# Cahiers de géographie du Québec



# Non-Resident Land Ownership and Land Value in Two Eastern Townships of Quebec : A preliminary investigation

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Volume 19, numéro 48, 1975

URI: https://id.erudit.org/iderudit/021295ar DOI: https://doi.org/10.7202/021295ar

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Éditeur(s)

Département de géographie de l'Université Laval

**ISSN** 

0007-9766 (imprimé) 1708-8968 (numérique)

Découvrir la revue

#### Citer cette note

Rose, C. (1975). Non-Resident Land Ownership and Land Value in Two Eastern Townships of Quebec : A preliminary investigation. *Cahiers de géographie du Québec*, 19(48), 537–552. https://doi.org/10.7202/021295ar

#### Résumé de l'article

Cette étude vise à tester l'hypothèse d'une relation indirecte entre la valeur des terrains et les types de propriétaires: les résidents et les divers types de non-résidents, « locaux », « provinciaux », « nationaux » et « étrangers ». Les données sur le nombre de propriétaires, la superficie totale et l'évaluation des terrains et des bâtiments de la construction dans deux municipalités rurales des Cantons-de-l'Est (Québec) sont examinées en utilisant la méthode des surfaces mathématiques pour l'étude de la valeur des terrains ainsi que des statistiques non-paramétriques. La proportion des terrains aux mains de non-résidents de l'Estrie est assez élevée, surtout en ce qui concerne les types de non-résidents « locaux » et « provinciaux ». Une association significative existe entre l'évaluation totale et le type de propriétaires dans les deux municipalités.

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# NON-RESIDENT LAND OWNERSHIP AND LAND VALUE IN TWO EASTERN TOWNSHIPS OF QUEBEC: A PRELIMINARY INVESTIGATION

Of the many traditional freedoms on which western society is based, none is regarded as more fundamental than the right to acquire, use and divest oneself of tracts of land. Such is the strength of this hunger for land that, like the yearning for freedom, it is almost universal, and has provided one of the strongest motives for settlement in North America. (Bennett, 1951, p. 380)

Specifically, the purpose of this preliminary investigation was to examine the relationship between instances of non-resident land ownership and land value. The most obvious reason for this investigation is that no such inventory presently exists (as of 1973) for the study area or for any other portion of Québec. Further, it is suspected that non-resident ownership and the land speculation process have undoubtedly contributed to the exhorbitant land prices facing local residents, the disruption by wealthy buyers and the decrease in control over local affairs by local residents. If provincial legislative action is to be taken in this matter, a clear understanding of the relationship between land value and the conditions which underlie its fluctuation is indispensable. One of the variables in this problem is the nature of land tenure and the question examined here is: does there exist a relationship between type of ownership and land value?

#### The Theoretical Basis

Relating patterns of land use and ownership to a theory of land value has been the research objective of many geographers and economists. (von Thunen, 1826; Hoover, 1948; Hoyt, 1953; Muth, 1961; Knos, 1962; Alonso, 1960; Wingo, 1961; Yeates, 1965). Early attempts focused on the concepts of "economic rent" or "land use competition" stating that landowners will rank the potential uses of their land plot on the basis of its anticipated return on investment and will always choose that land use delivering the highest "rent". Land values was thus interpreted as some function of land use. Several writers, including Hoyt, Muth and Knos have commented that it is actually the intensity of use and not the use itself which is the key factor in determining land value. Other writers, namely Alonso, Wingo and Yeates, have suggested that land value is

<sup>&</sup>lt;sup>1</sup> This study does not purport to *explain* the relationship between non-resident land ownership and land value, but rather to demonstrate the existence and nature of some portions of this relationship.

only a measure of accessibitly (in an aggregate sense) to the things, people and places of interest to the landower and thus there is a "trade-off" of accessibility with land value until an individual equilibrium is reached. Found suggests that still other processes are at work:

« the variables affecting the shape and steepness of the slope of land values include the future urban values, the timing of future development, and acceptable rates of return on investment. »

(Found, 1971, p. 76.)

It is evident, then, that some of the variables related to land value are concerned with the landowner: it is *his* future value, *his* sense of timing, *his* acceptable rate of return, *his* perception of aggregate accessibility, etc., which ultimately condition the levels of land value in a particular area. Land value is therefore indirectly related to land owership through several intervening variables and through the capacity of each landowner to decide amongst various potential uses for his particular purposes. Thus the relationship between type of land tenure and land value should not be couched in causal terms whose linkages are direct, but rather in multivariate terms, one of which, it is argued, should be the type of landowner.

### Foreign Land Ownership in Canada and in Quebec

The greater part of documentation on the subject of foreign ownership has concerned the control of Canadian industrial sectors by non-Canadian and/or non-resident owners. The Watkins report (1968), the Wahn report (1970) and the Gray report (1971) along with the works of Safarian (1966, 1970) and Rotstein (1966) have sufficiently examined the problem of foreign ownership and demonstrated that the current policies of the federal government such as public ownership of vital enterprises, (C.N.R., Air Canada, C.B.C.), the use of government regulatory agencies, (C.T.C., N.E.B., C.R.T.C.), income tax incentives and tariff and import duties to protect Canadian industries, has not generally reduced the degree of foreign control in the Canadian economy, and that certain specific sectors (mining, petroleum and manufacturing) have become increasingly foreign in character. No specific mention is made of reducing or restricting the amount of land owned by foreign interests.<sup>3</sup>

Documentation of foreign or non-resident land ownership by the provinces has been minimal. Studies completed in Saskatchewan place the level of "American" ownership of land in some areas of the province at two to three percent of the acreage investigated (Brown, 1972, p. 7) and

<sup>&</sup>lt;sup>2</sup> Several thousand other «individual equilibra» are also needed to generate the land value surface but each one is conditioned in part by the type of landowner. See Wolpert (1964) for a classic study of the effects which different types of decision makers have on resource productivity.

<sup>&</sup>lt;sup>3</sup> Conceivable, one instance in which the land ownership issue would arise, would be in the event of compensation legislation requiring that foreign-owned companies offer fifty-one percent of their shares and holdings to Canadian buyers over a reasonable period of time, say twenty years. See Arnett (1972) for a discussion of such legislation.

the level of total non-resident ownership in the province at nearly one percent. (Report of the Special Committee on the Ownership of Agricultural Lands, 1973, p. 32). Four other provinces (British Columbia, Ontario, Nova Scotia, Prince Edward Island) have deemed the level of non-resident ownership sufficiently high to legislate acts which either prevent, tax, or require approval of all transactions of land to non-residents or to non-Canadians. In Quebec, a recent report by the Ministry of Agriculture focusses briefly on the problem of land speculation in Brome and Sherbrooke counties as it affects the productivity of agricultural land (Ministère de l'Agriculture, 1972) but concern with non-resident land holdings *per se* has not crystallized as a separate issue.

# Measuring the Extent of Non-Resident Land Ownership

Questions concerning the extent of non-resident land ownership cannot often be separated from related questions dealing with how interested non-residents are in conditions in the municipality, or from questions involving how much control or influence over local political and economic decisions such non-residents may have. Realizing that the data needed to operationalize such interest and control level measures e.g., annual expenditures by non-residents in the municipality, proprietorship in local business ventures, investments in adjacent municipalities, etc., would require extensive interview procedures and that such data would have limited reliability, recourse was made to municipal assessment records which contain data on the landholder's permanent address, acreage held, lot numbers, the assessed value of buildings and land, and supplementary information on the landholder's occupation, age and religion. Three approaches were utilized to gauge the extent of non-resident ownership: (i) the proportion of resident to non-resident owners, (ii) the amount of acreage owned, in whole or in part, by non-residents, and (iii) the assessed value of land and buildings belonging to non-residents. The disadvantages of utilizing these approaches include the facts that method (i) may produce proportions which bear no relation to the physical or financial extent of non-resident ownership, method (ii) gives no indication of the "attractiveness" or value (in dollars) of the land in question and method (iii) uses the assessed value of the land and buildings, figures which are guite different from the market values of the same object. 5 Nevertheless, the assessment records do provide a consistent set of land value indicators and were therefore utilized in this study.

<sup>&</sup>lt;sup>4</sup> Eg. « An Act Respecting the Approval of Purchases of Land Holdings by Non-Residents » Province of Nova Scotia, 1973. and « An Act to Impose a Tax on Land in respect of Certain Speculative Transactions affecting the Control or Ownership of Land » Province of Ontario, 1974.

<sup>&</sup>lt;sup>5</sup> The use of assessed values versus market values in studies on land value is well established (Knos, 1962; Garrison and Marble, 1959; and Garner, 1966) indicates that there exists a very close correlation between the two methods of measuring land value. The relevant fraction in this study is between one quarter and one third, i.e. the assessed values of land are between one quarter and one third of the market values.

One further problem resides in the definition of the term "non-resident". Definitions such as those found in the Canadian Citizenship Act (1970), the Alien Labour Act (1970), the Income Tax Act (1971), tend to use the terms "non-resident" and "alien" synonymously, when in fact several categories of non-resident status can be discerned, some of which are Canadian in character while others are alien in character. <sup>6</sup> In this study the following expanded definitions will pertain to "non-resident":

Type I Non-Resident Owner — any Canadian citizen whose principal place of residence is not in the Town of Hatley, or the Township of West Hatley, but who lives within the boundaries of provincial region number five: (the counties of Sherbrooke, Stanstead, Compton, Richmond and parts of Arthabaska, Frontenac and Wolfe.)

Type II Non-Resident Owner — any Canadian citizen whose principal place of residence lies outside provincial region number five but within the province of Quebec.

Type III Non-Resident Owner — any Canadian citizen whose principal place of residence lies outside the province of Quebec but inside Canada.

Type IV Non-Resident Owner - any alien whose principal place of residence is outside Canada.  $^7$ 

# The Study Area

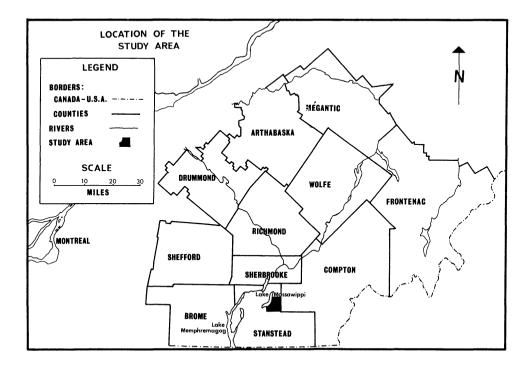
The study area, consisting of the township of West Hatley and the village of Hatley, has dimensions of approximate 8.9 km (5.5 miles) eastwest by 9.3 km (5.8 miles) north-south and is situated along the eastern shore of Lake Massawippi, (see figure 1). The study area, while unique in certain respects, is representative of the southern portion of the Eastern Townships in that it is situated close to the U.S. border but not adjacent to it and it provides a balanced cross-section of the gamut of land uses characteristically associated with the Eastern Townships (agricultural, recreational, urban and rural non-farm uses). These characteristics of the study area indicate that while it would be attractive for all four of the types of non-resident landowners indicated above, it may be expected that this attractiveness would be most obvious for the type I, type II and type IV non-resident owners, particularly in the case of U.S. residents.

Data collection was concentrated on five elements: the name of the landowner, the permanent address of the landowner, the combined acreage of all lots held, and the assessed value of all buildings and land held. To correct suspected inaccuracies in the assessment records and to complete

<sup>&</sup>lt;sup>6</sup> In the simplest senses of the definitions used in these acts, a «non-resident» refers to any person whose permanent address is outside Canada but who may or may not hold Canadian citizenship status, a «non-Canadian» is clearly a person who may reside in Canada (e.g., landed immigrants, people on temporary work or student visas) but who does not hold Canadian citizenship status, and an «alien» is a person who lacks national status in relation to any conferring state.

<sup>&</sup>lt;sup>7</sup> This set of definitions does not allow for two additional eventualities: (i) an alien landowner whose principal place of residence is inside Canada e.g., a landed immigrant, or (ii) a Canadian citizen whose principal place of residence is outside Canada.

Figure 1



the data set with respect to acreage figures, title searches of the relevant land plots were made in the county registry office at Stanstead, Quebec. All data are correct to June 1st, 1973 and represent the assessed values of buildings and land assigned during the years 1968 to 1973.

Analysis of the data was carried out in three stages: (i) the calculation of the extent of non-resident ownership in simple percentages using the number of resident and non-resident landowners, the acreage held by type of resident and non-resident landowner, the assessed value of buildings and land by type of resident and non-resident landowner as well as additional calculations on the average building assessment and average land assessment by type of landowner in West Hatley and the extent of land ownership by U.S. citizens for both the village of Hatley and the township of West Hatley, (see tables one through five), (ii) the plotting of the acreage held by all types of non-resident landowers (figure 2) and the calculation of the land value surface and the corresponding surface created by the total value of investments in buildings and land using logarithmically transformed per acre values of both buildings and land, (figures 3 and 4), and (iii) a series of non-parametric tests (chi square, Pearson's contingency coefficient, Tschuprow's T and Cramer's V tests) to investigate the relationship between the nominal data set, type of landowner and the interval data set, the assessed value of buildings and land, (see tables six and seven).

Figure 2

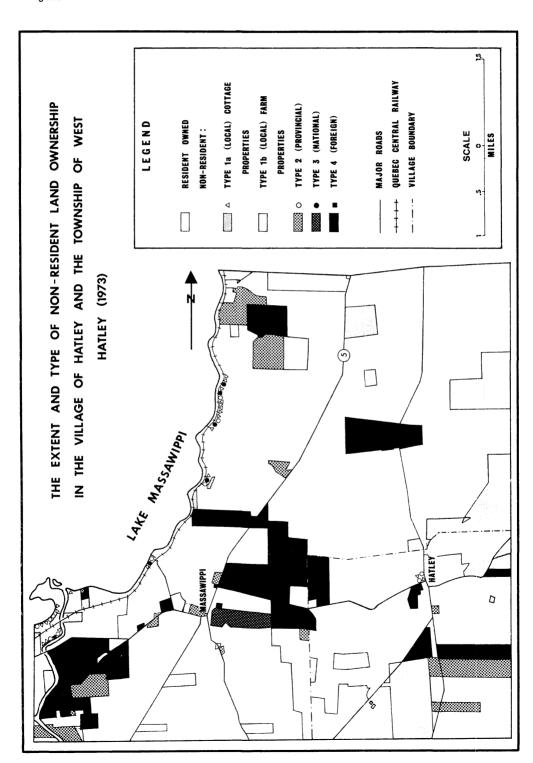


Table 1 Land Ownership by Type of Landowner, Village of Hatley and Township of West Hatley (1973)

Type of Landowner	Hatley	(% of Total)	West Hatley	(% of Total)
RESIDENT		67.5		27.9
NON-RESIDENT:				
Type I (local)	18.0		43.1	
Type II (provincial)	7.8	32.5	20.7	72.1
Type III (national)	0.0		3.3	
Type IV (foreign)	6.7		5.0	
		100.0		100.0
		(89 owners*)		(288 owners*)

<sup>\*</sup> This total does not include non-taxable landowners, such as the various religious institutions and public lands help by the municipality.

Table 2

Land Ownership by Acreage held

Village of Hatley and Township of West Hatley

(1973)

Type of Landowner	Hatley	(% of Total)	West Hatley	(% of Total)
RESIDENT		55.8		67.4
NON-RESIDENT:				
Type I (local)	31.9		12.2	
Type II (national)	4.9	44.2	5.1	32.6
Type III (national)	0.0		1.0	
Type IV (foreign)	7.4		14.3	
		100.0		100.0
		(3269.9 acres) *		(10,965.5 acres) *

<sup>\*</sup> These totals do not include land held by religious institutions or public land held by the municipality.

Table 3

Land Ownership by Assessed Value of Buildings and Land

Types of Landowners	1	Total Assessed Value: Buildings & Land (% of Total)			Assessed Value of Buildings (% of Total)			Assessed Value of Land (% of Total)				
	Hat			West Hatley latley		tley	West Hatley		Hatley		West Hatley	
RESIDENT		83.4		58.9		87.8		58.8		68.8		59.2
NON-RESIDENT Type I (Local)	7.1	16.6	18.9	41.1	3.3	12.2	18.7	41.2	21.3	33.2	19.6	40.8
Type II (provincial)	6.9	10.0	13.2		7.2	12.2	13.8	41.2	5.7	33.2	11.3	40.6
Type III (national)	0.0		1.8		0.0		1.8		0.0		1.9	
Type IV (foreign)	2.59		7.0		1.6		6.8		6.1		7.9	
		100.0		100.0		100.0		100.0	-	100.0		100.0

Table 4

Average Building Assessment and Average Land Assessment by Type of Landowner, Township of West Hatley (1973)

Type of Landowner	1	Building ssment	Average Land Assessment			
ALL OWNERS		\$ 5,124.85		\$ 1,531.01		
RESIDENT OWNERS		10,792.85		3,248.83		
NON-RESIDENT OWNERS		2,931.70		866.33		
Туре І	\$ 2,226.89		\$ 698.10			
Type II	3,437.71		841.66			
Type III	2,878.88		887.77			
Type IV	6,896.42		2,383.85			

Table 5

The Extent of Land Ownership by United States Citizens,
Village of Hatley and Township of West Hatley
(1973)

	Ha	tley	West Hatley		
	American	Total Type IV *	American	Total Type IV *	
Proportion of all landowners (% of total)	4.6	6.7	3.6	5.0	
Proportion of total acreage (% of total)	4.3	7.4	5.8	14.3	
Proportion of total assessed value (buildings and land) (% of total)	1.8	2.6	4.1	7.0	
Proportion of assessed value of buildings (% of total)	1.5	1.6	4.1	6.8	
Proportion of assessed value of land (% of total)	3.2	6.1	4.1	7.9	

<sup>\*</sup> Figures represent the corresponding total values for Type IV (foreign) non-resident owners.

Table 6

Results of Chi Square Test, Village of Hatley and Township of West Hatley

	Hatley	West Hatley
Total assessed value of land and buildings per acre	13.520 <sup>2</sup>	30.204 !
Assessed value of land per acre	1.429 <sup>3</sup>	45.391 <sup>1</sup>
	(89 owners)	(288 owners)

<sup>&</sup>lt;sup>1</sup> Significant at the .001 level

### **Findings**

1. Using any of the three methods adopted for determining the extent of non-resident land ownership, the proportions of non-resident to resident ownership are high. For example, the non-residents comprise 72.1% of the owners in West Hatley, control 32.6% of the total acreage in the municipality, and hold 41.1% of the total assessed value of buildings and land. The bulk of the non-resident land appears to be in the hands of local and provincial owners (well over one half), however, significant proportions (up to 14% by acreage and up to 8% by total assessed value of land and buildings),

Table 7

Results of Tests of Significance:
Pearson's Contingency Coefficient, Tschuprow's T, and Cramer's Test

	На	tley	West Hatley		
	Total assessment per acre	sment assessment assessme		Land assessment per acre	
С	0.365	0.179 1	0.308	0.370	
т	0.298	0.127 2	0.246	0.334	
V	0.391	0.127 <sup>2</sup>	0.323	0.397	

<sup>&</sup>lt;sup>1</sup> Adjusted C value, where C =  $\sqrt{\frac{(k-1)}{k}}$  for a 2 × 2 table.

<sup>&</sup>lt;sup>2</sup> Significant at the .01 level

<sup>3</sup> Not significant

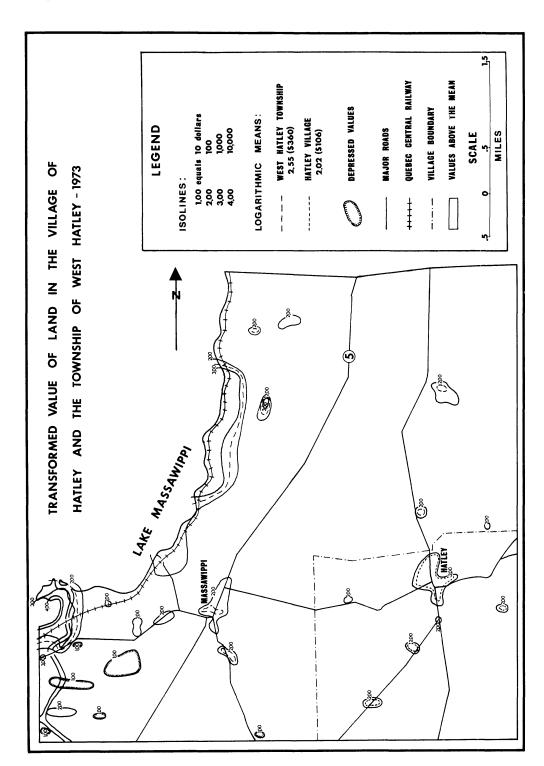
<sup>&</sup>lt;sup>2</sup> Both T max. and V max. can be assumed equal to 1.0.

rest with Type IV (foreign) owners and it is here that average investment levels are highest, exceeding all other categories of non-resident owners and the mean level of investment for all owners. The non-resident owners do not appear to be a homogeneous population in any way - rather, they consist of two well-defined subgroups: (i) a large number of Type I (local) non-residents who, coupled with a smaller of Type II (provincial) non-residents own a considerable quantity of land (17.3% of the total acreage), and account for nearly one-third of the total capital invested in land and buildings but whose average investment levels are relatively low, and (ii) a small number of Type IV (foreign) owners who control a large quantity of acreage (14.3% of the total acreage) and whose proportion of the total capital invested is not high but whose average investment levels are of the order of three to four times that of all other non-residents and nearly equal to the average level of investment by resident owners (particularly in West Hatley). The absolute level of ownership by U.S. citizens is not high (5.8% by acreage), however, this specific type of non-resident consistently accounts for well over one-half of all Type IV (foreign) ownership.

- 2. The land value « surface » and the « surface » representing the total value of land and buildings in the study area exhibits a rather simple core-and-ring pattern with the cores consisting of predominantly resident-owned, higher-valued land and buildings in the villages of Hatley and Massawippi and the ring composed of non-residents in the following configuration: (i) three clusters of cottages on higher-value land adjacent to Lake Massawippi inhabited principally by Type I (local) and Type II (provincial) owners, (ii) a peripheral zone of agricultural areas of relatively low value inhabited by Type I owners and (iii) an intermediate « flat » zone consisting of five clusters of Type IV foreign-owned commercial farms on relatively low-value land.
- 3. The results of the chi square test (table six) indicate that only in the case of land value in the village of Hatley is the proportion of resident to non-resident landowners the same as would have been predicted by chance. Thus in the case of the total value of buildings and land for both Hatley and West Hatley and in the case of land value for Hatley, the null hypothesis can be rejected and there does exist a relationship between land value and land ownership in these three instances. As to the strength of this relationship, the coefficient values for Pearson's C, Tschprow's T, and Cramer's V point to a relationship of moderate strength between land value, total value of land and buildings and the type of landowner in West Hatley, and between total value of land and buildings and the type of

<sup>8</sup> With non-parametric tests, there is no necessity of assuming a bivariate normal population, no necessity of ordering the nominal categories in any way, nor any necessity of assuming any underlying continuity for the various categories used, (see Siegal, 1956).

Figure 3



landowner in the village of Hatley. <sup>9</sup> There are obvious limitations to these statements. One interpretation of these results might be that while there may very well be evidence for the existence of a relationship between the type of landowner and land value in the study area, its strength may be mitigated to a greater or lesser degree by several intervening variables such as the type of land use, the intensity of land use, the degree of accessibility afforded to either agricultural or recreational service centers, the future value placed on the land by the owner and his acceptable rates of return on investment. Secondly, the relationship may very well obtain within the study area but have little or no application in other areas of the county of Stanstead or the Eastern Townships, i.e. as the characteristics of the land value surface and land ownership types become more dissimilar to those investigated in this study.

#### *Implications*

Clearly the most important implication of the results of this study is that postulates concerning the explanation of land value in terms of several underlying factors are incomplete unless the type of landowner variable is included. Obviously this does not mean that land use is an insignificant determinant of land value but that this dependent variable (land value) can be influenced considerably by the landowner's citizenship and the distance between the land plot and the owner's principal place of residence. While this relationship is not a direct one, at least two outcomes would probably be contingent upon an increase in the proportion of non-resident owners in the Eastern Townships. First, a large influx of local and provincial non-residents, who, by virtue of their collective investment will stimulate a general rise in the per acre value of land in specific, highly-desirable locations, and secondly, a less numerous influx of foreign non-residents coming from a considerable distance, who, by virtue of their individual investments will raise the per acre value of specific land plots and gain control over disproportionately large acreages in the process. Neither outcome would seem to be in the best interests of any rural Quebec municipality, areas which are already facing the inflationary tendencies of land value which emanate from purely domestic and local sources. The added stimulus of non-resident owners can only serve to exacerbate this situation.

 $<sup>^9</sup>$  In non-parametric tests of significance it is only possible to have an indicator of correlation which ranges from  $\pm 1.0$  to  $\pm 1.0$  when dealing with two by two contingency tables since the upper limit of Pearson's C, Tschprow's T and Cramer's V coefficients is often less than 1.0. In the case of rectangular tables, only Cramer's V coefficient can be assumed to have a maximum value of 1.0, the exact upper limits of both C and T coefficients being unknown, (see McNemar, 1969). The point being stressed is that it is not so much the numerical value of the coefficients which indicates the strength of the relationship as it is the amount that the coefficient differs from zero.

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#### **ABSTRACT**

ROSE, Curtice: Non-Resident Land Ownership and Land Value in two Eastern
Townships of Quebec: a preliminary investigation.

The papers probes the indirect relationship between land value and various types of landowners: resident landowners, and 'local', 'provincial', 'national' and 'foreign' non-resident landowners. Data on the number of landowners, the acreage held and the assessed value of buildings and land in two rural Quebec municipalities are examined using plotted "surfaces" of land value and several non-parametric statistical approaches. The levels of non-resident ownership are found to be relatively high with 'local' and 'provincial' non-residents holding the bulk of the non-resident acreage. A significant association is found to exist between the total assessed value of land and buildings and the type of landowner in both municipalities.

KEY WORDS: Rural land use and land value, non-resident land ownership, core and ring pattern. Eastern Townships, Québec.

#### RÉSUME

ROSE, Curtice: Importance des propriétés appartenant à des non-résidents et valeur des terrains dans 2 municipalités des Cantons-de-l'Est : résultats d'une enquête préliminaire.

Cette étude vise à tester l'hypothèse d'une relation indirecte entre la valeur des terrains et les types de propriétaires: les résidents et les divers types de non-résidents, « locaux », « provinciaux », « nationaux » et « étrangers ». Les données sur le nombre de propriétaires, la superficie totale et l'évaluation des terrains et des bâtiments de la construction dans deux municipalités rurales des Cantons-de-l'Est (Québec) sont examinées en utilisant la méthode des surfaces mathématiques pour l'étude de la valeur des terrains ainsi que des statistiques non-paramétriques. La proportion des terrains aux mains de non-résidents de l'Estrie est assez élevée, surtout en ce qui concerne les types de non-résidents « locaux » et « provinciaux ». Une association significative existe entre l'évaluation totale et le type de propriétaires dans les deux municipalités.

MOTS-CLÉS: Utilisation du sol rural, valeur des terres, propriétés appartenant à des non-résidents, modèle concentrique.

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