square mile. Households account for 13% of the province total, and there are 41,995 dwelling units on its territory. Household density is 11.7, which is nearly twice the province average (organized); linear density is the highest, 25.44 households per mile. The number of persons per household is the lowest (3.82). The number of communities is 126 (fifth from the top); 64 municipalities have fewer than 1,000 inhabitants; there are 42 between 1,000 and 2,000 with 38.7% of the population; 15% of the population live in 3,000 to 4,000 localities. Distance between communities is the second shortest, 5.0 miles. Montreal North comes forth for farming activities (4,202 farms in 1976). Trade activities are over the average, and salaries are in the average. Manufacturing activities come third, but it is fourth as far as job creating is concerned. Salaries are slightly over the average.

Telephone Service Penetration - Residence: Around 80% of the phone terminals are residential; 30.9% of the subscribers are on multi-party lines, but only 10.8% are on two-party lines. Household penetration rate is very high (131.1).

Business: 92.1% of the businesses are on single-party lines, which is the third highest percentage in Quebec. The number of business telephones per business place is 10.7, which is the highest in the province. There is one telephone company in the territory.

Comments - A high percentage of multi-party lines may be partly explained by a relatively high number of farm activities. High penetration rate may be explained by the presence of Montreal and a good economy, larger communities, and a small distance between each of those and the presence of a large number of secondary residences.

7. Montreal-South - Socio-economic: Montreal South land area is in the average (4,049 square miles); and its population is the second largest (246,390). It has the highest density with 60.9 persons per square mile. Households account for 18.3% of the province total, and there are 60,725 dwelling units on the territory. Household density is 15.8; linear density is high: 20.14 households per mile. The number of persons per household is the second smallest (3.96). Number of communities (214) is the second largest in the province. There are 112 localities under 1,000 of population, and 81 between 1,000 and 2,000. Three-quarters of the population live in communities having from 500 to 2,500 inhabitants. Distance between the communities is the lowest (4.5 miles in average). There is a very high farming activity; indeed 10,181 is the highest number of farms (1976). Second highest in trade activities (2,062), the salaries are slightly above the province average. Also second for the number of manufacturing activities, and first for the number of jobs; salaries are below average and added value is not excessively high.

Telephone Service Penetration - Residence: 77.5% of phone terminals are residential; 64.4% of the subscribers are on single-party lines, which is a high percentage; 21.8% of the subscribers are on multi-party lines and 13.8% on two-party. Household penetration (101.5) is below average.

Business - Only 7.8% of business subscribers are on two-party lines (the second smallest percentage in the province). There are 9.5 business telephones per business place (average is 8.1). Number of telephone companies: eight.

Comments - A very high density coupled with a good economy may explain a high percentage of single-party lines. Household penetration is not high; can the high number of farms be partly responsible for that situation? It is hard to give a strong yes to that question, especially with farm revenues matching the province average.

High trade activities and a healthy economy can explain a very good business penetration rate and high single-party lines in that category.

8. Outaouais - Socio-economic: This sub has the third largest organized land area, and its population (109,300) is the sixth largest. Unorganized population is negligible. Population density (organized) is 16.1, which is below the province average (27.75). Households account for 8% of the province total, and there are 26,470 dwelling units on its territory. Household density is the lowest (3.9). Linear density (13.45) is below the average. The number of persons per household (4.01) is below the average. The number of communities is the fifth largest (126), and they are generally small: 94 under 1,000 inhabitants. Nearly two thirds of the population live in communities under 1,500 inhabitants. Average distance between communities is 6.7 miles. The number of farm activities ranks seventh (2,098 farms, 1976). Trade activities come sixth in the province, with sales per activity average; salaries are above average. Manufacturing activities are fairly low (94); added value is relatively good and salaries over the average.

Telephone Service Penetration - Residence: 77.8% of phones are residential; 35.7% of the subscribers are on multi-party lines (second highest). Household penetration (114.6) comes third in the province, above average.

Business - 17.2% of business subscribers are on multi-party lines. Number of business telephones per business (8.9) is slightly above average. Number of telephone companies: three.

Comments - The very low household density and low farm revenues may probably explain the high percentage of multi-party subscribers. Fairly low economic activities could partly explain the high number of businesses on multi-party lines.

9. Abitibi-Témiscamingue - Socio-economic: Abitibi has the smallest organized land area (2,909 square miles). Total population (75,095) is second from the last; unorganized population is considerable (23,285) (the largest unorganized group in the province). Population density (organized) is 17.8; including unorganized land and population, it drops to 10.99 persons per square mile; Abitibi comes second from the last for its population density. Households account for 4.67% of the province total, and there are 15,495 dwelling units on the territory. Household density (organized) is 3.7 and total household density is 2.2. Linear density is the smallest, 9.4 households per mile (average is 16.68). The number of persons per household, 4.64, is slightly over the average. There are 64 communities on the territory. There are 46 localities smaller than 1,000 population; 52% live in communities of fewer than 1,500 inhabitants; 31% live in the two unorganized territories. Average distance between communities is 7.2 miles. Number of farm activities is next to the last, but not negligible (1,396). Trade activities (626) are under the average for sales per activity, and salaries are in the average. Manufacturing activities (64) are in the average for added value, and salaries are below the average.

Telephone Service Penetration - Residence: Three-quarters of all telephones are residential; 37% of the subscribers are on multi-party lines (this is the highest percentage in the province). This sub-region has the lowest single-party subscribers (along with Trois-Rivières). Household penetration is the lowest (82.8) in the province.

Business - There are 16.8% of business subscribers on multi-party lines (the third highest percentage in the province). There are 6.6 business telephones per business (average is 8.1). Number of telephone companies: two.

Comments - The very low density of this sub-region (both linear and in square miles) explains rather well the high percentage of multi-party subscribers. The very low household penetration rate explains itself by the enormous unorganized territory and its very scattered households. Multi-party business subscribers also find their explanation in the low density figure.

10. North-Shore - Socio-economic: This sub has the second largest organized land area (similar to Quebec sub). Population (44,130) is the smallest. Unorganized population is the largest apart from Abitibi (3,408 persons). Population density is 4.9, which is the lowest, and far apart from the next, Outaouais (16.1). Households account for 2.5% of the province total, and there are only 8,180 dwelling units on the territory. Household density is very low (0.9), but linear household density is surprisingly high (the second highest after Montréal North), which is explained easily by the low dispersion of population and households in a small number (34 in all) of communities, and in fact on a limited territory, all along the coast. Number of persons per household (5.04) is one of the highest. Communities are relatively big: 58.4% of the population live in the 24 localities having a population between 500 and 2,500. Average distance between communities is high (17.0 miles). North-Shore farming activities are negligible.

Trade activities come last in the province, average sales per activity are the highest, and far over the province average ($105,000 as compared to $82,000), and salaries are over the average. Manufacturing activities (47) generate an average of 61 jobs per activity, which is one of the highest rates in the province; average salaries are the highest, and shipment value per activity comes second after Saguenay.

Telephone Service Penetration - Residence: 72.0% of all telephones are residential, which is the lowest percentage in the province. 84.7% of all subscribers are on single-party lines, which is very high (provincial average is 58.4%). Household penetration rate (99.0) is the third lowest in the province and well below average.

Business - 93.7% of the business subscribers are on single-party lines (this is the highest percentage in the province). Telephone penetration rate per business is 8.8 (slightly above average). Number of telephone companies: three.

Comments - A relatively low household penetration rate may be explained by a relatively high percentage (7.7%) of population living in unorganized territories, and in rather scattered communities. Some are quite isolated, and their population is less inclined to take advantage of telephone services. High percentage of single-party subscribers is probably due to the fact of a high household linear density and a rather efficient infrastructure of the telephone companies. A high economy could also explain both high percentages of household and business subscribers on single-party lines.

B. Ontario

1. Eastern Ontario - Socio-economic: Eastern is the largest of Ontario's sub-regions. Its total population (1971) is 376,050; it is the most populated rural sub-region. Population density is 38 persons per square mile, which is in the provincial average. Households account for 20% of the province's total, and there are 97,550 dwelling units in the territory. Household square-mile density is 9.9, while linear density is 12.35. Linear density is slightly below the provincial average. The number of persons per household (3.74) is the second highest. There are 133 communities in the territory; only 41 of which have fewer than 1,000 population; 68.2% of the population live in communities or townships of more than 2,500 inhabitants. The average distance between communities is 6.9 miles. Farming activities come third in the province (10,936 farms in 1976). Trade activities (2,203) come first, and sales per activity are the highest; salaries are above average. Manufacturing activities come first, but the number of employees per activity is under the provincial average; salaries are below average and added value is slightly below average.

Telephone Service Penetration - Residence: Number of residential phones is 72.5% of the sub-region total (provincial average is 77.8%); 68.1% of the subscribers are on single-party lines, the third highest percentage in the province. Multi-party telephones account for 21.9%, which is fairly low in relation to the rest of the province. Household penetration rate (101.6) is the third highest in Ontario.

Business - Percent of business phone terminals (26.8) is the second highest in the province. There are only 5.1% multi-party telephones. The highest number of business telephones per business is found in Eastern Ontario (22.7, twice the provincial average). There are eight telephone companies in Eastern Ontario.

Comments - A majority of the population lives in large size communities; this may account for a high number of single-party telephones. A good penetration rate in households and especially in business may be explained by a fairly good economy and high trade activities.

2. Lake Ontario - Socio-economic: Lake Ontario land area is the second largest and population third, 209,520 (1971). Population density is 22.8, which is the second lowest density. Households account for 12% of the province total, and the number of dwelling units is 59,000. Household square-mile density is 6.4 (second lowest), and linear density fifth with 13.22 household per mile. The number of persons per household, 3.48, is below the average. The total number of communities (111) comes fourth; there are 88 communities under 2,500 of population. Average distance between communities is 8.6 miles. Farming activities come fourth (10,017 in 1976). Trade activities come third, but sales are well under the average ($97,000 per activity, as compared to the province average $123,000). Salaries are below the average. Manufacturing comes second (288 activities); number of jobs per activity slightly below the average of 42; added value per activity ($518,000) is under the average.

Telephone Service Penetration - Residence: 82.4% of all telephones are residential, which is the highest percentage in the province; 37.4% of the residential telephones are on multi-party lines, and only 45.4% are single-party subscribers (this is the lowest percent of single parties). Household penetration rate is 88.7, which is below average.

Business: 12.0% of business phones are on multi-party lines and over (this is higher than the provincial average). The number of business telephones per business (7.6) is the lowest, along with central Ontario. The number of telephone companies is six.

Comments - A high number of farming activities with a very low density might explain a low percent of single-party lines. Low economic activities could give a partial answer to the relatively low penetration rates, for households and especially for businesses.

3. Central Ontario - Socio-economic: Next to the smallest sub-region, Central Ontario has a population of 150,355; its density, the highest, is 93.4 persons per square mile. Households account for 8.0% of the province total, and there are 39,475 dwelling units on the territory. Household

density is the highest (24.5 per square mile); linear density (31.1) is the highest, and more than twice that of the province average. Number of persons per household is 3.74. The number of communities is the lowest (23); 14 are townships of more then 3,000 inhabitants, containing 93% of the population. Average distance between communities is 6.9 miles. The number of farm activities (1976) is 3,229 (third from the last among the sub-regions). Trade activities (794) have an average sale of $131,000, which is above the province average; salaries are slightly below the average. Manufacturing comes next to the last sub-region, with 161 activities, but each activity generates 64 jobs (average of province is 42). Salaries are just about in the average. Added value is relatively high.

Telephone Service Penetration - Residence: 81.2% of all telephones are residential. Central comes first for single-party telephones with 72.6%. Household penetration rate is the lowest (78.3) in the province, but is regarded as an inconclusive rate.

Business - The proportion of single-party business telephones is very high (95.8%). Number of business telephones per business is the lowest, 7.6. There are two companies in Central Ontario.

Comments - High density explains easily the high number of single-party subscribers (both in households and businesses). Low service penetration cannot be directly explained by these general socio-economic figures. Some other factors may explain this rather strange situation.

4. Niagara - Socio-economic: Niagara has the smallest land area; population 130,775 is next to the smallest. Density is high, 87.1 persons per square mile. Households account for 7.0% of the province total, and there are 34,255 dwelling units on its territory. Household density (22.8) is second highest, and linear density is 17.73. The number of persons per household is 3.78. The number of communities is 30, and 80% of the population live in the 14 localities or townships of 3,000 inhabitants and over. Average distance between communities is 6.5 miles. Niagara comes sixth for farming activities, 9,218 farms in 1976. Trade activities

come next to the last in number, the average sales per activity are higher than the province average; salaries are slightly over the average. Manufacturing activities come fourth from the last; number of jobs generated per activity (32) is below average; salaries are slightly below average, and added value is below average.

Telephone Service Penetration - Residence: 80% of all telephones are residential. There are 57.3% of single-party residence telephones; and penetration is above average (99.6).

Business: 93.1% of business telephones are on single-party lines; and business penetration rate is average (11.4 business telephones per business). There are two telephone companies servicing the sub-region.

Comments - There are good penetration rates, both in households and business; a generally good economic activity and high densities are probably important factors to explain this fact. Low single subscribers in residential telephones is difficult to explain, especially when businesses have a high percentage. Farming activities are quite numerous and salaries are not the highest.

5. Lake Erie - Socio-economic: Of a medium size land area, Lake Erie rural population (164,305) is the sixth largest among the sub-regions. Population density is 49, which is above the average. Households account for 9.1% of the province total, and there are 44,895 dwelling units on its territory. Household square-mile density is 13.4 (above the average), and linear 10.81 (below the average, and third form the lowest). The number of persons per household (3.55) is below the average. There are 62 communities (the fifth largest number), which are rather large; most are over 1,000 of population; 63.2% of the population live in communities of 3,000 and over. Average distance between communities is 7.6 miles. The number of farm activities (1976) is 8,394, or the fourth smallest number in the province. The number of trade activities (1,158) is the fifth largest, but sales per activity are rather low; salaries

below the average. The number of manufacturing activities (184) comes sixth; the number of jobs per activity is 21 (second from the last). Salaries are below average, and added value low.

Telephone Service Penetration - Residence: 81.6% of the total of telephones are residential. The number of single-party subscribers is the second lowest (49.4%); multi-party telephones represent 30%. Household penetration rate (89.8) comes sixth in the province and is below average.

Business: 93.1% of the business telephones are on single-party lines (average is 89.9%). Business penetration rate (8.6) is second lowest. Number of telephone companies: six.

Comments - A low linear density of households could have influenced the high number of multi-party residential telephones. Low penetration rates can be partly attributed to a low economy. Other important factors could be considered such as the type of service offered by the six companies.

6. Lake St. Clair - Socio-economic: It has the third from the smallest land area; its population is 166,555, and density (60.6) is high. Households account for 9.3% of the provincial total, and there are 45,860 dewlling units in the territory. Household density (16.7) is high, and linear density (14.40) is slightly below the province average. The number of persons per household (3.58) is below the average. Total number of communities is 54; 79.6% of the population live in the 22 communities of more than 3,000 inhabitants; average distance between communities is 7.8 miles. The number of farm activities (9,557 in 1976) comes fifth among the sub-regions. The 1,025 trade activities generate an average of $132,000 of sales per activity, which is above the province average; salaries are average. Manufacturing activities come third in number; the number of jobs per activity is below average; salaries are in the average; added value is below the average.

Telephone Service Penetration - Residence: 80% of all phones are residential; 58.6% are on single-party lines, which is average. Penetration rate (96.8) is average.

Business - There are 92.8% of business telephones on single-party lines, and business penetration rate is high at 12.2. There are six telephone companies on the territory.

Comments - An average telephone service penetration corresponds to a relatively good economy and average household density.

7. Mid-Western Ontario - Socio-economic: Mid-Western has an area of 3,581 square miles (fifth largest); its population (136,815) comes third from the smallest sub. Population density (38.2) is in the average. Households account for 7.4% of the province total, and there are 36,525 dwelling units on the territory. Household square miles density (10.5) comes fifth; linear density (9.6) is next to the lowest. The number of persons per household (3.68) is average. There are 60 communities and most of them fall in the categories between 500 and 2,500 people; this group counts 44 units and 50% of the population. The average distance between communities is 7.9 miles. The number of farm activities is 11,414 (1976), the highest in the province. Trade activities come sixth, and sales are below the average; salaries are in the average. Manufacturing activities come third; the number of jobs (22) per activity is under the average; salaries are low; added value the second lowest.

Telephone Service Penetration - Residence: 81.3% of all telephones are residential; only 51.3% of telephones are on single-party lines (multi-party: 28.6%). Household penetration rate is 106, second highest in the province.

Business: 26.6% of business phones are on party lines of two or more, which is a very high percentage. The number of business phones per business (9.4) is below average. The number of telephone companies is nine.

Comments - A high number of multi-party lines can be explained by a very

low linear density of households. Farm activity is high and farm revenues are in the highest of the province (84.5% have more than $5,000 sales, 1976), this may account for a high household penetration. High household penetration may also be affected by a high number of secondary residences. Business activities do not generate a high money turnover, which could be reflected in low business-phone penetration rate.

8. Georgian Bay - Socio-economic: This sub is the third largest (organized territory only), its population comes fourth (208,145); unorganized territory population is 4,035. Population density is 25.9 persons per square mile (organized territory). Households account for 12% of the province total, and there are 59,830 dwelling units on the territory. Household density is the fourth lowest (7.4), and linear (12.99) is sixth, and below the average. Average number of persons per household (3.41) is below the average. The total number of communities (120) is the second highest. There are 46 localities under 1,000 inhabitants, and 55 between 1,000 and 2,500; 58% of the population live in communities smaller than 2,500 inhabitants. The average distance between communities is 8.5 miles. The number of farm activities (1976) is 11,047 (the second largest number). Trade activities come second, sales being below the average and salaries also. Manufacturing activities come fourth; jobs generated per activity (14) are the lowest, and also the added value.

Telephone Service Penetration - Residence: 78.8% of all phones are residential; 31.8% of phones are on multi-party lines (second highest percentage). Household penetration rate (111.3) is the highest in the province.

Business - There are 10.5% of party lines with two or more subscribers. This is average. Business penetration is average (11.0 phone terminals per activity). The number of telephone companies is eight.

Comments - High farming activities and a low density can explain easily the high multi-party percentage. High penetration rate could be

explained by the great number of small communities, all being relatively well served by the eight companies that share this market and by a very large number of secondary residences in the area.

9. Northeastern Ontario - Socio-economic: Organized land area is the fourth largest; total population is 228,725, the second largest number in the province. There are 54,305 persons in the unorganized territories. Organized area population density is 27.5 persons per square mile, which is not far from the average. Households account for 12% of the province total and there are 56,685 dwelling units on the territory. Household square-mile density (organized) is 6.8 (third form the lowest density; linear density, 14.56, is average). The number of persons per household is 3.93, the highest number in the province. Communities (113) come third for their number. There are 64 localities below 1,000 inhabitants; 30% of the population live in communities under 2,000 inhabitants; 24% live in unorganized territories. Average distance between communities is 9.0 miles. Northeastern is next to the last as far as farming activities are concerned (2,327 in 1976). Trade activities come fourth, and sales per activity ($134,000) are over the average. Salaries are above the average, indeed the highest of all. Manufacturing activities come fifth; jobs generated per activity (121) are much more numerous than in other sub-regions. Salaries are the highest, and so is the added value.

Telephone Service Penetration - Residence: 76% of total telephones are residential. Subscribers figures by type are not available. Penetration rate comes second to the last (82.1).

Business - Penetration rate (9.7) is below average. The number of telephone companies is five.

Comments - Low penetration rates are partly explained by 24% of the population living in unorganized territories. Distance between communities is also relatively high.

10. Northwestern - Socio-economic: Organized land area is fourth from the smallest, and Northwestern population is the smallest (66,815). Unorganized population is 17,340 or 26% of the total. Population density (organized) is 14.7, the lowest density among the sub-regions. Households account for 3.5% of the province total, and there are 17,065 dwelling units on the territory. Household density (3.6) is the lowest, and also the linear density, 8.68 households per mile. There are 3.78 persons per household. The number of communities (44) is the third smallest. There are 21 localities under 1,000 of population, and the majority (58%) live in townships smaller than 2,500 inhabitants. Average distance between municipalities is 11.7 miles. Farm activities are very small (844). Trade activities (602) come last by number; average sales per activity are over the province avérage, and salaries are over the average. Manufacturing activities (77) also come last, but jobs generated are higher than the average; salaries are the second highest, and added value is the second best.

Telephone Service Penetration - Residence: 70% of all phones are residential; 71.8% of all telephones are on single-party lines (second highest percentage in the province); multi-party accounts for 19.5%. Household penetration rate (85.3) is below average.

Business: 88.8% of business phones are on single-party lines (average is 89.9%); business telephones per business (11.3) is average. There are three telephone companies on the territory.

Comments - Low penetration rate can be explained by a high percentage of population (26%) living in unorganized territories, and the lowest household density (organized territories) in the province. A high number of households with single-party lines may be partly explained by the high economy of the sub-region.

4.2 Choice of Representative Areas

Regional representative areas are meant to be clusters of territory units (sub-regions in this case) where significant common denominators are found, so that a particular group may be considered representative of a well defined geographical and socio-economic phenomenon.

To determine such clusters, a certain number of the most discrimating variables were selected. Variables not of the same level of significance (physiography, as opposed to revenue) were eliminated. Another variable, education, would have been valuable, but problems of statistical inconsistencies in one of the provinces forced its elimination. The most significant remaining variables are economic:

1) The total household income (1970); 2) the average sales per trade activity (1971); 3) the average shipment value in manufacturing (1972). These three variables generally provide a good indication of regional growth.

In the socio-demographic group of variables, only one was regarded as sufficiently significant to be retained: the percent of population in farm and non-farm activities. This single social index proved to be an effective clustering factor, especially in Ontario. Moreover, the farm-non-farm variable confirms the economic activity type or characteristic of a sub-region, the non-farm population mainly working in trade and industry.

For Quebec, the first result with four variables was not found satisfactory by the study group; it was therefore decided to add a geographical factor which grouped with the others would contribute to sub-regional definition. The result proved satisfactory. The fifth variable is the square-mile household density, organized territory only. This in a certain way also expresses an economic value, indicating expenses entailed, for example, in the installation of a service for the population, such as cable T.V.

The setting up of the index for each of the variables was as follows: the provincial average serving as a base for comparison among the sub-regions, a rating of 4 was set for sub-regions having the highest average values, 3 for values above the general average, 2 for values below the provincial average, and 1 for the lowest values. For instance, in Quebec, for the household sq. mi. density variable, the provincial average being 6.4, Montreal South having the highest value (15.8) received a rating of 4; Montreal North follows with 11.7, thus receiving a value of 3. The attribution of these indexes is thus directly related to our interpretation of each value.

A. QUEBEC

Table 106 shows the results of the clustering indexes for Quebec. Representative areas are three:

1. The High Cluster:

- Saguenay/Lac St-Jean (16)
- Montreal North (15)
- Montreal South (15)
- North Shore (17)

The characteristics of this first cluster can be summarized as follows:

- Household density is from medium to high, especially the linear density;
- high economic activity;
- farm population from medium to high;
- polarized by high-density metropolitain areas;
- telephone service generally high.

Table 106 QUEBEC SUB-REGIOANL CLUSTERING INDEXES/

Tableau INDICE DE REGROUPEMENT DES SOUS-REGIONS - QUEBEC

Sub-regions/ Sous-régions	ORG. TERR. sq. mi. household density/ densité des ménages (mi^2)	% non-farm population/ % pop. non agricole	Tot. household ave. income (1970)/ Rev. tot. moy. des ménages	Ave. sales, trade activities 1971 / Ventes moy. des commerces	Ave. shipment value manufacturing 1972 / Val. moy. livraisons, manufacturier	TOTAL
Gasposia/ Gaspésie	2	3	2	1	1	9
Saguenay-Lake St. John/ Saguenay Lac St-Jean	2	3	3	4	4	16
Québec	3	2	3	2	1	11
Trois-Rivières	3	1	2	1	1	8
Eastern Townships/ Cantons de l'Est	2	2	2	2	2	10
Montreal north/ Nord de Montréal	3	3	3	3	3	15
Montreal south/ Montréal rive-sud	4	2	2	4	3	15
Outaouais	1	3	3	2	3	12
Abitibi-Témiscamingue	1	3	1	1	3	9
North/Shore/ Côte-Nord	1	4	4	4	4	17

2. The Medium Cluster:

- Quebec (11)
- Eastern Townships (10)
- Outaouais (12)

The characteristics of the second cluster can be summarized as follows:

- Household densities ranging from low to high;
- average economic activities and average income;
- average farming activities;
- average or below for single-party telephones;
- average or above for penetration indexes.

3. The Low Cluster:

- Gaspesia (9)
- Trois-Rivières (8)
- Abitibi-Témiscamingue (9)

The characteristics of this third cluster are summarized as follows:

- Household density from average to low;
- low economic activity and low incomes;
- low farming population except for Trois-Rivières
- below average for single-party telephones;
- below average for penetration indexes.

Within each of these three clusters, all the counties were examined in the light of the cluster characteristics, and the following counties were retained as representative:

High Cluster (See Table 107)

. Saguenay-Lac-St-Jean (16):
- Chicoutimi (14)
- Lac St-Jean Est (17)

. Montreal North (15):
- Deux-Montagnes (14)
- Joliette (13)

. Montreal South (15):
- Beauharnois (15)
- Rouville (15)
- St-Jean (14)
- Shefford (15)
- Vaudreuil (15)
- Verchères (17)

. North Shore (17):
- Saguenay (17)

Medium Cluster (See Table 108)

. Quebec (11):
- Charlevoix-Ouest (10)
- Lévis (11)
- Mégantic (10)
- Portneuf (13)

. Eastern Townships (10):
- Richmond (10)
- Stanstead (10)

. Outaouais (12):
- Gatineau (14)
- Papineau (10)
- Pontiac (10)

Low Cluster (See Table 109)

. Gaspesia (9):
- Rimouski (8)
- Rivière-du-Loup (9)
- Témiscouata (8)

. Trois-Rivières (8):
- Arthabaska (7)
- Drummond (9)
- Nicolet (8)
- Yamaska (7)

. Abitibi (9):
- Abitibi (9)
- Témiscamingue (9)

Chosen counties were matched with cluster general telephone characteristics, and the following two groups of three counties were judged satisfactory for further investigation:

Group I	Group II
- Lac St-Jean-Est (17)	Shefford (15)
- Papineau (10)	Charlevois-ouest (10)
- Nicolet (8)	Témiscamingue (9)

Group II (See Figure 36) has been retained for telephone penetration considerations, and for household density factors (Shefford 10.1; Charlevoix-ouest 7.7; Témiscamingue 5).

TYPICAL AREAS

One community has been chosen in each county, as a typical area respecting the cluster characteristics; communities were compared with average density, average farm, non-farm figures, average community size. Acceptable choices were then screened by comparing economic activities and telephone characteristics with those of their respective clusters.

Table 107 QUEBEC HIGH CLUSTER INDEXES/

Tableau GROUPE FORT-QUEBEC; INDICES GENERAUX

Census division/ Div. de recensement	Density/ Densité	Non farm %/ Pop. non agricole	Aver. tot. Rev. / Rev. tot. moyen	Trade/ Commerce	Industry/ Manufacturier	Total
. Saguenay-Lac-St-Jean						
-Chicoutimi	2	3	1	4	4	14
-Lac-St-Jean-Est	3	3	3	4	4	17
. Montreal North						
-Deux-Montagnes	4	3	2	4	1	14
-Joliette	4	3	1	3	2	13
. Montreal South						
-Beauharnois	4	3	1	3	4	15
-Rouville	4	2	4	3	2	15
-St-Jean	4	2	1	4	3	14
-Shefford	3	2	2	4	4	15
-Vaudreuil	4	3	3	3	2	15
-Verchères	4	3	2	4	4	17
. North Shore						
-Saguenay	1	4	4	4	4	17

Table 108 QUEBEC MEDIUM CLUSTER INDEXES/

Tableau INDICES, GROUPE MOYEN, QUEBEC

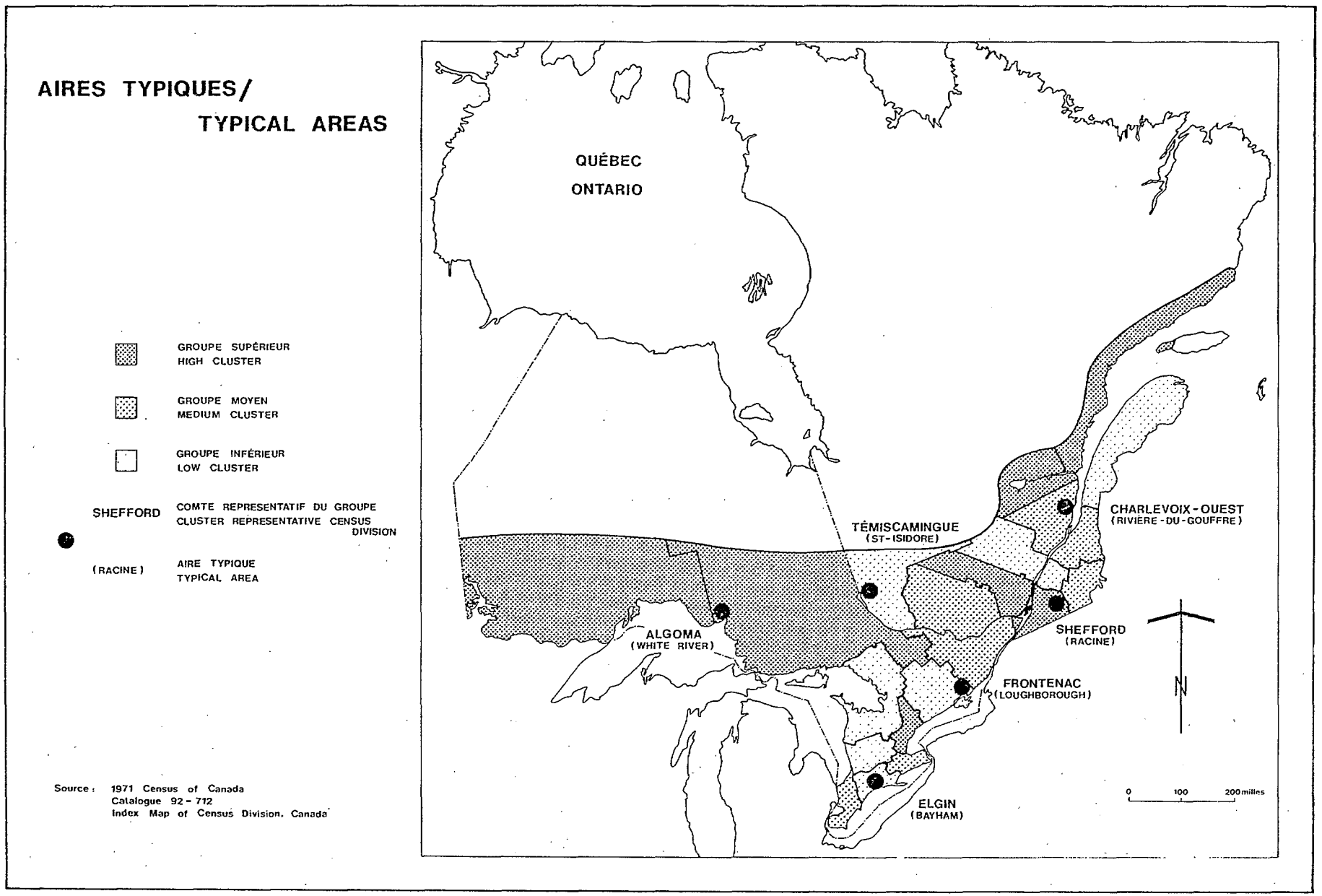
Census divisions/ Div. de recensement	Density/ Densité	Non farm %/ Pop. non agricole	Aver. tot Rev. / Rev. tot. moyen	Trade/ Commerce	Industry/ Manufacturier	Total
. Quebec						
-Charlevoix	3	3	1	2	1	10
-Lévis	4	3	1	2	1	11
-Mégantic	3	1	1	4	1	10
-Portneuf	3	3	4	1	2	13
. Eastern Townships						
-Richmond	3	1	1	1	4	10
-Stanstead	3	2	1	1	3	10
.Outaouais						
-Gatineau	2	4	3	4	1	14
-Papineau	1	3	1	2	3	10
-Pontiac	1	3	1	2	3	10

Table 109 QUEBEC LOW CLUSTER INDEXES/

Tableau INDICES, GROUPE FAIBLE, QUEBEC

Census divisions/ Div. de recensement	Density/ Densité	Non farm %/ Pop. non agricole	Aver. tot. Rev. / Rev. tot. moyen	Trade/ Commerce	Industry/ Manufacturier	Total
. Gaspesia						
-Rimouski	3	2	1	1	1	8
-Rivière du Loup	3	1	3	1	1	9
-Témiscamingue	2	2	2	1	1	8
. Trois-Rivières						
-Arthabaska	2	1	1	2	1	7
-Drummond	3	1	1	1	3	9
-Nicolet	3	1	1	2	1	8
-Yamaska	3	1	1	1	1	7
. Abitibi						
-Abitibi	1	3	1	1	3	9
-Témiscamingue	2	2	1	2	2	9

Figure 36


AIRES TYPIQUES/
TYPICAL AREAS
GROUPE SUPÉRIEUR
HIGH CLUSTER
GROUPE MOYEN
MEDIUM CLUSTER
GROUPE INFÉRIEUR
LOW CLUSTER
SHEFFORD
COMTE REPRESENTATIF DU GROUPE
CLUSTER REPRESENTATIVE CENSUS DIVISION
(RACINE)
AIRE TYPIQUE
TYPICAL AREA
Source : 1971 Census of Canada
Catalogue 92 - 712
Index Map of Census Division, Canada
QUÉBEC
ONTARIO
TÉMISCAMINGUE
(ST-ISIDORE)
CHARLEVOIX - OUEST
(RIVIÈRE - DU - GOUFFRE)
ALGOMA
(WHITE RIVER)
SHEFFORD
(RACINE)
FRONTENAC
(LOUGHBOROUGH)
ELGIN
(BAYHAM)
N
0 100 200 milles

Quebec typical areas are the following:

- Shefford: Racine
- Charlevoix-ouest: Rivière-du-Gouffre
- Témiscamingue: Saint-Isidore

A description of these three communities will be given in Section 4.3 A.

B. ONTARIO

Table 110 shows the results of the clustering indexes for Ontario. Representative areas are three:

1. The High Cluster:

- Central Ontario (13)
- Northeastern Ontario (13)
- Northwestern Ontario (13)

The characteristics of this first cluster can be summarized as follows:

- High economic activities;
- medium to high revenues;
- high percentage of non-farm population;
- telephone subscribers on single-party lines over the average;
- telephone penetration rates below average.

2. The Medium Cluster

- Eastern Ontario (12)
- Niagara (12)
- St.Clair (10)

Table 110 ONTARIO SUB-REGIONAL CLUSTERING INDEXES/

Tableau INDICES DE REGROUPEMENT DES SOUS-REGIONS - ONTARIO

Sub-regions Sous-régions	% non-farm population/ % pop. non agricole	Tot. household aver. income 1970 /Rev. tot. moy. des ménages	Aver. sales Trade activities 1971 /Ventes moy. des commerces	Ave. shipment value manufac.1972 /Val. moy, livraisons, manufacturier	Total
Eastern Ontario/ Ontario Est	3	3	4	2	12
Lake Ontario/ Lac Ontario	2	1	1	2	6
Central Ontario/ Ontario Centre (Toronto)	3	4	3	3	13
Niagara	3	4	3	2	12
Lake Erie/ Lac Erié	1	2	1	1	5
Lake St.Clair/ Lac St-Clair	2	3	3	2	10
Mid-Western Ontario/ Ontario centre-ouest	1	2	2	1	6
Georgia Bay/ Baie Georgienne	2	1	1	1	5
Northeastern Ontario/Ontario nord-est	4	2	3	4	13
Northwestern Ontario/Ontario nord-ouest	4	2	3	4	13

The characteristics of this second cluster can be summarized as follows:

- Good economic activity;
- high revenues;
- average percentage of non-farm population;
- household density from average to high;
- telephone subscribers on single-party line average and above;
- telephone penetration rates above average.

3. The Low Cluster:

- Lake Ontario (6)
- Lake Erie (5)
- Midwestern Ontario (6)
- Georgian Bay (5)

The characteristics of this cluster can be summarized as follows:

- A weak group at all points of view: low economic activities, low revenues;
- a high percentage of farm activities;
- household densities ranging from average to low;
- telephone subscribers on single-party lines, very low percentage in residential and average or below for businesses;
- penetration rates below (Lake Ontario & Erie) and above (Midwestern and Georgian Bay) the average in businesses.

Within each of these three clusters, all the counties were examined and the following counties were retained as representative:

High Cluster (See Table 111)

. Central Ontario (13):
- York (10)

. Northeastern Ontario (13):
- Algoma (13)
- Cochrane (13)

. Northwestern Ontario (13):
- Kenora (12)
- Rainey River (11)
- Thunder Bay (14)

Medium Cluster (See Table 112)

. Eastern Ontario (12):
- Dundas (10)
- Frontenac (11)
- Ottawa-Carleton (13)

. Niagara (12):
- Brant (12)
- Wentworth (10)

. St.Clair (10):
- Essex (11)
- Lambton (11)

Low Cluster (See Table 113)

. Lake Ontario (6):
- Durham (6)
- Northumberland (5)
- Prince Edward (6)

. Lake Erie (5):
- Elgin (6)
- Norfolk (5)
- Oxford (6)

Table 111 ONTARIO HIGH CLUSTER INDEXES/

Tableau INDICES, GROUPE FORT, ONTARIO

Census divisions/ Division de recensement	Non-farm % / Pop. non-agricole	Aver. tot. Revenue/ Rev. tot moyen	Trade/ Commerce	Industry/ Manufac-turier	Total
. Central Ontario					
-York	3	3	3	1	10
. Northeastern Ontario					
-Algoma	4	2	3	4	13
-Cochrane	4	2	3	4	13
. Northwestern Ontario					
-Kenora	4	2	3	3	12
-Rainy River	3	2	3	3	11
-Thunder Bay	4	3	3	4	14

Table 112 ONTARIO MEDIUM CLUSTER INDEXES/

Tableau INDICES, GROUPE MOYEN, ONTARIO

Census divisions/ Division de recensement	Non-farm % / Pop. non-agricole	Aver. tot. Revenue/ Rev. tot. moyen	Trade/ Commerce	Industry/ Manufac-turier	Total
. Eastern Ontario					
-Dundas	2	1	3	4	10
-Frontenac	3	3	4	1	11
-Ottawa-Carleton	4	4	4	1	13
. Niagara					
-Brant	2	3	4	3	12
-Wentworth	3	4	4	2	13
. St.Clair					
-Essex	2	4	3	2	11
-Lambton	2	2	4	3	11

Table 113 ONTARIO LOW CLUSTER INDEXES/

Tableau INDICES, GROUPE FAIBLE, ONTARIO

Census divisions/ Division de recensement	Non-farm % / Pop. non-agricole	Aver. tot. Revenue/ Rev. tot. moyen	Trade/ Commerce	Industry/ Manufac-turier	Total
. Lake Ontario					
-Durham	2	2	1	1	6
-Northumberland	2	1	1	1	5
. Lake Erie					
-Elgin	2	2	1	1	6
-Norfolk	1	2	1	1	5
-Oxford	1	2	1	2	6
. Mid-Western					
-Huron	1	1	1	2	5
-Wellington	1	2	1	1	5
. Georgian Bay					
-Bruce	1	1	1	1	4
-Dufferin	1	1	1	1	4
-Grey	1	1	1	1	4

. Midwestern Ontario (6):
- Huron (5)
- Wellington (5)

. Georgian Bay (5):
- Bruce (4)
- Dufferin (4)
- Grey (4)

Chosen counties were matched with cluster general telephone characteristics, and the following three counties were selected as being the most representative (See Figure 36):

- High Cluster: Algoma (13) (Thunder Bay was our second best choice-total index 14)
- Medium Cluster: Frontenac (11) (Lambton was also a good choice, but was rejected for geographical considerations)
- Low Cluster: Elgin (6) (Wellington was also considered as a good choice, but was rejected for geographical considerations).

Household densities of the chosen representative census divisions are as follows:

- Algoma: 5.6
- Frontenac: 7.4
- Elgin: 13.9

TYPICAL AREAS

One community has been chosen in each county as a typical area, respecting the cluster characteristics: communities were compared with average density, average farm, non-farm figures, average community size.

Acceptable choices were then screened by comparing economic activities and telephone characteristics with those of their respective clusters. Ontario Typical Areas are the following:

- Algoma: White River
- Frontenac: Loughborough
- Elgin: Bayham/Springfield

A description of these three communities will be given in Section 4.3 B.

4.3 TYPICAL AREAS

A. QUEBEC

a) Summary of Typical Areas

1. Racine (Shefford Co.) - A small community of 529 inhabitants (1976), 32% farm population, near the industrial sector of Valcourt; nearest agglomeration - Granby, 22 miles.

2. Rivière-du-Gouffre (Charlevoix - Ouest Co.) - A growing community of 832 inhabitants (1976), 31% farming population; nearest agglomeration - Quebec, 58 miles. Rivière-du-Gouffre is located on the North Shore road running along the St.Lawrence River, near Baie St-Paul (4,000 inhabitants).

3. St-Isidore (Témiscamingue Co.) - A community of 864 inhabitants (1976), one of an isolated group, 60 miles south of Rouyn-Noranda (the nearest agglomeration); 38% farm population.

b) Detailed Description of Typical Areas

1. Racine - Part of the Appalachian low plateaus, has good agricultural conditions; summers are cool without a dry season and winters cold. Near an industrial sector (Valcourt), its land area is 12 sq. mi.; population in 1971 - 533, population density 44 inhabitants per sq. mi.

Demography:

- Non-farm population is 68% of total;
- Population: 448 (1966), 533 (1971), 529 (1976); it 1966-1971 change: 16%; 1971-1976: -0.8%
- Age groups (%): 23.5 (0-9); 20.8 (10-19); 31.9 (20-44); 13.4 (45-64); 10.4 (65 and over).

- Mother tongue (C.D.)[1] - French: 93.1%; English: 6.1%; Other: 0.8%
- Households (1976 estimated): 133.
- Household square-mile density: 11.18 (1971); 11.10 (1976).
- Household linear density (Shefford Co.)[2]: 13.16.

Dwellings (C.D.)[1] (1971)

- Owners:	73.6%
- Hot & cold water:	91.3%
- Constructed before 1961:	66.3%
- With dishwasher:	24.5%
- B/W T.V. only:	86.8%
- Two cars and over:	12.2%
- Average rent:	$70.56

Socio-economic Characteristics & Economic Activities (C.D.)[1]

- Labour force (1971)

. Labour force activity rate:	56.45
. Labour force/Resource industries:	21.1%
. Labour force/Manufacturing:	43.6%
. Labour force/Service:	28.6%
. Labour force/Unspecified:	7.7%

- Farming activity (1971)

. Farm value/land and buildings:	$29,342,000.00
. Value of products sold (% farms selling $5,000 and more):	60.4%

---

[1] C.D. for Census Division or County/Rural

[2] Rural

- Trade activities (1971)

. 25 in Valcourt only (average sales: $81,120)
. Total Census Division[1]

-- Number of activities:	196
-- Average salary:	$4,782.00
-- Average sales per activity:	$114,780.00

- Industry (1972)

. Number of activities:	31
. Average salary:	$6,989.00
. Average Shipping value:	$4,218,160.00

- Income (1970)

. Average employment income:	$4,258.00
. Household total average income:	$8,568.00

Telephony (See Table 114)

2. Rivière-du-Gouffre: Part of the Laurentian region of Canadian Shield: hilly highlands. Bad to low Agricultural conditions. Cool summers without dry season, and cold winters. Near Baie St-Paul (4,000 inhabitants), its land area is 20.89 sq. mi.; its population (1971) - 684, population density 32.74 persons per sq. mi.

Demography

- Non-farm population is 69%
- Population: 631 (1966); 684 (1971); 832 (1976)
  1966-1971 change: 7.7%; 1971-1976: 17.8%
- Age groups (%): 15.9 (0-9); 23.2 (10-19); 35.0 (20-44); 18.8 (45-64); 7.1 (65 and over).

---

[1] Rural county

Table 114
Tableau

TELEPHONE DATA, SHEFFORD C.D. TYPICAL AREA/
DONNEES TELEPHONIQUES, AIRE TYPIQUE, CTE SHEFFORD

Exchange & Typical Area	Residential Telephones						Business Telephones						TOTAL Tel.	Telephone Lines						
														Residential			Business		TOTAL
	1 Sub.	2 Sub.	4+ Sub.	Main	Ext.	Total	1 Sub.	2+ Sub.	Main	Ext.	Total	Coin Tel.		1 Sub.	2 Sub.	4+ Sub.	1 Sub.	2+ Sub.	
Valcourt	727	57	510	1,294	120	1,414	135	54	189	149	338	18	2,230*	27	31	131	135	19	1,044
Racine[1]	84	6	59	149	14	163	15	6	21	17	38	2	258*	84	4	15	16	22	141

EXCHANGE DESCRIPTION:

1. Name: VALCOURT
2. Company: Association Coopérative de téléphone de Valcourt
3. Area: 80.74 sq. mi.
4. Municipalities served: Valcourt, Valcourt Canton, Maricourt, Racine
5. Population number (1976): 4,730
6. Household number (1976): 1,187
7. Penetration rates:
   - M.R.T./100 h: 109.0
   - T./100 Pop.: 46.6
   - R.T./100 Pop.: 29.9
   - T./m^2: 27.6

TYPICAL AREA DESCRIPTION:

1. Name: RACINE
2. Population (1976): 529
3. Households (1976): 133
4. Penetration rates[1]:
   - M.R.T./100 h: 112.0
   - T./100 Pop.: 48.7
   - R.T./100 Pop.: 31.0

[1] Telephone data for the Municipality of Racine estimated 1975

* Including P.B.X. Centrex, W.A.T.S., Mobile.

- Mother tongue (C.D.)[1]- French: 99.8%; English: 0.2%
- Households

. 1976 estimated number:	188
. 1971 sq. mi. density:	7.4
. 1976 sq. mi. density:	9.0
. 1976 linear density (C.D.)[1]:	18.43

Dwellings (C.D.)[1] - 1971

- Owners:	82.7%
- Hot & Cold running water:	86.5%
- Construction period (before 1961):	84.2%
- With dishwasher	35.8%
- B/W. T.V. only	89.8%
- Two cars and over	10.6%
- Average rent	$59.31

Socio-economic Characteristics & Economic Activities (C.D.)[1]

- Labour force (1971)

. L.F. Activity rate:	40.42
. L.F./Resource industries:	18.6%
. L.F./Manufacturing:	13.7%
. L.F./Services	55.8%
. L.F./Unspecified :	11.9%

- Farming activity (1971)

. Farm land & building value:	$5,127,500.00
. Value of products sold (% farms selling %5,000 and more):	16.6%

---

[1] Rural county

- Trade activities (1971)

. Number of trade activities:	102
. Average salary:	$5,715.00
. Average sales per activity:	$76,660.00

- Industry (1972)

. Number of activities:	6
. Average salary:	$4,888.00
. Average shipping value:	$31,500.00

- Income (1970)

. Average employment income:	$3,843.00
. Household total average income:	$6,887.00

Telephony (See Table 115)

3. St-Isidore (Témiscamingue Co.): Part of the Laurentian region of the Canadian Shield: hilly highlands. Average agricultural conditions. Cool summers without dry season and cold winters; 60 miles from Rouyn-Noranda, its land area is 41.32 sq. mi.; its population (1971) - 819, population density 19.82 persons per sq. mi.

Demography

- Non-farm population is 62.0%
- Population: 962 (1966); 819 (1971); 864 (1976);
  1966-1971 change: -14.9%; 1971-1976: 5.2%
- Age groups (%): 21.7 (0-9); 29.6 (10-19); 27.2 (20-24); 13.8 (45-64); 7.7 (65 and over)
- Mother tongue (C.D.)[1] - French: 95.3%; English 1.3%; Others: 3.4%

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[1] Rural county

Table 115
Tableau

TELEPHONE DATA, CHARLEVOIX-OUEST C.D. TYPICAL AREA/
DONNEES TELEPHONIQUES, AIRE TYPIQUE, CTE CHARLEVOIS-OUEST

Exchange & Typical area	Residential Telephones						Business Telephones						TOTAL Tel.	Telephone Lines					
														Residential			Business		Total
	1 Sub.	2 Sub.	4+ Sub.	Main	Ext.	Total	1 Sub.	2+ Sub.	Main	Ext.	Total	Coin Tel.		1 Sub.	2 Sub.	4+ Sub.	1 Sub.	2+ Sub.	
Baie St-Paul [1]	431	32	113	576	87	663	99	3	102	97	199	10	1,014*	431	20	22	99	-	602
Rivière-du-Gouffre [2]	134	10	35	179	27	206	30	1	32	30	62	3	316*	134	6	6	31	-	187

EXCHANGE DESCRIPTION:

1. Name: BAIE SAINT-PAUL
2. Telephone Company: Bell Canada
3. Area: 81.63 sq. mi.
4. Municipalities served: Baie St-Paul Paroisse, Rivière-du-Gouffre
5. Population (1976): 2,628
6. Households: (1976): 576
7. Number of unserved families: 4.8% (1971, Bell Canada data)
8. Penetration rates:
   - M.R.T./100 h: 100.0
   - T./100 Pop.: 38.5
   - R.T./100 Pop.: 25.2
   - T./m^2: 12.42

TYPICAL AREA DESCRIPTION:

1. Name: RIVIERE-DU-GOUFFRE
2. Population (1976): 832
3. Households (1976): 188
4. Penetration rates[2]:
   - M.R.T./100 h: 95.2
   - T./100 Pop.: 37.9
   - R.T./100 Pop.: 25.4

[1] Baie St-Paul Telephone Exchange is classified as Urban/Rural. The data given here correspond to the rural section only

[2] Telephone Data for the Municipality of Rivière-du Gouffre (estimated 1975).

* Including P.B.X. Centrex, W.A.T.S., Mobile

- Households

. 1976 estimated number:	190
. 1971 sq. mi. density:	4.35
. 1976 sq. mi. density:	4.60
. 1976 linear density (C.D.)[1]:	10.06

Dwellings (C.D.)[1] - 1971

- Owners:	76.7%
- Hot & cold running water:	84.3%
- Construction period (before 1961):	83.1%
- With dishwasher:	27.4%
- B/W. T.V. only:	86.3%
- Two cars and over:	9.3%
- Average rent:	$59.20

Socio-economic Characteristics & Economic Activities (C.D.)[1]

- Labour Force (1971)

. L.F. Activity rate:	46.16
. L.F./Resource industries:	18.7%
. L.F./Manufacturing:	24.0%
. L.F./Services:	47.1%
. L.F./Unspecified ind.:	10.2%

- Farming activity (1971)

. Farm land & building value:	$15,558,900.00
. Value of products sold (farms selling $5,000 and over):	25.6%

---

[1] Rural county

- Trade activities (1971)

. Number of trade activities:	257
. Average salary:	$3,781.00
. Average sales per activity:	$74,960.00

- Industry (1972)

. Number of activities:	29
. Average salary:	$5,890.00
. Average shipping value:	$1,045,450.00

- Income (1970)

. Average employment income:	$4,539.00
. Household total average income:	$7,768.00

Telephony (See Table 116)

B. ONTARIO

a) Summary of Typical Areas

1. White River (Algoma Co.) - A small non-farm community of 750 inhabitants (1976); 140 miles north of Sault Ste.Marie.

2. Loughborough (Frontenac Co.) - A typical size Ontario growing rural community of 2,990 inhabitants (1976); 14% farm population, near the Kinsgton urban area.

3. Bayham & Springfield (Elgin Co.) - Two average size contiguous communities, 4,612 in population (1976); 33% farm population. Located 25 miles from nearest agglomeration - London, in one of the best areas in Ontario for farming conditions.

Table: 116

Tableau:

TELEPHONE DATA TEMISCAMINGUE C.D. TYPICAL AREA/

DONNEES TELEPHONIQUES, AIRE TYPIQUE, CTE TEMISCAMINQUE

Exchange: LAVERLOCHERE

Residential Telephones						Business Telephones						TOTAL Tel.	Telephone Lines					
													Residential			Business		TOTAL
1 Sub.	2 Sub.	4+ Sub.	Main	Ext.	Total	1 Sub.	2+ Sub.	Main	Ext.	Total	Coin Tel.		1 Sub.	2 Sub.	4+ Sub.	1 Sub.	2+ Sub.	
98	8	52	158	8	166	22	1	23	14	37	2	205	98	N.A.	N.A.	22	N.A.	N.A.

EXCHANGE DESCRIPTION:

1. Name: LAVERLOCHERE
2. Company: Téléphone du Nord de Québec Inc. Val d'Or, Québec
3. Area: 41.32m^2
4. Municipality served: Saint-Isidore
5. Number of inhabitants (1976): 864
6. Number of households (1976): 190
7. Penetration rates:
   - M.R.T./100h: 83.16
   - T./100 Pop. 23.7
   - R.T./100 Pop. 19.2
   - T./m^2: 4.96

---

1 Exchange corresponds to the Municipality of St-Isidore i.e. typical area

b) Detailed Description of Typical Areas

1. White River: Part of the Davis region Canadian Shield low plateaus; cool summers, cold and rigorous winters. There is no farming activity; 140 miles north of Sault Ste.Marie, its land area is 51.40 sq. mi.; its population (1971) 953, population density 18.54.

Demography:

- Non-farm population is 100%
- Population: 900 (1966); 953 (1971); 750 (1976)
  1966-1971 change: 5.6%; 1971-1976: -21.3%
- Age groups (%): 21.6 (0-9); 21.6 (10-19); 35.3 (20-44); 14.7 (45-64); 6.8 (65 and over).
- Mother tongue (C.D.)[1]: English: 71.2%; French 17.9%; Others: 10.9%.
- Households

. 1976 estimated number:	200
. 1971 sq. mi. density:	4.96
. 1976 sq. mi. density:	3.91
. 1976 linear density (C.D.)[1]:	14.38

Dwellings (C.D.)[1] - 1971

- Owners:	72.0%
- Hot & cold running water:	82.0%
- Construction period (before 1961):	78.9%
- With dishwasher:	5.6%
- B/W T.V. only:	82.4%
- Two cars and over:	17.6%
- Average rent:	$77.17

---

[1] Rural county

Socio-economic Characteristics & Economic Activities (C.D.)[1]

- Labour Force (1971)

. L.F. Activity rate:	56.78
. L.F./Resource industries:	24.2%
. L.F./Manufacturing:	16.5%
. L.F./Services:	50.3%
. L.F./Unspecified ind.:	9.0%

- Farming activity (1971)

. Farm land & building value:	$10,869,500.00
. Value of products sold (farms selling $5,000 and over):	26.4%

- Trade activities (1971)

. Number of trade activities:	282
. Average salary:	$4,711.00
. Average sales per activity:	$136,850.00

- Industry (1972)

. Number of activities:	71
. Average salary:	$10,656.00
. Average shipping value:	$5,333,360.00

- Income (1970)

. Average employment income:	$5,508.00
. Household total average income:	$8,798.00

Telephony (See Table 117)

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[1] Rural County

Table 117
Tableau

TELEPHONE DATA ALGOMA C.D. TYPICAL AREA/
DONNEES TELEPHONIQUES, AIRE TYPIQUE, CTE ALGOMA

Exchange: WHITE RIVER[1]

Residential Telephones						Business Telephones						TOTAL Tel.	Telephone Lines						
													Residential			Business		Total
1 Sub.	2 Sub.	4+ Sub.	Main	Ext.	Total	1 Sub.	2+ Sub.	Main	Ext.	Total	Coin Tel.		1 Sub.	2 Sub.	4+ Sub.	1 Sub.	2+ Sub.	
197	3	1	201	48	249	65	6	71	85*	156	13	418		202		84		286

EXCHANGE DESCRIPTION:

1. Name: WHITE RIVER
2. Company: Bell Canada
3. Area: 51.2 m^2
4. Municipality served: White River
5. Number of inhabitants (1976): 750
6. Number of households (1976): 200
7. Number of unserved families - 15.6% (1971 - Bell Canada data).
8. Penetration rates:
   - M.R.T./100 h: 100.5
   - T./100 Pop.: 55.7
   - R.T./100 Pop.: 33.2
   - T./m^2: 8.13

[1] Exchange corresponds to the Municipality of White River i.e. typical area.

* Including P.B.X., Centrex, W.A.T.S., Mobile

2. Loughborough - Part of the Laurentian region of the Canadian Shield: hilly highlands; cool summers without dry season and cold winters. Agriculture conditions range from low to average. Located 12 miles north of Kingston, its land area is 83.92 sq. mi.; population (1971) - 2,490, and population density 29.67 persons per sq. mi.

Demography

- Non-farm population - 86%
- Population: 2,243 (1966); 2,490 (1971); 2,990 (1976)
  1966-1971 change: 9.9%; 1971-1976: 16.7%
- Age groups (%): 21.4 (0-9); 21.2 (10-19); 31.1 (20-44); 17.8 (45-64); 8.5 (65 and over)
- Mother tongue (C.D.)[1]: - English: 94.5%; French: 1.9%; Others: 3.6%
- Households

. 1976 estimated number:	792
. 1971 sq. mi. density:	7.86
. 1976 sq. mi. density:	9.43
. 1976 linear density (C.D.)[1]:	17.05

Dwellings (C.D.)[1] - 1971

- Owners:	76.2%
- Hot & cold running water:	85.0%
- Construction period (before 1961):	70.4%
- With diswasher:	9.7%
- B/W T.V. only:	80.6%
- Two cars and over:	33.7%
- Average rent:	$114.94

---

[1] Rural County

Socio-economic Characteristics & Economic Activities (C.D.)[1]

- Labour force (1971)

. L.F. Activity rate:	59.25
. L.F./Resource industries:	7.2%
. L.F./Manufacturing:	21.5%
. L.F./Services:	63.9%
. L.F./Unspecified ind.:	7.4%

- Farming activity (1971)

. Farm land & building value:	$42,131,900.00
. Value of products sold (farms selling $5,000 and over):	32.5%

- Trade activities (1971)

. Number of trade activities:	264
. Average salary:	$5,141.00
. Average sales per activity:	$239,340.00

- Industry (1972)

. Number of activities:	8
. Average salary:	$6,858.00
. Average shipping value:	$627,500.00

- Income (1970)

. Average employment income:	$5,619.00
. Household total average income:	$9,868.00

Telephony (See Table 118)

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[1] Rural county

Table 118
Tableau

TELEPHONE DATA, FRONTENAC C.D. TYPICAL AREA/
DONNEES TELEPHONIQUES, AIRE TYPIQUE, CTE FRONTENAC

Exchange: SYDENHAM[1]

Residential Telephones						Business Telephones						TOTAL Tel.	Telephone Lines					
													Residential			Business		Total
1 Sub.	2 Sub.	4+ Sub.	Main	Ext.	Total	1 Sub.	2+ Sub.	Main	Ext.	Total	Coin Tel.		1 Sub.	2 Sub.	4+ Sub.	1 Sub.	2+ Sub.	
338	114	199	651	205	856	51	4	55	57	112	4	972	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

1. Name: SYDENHAM
2. Company: Bell Canada
3. Area: 83.92 $m.^2$
4. Municipality served: Loughnorough
5. Number of inhabitants (1976): 2,990
6. Number of households (1976): 792
7. Number of unserved families: 7.3% (1971 - Bell Canada data)
8. Penetration rates:
   - M.R.T./100 h: 82.1
   - T./100 Pop.: 32.5
   - R.T./100 Pop. 28.6
   - $T./m^2$: 11.5

[1] Exchange corresponds to the Municipality of Loughborough, i.e., typical area.

3. Bayham and Springfield: Located in the St.Lawrence Lowlands, it has the best agricultural conditions of Ontario, with warm summer and mild winter; 20 miles southeast from St.Thomas and 25 miles from London (nearest agglomarations), the two municipalities have an area of 94.61 sq. mi., with a population (1971) of 4,648. Population density is 49.12 inhabitants/m^2.

Demography

- Non-farm population is 67%
- Population: 4,322 (1966); 4,648 (1971); 4,612 (1976)
  1966-1971 change: 7.1%; 1971-1976: -0.8%
- Age groups (%): 21.4 (0-9); 21.9 (10-19); 29.9 (20-44);
  18.4 (45-64); 8.4 (65 and over)
- Mother tongue (C.D.)[1]: - English: 84.3%; French: 0.8%; Others: 14.9%
- Households:

. 1976 estimated number:	1265
. 1971 sq. mi. density:	13.47
. 1976 sq. mi. density:	13.37
. 1976 linear density (C.D.)[1]:	13.30

Dwellings (C.D.)[1] - 1971

- Owners:	79.8%
- Hot & cold running water:	90.8%
- Construction period (before 1961):	86.4%
- B/W T.V. only:	78.2%
- Two cars and over:	29.4%
- Average rent:	$70.50
- With dishwasher	7.9%

---

[1] Rural county

Socio-economic Characteristics & Economic Activities (C.D.)[1]

- Labour force (1971)

. L.F. Activity rate:	59.43
. L.F./Resource industries:	30.5%
. L.F./Manufacturing:	23.2%
. L.F./Services:	39.4%
. L.F./Unspecified ind.:	6.9%

- Farming activity (1971)

. Farm land & building value:	$176,928,500.00
. Value of products sold (farms selling $5,000 and over):	69.3%

- Trave activities (1971)

. Number of trade activities:	257
. Average salary:	$4,274.00
. Average sales per activity:	$89,320.00

- Industry (1972)

. Number of activities:	32
. Average salary:	$6,190.00
. Average shipping value:	$323,590.00

- Income (1970)

. Average employment income:	$4,786.00
. Household total average income:	$8,743.00

Telephony (See Table 119)

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[1] Rural county

Table 119
Tableau

TELEPHONE DATA, ELGIN C.D. TYPICAL AREA/
DONNEES TELEPHONIQUES, AIRE TYPIQUE, CTE ELGIN

Exchange: STRAFFORDVILLE[1]

Residential Telephones						Business Telephones						TOTAL Tel.	Telephone Lines						
													Residential			Business		Total
1 Sub.	2 Sub.	4+ Sub.	Main	Ext.	Total	1 Sub.	2+ Sub.	Main	Ext.	Total	Coin Tel.		1 Sub.	2 Sub.	4+ Sub.	1 Sub.	2+ Sub.	
267	253	196	716	162	878	93	19	112	95	207	5	1,116 *		444		128		572

EXCHANGE DESCRIPTION:

1. Name: STRAFFORDVILLE
2. Company: Aylmer and Malahide Telephone Co. Ltd. Aylmer, Ontario
3. Area: 94.61 $m.^2$
4. Municipalities served: Bayham, Springfield
5. Number of inhabitants (1976): 4,612
6. Number of households (1976): 1,265
7. Penetration rates:
   - M.R.T./100 h: 56.6
   - T./100 Pop.: 24.1
   - R.T./100 Pop.: 19.0
   - $T./m^2$: 11.7

[1] Exchange corresponds to typical area

* Including P.B.X., Centrex, W.A.T.S., Mobile

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