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**CANADA**

**DEPARTMENT OF TRADE AND COMMERCE**

**DOMINION BUREAU OF STATISTICS**

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**URBAN EARNINGS**

**AND**

**HOUSING ACCOMMODATION**

**IN**

**CANADA**

**1931 AND 1936**



OTTAWA  
1938

Price 25 cents



PREFACE

This bulletin is the second preliminary release of data being incorporated in a monograph on The Housing of the Canadian People. The first release entitled "The Housing Accommodation of the Canadian People" was mainly a summary of 1931 census compilations. The present bulletin contains a preliminary analysis of material sampled from census records relating to earnings and housing for wage-earner households in 14 cities. These include the 5 Prairie cities of 30,000 population and over for which data were available for 1936 as well as 1931. This material supplements census statistics with reference to such questions as the distribution of family earnings, tenant rentals, the value of owned homes, etc. It was prepared by H. F. Greenway, M.A.



R. H. Coats,  
Dominion Statistician.

### DEFINITIONS

Most of the following terms are used repeatedly, and an exact understanding of them is necessary to the interpretation of results presented.

Building: For census purposes, a building is any structure used for human habitation. It may be a single house, an apartment house, a tent, or other type of shelter.

Dwelling: Hereafter used interchangeably with home. It may be a single house, an apartment in an apartment building, or any separate set of living quarters with an independent entrance either from outside, or from a public passage or landing.

Room: Only such rooms as were used for living purposes have been listed.

Household: All households in the sample included husbands and wives living together as joint heads of a single private family. Lodgers were considered as members of the family, except in the reckoning of earnings. No households with sub-tenant families were included.

Rent: No distinction was made between rent for homes furnished or unfurnished, heated or unheated. Rent shown is that for the month of May.

Value: The current or actual market value of homes.

Earnings: Total earnings for the twelve months ending May for every person with an occupation who worked for salary, wages, commission or at piece rates. No record of earnings or income was obtained from those working on their own account or whose income was derived only from property. Earnings of private family members have been grouped together as the unit for earnings analysis.

Median earnings: The value of family earnings midway between the highest and lowest family earnings figures in the sample.

Quartile earnings: First quartile value - the value of family earnings midway between the lowest earnings and the median earnings value. Third quartile value - the value of earnings midway between the median and highest earnings value reported. Median and quartile values divide the number of families into four equal groups.

Inter-quartile range of earnings: The value obtained by subtracting the first earnings quartile from the third, i.e., the range in which earnings for the middle 50 per cent. of families falls.

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URBAN EARNINGS AND HOUSING ACCOMMODATIONINTRODUCTORY

This bulletin presents an analysis of Canadian urban earnings and housing data for 1931 and 1936. The basic material has been obtained from population census records and was compiled by sampling returns for households of a predominant type from some of the principal cities of Canada. The random sample for each city usually consisted of 1,000 or more cases, about equally divided between tenant and owner households of the wage-earner and salaried classes. The sample was limited further to households of one private family with husband and wife living together as joint family heads, such cases usually comprising from one-half to three-quarters of all households in the cities examined. Some households include one or more lodgers, and in such cases, family earnings excluded amounts earned by these individuals. They were included, however, in calculations of rooms per person.

The nature of family earnings and rents warrants a brief comment. Family earnings as reported to census enumerators may not have been perfectly exact. However, comparative tests of these data with earnings averages computed from industrial census returns have given results that checked very closely. Further, the consistency discovered in earnings distributions gives grounds for believing that these data provide a reliable basis for appraising the earnings situation. Rent comparisons were complicated by the fact that no distinction could be made between furnished and unfurnished or heated and unheated dwellings. It is safe to say, however, that the proportion of furnished homes is small, and has a negligible effect upon the samples examined. The proportion of heated homes varies from city to city, depending chiefly upon the number of dwellers in apartments and flats, but this fact should make very little difference to an examination of underlying tendencies affecting rent-earnings ratios, and, of course, it is of no consequence in the consideration of owned homes.

The analysis of these data has been made with several main objectives in view. Foremost has been that of obtaining a picture of the distribution of earnings, and of differences in earnings levels between 1931 and 1936. The relationship between earnings and various significant characteristics of housing and tenure is examined in the balance of the brochure. Answers have been sought to such questions as - How do earnings of owners and tenants compare? What is the relation between earnings and adequacy of accommodation? What proportion of earnings is devoted to rents, and how do earnings compare with the value of homes owned?

SUMMARY

Averages of annual earnings samples in 14 cities in 1931 ranged from \$1,379 to \$1,934 per family. Corresponding 1936 averages for Prairie cities showed declines of approximately \$450 per family. The commonest 1931 earnings level in these cities was between \$1,200 and \$1,600, a range which usually included between 20 and 23 per cent. of families sampled.

Variations in living standards were greater than differences in earnings levels. Living costs in some cities were relatively high, while the average level of earnings was not correspondingly high.

When family earnings were arranged in order of magnitude and divided into four equal groups, the boundary line between earnings of the lowest and second lowest groups (first quartile) was usually between 35 and 40 per cent. below the middle level of earnings (median). In the

upper half, the dividing line between earnings of the third and fourth groups (third quartile) was commonly about 45 per cent. higher than the middle earnings level.

Earnings in 1931 averaged about \$400 per year higher for owner families than for those of tenants. Actual averages centred around \$1,700 for owner families and around \$1,300 for tenants.

Although tenant families were approximately the same size as owner families below the first earnings quartile, tenant averages for rooms per person and earnings per person were materially lower than corresponding owner averages, and both tenant and owner averages pointed to the prevalence of inadequate housing accommodation in this group.

There was more than one wage earner in approximately one out of every five families sampled. The proportion was higher in owner than in tenant families, and increased in progressive earnings groups up to \$3,000.

The proportion of tenant families with less than one room per person in samples ranged from 15 to 41 per cent., and from 9 to 39 per cent. for owner families.

Earnings per person and rent per room for tenant families increased as rooms per person increased. Averages of earnings per person and rent per room for families with more than one room per person were sharply higher than for families with less than one room per person. There was convincing evidence of a close relationship between the amount of earnings and adequacy of accommodation.

City average proportions of tenant family earnings spent on rent ranged from 19 per cent. to 27 per cent. in 1931. Proportions of tenant earnings devoted to rents declined in progressive earnings groups, but there was evidence of greater emphasis upon housing in earnings groups between \$800 and \$1,600 per annum than either below or above that range. This appeared in the rate of increase in rooms per person and rent per room.

There was much greater variation in proportions of earnings expended in rent by individual families with earnings below \$2,000 than for those with more than this amount. In other words, there appeared to be relatively wider differences in emphasis upon the home among tenant families with less than \$2,000 per annum than among families with larger earnings.

Annual earnings of owner families averaged from 34 to 62 per cent. of the 1931 value of homes in the 14 cities examined. Generally the proportion of owned homes was high when these percentages were high, and vice versa. The lowest proportions of owned homes were found for cities with the lowest rent-earnings ratios.

AVERAGE FAMILY EARNINGS

The data hereafter presented indicate the earnings position of the most typical Canadian family. The proportion of all families which this type forms in the cities sampled may be observed from the following table:

TABLE 1. - Households in Cities Sampled, 1931.<sup>x</sup>

City	Total Households	Estimated number of one family wage-earner households with husband and wife as joint heads	Col.2 as a percentage of Col.1
Halifax .....	12,213	6,700	55
Three Rivers .....	6,208	4,200	68
Montreal .....	171,348	104,800	61
Verdun .....	13,919	10,600	76
Toronto .....	149,994	81,300	54
Hamilton .....	37,270	22,300	60
Brantford .....	7,503	4,300	57
Winnipeg .....	48,583	28,100	58
Regina .....	12,074	7,500	62
Saskatoon .....	9,769	5,800	59
Calgary .....	20,543	11,800	57
Edmonton .....	19,007	10,700	56
Vancouver .....	61,268	30,400	50
Victoria .....	10,523	3,700	35

The residual households include all families with non-wage earner heads, and broken families with wage-earner heads.

To obtain an accurate idea of relative levels of earnings in various cities, it is necessary to know the average earnings per person in addition to family earnings, since the average size of families differs appreciably from place to place. Averages of sample earnings appear below in Table 2.

<sup>x</sup> See final page for the number of cases sampled in each city.



TABLE 2. - Average Annual<sup>x</sup> Earnings per Household and per Person 1931 and 1936.

City	Persons per Household <sup>†</sup>		Average Earnings per Household		Average Earnings per Person	
	1931	1936	1931	1936	1931	1936
			\$	\$	\$	\$
Halifax .....	4.4	-	1,602	-	366	-
Three Rivers .....	5.5	-	1,450	-	266	-
Montreal .....	4.3	-	1,622	-	375	-
Verdun .....	4.4	-	1,530	-	359	-
Toronto .....	3.7	-	1,934	-	516	-
Hamilton .....	3.9	-	1,449	-	371	-
Brantford .....	4.0	-	1,379	-	345	-
Winnipeg .....	4.1	3.9	1,784	1,333	435	339
Regina .....	4.0	4.0	1,718	1,284	433	323
Saskatoon .....	4.0	4.0	1,697	1,256	424	310
Calgary .....	3.8	3.8	1,697	1,295	444	339
Edmonton .....	4.0	4.0	1,579	1,119	395	280
Vancouver .....	3.8	-	1,589	-	419	-
Victoria .....	3.7	-	1,533	-	409	-

x Year ended June 30. Tenant and Owner averages weighted according to proportions of these types of households.

† Exclusive of lodgers.

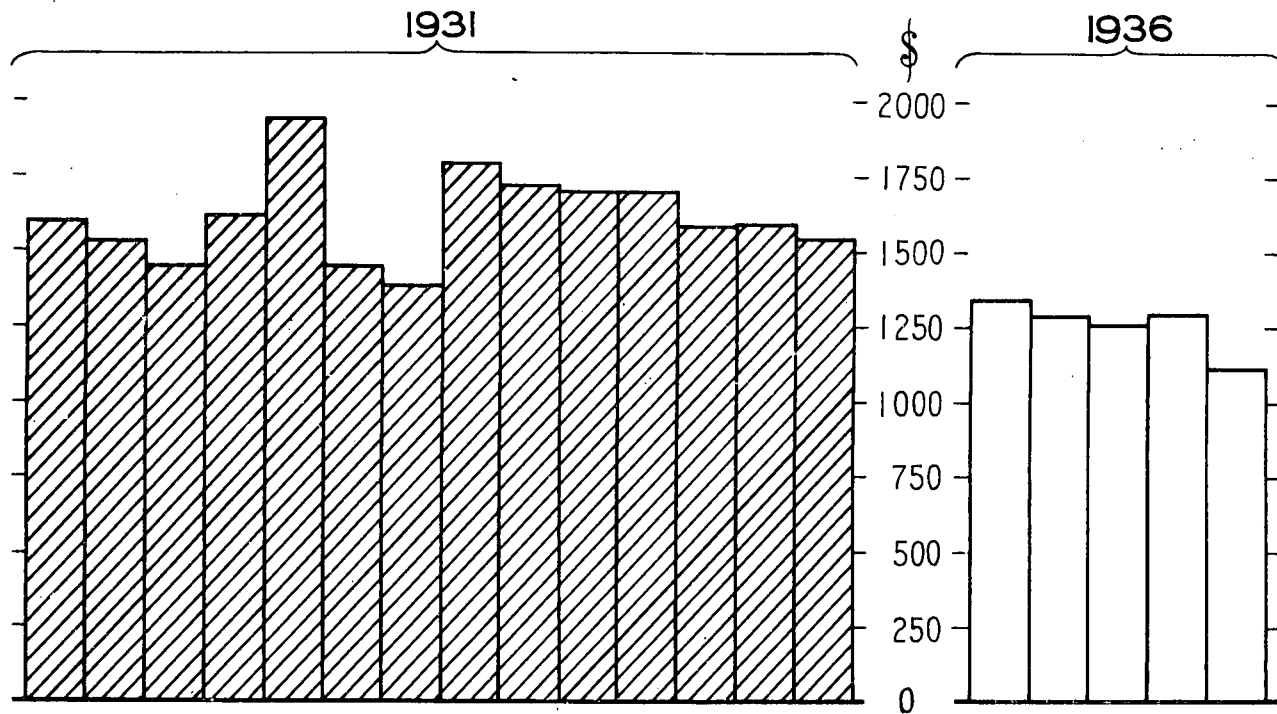
It seems improbable that comprehensive city averages of income per person would differ materially from these figures. As already indicated, they represent a predominant proportion of all households. Residual wage-earner households would increase the proportion to better than 70 p.c. of the total. Income per person in these residual wage-earner families, however, would probably be lower than the figures shown above, since they include many multiple family households and others with widow heads or husband absent which are usually living at lower standards than single family households. Against them must be balanced families living on income from investments and those whose chief breadwinners are employers or work on their own account. Together these form not more than 20 p.c. of urban households in cities of over 30,000. Finally, there is a further 8 p.c. whose heads have no recognized occupation, largely representing broken families supported mainly by junior members, and likely to average less earnings per person than unbroken families with wage-earner heads.

It will be observed from the preceding table that average earnings per household in 1931 ranged from \$1,934 down to \$1,379. However, differences in the average number of persons per family make earnings per person more significant than earnings per household. The range of variation here was relatively greater, with averages running from \$516 down to \$266 per person. Western averages were generally above \$400 per person, with eastern figures mostly between \$350 and \$400. The 1936 sample for the Prairies pointed to a marked decline centring around 25 p.c. during the preceding five years.

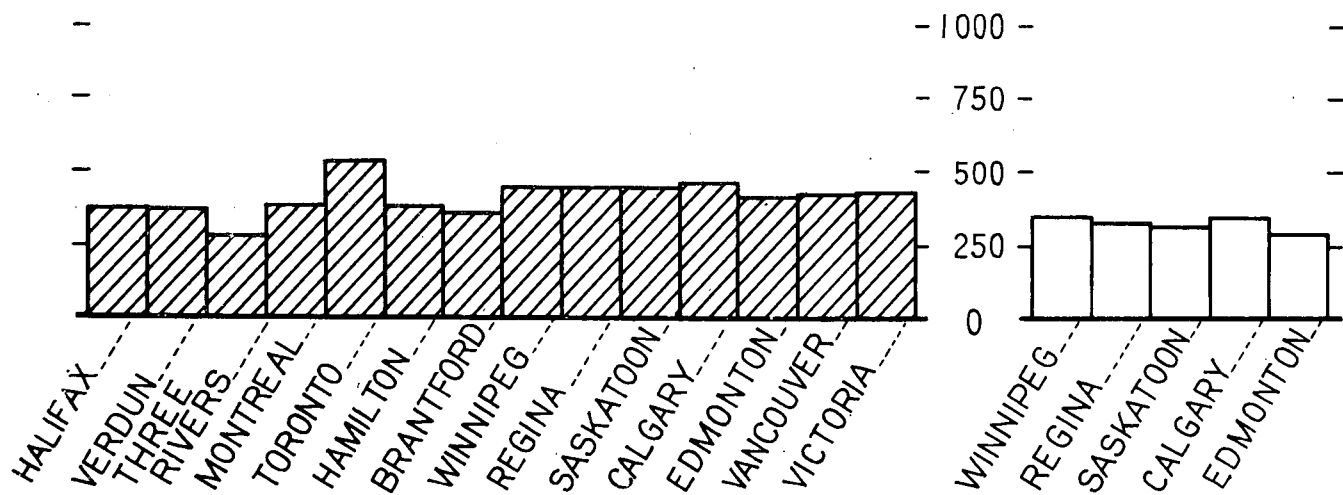
#### The Purchasing Power of Earnings in 14 Cities

The range of variation noted for earnings per person does not reveal the extent of differences in living standards, since living costs are sometimes relatively high or low when compared to levels of earnings. No comprehensive basis of evaluating differences in living standards is available, but two independent tests have been made which point to a wider range of living standards than earnings averages would indicate. In the first, index numbers of earnings per person were divided by corresponding city index numbers for a workman's family budget of foods, fuel, and rent. These may be considered as necessities and sufficient to give an approximate idea of the purchasing power of earnings over essentials to the family budget. Figures

# ANNUAL AVERAGE EARNINGS PER HOUSEHOLD



# ANNUAL AVERAGE EARNINGS PER PERSON



for Regina were arbitrarily taken as equal to 100 for the purpose of this comparison. The distribution of earnings per person indexes showed much less scatter than that for indexes indicative of purchasing power over necessities, as may be observed from the following statement:

Index Numbers of Earnings per Person, 1931		Index Numbers of Purchasing Power over Necessities, 1931		
		(Regina=100)		
		Number of Cities		
Under 80 .....	Three Rivers	1	1	Three Rivers
80-89 .....	Halifax, Montreal, Hamilton, Brantford	4	2	Halifax, Brantford
90-99 .....	Saskatoon, Edmonton, Vancouver, Victoria	4	2	Montreal, Hamilton
100-109 .....	Winnipeg, Regina, Calgary	3	4	Winnipeg, Regina, Saskatoon, Edmonton
110+ .....	Toronto	1	4	Toronto, Calgary, Vancouver, Victoria

Wide divergence in purchasing power over items which may be classed as luxuries is also indicated by per capita figures for radios and passenger automobiles similarly related to Regina totals. Such percentages cannot be compared directly with those above, but they point to differences in purchasing power much greater than might be inferred from indexes of average earnings per person.

Index Numbers of Radios per Capita, 1931		Index Numbers of Passenger Autos per Capita, 1931		
		(Regina=100) Number of Cities		
Under 80 .....	Three Rivers	1	4	Halifax, Three Rivers, Montreal, Winnipeg
80-89 .....	Edmonton	1	-	-
90-99 .....	Halifax, Montreal, Winnipeg, Saskatoon	4	4	Hamilton, Saskatoon, Edmonton, Vancouver
100-109 .....	Regina, Calgary	2	2	Brantford, Regina
110-149 .....	Brantford, Vancouver Victoria	3	2	Toronto, Calgary
150+ .....	Toronto, Hamilton	2	1	Victoria

Other earnings records from the Prairie census of 1936 indicate that the purchasing power of earnings per person over necessities was somewhat less in 1936 than in 1931. The decline in general living standards would be greater than that indicated by records of basic budgets for foods, fuel and rent. The position of 1936 earnings per person and family budgets with reference to 1931 levels is shown following for representative Prairie cities. No corresponding data are available for earnings in eastern Canada or British Columbia.

	Percentage declines between 1931 and 1936 -	
	Earnings per person	Family Budgets (Foods, Rent, Fuel)
Winnipeg .....	22	18
Regina .....	25	21
Calgary .....	24	16

### THE DISTRIBUTION OF FAMILY EARNINGS

The question of earnings is more than a matter of averages, which may hide widely different distributions of income. It is important to know the proportions of households at different earnings levels. To this end, data have been assembled in two ways, first to show the range of earnings for the first, second, and third quarters of households sampled, and again to show the percentages of households in more detailed earnings groups. The first arrangement is presented in the following table.

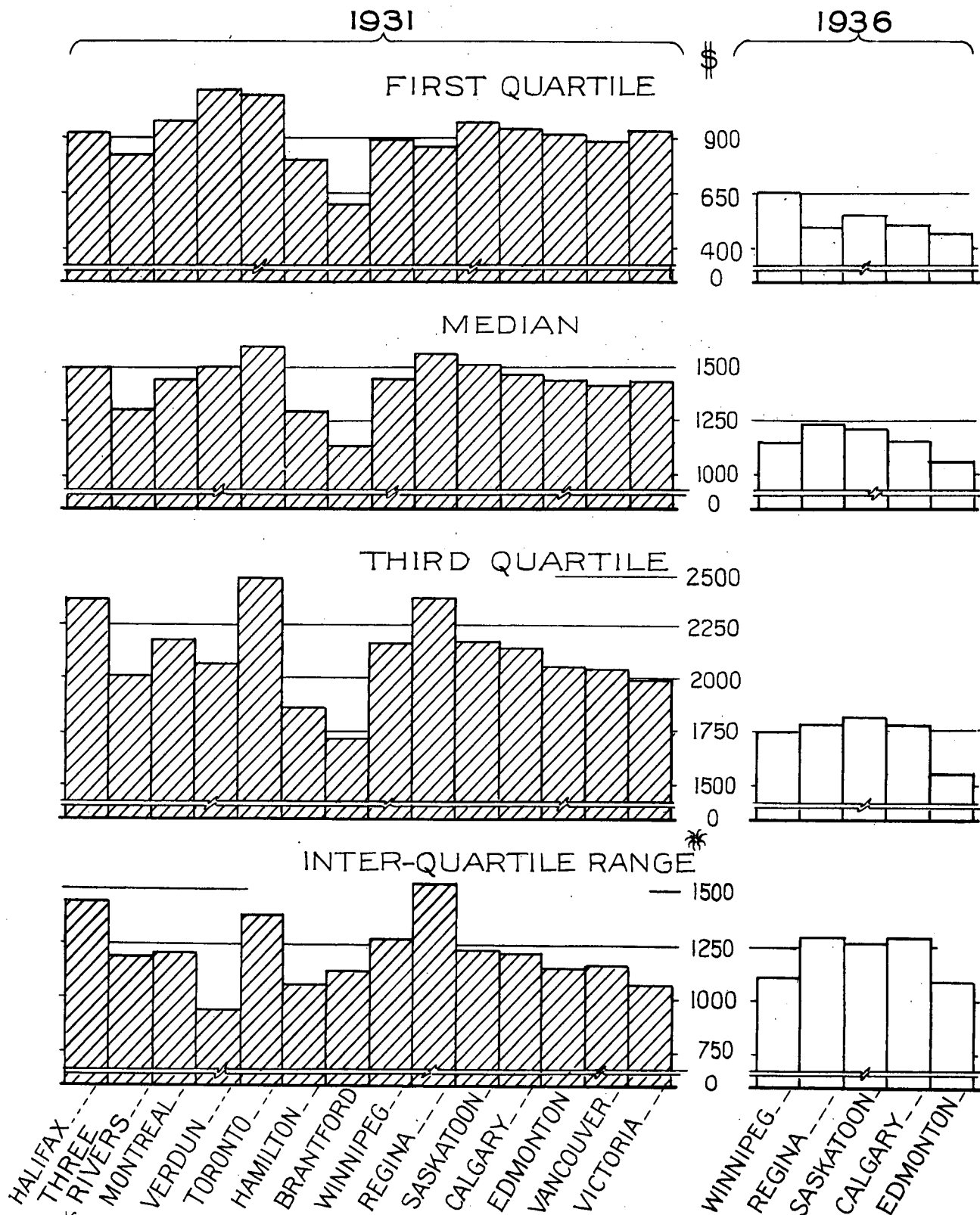
### Median and Quartile Family Earnings Values

Table 3. - Household Earnings Distribution (Medians, Quartiles, and Inter-quartile range)

City	25 p.c. of Households Receive less than-	50 p.c. of Households Receive less than-	75 p.c. of Households Receive less than-	Inter-quartile Range Col.3 minus Col.1
		<u>1 9 3 1</u>		
	\$	\$	\$	\$
Halifax .....	923	1,495	2,370	1,447
Three Rivers ...	822	1,293	2,008	1,186
Montreal .....	974	1,439	2,181	1,207
Verdun .....	1,120	1,499	2,065	946
Toronto .....	1,093	1,583	2,469	1,376
Hamilton .....	799	1,289	1,859	1,060
Brantford .....	596	1,126	1,719	1,124
Winnipeg .....	894	1,443	2,165	1,271
Regina .....	852	1,557	2,370	1,518
Saskatoon .....	962	1,509	2,172	1,210
Calgary .....	936	1,464	2,141	1,204
Edmonton .....	915	1,439	2,050	1,135
Vancouver .....	891	1,411	2,039	1,148
Victoria .....	927	1,426	1,991	1,064
		<u>1 9 3 6</u>		
Winnipeg .....	655	1,152	1,759	1,104
Regina .....	497	1,240	1,789	1,293
Saskatoon .....	552	1,217	1,824	1,272
Calgary .....	508	1,167	1,795	1,287
Edmonton .....	473	1,066	1,564	1,091

These figures are of interest not only as an indication of the actual amounts wage-earner families received, but also as a guide to the dispersion of earnings. Consequently they afford a rough index to relative variations in living standards when considered in relation to living costs. The earnings boundary line between the first and second 25 p.c. of households, i.e., the first quartile, was generally between 35 and 40 p.c. below the median or middle level of earnings. In Verdun, the difference was materially less, while in Brantford and Regina, it was about 10 p.c. greater. In the upper half, the dividing line between the third and fourth 25 p.c. of households, i.e., the third quartile, was most commonly around 45 p.c. above median earnings values, with Verdun and Hamilton falling below this figure and Halifax, Regina, and Calgary noticeably above it.

# QUARTILE FAMILY EARNINGS VALUES



\* Spread between the upper limit of the lowest 25 per cent and the lower limit of the highest 25 per cent of family earnings.

If economic pressure is to be observed among wage earners, it may logically be looked for in the first quarter of the sample. In 1931, the upper earnings limit for the first quarter ranged between \$596 and \$1,120, which in view of living cost data referred to above, is indicative of real differences in living standards in these groups. For a large proportion of households in the lowest earnings group, a pronounced deficiency in earnings necessary for a normal livelihood was clearly apparent. Well over one-half of these households comprised more than three persons, which in the most favourably situated cases would not allow much more than \$300 per person per annum. Actually in several cities the typical amount was between \$50 and \$100 per person. Western data for 1936 indicated a materially weaker economic position for the lowest group of wage earners than in 1931, with the first earnings quartile reduced between 25 and 50 p.c. Median and third quartile household earnings values did not suffer nearly such drastic reductions. Percentage decreases at these points were about the same in each of the large Prairie cities and ranged usually from 20 to 25 p.c.

### Earnings Frequency Distributions

To supplement the foregoing examination, household earnings were sorted into \$400 groups for more careful inspection. It should be borne in mind that the samples include approximately equal proportions of owner and tenant households, whereas actual proportions in a few cities, notably Halifax, Three Rivers and Verdun, show a definite preponderance of tenants.<sup>x</sup> Total distributions for these cities would differ slightly from those shown, as may be judged from tenant and owner distributions appearing separately in Tables 7 and 8. For other centres, the proportions of owners and tenants are so similar as to affect combined distributions very little.

The commonest 1931 earnings level in the cities examined was between \$1,200 and \$1,599 per annum, a range which usually included between 20 and 23 p.c. of all cases sampled. Concentration around this level was quite marked in Verdun, but definitely below average in Halifax, Brantford and Regina where the greatest degree of dispersion existed. For Three Rivers, Brantford, Hamilton and Regina there was an abnormally large proportion of returns below the predominant earnings range, and distributions for other cities all showed this same tendency to a lesser extent. The 1936 earnings distributions for Prairie cities showed a startling proportion of households with earnings of less than \$400 per annum. This ran from 17 to 23 p.c. of the total samples, which explains the sharp drop already noted in the earnings levels at the first quartile. Typical or modal earnings figures for 1936 tended to be slightly below those reported for 1931 and distributions were badly skewed by the high proportions of cases in the group with less than \$400. There was a greater degree of concentration apparent in the middle earnings groups at the expense of the higher brackets. Presumably a considerable number of households with relatively high earnings in 1931 also joined the wholly or virtually unemployed in the lowest group with earnings of less than \$400.

### EARNINGS COMPARISONS OF OWNER AND TENANT HOUSEHOLDS

Although home ownership is most prevalent in the cities of Western Canada where household earnings are relatively high, there appear to be other major factors affecting owner-tenant ratios. The homes of western cities where frame construction predominates have cost less on the average than those in the east which are chiefly of brick or stone. Further, western homes contain a smaller number of rooms than those in the east, and the average level of western rentals is higher, making ownership relatively more attractive.

### Average Earnings of Owner and Tenant Households

Earnings per household in 1931 averaged about \$400 per year higher for owner families than those of tenants, with variations in averages for cities sampled ranging from \$203 up to \$722. Actual averages centred around \$1,700 for owner households and \$1,300 per annum for tenants. Owner averages ranged from \$1,555 to \$2,178 and tenant averages from \$1,145

# PERCENTAGES OF FAMILIES AT SPECIFIED EARNINGS LEVELS, 1931 AND 1936

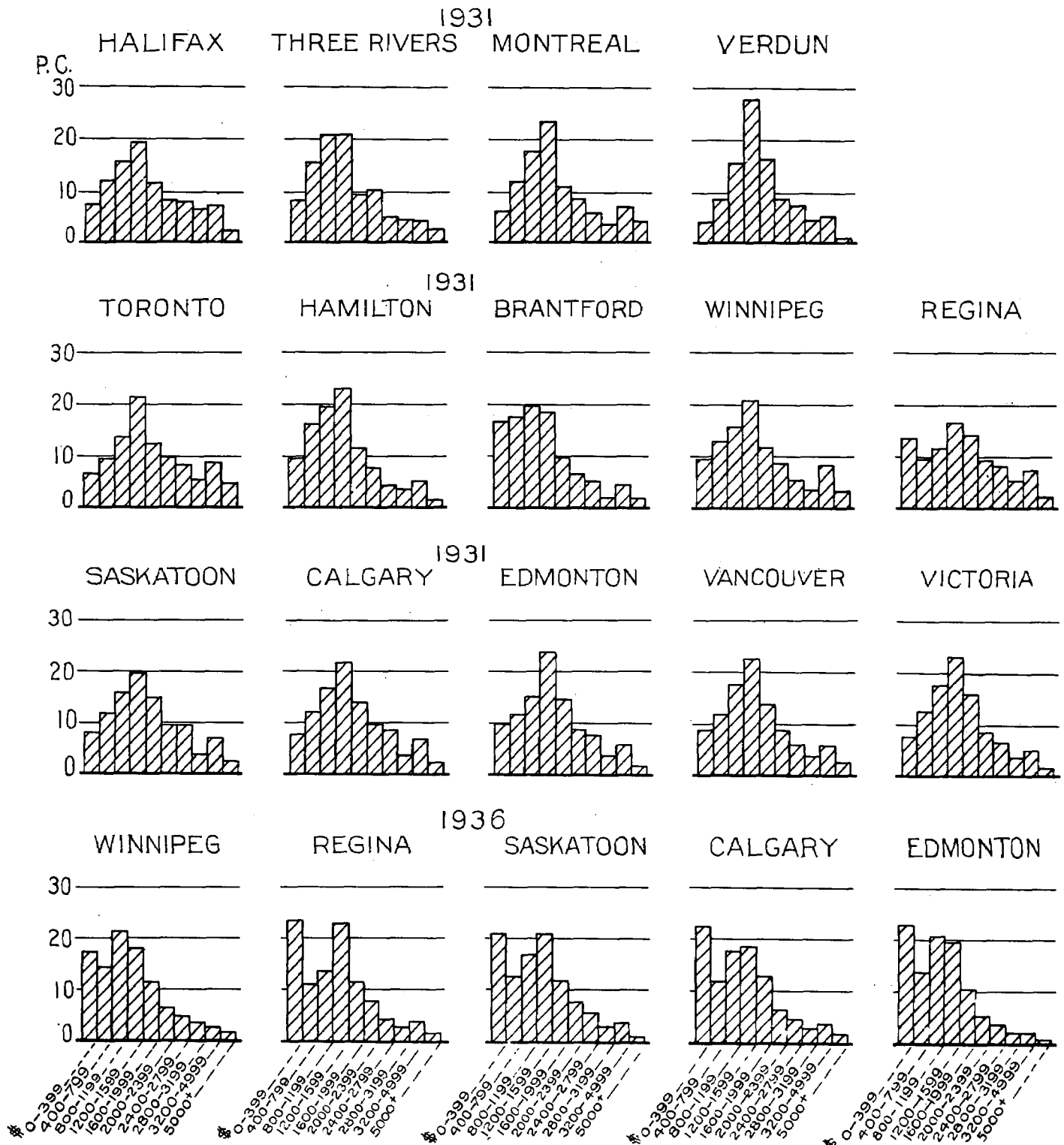


Table 4. - Percentage Earnings Distribution of all Wage-Earner Families Sampled, 1931 and 1936.

Earnings Groups

City	\$0- 399	\$400- 799	\$800- 1199	\$1200- 1599	\$1600- 1999	\$2000- 2399	\$2400- 2799	\$2800- 3199	\$3200- 4999	\$5000+
<u>1 9 3 1</u>										
Halifax .....	8	12	16	19	12	9	8	7	7	2
Three Rivers .....	8	15	21	21	9	10	5	4	4	3
Montreal .....	6	12	18	23	11	9	6	4	7	4
Verdun .....	4	9	16	28	16	9	7	4	6	1
Toronto .....	7	9	14	21	12	10	8	5	9	5
Hamilton .....	9	16	20	23	11	8	4	3	5	1
Brantford .....	16	17	20	18	10	6	5	2	4	2
Winnipeg .....	9	13	16	21	12	9	5	4	8	3
Regina .....	14	10	12	16	15	9	8	6	8	2
Saskatoon .....	8	12	16	19	14	9	9	4	7	2
Calgary .....	7	12	16	21	14	9	8	4	7	2
Edmonton .....	10	11	15	23	14	9	7	4	5	2
Vancouver .....	9	12	17	22	14	9	6	4	5	2
Victoria .....	7	12	17	23	16	8	6	4	5	2
<u>1 9 3 6</u>										
Winnipeg .....	17	14	21	18	12	6	5	3	2	2
Regina .....	23	11	13	23	11	8	4	3	3	1
Saskatoon .....	20	12	17	20	12	7	5	3	4	0
Calgary .....	22	12	18	19	12	6	4	3	3	1
Edmonton .....	23	13	21	20	10	5	4	2	2	0



to \$1,724. It will be noted from Table 5 that comparisons of earnings per person in most cases show less proportionate difference than household earnings because the families in owner groups were nearly always larger than the average tenant family. It may also be observed that declines in owner and tenant household earnings between 1931 and 1936 were approximately the same. The decrease over this period approximated \$425 per household, with Winnipeg and Edmonton tenants suffering a more severe reduction of over \$500 per annum. It should be noted that these reductions bore more heavily upon tenant than upon owner households, since average earnings of the former in 1931 were approximately \$400 below those for owner households.

Table 5.- Average Annual Earnings per Family and per Person in Specified Canadian Cities.

Cities	Average Annual Earnings per Family			Average Annual Earnings per Person		
	Tenants	Owners	Total	Tenants	Owners	Total
			<u>1 9 3 1</u>			
Halifax .....	\$1,361	\$2,083	\$1,602	\$ 317	\$ 463	\$ 366
Three Rivers .....	1,313	1,724	1,450	253	292	266
Montreal .....	1,532	2,147	1,622	364	439	375
Verdun .....	1,465	1,922	1,530	349	418	359
Toronto .....	1,724	2,178	1,934	472	566	516
Hamilton .....	1,217	1,694	1,449	320	424	371
Brantford .....	1,145	1,555	1,379	286	389	345
Winnipeg .....	1,541	2,059	1,784	407	467	435
Regina .....	1,455	1,981	1,718	393	472	433
Saskatoon .....	1,552	1,841	1,697	398	449	424
Calgary .....	1,467	1,906	1,697	408	477	444
Edmonton .....	1,393	1,747	1,579	348	437	395
Vancouver .....	1,486	1,689	1,589	407	430	419
Victoria .....	1,342	1,763	1,533	353	476	409
			<u>1 9 3 6</u>			
Winnipeg .....	1,026	1,679	1,333	278	409	339
Regina .....	1,026	1,541	1,284	270	376	323
Saskatoon .....	1,126	1,386	1,256	282	338	310
Calgary .....	1,037	1,529	1,295	280	392	339
Edmonton .....	882	1,332	1,119	221	333	280

Differences in earnings of owners and tenants may be more completely appreciated when these respective types of households are divided into four equal groups and earnings at the three dividing lines are examined, i.e., the values of the median and first and third quartiles. Median or middle earnings values correspond fairly closely with averages already tabled, but are invariably lower than related averages by amounts usually ranging from \$100 to \$300. This is characteristic of ordinary earnings distributions, averages for which are influenced materially by the comparatively small number of cases in the higher earnings groups.

Tenant household median earnings centred around 80 p.c. of corresponding owner household median values in 1931, with extremes ranging from 64 p.c. for Halifax to 88 p.c. for Saskatoon. The same was broadly true at the third quartile level where the range of variation extended from 72 p.c. for Halifax to 94 p.c. for Saskatoon. At the first quartile level, however, tenants appeared at a greater disadvantage with corresponding percentages ranging from 49 for Regina to 79 for Three Rivers, and little sign of central tendency apparent in between. Similar percentages for 1936 covering Prairie cities showed little change in relationships at third quartile levels, but tenant median and first quartile values dropped appreciably in relation to earnings levels for corresponding owner earnings groups. Tenant median earnings values were from 65 p.c. to 77 p.c. of those for owner households, while lower quartile value proportions for tenants dropped sharply to percentages ranging from 22 to 62.

Median and Quartile Family Earnings Values for Owner and Tenant Families

Median earnings values for owner households were usually about \$300 above those for tenant households in 1931. Differences ranged from \$669 for Halifax down to \$155 for Vancouver. Earnings for this city showed very little difference as between tenant and owner households in marked contrast with Halifax and Regina, where differences at all three levels of investigation exceeded \$500 per household. Median earnings per tenant household ranged from \$999 up to \$1,437, with corresponding figures for owners scattered between \$1,281 and \$1,849. Third quartile earnings values for owner families were usually between \$600 and \$800 above the median, with tenant families generally between \$400 and \$700 higher. At the first quartile, owners dropped between \$400 and \$600 below the median, and tenants usually from \$450 to \$600. Owner family earnings at the first quartile ranged from \$754 to \$1,296, falling below \$1,000 in four cases. Tenant family earnings at this level varied from \$497 to \$1,012. By 1936, tenant family earnings at the first quartile in Prairie cities were all below \$500, with corresponding owner figures between \$749 and \$890. Median tenant earnings centred around \$950 with owner families between \$1,267 and \$1,478. Prairie earnings averages in 1931 compared favourably with those in Eastern Canada, but there is reason to believe they may have suffered to a greater extent during the subsequent years of depression.

Table 6. - Median and Quartile Annual Earnings of Owner and Tenant Families.

Cities	Upper Limit for 25% of Households		Upper Limit for 50% of Households		Upper Limit for 75% of Households	
	Owners	Tenants	Owners	Tenants	Owners	Tenants
			1 9 3 1			
Halifax .....	\$1,251	\$ 677	\$1,840	\$1,171	\$2,634	\$1,883
Three Rivers .....	921	725	1,459	1,165	2,178	1,732
Montreal .....	1,197	805	1,653	1,262	2,510	1,864
Verdun .....	1,296	1,012	1,758	1,368	2,446	1,825
Toronto .....	1,214	978	1,849	1,437	2,847	2,158
Hamilton .....	924	699	1,429	1,161	2,125	1,584
Brantford .....	754	497	1,281	999	1,947	1,482
Winnipeg .....	1,096	687	1,585	1,200	2,464	1,972
Regina .....	1,192	582	1,828	1,325	2,644	1,991
Saskatoon .....	1,084	814	1,605	1,413	2,245	2,120
Calgary .....	1,187	790	1,666	1,314	2,399	1,985
Edmonton .....	1,134	739	1,578	1,294	2,216	1,862
Vancouver .....	999	784	1,479	1,324	2,119	1,926
Victoria .....	1,102	758	1,555	1,260	2,131	1,822
			1 9 3 6			
Winnipeg .....	867	405	1,478	939	2,124	1,394
Regina .....	810	181	1,388	983	2,028	1,541
Saskatoon .....	749	461	1,364	1,044	1,939	1,615
Calgary .....	890	241	1,390	939	1,926	1,554
Edmonton .....	823	231	1,267	819	1,795	1,340

Turning from relative levels of earnings for owner and tenant families to the ranges of dispersion about central values, it was found that in Western Canada tenant earnings revealed a greater degree of scatter than those for owners. In the East there was no such clear cut distinction. Western third quartile tenant earnings values were from 4 p.c. to 17 p.c. farther above median values than was the case for owner earnings data. Conversely Western first quartile tenant earnings were from 3 p.c. to 21 p.c. lower with respect to their median values than corresponding values for owners. In 1936 the range between medians and quartiles among tenant households was considerably wider, particularly in the lower half of wage-earner tenant households. As intimated above, there was no prevailing difference in Eastern cities. In some cases there was much less dispersion apparent in tenant than in owner earnings above the median, but more below it. This was true of Hamilton and Brantford.

Size, Earnings, and Rooms per Person for Tenant Families below  
the First Earnings Quartile

Data relating to size of families, earnings, and rooms per person below the first earnings quartile were examined for Three Rivers, Hamilton and Regina. These cities were chosen because of the wide variety of conditions they represented with respect to geographical, racial and other factors. Tenant families in this earnings group appeared to be less favourably situated than those of owners with respect to rooms per person and earnings per person. The proportion of large families in the tenant group was slightly lower and the average number of persons per family also was fractionally smaller, except in Three Rivers. The significance of findings may be better appreciated if the first quartile earnings figures are kept in mind and it is realized that 25 p.c. of owner and tenant families in the sample reported earnings of less than these amounts.

	First Earnings Quartile	
	Owners	Tenants
Three Rivers .....	\$ 921	\$ 725
Hamilton .....	924	699
Regina .....	1,192	582

There was no typical size for families below the first earnings quartile, although two, three and four person families were most numerous. The percentages of families with more than four persons, however, were relatively high, and, of course, the actual number of persons much greater still.

Families below First Earnings Quartile

	Average Number of Persons per Family		Percentage of Families with more than 4 Persons		Persons in Families of more than 4 persons as a Percentage of all Persons in the Group	
	Owners	Tenants	Owners	Tenants	Owners	Tenants
Three Rivers .....	5.13	5.49	53	57	71	75
Hamilton .....	4.34	4.30	42	36	62	55
Regina .....	4.44	4.25	43	34	60	53

There was definite evidence of crowding among Three Rivers and Regina tenant families which showed an unmistakable relationship to the amount of family earnings. Since 25 p.c. of all families in the sample were examined, it would be reasonable to expect the families below the first earnings quartile would form 25 p.c. of the total sample in each room group, if earnings were unrelated to crowding. Actually, percentages were highest in the groups below one room per person and declined irregularly in the higher groups. This tendency was more pronounced in tenant than in owner distributions, and it was most marked among Regina tenants for whom the first earnings quartile was the lowest shown. The percentages of families with less than one room per person are shown following.

Families below First Earnings Quartile

	Percentage with less than one room per person	
	Owners	Tenants
Three Rivers .....	32	51
Hamilton .....	19	31
Regina .....	38	73

Considering the size of families in this group in relation to family earnings noted above, it is inevitable that earnings per person should be small. Earnings per person tend to make the position of the large family appear overly dark, but it is a fairer measure of comparison than earnings per family in view of the wide variation in number of persons per family unit. The proportion of families with annual earnings of \$100 or less per person was sharply higher for tenant than for owner households, while \$200 per person or less included the great majority of all cases in the group.

Families below First Earnings Quartile

	Percentages with specified amounts per person			
	\$100 or Less		\$200 or Less	
	Owners	Tenants	Owners	Tenants
Three Rivers .....	48	71	92	89
Hamilton .....	39	60	72	86
Regina .....	47	76	72	96

Owner and Tenant Family Earnings Distributions

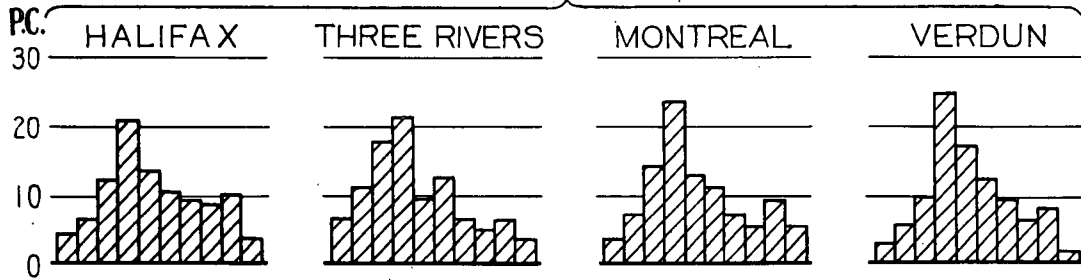
General characteristics of household earnings revealed by arranging samples into \$400 groups have already been commented upon. There are sufficient differences between owner and tenant earnings distributions, however, to justify a brief special comment. In the majority of cases there was little observable difference in 1931 between the earnings groups in which the highest proportion of owner and tenant families were concentrated. Concentration centred between \$1,200 and \$1,600 for both owners and tenants in most cities, and the pronounced advantage of owner families noted earlier from an examination of median earnings values, was obscured. However, these distributions did show clearly the tendency for tenant family earnings to be most numerous in the lower earnings groups. The general contour of owner frequency distributions more nearly approached a normal bell-shaped curve than did tenant frequencies. Distributions for 1936 in Prairie cities showed a more definite concentration around a central value for owner families, but definitely less for those of tenants. They also revealed a highly abnormal number of both types of families with earnings of less than \$400 per year. Percentages of owners in this group ranged from 7 to 18. Under such conditions ownership is nominal rather than real, and families thus situated must be dependent upon savings or a change in economic fortune for the maintenance of their tenure status. More than one-quarter of the tenant families in samples for Prairie cities also reported earnings of less than \$400 for 1936. Both average earnings and percentages of families receiving obviously inadequate income, i.e., less than \$400 per year, point to less satisfactory economic circumstances in 1936 than in 1931.

Table 7. - Percentage of Owner Households in Specified Family Earnings Ranges.

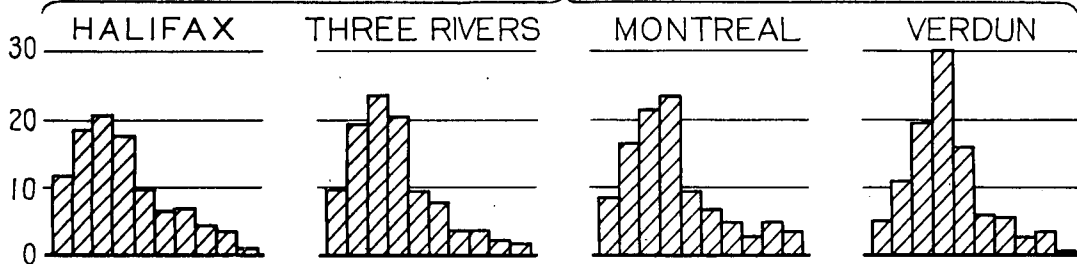
	\$0-399	\$400-799	\$800-1199	\$1200-1599	\$1600-1999	\$2000-2399	\$2400-2799	\$2800-3199	\$3200-4999	\$5000+
					1 9 3 1					
Halifax .....	4	7	12	21	14	10	9	9	10	4
Three Rivers .....	7	11	18	21	10	13	6	5	6	3
Montreal .....	4	7	14	24	13	11	7	6	9	5
Verdun .....	3	6	10	25	17	13	10	6	8	2
Toronto .....	6	7	12	18	13	11	9	7	11	6
Hamilton .....	6	13	18	22	13	9	5	4	8	2
Brantford .....	13	14	19	19	12	7	6	2	5	3
Winnipeg .....	5	9	15	21	13	10	8	5	10	4
Regina .....	8	7	10	18	14	11	10	8	11	3
Saskatoon .....	5	9	15	20	17	10	9	4	8	3
Calgary .....	3	9	14	22	17	10	9	4	9	3
Edmonton .....	6	8	13	24	17	11	10	3	6	2
Vancouver .....	6	10	17	23	14	11	5	4	7	3
Victoria .....	5	8	16	24	17	10	7	4	7	2
					1 9 3 6					
Winnipeg .....	7	9	18	21	16	10	7	5	4	3
Regina .....	15	10	11	26	12	10	5	4	5	2
Saskatoon .....	18	8	16	23	13	8	6	4	4	1
Calgary .....	12	9	18	22	17	6	6	3	5	2
Edmonton .....	13	11	22	22	13	7	6	3	2	1

# PERCENTAGES OF OWNER AND TENANT FAMILIES AT SPECIFIED EARNINGS LEVELS, 1931

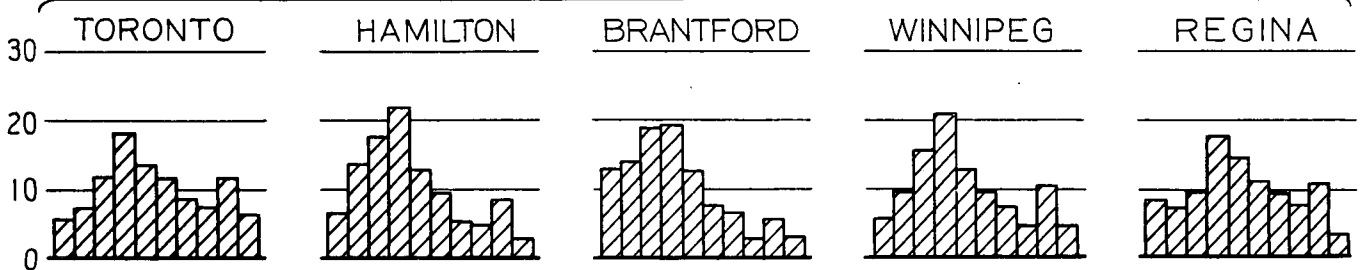
## OWNERS



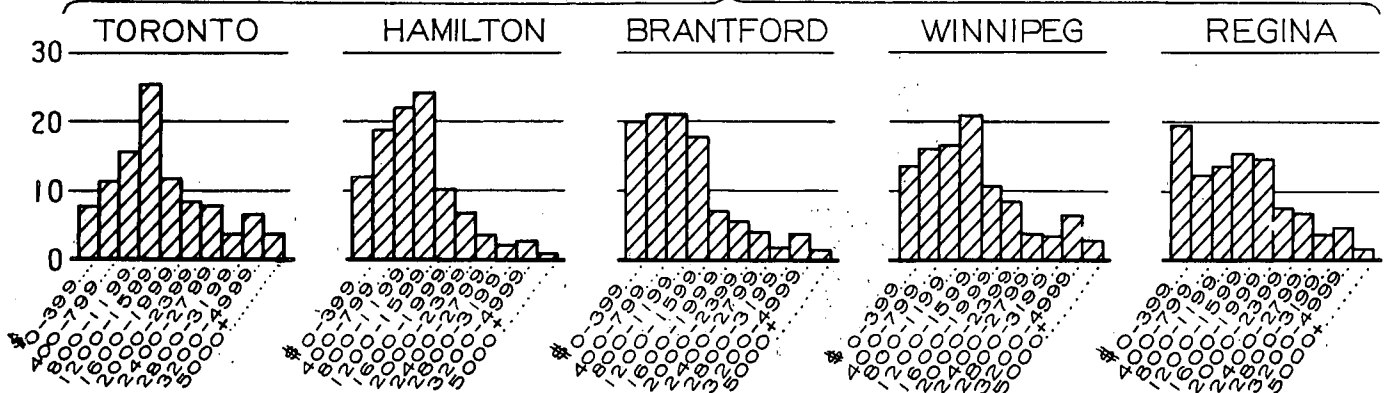
## TENANTS



## OWNERS

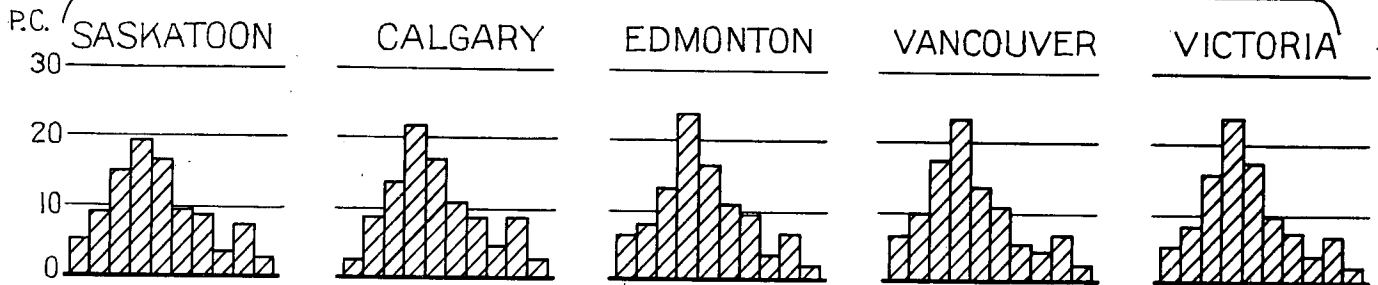


## TENANTS

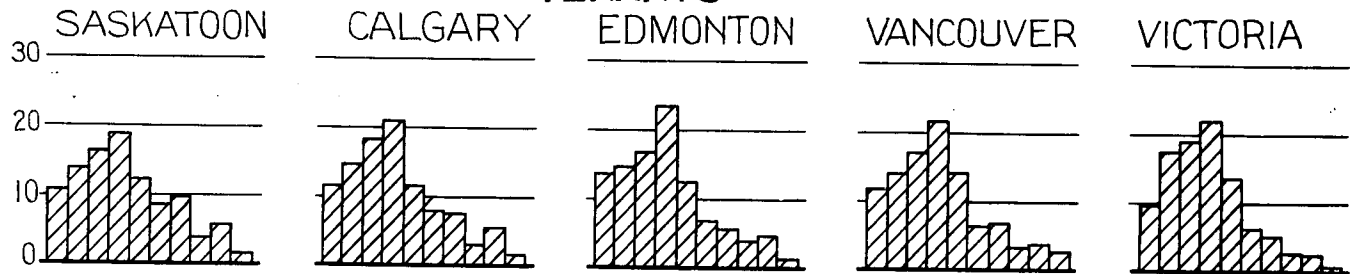


# PERCENTAGES OF OWNER AND TENANT FAMILIES AT SPECIFIED EARNINGS LEVELS, 1931 AND 1936

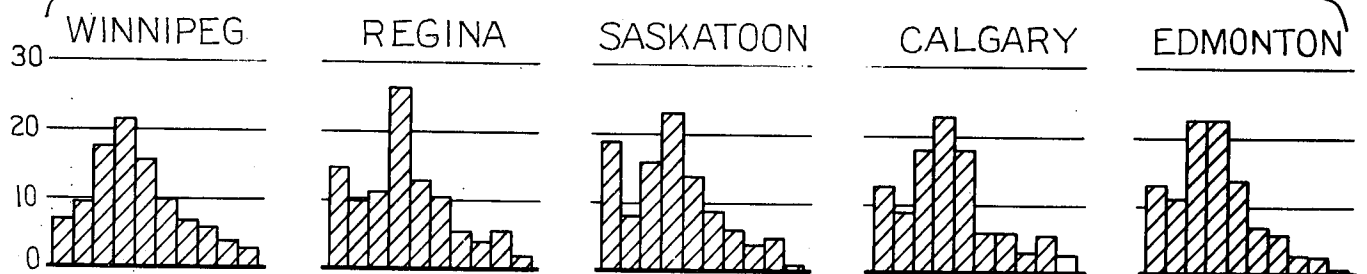
## OWNERS 1931



## TENANTS



## OWNERS 1936



## TENANTS

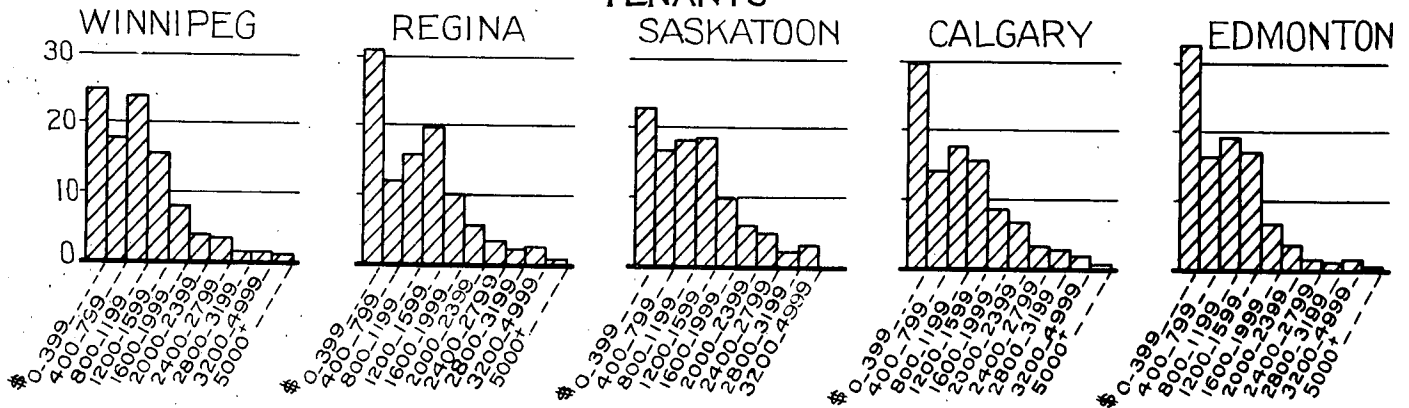


Table 8. - Percentage of Tenant Households in Specified Family Earnings Ranges

City	\$0-399	\$400-799	\$800-1199	\$1200-1599	\$1600-1999	\$2000-2399	\$2400-2799	\$2800-3199	\$3200-4999	\$5000+
					1 9 3 1					
Halifax .....	12	19	20	18	10	6	7	4	3	1
Three Rivers ...	10	19	23	20	9	8	4	3	2	2
Montreal .....	8	17	21	23	9	6	5	3	5	3
Verdun .....	5	11	20	30	16	6	5	3	3	1
Toronto .....	8	11	15	25	12	8	8	4	6	3
Hamilton .....	12	19	21	24	10	6	3	2	2	1
Brantford .....	20	21	21	17	7	5	4	1	3	1
Winnipeg .....	13	16	16	21	10	8	4	3	6	3
Regina .....	19	13	14	15	15	8	7	4	5	1
Saskatoon .....	11	14	16	19	12	8	10	4	5	1
Calgary .....	11	14	18	21	11	8	8	3	5	1
Edmonton .....	13	14	17	23	12	7	5	4	4	1
Vancouver .....	12	14	17	21	14	6	6	3	4	3
Victoria .....	10	17	19	22	14	6	5	3	3	1
					1 9 3 6					
Winnipeg .....	25	18	24	15	8	4	3	1	1	1
Regina .....	31	12	15	19	10	5	3	2	2	1
Saskatoon .....	22	16	18	18	10	6	5	2	3	-
Calgary .....	30	14	17	15	8	7	3	3	2	1
Edmonton .....	33	16	19	17	7	4	2	1	1	-

SUPPLEMENTARY FAMILY EARNINGS

In the foregoing analysis, earnings of the family have been treated as a unit. In a large proportion of families, however, there were two or more members with earnings recorded. Usually the amounts were relatively small when compared individually with those of the principal wage-earners, but all supplementary earnings per family formed a significant proportion of the total, particularly in the higher earnings brackets. The purpose of this section is to indicate the importance of supplementary wage-earners in the earnings structure of the type of household sampled, i.e., one family wage-earner households with husband and wife living together as joint heads.

Proportions of Families with Supplementary Wage-Earners  
at Different Earnings Levels

The proportion of households with supplementary wage-earners rose irregularly in successive earnings groups until total earnings were from \$2,200 to \$3,000 per annum. The highest group proportions of households with supplementary wage-earners usually ranged between 50 p.c. and 80 p.c. from Winnipeg east, and from 40 p.c. to 60 p.c. in cities farther west. In earnings groups below \$1,200 the proportion seldom exceeded 20 p.c.

The substantial proportion of this type of households with supplementary wage-earners, commonly exceeding one-fifth of the households sampled, might well be borne in mind when use is being made of census records of earnings per person. As noted above the great majority of these earners formed parts of households with earnings in excess of \$1,200, yet individually their annual earnings fell well below that figure. The significance of the absolute amount is altered by the fact that these supplementary earners were members of a normally constituted household. As such, their economic position was presumably stronger and more stable than if they were independent wage-earners. The number of supplementary wage-earners in owner households was approximately double the number in tenant households.

Table 9. -The Percentage of Families with more than one Wage-Earner at Specified Earnings Levels, 1931

	\$0-399	\$400-799	\$800-1199	\$1200-1599	\$1600-1999	\$2000-2399	\$2400-2799	\$2800-3199	\$3200-4999	\$5000+
Halifax .....	6	10	11	19	30	41	45	48	42	34
Three Rivers .....	24	16	20	24	37	52	39	67	69	44
Montreal .....	14	9	14	18	36	42	47	59	70	51
Verdun .....	4	4	9	12	20	49	56	68	83	92
Toronto .....	8	12	11	14	33	40	36	47	49	33
Hamilton .....	5	9	14	17	33	46	43	59	57	32
Brantford .....	7	20	23	27	49	53	44	52	39	48
Winnipeg .....	5	12	14	16	29	40	41	50	55	15
Regina .....	6	14	16	12	17	19	26	34	36	33
Saskatoon .....	5	7	10	17	12	19	30	28	40	28
Calgary .....	5	6	8	11	21	31	25	32	43	24
Edmonton .....	6	15	8	7	21	36	31	40	51	22
Vancouver .....	3	10	11	17	26	34	45	44	45	39
Victoria .....	2	13	19	16	23	38	45	50	56	63

## Supplementary Earnings as a Proportion of Total Earnings per Family

The amounts of supplementary relative to total earnings were examined at two earnings levels, the first between \$800 and \$1,200, and the second between \$2,800 and \$5,000. The first range was subdivided evenly into two sections. In the two lower groups the percentages of supplementary to total earnings per household ranged from 1.5 to 12.2. With the exception of Verdun, percentages for eastern cities were concentrated in the upper half of this range. This was also true of western cities with the exception of Calgary. City percentages for the households with earnings of between \$2,800 and \$3,000 were at much higher levels, ranging from 7.1 for Saskatoon to 47.9 for Three Rivers. In all cities except Saskatoon, proportions of supplementary earnings in this group were several times higher than at the lower level and particularly important in cities of the province of Quebec.

Actual averages of supplementary earnings reported, may be observed along with total household earnings averages in Table 10. Supplementary earnings averages have been computed in two ways, first in relation to all households in the group, and again only in relation to households reporting such earnings.

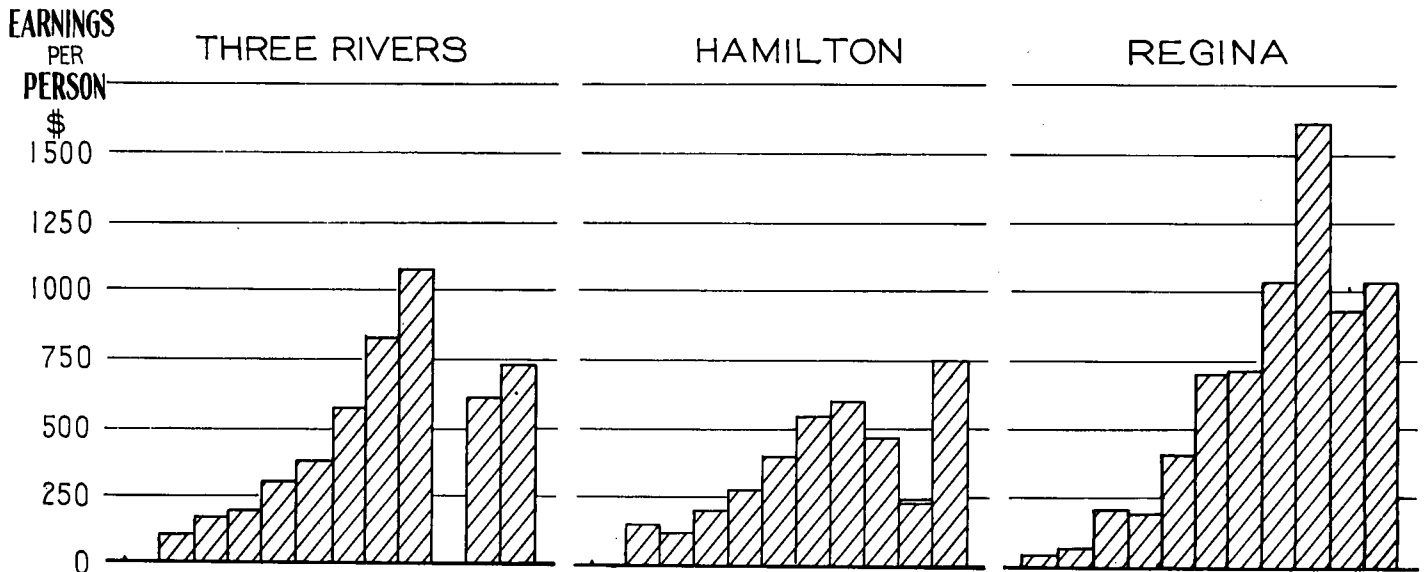
The material submitted above seems quite sufficient to warrant the conclusion that the proportion of supplementary wage-earners and earnings both increase rapidly at progressively higher earnings levels up to \$3,000; and further that this tendency is stronger in Eastern than in Western Canada. At no earnings level, however, do supplementary amounts form a preponderant proportion of total earnings. In the highest earnings ranges it seems probably that the proportion of supplementary wage-earners and earnings would decline.

Table 10. - Supplementary Earnings at Specified Family Earnings Levels, 1931.

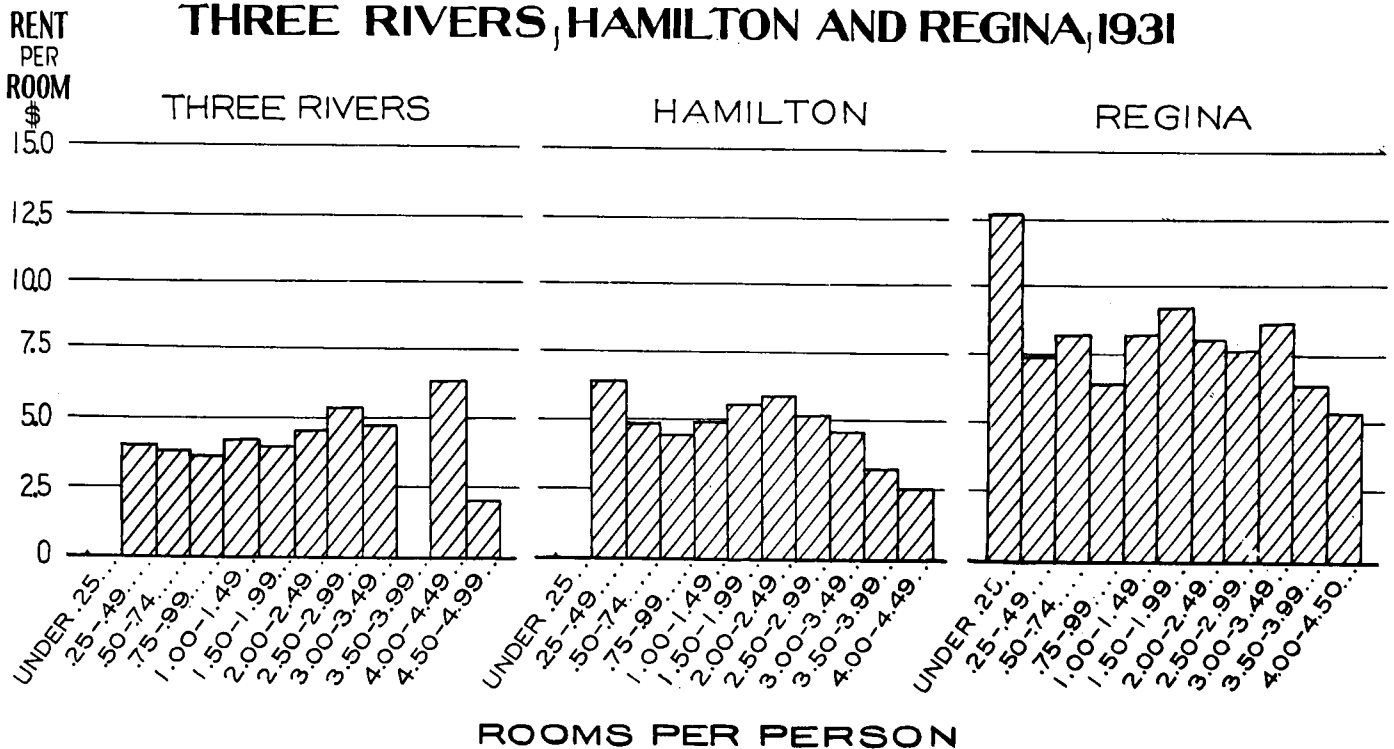
	Average Supplementary Earnings per Family								Supplementary Earnings as a Percentage of all Family Earnings			
	For Families with Supplementary Wage-Earners				For all Families							
	\$800-999	\$1000-1199	\$2800-2999	\$3000-4999	\$800-999	\$1000-1199	\$2800-2999	\$3000-4999	\$800-999	\$1000-1199	\$2800-2999	\$3000-4999
Halifax .....	348	928	1,246	1,738	34	117	897	693	4	11	31	20
Three Rivers ..	287	487	1,773	2,111	45	122	1,379	1,391	5	12	48	39
Montreal .....	349	483	1,364	1,816	46	73	941	1,190	5	7	33	33
Verdun .....	253	455	1,464	1,856	14	51	1,098	1,418	2	5	38	39
Toronto .....	409	634	1,258	1,775	47	73	991	787	5	7	34	22
Hamilton .....	543	524	1,193	1,733	80	64	1,050	858	9	6	37	24
Brantford .....	437	465	1,181	1,830	81	131	945	746	9	12	33	21
Winnipeg .....	477	466	1,069	1,620	68	66	770	810	8	6	27	22
Regina .....	338	594	1,219	1,595	60	89	522	543	7	8	18	15
Saskatoon .....	280	488	516	1,531	24	56	201	535	3	5	7	15
Calgary .....	243	559	1,282	1,768	28	27	350	718	3	3	12	21
Edmonton .....	427	556	1,240	1,751	20	62	853	753	2	6	30	21
Vancouver .....	375	549	1,467	1,849	32	85	926	755	4	8	33	21
Victoria .....	456	470	1,171	1,702	72	106	585	930	8	10	20	25



# LEVELS OF TENANT EARNINGS PER PERSON AS ROOMS PER PERSON INCREASE THREE RIVERS, HAMILTON AND REGINA, 1931



## LEVELS OF RENT PER ROOM AS ROOMS PER PERSON INCREASE THREE RIVERS, HAMILTON AND REGINA, 1931



### EARNINGS IN RELATION TO ADEQUACY OF ACCOMMODATION

The term "adequacy" necessitates an arbitrary dividing line to separate households considered to be inadequately housed from those with adequate accommodation. One room or more per person has been widely accepted as a basis of division in housing studies for Canada and the United States, although size of rooms, light, ventilation, and heating are other factors scarcely less important. Unfortunately they are difficult to record statistically.

The data utilized in this section have been compiled from tenant samples in the same three cities chosen for an examination of families below the first earnings quartile. They differ radically with regard to earnings, dwellings, racial characteristics, and extent of industrialization. It is, therefore, definitely significant that a high degree of uniformity of tendency in data related to earnings and adequacy of accommodation was clearly apparent. The averages shown on table 12 following should be considered in relation to the proportion of the samples they represent. The slightly erratic nature of progressions and regressions in these averages appears attributable to the small number of cases falling in groups at either end of the frequencies that are used.

Crowding is a phenomenon much more common in tenant than in owner households. Proportions of tenant households with less than one room per person in 14 of the larger Canadian cities exceeded similar proportions for owners by a wide margin in nearly every case. Tenant percentages of households in this class ranged from 15 to 41, with owner percentages varying between 8 and 39. Tenant percentages for Three Rivers, Hamilton, and Regina, the cities upon which subsequent analysis has been based, showed percentages at both extremes, and owner percentages also differed widely. This may be observed from Table 11.

Table 11. - Percentages of Households with less than one Room per Person, 1931.

City	Owners	Tenants
Halifax .....	15	38
Three Rivers .....	39	41
Montreal .....	21	24
Verdun .....	22	28
Toronto .....	9	17
Hamilton .....	12	19
Brantford .....	9	15
Winnipeg .....	22	32
Regina .....	21	41
Saskatoon .....	17	33
Calgary .....	12	31
Edmonton .....	16	34
Vancouver .....	17	25
Victoria .....	8	17

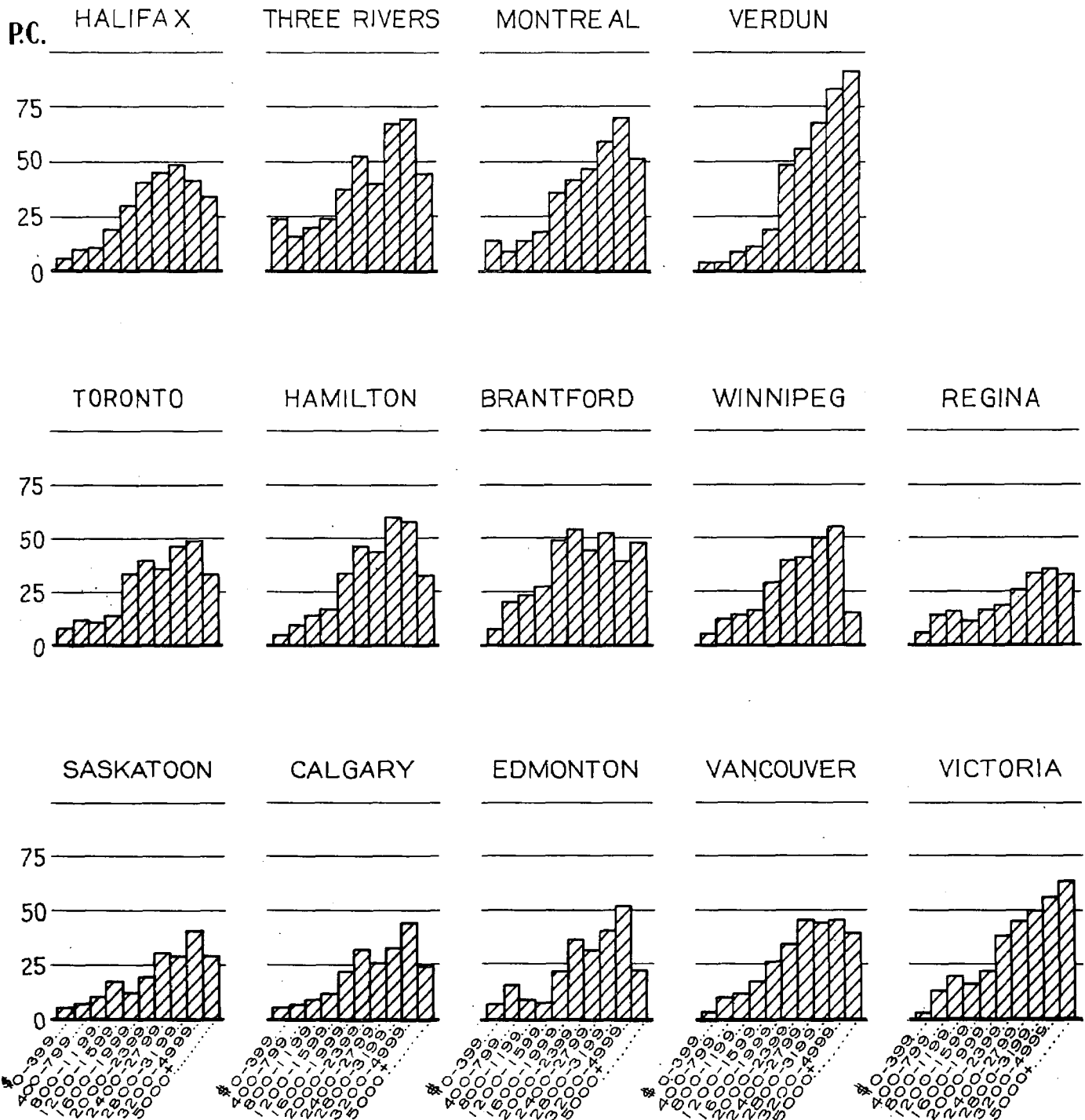
Turning to Table 12, showing data for the three cities mentioned above, several points of difference and similarity are discernible. Three Rivers tenant families above the one room per person level correspond closely in size to Hamilton families at the same room levels, although the average number of persons per tenant household in Three Rivers is 5.5 as compared with 4.1 in Hamilton. The same is also broadly true of Regina, with an average of 4.1 persons per household. The average size of households with less than one room per person was 7.7 for Three Rivers, 6.4 for Hamilton, and 5.0 for Regina. Two points revealed by this comparison stood out, viz., the size of crowded families was well above city averages, while the size of families at different space levels above the "adequacy" dividing line was approximately the same.

Averages of earnings per person at different room levels showed a remarkably steady increase up to the points where there were too few cases to make a reliable average. Although Regina averages were almost always above those for the two eastern cities, Three Rivers figures in the higher space groups compared favourably with those for Hamilton. The city average for Three Rivers at \$239 per person was \$58 lower than that for Hamilton. In all three cities average earnings per person were decidedly lower below the one room per person level than above it. These figures were \$156 and \$351 for Three Rivers, \$151 and \$360 for Hamilton, and \$176 and \$543 for Regina. Here again, comparisons at corresponding levels caused differences between Three Rivers and Hamilton to narrow surprisingly, and the former actually possessed a slight advantage.

Table 12.- Averages of Persons per Family, Earnings per Person and Rent per Room in Relation to Rooms per Person, 1931.  
(From a sample of Three Rivers, Hamilton, and Regina Tenants)

Rooms per Person	Families in Sample			Average number of Persons per Family			Average Earnings per Person per Annum			Average Rent per Room		
	Three Rivers	Hamilton	Regina	Three Rivers	Hamilton	Regina	Three Rivers	Hamilton	Regina	Three Rivers	Hamilton	Regina
Under .25 .....	-	-	3	-	-	5.7	\$ -	\$ -	\$ 44	\$ -	\$ -	\$ 12.7
.25 - .49 .....	10	8	39	10.3	6.4	5.5	98	144	74	3.9	6.4	7.4
.50 - .74 .....	82	71	133	8.0	6.4	4.5	154	117	208	3.7	4.8	8.2
.75 - .99 .....	51	60	58	6.5	6.5	5.9	176	192	190	3.6	4.4	6.4
1.00 -1.49 .....	122	230	191	4.6	4.5	3.8	286	271	414	4.1	4.9	8.2
1.50 -1.99 .....	39	183	77	3.8	3.3	3.2	372	395	703	3.9	5.5	9.2
2.00 -2.49 .....	27	90	43	2.6	2.7	2.7	558	538	706	4.5	5.8	8.0
2.50 -2.99 .....	11	45	20	2.3	2.1	2.2	817	595	1038	5.3	5.1	7.7
3.00 -3.49 .....	4	24	5	2.0	2.1	2.2	1063	467	1613	4.7	4.5	8.7
3.50 -3.99 .....	-	2	1	-	2.0	2.0	-	240	930	-	3.2	6.4
4.00 -4.49 .....	1	2	2	2.0	2.0	2.0	600	750	1030	6.3	2.5	5.3
4.50 -4.99 .....	1	-	-	2.0	-	-	720	-	-	2.0	-	-
TOTAL .....	348	715	572	5.5	4.1	4.1	239	297	359	4.0	5.1	8.1
Average, under one room per person ..				7.7	6.4	5.0	156	151	176	3.7	4.6	7.5
Average, one room or more per person ...				4.0	3.5	3.4	351	360	543	4.2	5.2	8.4

# PERCENTAGES OF FAMILIES WITH MORE THAN ONE WAGE-EARNER AT PROGRESSIVE EARNINGS LEVELS, 1931



Average rent per room was examined in an attempt to obtain some notion of qualitative differences in housing accommodation in relation to earnings and rooms per person. The comparison was complicated by the fact that rent per room tends to decrease as the size of the home increases even if qualitative factors can be held constant. The cost of bath-room fixtures and kitchen equipment, for example, is as high for an ordinary four-room apartment as it is for a six-room apartment, and other costs tend also to become less in larger dwellings when measured upon a per room basis. However, in all three cities, rent per room moved progressively higher as rooms per person increased, until a level of from 1.50 to 2.50 rooms per person was reached. Above that range, rent per room showed definite signs of decreasing, and detailed examination of records at this turning point showed an appreciable increase in the size of homes, supporting the contention advanced above. Presumably in the lower room per person groups qualitative differences were great enough to smother this tendency. Again using one room per person as a dividing line, it was found that rent per room above this level was higher than in the lower group of households, despite the decline in top brackets noted above. Averages below and above the one room per person boundary were \$3.7 and \$4.2 for Three Rivers, \$4.6 and \$5.2 for Hamilton, and \$7.5 and \$8.4 for Regina.

The foregoing comparisons furnish convincing evidence of the close relationship between earnings and adequacy of accommodation. Earnings per person and rooms per person not only increased together, but rents provided evidence of qualitative improvement in accommodation as earnings rose.

#### EARNINGS AND RENTALS

Surveys of family expenditure in Canada and the United States have indicated that the proportion of income required for the shelter of tenant families, usually averages between 20 and 25 p.c. However, averages hide a variable tendency at different income levels which Engel discovered many years ago, viz., that the proportion of earnings spent on necessities such as shelter tends to decline gradually in the higher income groups. There are appreciable differences in the rate of this decline, depending upon the supply of housing accommodation and upon housing standards. Samples of census earnings and rentals data for 1931 and 1936 have been examined to determine the average proportion of earnings expended in the form of rent in various Canadian cities, and to scrutinize any appreciable difference in earnings-rent ratios at progressive earnings levels. The relation between rents and rooms per person at different earnings levels has also been noted.

City average ratios of family rents to earnings ranged from 19 p.c. to 27 p.c. according to 1931 data from the fourteen centres examined. Corresponding 1936 percentages for Prairie cities reflected changing relationships between rents and earnings. In Winnipeg and Edmonton, 1936 ratios were 3 p.c. and 4 p.c. higher respectively; Regina and Calgary figures were 1 per cent. lower; and the Saskatoon ratio 5 p.c. lower than in 1931. Lower ratios resulted from a sharper decline in rents than in earnings between 1931 and 1936, and conversely higher ratios pointed to rents better maintained than earnings. Where the latter condition existed, there was a noticeable decline in the average number of rooms per person in 1936, while lower rent-earnings ratios were accompanied by increases in the number of rooms per person.

#### City Average Ratios of Rents to Earnings

The narrow range of city average percentages was accounted for to a considerable extent by the fact that rents were low where earnings were low and vice versa. The magnitude of ratios thus did not appear significant as a measure of economic well-being, which varied widely from city to city according to data presented in a preceding section.<sup>x</sup> Three Rivers with a rental expenditure of 19 p.c. of earnings had a larger proportion of earnings to spend upon other needs than any city studied except Verdun, yet earnings per person averaged lowest in the list. Likewise, Three Rivers indexes of purchasing power over necessities, and

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x The Purchasing Power of Earnings, pages 6 to 9.

other indexes showing command over goods of the luxury type ranked lowest in the list for the 14 cities examined. Corresponding Toronto purchasing power indexes were the highest in the group, although the 1931 ratio of rents to earnings was 26 p.c., among the largest in Canada. Ratios of rent per room to earnings per person were appreciably different from those based on family data in cases where the number of rooms per person was above average. The Toronto ratio reckoned on this basis was 19 p.c., almost the same as for Three Rivers. It is probable that density of population was an important factor in determining these proportions since Victoria and Brantford showed very low ratios of 15 p.c. and 17 p.c. respectively. However, the low percentage of 17 for Montreal, the largest city in Canada, indicated clearly that size was not the only consideration. Population density, housing standards, and the supply of homes appeared to be inextricably involved in determining rent-earnings ratios.

Table 13. - Tenant Average Earnings and Rents per Month.

City	Average Monthly Earnings per Household	Average Monthly Rent per Household	Ratio of Household Rents to Earnings	Ratio of Earnings per Person and Rent per Room
	\$	\$	p.c.	p.c.
		<u>1 9 3 1</u>		
Halifax .....	113	26	23	23
Three Rivers .....	109	21	19	20
Montreal .....	128	27	21	17
Verdun .....	122	23	19	18
Toronto .....	144	38	26	19
Hamilton .....	101	26	26	21
Brantford .....	95	22	23	17
Winnipeg .....	128	33	25	22
Regina .....	121	33	27	27
Saskatoon .....	129	33	26	24
Calgary .....	122	31	25	23
Edmonton .....	116	26	22	21
Vancouver .....	124	30	25	20
Victoria .....	112	22	20	15
		<u>1 9 3 6</u>		
Winnipeg .....	86	24	28	24
Regina .....	86	22	26	25
Saskatoon .....	94	20	21	19
Calgary .....	86	21	24	23
Edmonton .....	74	19	26	25

#### City Rent-Earnings Ratios at Progressive Earnings Levels

The \$200 earnings interval was discarded for comparisons of rents and earnings at different earnings levels because of erratic fluctuations in percentages computed on this basis. These tended to obscure a strong underlying tendency for rent percentages to fall as earnings increased, which appeared more clearly in data based upon a \$400 interval, as may be observed from the table following. However, both these intervals smoothed out a break in continuity appearing in \$100 intervals from \$400 to \$1,000. It came most frequently in family earnings groups between \$800 and \$900, and occasionally in the two groups preceding. In each city, percentages of rents to earnings showed a pronounced decline within this earnings range in all save one \$100 interval, for which the percentage was much higher than the trend for the other five groups would have indicated. The significance of this break is conjectural and not subject to definite interpretation on the basis of census statistics, but its occurrence in all 14 of the cities examined seems to place it beyond the limits of chance coincidence. Presumably it marked a level of earnings which made possible the achievement of something beyond the bare necessities of life; either a transition range from relief living standards to independent livelihood, or a sensitiveness to environment which focussed attention upon better living quarters

when earnings permitted improvement. Data presented later point to wide differences in emphasis placed upon housing among low-paid wage-earners, making it difficult to check either of these premises. The narrow range of earnings in which the break occurred would point to the advisability of caution in identifying it with an increase in emphasis upon housing. If this existed, it would likely be manifest over a wider range of earnings, and would, of course, be contrary to Engel's law. Evidence of increasing emphasis upon housing accommodation in the middle earnings groups which falls within the limits of a general statement of Engel's law is presented in a later section on rent per room and rooms per person at progressive earnings levels.

As may be noted from the following table, percentages between \$800 and \$1,199 in which most of the continuity breaks occurred were in border-line territory just above levels ordinarily considered as a minimum for a normally constituted family. These percentages ranged from 23.4 to 36.3. Percentages in earnings groups below \$800 were significant mainly as an indication of relative degrees of poverty, and it will be noted that in the lowest earnings group for Prairie cities percentages in 1936 were much higher than in 1931, while above the \$800 level they were appreciably lower.

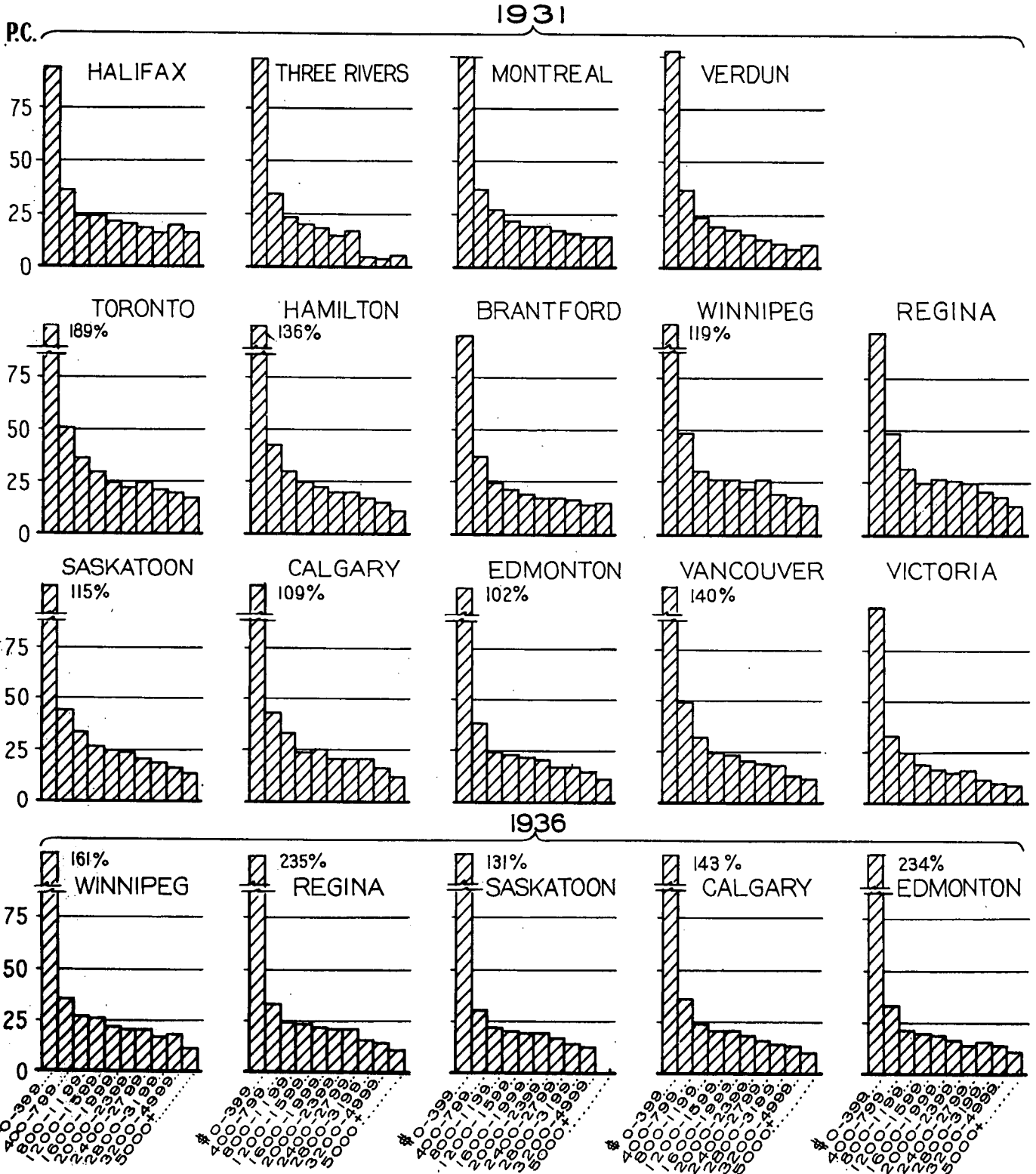
Although the abnormality of rent-earnings ratios for families with earnings of less than \$800<sup>x</sup> per year is the most outstanding feature of this table, it contains others of considerable significance. The data, of course, conform to the pattern revealed by earlier studies, i.e., they show that the proportion of earnings devoted to rents declines as earnings increase. However, the slow rate of this decline tends to hide the extent of the absolute increase in rents, as earnings move progressively higher. Between the earnings groups centring around \$1,400 and \$2,200, rentals expressed as a proportion of earnings declined on an average of not more than 5 p.c., and frequently the figure was substantially less. Rents at the lower level formed approximately 25 p.c. of total earnings and about 20 p.c. at the higher level. This meant average rental expenditures of \$350 per annum and \$440 per annum respectively at these earnings levels. Thus a 5 p.c. decrease in the proportion of rent to earnings meant an increase of over 25 p.c. in actual expenditures for shelter, and presumably a material improvement in the class of housing accommodation obtained. Averages of rooms per person and rent per room both showed appreciable increases within this earnings interval.

The proportion of rent to earnings, particularly in earnings group above \$1,200 in which tenants have a greater range of alternatives in spending their income, depends upon several factors of which housing standards and the supply of accommodation are the most important. Both of these are reflected in rental levels, and in cities such as Halifax, Toronto, and Regina where rents were relatively high in 1931, percentages declined slowly in the higher earnings groups. For other places with relatively low rentals including Three Rivers, Brantford and Victoria, percentages formed a smooth descending arc in contrast with the almost flat course followed by percentages in the high rental cities. Unfortunately it is difficult to evaluate the importance of housing standards and supply of housing accommodation. Appraisals of living standards, presented in a preceding section, would place Halifax and Three Rivers at lower levels than the other cities grouped with them above. The shape of the Halifax rent-earnings ratio curve under such circumstances presumably would be attributable mainly to a limited supply of better class housing. The Three Rivers curve might reasonably be interpreted as pointing to relatively little variation in housing standards as earnings increased. The behaviour of rent per room and rooms per person in successive earnings groups supports this conclusion. These cases are cited to illustrate the difficulty of placing qualitative interpretations upon rent-earnings ratios.

One further point may be noted from the comparison of ratios in 1931 and 1936 for the Prairie cities. The 1936 percentages were much higher than those for 1931 in the lowest family earnings group under \$400 per year, but dropped until they were between 4 and 5 p.c. lower in the groups above \$1,600. Percentages in 1936 ranging from 131 to 235 where family earnings fell below \$400 bore witness of more complete dependence in this group upon organized relief and charity than in 1931. Nor should the lower percentages in higher earnings groups be interpreted as conclusive evidence of better economic circumstances, since it has been established

<sup>x</sup> Table 6, page 16, shows that more than 25 p.c. of tenant wage-earner families in many cities received less than this amount in both 1931 and 1936.

# RENT AS A PERCENTAGE OF TENANT FAMILY EARNINGS AT PROGRESSIVE EARNINGS LEVELS, 1931 AND 1936





in an earlier section that tenant family average earnings in these cities declined between 1931 and 1936 by more than 30 p.c. The families reporting \$1,600 for example, in 1936 generally were not the ones reporting that amount in 1931, when their earnings probably exceeded \$2,000. The pairing of 1931 ratios around the \$2,000 level with 1936 ratios around the \$1,600 level shows percentages approximately the same in both cases for three of the five Prairie cities of over 30,000 population. A stiffer drop in rents between 1931 and 1936 in Regina and Saskatoon than elsewhere on the Prairies pointed to generally more favourable positions in 1936 for tenant families in the upper earnings groups than had existed in 1931.

Rents as a Percentage of Earnings for Individual Tenant  
Families in Regina and Victoria

As illustrated earlier with other data, averages hide variations of great significance. In order to appreciate the extent of these variations, tenant rent-earnings ratios were computed for individual families in two cities, one with a high average rent-earnings ratio and the other with a very low one. These were Regina where tenants spent an average of 27 p.c. of earnings for shelter in 1931, and Victoria where the percentage was only 20. As might be expected, the great majority of high rent ratios were in the low earnings groups. The high proportions of families paying abnormally large parts of earnings for rent may be observed from the following statement.

Distribution of Individual Family Rent-Earnings Percentages in Regina  
and Victoria classified according to Earnings,  
1 9 3 1

Earnings Groups

	\$ - 399		\$400-799		\$800-1199		Total under \$1200		Total Sample	
	Re- gina	Vic- toria	Re- gina	Vic- toria	Re- gina	Vic- toria	Re- gina	Vic- toria	Re- gina	Vic- toria
Percentage of families at specified earnings levels .....	19	10	12	17	14	19	45	46	100	100
Percentage of cases with rent over 25 p.c. of earnings .....	100	100	87	73	62	39	85	65	60	36
Percentage of cases with rent over 35 p.c. of earnings .....	95	93	68	49	31	13	69	43	37	20

Nearly half of the families sampled in Regina and Victoria earned less than \$1200 per annum in 1931. Of these, 85 p.c. in Regina and 65 p.c. in Victoria paid out more than one-quarter of all earnings in the form of rent, and 69 p.c. and 43 p.c. of families in samples for these respective cities paid more than 35 p.c. of earnings for shelter. More than one-quarter of earnings devoted to this purpose is usually considered abnormal; more than 35 p.c. so expended may be considered as almost positive evidence of economic pressure where earnings are so low. Of all families sampled, one-fifth in Victoria and more than a third in Regina reported rents in excess of 35 p.c. of earnings.

Frequency distributions of individual family rent-earnings ratios for Regina and Victoria provided contrasts and parallels of considerable interest. Differences suggested that this approach might yield valuable results if applied to a more comprehensive investigation.

For Victoria, there was little sign of central tendency in rent-earnings ratios in the lower earnings groups, but such a tendency became quite pronounced in groups above \$1,600. Presumably, emphasis upon home comfort varied more widely in families with earnings below this figure, than where earnings were higher. These variations were doubtless accentuated, however, by the depression, which caused drastic adjustments in the living conditions of many families in the years centring around 1931. The Regina frequency distribution of rent-earnings ratios showed a marked degree of scatter in all earnings groups, although this was perceptibly less in earnings groups above \$2,400 per annum.

It has been established that the proportion of earnings spent in the form of rent declines as earnings increase. From this, it might be inferred that rent-earnings ratios would also decrease in progressively higher rent groups, if these ratios were rearranged according to rental instead of earnings intervals. Such is not the case. Ratios for Regina and Victoria as well as for other cities not hereafter examined, showed no discernible trend in rent-earnings ratios at progressive rent levels. In Victoria, a measure of central tendency was apparent in all rent groups with rents between 11 p.c. and 25 p.c. of earnings. Corresponding signs of concentration in Regina could be observed only in rent groups above \$30 per month.

The apparently conflicting evidence of the two types of frequency distributions really presents two aspects of a complex situation. The principal facts which they reveal may be summed up as follows:

1. There is a definite tendency for tenant families to spend a smaller percentage of earnings upon rent at progressively higher earnings levels. The absolute amount of rent increases, but not so fast as outlays in other sections of the family budget. One important exception to this statement has already been noted, and should be reiterated. Apparently just above the level of subsistence, there is a tendency for tenant families to increase the proportion of earnings spent for shelter for a brief interval before turning to other needs of an optional character. The additional proportion of earnings devoted to rent at this transitional stage was not large, seldom exceeding 5 p.c., and sometimes was much less. In every city, however, there was evidence of this greater stress upon homes at some level in the middle earnings groups.

2. The lack of trend in rent-earnings ratios as between different rent groups does not contradict evidence of the tendency just noted. This arrangement of ratios does draw attention, however, to the wide variations in the importance of the home in the lives of different families. This point may be illustrated by reference to families in Regina with rentals of from \$25 to \$29 per month. Of 64 such families sampled, 13 had earnings of less than \$800, with the remainder showing earnings scattered all the way up to \$3,600 per annum. No more than 8 of these fell in any single \$100 earnings interval, and there were as many with more than \$1,400 as there were with less. Disregarding those under \$800, the percentage of earnings spent in rent ranged all the way from 9 p.c. up to 40 p.c. with no sign of central tendency in between. Obviously it meant more to families with \$800 a year to spend \$25 a month for rent than it did to the family with \$3,600.

3. Frequency distributions indicate a greater consistency of rent-earnings ratios in earnings groups above \$2,000 per annum than below this figure.

4. The different patterns of frequency distribution for Regina and Victoria give evidence of relatively greater heterogeneity in housing standards of the former city. This approach to the problem of housing conditions reveals clear-cut differences which are almost entirely hidden by averages of the same data.

#### ROOMS PER PERSON AND RENT PER ROOM AT PROGRESSIVE EARNINGS LEVELS

Emphasis has been placed in preceding sections upon the fact that the proportion of earnings devoted to rent tended to decrease at progressively higher earnings levels. It should not be inferred from this that less emphasis was placed upon housing comfort as earnings increased. Higher averages of rooms per person and more rent per room both indicated a marked improvement in shelter standards as earnings rose. There was a clearly discernible variation in the behaviour of rates of increase for these two averages at different earnings levels. Averages of rooms per person advanced more rapidly where earnings were between \$800 and \$1,600, than either below or above that range. Eight of the 14 cities revealed this tendency quite clearly.

Table 14.- Rents expressed as a Percentage of Family Earnings

City	\$0-399	\$400-799	\$800-1199	\$1200-1599	\$1600-1999	\$2000-2399	\$2400-2799	\$2800-3199	\$3200-4999	\$5000+
					1 9 3 1					
Halifax .....	93.7	35.7	24.4	24.2	20.6	19.6	17.9	16.3	19.2	15.7
Three Rivers .....	99.1	34.3	23.4	19.8	18.1	14.1	16.6	9.4	7.9	9.7
Montreal .....	100.0	36.6	26.8	21.7	18.8	18.8	17.4	15.9	13.6	14.2
Verdun .....	103.2	36.6	24.3	20.0	17.7	15.5	13.4	12.1	9.2	10.6
Toronto .....	188.8	51.3	36.3	28.8	24.4	21.9	23.5	20.8	19.1	16.7
Hamilton .....	136.2	42.3	28.8	24.0	22.3	19.4	18.5	17.0	13.8	10.4
Brantford .....	95.2	37.2	24.1	20.9	17.9	16.7	16.7	15.7	13.3	14.2
Winnipeg .....	118.6	48.3	29.6	26.4	26.3	21.7	25.8	18.7	18.4	13.6
Regina .....	96.9	48.8	32.2	25.2	26.8	26.2	25.0	20.9	18.3	13.5
Saskatoon .....	114.9	45.4	33.7	27.2	24.6	23.6	21.4	18.4	15.5	12.8
Calgary .....	108.9	42.5	33.8	24.3	24.6	20.7	21.3	20.6	16.1	11.5
Edmonton .....	102.0	38.2	23.7	22.7	21.8	21.0	17.3	17.4	14.1	11.1
Vancouver .....	139.5	48.7	31.7	24.4	23.2	21.1	19.3	18.3	12.6	11.9
Victoria .....	95.9	33.1	24.5	19.3	17.1	15.2	15.7	11.8	9.5	8.9
Range for 14 Cities .....	93.7-188.8	33.1-51.3	23.4-36.3	19.3-28.8	17.1-26.8	14.1-26.2	13.4-25.8	9.4-20.9	7.9-19.2	8.9-16.7
					1 9 3 6					
Winnipeg .....	160.9	35.5	26.6	25.7	22.0	21.1	21.2	17.4	17.5	11.1
Regina .....	234.9	33.2	23.7	22.8	22.0	20.9	20.7	15.1	13.9	9.9
Saskatoon .....	131.1	30.2	21.6	20.4	18.9	19.0	17.0	13.4	11.9	-
Calgary .....	233.5	36.2	24.2	21.0	21.3	17.7	16.2	13.9	12.6	10.2
Edmonton .....	143.0	33.2	21.9	20.0	19.1	16.6	14.3	15.7	14.1	11.4

In some of the western cities the highest rate of increase did not appear until after the \$1,600 mark had been passed, but it was followed by definite rate declines in the earnings groups above \$2000. This sensitiveness to housing adequacy in the middle earnings groups is not in contradiction to Engel's law, but suggests that its usual form may be incomplete. To say that the proportion of income spent upon shelter decreases as income rises, gives no indication of changing degrees of emphasis upon housing which may occur while rent-earnings ratios continue to fall.

Table 15a.- Percentage Increase or Decrease in Average Number of Rooms per Person at Progressive Earnings Levels.

(Percentage for each earnings group based on the average for the group preceding)

City	\$400-799	\$800-1199	\$1200-1599	\$1600-1999	\$2000-2399	\$2400-2799
				1 9 3 1		
Halifax .....	+ 13	+ 5	+ 4	+ 9	+ 19	- 7
Three Rivers .....	+ 2	+ 17	+ 4	- 8	+ 4	+ 29
Montreal .....	+ 20	+ 7	+ 9	+ 4	+ 2	+ 7
Verdun .....	or - 0	- 3	+ 16	or - 0	- 9	+ 5
Toronto .....	+ 8	+ 7	+ 8	- 1	+ 4	+ 17
Hamilton .....	+ 10	+ 6	+ 10	+ 7	- 11	+ 10
Brantford .....	- 8	+ 34	- 1	+ 2	+ 1	+ 22
Winnipeg .....	+ 7	+ 7	+ 16	+ 6	- 5	+ 6
Regina .....	+ 21	+ 11	+ 16	+ 18	+ 2	+ 6
Saskatoon .....	or - 0	+ 14	+ 15	+ 5	+ 1	+ 9
Calgary .....	+ 8	+ 16	+ 13	+ 10	- 2	or - 0
Edmonton .....	+ 6	+ 19	+ 21	- 1	or - 0	- 2
Vancouver .....	- 1	+ 13	+ 4	+ 12	- 1	+ 11
Victoria .....	+ 9	+ 2	or - 0	+ 10	- 1	+ 14
				1 9 3 6		
Winnipeg .....	+ 18	+ 3	+ 2	+ 12	- 14	+ 18
Regina .....	+ 29	- 10	+ 25	+ 10	+ 3	- 7
Saskatoon .....	+ 8	+ 10	+ 11	- 1	+ 12	- 1
Calgary .....	+ 29	+ 9	+ 17	+ 5	+ 7	- 5
Edmonton .....	+ 30	+ 8	+ 20	+ 6	+ 2	- 12

Table 15b. - Average Number of Rooms per Person for Tenant Families at Progressive Earnings Levels.

Earnings Groups							
City	\$0-399	\$400-799	\$800-1199	\$1200-1599	\$1600-1999	\$2000-2399	\$2400-2799
	(Rooms per Person)						
			<u>1 9 3 1</u>				
Halifax .....	.78	.88	.92	.96	1.05	1.25	1.16
Three Rivers .....	.83	.85	.99	1.03	.95	.99	1.28
Montreal .....	.92	1.10	1.11	1.21	1.26	1.28	1.37
Verdun .....	1.03	1.03	1.00	1.16	1.16	1.06	1.11
Toronto .....	1.05	1.13	1.21	1.31	1.29	1.34	1.57
Hamilton .....	1.06	1.17	1.24	1.36	1.45	1.29	1.42
Brantford .....	1.18	1.08	1.45	1.43	1.46	1.47	1.80
Winnipeg .....	.83	.89	.95	1.10	1.17	1.11	1.18
Regina .....	.67	.81	.90	1.04	1.23	1.25	1.32
Saskatoon .....	.84	.84	.96	1.10	1.15	1.16	1.26
Calgary .....	.78	.84	.97	1.10	1.21	1.19	1.19
Edmonton .....	.79	.84	1.00	1.21	1.20	1.20	1.17
Vancouver .....	.98	.97	1.10	1.14	1.28	1.27	1.41
Victoria .....	1.14	1.24	1.26	1.26	1.38	1.36	1.55
			<u>1 9 3 6</u>				
Winnipeg .....	.89	1.05	1.08	1.10	1.23	1.06	1.25
Regina .....	.83	1.07	.96	1.20	1.32	1.36	1.27
Saskatoon .....	.97	1.05	1.15	1.28	1.27	1.42	1.40
Calgary .....	.80	1.03	1.12	1.31	1.38	1.48	1.41
Edmonton .....	.76	.99	1.07	1.28	1.35	1.37	1.20

Increases in averages of rent per room showed less uniformity of behaviour than averages of rooms per person. There was a tendency in data from many cities, for the rate of increase in such averages to continue upward considerably beyond \$1,600. This was not at all incompatible with the behaviour of rooms per person averages. It would be natural for families to concentrate upon adequate space as soon as earnings permitted. Likewise it might be expected that qualitative improvement in housing status, reflected in higher rent per room, might continue far beyond the point where sufficient space had been provided. There were several cities for which the rate of increase for both rooms per person and rent per room was highest within the \$800-\$1600 earnings interval, but this was the exception rather than the rule. This may be observed from Tables 15a and 16a, which show the percentage rise or fall in rooms per person and rent per room averages at progressive earnings levels.

Table 16a. - Percentage Increase or Decrease in Average Rent per Room at Progressive Earnings Levels. (Percentage for each earnings group based upon the average for the group preceding)

## Earnings Groups

City	\$400-799	\$800-1199	\$1200-1599	\$1600-1999	\$2000-2399	\$2400-2799
			<u>1 9 3 1</u>			
Halifax .....	- 1	/ 7	/ 12	/ 12	- 1	- 2
Three Rivers .....	- 10	/ 12	/ 13	/ 5	/ or - 0	/ 29
Montreal .....	/ 3	/ 8	/ 9	- 3	/ 27	/ 2
Verdun .....	- 3	/ 3	/ 8	/ 5	/ or - 0	/ 1
Toronto .....	- 12	/ 19	/ or - 0	/ 3	/ 8	/ 11
Hamilton .....	/ 6	/ 4	/ 13	/ 16	/ 4	/ 5
Brantford .....	/ 27	- 9	/ 10	/ 6	/ 8	/ 25
Winnipeg .....	/ 17	/ 11	/ 9	/ 20	- 21	/ 15
Regina .....	/ 11	/ 5	/ 7	/ 33	- 7	/ 13
Saskatoon .....	/ 5	/ 16	/ 8	/ 19	/ or - 0	- 1
Calgary .....	- 12	/ 5	/ 5	/ 1	/ 7	/ 13
Edmonton .....	/ 13	- 1	/ 15	/ 10	/ 10	- 3
Vancouver .....	- 5	- 1	/ 5	/ 24	- 6	/ 10
Victoria .....	/ 3	/ 9	/ 14	/ 8	- 7	/ 23
			<u>1 9 3 6</u>			
Winnipeg .....	/ 16	/ 20	/ 7	/ or - 0	- 9	/ 14
Regina .....	/ 37	/ 10	/ 14	/ 18	- 2	/ 25
Saskatoon .....	/ 28	/ 16	/ 20	/ 9	/ 20	- 1
Calgary .....	/ 10	- 12	/ 13	/ 8	/ 3	/ 7
Edmonton .....	/ 14	- 3	/ 11	/ 9	- 3	- 2

Table 16b. - Average Monthly Rent per Room for Tenant Families at Progressive Earnings Levels

City	\$0-399	\$400-799	\$800-1199	\$1200-1599	\$1600-1999	\$2000-2399	\$2400-2799
	\$	\$	\$	\$	\$	\$	\$
				1 9 3 1			
Halifax .....	4.59	4.54	4.85	5.45	6.11	6.07	5.97
Three Rivers .....	3.61	3.26	3.65	4.14	4.33	4.32	5.58
Montreal .....	3.98	4.08	4.42	4.82	4.68	5.92	6.03
Verdun .....	4.68	4.52	4.67	5.02	5.28	5.27	5.30
Toronto .....	6.29	5.51	6.58	6.60	6.79	7.33	8.13
Hamilton .....	4.17	4.42	4.61	5.21	6.05	6.29	6.61
Brantford .....	3.10	3.95	3.59	3.93	4.17	4.50	5.64
Winnipeg .....	5.06	5.91	6.53	7.10	8.55	6.77	7.80
Regina .....	5.78	6.44	6.79	7.24	9.61	8.98	10.16
Saskatoon .....	5.36	5.61	6.49	6.98	8.31	8.30	8.19
Calgary .....	7.23	6.33	6.66	7.00	7.10	7.57	8.57
Edmonton .....	4.43	5.01	4.98	5.74	6.32	6.94	6.71
Vancouver .....	6.19	5.90	5.84	6.11	7.59	7.13	7.81
Victoria .....	3.56	3.65	3.97	4.53	4.87	4.54	5.57
				1 9 3 6			
Winnipeg .....	4.27	4.94	5.91	6.32	6.30	5.75	6.53
Regina .....	3.36	4.60	5.06	5.75	6.80	6.64	8.27
Saskatoon .....	2.65	3.39	3.93	4.72	5.12	6.12	6.04
Calgary .....	4.64	5.10	4.50	5.10	5.53	5.69	6.11
Edmonton .....	3.85	4.38	4.25	4.70	5.13	4.99	4.91

The irregular nature of rates of increase in rent per room averages was no doubt associated with the way rents are quoted. They increase in intervals of \$2.50 per month, or multiples of that amount, but seldom by intervening amounts. Marked variations in rates of increase from city to city furnished additional evidence of different degrees of homogeneity in housing accommodation.

#### EARNINGS IN RELATION TO THE VALUE OF OWNED HOMES

City annual average family earnings expressed as a percentage of corresponding average values of owned homes showed a wide range of variation in the 14 centres included in this analysis. These percentages were scattered between a low of 34.3 p.c. for Montreal and 61.7 p.c. for Edmonton. In each city, percentages showed pronounced increases at progressive earnings groups. As noted earlier, there was a considerable number of family heads listed as owners in the earnings group below \$400. Percentages at this earnings level, ranging from 2.8 to 10.9 were definitely abnormal. Many owners in the group between \$400 and \$799 doubtless were in abnormal economic circumstances also. Earnings expressed as a percentage of home values in this group ranged from 11.0 to 36.4. They continued to rise unevenly but rapidly as earnings advanced, with percentages for the residual group with earnings of \$5,000 or more per year falling between limits of 53.0 and 102.2.

The wide variation in city average percentages noted above bore a significant relationship to proportions of owned homes and ratios of rent to earnings in the tenant group. Speaking generally, the proportion of owned homes varied directly with the size of earnings-value percentages, and also with rent-earnings percentages. In other words, where earnings were high relative to home values, the proportion of owned homes was high, and where rents were low in relation to earnings the proportion of owned homes was low. The size of cities also appeared to be related to ownership in some cases, and in others there was evidence of what might be termed ownership preference which could not be explained from the data available.

# FAMILY EARNINGS AS A PERCENTAGE OF THE VALUE OF OWNED HOMES AT PROGRESSIVE EARNINGS LEVELS, 1931

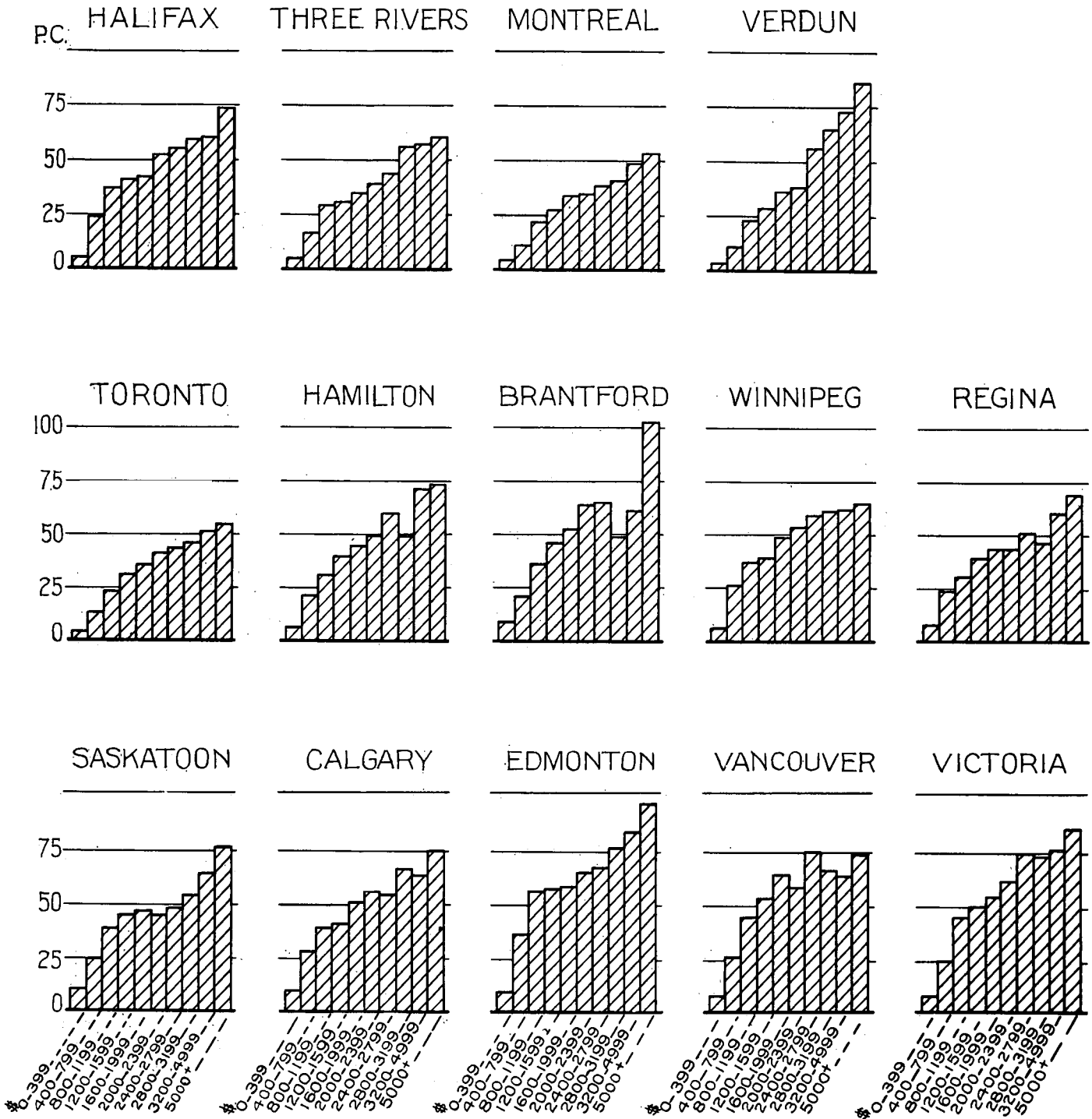


Table 17. - Earnings as a Percentage of the Value of Owned Homes and Related Data.

City	\$0- 399	\$400- 799	\$800- 1199	\$1200- 1599	\$1600- 1999	\$2000- 2399	\$2400- 2799	\$2800- 3199	\$3200- 4999	\$5000+	Total	Rent Earnings Percent- age	Percent- ages of Homes Owned
						<u>1 9 3 1</u>							
Halifax .....	5	24	37	41	42	52	55	59	60	74	49	23	35
Three Rivers .....	4	16	28	30	34	38	43	55	57	60	36	19	28
Montreal .....	4	11	22	27	33	34	38	41	49	53	34	21	15
Verdun .....	3	11	23	28	36	38	55	65	73	86	39	19	12
Toronto .....	4	13	23	31	36	41	43	46	51	54	38	26	46
Hamilton .....	6	21	31	39	44	49	59	49	71	73	44	26	48
Brantford .....	8	21	36	46	52	64	65	49	61	102	47	23	54
Winnipeg .....	6	26	37	39	49	53	59	61	62	65	50	25	47
Regina .....	8	24	31	40	44	44	51	47	61	69	46	27	50
Saskatoon .....	11	25	39	45	47	45	48	54	64	76	48	26	54
Calgary .....	10	28	39	41	51	55	54	66	63	75	51	25	52
Edmonton .....	9	36	56	57	58	65	67	76	83	97	62	22	53
Vancouver .....	8	26	44	53	64	58	75	66	64	74	54	25	51
Victoria .....	8	25	45	50	55	62	75	71	77	86	57	20	47
Range of Earnings Group .....	3- 11	11- 36	22- 55	27- 57	33- 64	34- 65	38- 75	41- 76	49- 83	53- 102	34- 62	19- 27	12- 54
						<u>1 9 3 6</u>							
Winnipeg .....	7	28	42	49	53	57	69	72	71	65	53	28	
Regina .....	3	28	34	43	44	48	47	52	62	69	43	26	
Saskatoon .....	7	30	54	53	53	54	52	59	62	54	49	21	
Calgary .....	5	33	55	58	58	61	67	91	73	90	57	24	
Edmonton .....	8	50	56	61	64	64	73	72	75	95	59	26	

An indication of the ownership preference noted above may be obtained by comparing percentages of owned homes with corresponding percentages of earnings expressed as a percentage of home values. However, lack of data relating to changes in value since the date of purchase prevent any exact significance from being given to these comparisons. These two percentages were nearly all within 10 points of each other for any single city. Where ownership percentages exceeded percentages of earnings as a proportion of home values by a substantial amount, it may reasonably be inferred that ownership was more highly esteemed than in places where the reverse was the case. This was true generally of Ontario cities and also for Regina, Saskatoon, and Calgary. Elsewhere ownership percentages were lower than annual earnings expressed as a percentage of corresponding home value averages. The margin in this direction was particularly marked in the Province of Quebec and to a lesser extent in Halifax. However, rents in relation to family earnings in Quebec were lower than in any other province. The influence of size showed clearly in figures for Montreal and Three Rivers, the latter having proportionately more than twice as many owned homes, although rent-earnings ratios were approximately the same in both cities.

Table 18. - Numbers of Tenant and Owner Wage-Earner Families Included in the Foregoing Analysis

Cities	Tenants	Owners	Total
	<u>1 9 3 1</u>		
Halifax .....	534	646	1,180
Three Rivers .....	348	307	655
Montreal .....	964	933	1,897
Verdun .....	662	494	1,156
Toronto .....	963	962	1,925
Hamilton .....	715	725	1,440
Brantford .....	615	569	1,185
Winnipeg .....	717	665	1,382
Regina .....	572	580	1,152
Saskatoon .....	567	613	1,180
Calgary .....	581	457	1,038
Edmonton .....	613	610	1,223
Vancouver .....	565	720	1,285
Victoria .....	551	701	1,252
	<u>1 9 3 6</u>		
Winnipeg .....	892	673	1,565
Regina .....	622	574	1,196
Saskatoon .....	613	619	1,237
Calgary .....	739	570	1,309
Edmonton .....	607	626	1,233





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