Labour Force Quality Report

Canadian Labour Force Survey

September, 1974

Confidential Restricted Circulation

Household Surveys Development Staff
Labour Force Survey Division
Field Division

Statistics Canada Statistique Canada

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Comparisons of: a) Canadian and American Unemployment rates, and b) UIC Claimants and LFS Unemployed are presented in Appendix IV.

HIGHLIGHTS

A - SLIPPAGE

The estimated slippage rate at the Canada level decreased slightly from 4.6% in August to 4.4% in September.

1. - By Province

All provinces exhibited positive estimated slippage rates in September. From August to September, decreases in the estimated slippage rate were noted in Newfoundland (a change of − 0.2%), Nova Scotia (− 0.6%), New Brunswick (− 1.7%), Ontario (− 0.9%), Manitoba (− 0.4%) and British Columbia (− 0.8%) while increases occurred in Prince Edward Island (+ 3.6%), Quebec (+ 0.8%), Saskatchewan (+ 1.0%) and Alberta (+ 0.2%).

The largest increase in the estimated slippage rate was noted in Prince Edward Island. Decreases in both the average size of households (− 0.0335) and the estimated number of households (a percentage change of − 2.7%) contributed to this increase.

Approximate 95% confidence intervals for slippage rates at the Canada and provincial levels for the September survey have been calculated and are given below:

Area	Estimated Slippage Rate (%)	Standard Deviation	Approximate 95% Confidence Interval
Canada	4.4	0.903	(2.6, 6.2)
Nfld.	11.1	3.183	(4.7, 17.5)
P.E.I.	17.5	2.178	(13.1, 21.9)
N.S.	8.7	2.230	(4.2, 13.2)
N.B.	7.2	3.064	(1.1, 13.3)
Quebec	1.3	2.143	(− 3.0, 5.6)
Ont.	3.7	1.567	(0.6, 6.8)
Man.	8.6	2.550	(3.5, 13.7)
Sask.	0.7	3.417	(− 6.1, 7.5)
Alta.	8.0	2.538	(2.9, 13.1)
B.C.	8.0	2.071	(3.9, 12.1)

The 95% confidence interval gives the range within which the true slippage rate (that is, the slippage rate obtained by averaging over all possible LFS samples) is thought to lie and the probability that the confidence interval contains the true slippage rate is 0.95. From the above table, it is evident that the confidence interval for each province except Quebec and Saskatchewan does not contain zero (which is the ideal value

of the true slippage rate). In other words, for Canada and for each province except Quebec and Saskatchewan, the difference between the estimated slippage rate and zero was statistically significant. Thus, there was a net undercoverage in the LFS frame for each province except possibly for Quebec and Saskatchewan. For further details on the interpretation of confidence intervals, see the technical memorandum entitled "Sampling Variability of Estimated Slippage Rates".

2. - By Age Group at the Canada Level

All age groups at the Canada level exhibited positive estimated slippage rates. From August to September, increases in the estimated slippage rates were noted in the 45-64 (a change of + 0.2%) and 65 and over (+ 1.5%) age groups. Each of the other age groups showed decreases in the estimated slippage rate.

It should be noted that there has been a general downward trend in the estimated slippage rates for the 14-19 and 25-44 age groups and a general upward trend in the 45-64 age group over the last five months as shown below:

Age Group	May (%)	June (%)	July (%)	August (%)	Sept. (%)
14-19	4.7	3.4	3.2	2.9	2.6
25-44	5.7	5.2	5.4	4.8	3.9
45-64	2.6	2.0	2.7	2.9	3.1

Approximate 95% confidence intervals for each of the five age groups are given below:

Age Group	Estimate Slippage Rate (%)	Standard Deviation	Approximate 95% Confidence Interval
All Ages	4.4	0.903	(2.6, 6.2)
14-19	2.6	1.395	(− 0.2, 5.4)
20-24	10.1	1.395	(7.3, 12.9)
25-44	3.9	1.488	(0.9, 6.9)
45-64	3.1	1.012	(1.1, 5.1)
65 +	5.7	1.511	(5.4, 6.0)

Except for the 14-19 age group, each age group exhibited an estimated slippage rate which was significantly different from zero. This indicates a net undercoverage in the 20-24, 25-44, 45-64 and 65 + age groups.

B - NON-RESPONSE

The overall non-response rate for the Canada level decreased from 8.8% in August to 5.6% in September. This decrease was smaller than the one recorded between the same two months one year ago. The decrease in the T.A. component was mainly responsible for the decrease in the overall non-response rate this year.

Compared with last year's September non-response rate (6.5%), this year's rate was lower. This year's lower rate was attributed to decreases in the N_1, N_2 and "other" components.

As was the case in August, a number of households were recorded at the N_6 component level (households not contacted for the current Labour Force Survey because of overlap with the Revised Labour Force Survey) which has been added to the "other" component of non-response. Again this month, these new households were located in the St. John's, Halifax and Montreal Regional Offices; however, there was over twice as many N_6 households in the September survey than in the August survey.

C - VARIANCE

The coefficients of variation of Employed, Unemployed and In Labour Force at the Canada level increased from the August survey, the increases being from 0.33% to 0.34%, 2.5% to 2.79% and 0.30% to 0.31% respectively. These changes can be accounted for by decreases in the levels of the estimated totals for the three characteristics.

At the provincial levels, increases in the coefficients of variation of Employed occurred in all provinces except Quebec and British Columbia and increases in the coefficients of variation of Unemployed occurred in all provinces except New Brunswick and British Columbia. These changes can generally be explained by changes in the levels of the estimated totals - all provinces exhibited declines in the estimated total of Employed from the August survey and New Brunswick, Saskatchewan and Alberta were the only provinces to register increases in the level of Unemployed.

For the estimates of the major Labour Force characteristics (Employed, Unemployed and In Labour Force) at the Canada and province levels there were 10 estimates for which the symbol for the estimated coefficient of variation based on the September survey differed from the published symbol based on 1973 data. These were distributed as follows: 3 for estimates of In Labour Force, 1 for Employed estimates and 6 for Unemployed estimates. For the above 6 cases for Unemployed estimates, (Unemployed in Canada, P.E.I., Que., Ont., Sask. and Alta.), the published symbol indicated a greater degree of reliability than was warranted on the basis of the variances calculated from the September data. For the remaining 4 cases the estimates were more reliable than the published figures indicated.

For the past three surveys the published symbol indicated a greater degree of reliability than was indicated on the basis of survey variance estimates for the estimates of Unemployed totals in the provinces of Ontario and Alberta.

D - REJECTED DOCUMENTS

The 1288 document reader was used for the first time in August, however the computer programme for rejected documents was not ready. The development of this programme is now underway and it is expected that information on rejects will be available for the October Quality Report.

E - ENUMERATION COSTS

The September enumeration cost at the Canada level was calculated at $2.72 per sample household a decrease of 1 cent from the $2.73 for August. A 1 cent increase in enumeration cost for SRU areas was more than off set by a 4 cent decrease in the average enumeration costs for NSRU areas.

At the regional levels, 5 offices had decreases ranging from 5 to 12 cents, while Toronto, Halifax and St. John's had increases in their enumeration cost of 16, 5 and 1 cent respectively. The substantial increase for the Toronto region resulted for the most part, from the extra attention given non-response households. This effected a 5.3% decrease in the Toronto non-response rate from 11.0% in August to 5.7% for September.

Non-Response Rates, Rejected Document Rates and Enumeration Cost per Household by Regional Office
April 1973 to September 1973 and April 1974 to September 1974

	1974						1973					
	Sept.	August	July	June	May	April	Sept.	August	July	June	May	April
Non-response												
Canada ..... %	5.6	8.8	10.4	6.8	7.0	8.3	6.5	10.9	15.1	8.4	7.0	7.9
St. John's ..... %	4.4	5.7	6.2	5.1	5.2	7.7	2.4	9.7	14.0	5.4	4.5	5.1
Halifax ..... %	6.2	8.7	10.0	6.6	6.9	7.9	6.1	9.8	13.4	8.1	7.6	7.5
Montreal ..... %	5.2	8.4	12.1	6.9	8.2	8.7	6.6	12.1	19.2	10.3	7.4	7.4
Ottawa ..... %	4.2	8.6	9.5	6.2	7.3	7.4	6.6	9.2	13.9	8.6	5.7	5.6
Toronto ..... %	5.7	11.0	12.2	7.0	7.0	8.7	6.7	11.4	16.2	6.7	6.2	7.2
Winnipeg ..... %	4.3	4.7	6.4	3.7	3.0	2.6	2.2	5.2	6.7	3.9	2.8	2.8
Edmonton ..... %	4.6	7.0	8.5	6.4	7.3	8.8	6.3	11.4	15.8	11.2	9.0	10.0
Vancouver ..... %	8.0	12.2	12.8	10.5	9.0	12.2	11.7	14.9	16.0	11.0	9.6	14.5
Rejected Documents (Regular Labour Force Items)												
Canada ..... %				10.2	12.4	8.4	8.5	9.9	9.1	9.0	8.2	7.6
St. John's ..... %				8.4	9.2	3.4	6.2	6.8	5.1	6.3	4.9	5.9
Halifax ..... %		See Highlights,		11.5	12.3	7.4	7.9	10.0	10.0	9.8	9.0	7.9
Montreal ..... %				8.9	10.7	7.0	7.2	8.7	8.8	7.8	7.2	6.4
Ottawa ..... %		Section D,		8.4	10.1	7.8	9.2	12.0	9.3	7.6	7.0	7.1
Toronto ..... %				11.7	14.4	11.9	9.9	10.6	10.7	11.0	9.8	10.1
Winnipeg ..... %		Page 3.		8.4	16.7	5.2	7.0	8.8	6.3	5.8	6.5	5.7
Edmonton ..... %				11.1	12.0	11.1	9.1	11.0	8.1	9.9	8.1	6.6
Vancouver ..... %				9.9	11.7	9.3	11.0	11.0	10.6	10.4	9.4	9.0
Enumeration Cost per Household												
Canada ..... $	2.72	2.73	2.70	2.56	2.51	2.53	2.46	2.24	1.98	2.20	2.17	1.89
St. John's ..... $	3.33	3.32	3.26	3.04	3.01	2.61	2.71	2.50	2.10	2.50	2.59	2.17
Halifax ..... $	2.64	2.59	2.57	2.32	2.41	2.48	2.29	2.10	1.89	2.02	1.98	1.74
Montreal ..... $	2.81	2.88	2.81	2.45	2.69	2.67	2.66	2.41	2.07	2.30	2.35	2.00
Ottawa ..... $	2.71	2.76	2.73	2.68	2.49	2.61	2.68	2.44	2.07	2.49	2.33	2.05
Toronto ..... $	2.80	2.64	2.68	2.67	2.49	2.43	2.60	2.37	2.09	2.37	2.29	1.98
Winnipeg ..... $	2.59	2.71	2.60	2.61	2.51	2.64	2.40	2.22	2.16	2.25	2.19	2.07
Edmonton ..... $	2.60	2.69	2.65	2.53	2.40	2.54	2.24	2.06	1.72	1.91	1.78	1.66
Vancouver ..... $	2.54	2.63	2.65	2.58	2.34	2.39	2.20	1.92	1.84	2.01	1.98	1.72

	Month-to-month Change								Year-to-year Change			
	1974				1973				Sept. 1973 to Sept. 1974	August 1973 to August 1974	July 1973 to July 1974	June 1973 to June 1974
	August to Sept.	July to August	June to July	May to June	August to Sept.	July to August	June to July	May to June				
Non-response												
Canada ..... %	- 3.2	- 1.6	+ 3.6	- 0.2	- 4.4	- 4.2	+ 6.7	+ 1.4	- 0.9	- 2.1	- 4.7	- 1.6
St. John's ..... %	- 1.3	- 0.5	+ 1.1	- 0.1	- 7.3	- 4.3	+ 8.6	+ 0.9	+ 2.0	- 4.0	- 7.8	- 0.3
Halifax ..... %	- 2.5	- 1.3	+ 3.4	- 0.3	- 3.7	- 3.6	+ 5.3	+ 0.5	+ 0.1	- 1.1	- 3.4	- 1.5
Montreal ..... %	- 3.2	- 3.7	+ 5.2	- 1.3	- 5.5	- 7.1	+ 8.9	+ 2.9	- 1.4	- 3.7	- 7.1	- 3.4
Ottawa ..... %	- 4.4	- 0.9	+ 3.3	- 1.1	- 2.6	- 4.7	+ 5.3	+ 2.9	- 2.4	- 0.6	- 4.4	- 2.4
Toronto ..... %	- 5.3	- 1.2	+ 5.2	-	- 4.7	- 4.8	+ 9.5	+ 0.5	- 1.0	- 0.4	- 4.0	+ 0.3
Winnipeg ..... %	- 0.4	- 1.7	+ 2.7	+ 0.7	- 3.0	- 1.5	+ 2.8	+ 1.1	+ 2.1	- 0.5	- 0.3	- 0.2
Edmonton ..... %	- 2.4	- 1.5	+ 2.1	- 0.9	- 5.1	- 4.4	+ 4.6	+ 2.2	- 1.7	- 4.4	- 7.3	- 4.8
Vancouver ..... %	- 4.2	- 0.6	+ 2.3	+ 1.5	- 3.2	- 1.1	+ 5.0	+ 1.4	- 3.7	- 2.7	- 3.2	- 0.5
Rejected Documents (Regular Labour Force Items)												
Canada ..... %				- 2.2	- 1.4	+ 0.8	+ 0.1	+ 0.8				+ 1.2
St. John's ..... %				- 0.8	- 0.6	+ 1.7	- 1.2	+ 1.4				+ 2.1
Halifax ..... %		See Highlights,		- 0.8	- 2.1	-	+ 0.2	+ 0.8		See Highlights,		+ 1.7
Montreal ..... %				- 1.8	- 1.5	- 0.1	+ 1.0	+ 0.6				+ 1.1
Ottawa ..... %		Section D,		- 1.7	- 2.8	+ 2.7	+ 1.7	+ 0.6		Section D,		+ 0.8
Toronto ..... %				- 2.7	- 0.7	- 0.1	- 0.3	+ 1.2				+ 0.7
Winnipeg ..... %		Page 3.		- 8.3	- 1.8	+ 2.5	+ 0.5	- 0.7		Page 3.		+ 2.6
Edmonton ..... %				- 0.9	- 1.9	+ 2.9	- 1.8	+ 1.8				+ 1.2
Vancouver ..... %				- 1.8	—	+ 0.4	+ 0.2	+ 1.0				- 0.5
Enumeration Cost per Household												
Canada ..... $	- 0.01	+ 0.03	+ 0.14	+ 0.05	+ 0.22	+ 0.26	- 0.22	+ 0.03	+ 0.26	+ 0.49	+ 0.72	+ 0.36
St. John's ..... $	+ 0.01	+ 0.06	+ 0.22	+ 0.03	+ 0.21	+ 0.40	- 0.40	- 0.09	+ 0.62	+ 0.82	+ 1.16	+ 0.54
Halifax ..... $	- 0.05	+ 0.02	+ 0.25	- 0.09	+ 0.19	+ 0.21	- 0.13	+ 0.04	+ 0.35	+ 0.49	+ 0.68	+ 0.30
Montreal ..... $	- 0.07	+ 0.07	+ 0.36	- 0.24	+ 0.25	+ 0.34	- 0.23	- 0.06	+ 0.15	+ 0.47	+ 0.74	+ 0.15
Ottawa ..... $	- 0.05	+ 0.03	+ 0.05	+ 0.19	+ 0.24	+ 0.37	- 0.42	+ 0.16	+ 0.03	+ 0.32	+ 0.66	+ 0.19
Toronto ..... $	+ 0.16	- 0.04	+ 0.01	+ 0.18	+ 0.23	+ 0.28	- 0.28	+ 0.08	+ 0.20	+ 0.27	+ 0.59	+ 0.30
Winnipeg ..... $	- 0.12	+ 0.11	- 0.01	+ 0.10	+ 0.18	+ 0.06	- 0.09	+ 0.06	+ 0.19	+ 0.49	+ 0.44	+ 0.36
Edmonton ..... $	- 0.09	+ 0.04	+ 0.12	+ 0.13	+ 0.18	+ 0.34	- 0.19	+ 0.13	+ 0.36	+ 0.63	+ 0.93	+ 0.62
Vancouver ..... $	- 0.09	- 0.02	+ 0.07	+ 0.24	+ 0.28	+ 0.08	- 0.17	+ 0.03	+ 0.34	+ 0.71	+ 0.81	+ 0.57

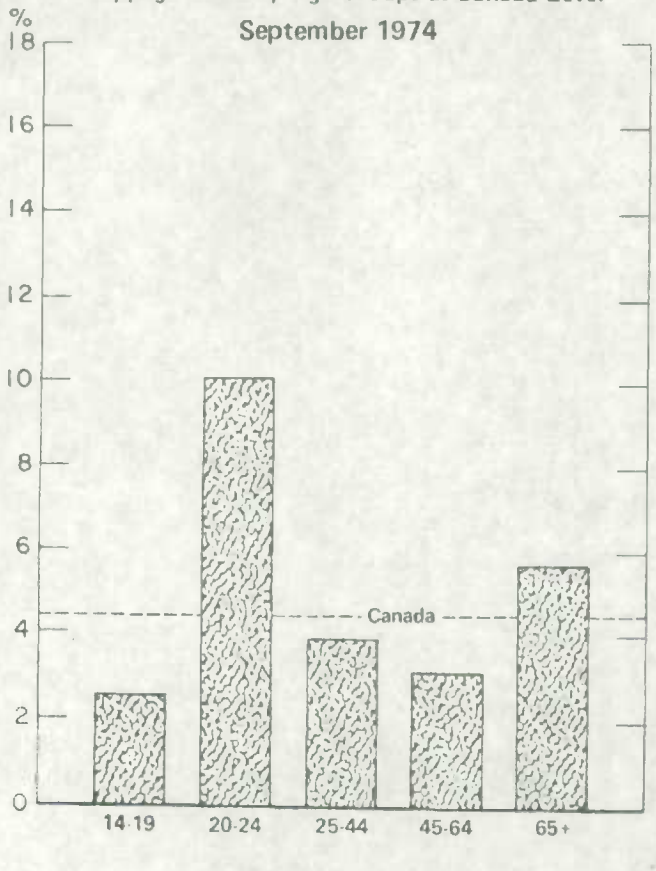
Slippage Rates(1), Canada by Age and Provincial Totals

August and September 1974

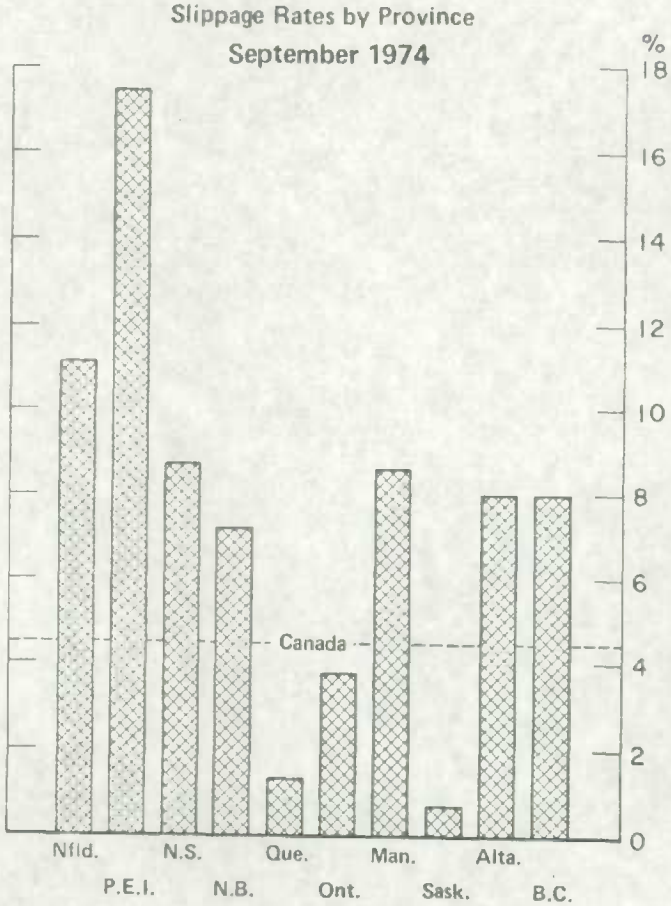
	1974						1973	Aug. 1974 to Sept. 1974	Sept. 1973 to Sept. 1974
	Sept.	Aug.	July	June	May	April	Sept.		
Total	4.4	4.6	4.8	4.6	5.0	4.9	4.6	− 0.2	− 0.2
14-19 years	2.6	2.9	3.2	3.4	4.7	3.0	3.6	− 0.3	− 1.0
20-24 years	10.1	10.5	10.0	10.5	10.1	10.7	8.1	− 0.4	+ 2.0
25-44 years	3.9	4.8	5.4	5.2	5.7	5.5	4.7	− 0.9	− 0.8
45-64 years	3.1	2.9	2.7	2.0	2.6	2.9	3.1	+ 0.2	−
65 and over	5.7	4.2	4.3	4.0	2.8	4.1	5.1	+ 1.5	+ 0.6
Nfld.	11.1	11.3	10.8	10.9	10.9	10.4	10.1	− 0.2	+ 1.0
P.E.I.	17.5	13.9	13.6	8.8	10.9	12.8	6.3	+ 3.6	+ 11.2
N.S.	8.7	9.3	9.5	10.2	9.8	9.9	10.1	− 0.6	− 1.4
N.B.	7.2	8.9	9.3	8.5	8.3	7.7	9.5	− 1.7	− 2.3
Qué.	1.3	0.5	2.0	1.6	3.1	2.8	4.1	+ 0.8	− 2.8
Ont.	3.7	4.6	4.3	4.2	4.7	5.0	3.6	− 0.9	+ 0.1
Man.	8.6	9.0	5.7	5.0	1.7	I.7	5.5	− 0.4	+ 3.1
Sask.	0.7	− 0.3	− 1.4	− 0.1	− 1.5	− 0.9	2.8	+ 1.0	− 2.1
Alta.	8.0	7.8	7.9	7.6	8.8	8.3	4.7	+ 0.2	+ 3.3
B.C.	8.0	8.8	8.8	8.5	8.0	7.6	4.8	− 0.8	+ 3.2

(1) The above Rates are calculated on Population Projections Based on 1971 Census.

Slippage Rates by Age Groups at Canada Level
September 1974



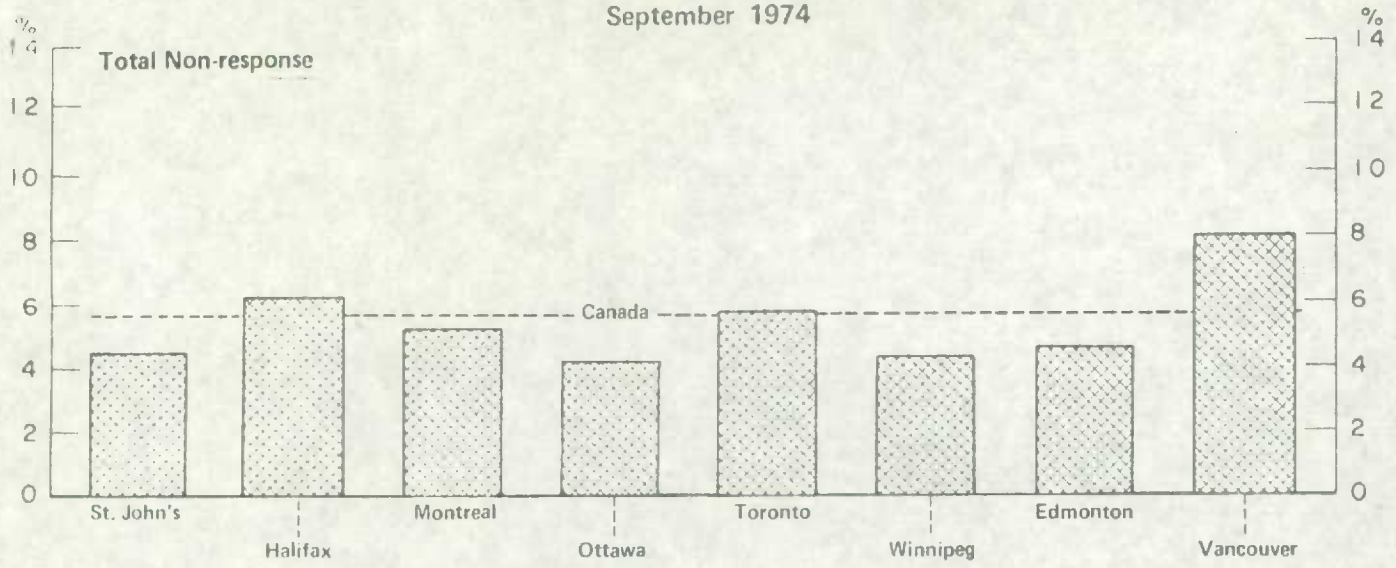
Slippage Rates by Province
September 1974



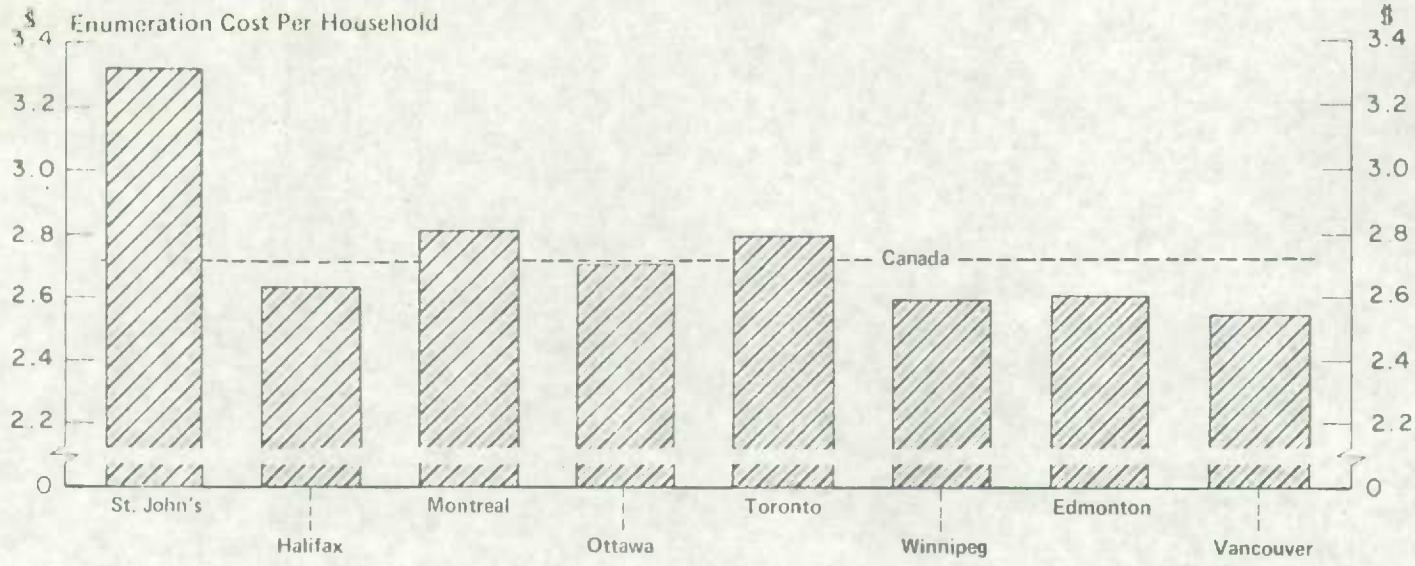
(1) The Above Rates are Calculated on Population Projections Based on 1971 Census.

Non-response Rates, Enumeration Cost and Rejected Documents by Regional Office

September 1974

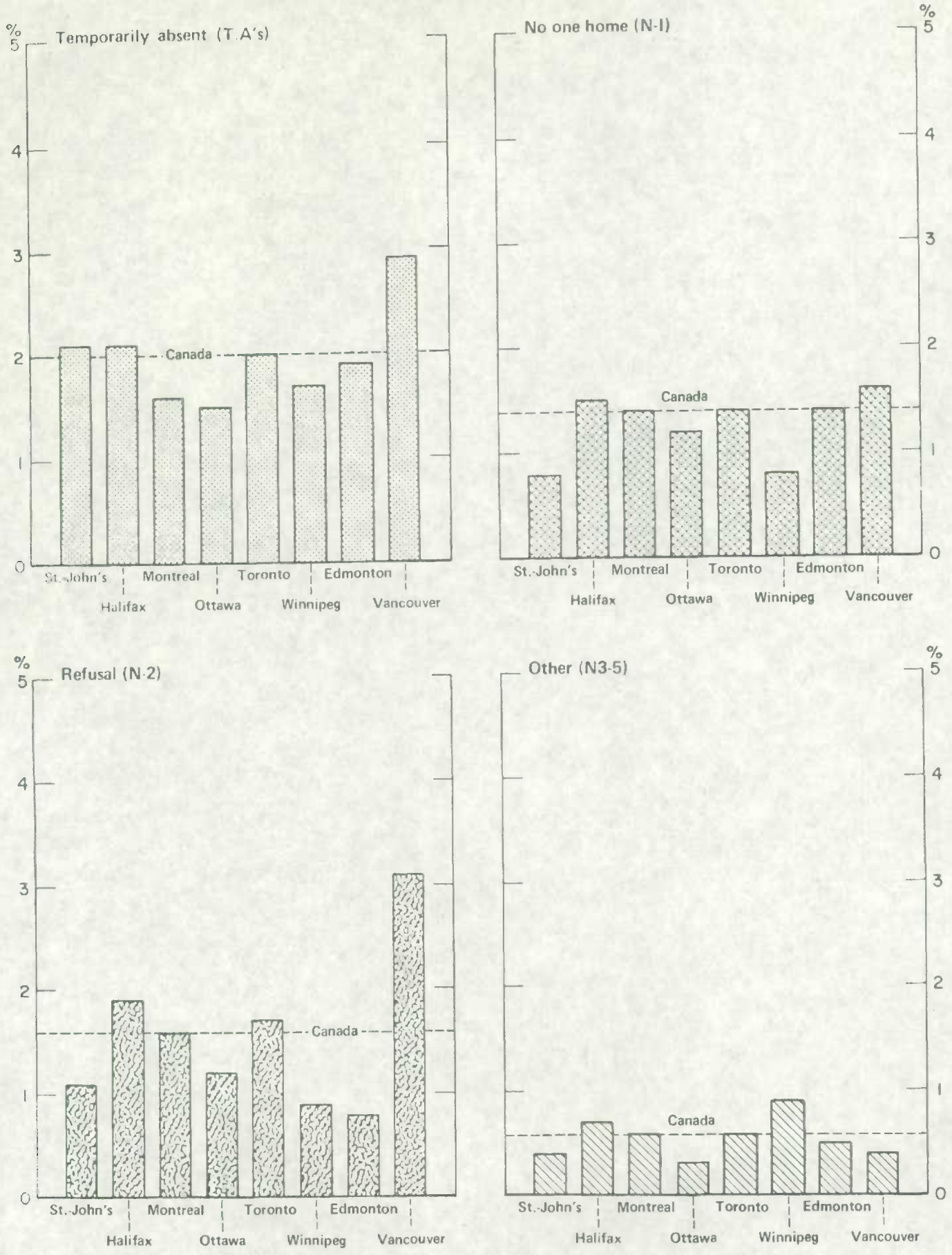


SEPTEMBER 1974



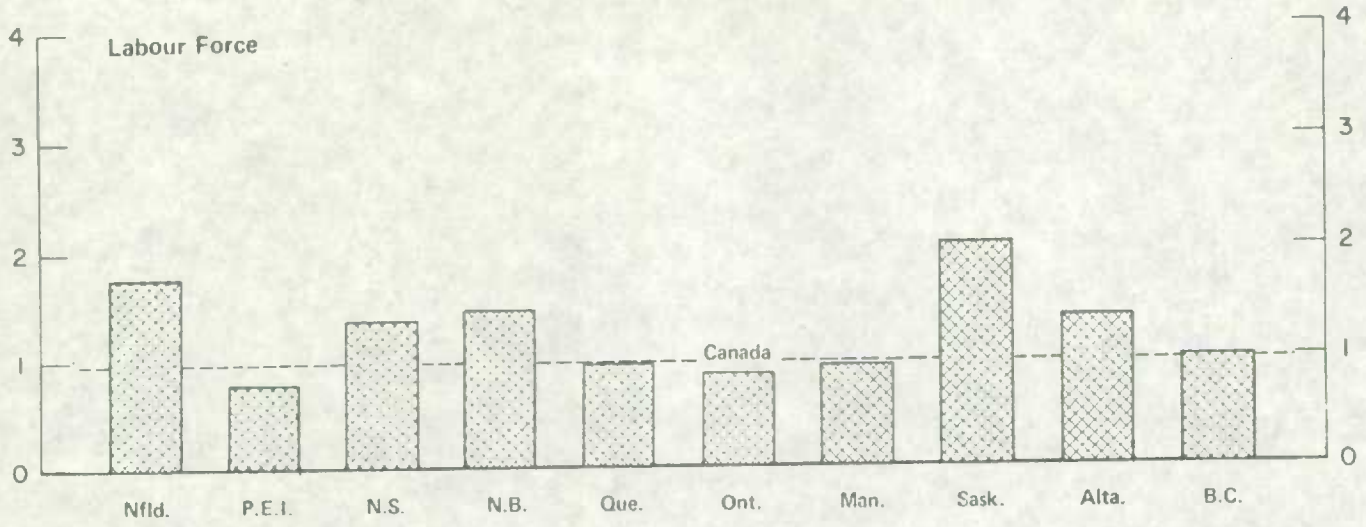
Non-response Rates, by Component

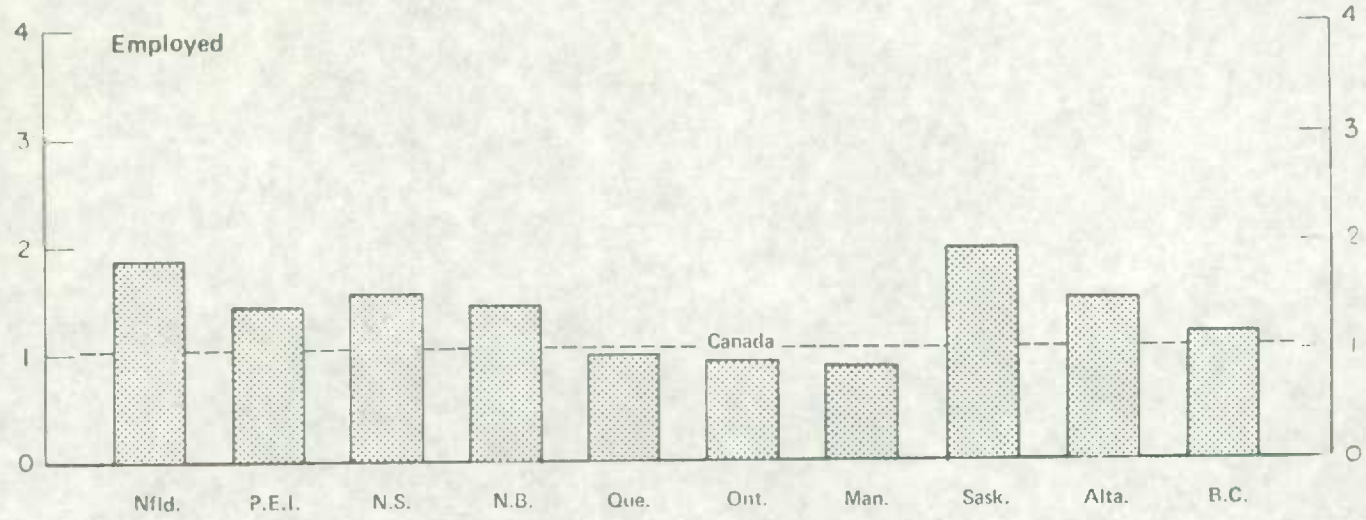
September 1974

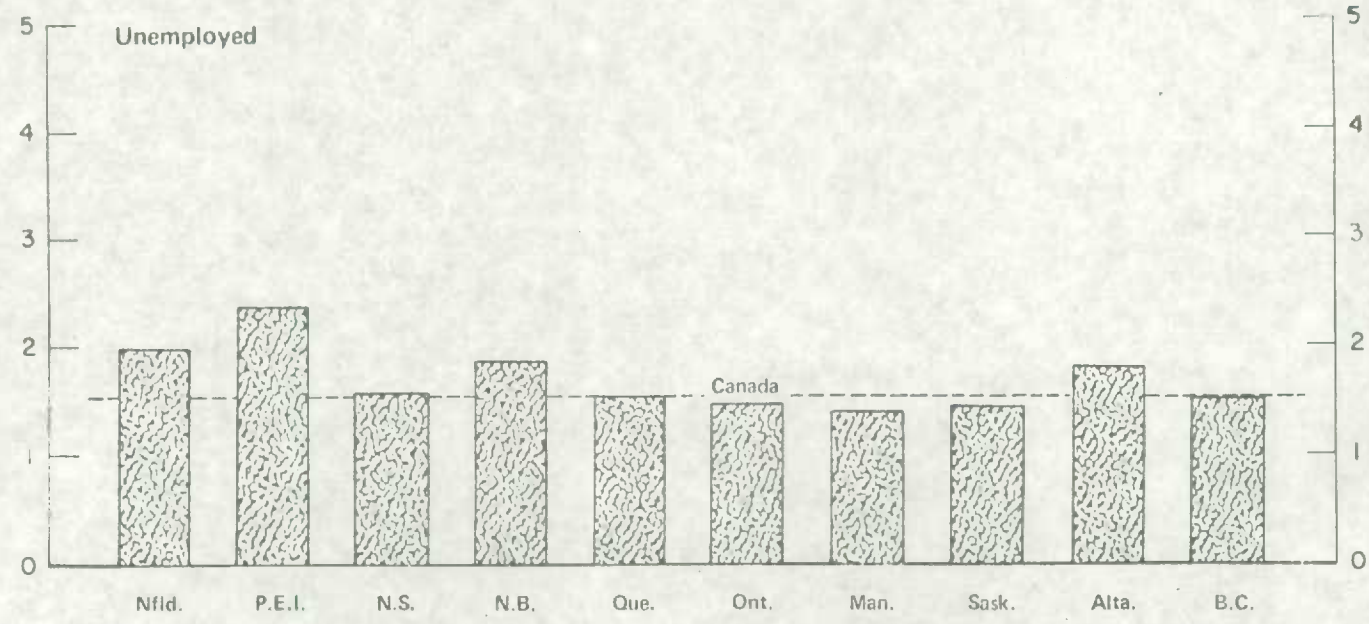


Binomial Factors for the Labour Force, Employed and Unemployed,
Canada and the Provinces

September 1974

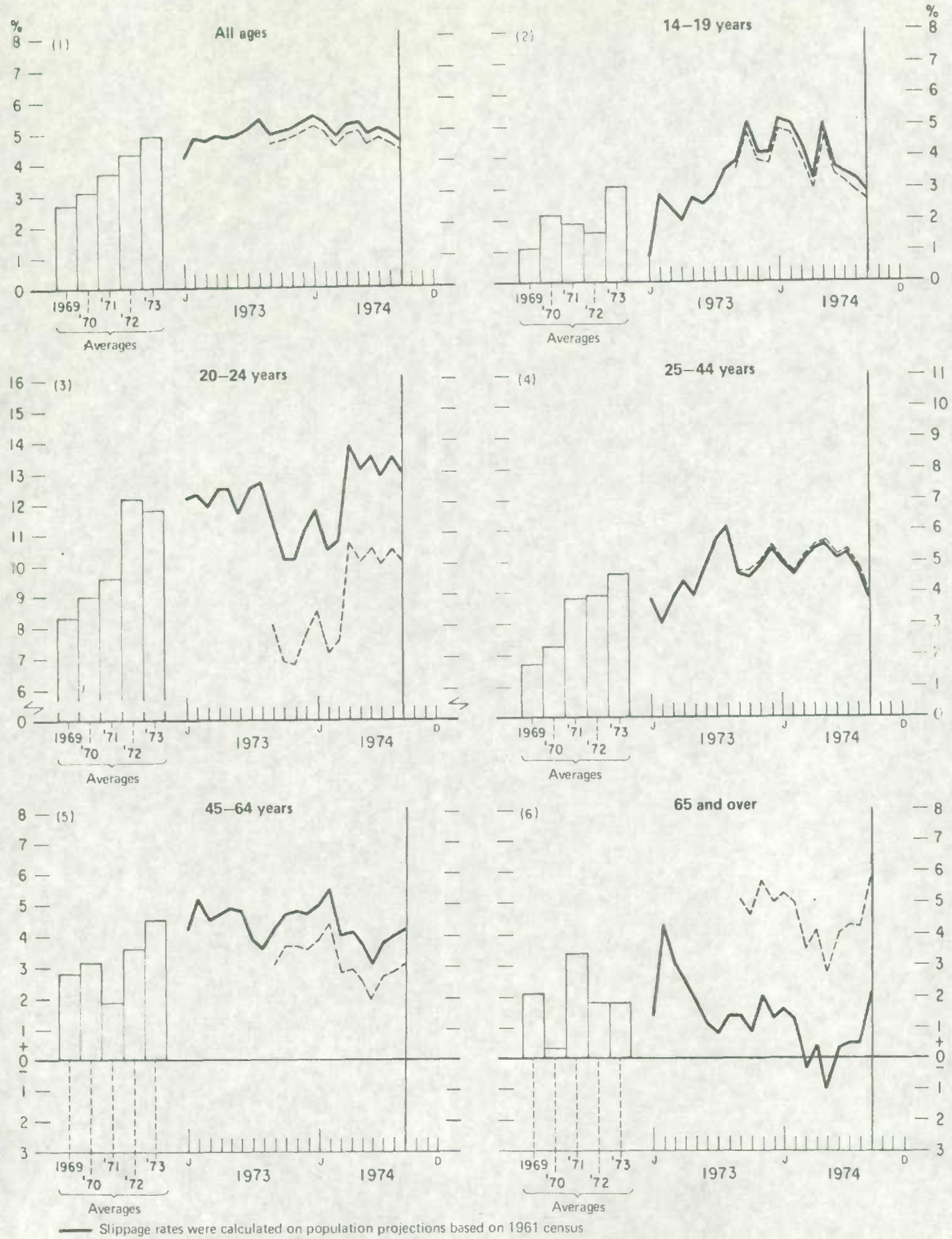






G-2

Slippage by Age Group at the Canada Level

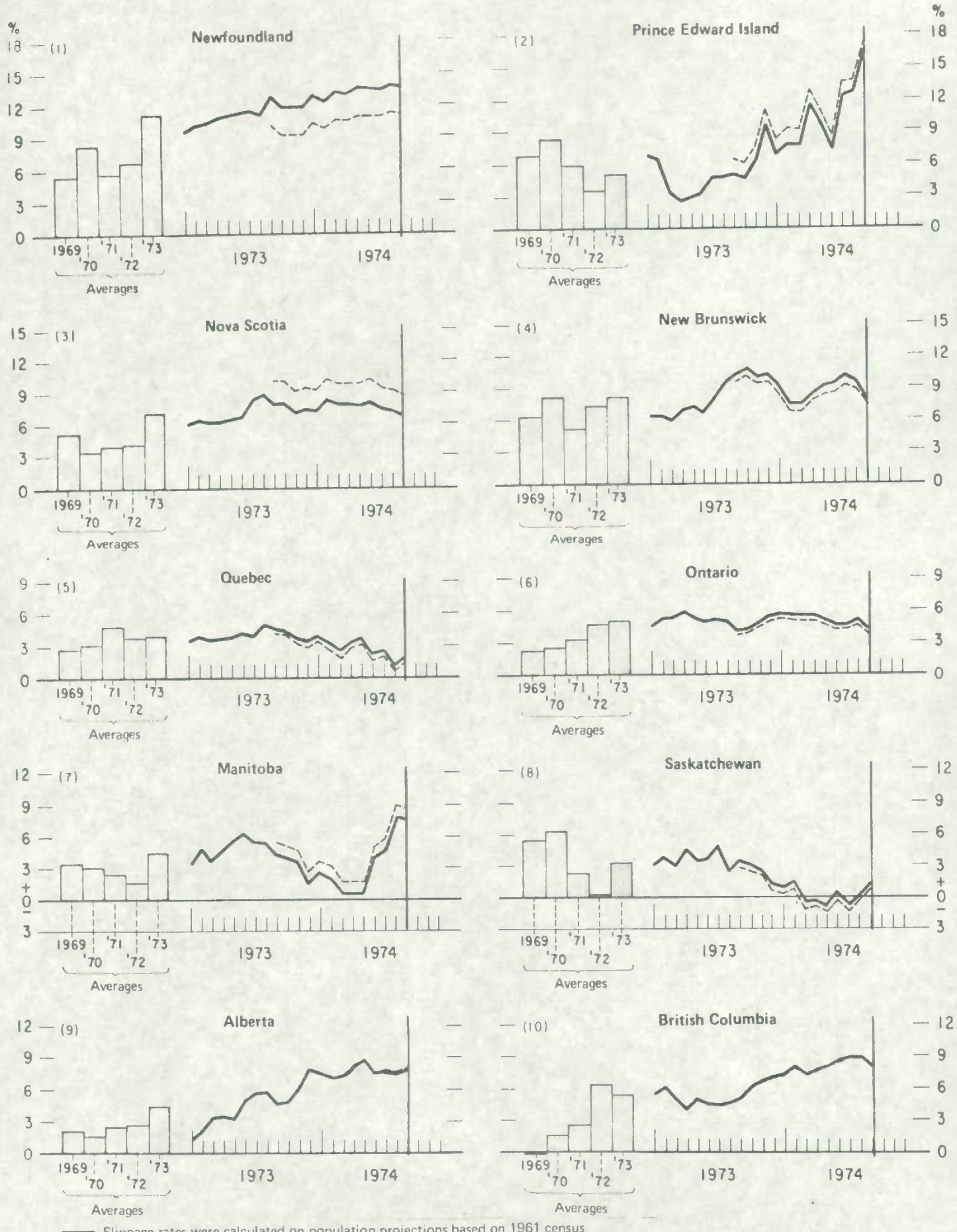


Slippage rates were calculated on population projections based on 1961 census

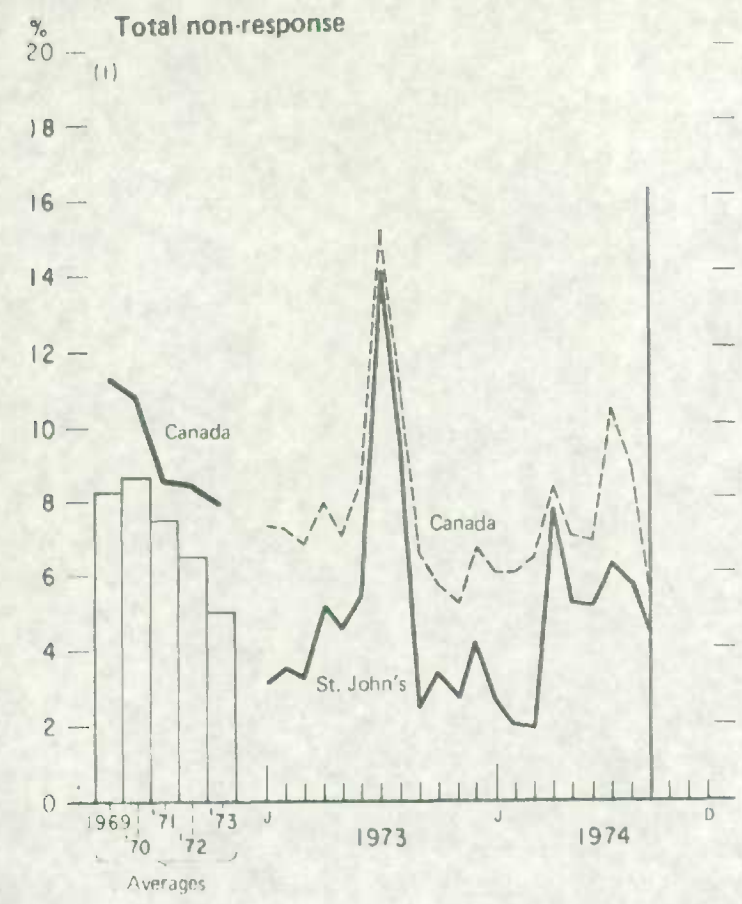
Slippage rates were calculated on preliminary population projections based on 1971 census

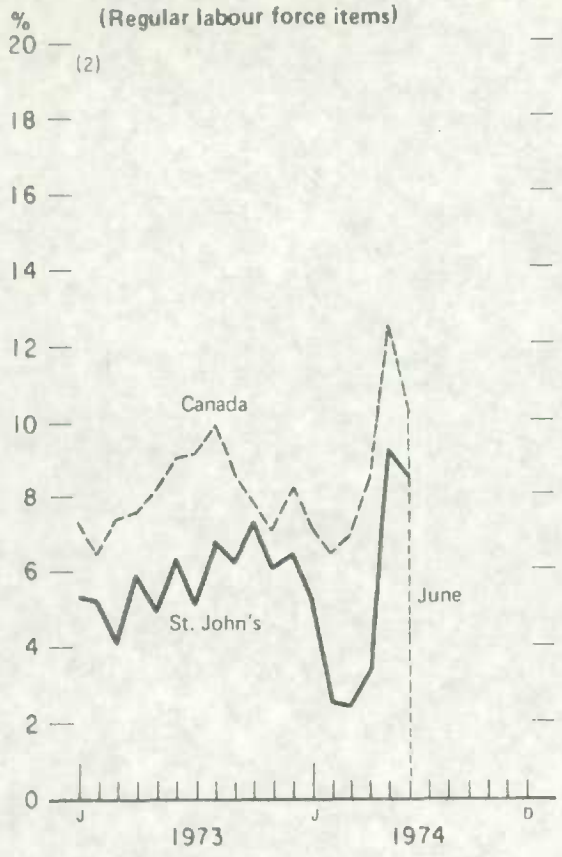
G-1

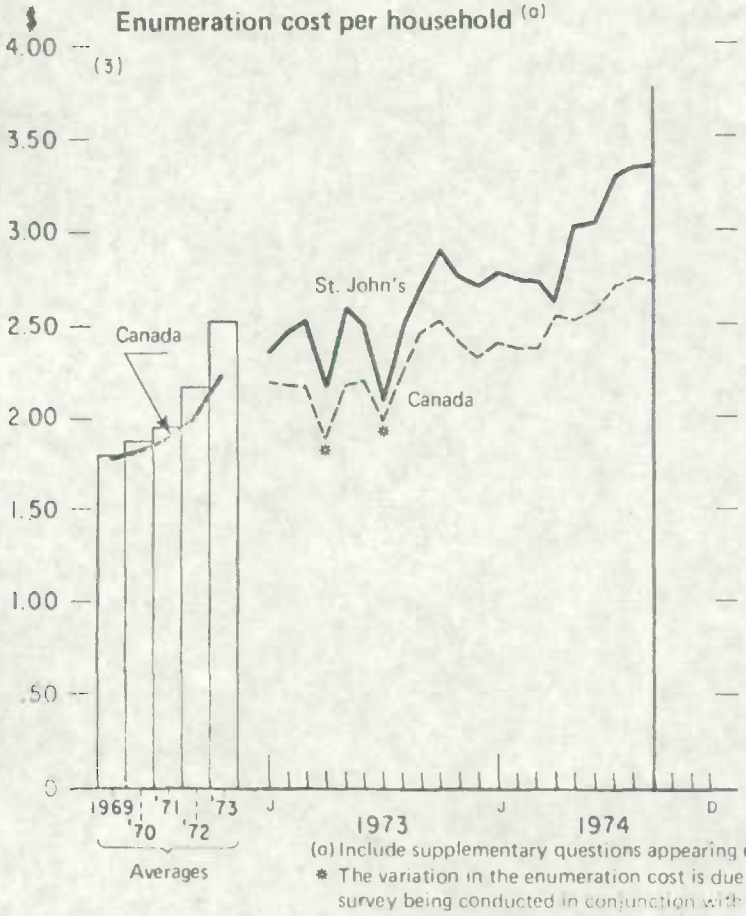
Slippage by Province

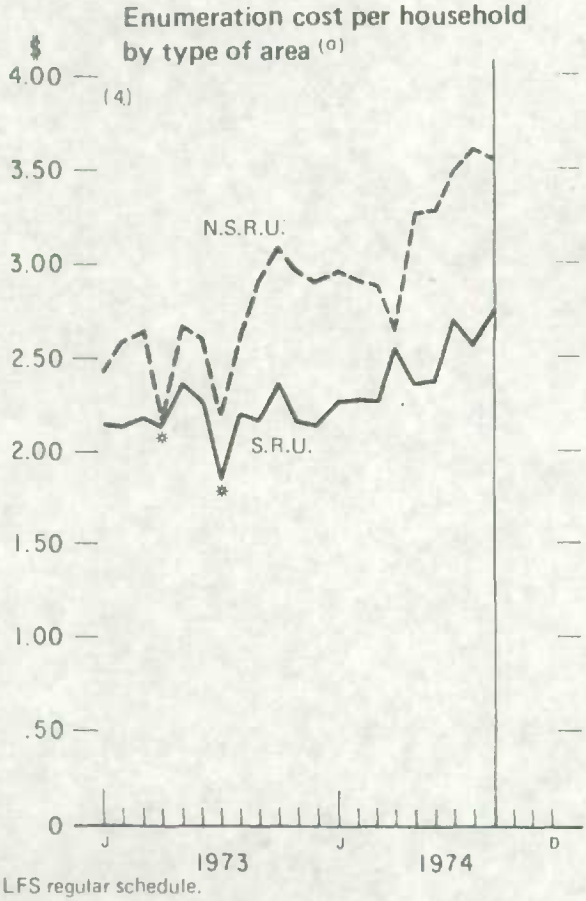


St. John's Regional Office







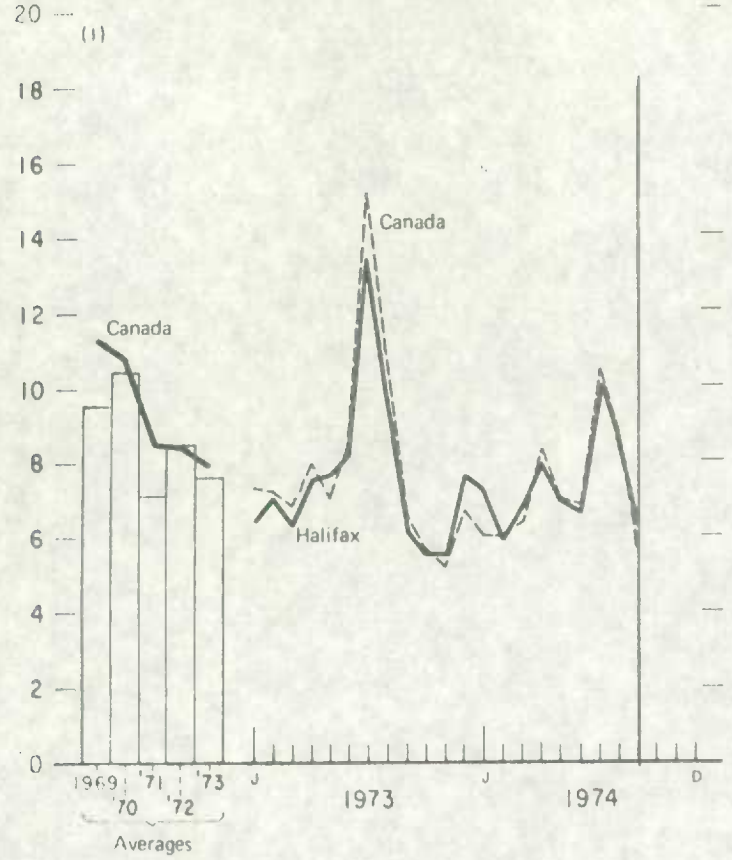


(o) Include supplementary questions appearing on the LFS regular schedule.

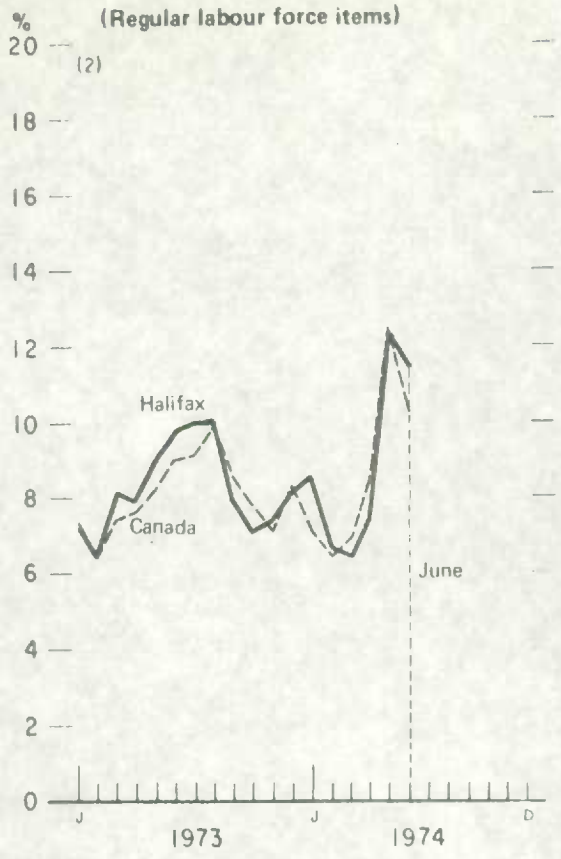
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Halifax Regional Office

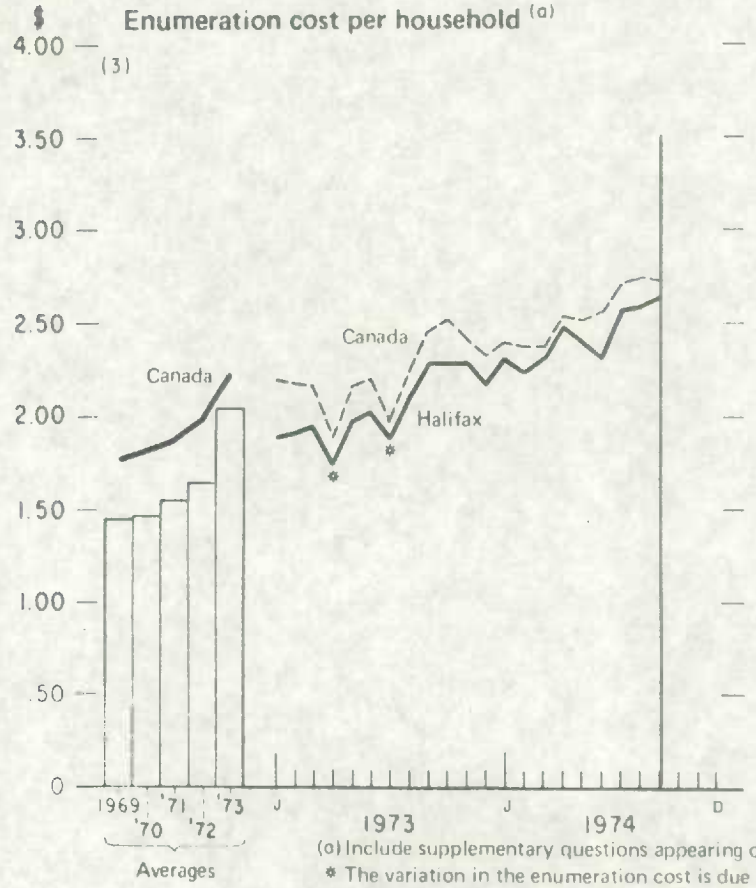
Total non-response



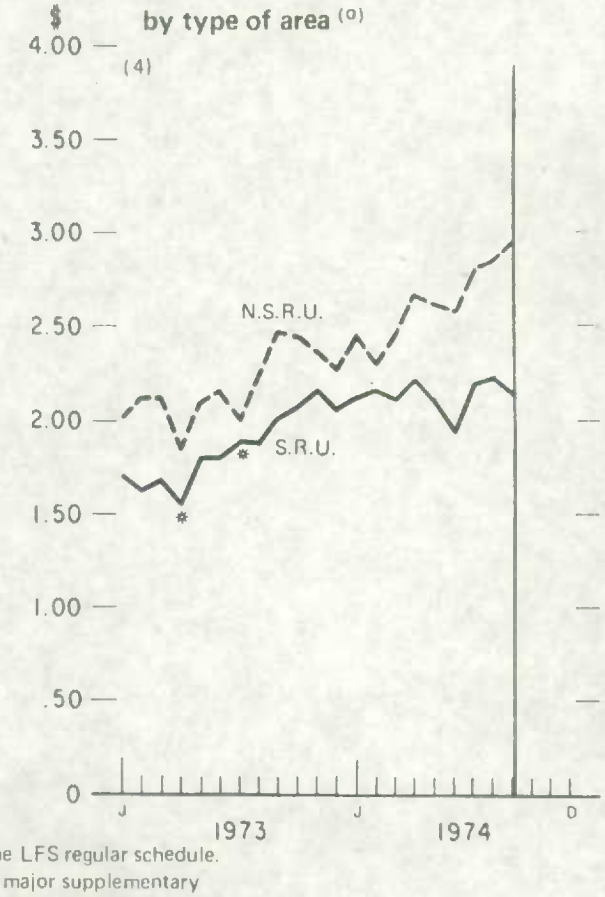
Per cent of rejected documents (Regular labour force items)



Enumeration cost per household (a)



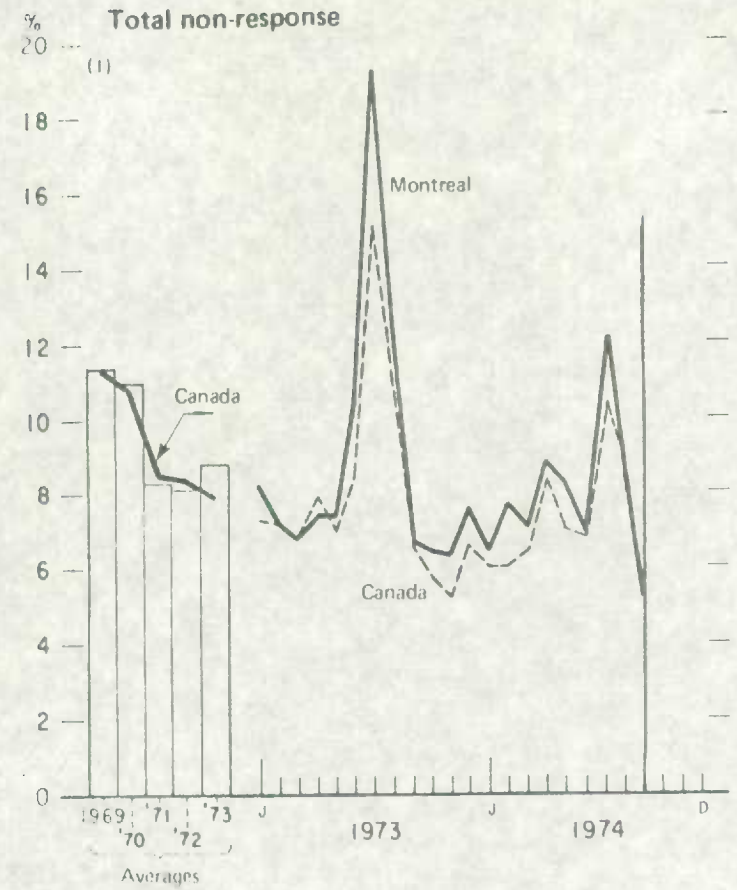
Enumeration cost per household by type of area (a)

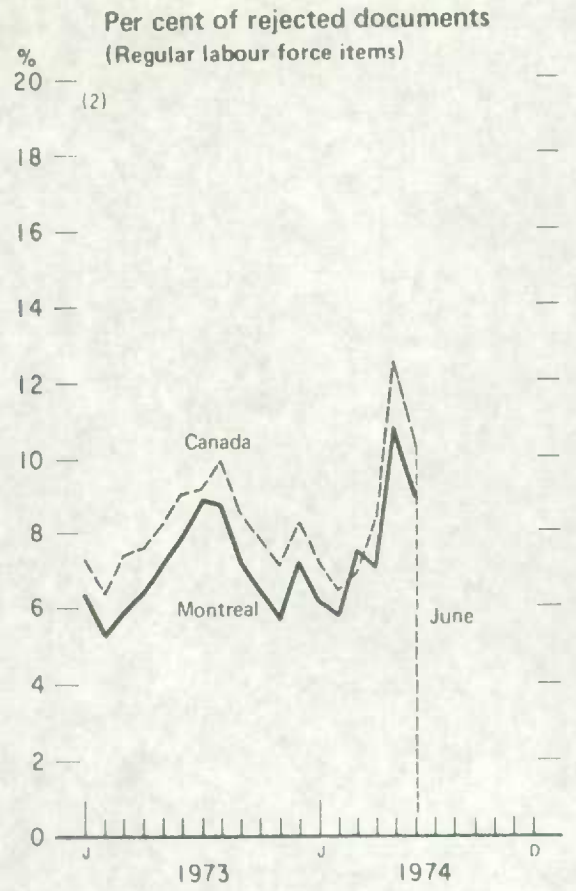


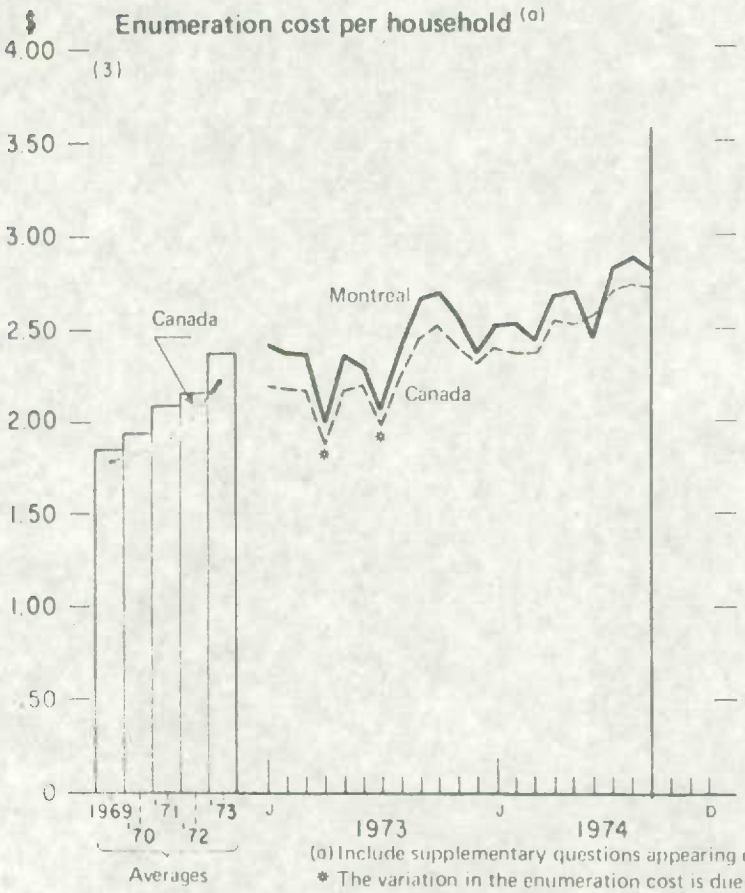
(a) Include supplementary questions appearing on the LFS regular schedule.

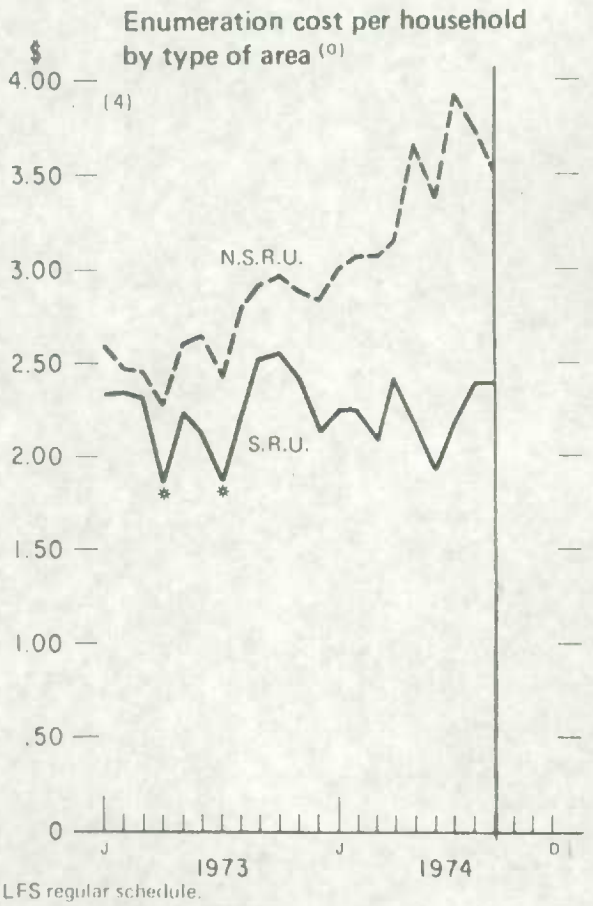
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Montreal Regional Office





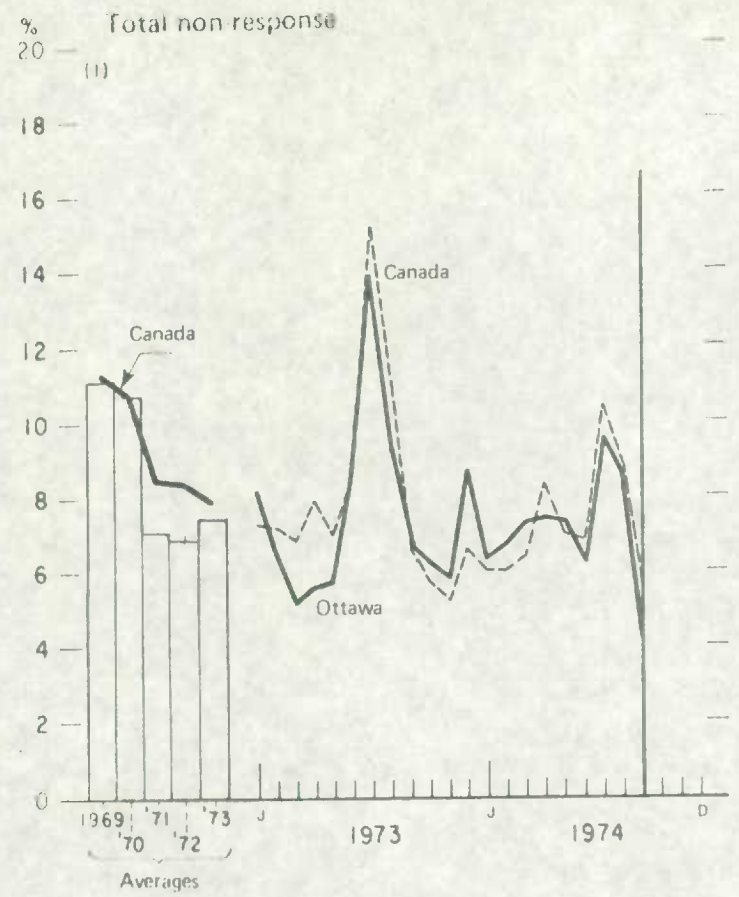


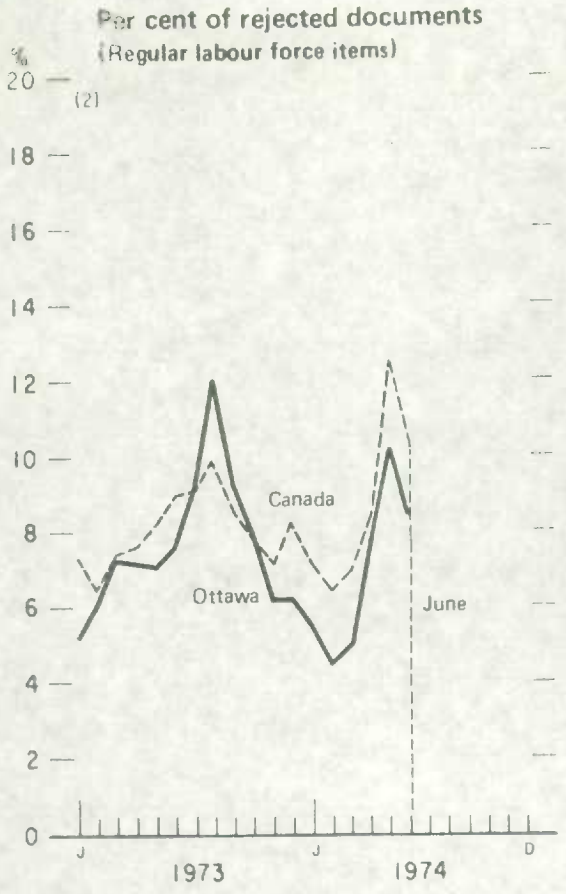


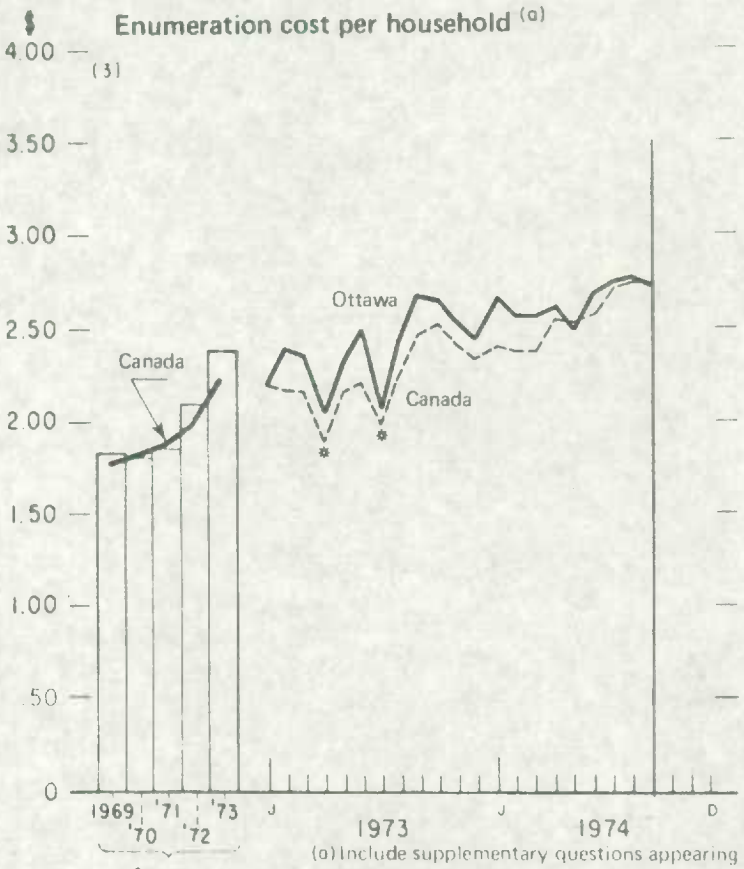
(a) Include supplementary questions appearing on the LFS regular schedule.

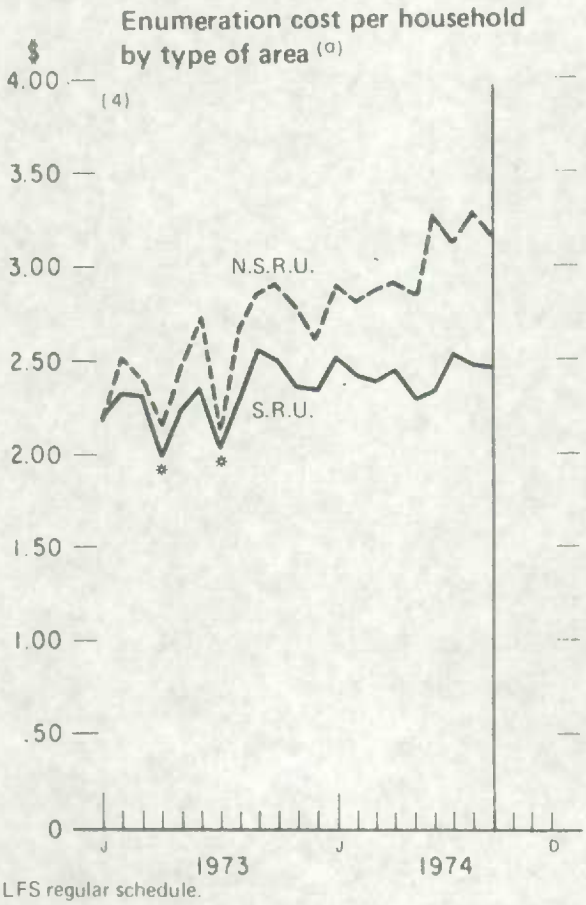
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Ottawa Regional Office







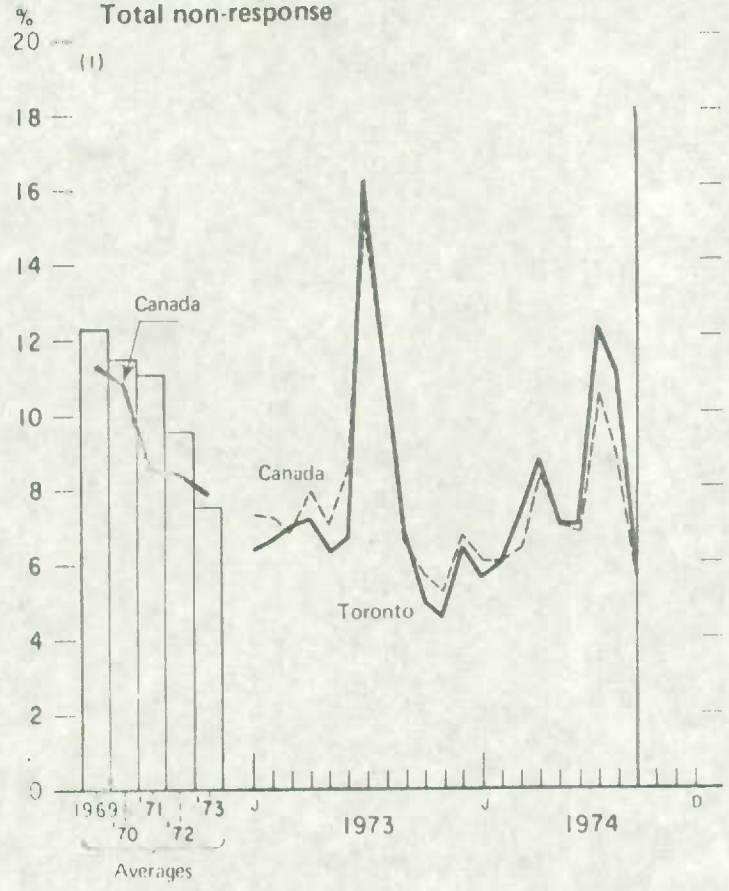


(a) Include supplementary questions appearing on the LFS regular schedule.

* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

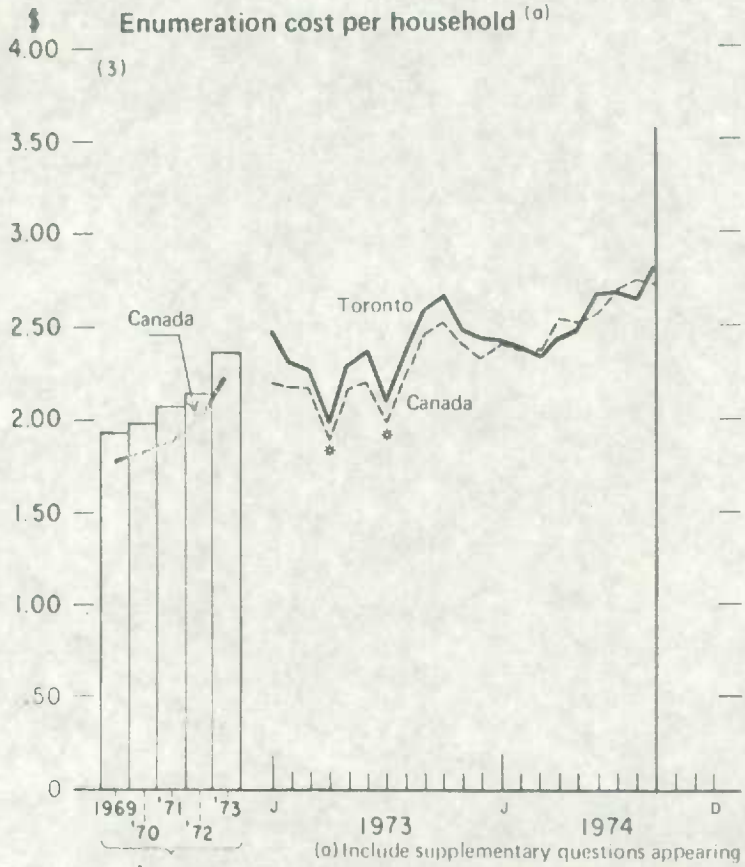
Toronto Regional Office

Total non-response

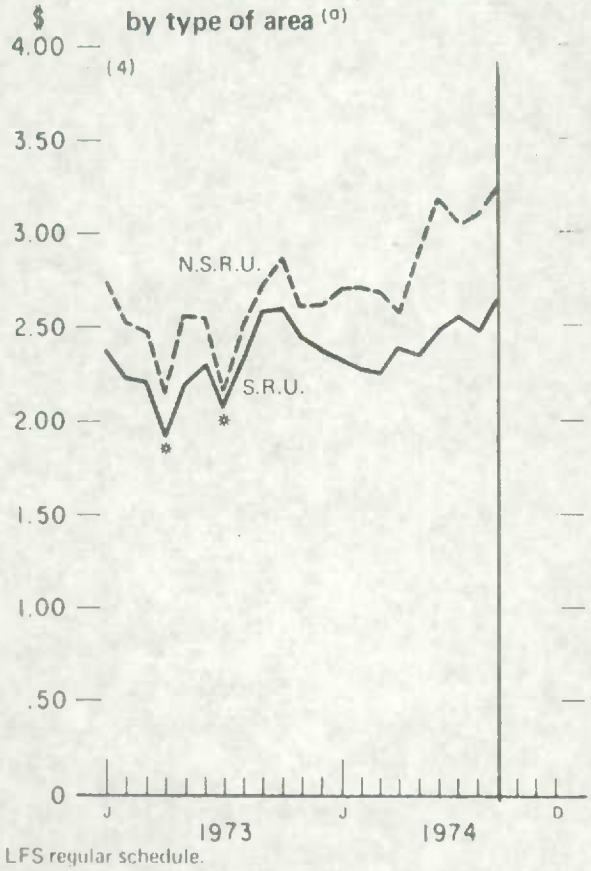


Per cent of rejected documents (Regular labour force items)

Enumeration cost per household [a]



Enumeration cost per household by type of area [a]

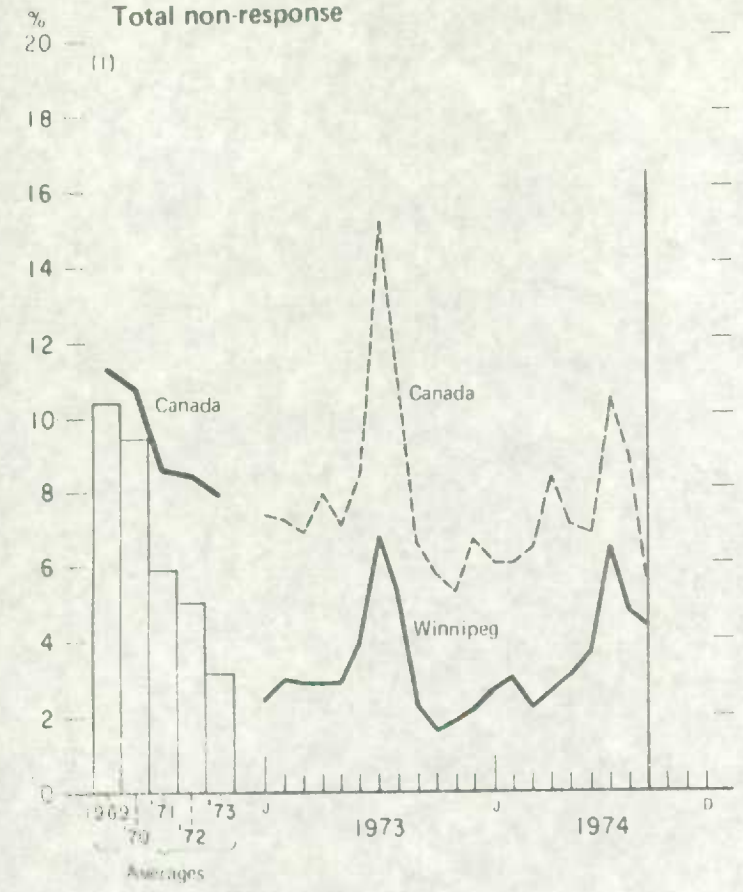


(a) Include supplementary questions appearing on the LFS regular schedule.

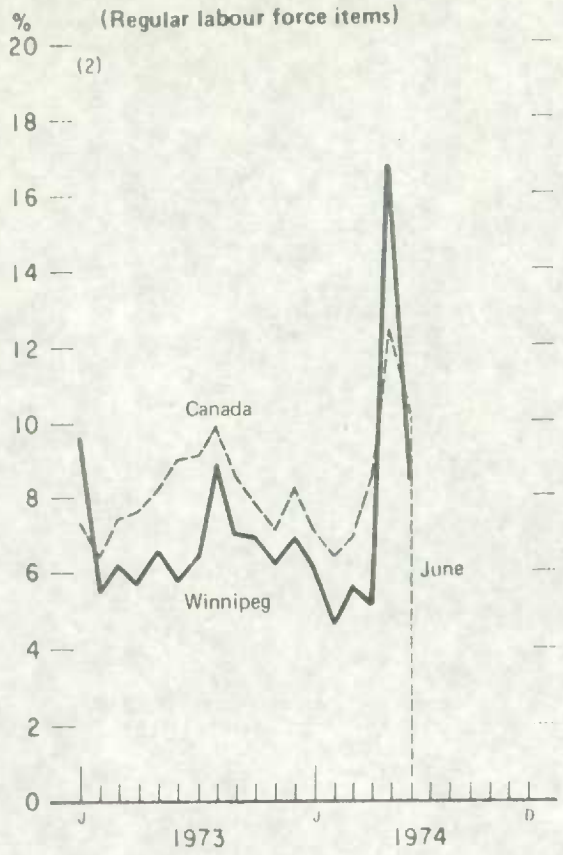
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Winnipeg Regional Office

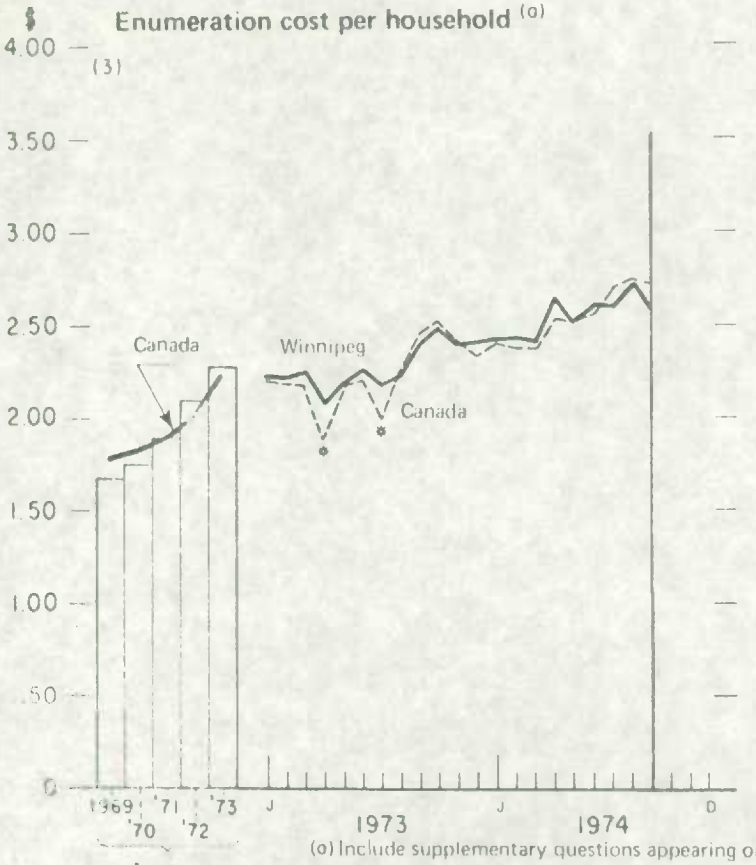
Total non-response



Per cent of rejected documents (Regular labour force items)



Enumeration cost per household (a)



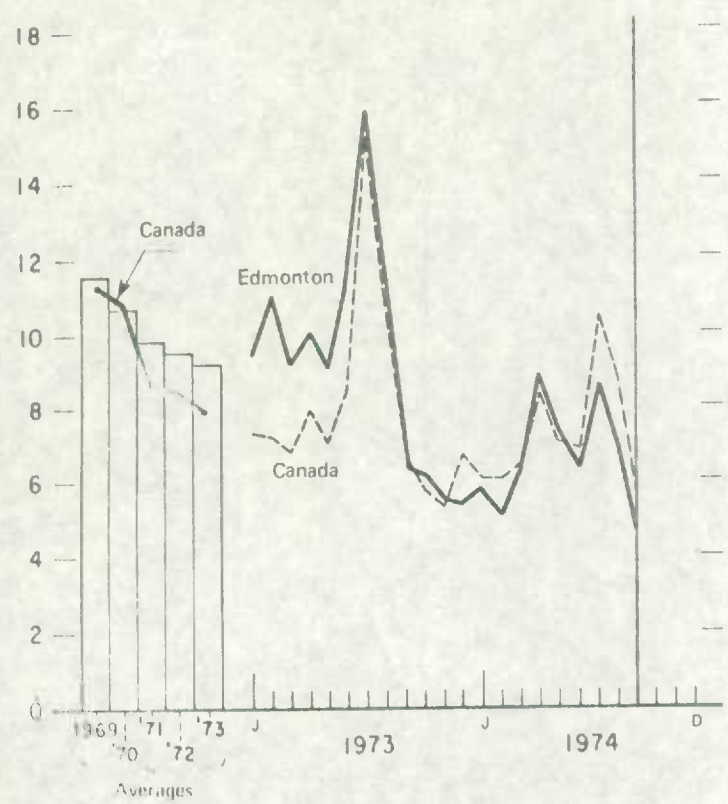
Enumeration cost per household by type of area (a)

(a) Include supplementary questions appearing on the LFS regular schedule.

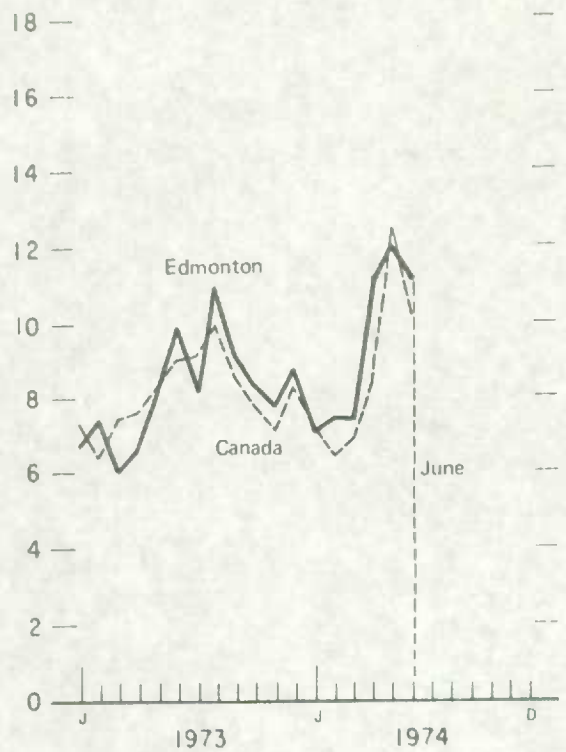
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Edmonton Regional Office

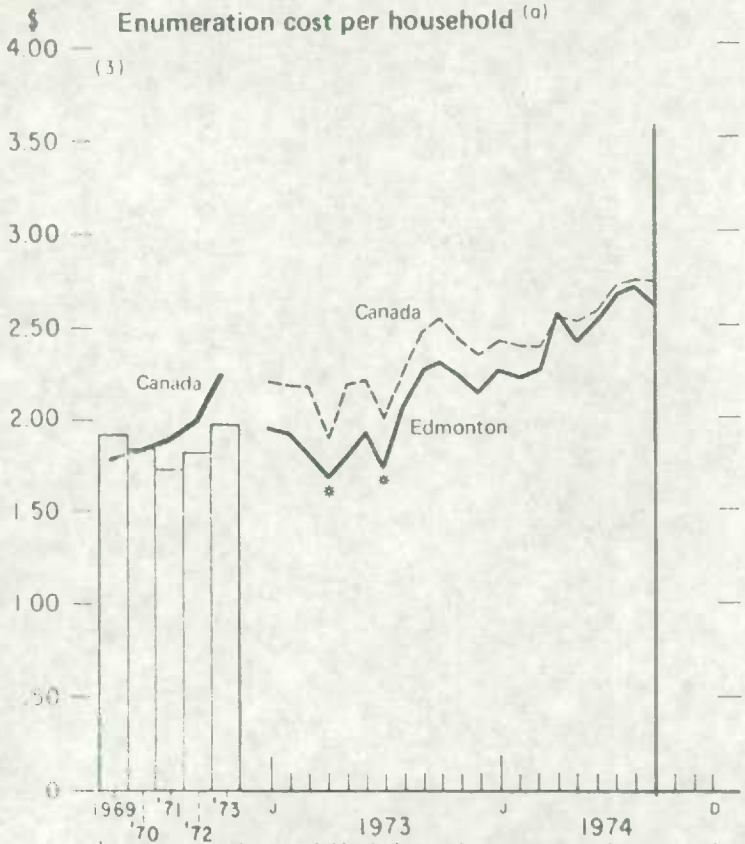
Total non-response



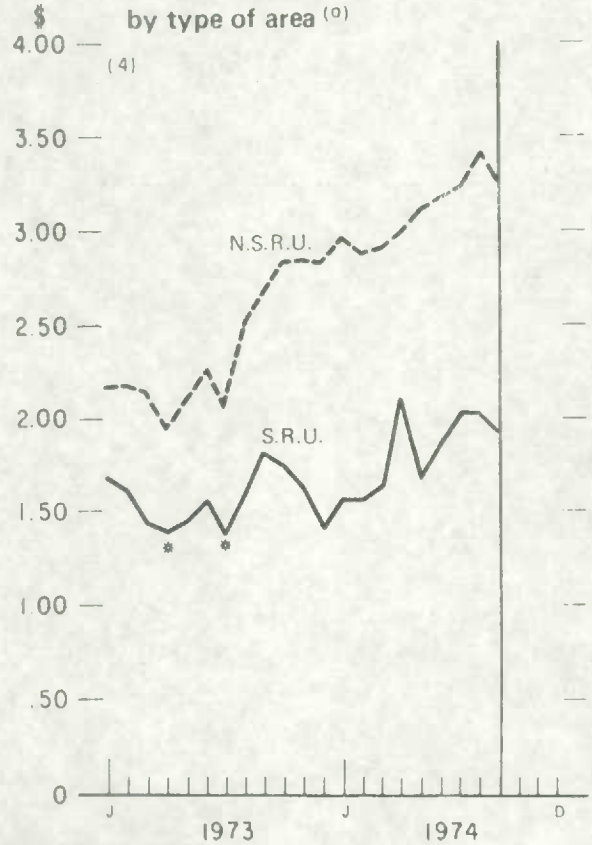
Per cent of rejected documents (Regular labour force items)



Enumeration cost per household (a)



Enumeration cost per household by type of area (a)

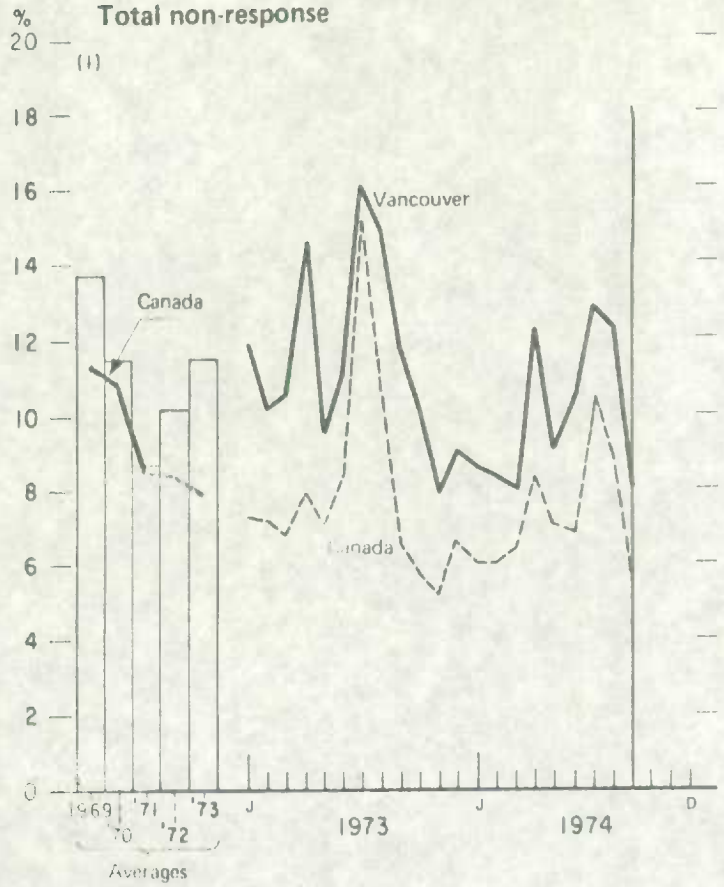


(a) Include supplementary questions appearing on the LFS regular schedule.

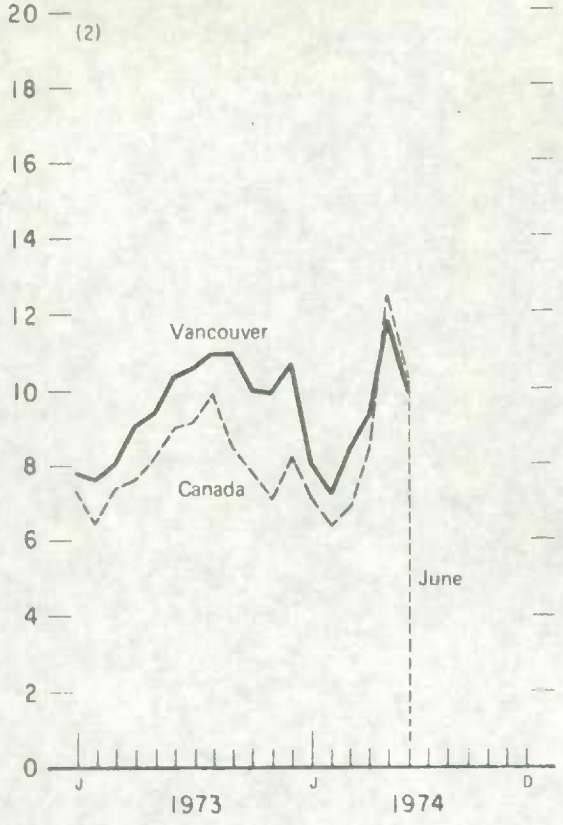
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Vancouver Regional Office

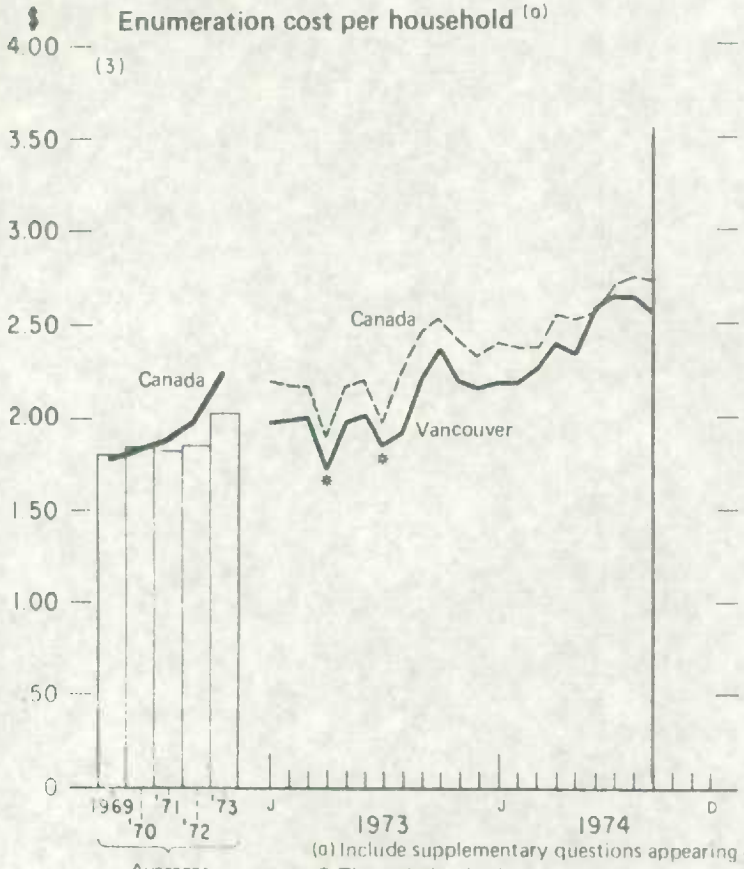
Total non-response



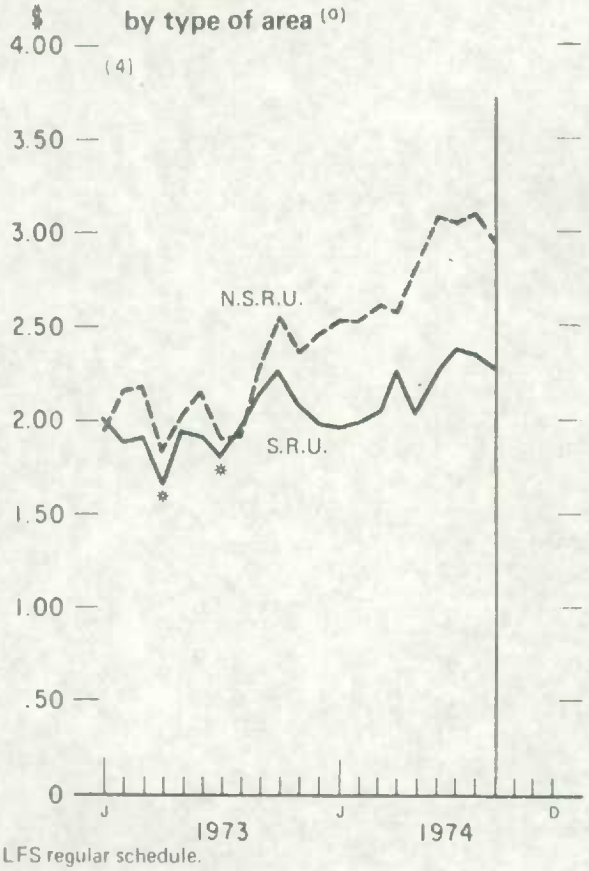
Per cent of rejected documents (Regular labour force items)



Enumeration cost per household [a]



Enumeration cost per household by type of area [a]



(a) Include supplementary questions appearing on the LFS regular schedule.

* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Non-Response Rates by Components, Canada and the Regional Offices
August and September 1973 and 1974

	1974		1973		Month-to-Month-Change		Year-to-Year Change
	Sept.	Aug.	Sept.	Aug.	Aug. to Sept. 1974	Aug. to Sept. 1973	Sept. 1973 to Sept. 1974
Total							
Canada	5.6	8.8	6.5	10.9	− 3.2	− 4.4	− 0.9
St. John's	4.4	5.7	2.4	9.7	− 1.3	− 7.3	+ 2.0
Halifax	6.2	8.7	6.1	9.8	− 2.5	− 3.7	+ 0.1
Montreal	5.2	8.4	6.6	12.1	− 3.2	− 5.5	− 1.4
Ottawa	4.2	8.6	6.6	9.2	− 4.4	− 2.6	− 2.4
Toronto	5.7	11.0	6.7	11.4	− 5.3	− 4.7	− 1.0
Winnipeg	4.3	4.7	2.2	5.2	− 0.4	− 3.0	+ 2.1
Edmonton	4.6	7.0	6.3	11.4	− 2.4	− 5.1	− 1.7
Vancouver	8.0	12.2	11.7	14.9	− 4.2	− 3.2	− 3.7
Temporarily Absent							
Canada	2.0	4.7	1.6	5.6	− 2.7	− 4.0	+ 0.4
St. John's	2.1	3.6	0.8	6.0	− 1.5	− 5.2	+ 1.3
Halifax	2.1	4.8	1.8	5.6	− 2.7	− 3.8	+ 0.3
Montreal	1.6	4.0	1.3	6.2	− 2.4	− 4.9	+ 0.3
Ottawa	1.5	5.2	1.5	4.2	− 3.7	− 2.7	−
Toronto	2.0	6.3	1.6	6.5	− 4.3	− 4.9	+ 0.4
Winnipeg	1.7	2.8	1.0	3.1	− 1.1	− 2.1	+ 0.7
Edmonton	1.9	3.3	1.5	5.3	− 1.4	− 3.8	+ 0.4
Vancouver	2.9	5.8	2.9	6.0	− 2.9	− 3.1	−
No one home							
Canada	1.4	1.7	2.1	2.3	− 0.3	− 0.2	− 0.7
St. John's	0.8	0.6	1.1	2.1	+ 0.2	− 1.0	− 0.3
Halifax	1.5	1.6	1.7	1.6	− 0.1	+ 0.1	− 0.2
Montreal	1.4	1.6	2.5	2.3	− 0.2	+ 0.2	− 1.1
Ottawa	1.2	1.8	2.5	3.0	− 0.6	− 0.5	− 1.3
Toronto	1.4	2.2	2.2	2.4	− 0.8	− 0.2	− 0.8
Winnipeg	0.8	0.8	0.4	1.2	−	− 0.8	+ 0.4
Edmonton	1.4	1.3	1.7	2.7	+ 0.1	− 1.0	− 0.3
Vancouver	1.6	2.4	3.7	3.5	− 0.8	+ 0.2	− 2.1
Refusals							
Canada	1.6	1.9	2.1	2.3	− 0.3	− 0.2	− 0.5
St. John's	1.1	1.1	0.4	1.2	−	− 0.8	+ 0.7
Halifax	1.9	1.8	2.3	2.2	+ 0.1	+ 0.1	− 0.4
Montreal	1.6	2.1	1.8	2.2	− 0.5	− 0.4	− 0.2
Ottawa	1.2	1.5	1.7	1.7	− 0.3	−	− 0.5
Toronto	1.7	2.0	1.9	1.8	− 0.3	+ 0.1	− 0.2
Winnipeg	0.9	0.8	0.6	0.7	+ 0.1	− 0.1	+ 0.3
Edmonton	0.8	1.3	2.2	2.7	− 0.5	− 0.5	− 1.4
Vancouver	3.1	3.6	4.3	4.5	− 0.5	− 0.2	− 1.2
Other							
Canada	0.6	0.5	0.7	0.7	+ 0.1	−	− 0.1
St. John's	0.4	0.4	0.1	0.4	−	− 0.3	+ 0.3
Halifax	0.7	0.5	0.3	0.4	+ 0.2	− 0.1	+ 0.4
Montreal	0.6	0.7	1.0	1.4	− 0.1	− 0.4	− 0.4
Ottawa	0.3	0.1	0.9	0.3	+ 0.2	+ 0.6	− 0.6
Toronto	0.6	0.5	1.0	0.7	+ 0.1	+ 0.3	− 0.4
Winnipeg	0.9	0.3	0.2	0.2	+ 0.6	−	+ 0.7
Edmonton	0.5	1.1	0.9	0.7	− 0.6	+ 0.2	− 0.4
Vancouver	0.4	0.4	0.8	0.9	−	− 0.1	− 0.4

Enumeration Cost per Household by Regional Office, S.R.U. and N.S.R.U.
April to September, 1973 and 1974

	1974						1973					
	Sept.	August	July	June	May	April	Sept.	August	July	June	May	April
All areas												
Canada ... $	2.72	2.73	2.70	2.56	2.51	2.53	2.46	2.24	1.98	2.20	2.17	1.89
St. John's ... $	3.33	3.32	3.26	3.04	3.01	2.61	2.71	2.50	2.10	2.50	2.59	2.17
Halifax ... $	2.64	2.59	2.57	2.32	2.41	2.48	2.29	2.10	1.89	2.02	1.98	1.74
Montreal ... $	2.81	2.88	2.81	2.45	2.69	2.67	2.66	2.41	2.07	2.30	2.36	2.00
Ottawa ... $	2.71	2.76	2.73	2.68	2.49	2.61	2.68	2.44	2.07	2.49	2.33	2.05
Toronto ... $	2.80	2.64	2.68	2.67	2.49	2.43	2.60	2.37	2.09	2.37	2.29	1.98
Winnipeg ... $	2.59	2.71	2.60	2.61	2.51	2.64	2.40	2.22	2.16	2.25	2.19	2.07
Edmonton ... $	2.60	2.69	2.65	2.53	2.40	2.54	2.24	2.06	1.72	1.91	1.78	1.66
Vancouver ... $	2.54	2.63	2.65	2.58	2.34	2.39	2.20	1.92	1.84	2.01	1.98	1.72
S.R.U.												
Canada ... $	2.35	2.34	2.33	2.17	2.16	2.34	2.32	2.09	1.85	2.06	2.04	1.78
St. John's ... $	2.75	2.57	2.69	2.38	2.35	2.54	2.17	2.20	1.85	2.27	2.36	2.13
Halifax ... $	2.13	2.22	2.19	1.94	2.10	2.20	2.01	1.88	1.89	1.80	1.80	1.55
Montreal ... $	2.39	2.37	2.18	1.92	2.17	2.41	2.52	2.21	1.88	2.13	2.23	1.86
Ottawa ... $	2.45	2.48	2.53	2.34	2.29	2.44	2.56	2.28	2.03	2.36	2.24	1.98
Toronto ... $	2.63	2.46	2.53	2.47	2.33	2.39	2.57	2.32	2.06	2.31	2.20	1.92
Winnipeg ... $	2.04	2.25	2.28	2.19	2.19	2.43	2.12	1.92	1.86	1.94	1.94	1.90
Edmonton ... $	1.92	2.01	2.04	1.86	1.68	2.10	1.81	1.60	1.37	1.55	1.44	1.39
Vancouver ... $	2.28	2.34	2.38	2.26	2.03	2.26	2.14	1.94	1.80	1.92	1.94	1.65
N.S.R.U.												
Canada ... $	3.19	3.23	3.17	3.05	2.97	2.78	2.65	2.44	2.15	2.40	2.32	2.04
St. John's ... $	3.54	3.60	3.47	3.28	3.25	2.64	2.91	2.59	2.20	2.60	2.67	2.18
Halifax ... $	2.95	2.83	2.80	2.56	2.61	2.65	2.47	2.24	2.00	2.16	2.10	1.85
Montreal ... $	3.51	3.73	3.92	3.38	3.64	3.13	2.92	2.80	2.43	2.64	2.61	2.28
Ottawa ... $	3.16	3.26	3.10	3.27	2.85	2.91	2.85	2.67	2.13	2.72	2.46	2.16
Toronto ... $	3.24	3.07	3.05	3.18	2.89	2.55	2.72	2.51	2.16	2.54	2.55	2.14
Winnipeg ... $	3.10	3.15	2.89	2.99	2.80	2.83	2.66	2.48	2.41	2.52	2.41	2.22
Edmonton ... $	3.26	3.40	3.22	3.17	3.11	2.99	2.68	2.51	2.05	2.26	2.09	1.93
Vancouver ... $	2.93	3.07	3.05	3.08	2.79	2.57	2.27	1.91	1.90	2.15	2.03	1.84

	Month-to-month Change								Year-to-year Change			
	1974				1973							
	August to Sept.	July to August	June to July	May to June	August to Sept.	July to August	June to July	May to June	Sept. 1973 to Sept. 1974	August 1973 to August 1974	July 1973 to July 1974	June 1973 to June 1974
All areas												
Canada ... $	- 0.01	+ 0.03	+ 0.14	+ 0.05	+ 0.22	+ 0.26	- 0.22	+ 0.03	+ 0.26	+ 0.49	+ 0.72	+ 0.36
St. John's ... $	+ 0.01	+ 0.06	+ 0.22	+ 0.03	+ 0.21	+ 0.40	- 0.40	- 0.09	+ 0.62	+ 0.82	+ 1.16	+ 0.54
Halifax ... $	+ 0.05	+ 0.02	+ 0.25	- 0.09	+ 0.19	+ 0.21	- 0.13	+ 0.04	+ 0.35	+ 0.49	+ 0.68	+ 0.30
Montreal ... $	- 0.07	+ 0.07	+ 0.36	- 0.24	+ 0.25	+ 0.34	- 0.23	- 0.06	+ 0.15	+ 0.47	+ 0.74	+ 0.15
Ottawa ... $	- 0.05	+ 0.03	+ 0.05	+ 0.19	+ 0.24	+ 0.37	- 0.42	+ 0.16	+ 0.03	+ 0.32	+ 0.66	+ 0.19
Toronto ... $	+ 0.16	- 0.04	+ 0.01	+ 0.18	+ 0.23	+ 0.28	- 0.28	+ 0.08	+ 0.20	+ 0.27	+ 0.59	+ 0.30
Winnipeg ... $	- 0.12	+ 0.11	- 0.01	+ 0.10	+ 0.18	+ 0.06	- 0.09	+ 0.06	+ 0.19	+ 0.49	+ 0.44	+ 0.36
Edmonton ... $	- 0.09	+ 0.04	+ 0.12	+ 0.13	+ 0.18	+ 0.34	- 0.19	+ 0.13	+ 0.36	+ 0.63	+ 0.93	+ 0.62
Vancouver ... $	- 0.09	- 0.02	+ 0.07	+ 0.24	+ 0.28	+ 0.08	- 0.17	+ 0.03	+ 0.34	+ 0.71	+ 0.81	+ 0.57
S.R.U.												
Canada ... $	+ 0.01	+ 0.01	+ 0.16	+ 0.01	+ 0.23	+ 0.24	- 0.21	+ 0.02	+ 0.03	+ 0.25	+ 0.48	+ 0.11
St. John's ... $	+ 0.18	- 0.12	+ 0.31	+ 0.03	- 0.03	+ 0.35	- 0.42	- 0.09	+ 0.58	+ 0.37	+ 0.84	+ 0.11
Halifax ... $	- 0.09	+ 0.03	+ 0.25	- 0.16	+ 0.13	- 0.01	+ 0.09	-	+ 0.12	+ 0.34	+ 0.30	+ 0.14
Montreal ... $	+ 0.02	+ 0.19	+ 0.26	- 0.25	+ 0.31	+ 0.33	- 0.25	- 0.10	- 0.13	+ 0.16	+ 0.30	- 0.21
Ottawa ... $	- 0.03	- 0.05	+ 0.19	+ 0.05	+ 0.28	+ 0.25	- 0.33	+ 0.12	- 0.11	+ 0.20	+ 0.50	- 0.02
Toronto ... $	+ 0.17	- 0.07	+ 0.06	+ 0.14	+ 0.25	+ 0.26	- 0.25	+ 0.11	+ 0.06	+ 0.14	+ 0.47	+ 0.16
Winnipeg ... $	- 0.21	- 0.03	+ 0.09	-	+ 0.20	+ 0.06	- 0.08	-	- 0.08	+ 0.33	+ 0.42	+ 0.25
Edmonton ... $	- 0.09	- 0.03	+ 0.18	+ 0.18	+ 0.21	+ 0.23	- 0.18	+ 0.11	+ 0.11	+ 0.41	+ 0.67	+ 0.31
Vancouver ... $	- 0.06	- 0.04	+ 0.12	+ 0.23	+ 0.20	+ 0.14	- 0.12	- 0.02	+ 0.14	+ 0.40	+ 0.58	+ 0.34
N.S.R.U.												
Canada ... $	- 0.04	+ 0.06	+ 0.12	+ 0.08	+ 0.21	+ 0.29	- 0.25	+ 0.08	+ 0.54	+ 0.79	+ 1.02	+ 0.65
St. John's ... $	- 0.06	+ 0.13	+ 0.19	+ 0.03	+ 0.32	+ 0.39	- 0.40	- 0.07	+ 0.63	+ 1.01	+ 1.27	+ 0.68
Halifax ... $	+ 0.12	+ 0.03	+ 0.24	- 0.05	+ 0.23	+ 0.24	- 0.16	+ 0.06	+ 0.48	+ 0.59	+ 0.80	+ 0.40
Montreal ... $	- 0.22	- 0.19	+ 0.54	- 0.26	+ 0.12	+ 0.37	- 0.21	+ 0.03	+ 0.59	+ 0.93	+ 1.49	+ 0.74
Ottawa ... $	- 0.10	+ 0.16	- 0.17	+ 0.42	+ 0.18	+ 0.54	- 0.59	+ 0.26	+ 0.31	+ 0.59	+ 0.97	+ 0.55
Toronto ... $	+ 0.17	+ 0.02	- 0.13	+ 0.29	+ 0.21	+ 0.35	- 0.38	- 0.01	+ 0.52	+ 0.56	+ 0.89	+ 0.64
Winnipeg ... $	- 0.05	+ 0.26	- 0.10	+ 0.19	+ 0.18	+ 0.07	- 0.11	+ 0.11	+ 0.44	+ 0.67	+ 0.48	+ 0.47
Edmonton ... $	- 0.14	+ 0.18	+ 0.05	+ 0.06	+ 0.17	+ 0.46	- 0.21	+ 0.17	+ 0.58	+ 0.89	+ 1.17	+ 0.91
Vancouver ... $	- 0.14	+ 0.02	- 0.03	+ 0.29	+ 0.36	+ 0.01	- 0.25	+ 0.12	+ 0.66	+ 1.16	+ 1.15	+ 0.93

RELATED TO SECTION 1D

Percentage of Rejected Documents - The Summary Table and Charts give the percentage of labour force documents requiring clerical edits due to missing or inconsistent entries in the regular labour force items.

Careless Errors - The term "careless errors" refers to omissions, poor marks and inconsistent entries on the Labour Force schedule for identification, sex, marital status, relationship to head and age as taken from the entries on the Household Record Card, plus the failure to answer item 26, "Was this person interviewed?"

RELATED TO SECTION 1E

Enumeration Cost per Household - The per household costs are calculated using the total number of households sampled for the survey in relation to the cost incurred to do the interviewing, in terms of fees paid to the interviewer (hourly rated employee) and the interviewer expenses to cover the assignment (mileage, etc.).

Interviewing refers to obtaining the information by personal visit to the household, or by telephoning the household to obtain the information, for the LF survey and for supplementary questions added to the LF document for the current month.

DEFINITIONS

RELATED TO SECTION 1A

Slippage - population slippage is defined as the percentage difference between the Census population projection, Pp (preliminary projections based on the 1971 Census) for a given month and the population estimate $\hat{P}p$ derived from the Labour Force Survey sample for the same month. It is given by

$$\frac{Pp - \hat{P}p}{Pp} \cdot 100$$

RELATED TO SECTION 1B

Total non-response - proportion of households which were not interviewed due to lack of co-operation or their unavailability to the survey interviewer.

RELATED TO SECTION 1C

Variance - There is a certain amount of error present in any estimate obtained from a sample, (due to the lack of complete information about the population). The average of the estimates, obtained from the various possible samples, is called the expected value of the estimate. If the difference between an estimate and its expected value is squared and this squared difference is averaged over all possible samples which could be selected from the sample frame, we obtain the sampling variance. The square root of the sampling variance is called the standard deviation. The coefficient of variation of an estimate is defined to be the standard deviation of the estimate divided by the estimate times 100 to convert to a percentage. If the expected value of an estimate is not equal to the true population value then the estimate is said to be biased. Among the causes of this bias are non-response, slippage and processing errors. The square of the difference between an estimate and the true population value averaged over all possible samples from the sample frame is called the mean square error. The variance estimate for a characteristic is influenced by changes in the population size, the sample size, and the frequency of the characteristic being considered. For these reasons the variance estimates should be standardized; the binomial factor is one such standardization. The binomial factor is defined to be the ratio of the variance estimate to an estimate of what the variance would be if a similar sample has been obtained through a simple random sampling procedure. The binomial factor measures the behaviour of the sample design relative to a simple random sample as far as the characteristic is concerned.

Variances in the Labour Force Survey

Introduction

Another important quality measure pertaining to the statistics is that of sampling variance, defined by the mean square deviation of statistics over all possible samples from the expected value over all possible samples which may be selected from the sample frame. Due to the well designed sampling procedure and to careful processing of the data, the bias of this statistic should be small. The estimated variances, the standard deviations, and the coefficients of variation are calculated each month for a set of characteristics. From the estimated standard deviations and the coefficients of variation confidence intervals for published statistics, ignoring the effect of non-sampling errors, may be obtained under the assumption that estimated totals are normally distributed about the true population value. Thus if it is found that an unemployed estimate possesses a coefficient of variation of 3 % then an unemployed estimate may vary 6 % (2 standard deviations) about the true population value in either direction in 95 % of the samples that could be drawn from the LFS frame.

Rough confidence intervals may be obtained from the lettered symbols given in the monthly publications (The Labour Force: Catalogue 71-001). Due to time deadlines for the release of these publications the lettered symbols are based on the average of the monthly coefficients of variation for the previous year. The lettered symbol, which indicates a range in which the coefficient of variation is expected to fall, gives the user an indication of the reliability of the estimate.

From any particular survey the obtained coefficient of variation will not necessarily fall within the range indicated by the lettered symbol found in the publication because of 1) the sampling variance of the estimated coefficient of variation and 2) the seasonal effects which are not reflected in the published lettered symbols.

Example: For an estimate of 175,000 with a coefficient of variation of 2.47 % then in 95 % of all different samples that could be selected from the sample frame, the estimate would deviate from the true population value by not more than 8,645.

The complexity of the formulas for the theoretical variance based on the multi-stage sampling procedure for the Labour Force Survey make it difficult to determine from the calculations alone if the variances are high considering the sample design or the frequency of the characteristic even if they are high for purposes of analysis. Because coefficients of variation decrease with increases in the population, the sample size and the frequency of the characteristic, the calculated variances should be compared with some standard values.

Assuming a similar number of persons were drawn at random in each province one such standard value is the corresponding random sample variance, which is a function of the population size, the sample size, and the frequency of the characteristic. The ratio of the estimated variance from the computer programs to this random sample variance or the binomial factor is calculated monthly for each characteristic.

The higher the factor th worse the sample design relative to a simple random sample as far as the characteristic is concerned. A high factor may be the result of limitations imposed by cost restrictions and not the result of a bad sample design.

High factors do indicate where further analysis should be undertaken and where there is potential for improvement in the present sample design. High variances at provincial levels are frequently attributable to one or two PSUs so that for quality studies, the analysis will often centre around studies of subprovincial contributions to the total variance. In table 1 are included the binomial factors and the coefficients of variation for several estimates.

Definitions

Sampling variance: The average of squared deviations of statistics over all possible samples from the average value of the statistics over all possible samples (neglecting the effect of non-sampling errors).

Non-sampling errors: Deviations from the true (but usually unknown) value of a statistic caused by factors other than sampling (such as non-response, slippage, coding errors).

Standard deviation: The square root of the sampling variance.

Coefficient of variation: The standard deviation expressed as a percent of the estimate of a quantity, sometimes termed percent standard deviation.

Confidence intervals: The intervals in which the unknown value of the population to be estimated from a sample may be expected to lie a given percent of the time (commonly 95 % of the time).

Binomial Factor (design effect): The ratio of the variance of a statistic as estimated from the sample considering the sample design compared with the variance of a statistic obtained in a simple random sample of the same size.

Reliability: Not really a statistical term but referring in general to the standard deviation, variance of a statistic, and confidence interval. In Table 1, the coefficient of variation is used as a measure of the reliability of estimates.

The following table presents some results of the monthly Labour Force Survey. Included are estimates, coefficients of variation and binomial factors for the characteristics Employed Unemployed and "In Labour Force".

Table 1: Estimates, Their Coefficients of Variation and Their Binomial Factors for Canada and by Province for September, 1974

	Population Estimate	Employed				Unemployed				In Labour Force			
		Estimate	C.V.	Symbol	B.F.	Estimate	C.V.	Symbol	B.F.	Estimate	C.V.	Symbol	B.F.
Canada	16,665	9,218	0.34	A	1.03	431	2.79	D	1.52	9,649	0.31	A	0.97
Nfld.	381	164	2.24	C	1.88	23	7.79	E	1.98	187	1.92	C	1.77
P.E.I.	82	43	3.27	D	1.43	1	33.76	J	2.36	45	2.35	C	0.78
N.S.	572	283	1.45	C	1.55	16	8.54	E	1.56	299	1.29	C	1.37
N.B.	480	237	1.51	C	1.44	17	8.96	E	1.84	253	1.40	C	1.43
Que.	4,643	2,459	0.71	B	0.99	149	5.14	E	1.52	2,608	0.65	B	0.95
Ont.	6,091	3,514	0.55	A	0.91	135	5.44	E	1.47	3,649	0.50	A	0.84
Man.	726	412	1.24	C	0.88	11	14.51	F	1.39	424	1.22	C	0.91
Sask.	657	359	1.91	C	1.93	7	18.14	G	1.41	366	1.91	C	2.03
Alta.	1,225	733	1.16	C	1.49	13	15.17	F	1.78	746	1.08	C	1.35
B.C.	1,807	1,015	0.97	B	1.16	58	6.88	E	1.51	1,073	0.84	B	0.99

C.V. - Coefficient of Variation
B.F. - Binomial Factor
Estimates in Thousands

Alphabetic Symbol	Percent of Estimates at One Standard Deviation
A	0.0 - 0.5%
B	0.6 - 1.0%
C	1.1 - 2.5%
D	2.6 - 5.0%
E	5.1 - 10.0%
F	10.1 - 16.5%
G	16.6 - 25.0%
H	25.1 - 33.3%
J	33.4 - 50.0%
K	50.1 +

Analysis of Sub-Provincial Contributions to the Variance

On the basis of the binomial factor corresponding to the estimated total of a characteristic, the decision is made whether to study sub-provincial contributions to the variance of this characteristic or not. A high binomial factor or a substantial increase in the factor over the corresponding factors for the previous months indicate that a study should be carried out to determine the origins of the high variance or increase in the factor.

A portion of the provincial variance is contributed by each subunit or pair of PSUs and these contributions tallied over all subunits and pairs of PSUs yield the variance estimate of the characteristic total at the provincial level. The purpose of the analysis of subprovincial contributions to the variance is to determine those subunits or PSUs where the portion of the variance contributed is excessively large relative to a desired portion based on the population and sampling ratio in the sub-provincial area. Such "problem areas" are determined by a statistical test of hypothesis.

The results of the analysis for those characteristics and provinces, as determined by their binomial factors, are presented in Tables 2a, 2b, etc. The percentage of the variance contributed is simply the contribution by the pair of PSUs or subunit expressed as a percentage of the provincial variance. The desired percentage contribution is the ratio of a weighted population estimate of the subunit or stratum to a weighted total population estimate of the province expressed as a percentage. The weights (a weight of 1 for NSRU PSUs and a weight of 1.5 for SRU subunits) adjust the population estimates to take into account the difference in sampling ratios between NSRU and SRU parts of the province.

Adjusted Binomial Factors

The binomial factor or the ratio of the variance of a Labour Force estimate to the variance of this estimate if similar results had been obtained from a simple random sample is a measure of the quality of the variances of Labour Force estimates. For those estimates where the binomial factor is large, either absolutely or relative to previous months, a detailed study of the subprovincial contributions to the variance is carried out. This analysis essentially separates the subprovincial areas into two groups:

1) Those strata and subunits which contributed significantly in excess of the desired contribution by the area.

and 2) Those strata and subunits which contributed more or less the desired contribution by the area.

The question may arise as to what the binomial factor would have been if the strata or subunits in (1) contributed more or less the desired contribution, based on the estimated population. The adjustment which is proposed and which is being tried out for analysis is as follows:

(i) The variance remains unchanged in (2)

(ii) The variance is reduced in (1) and the combined variance in (1) and (2) is reduced so that the contribution in (1) and (2) are in direct proportion to weighted sample takes.

A more detailed write-up and algebraic development is to be presented in an LFSP series report.

The adjusted binomial factor reduces the binomial factor to a value it would have been had the variance contribution by the areas identified by (1) contributed in the same proportion as the areas identified in (2). If this adjusted binomial factor has approximately the same value as previous binomial factors in which a subprovincial analysis was not deemed necessary, then the subprovincial areas identified in (1) were the cause of the high variance. If the adjusted binomial factor is still in excess of previous binomial factors then the subprovincial areas identified in (1) although part of the cause of the high variance were not the only causes of a high variance; other causes might be a general clustering of the characteristic throughout the whole province, gradual deterioration of the stratification or other reasons. These binomial factors do possess a sampling variance and this results in rigorous interpretations of these binomial factors being impossible to make.

In the quality report variance, write-up, the adjusted binomial factors will be calculated to determine whether or not the subprovincial areas identified appear to be the main cause for the high variance.

Analysis of Subprovincial Contributions to the Variances of Provincial Estimates

For the estimate of Unemployed in Newfoundland, the binomial factor with a value of 1.98 is higher than the corresponding binomial factor for the September 1973 survey and higher than the corresponding binomial factors in other provinces for the current survey. A detailed analysis of subprovincial contributions to the variance yielded the following areas in which a significant discrepancy between the desired and actual contributions was detected.

Table 2a) Actual vs. Desired Contribution to the Variance of Unemployed in Nfld. by PSUs and Subunits

Identification	Location	Percentage of the Variance Contributed	Desired Percentage Contribution
00021 & 00022	- along the south coast of Nfld.	28.2	2.5
01108	- a subunit in St. John's	18.5	1.1
05101	- Goose Bay	5.2	1.7
All Other PSUs and Subunits	-	48.1	94.7

The adjusted binomial factor with a value of 1.01 indicates that the high estimate of the sampling variance is accounted for by the above identified subprovincial areas.

In the province of Nova Scotia, the binomial factor for the estimate of Employed has a value of 1.55 which is considerably higher than the binomial factors for both the August 1974 and the September 1973 surveys. The results of the subprovincial analysis of contributions to the variance estimate resulted in the following table.

Table 2b) Actual vs. Desired Contribution to the Variance of Employed in Nova Scotia by PSUs and Subunits

Identification	Location	Percentage of the Variance Contributed	Desired Percentage Contribution
22061 & 22069	- in the southwestern quarter of Nova Scotia	20.2	3.6
23003 & 23009	- in the Annapolis Valley area	9.9	2.8
20101	- a subunit in Sydney-Glace Bay	5.5	1.4
20109	- a subunit in Sydney-Glace Bay	5.2	1.3
20901 - 20902	- a pair of special area PSUs	5.1	1.1
All Other PSUs and Subunits	-	54.1	89.8

For this estimate the adjusted binomial factor has a value of 0.93. It appears that there is a resultant over-correction of the contribution by these subprovincial areas in the adjusted binomial factor calculations.

For the province of New Brunswick, the binomial factor for the estimate of Unemployed at a value of 1.84 indicates that a detailed analysis of the subprovincial contributions to the variance should be carried out. The results are presented in the following table.

Table 2c) Actual vs. Desired Contribution to the Variance Of Unemployed in New Brunswick by PSUs and Subunits

Identification	Location	Percentage of the Variance Contributed	Desired Percentage Contribution
30002 & 30004	- in the southeast corner of N.B.	13.5	4.1
33022 & 33027	- in the northeast portion of N.B.	19.2	3.6
30103	- a subunit in Moncton	8.3	1.2
31104	- a subunit in Saint John	8.3	2.1
All Other PSUs and Subunits	-	50.7	89.0

The adjusted binomial factor corresponding to the estimated total of Unemployed persons in New Brunswick has a value of 1.05. This indicates that the above subprovincial areas are mainly responsible for the high estimate of the sampling variability for the estimate of Unemployed.

For the estimate of Unemployed in Saskatchewan, the binomial factor has a value of 1.41 which is considerably higher than the value of 0.82 for this binomial factor for the August survey. An analysis of the subprovincial contributions to the estimated variance of the estimated provincial total of Unemployed did not reveal any subprovincial areas in which the actual contribution significantly exceeded the desired contribution to the variance. The high variance appears to have been spread uniformly over all areas of the province.

The binomial factor corresponding to the estimate of Unemployed in the province of Alberta has a value of 1.78 which is considerably higher than the values of the corresponding factor for both the August 1974 and September 1973 surveys. The analysis of subprovincial contributions to the variance revealed one pair of PSUs in which the actual contribution to the variance significantly exceeded the desired contribution to the variance.

Table 2d) Actual vs. Desired Contribution to the Variance of Unemployed in Alberta by PSUs and Subunits

Identification	Location	Percentage of the Variance Contributed	Desired Percentage Contribution
86023 & 86028	- in the Alberta Peace River Region on the northwestern part of the province	6.7	1.6
All Other PSUs and Subunits	-	93.3	98.4

Since the adjusted binomial factor has a value of 1.69, the above subprovincial area is not entirely responsible for the high variance estimate for this characteristic total but rather the high variance is distributed over the remaining portions of the province.

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NON-RESPONSE IN THE CANADIAN LABOUR FORCE SURVEY

Non-Response in the Canadian Labour Force Survey

I. Introduction

There are a number of ways of measuring the quality of the Labour Force Survey. One such method is the calculation of non-response rates. The sampling variability of weighted up statistics is inversely proportional to the response rate so that published figures based on a sample with only 80% response rate (20% non-response rate) will have 90/80 or 1.125 times the sampling variability of corresponding figures based on the same sample with 90% response rate (or 10% non-response rate). Together with the increase in sampling variability caused by higher non-response rates there is also a possible increase in the mean square error as a result of the non-response bias. If the characteristics of non-respondents are significantly different from those of respondents, then the higher the non-response rate, the greater the contribution to the mean square error by the non-response bias. The extent of this bias is unknown at present but must be obtained from outside sources of similar data or from special experiments on non-response characteristics.

Non-response follows a marked pattern seasonally, generally peaking in the summer months and declining in the spring and autumn (Graph G1). The seasonality effect is caused by the "temporarily absent[1]" component which increases sharply during the summer months when people are generally away on vacation (Graph G1).

In this report, non-response data are summarized at the economic region, regional office and Canada levels in the form of tables and graphs. For Canada and each of the regional offices, non-response rate are given for each of the four components[1] of non-response as well as for total non-response. Furthermore, month-to-month and year to year changes in non-response rates are also included. At the economic region level, global non-response rates and the actual and expected percentage contributions[1] to the total non-response of the regional office are specified for every economic region within each regional office. The line graphs indicate the trends in non-response rates over the current year and the previous two years.

II. Monthly Meeting on Non-Response

A meeting on non-response with J.R. Norris and F.T. Newton, Household Surveys Development Staff and E.T. McLead, Field Division, is held every month to discuss the more pronounced movements in the current non-response data. The points covered during this meeting are incorporated in the analysis given in the next section.

1. See definitions in appendix 10.

III Analysis

A. At the Canada Level

The overall non-response rate for the Canada level decreased from 8.8% in August to 5.6% in September. This decrease was smaller than the one recorded between the same two months one year ago. The decrease in the T.A. component was mainly responsible for the decrease in the overall non-response rate this year.

Compared with last year's September non-response rate (6.5%), this year's rate was lower. This year's lower rate was attributed to decreases in the N1, N2 and "other" components.

As was the case in August, a number of households were recorded at the N6 component level (households not contacted for the current Labour Force Survey because of overlap with the Revised Labour Force Survey) which has been added to the "other" component of non-response. Again this month, these new households were located in the St. John's, Halifax and Montreal Regional Offices; however, there was over twice as many N6 households in the September survey than in the August survey.

B. At the Regional Office Level

1. St. John's Regional Office

The overall non-response rate for the St. John's Regional Office decreased from 5.7% in August to 4.4% in September. This decrease was much smaller than the one recorded between August and September of last year. The month to month decrease in the overall non-response rate this year was due to the decrease in the T.A. component.

Compared with last year's September non-response rate (2.4%), this year's rate was higher. Increases in all components except the N1 caused this year's higher non-response rate.

As noted at the Canada level, a number of N6-type households were found in the St. John's Regional Office. In all, there were 6 of these households of which 3 were found in E.R. 01, 2 in E.R. 03 and 1 in E.R. 04.

2. Halifax Regional Office

The overall non-response rate for the Halifax Regional Office decreased from 8.7% in August to 6.2% in September. This decrease was smaller than the one recorded for the same two months one year ago. The decrease in the T.A. component was mainly responsible for the lower overall non-response rate this year.

The September non-response rate this year was slightly higher than last year's rate of 6.1%. From September 1973 to September 1974, increases occurred in the T.A. and "other" components and decreases were noted in the N1 and N2 components.

At the economic region level, the refusal rate in E.R. 31 (Saint John area) continues to be high. The refusal rates for this economic region over the past 6 months are given below:

Refusal Rates

Economic Region	April	May	June	July	August	September
31	2.2%	3.1%	4.7%	4.6%	3.8%	4.4%

A concerted effort to reduce the refusal rate in this economic region should be made.

3. Montreal Regional Office

The overall non-response rate for the Montreal Regional Office decreased from 8.4% in August to 5.2% in September. This decrease was smaller than the one exhibited over the same period one year ago. All components of non-response showed month to month decreases this year with the T.A. component exhibiting the largest decrease.

Compared with last year's September non-response rate (6.6%), this year's rate was lower. The decrease in the N1 component was mainly responsible for this year's lower non-response rate.

At the economic region level, the most notable difference between the actual and expected contributions to non-response was noted in economic region 47 (Metropolitan area of Montreal). The percentage contribution made by each of the four non-response

components to the total non-response in this E.R. are given below:

E.R. 47

	(%)
T.A.	27.7
N1	26.6
N2	33.5
Other	12.2

It is evident that the major contribution was made by the N2 (refusals) component. It is interesting to note that E.R. 47 contained approximately 44% of all households sampled in the Montreal Regional Office this month, yet it also contained 60.0% of all the N2 households. However, it has been noted that this economic region has held a fairly high refusal rate over the last few months, but there has been a steady downward trend as shown below:

Refusal Rates

Economic Region	May	June	July	August	September
47	3.5%	3.3%	3.1%	2.6%	2.2%

4. Ottawa Regional Office

The non-response rate for the Ottawa Regional Office decreased from 8.6% in August to 4.2% in September. This decrease was much larger than the one recorded from August to September 1973. The decrease of 3.7% exhibited by the T.A. component mainly accounted for the month to month decrease in the overall non-response change this year.

Compared with the non-response rate (6.6%) in September 1973, this year's September rate was lower. The lower rate this year was attributed to decreases in the N1, N2 and "other" components.

The N1 rate for the Ottawa Regional Office has steadily decreased over the last 6 months as shown below:

April	May	June	July	August	September
3.2%	3.0%	2.1%	2.4%	1.8%	1.2%

The people responsible for this reduction should be commended for their great effort in reducing the "No one at home" rate.

5. Toronto Regional Office

The overall non-response rate for the Toronto Regional Office decreased from 11.0% in August to 5.7% in September. This decrease was larger than the one recorded over the same period last year. The decrease in the overall non-response rate this year was mainly attributed to the decrease in the T.A. component.

Compared with the non-response rate (6.7%) in September 1973, this year's rate was lower. The N1, N2 and "other" components accounted for the year to year decrease in the overall non-response rate.

From table 6(b), two of the economic regions where the actual contributions exceeded the expected contributions to non-response were E.R. 52 (Metropolitan Toronto and surrounding area) and E.R. 54 (London, Woodstock, St. Thomas area). The percentage contributions by each of the four components to the total non-response of these economic regions are given below:

E.R. 52	(%)	E.R. 54	(%)
T.A.	22.2	T.A.	48.2
N1	27.3	N1	14.8
N2	36.9	N2	33.3
Other	13.6	Other	3.7

Major contributions to non-response in these two economic regions were made by refusals(N2). These refusal rates continued to remain high this month but a marked improvement has been exhibited compared to the last few months as shown below:

Refusal Rates

Economic Region	June	July	August	September
52	3.2%	2.8%	2.6%	2.4%
54	3.2%	3.4%	3.4%	2.9%

6. Winnipeg Regional Office

The overall non-response rate for the Winnipeg Regional Office decreased from 4.7% in August to 4.3% in September. This decrease was much smaller than the one recorded for the same two months one year ago. The decrease in the T.A. component accounted for the month to month decrease in the overall non-response rate this year.

Compared with the non-response rate (2.2%) in September 1973, this year's September rate was higher. All components of non-response exhibited increases.

From table 7(b), the actual contribution to the total non-response for exceeded the expected contribution in economic region 71. The percentage contributions, at the component level, to the total non-response of this E.R. are given below:

E.R. 71

	(%)
T.A.	25.0
N1	3.1
N2	9.4
Other	62.5

It is evident that the major contribution was made by the "other" component. This high contribution was due to the fact that LFS documents for 20 households were lost in transit and were not received by the regional office.

7. Edmonton Regional Office

The overall non-response rate for the Edmonton Regional Office decreased from 7.0% in August to 4.6% in September. This decrease was smaller than the one recorded from August to September 1973. The decrease in the overall month to month change in non-response this year was mainly attributed to decreases in the T.A., N2 and "other" components.

Compared with last year's September non-response rate (6.3%), this year's September rate was lower. This year's lower rate was attributed to decreases in the N1, N2 and "other" components.

At the economic region level, the most notable difference between the actual and expected contributions to non-response was recorded in E.R. 82 (Calgary and surrounding area). The percentage contribution made by each of the four non-response components to the total non-response of this E.R. are given below:

E.R. 82

	(%)
T.A.	34.8
N1	28.8
N2	19.7
Other	16.7

The major contributions to the overall non-response rate were made by the T.A. and N1 components. Furthermore, the loss in the mail of Labour Force documents for eleven households also contributed to the overall non-response of E.R. 82.

8. Vancouver Regional Office

The overall non-response rate for the Vancouver Regional Office decreased from 12.2% in August to 8.0% in September. This decrease was larger than the one exhibited between August and September of last year. This year's month to month decrease in the overall non-response rate was due to decreases in the T.A., N1 and N2 components.

Compared with the non-response rate (11.7%) in September 1973, this year's September rate was lower. This year's lower rate was attributed to decreases in the N1, N2 and "other" components.

The refusal rate in economic region 94 decreased from 4.5% in August to 3.8% in September. While this N2 rate continues to be high, the September survey marks the first time since February 1974 that the refusal rate was below 4.0%. Furthermore this E.R. contained 52.6% of all sampled households in the Vancouver Regional Office; however 64.0% of all refusal households were located in this area.

It has been noted that E.R. 95 has also exhibited relatively high refusal rates over the last 6 months. The refusal rates for E. R. 94 and E.R. 95 are given below:

Refusal Rates

Economic Region	April	May	June	July	August	September
94	5.1%	5.1%	5.0%	4.6%	4.5%	3.8%
95	3.3%	3.5%	3.5%	2.9%	3.5%	2.9%

CANADA

September, 1974

Table 1(a)

Month to Month and Year to Year Changes in the Non-Response Rates

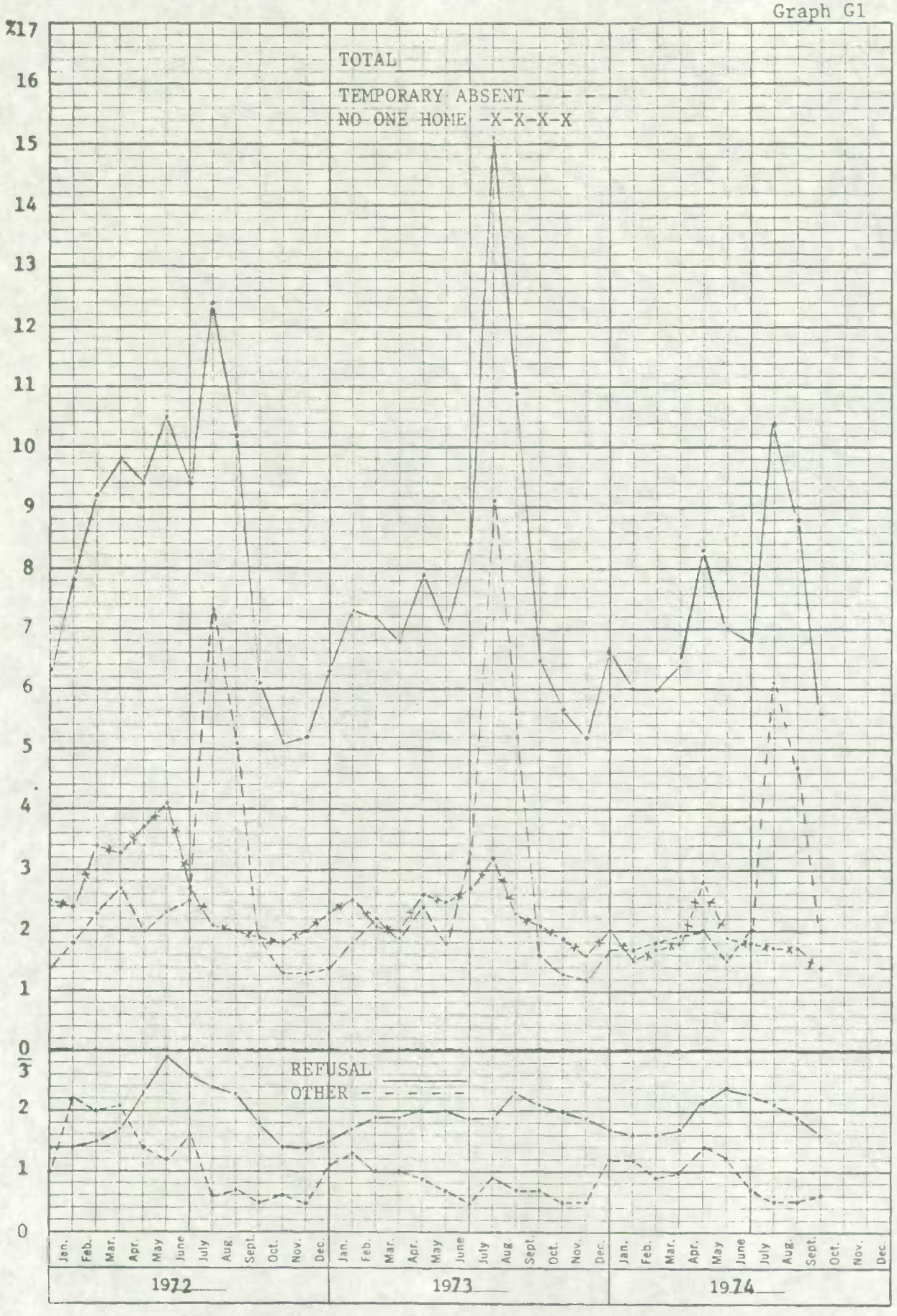
Non-Response Component	Non-Response Rates		Aug. 1974 to Sep. 1974	Non-Response Rates		Aug. 1973 to Sep. 1973	Sep. 1973 to Sep. 1974
	Sep. 1974 (%)	Aug. 1974 (%)	(%)	Sep. 1973 (%)	Aug. 1973 (%)	(%)	(%)
Overall	5.6	8.8	-3.2	6.5	10.9	-4.4	-0.9
T.A.	2.0	4.7	-2.7	1.6	5.6	-4.0	+0.4
N.1	1.4	1.7	-0.3	2.1	2.3	-0.2	-0.7
N.2	1.6	1.9	-0.3	2.1	2.3	-0.2	-0.5
Other	0.6	0.5	+0.1	0.7	0.7	-	-0.1

Table 1(b)

Non-Response Data at the Regional Office Level

Regional Office	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the Canada Level	Expected Percentage Contribution to Total Non-Response at the Canada Level
St. John's	1,644	4.4	3.8	4.8
Halifax	5,686	6.2	18.5	16.5
Montreal	6,500	5.2	17.8	18.9
Ottawa	2,155	4.2	4.7	6.2
Toronto	7,289	5.7	21.9	21.2
Winnipeg	3,191	4.3	7.1	9.3
Edmonton	3,948	4.6	9.5	11.5
Vancouver	3,994	8.0	16.7	11.6

Graph G1



ST. JOHN'S REGIONAL OFFICE

September, 1974

Table 2(a)

Month to Month and Year to Year Changes in the Non-Response Rates

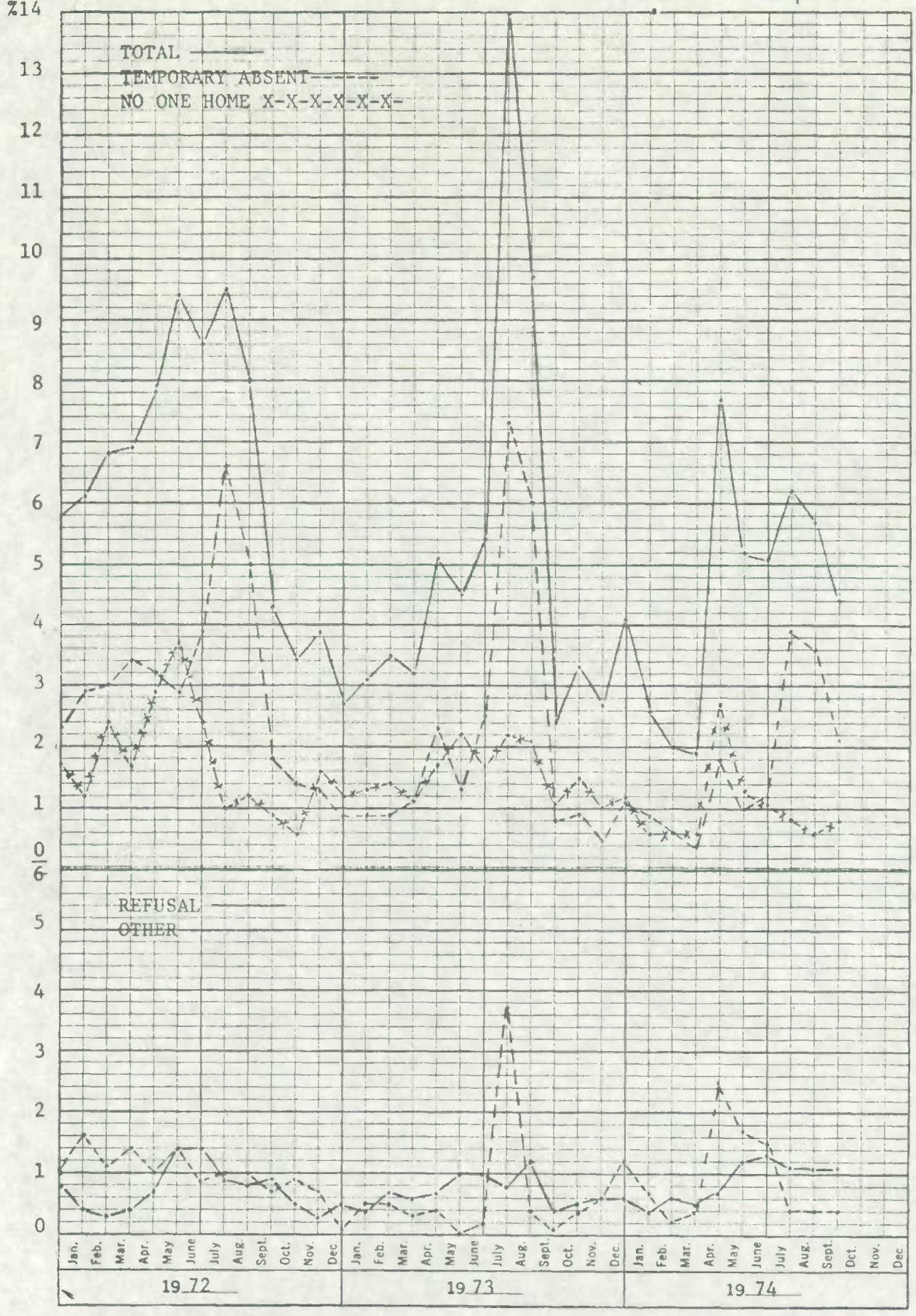
Non-Response Component	Non-Response Rates		Aug. 1974 to Sep. 1974 (%)	Non-Response Rates		Aug. 1973 to Sep. 1973 (%)	Sep. 1973 to Sep. 1974 (%)
	Sep. 1974 (%)	Aug. 1974 (%)		Sep. 1973 (%)	Aug. 1973 (%)		
Overall	4.4	5.7	-1.3	2.4	9.7	-7.3	+2.0
T.A.	2.1	3.6	-1.5	0.8	6.0	-5.2	+1.3
N.1	0.8	0.6	+0.2	1.1	2.1	-1.0	-0.3
N.2	1.1	1.1	-	0.4	1.2	-0.8	+0.7
Other	0.4	0.4	-	0.1	0.4	-0.3	+0.3

Table 2(b)

Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
00	248	4.4	15.3	15.1
01	658	4.3	38.9	40.0
02	145	4.8	9.7	8.8
03	289	5.9	23.6	17.6
04	283	2.5	9.7	17.2
05	21	9.5	2.8	1.3

Graph G2



HALIFAX REGIONAL OFFICE

September, 1974

Table 3(a)

Month to Month and Year to Year Changes in the Non-Response Rates

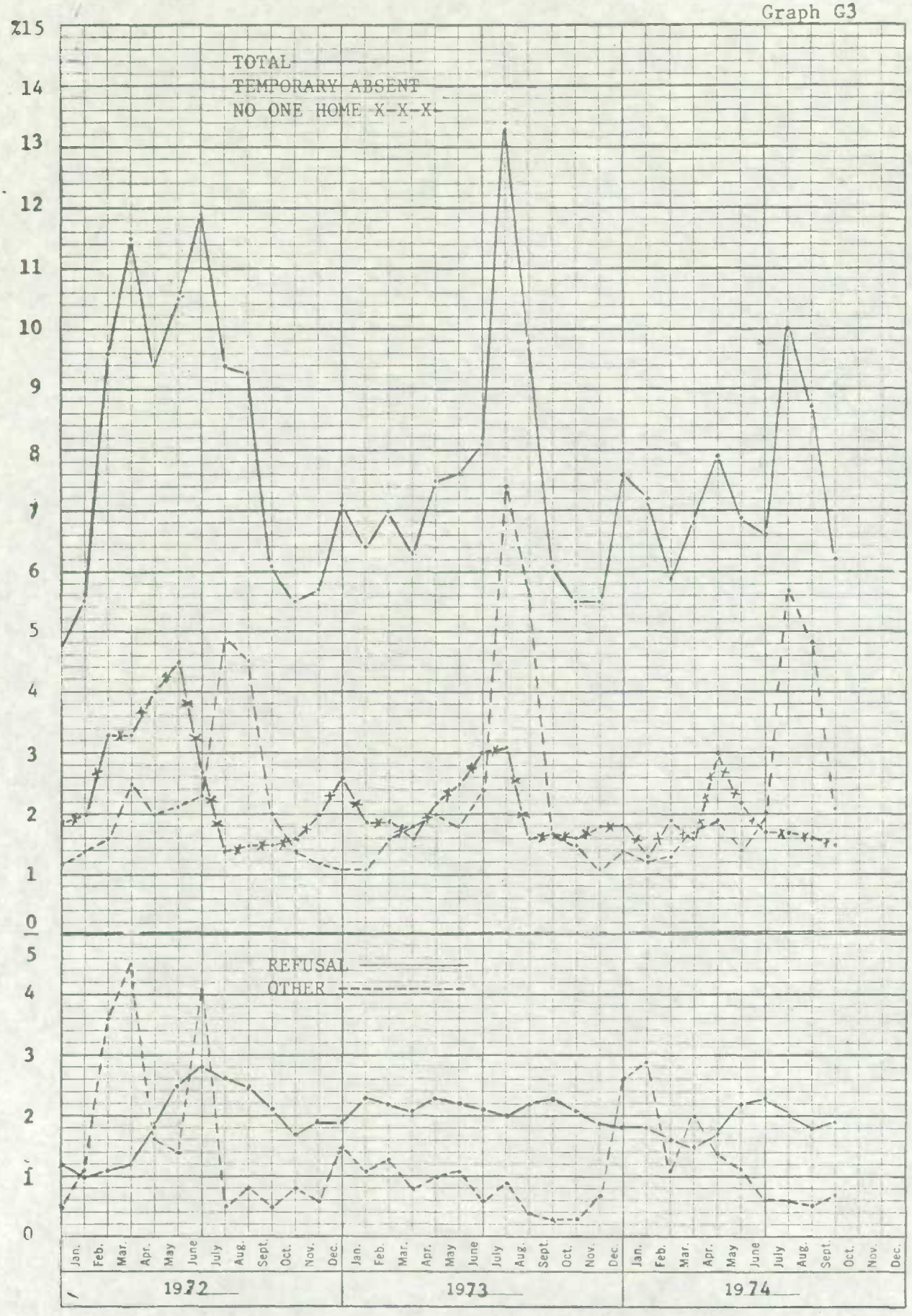
Non-Response Component	Non-Response Rates		Aug. 1974 to Sep. 1974	Non-Response Rates		Aug. 1973 to Sep. 1973	Sep. 1973 to Sep. 1974
	Sep. 1974 (%)	Aug. 1974 (%)	(%)	Sep. 1973 (%)	Aug. 1973 (%)	(%)	(%)
Overall	6.2	8.7	-2.5	6.1	9.8	-3.7	+0.1
T.A.	2.1	4.8	-2.7	1.8	5.6	-3.8	+0.3
N.1	1.5	1.6	-0.1	1.7	1.6	+0.1	-0.2
N.2	1.9	1.8	+0.1	2.3	2.2	+0.1	-0.4
Other	0.7	0.5	+0.2	0.3	0.4	-0.1	+0.4

Table 3(b)

Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
10	403	4.2	4.8	7.1
20	502	8.2	11.6	8.8
21	589	6.5	10.7	10.3
22	1,376	6.3	24.6	24.2
23	475	6.1	8.2	8.4
30	487	7.0	9.6	8.6
31	589	10.4	17.2	10.4
32	690	4.2	8.2	12.1
33	575	3.1	5.1	10.1

Graph G3



MONTREAL REGIONAL OFFICE

September, 1974

Table 4(a)

Month to Month and Year to Year Changes in the Non-Response Rates

Non-Response Component	Non-Response Rates		Aug. 1974 to Sep. 1974	Non-Response Rates		Aug. 1973 to Sep. 1973	Sep. 1973 to Sep. 1974
	Sep. 1974 (%)	Aug. 1974 (%)	(%)	Sep. 1973 (%)	Aug. 1973 (%)	(%)	(%)
Overall	5.2	8.4	-3.2	6.6	12.1	-5.5	-1.4
T.A.	1.6	4.0	-2.4	1.3	6.2	-4.9	+0.3
N.1	1.4	1.6	-0.2	2.5	2.3	+0.2	-1.1
N.2	1.6	2.1	-0.5	1.8	2.2	-0.4	-0.2
Other	0.6	0.7	-0.1	1.0	1.4	-0.4	-0.4

Table 4(b)

Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
40	343	5.5	5.6	5.3
41	402	2.0	2.4	6.2
42	202	4.0	2.4	3.1
43	1,004	4.1	12.1	15.4
44	526	4.9	7.6	8.1
45	661	3.8	7.3	10.2
46	513	4.9	7.3	7.9
47	2,849	6.6	55.3	43.8

OTTAWA REGIONAL OFFICE September, 1974

Table 5(a)

Month to Month and Year to Year Changes in the Non-Response Rates

Non-Response Component	Non-Response Rates		Aug. 1974 to Sep. 1974	Non-Response Rates		Aug. 1973 to Sep. 1973	Sep. 1973 to Sep. 1974
	Sep. 1974 (%)	Aug. 1974 (%)	(%)	Sep. 1973 (%)	Aug. 1973 (%)	(%)	(%)
Overall	4.2	8.6	-4.4	6.6	9.2	-2.6	-2.4
T.A.	1.5	5.2	-3.7	1.5	4.2	-2.7	-
N.1	1.2	1.8	-0.6	2.5	3.0	-0.5	-1.3
N.2	1.2	1.5	-0.3	1.7	1.7	-	-0.5
Other	0.3	0.1	+0.2	0.9	0.3	+0.6	-0.6

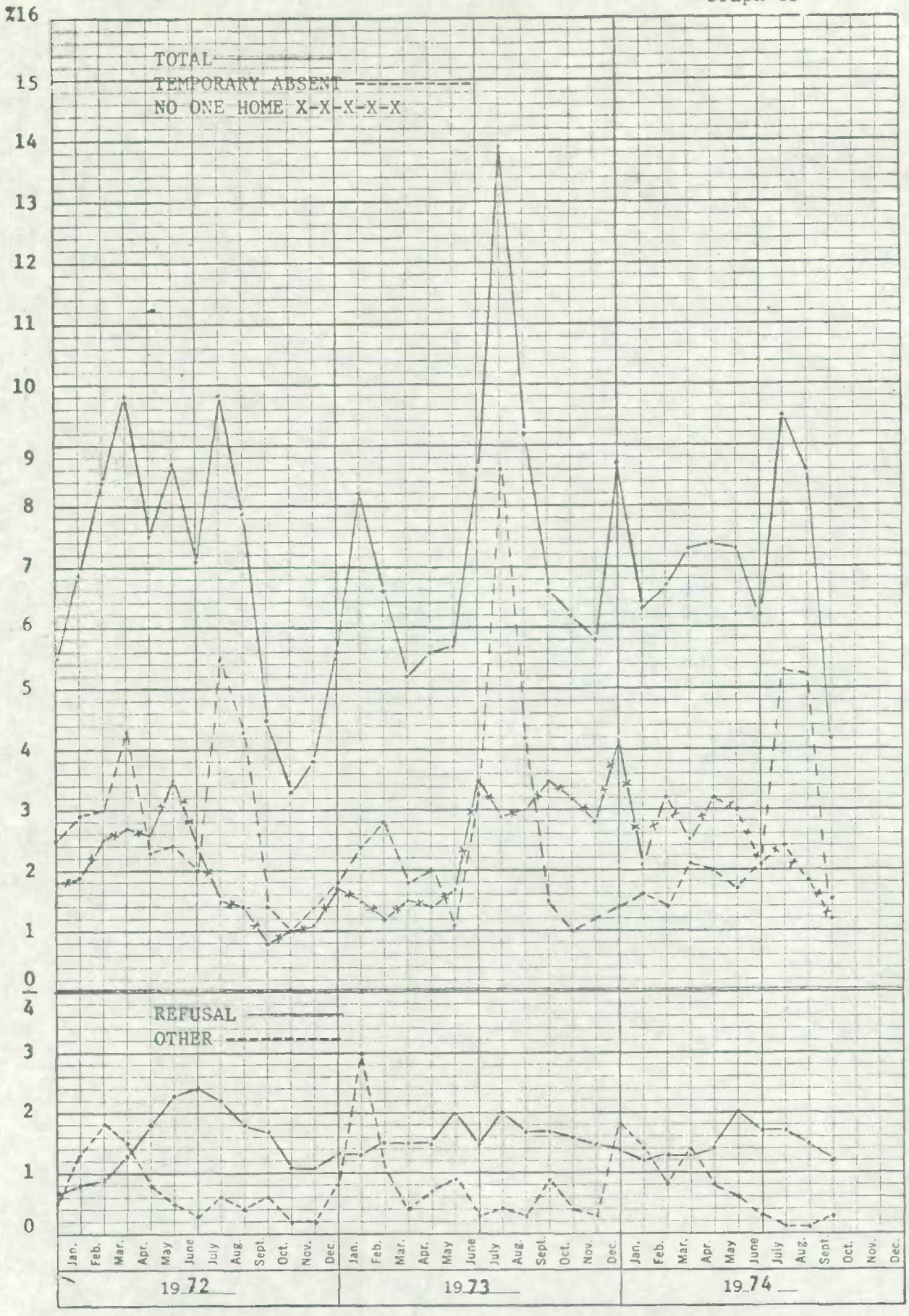
Table 5(b)

Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
40	18	0.0	0.0	0.8
48	243	4.5	12.1	11.3
49	136	5.1	7.7	6.3
50	1,130	4.2	52.7	52.4
58	628	4.0	27.5	29.2

Ottawa Regional Office

Graph G5



TORONTO REGIONAL OFFICE

September, 1974

Table 6(a)

Month to Month and Year to Year Changes in the Non-Response Rates

Non-Response Component	Non-Response Rates		Aug. 1974 to Sep. 1974	Non-Response Rates		Aug. 1973 to Sep. 1973	Sep. 1973 to Sep. 1974
	Sep. 1974 (%)	Aug. 1974 (%)	(%)	Sep. 1973 (%)	Aug. 1973 (%)	(%)	(%)
Overall	5.7	11.0	-5.3	6.7	11.4	-4.7	-1.0
T.A.	2.0	6.3	-4.3	1.6	6.5	-4.9	+0.4
N.1	1.4	2.2	-0.8	2.2	2.4	-0.2	-0.8
N.2	1.7	2.0	-0.3	1.9	1.8	+0.1	-0.2
Other	0.6	0.5	+0.1	1.0	0.7	+0.3	-0.4

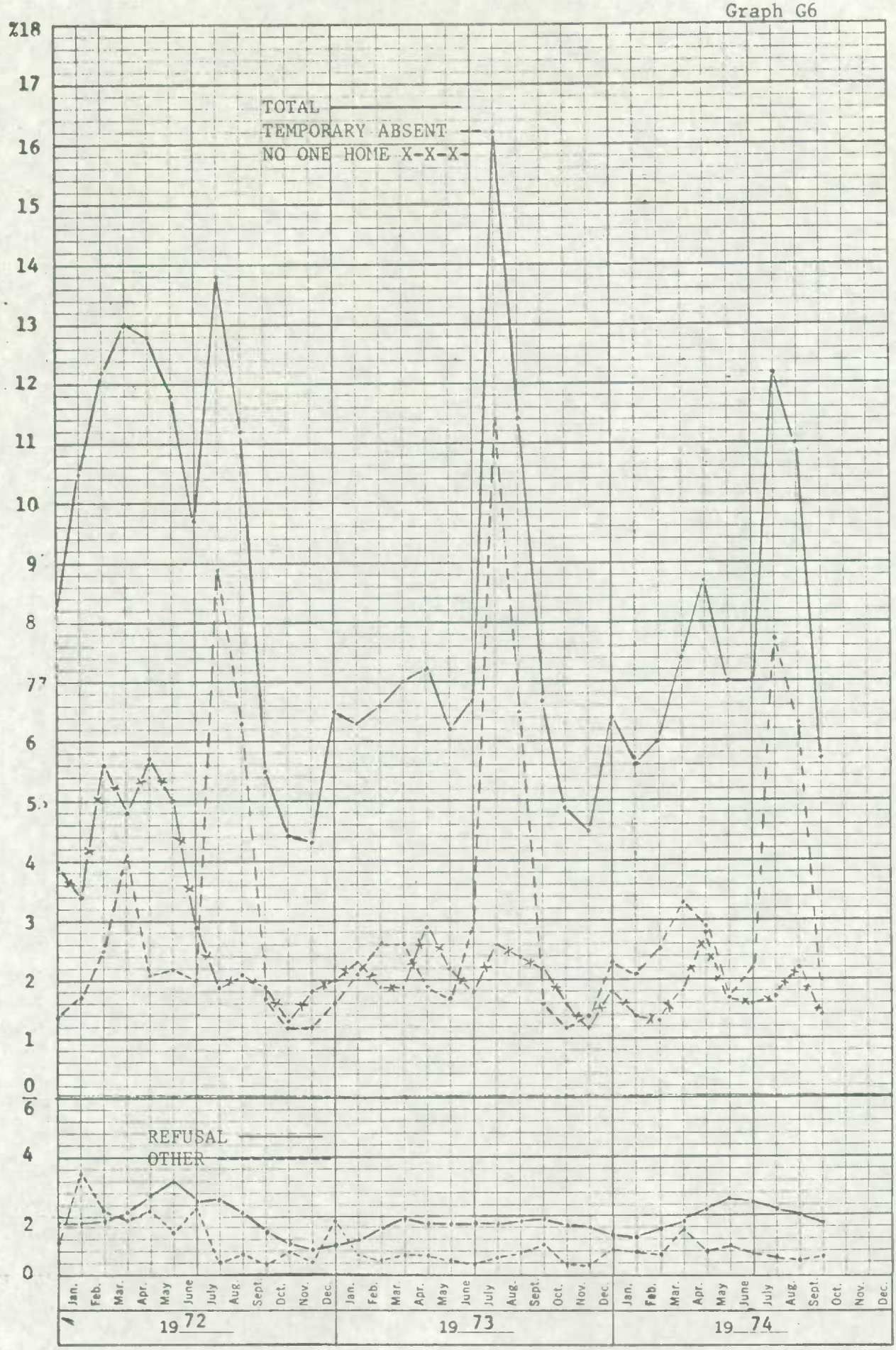
Table 6(b)

Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
51	475	7.6	8.6	6.5
52	3,101	6.4	47.4	42.5
53	1,120	3.3	8.8	15.4
54	630	8.6	12.9	8.6
55	689	4.1	6.7	9.5
56	619	4.4	6.5	8.5
57	655	5.8	9.1	9.0

Toronto Regional Office

Graph G6



WINNIPEG REGIONAL OFFICE

September, 1974

Table 7(a)

Month to Month and Year to Year Changes in the Non-Response Rates

Non-Response Component	Non-Response Rates		Aug. 1974 to Sep. 1974	Non-Response Rates		Aug. 1973 to Sep. 1973	Sep. 1973 to Sep. 1974
	Sep. 1974 (%)	Aug. 1974 (%)	(%)	Sep. 1973 (%)	Aug. 1973 (%)	(%)	(%)
Overall	4.3	4.7	-0.4	2.2	5.2	-3.0	+2.1
T.A.	1.7	2.8	-1.1	1.0	3.1	-2.1	+0.7
N.1	0.8	0.8	-	0.4	1.2	-0.8	+0.4
N.2	0.9	0.8	+0.1	0.6	0.7	-0.1	+0.3
Other	0.9	0.3	+0.6	0.2	0.2	-	+0.7

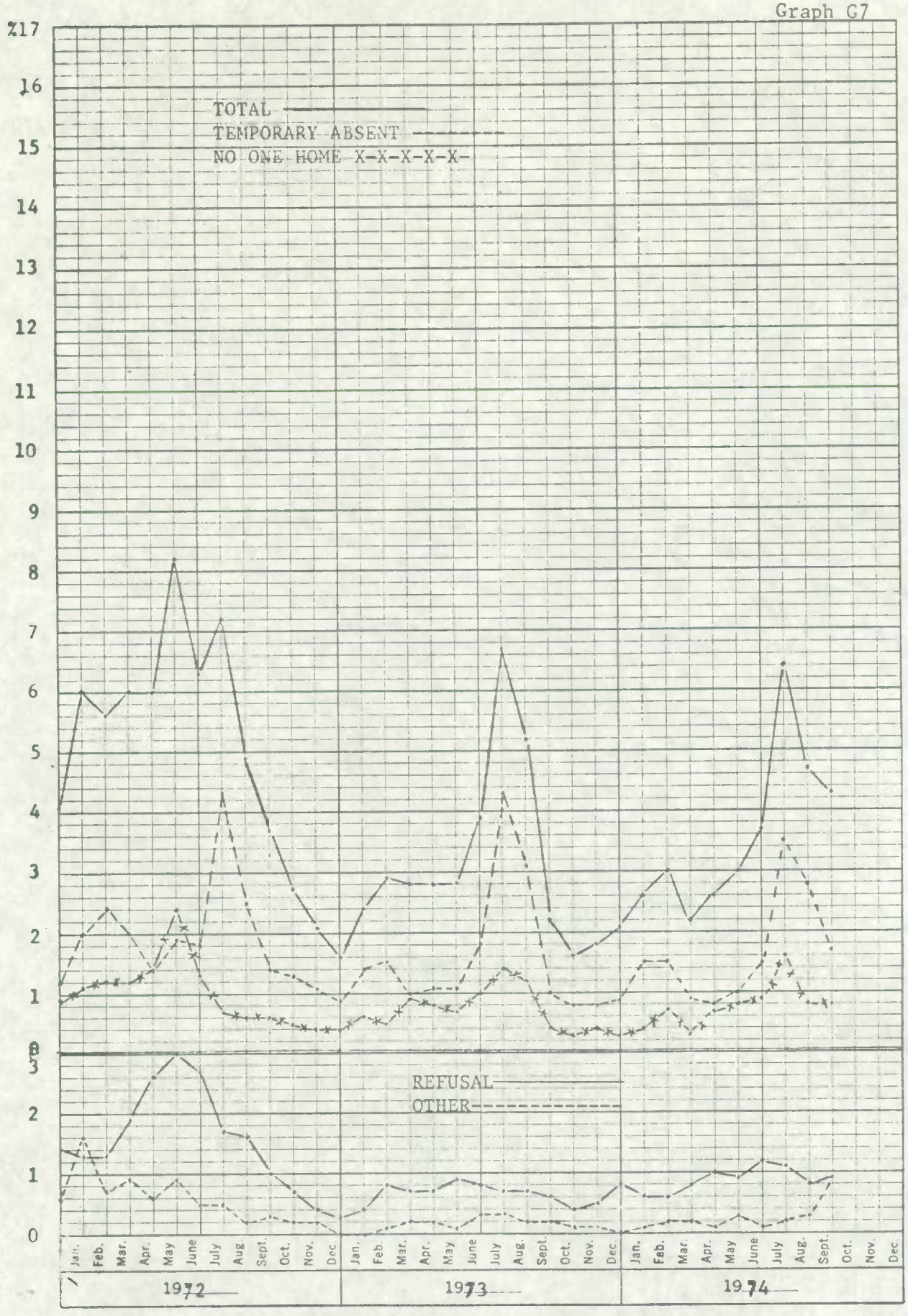
Table 7(b)

Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
509	17	0.0	0.0	0.5
59	233	3.4	5.9	7.3
60	1,048	5.5	42.7	32.8
61	153	1.9	2.2	4.8
62	79	1.3	0.7	2.5
63	127	4.7	4.4	4.0
64	286	0.0	0.0	9.0
65	140	0.7	0.7	4.4
70	498	3.4	12.5	15.6
71	317	10.1	23.5	9.9
73	293	3.4	7.4	9.2

Winnipeg Regional Office

Graph G7



EDMONTON REGIONAL OFFICE

September, 1974

Table 8(a)

Month to Month and Year to Year Changes in the Non-Response Rates

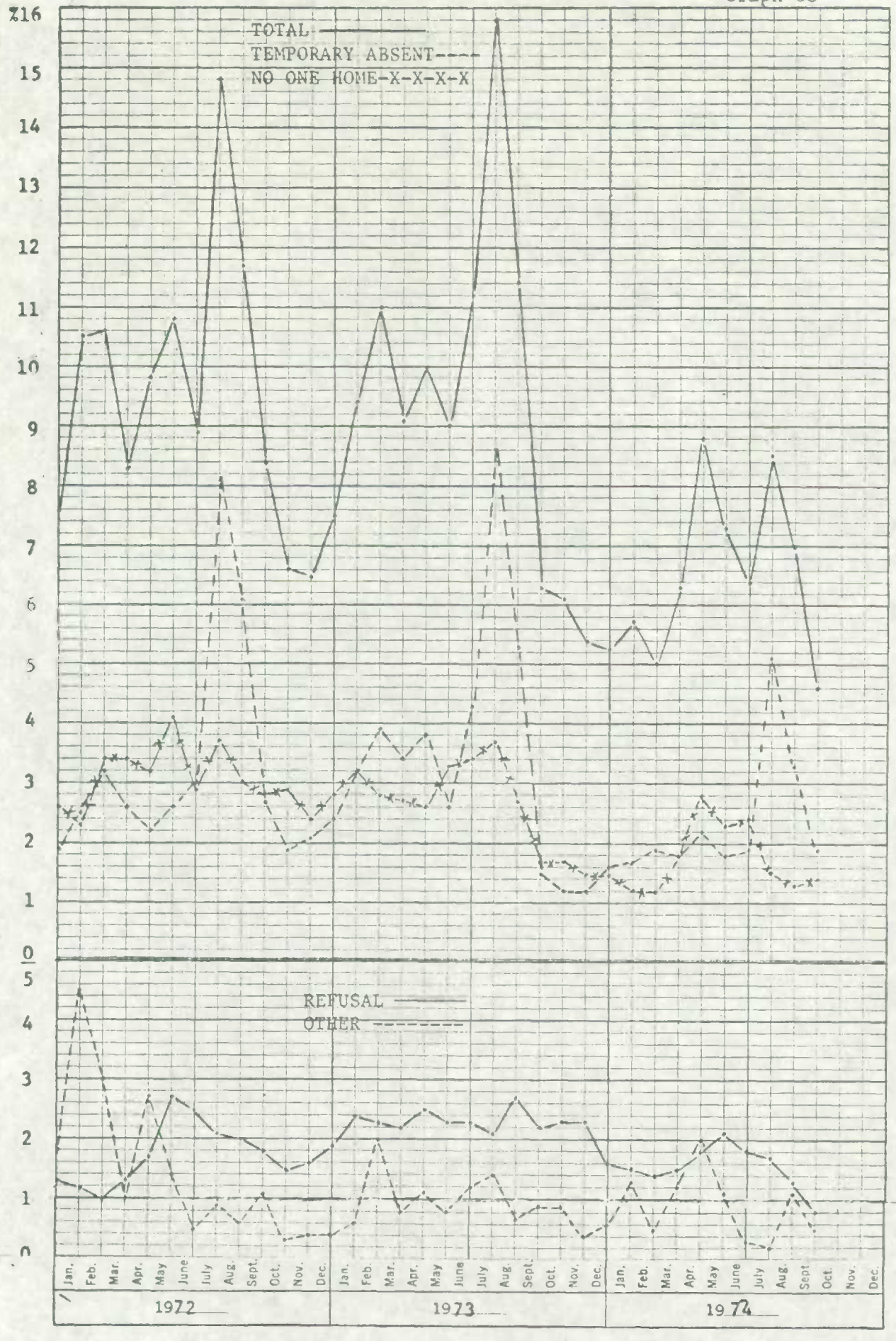
Non-Response Component	Non-Response Rates		Aug. 1974 to Sep. 1974	Non-Response Rates		Aug. 1973 to Sep. 1973	Sep. 1973 to Aug. 1974
	Sep. 1974 (%)	Aug. 1974 (%)	(%)	Sep. 1973 (%)	Aug. 1973 (%)	(%)	(%)
Overall	4.6	7.0	-2.4	6.3	11.4	-5.1	-1.7
T.A.	1.9	3.3	-1.4	1.5	5.3	-3.8	+0.4
N.1	1.4	1.3	+0.1	1.7	2.7	-1.0	-0.3
N.2	0.8	1.3	-0.5	2.2	2.7	-0.5	-1.4
Other	0.5	1.1	-0.6	0.9	0.7	+0.2	-0.4

Table 8(b)

Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
72	404	2.5	5.5	10.2
74	439	2.7	6.6	11.1
80	156	8.3	7.1	4.0
81	216	6.9	8.2	5.5
82	936	7.1	36.3	23.7
83	247	4.0	5.5	6.3
84	1,188	3.9	25.3	30.1
85	203	3.4	3.8	5.1
86	159	1.9	1.7	4.0

Graph G8



VANCOUVER REGIONAL OFFICE

September, 1974

Table 9(a)

Month to Month and Year to Year Changes in the Non-Response Rates

Non-Response Component	Non-Response Rates		Aug. 1974 to Sep. 1974	Non-Response Rates		Aug. 1973 to Sep. 1973	Sep. 1973 to Sep. 1974
	Sep. 1974 (%)	Aug. 1974 (%)	(%)	Sep. 1973 (%)	Aug. 1973 (%)	(%)	(%)
Overall	8.0	12.2	-4.2	11.7	14.9	-3.2	-3.7
T.A.	2.9	5.8	-2.9	2.9	6.0	-3.1	-
N.1	1.6	2.4	-0.8	3.7	3.5	+0.2	-2.1
N.2	3.1	3.6	-0.5	4.3	4.5	-0.2	-1.2
Other	0.4	0.4	-	0.8	0.9	-0.1	-0.4

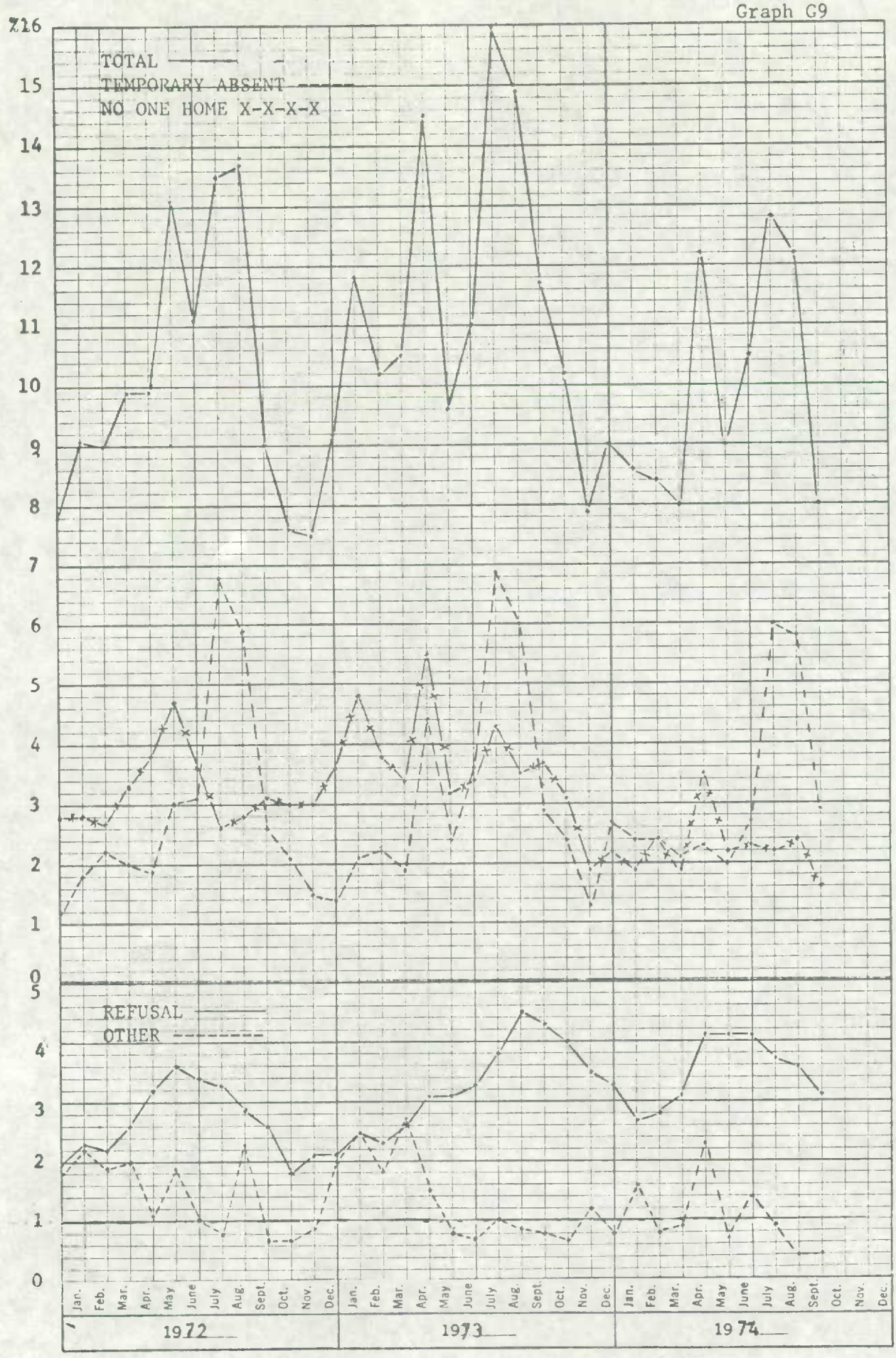
Table 9(b)

Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
90	88	8.0	2.2	2.2
91	146	6.8	3.1	3.7
92	318	5.3	5.4	8.0
93	183	8.2	4.7	4.6
94	2,102	7.9	52.5	52.6
95	815	8.8	22.6	20.4
96	60	3.3	0.6	1.5
97	228	10.5	7.6	5.7
98	54	7.4	1.3	1.3

Vancouver Regional Office

Graph G9



Definitions

1. Dwelling

A dwelling is a set of living quarters which is structurally separate and has a private entrance from outside the building or from a common hall or stairway inside the building. The entrance must be one which can be used without passing through someone else's living quarters.

2. Household

A household refers to any person or group of persons occupying a dwelling. A household may consist of a family group with or without servants, lodgers etc., or it may consist of a group of unrelated persons sharing a dwelling, or even one person living alone. Hotels, motels and institutions may also contain one or more households composed of staff members, employees, permanent residents or persons who have no usual place of residence elsewhere.

3. Expected Number of Households

The expected number of households is defined as the number of households (as defined above) in a specified area. It should be noted that dwellings classified as a V-types are not included in this count since they contain no households.

4. Non-Response Rate

The non-response rate refers to the proportion of the expected number of households that were not interviewed due to their unavailability to the survey interviewer or to the back of co-operation on the part of the householder. It is the sum of the four components defined below:

(i) Temporarily absent (T.A.)

A temporarily absent household refers to a household where all the household members are absent for the entire interview week.

(ii) No one home (N1)

A non-interview household is designated as "No one home" when after a reasonable number of call backs, there was no responsible member available to interview.

(iii) Refusal (N2)

A non-interview household is designated as a "refusal" when a responsible member of the household definitely refuses to provide the survey information requested.

(iv) Other (N3-N6)

A non-interview household is designated as "other" when the non-interview is due to reasons other than those specified above. Such non-interviews may be due to no interviewer available, impassable road conditions, death, illness, language problems, interviewers' return lost in the mail, etc.

5. Economic Region (E.R.)

Each province in Canada is divided into a number of geographical areas called economic regions. An economic region is defined as an area of structural homogeneity according to such factors as soil characteristics, production and marketing possibilities and commercial and industrial potential.

6. Actual Contribution to Non-Response

This term is defined as the ratio of the number non-respondent households (ie., T.A., N1, N2, N3-N6) in an economic region (or in a regional office) to the number of non-respondent households in the regional office (or in Canada). This ratio is expressed as a percentage.

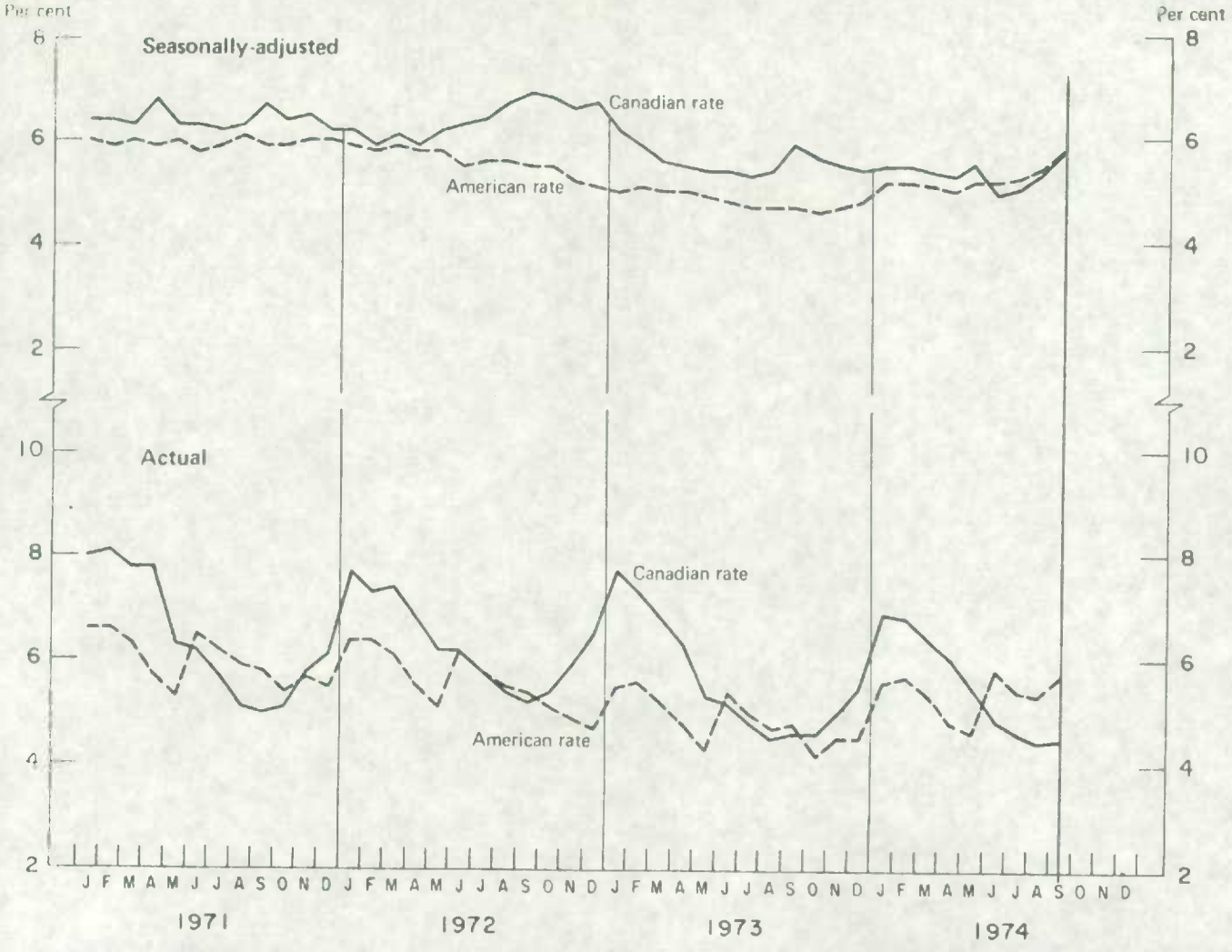
7. Expected Contribution to Non-Response

This term is defined as the ratio of the expected number of households in an economic region (or in a regional office) to the expected number of households in the regional office (or in Canada). This ratio is expressed as a percentage.

Comparison of Canadian and American Unemployment Rates,
September 1973 to September 1974

	Seasonally-Adjusted		Actual	
	Canadian	American	Canadian	American
1974 - September	5.8	5.8	4.5	5.7
August	5.3	5.4	4.4	5.3
July	5.1	5.3	4.6	5.4
June	4.9	5.2	4.8	5.8
May	5.5	5.2	5.4	4.6
April	5.3	5.0	6.0	4.8
March	5.4	5.1	6.4	5.3
February	5.5	5.2	6.8	5.7
January	5.5	5.2	6.9	5.6
1973 - December	5.4	4.8	5.5	4.5
November	5.5	4.7	5.0	4.5
October	5.6	4.6	4.6	4.2
September	5.9	4.7	4.6	4.7

Comparison of Canadian and American Unemployment Rates by Month, January 1971 to Date



Comparison of LFS Unemployed and UIC Claimants Series
January 1973 to date

	LFS Unemployed (000's)	UIC Claimants (000's)	Ratio Claimants / Unemployed		LFS Unemployed (000's)	UIC Claimants (000's)	Ratio Claimants / Unemployed
1974				1973			
December				December	512	835	1.63
November				November	468	744	1.59
October				October	429	677	1.58
September	431			September	421	676	1.61
August	447	694	1.55	August	433	691	1.60
July	465	719	1.55	July	461	733	1.59
June	469	748	1.59	June	503	739	1.47
May	524	825	1.57	May	493	810	1.64
April	568	960	1.69	April	570	921	1.62
March	599	984	1.64	March	608	1,003	1.65
February	635	1,009	1.59	February	655	1,055	1.61
January	637	981	1.54	January	688	1,056	1.53

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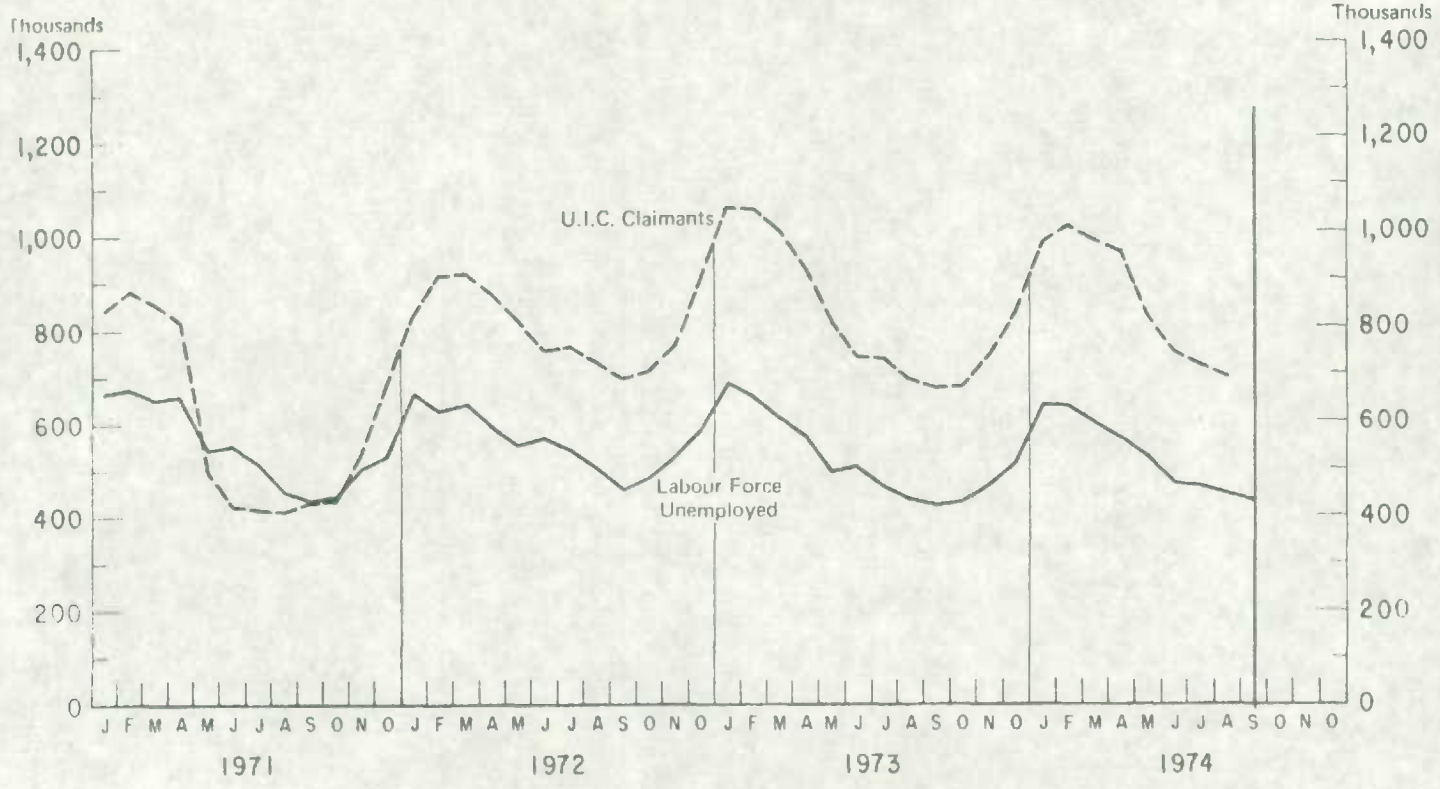
Comparison of Labour Force Unemployed and Unemployment Insurance Claimants by Month, January 1971 to Date



Unemployment rate represents the number of unemployed as a per cent of the civilian labour force.

Canadian civilian Labour Force, in the Labour Force Survey concept, is composed of that portion of the civilian non-institutional population 14 years of age and over who, during the reference week, were employed or unemployed.

American civilian Labour Force, in the Current Population Survey concept, is composed of that portion of the civilian non-institutional population 16 years of age and over who, during the reference week (which contains the 12th day of the month), were employed or unemployed.

List of some differences in the concepts of claimants and unemployed

UIC	Lf unemployed
- need to have worked at least 8 weeks in past year to be eligible	- does not need to have worked before
- interruption of earnings resulting from unemployment, illness or pregnancy	- activity concept: (1) did not work, (2) actively searched for a job, and (3) was able to work
- must be capable of and available for work and unable to obtain suitable employment (except in case of illness and pregnancy)	
- contribution and benefit entitlement ceases for a person: (a) at the age of 70, or (b) to whom a retirement pension under the Canada Pension Plan or the Quebec Pension Plan has at any time become payable	- no upper age boundaries See activity concept.
- claimants can work and be eligible for total benefit if weekly earnings do not exceed one quarter of weekly rate of benefit; work-related income in excess of 25% of weekly rate is deducted from benefit.	- unemployed cannot have worked a single hour in reference week