M. A. Campbell 792

File

Labour Force Quality Report

Canadian Labour Force Survey

April 1975

Confidential Restricted Circulation

Household Surveys Development Staff
Labour Force Survey Division
Field Division

Statistics Canada Statistique Canada

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HIGHLIGHTS

A. SLIPPAGE

The estimated slippage rate at the Canada level increased from 5.1% in March to 5.4% in April. Furthermore, the estimated slippage rate at the Canada level was found to be significantly different from zero at the 5% level of significance. This indicates a net undercoverage in the LFS frame in the April survey.

1 - By Province: From March to April, increases in the estimated slippage rates were noted in five provinces; namely Nova Scotia, New Brunswick, Quebec, Saskatchewan and Alberta. The other five provinces showed decreases in the estimated slippage rates. The more notable changes in slippage occurred in Prince Edward Island (a change of - 3.0%), Quebec (+ 2.0%) and Manitoba (- 1.7%).

In Prince Edward Island, the decrease in the estimated slippage rate was largely due to the increase (+ 0.0899) in the average size of households. However, in Quebec and Manitoba, changes in both the average size of households and the estimated number of heads of households as shown below affected the estimated slippage rate.

Province	Change in Average Size of Households (March to April)	Percentage Change in the Estimated Number of Heads of Households (March to April)
Quebec	- 0.0318	0.6%
Manitoba	+ 0.0194	1.2%

All provinces except Ontario and Saskatchewan exhibited estimated slippage rates which were significantly different from zero. Thus, there was a net undercoverage in the LFS frame for each province except for the two provinces mentioned above.

2 - By Age Group at the Canada Level: From March to April, increases in the estimated slippage rate were noted in the 14-19 and 20-24 age groups and decreases occurred in the 25-44 and 65 and over age groups. No change in the estimated slippage rate was noted in the 45-64 age group. The more notable changes occurred in the 14-19 (+ 2.7%), 20-24 (+ 1.8%) and 65 and over (- 1.5%) age groups.

Note that all age groups at the Canada level exhibited estimated slippage rates which were significantly different from zero. This indicates a net undercoverage in the LFS frame for all age groups (at the Canada level).

B. NON-RESPONSE

The overall non-response rate at the Canada level increased slightly from 4.6% in March to 4.7% in April. This increase was due to higher rates in the N1, N2 and "other" components this month. The overlap non-response rate increased 0.1% from March to April and the adjusted non-response rate for the April survey was calculated to be 4.3%.

Compared with last year's overall non-response rate of 8.3% for April, this year's rate was lower. Furthermore, all components of non-response exhibited year to year decreases in their rates.

C. VARIANCE

At the Canada level the coefficients of variation of Employed, Unemployed and In Labour Force increased from 0.38, 2.09 and 0.32 for the March survey to 0.39, 2.22 and 0.34, respectively, for the April survey.

At the provincial levels, four provinces – Prince Edward Island, New Brunswick, Alberta and British Columbia, exhibited decreases in the coefficients of variation of Employed estimates, while two provinces – Manitoba and British Columbia, exhibited decreases in the coefficients of variation of Unemployed estimates from the March survey to the April survey.

The increase in the coefficient of variation of the estimate of unemployed in the provinces of Quebec and Ontario from March to April was mainly due to the sample size reductions in the self-representing units of these two provinces for the April survey.

Of the 33 estimates considered, (Employed, Unemployed and In Labour Force at the province and Canada levels), there were 9 estimates for which the published estimates were assigned an alphabetic symbol indicating a different degree of reliability than that indicated by the estimated sampling variability for the April survey. For the estimates of Employed in Newfoundland and Prince Edward Island, and the estimates of In Labour Force in Prince Edward Island and Ontario, the published symbol was lower than the actual symbol for the April survey, whereas the opposite was true for the estimates of Employed in Alberta, Unemployed in Ontario and Alberta, and In Labour Force in Alberta.

On the basis of the analysis of subprovincial contributions to the provincial variance estimates, 18 pairs of PSUs, 1 pair of special area subunits, and 4 SRU subunits located among 5 provinces were identified in which the actual percentage contribution significantly exceeded the desired percentage contribution to the provincial variance estimate for some particular characteristic.

D. REJECTED DOCUMENTS

The number of rejected documents at the Canada level decreased from 6.6% in March to 6.3% in April. Significant changes took place in 2 regional offices; Halifax, a decrease of 2.2% and Winnipeg, an increase of 1.4%.

It is interesting to note a steady increase in the "No. of errors in items 13, 20 to 23", from month to month. St. John's, Ottawa, Edmonton and Vancouver regional offices have more than 31% of their rejected documents in this category. These documents are rejected because the interviewer coded 1 - 34 hours in item 13, but forgot to ask questions 20 to 23 as applicable.

E. ENUMERATION COST

The April enumeration cost for the Labour Force Survey at the Canada level was calculated at $3.02 per sample household, an increase of 8 cents from the March rate of $2.94.

While there was an 8.5% increase in the hourly rates paid to interviewers and some general increases in allowable travel expenses approximating 6%, the full effect of these increases was offset by the Household Facilities and Equipment supplement, piggy-backed on the April survey which resulted in considerable cost sharing benefit to the Labour Force Survey.

At the regional level, 5 areas registered increases ranging from 2 cents to 32 cents, while 3 areas registered decreases ranging from 2 cents to 17 cents.

Non-response Rates, Rejected Document Rates and Enumeration Cost per Household by Regional Office

November to April 1973 and 1974 to November to April 1975 and 1975

	1975				1974		1974				1973	
	April	March	Feb.	Jan.	Dec.	Nov.	April	March	Feb.	Jan.	Dec.	Nov.
Non-response												
Canada ... %	4.7	4.6	4.7	4.3	4.6	4.3	8.3	6.4	6.0	6.0	6.6	5.2
St. John's ... %	3.7	3.1	3.8	3.6	4.0	3.4	7.7	1.9	2.0	2.6	4.1	2.7
Halifax ... %	5.7	5.4	4.8	5.0	5.7	6.0	7.9	6.8	5.9	7.2	7.6	5.5
Montréal ... %	3.3	3.6	3.4	3.2	3.0	3.4	8.7	7.1	7.7	6.4	7.6	6.3
Ottawa ... %	5.7	6.0	3.9	5.1	5.8	4.2	7.4	7.3	6.7	6.3	8.7	5.8
Toronto ... %	5.3	5.0	6.5	4.6	5.6	5.0	8.7	7.4	6.0	5.6	6.4	4.5
Winnipeg ... %	2.8	2.9	3.5	3.0	2.5	1.7	2.6	2.2	3.0	2.6	2.1	1.8
Edmonton ... %	3.0	3.2	3.5	3.8	2.6	2.6	8.8	6.3	5.0	5.7	5.3	5.4
Vancouver ... %	7.4	6.8	6.1	6.4	7.0	6.2	12.2	8.0	8.4	8.6	9.0	7.9
Rejected Documents (Regular Labour Force Items)												
Canada ... %	6.3	6.6	6.9	7.4			8.4	6.9	6.4	7.1	8.2	7.1
St. John's ... %	4.0	3.8	3.4	4.2			3.4	2.4	2.5	5.2	6.4	6.0
Halifax ... %	6.5	8.7	7.0	8.3			7.4	6.4	6.6	8.5	8.1	7.4
Montréal ... %	5.2	6.3	5.8	6.8	(1)		7.0	7.4	5.8	6.1	7.1	5.7
Ottawa ... %	4.9	4.7	5.3	4.7			7.8	5.0	4.4	5.5	6.1	6.1
Toronto ... %	8.0	7.4	8.6	9.5			11.9	8.2	8.5	8.0	9.4	7.4
Winnipeg ... %	5.3	3.9	4.8	4.2			5.2	5.6	4.6	6.1	6.9	6.2
Edmonton ... %	6.8	7.2	10.0	9.8			11.1	7.4	7.4	7.0	8.7	7.7
Vancouver ... %	7.1	6.6	7.4	6.8			9.3	8.4	7.2	8.0	10.7	9.9
Enumeration Cost per Household												
Canada ... $	3.02	2.94	2.88	2.77	2.64	2.69	2.53	2.38	2.38	2.40	2.32	2.41
St. John's ... $	3.67	3.45	3.54	3.41	3.30	3.31	2.61	2.72	2.75	2.78	2.70	2.75
Halifax ... $	2.99	3.09	3.09	2.86	2.67	2.69	2.48	2.32	2.24	2.31	2.18	2.29
Montréal ... $	3.12	3.00	3.00	2.88	2.73	2.76	2.67	2.43	2.53	2.52	2.37	2.58
Ottawa ... $	2.96	2.98	2.65	2.78	2.76	2.83	2.61	2.57	2.57	2.66	2.44	2.53
Toronto ... $	3.06	2.83	2.85	2.76	2.64	2.65	2.43	2.35	2.39	2.42	2.43	2.47
Winnipeg ... $	2.93	2.91	2.80	2.62	2.53	2.74	2.64	2.41	2.43	2.42	2.40	2.39
Edmonton ... $	2.78	2.72	2.68	2.66	2.63	2.56	2.54	2.26	2.21	2.24	2.11	2.22
Vancouver ... $	2.64	2.81	2.59	2.47	2.26	2.45	2.39	2.26	2.19	2.19	2.16	2.19

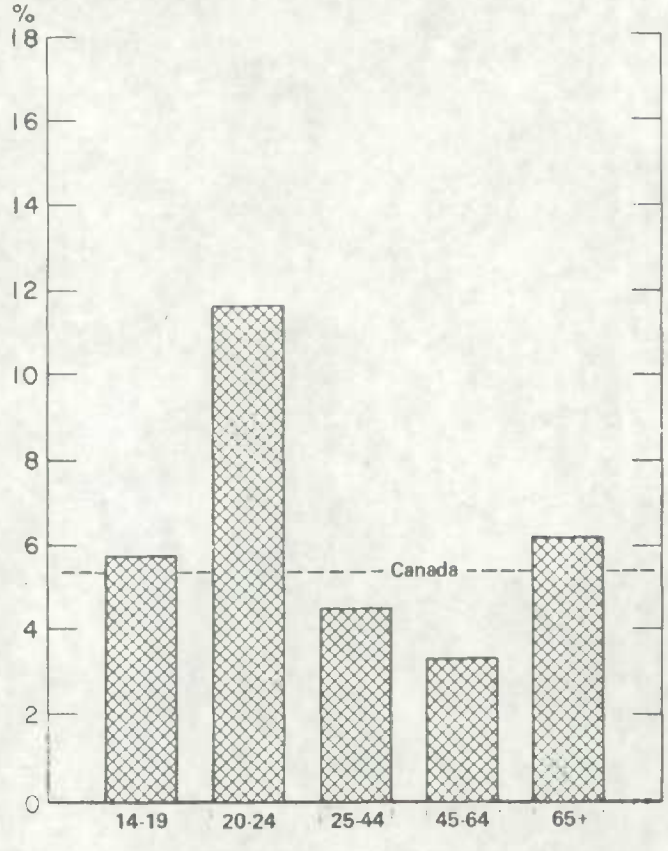
	Month-to-Month Change								Year-to-Year Change			
	1975			Dec. 1974 to Jan. 1975	1974			Dec. 1973 to Jan. 1974	April 1974 to April 1975	March 1974 to March 1975	Feb. 1974 to Feb. 1975	Jan. 1974 to Jan. 1975
	March to April	Feb. to March	Jan. to Feb.		March to April	Feb. to March	Jan. to Feb.					
Non-response												
Canada ... %	+ 0.1	- 0.1	+ 0.4	- 0.3	+ 1.9	+ 0.4	-	- 0.6	- 3.6	- 1.8	- 1.3	- 1.7
St. John's ... %	+ 0.6	- 0.7	+ 0.2	- 0.4	+ 5.8	- 0.1	- 0.6	- 1.5	- 4.0	+ 1.2	+ 1.8	+ 1.0
Halifax ... %	+ 0.3	+ 0.6	- 0.2	- 0.7	+ 1.1	+ 0.9	- 1.3	- 0.4	- 2.2	- 1.4	- 1.1	- 2.2
Montréal ... %	- 0.3	+ 0.2	+ 0.2	+ 0.2	+ 1.6	- 0.6	+ 1.3	- 1.2	- 5.4	- 3.5	- 4.3	- 3.2
Ottawa ... %	- 0.3	+ 2.1	- 1.2	- 0.7	+ 0.1	+ 0.6	+ 0.4	- 2.4	- 1.7	- 1.3	- 2.8	- 1.2
Toronto ... %	+ 0.3	- 1.5	+ 1.9	- 1.0	+ 1.3	+ 1.4	+ 0.4	- 0.8	- 3.4	- 2.4	+ 0.5	- 1.0
Winnipeg ... %	- 0.1	- 0.6	+ 0.5	+ 0.5	+ 0.4	- 0.8	+ 0.4	+ 0.5	+ 0.2	+ 0.7	+ 0.5	+ 0.4
Edmonton ... %	- 0.2	- 0.3	- 0.3	+ 1.2	+ 2.5	+ 1.3	- 0.7	+ 0.4	- 5.8	- 3.1	- 1.5	- 1.9
Vancouver ... %	+ 0.6	+ 0.7	- 0.3	- 0.6	+ 4.2	- 0.4	- 0.2	- 0.4	- 4.8	- 1.2	- 2.3	- 2.2
Rejected Documents (Regular Labour Force Items)												
Canada ... %	- 0.3	- 0.3	- 0.5		+ 1.5	+ 0.5	- 0.7	- 1.1	- 2.1	- 0.3	+ 0.5	
St. John's ... %	+ 0.2	+ 0.4	- 0.8		+ 1.0	- 0.1	- 2.7	- 1.2	+ 0.6	+ 1.4	+ 0.9	
Halifax ... %	- 2.2	+ 1.7	- 1.3		+ 1.0	- 0.2	- 1.9	+ 0.4	- 0.9	+ 2.3	+ 0.4	
Montréal ... %	- 1.1	+ 0.5	- 1.0		- 0.4	+ 1.6	- 0.3	- 1.0	- 1.8	- 1.1	-	
Ottawa ... %	+ 0.2	- 0.6	+ 0.6	(1)	+ 2.8	+ 0.6	- 1.1	- 0.6	- 2.9	- 0.3	+ 0.9	(1)
Toronto ... %	+ 0.6	- 1.2	- 0.9		+ 3.7	- 0.3	+ 0.5	- 1.4	- 3.9	- 0.8	+ 0.1	
Winnipeg ... %	+ 1.4	- 0.9	+ 0.6		- 0.4	+ 1.0	- 1.5	- 0.8	+ 0.1	- 1.7	+ 0.2	
Edmonton ... %	- 0.4	- 2.8	+ 0.2		+ 3.7	-	+ 0.4	- 1.7	- 4.3	- 0.2	+ 2.6	
Vancouver ... %	+ 0.5	- 0.8	+ 0.6		+ 0.9	+ 1.2	- 0.8	- 2.7	- 2.2	- 1.8	+ 0.2	
Enumeration Cost per Household												
Canada ... $	+ 0.08	+ 0.06	+ 0.11	+ 0.13	+ 0.15	-	- 0.02	+ 0.08	+ 0.49	+ 0.56	+ 0.50	+ 0.37
St. John's ... $	+ 0.22	- 0.09	+ 0.13	+ 0.11	- 0.11	- 0.03	- 0.03	+ 0.08	+ 1.06	+ 0.73	+ 0.79	+ 0.63
Halifax ... $	- 0.10	-	+ 0.23	+ 0.19	+ 0.16	+ 0.08	- 0.07	+ 0.13	+ 0.51	+ 0.77	+ 0.85	+ 0.55
Montréal ... $	+ 0.32	-	+ 0.12	+ 0.15	+ 0.24	- 0.10	+ 0.01	+ 0.15	+ 0.65	+ 0.57	+ 0.47	+ 0.36
Ottawa ... $	- 0.02	+ 0.33	- 0.13	+ 0.02	+ 0.04	-	- 0.09	+ 0.22	+ 0.35	+ 0.41	+ 0.08	+ 0.12
Toronto ... $	+ 0.23	- 0.02	+ 0.09	+ 0.13	+ 0.08	- 0.04	- 0.03	- 0.01	+ 0.63	+ 0.48	+ 0.46	+ 0.34
Winnipeg ... $	+ 0.02	+ 0.11	+ 0.18	+ 0.09	+ 0.23	- 0.02	+ 0.01	+ 0.02	+ 0.29	+ 0.50	+ 0.37	+ 0.20
Edmonton ... $	+ 0.06	+ 0.04	+ 0.02	+ 0.03	+ 0.28	+ 0.05	- 0.03	+ 0.13	+ 0.24	+ 0.46	+ 0.47	+ 0.42
Vancouver ... $	- 0.17	+ 0.22	+ 0.12	+ 0.21	+ 0.13	+ 0.07	-	+ 0.03	+ 0.25	+ 0.55	+ 0.40	+ 0.28

(1) Data not available.

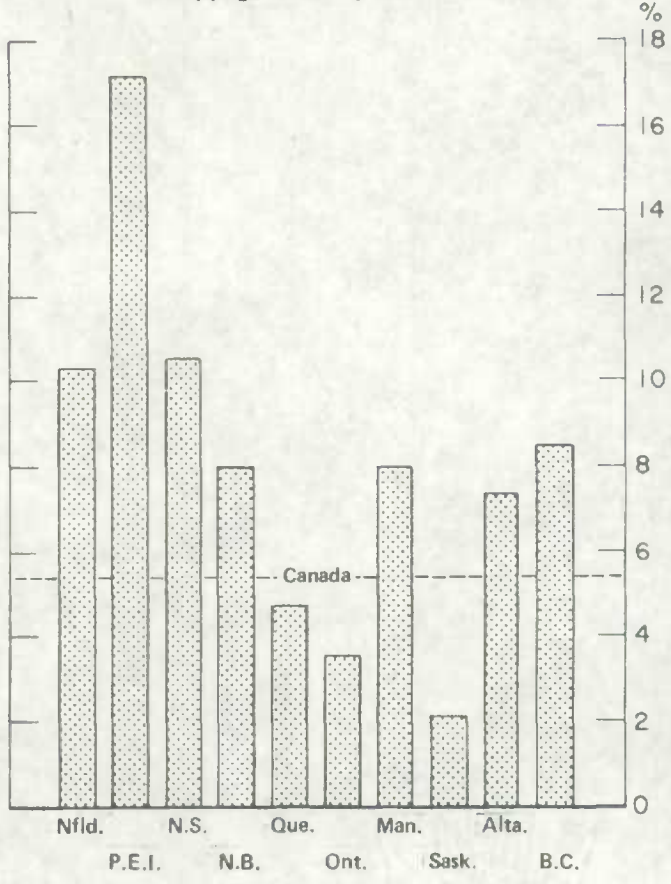
Slippage Rates(1), Canada by Age and Provincial Totals

	1975				1974		1974	March 1975 to April 1975	April 1974 to April 1975
	April	March	February	January	December	November	April		
TOTAL	5.4	5.1	5.1	4.9	4.6	4.6	4.9	+ 0.3	+ 0.5
14 - 19 years	5.8	5.1	3.0	2.1	2.0	1.8	3.0	+ 2.7	+ 2.8
20 - 24 years	11.6	9.8	9.9	10.5	9.3	10.1	10.7	+ 1.8	+ 0.9
25 - 44 years	4.5	4.8	5.4	4.9	4.5	4.6	5.5	- 0.3	- 1.0
45 - 64 years	3.3	3.3	2.2	2.4	3.0	2.8	2.9	-	+ 0.4
65 and over	6.2	7.7	8.5	8.4	7.4	6.6	4.1	- 1.5	+ 2.1
Nfld.	10.3	11.4	11.8	10.4	10.7	11.1	10.4	- 1.1	- 0.1
P.E.I.	17.2	20.2	17.5	21.9	20.4	18.7	12.8	- 3.0	+ 4.4
N.S.	10.5	9.2	9.0	8.6	8.4	8.7	9.9	+ 1.3	+ 0.6
N.B.	8.0	7.0	7.3	5.8	6.9	7.1	7.7	+ 1.0	+ 0.3
Qué.	4.7	2.7	3.2	1.9	1.7	1.7	2.8	+ 2.0	+ 1.9
Ont.	3.6	4.1	4.2	4.1	3.7	3.7	5.0	- 0.5	- 1.4
Man.	8.0	9.7	10.0	9.1	9.4	11.1	1.7	- 1.7	+ 6.3
Sask.	2.1	1.8	1.6	2.6	1.5	0.5	0.9	+ 0.3	+ 3.0
Alta.	7.4	6.9	6.4	7.0	7.2	6.8	8.3	+ 0.5	- 0.9
B.C.	8.5	8.8	7.9	9.4	8.8	8.4	7.6	- 0.3	+ 0.9

Slippage Rates by Age Groups at Canada Level

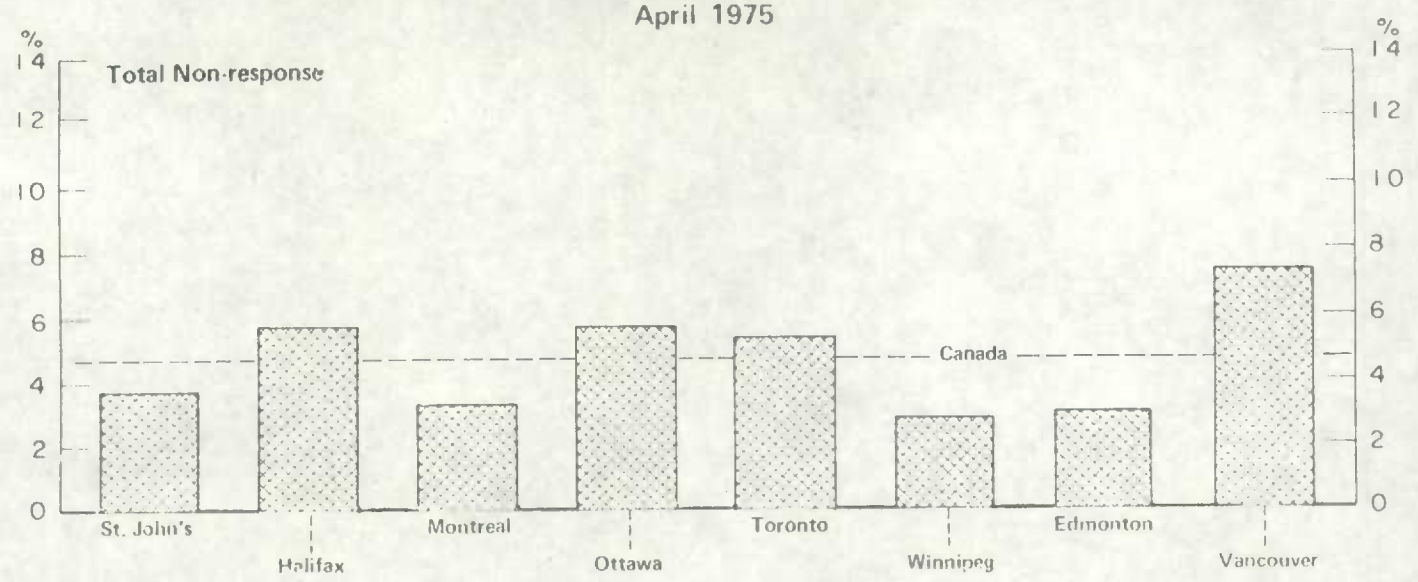


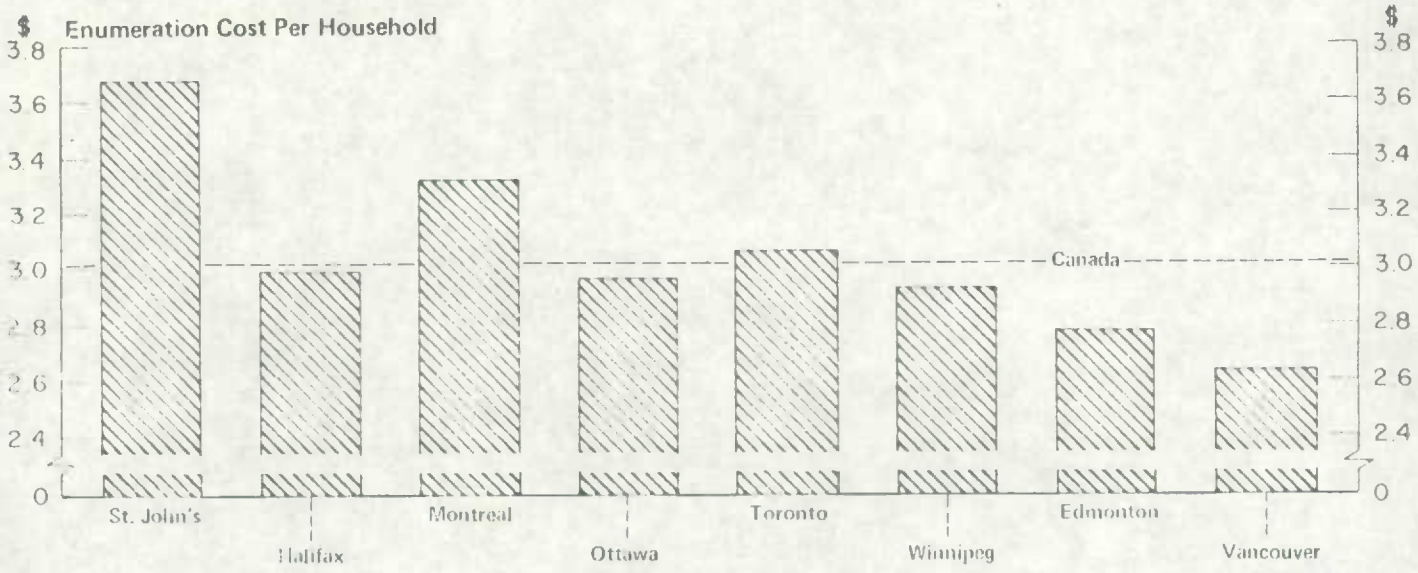
Slippage Rates by Province

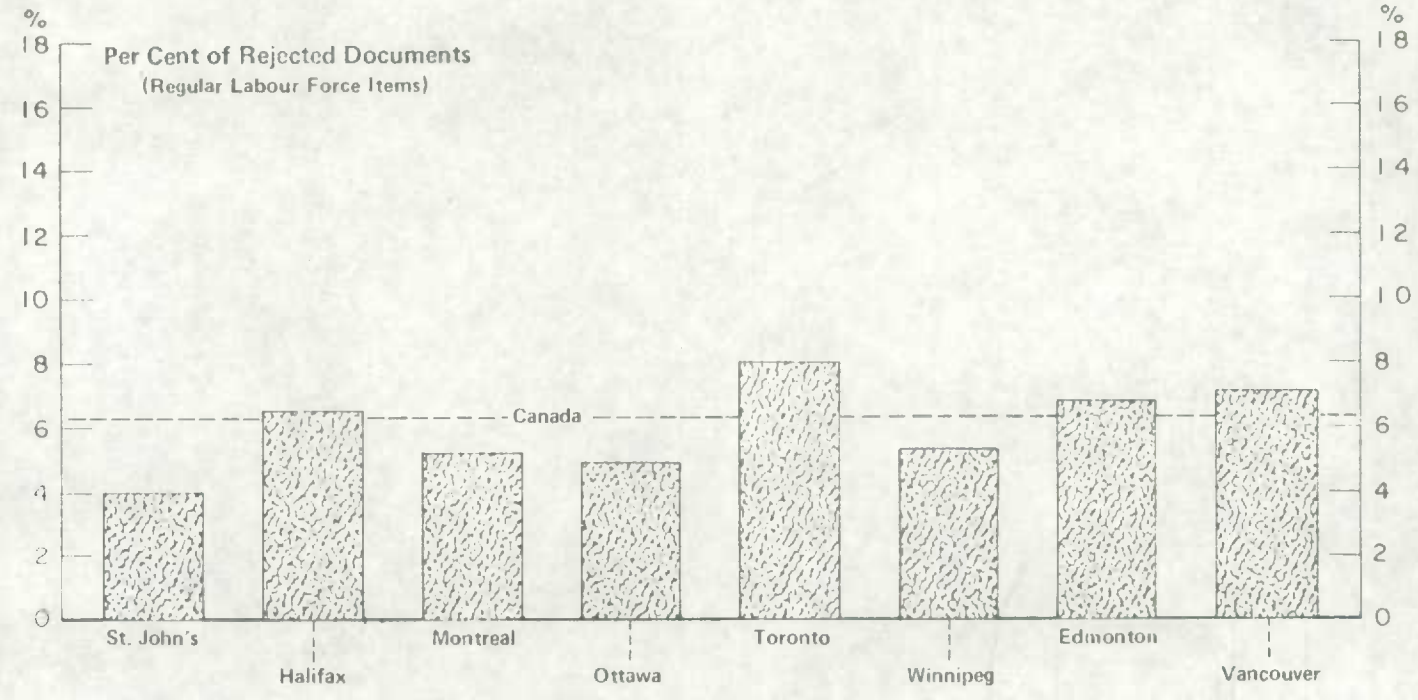


(1) The Above Rates are Calculated on Population Projections Based on 1971 Census.

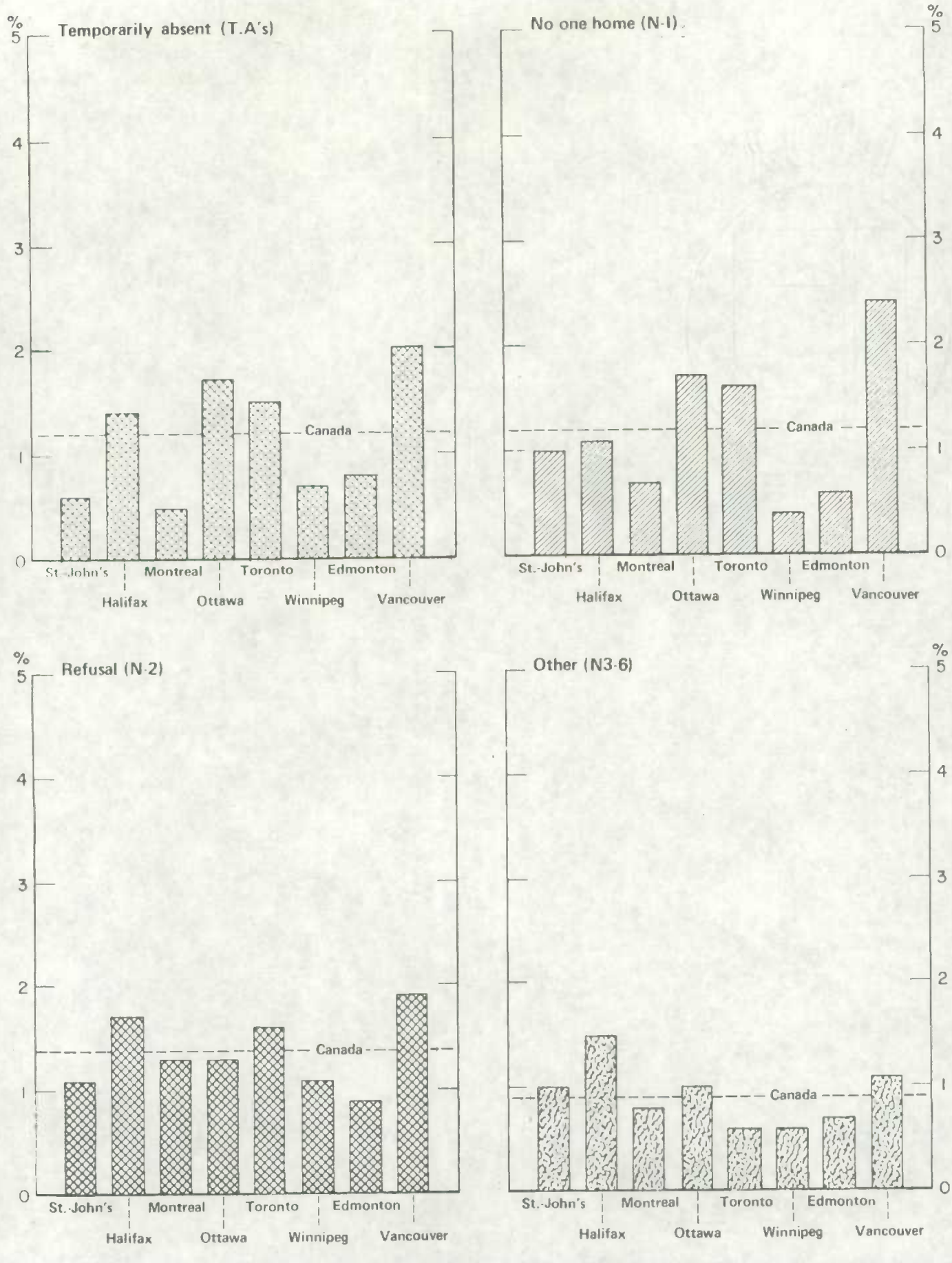
Non-response Rates, Enumeration Cost and Rejected Documents by Regional Office
April 1975



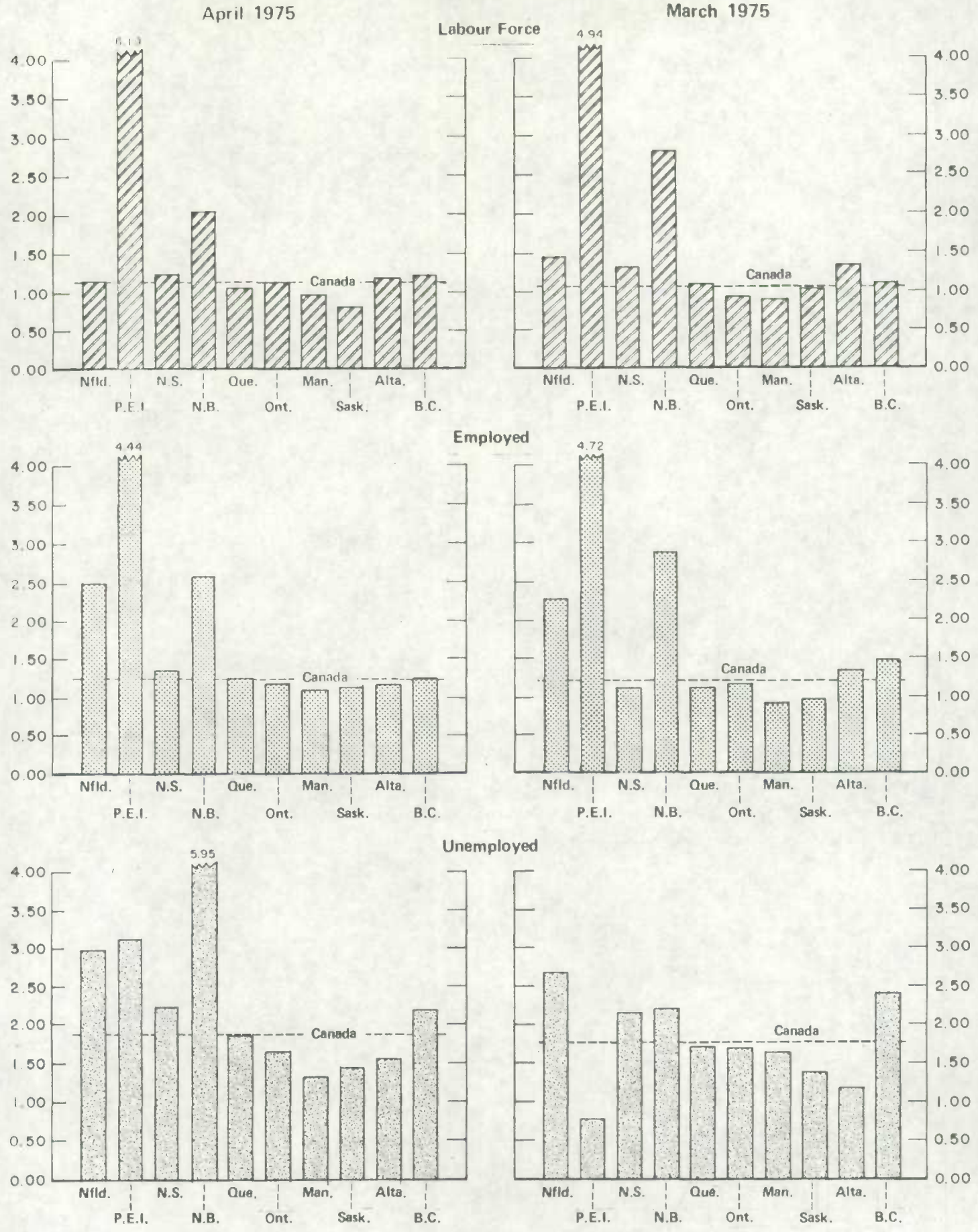




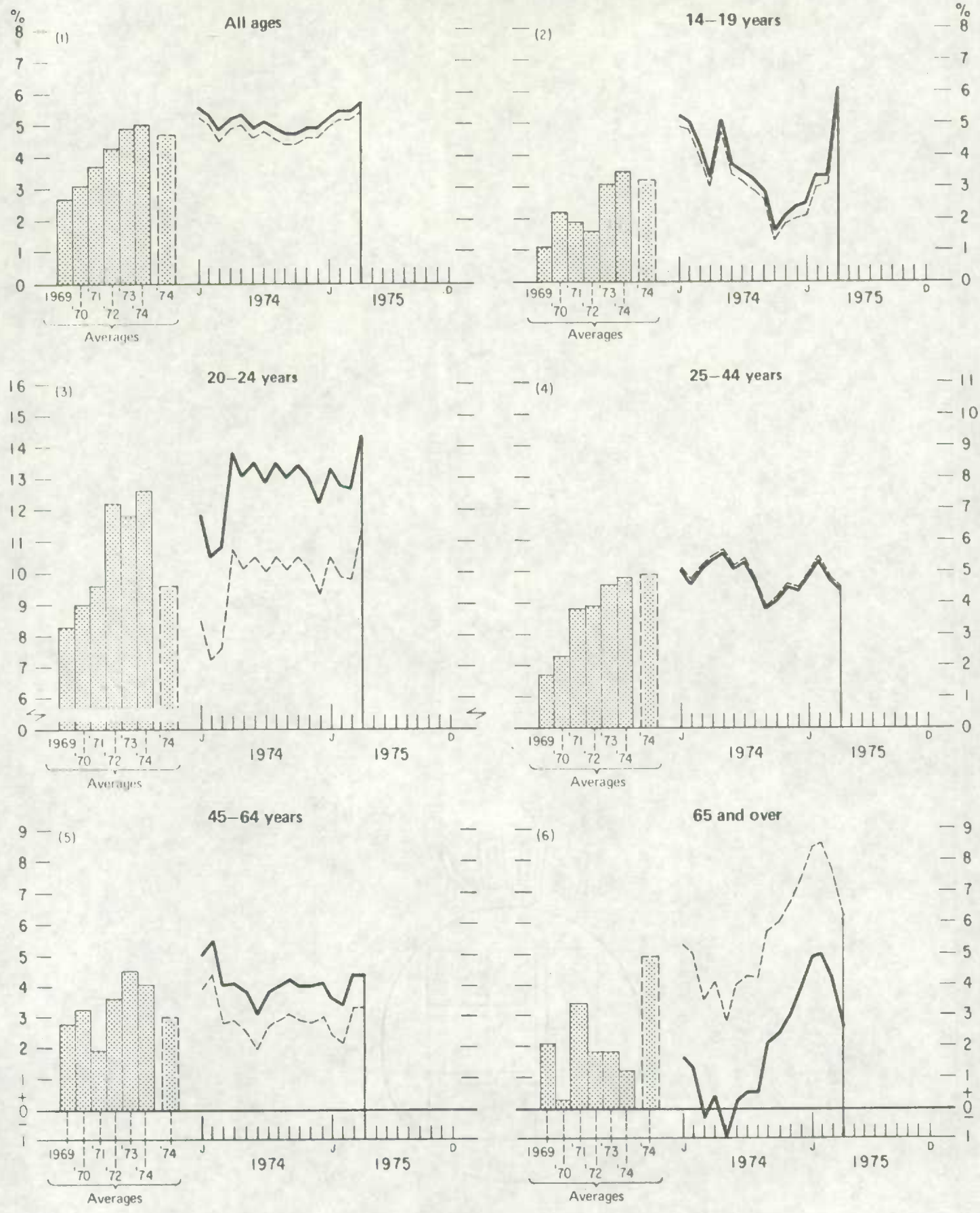
Non-response Rates, by Component
April 1975



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



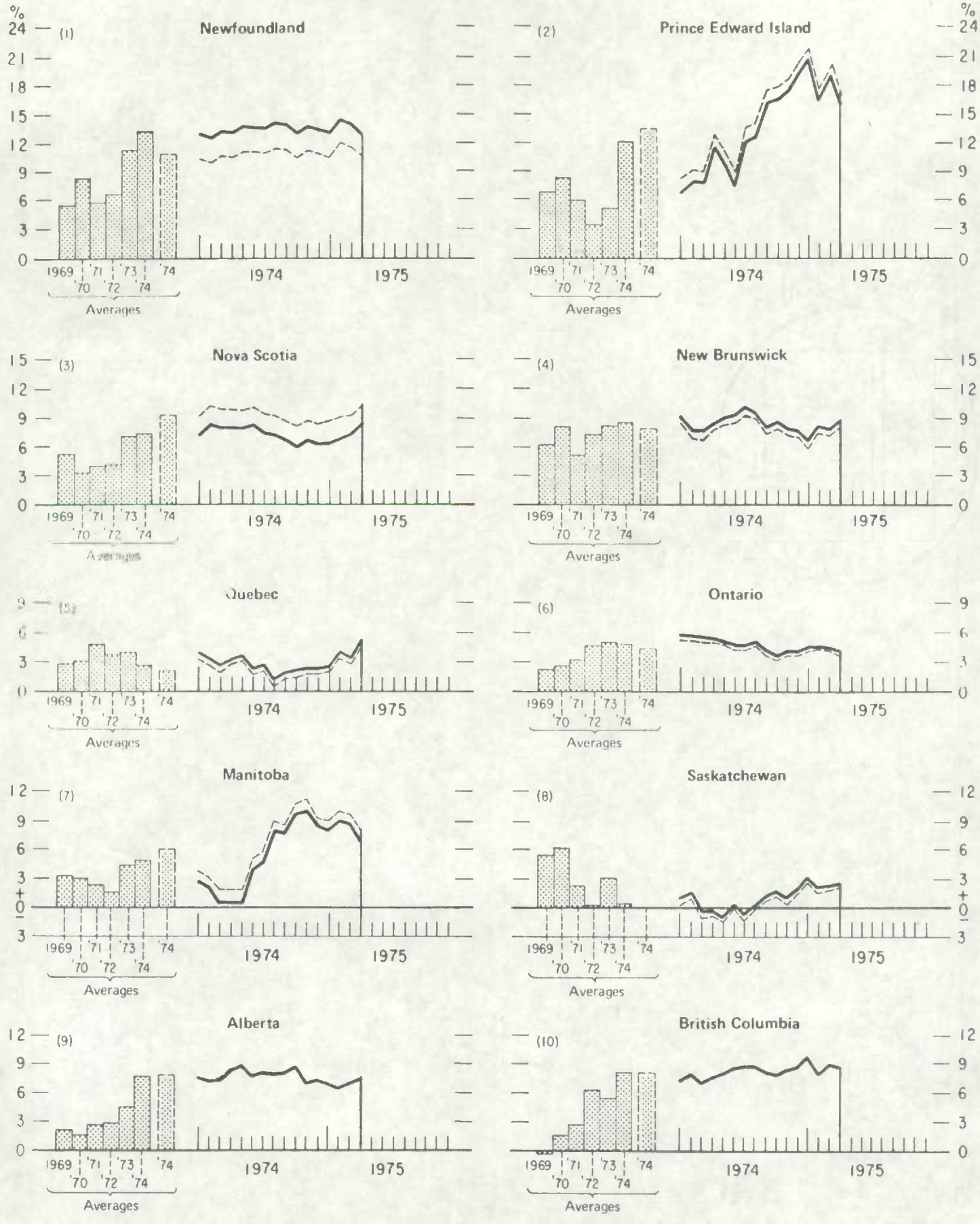
Slippage by Age Group at the Canada Level



Slippage rates were calculated on population projections based on 1961 census

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

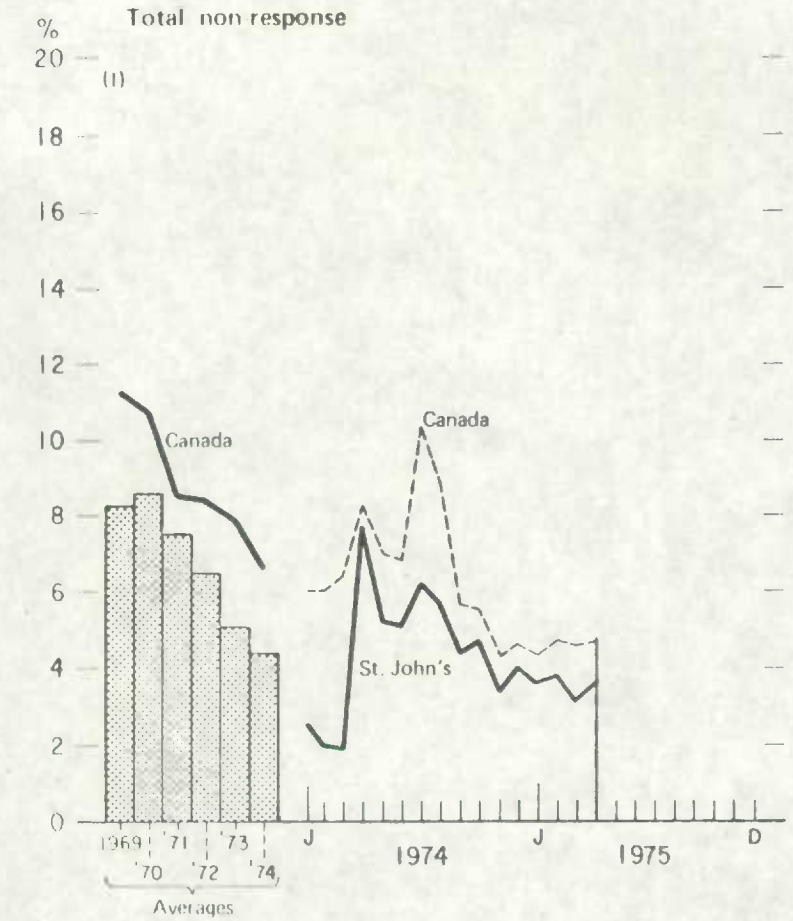
Slippage by Province

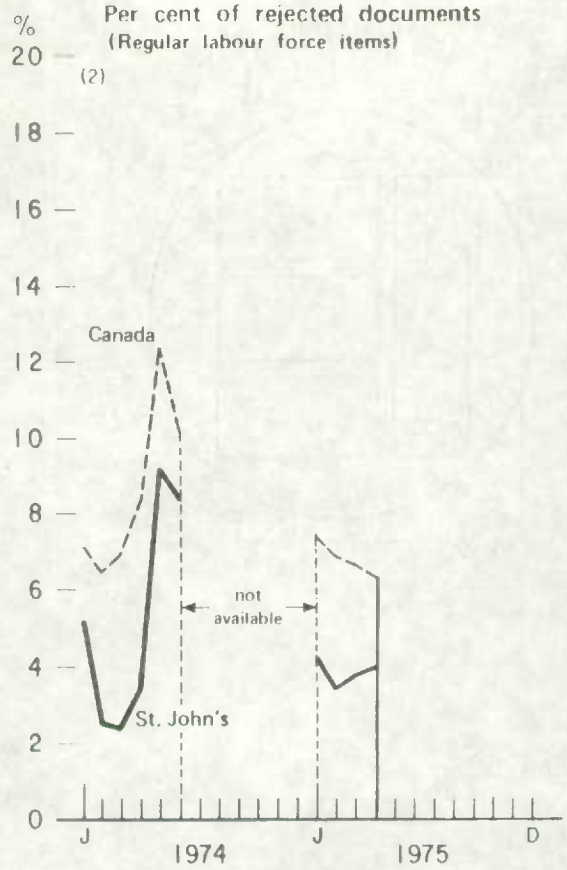


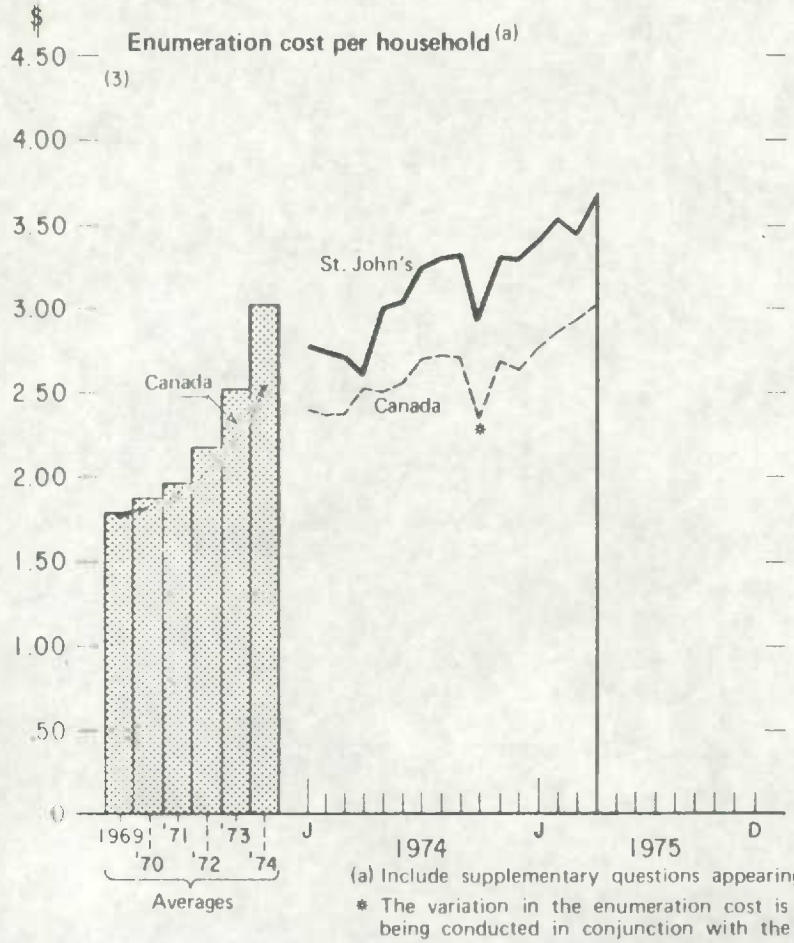
Slippage rates were calculated on population projections based on 1961 census

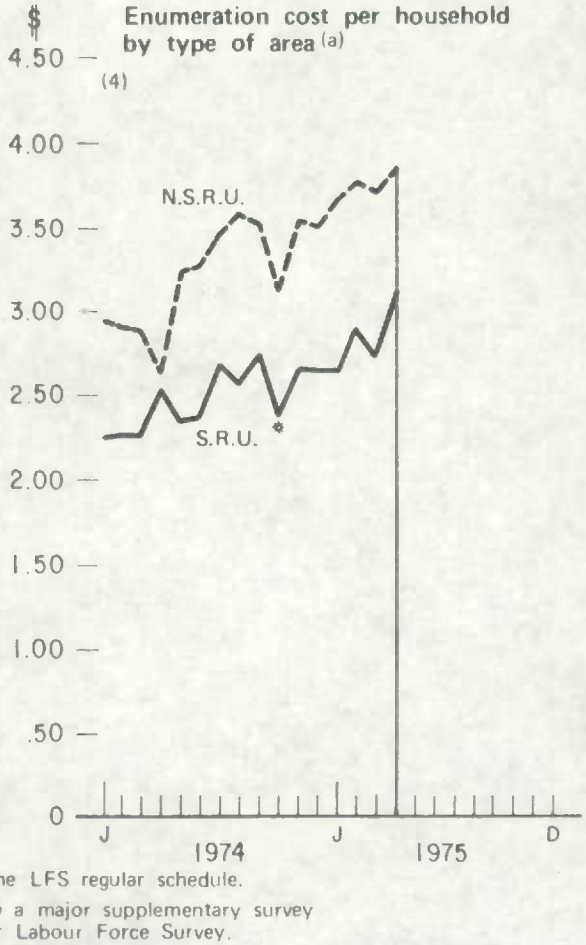
Slippage rates were calculated on preliminary population projections based on 1971 census

St. John's Regional Office





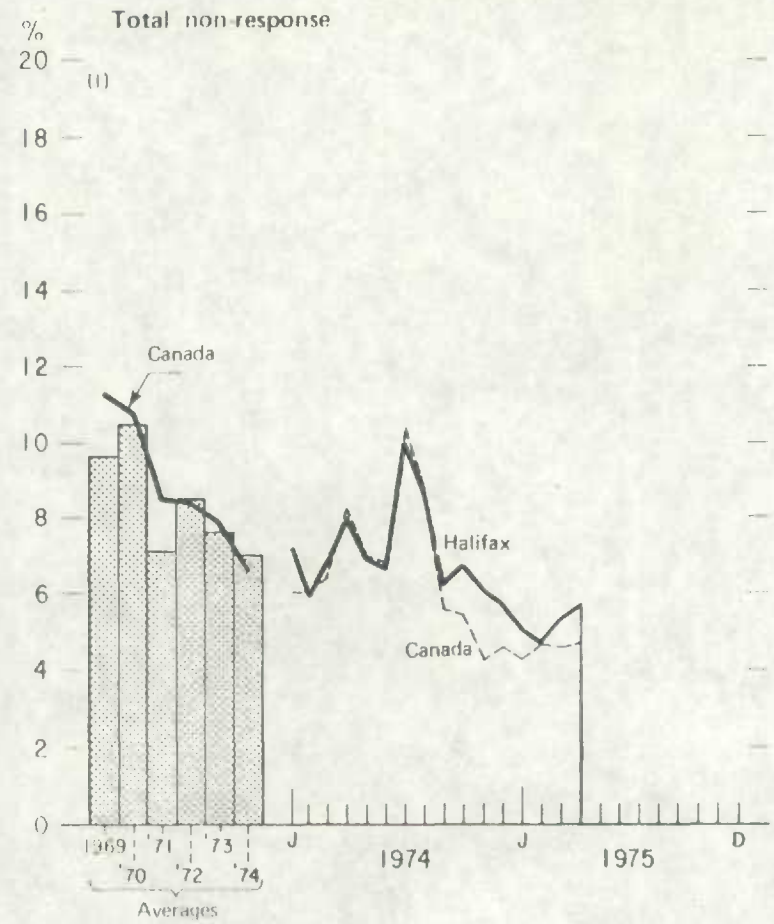


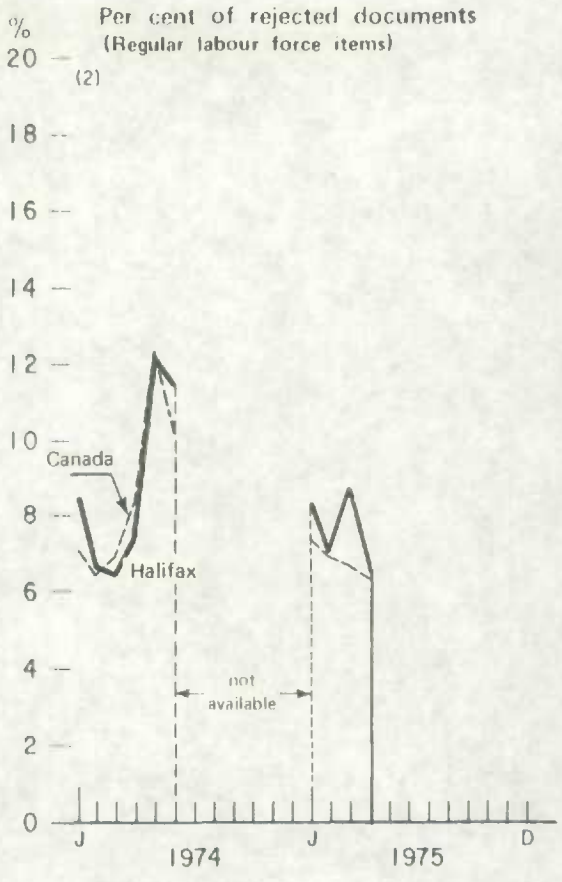


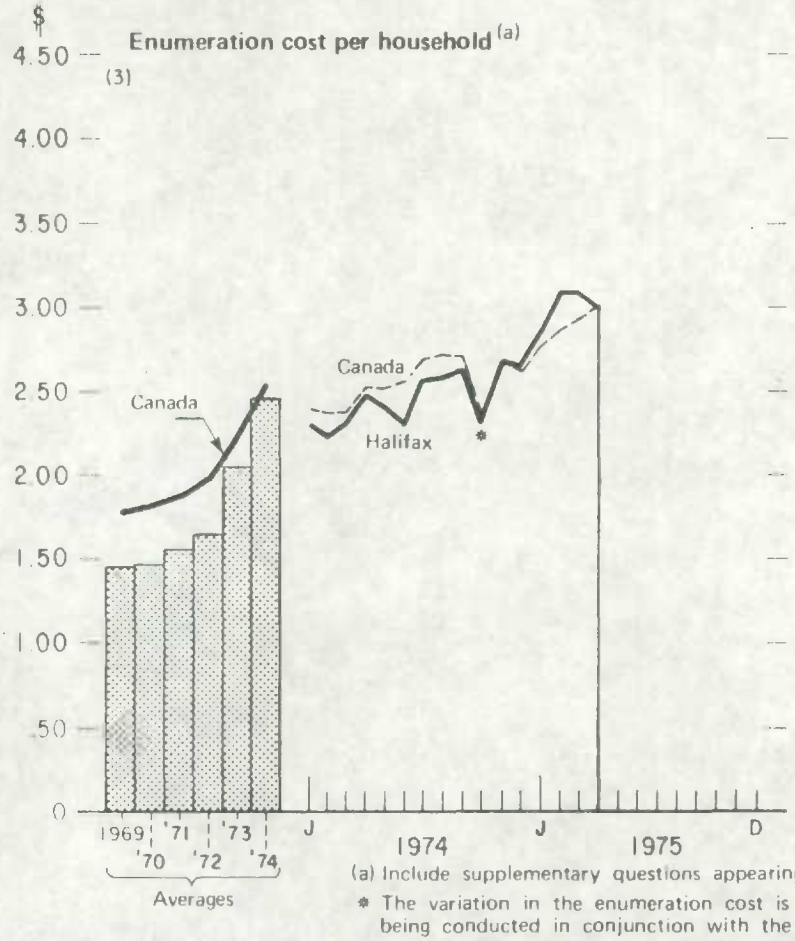
(a) Include supplementary questions appearing on the LFS regular schedule.

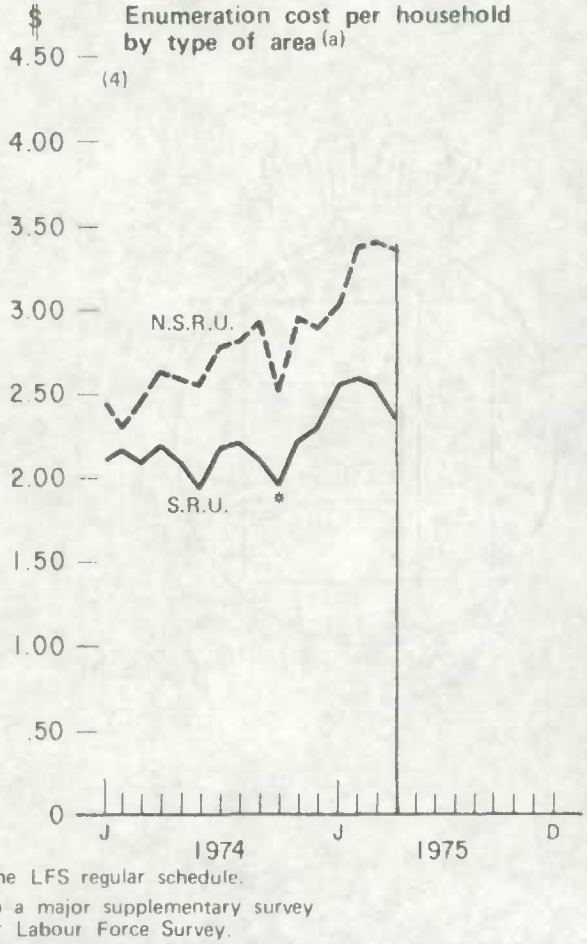
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Halifax Regional Office





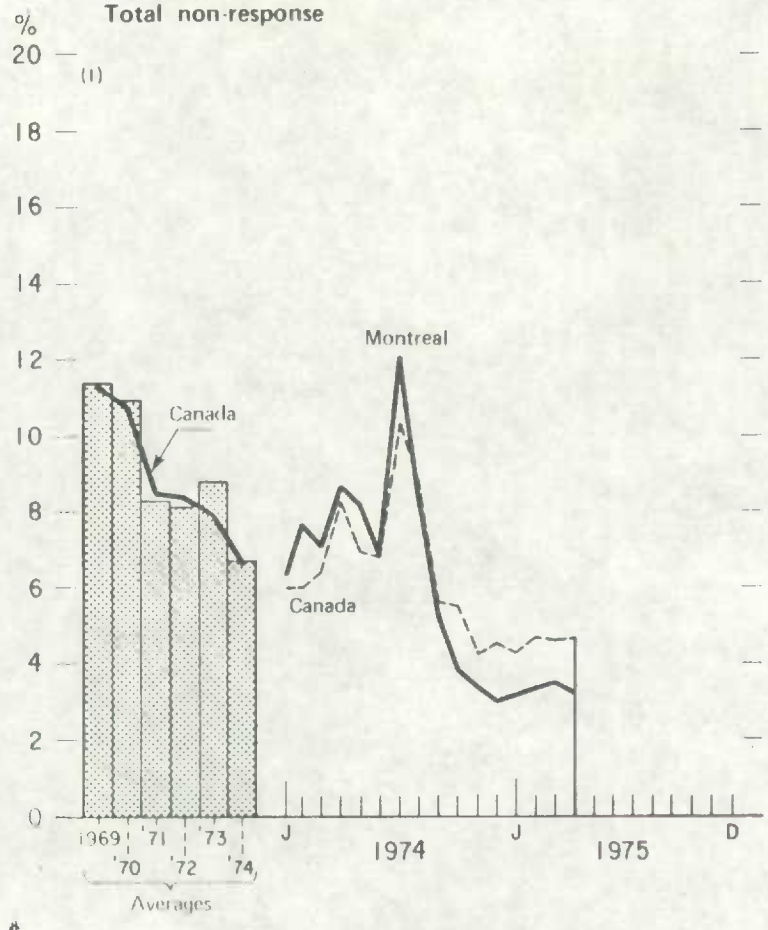


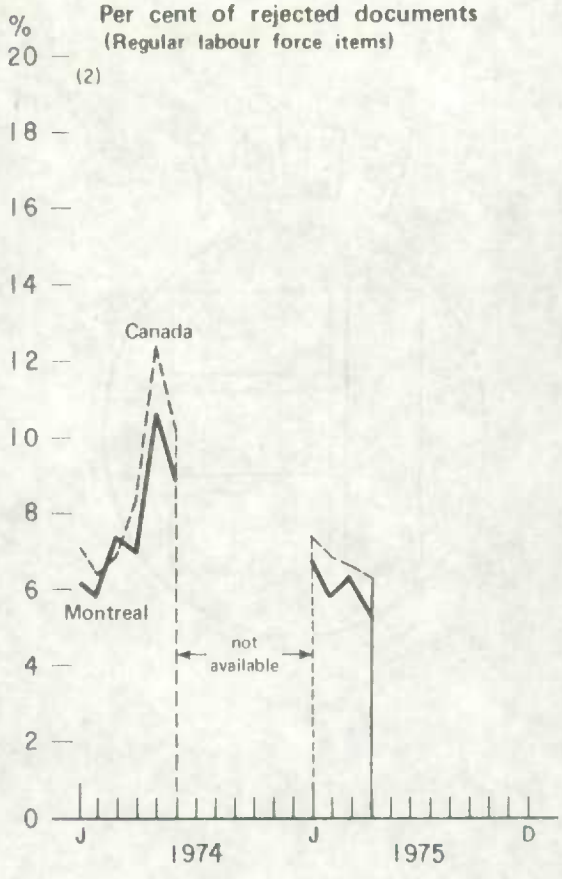


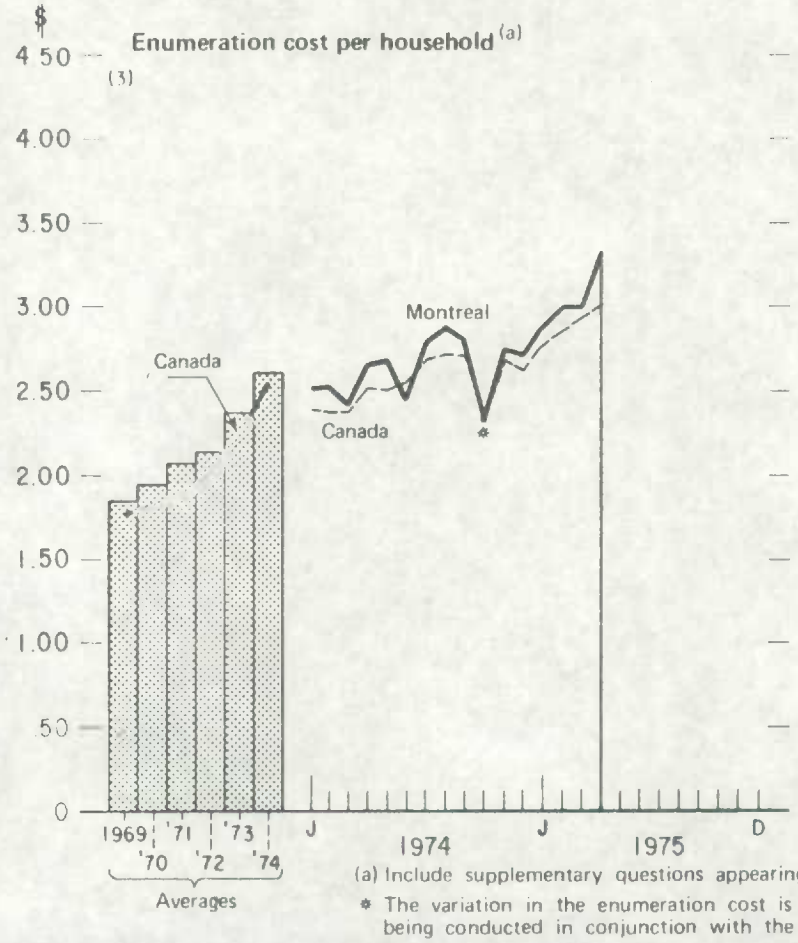
(a) Include supplementary questions appearing on the LFS regular schedule.

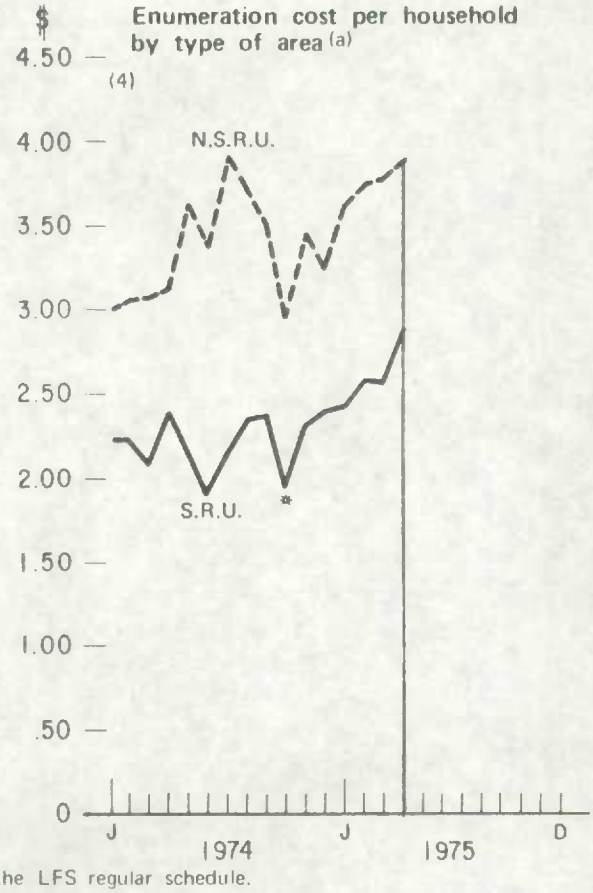
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Montreal Regional Office









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

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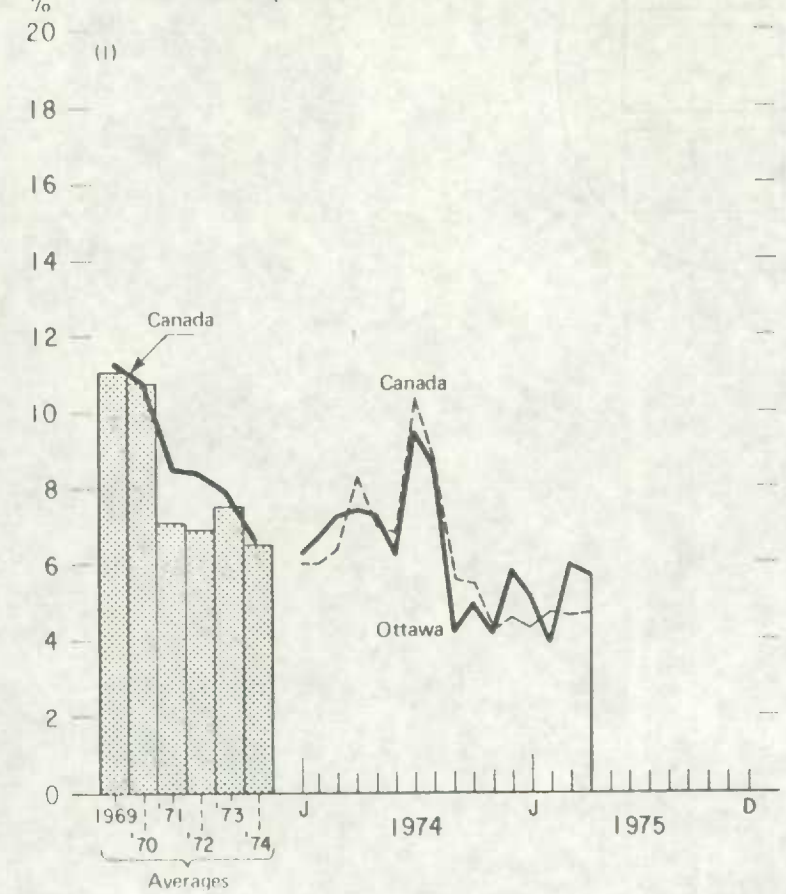
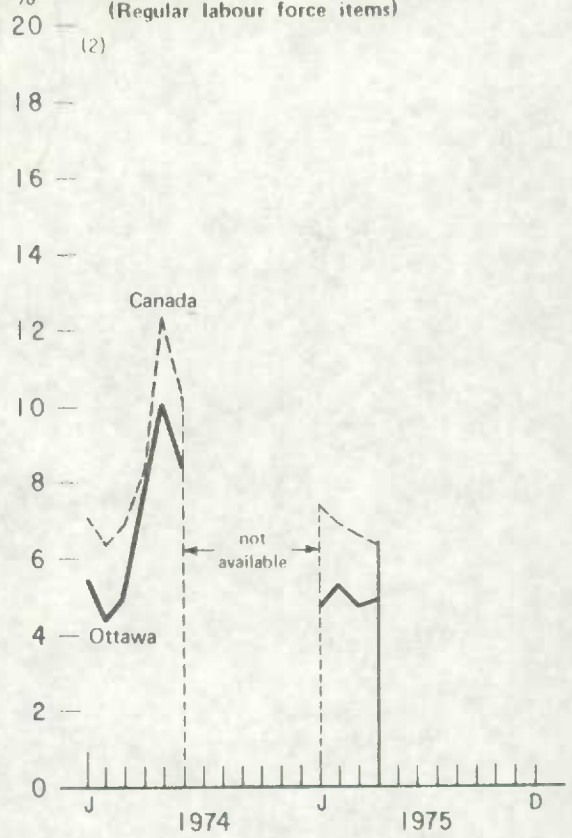
Ottawa Regional Office

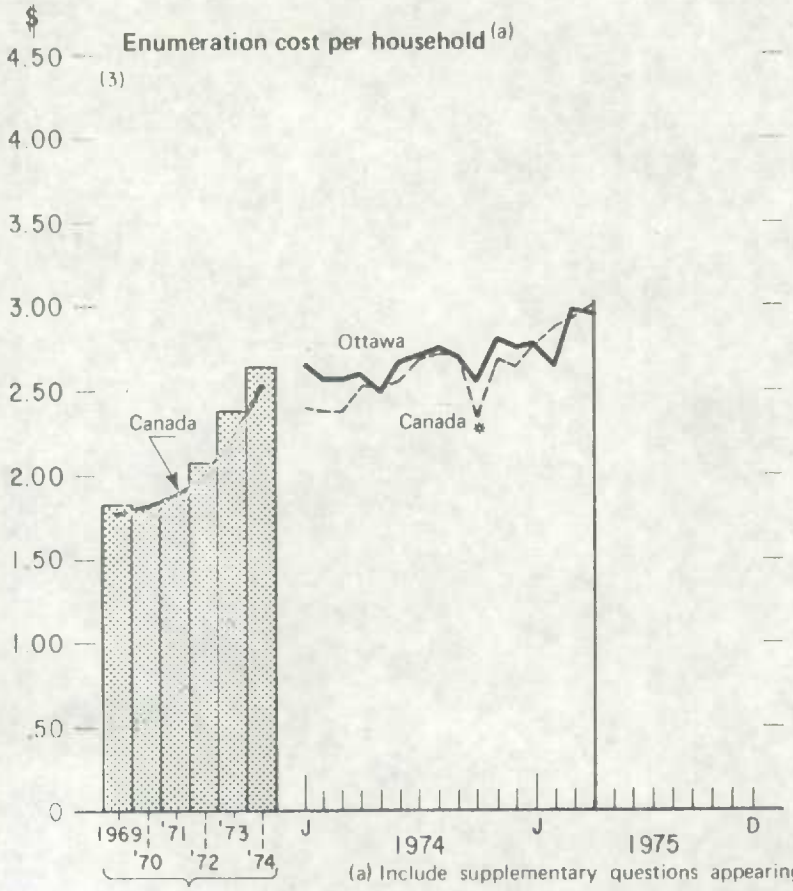
Total non-response



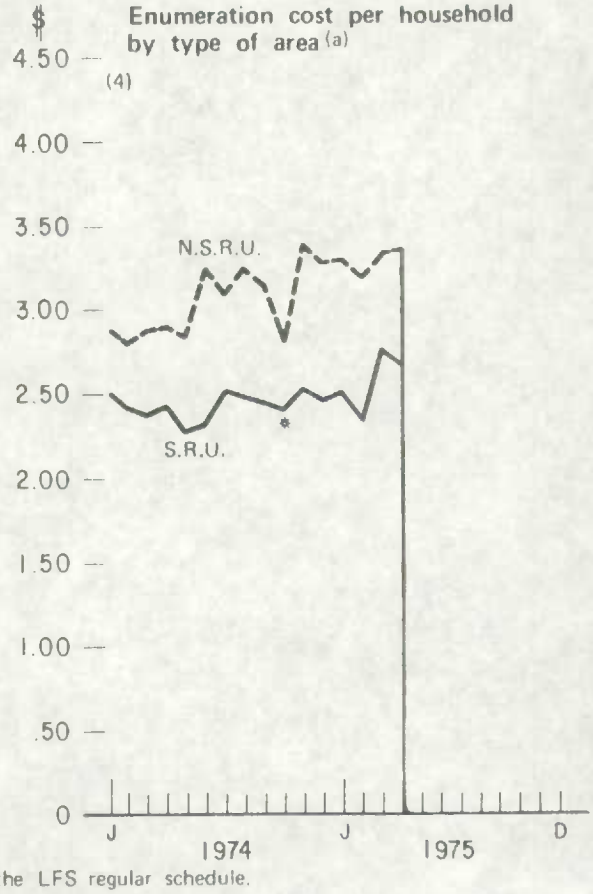
Per cent of rejected documents
(Regular labour force items)



Enumeration cost per household [a]



Enumeration cost per household
by type of area [a]



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

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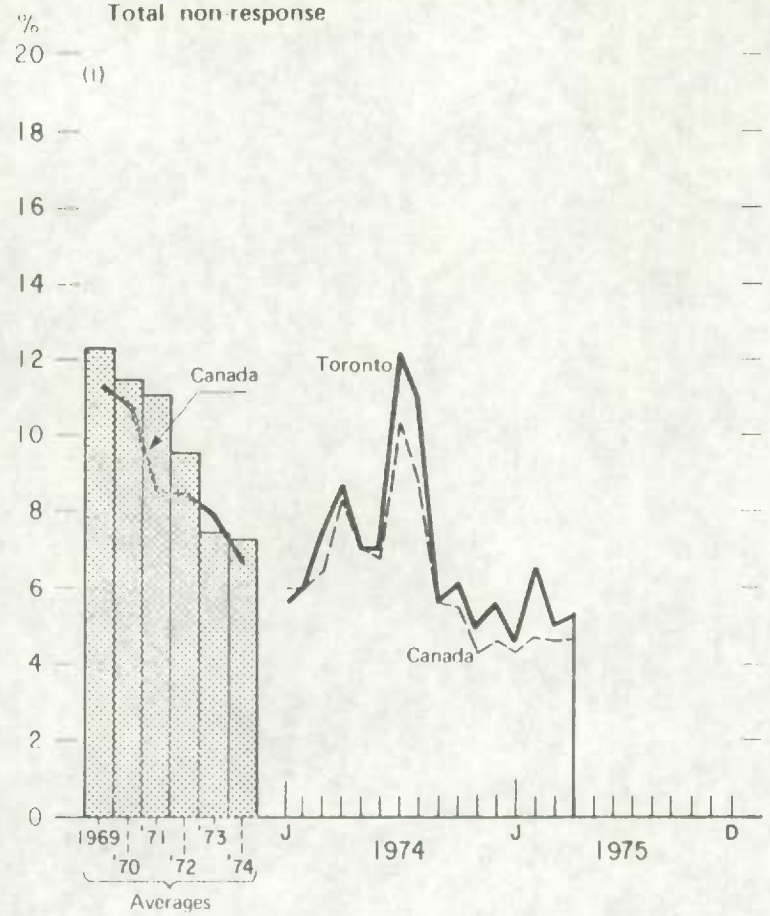
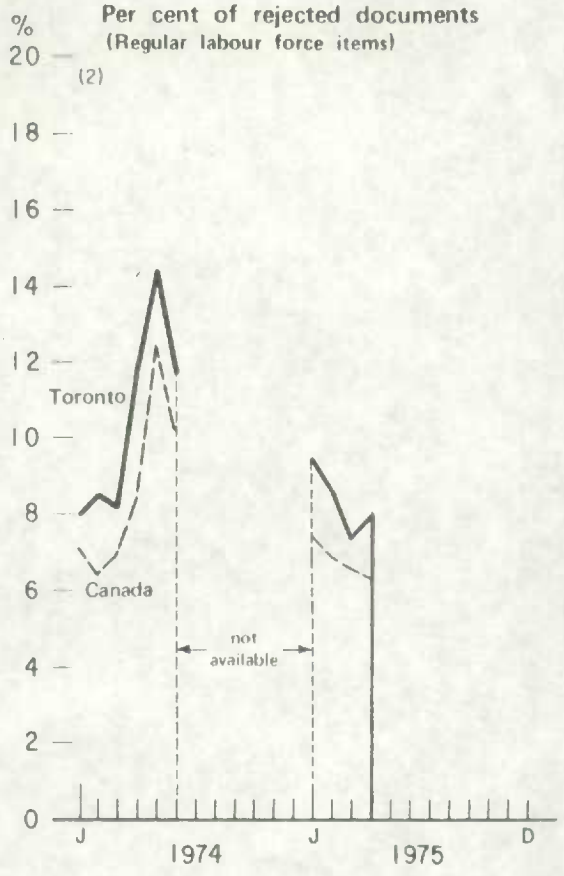
Toronto Regional Office

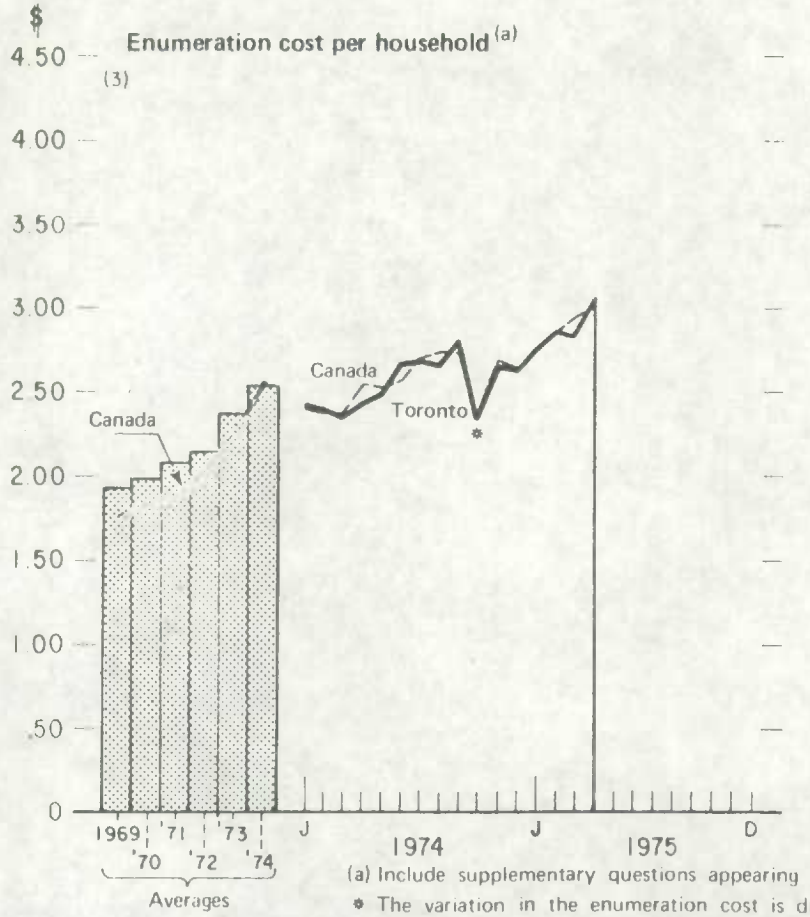
Total non-response



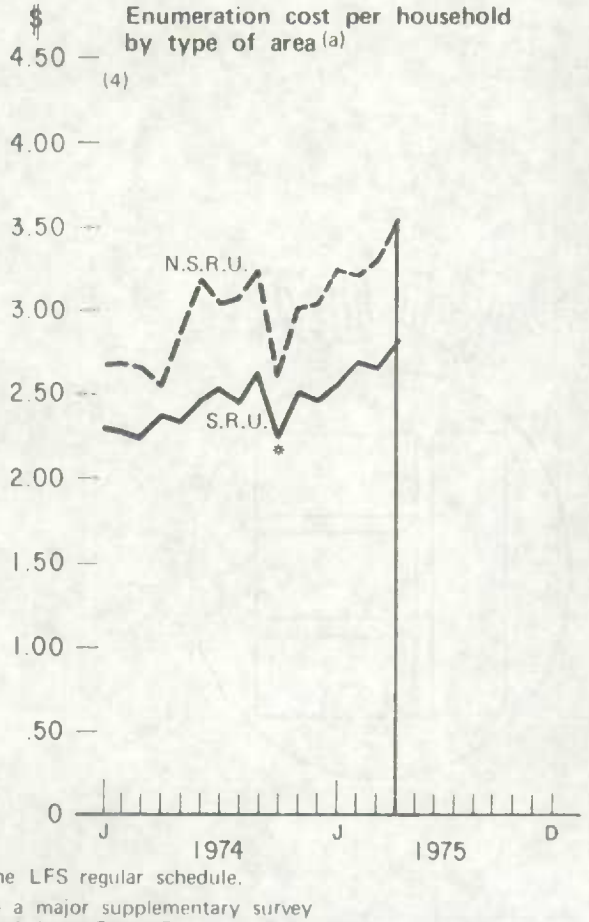
Per cent of rejected documents
(Regular labour force items)



Enumeration cost per household [a]



Enumeration cost per household by type of area [a]



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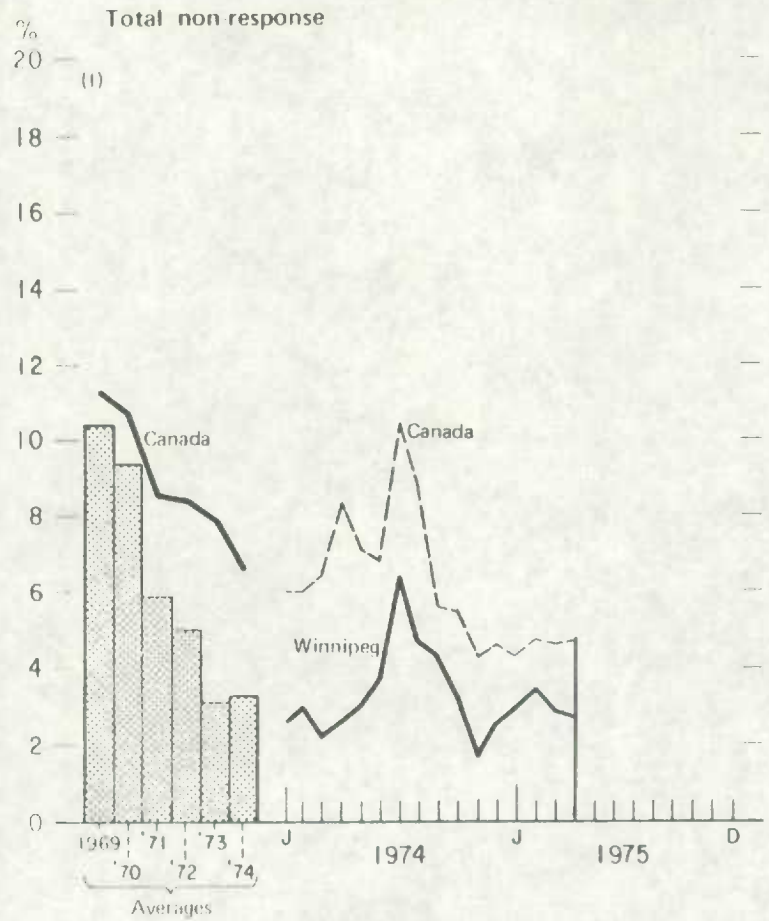
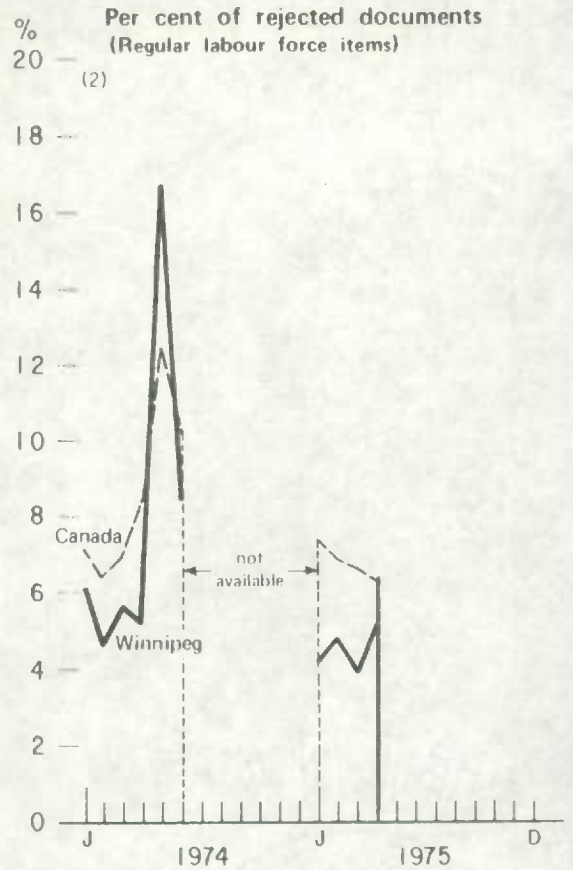
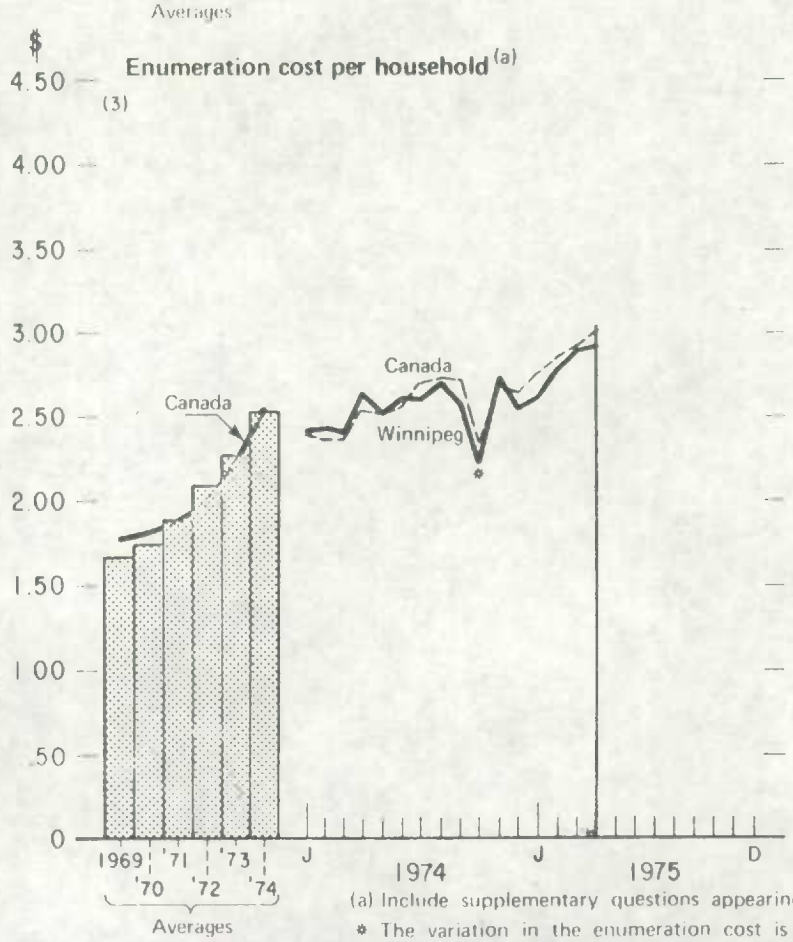
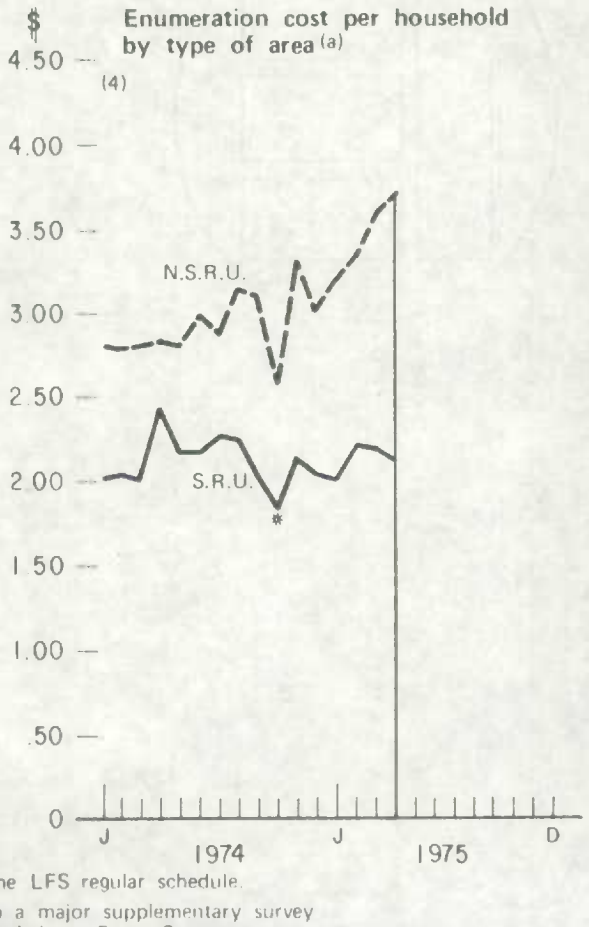
Winnipeg Regional Office









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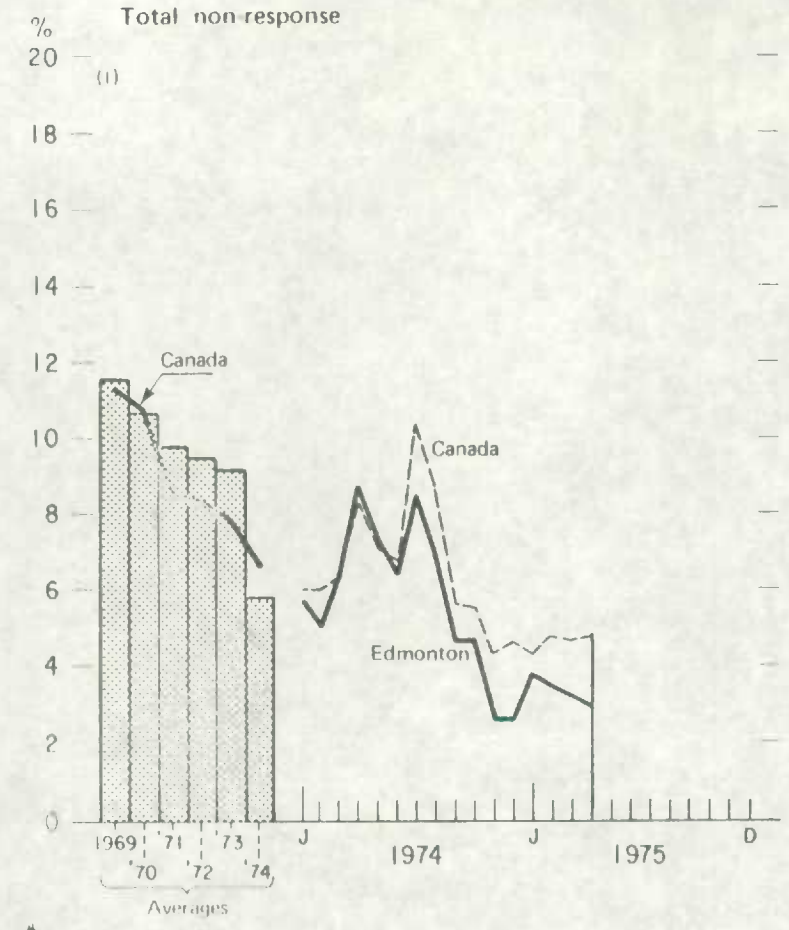
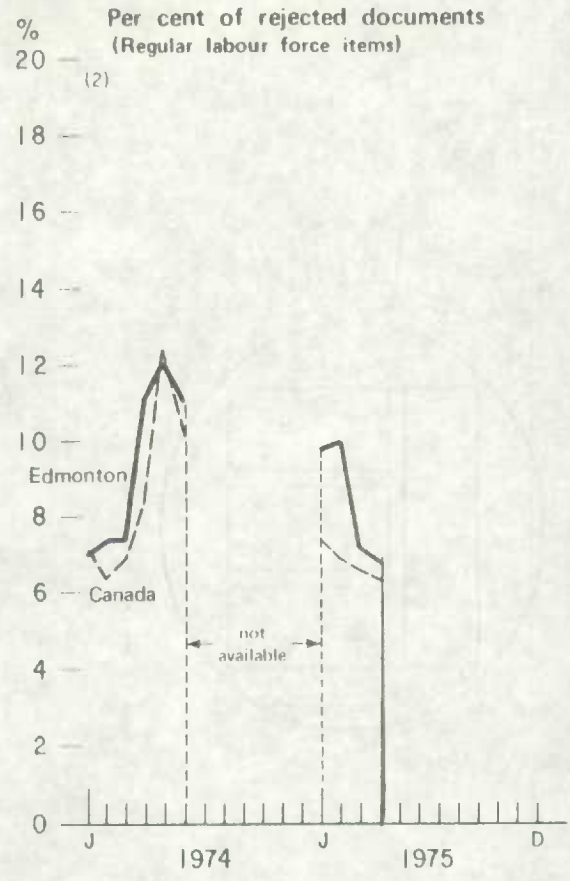
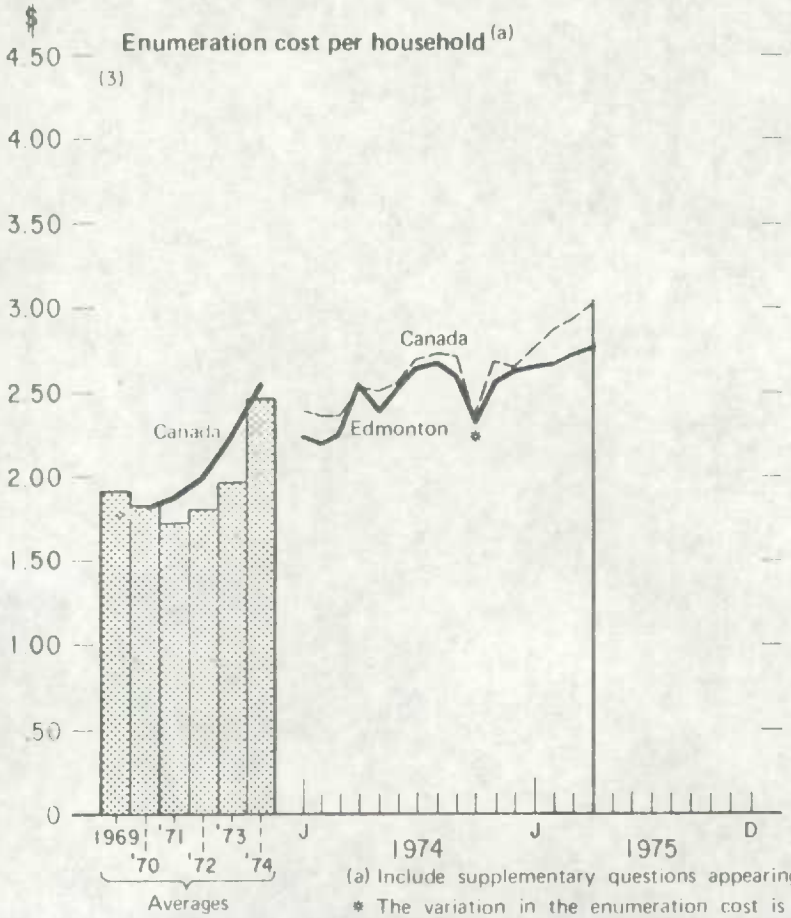
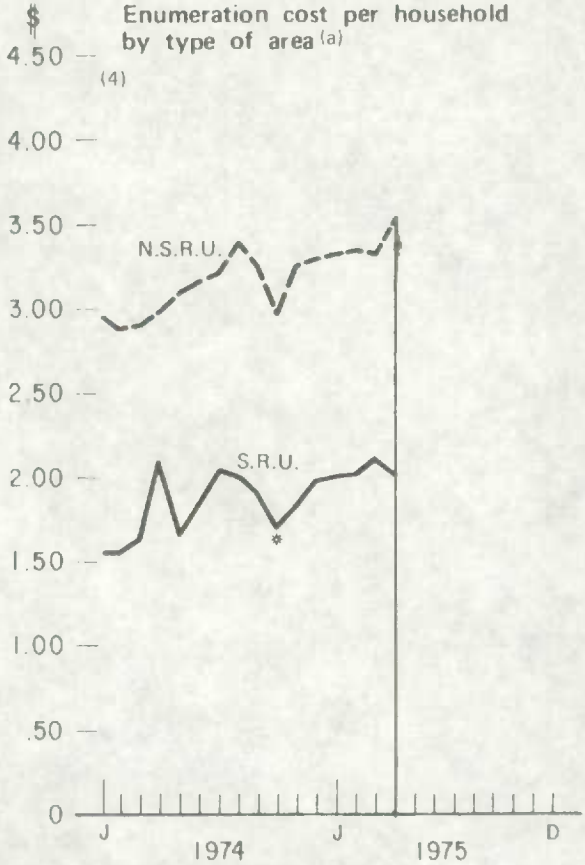
Edmonton Regional Office









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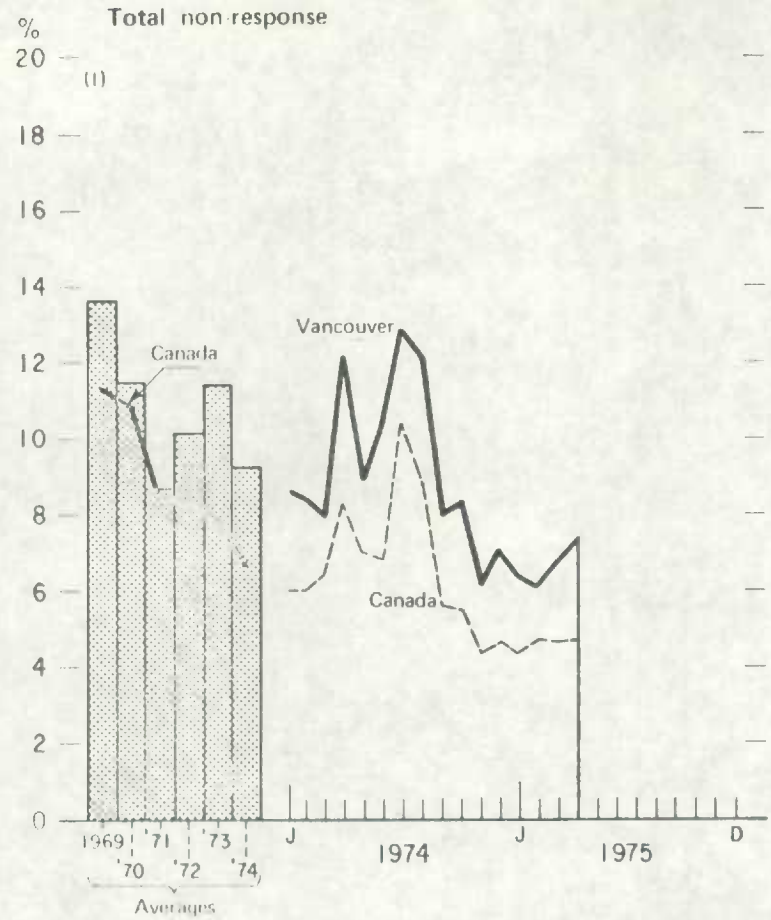
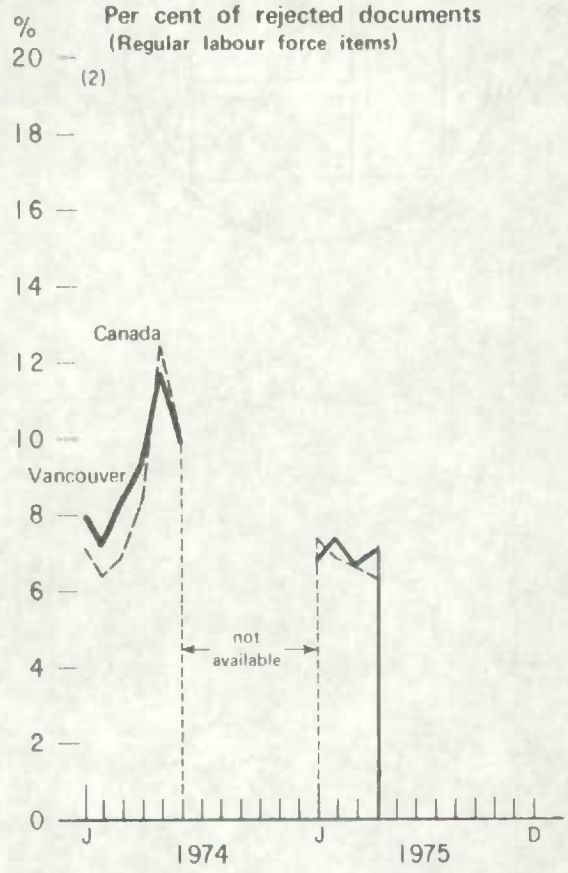
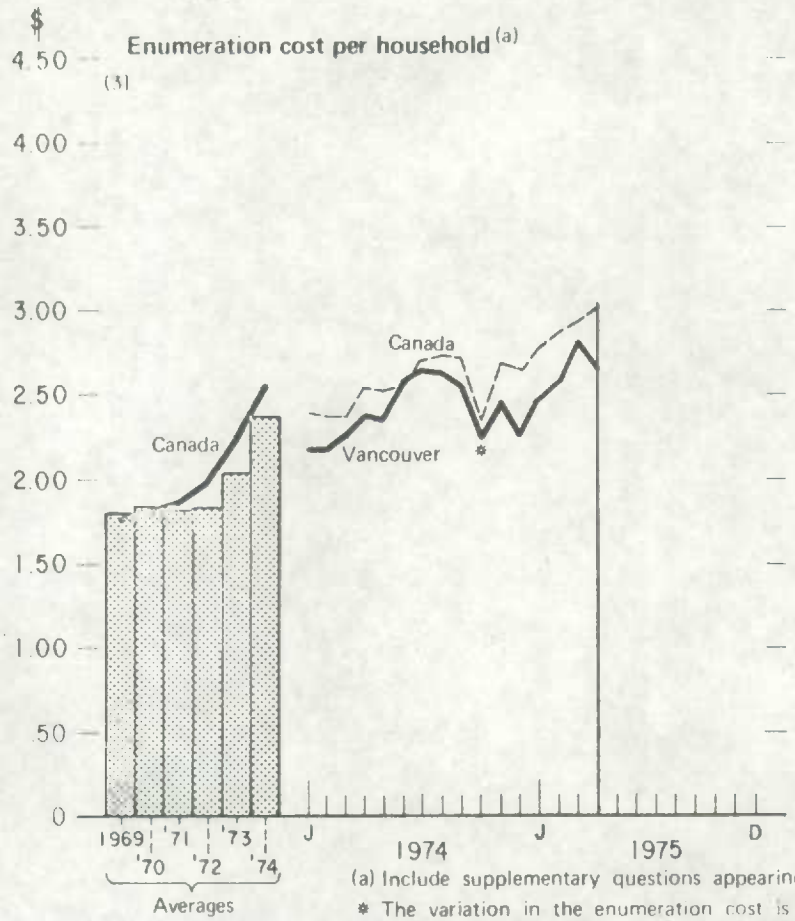
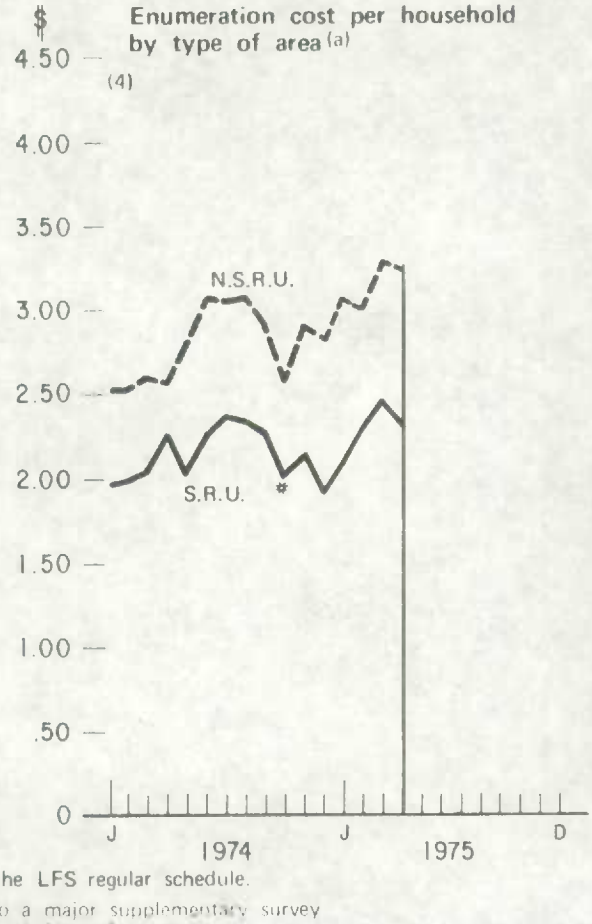
Vancouver Regional Office









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

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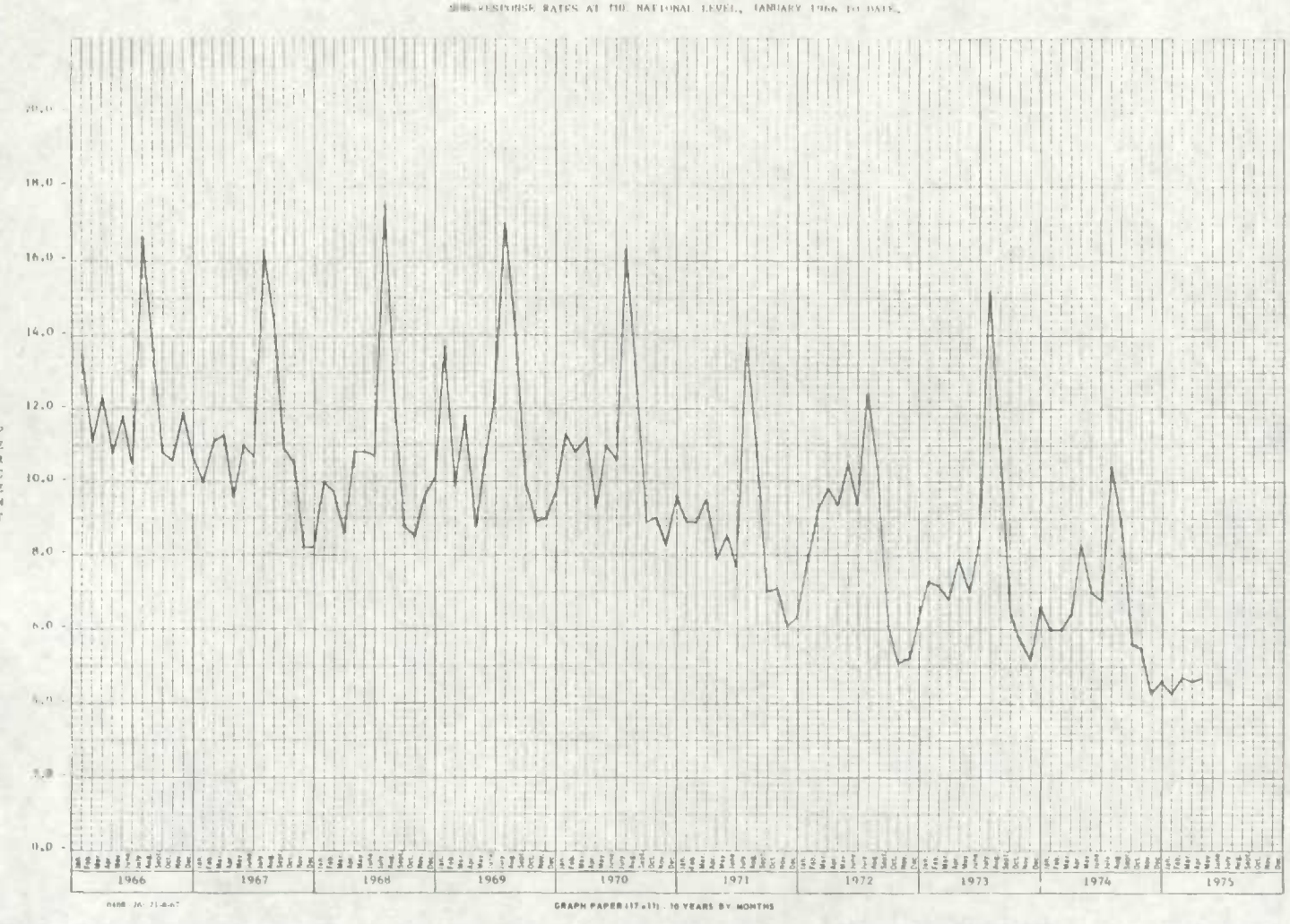
LABOUR FORCE SURVEY
THE NON-RESPONSE RATES AT THE NATIONAL LEVEL, JANUARY 1966 TO DATE

MONTH	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
JAN.	13.5	10.0	10.0	13.7	11.3	8.9	7.8	7.3	6.0	4.3
FEB.	11.1	11.1	9.7	9.9	10.8	8.9	9.2	7.2	6.0	4.7
MARCH	12.3	11.3	8.6	11.8	11.2	9.5	9.8	6.8	6.4	4.6
APRIL	10.8	9.6	10.8	8.8	9.3	7.9	9.4	7.9	8.3	4.7
MAY	11.8	11.0	10.8	10.7	11.0	8.5	10.5	7.0	7.0	
JUNE	10.5	10.7	10.7	12.3	10.6	7.7	9.4	8.4	6.8	
JULY	16.6	16.3	17.5	17.0	16.3	13.9	12.4	15.1	10.4	
AUGUST	13.6	14.3	12.5	14.0	12.9	10.7	10.1	10.9	8.8	
SEPT.	10.8	10.9	8.8	9.9	8.9	7.0	6.1	6.5	5.6	
OCT.	10.6	10.5	8.5	8.9	9.0	7.1	5.1	5.7	5.5	
NOV.	11.9	8.2	9.6	9.0	8.3	6.1	5.2	5.2	4.3	
DEC.	10.7	8.2	10.1	9.7	9.6	6.3	6.3	6.6	4.6	
AVERAGE	12.0	11.0	10.6	11.3	10.8	8.5	8.4	7.9	6.6	



Non-response Rates, Canada and Regional Offices

	1975		1974		Month-to-Month Change		Year-to-Year Change
	April	March	April	March	March to April 1975	March to April 1974	April 1974 to April 1975
Total							
Canada	4.7	4.6	8.3	6.4	+ 0.1	+ 1.9	- 3.6
St. John's	3.7	3.1	7.7	1.9	+ 0.6	+ 5.8	- 4.0
Halifax	5.7	5.4	7.9	6.8	+ 0.3	+ 1.1	- 2.2
Montréal	3.3	3.6	8.7	7.1	- 0.3	+ 1.6	- 5.4
Ottawa	5.7	6.0	7.4	7.3	- 0.3	+ 0.1	- 1.7
Toronto	5.3	5.0	8.7	7.4	+ 0.3	+ 1.3	- 3.4
Winnipeg	2.8	2.9	2.6	2.2	- 0.1	+ 0.4	+ 0.2
Edmonton	3.0	3.2	8.8	6.3	- 0.2	+ 2.5	- 5.8
Vancouver	7.4	6.8	12.2	8.0	+ 0.6	+ 4.2	- 4.8
Temporarily Absent							
Canada	1.2	1.6	2.0	1.9	- 0.4	+ 0.1	- 0.8
St. John's	0.6	0.5	1.8	0.4	+ 0.1	+ 1.4	- 1.2
Halifax	1.4	1.6	1.8	1.7	- 0.2	+ 0.1	- 0.4
Montréal	0.5	0.9	1.6	1.3	- 0.4	+ 0.3	- 1.1
Ottawa	1.7	2.4	2.0	2.1	- 0.7	- 0.1	- 0.3
Toronto	1.5	2.2	2.9	3.3	- 0.7	- 0.4	- 1.4
Winnipeg	0.7	1.2	0.8	0.9	- 0.5	- 0.1	- 0.1
Edmonton	0.8	1.1	2.2	1.8	- 0.3	+ 0.4	- 1.4
Vancouver	2.0	1.9	2.3	2.1	+ 0.1	+ 0.2	- 0.3
No one home							
Canada	1.2	1.0	2.8	1.8	+ 0.2	+ 1.0	- 1.6
St. John's	1.0	0.8	2.7	0.6	+ 0.2	+ 2.1	- 1.7
Halifax	1.1	1.1	3.0	1.6	-	+ 1.4	- 1.9
Montréal	0.7	0.7	3.2	2.7	-	+ 0.5	- 2.5
Ottawa	1.7	1.9	3.2	2.5	- 0.2	+ 0.7	- 1.5
Toronto	1.6	1.1	2.8	1.8	+ 0.5	+ 1.0	- 1.2
Winnipeg	0.4	0.5	0.7	0.3	- 0.1	+ 0.4	- 0.3
Edmonton	0.6	0.7	2.8	1.8	- 0.1	+ 1.0	- 2.2
Vancouver	2.4	1.9	3.5	1.9	+ 0.5	+ 1.6	- 1.1
Refusals							
Canada	1.4	1.2	2.1	1.7	+ 0.2	+ 0.4	- 0.7
St. John's	1.1	1.2	0.7	0.5	- 0.1	+ 0.2	+ 0.4
Halifax	1.7	1.3	1.7	1.5	+ 0.4	+ 0.2	-
Montréal	1.3	1.2	2.1	2.0	+ 0.1	+ 0.1	- 0.8
Ottawa	1.3	1.0	1.4	1.3	+ 0.3	+ 0.1	- 0.1
Toronto	1.6	1.2	2.2	1.8	+ 0.4	+ 0.4	- 0.6
Winnipeg	1.1	0.8	1.0	0.8	+ 0.3	+ 0.2	+ 0.1
Edmonton	0.9	0.8	1.8	1.5	+ 0.1	+ 0.3	- 0.9
Vancouver	1.9	2.2	4.1	3.1	- 0.3	+ 1.0	- 2.2
Other							
Canada	0.9	0.8	1.4	1.0	+ 0.1	+ 0.4	- 0.5
St. John's	1.0	0.6	2.5	0.4	+ 0.4	+ 2.1	- 1.5
Halifax	1.5	1.4	1.4	2.0	+ 0.1	- 0.6	+ 0.1
Montréal	0.8	0.8	1.8	1.1	-	+ 0.7	- 1.0
Ottawa	1.0	0.6	0.8	1.4	+ 0.4	- 0.6	+ 0.2
Toronto	0.6	0.5	0.8	0.5	+ 0.1	+ 0.3	- 0.2
Winnipeg	0.6	0.4	0.1	0.2	+ 0.2	- 0.1	+ 0.5
Edmonton	0.7	0.6	2.0	1.2	+ 0.1	+ 0.8	- 1.3
Vancouver	1.1	0.8	2.3	0.9	+ 0.3	+ 1.4	- 1.2

April 1975 avril

LABOUR FORCE SURVEY ENQUÊTE SUR LA POPULATION ACTIVE

SURVEY No 293
ENQUÊTE

ANALYSIS OF REJECTED DOCUMENTS — ANALYSE DES DOCUMENTS REJETÉS *

SUMMARY — SOMMAIRE	CANADA	ST JOHN'S	HALIFAX	MONTREAL	OTTAWA	TORONTO	WINNIPEG	EDMONTON	VANCOUVER
TAL DOCUMENTS RECEIVED / TOTAL DES DOCUMENTS REÇUS	73,480	4,590	13,544	13,284	4,273	13,705	7,114	8,670	8,300
JECTED DOCUMENTS / DOCUMENTS REJETÉS	4,626	184	886	689	210	1,099	378	587	593
F TOTAL DOCUMENTS RECEIVED ES DOCUMENTS REÇUS	6.30	4.01	6.54	5.19	4.91	8.02	5.31	6.77	7.14
TAL ERRORS / TOTAL DES ERREURS	7,040	298	1,331	1,058	307	1,713	592	855	886
. ERRORS PER REJECTED DOCUMENT ENNE D'ERREURS PAR DOCUMENT REJETÉ	1.52	1.62	1.50	1.54	1.46	1.56	1.57	1.46	1.49
ROR BREAKDOWN / RÉPARTITION DES ERREURS									
. OF CARELESS ERRORS ** RE DE FAUTES D'INATTENTION **	4,022	132	739	660	162	1,027	386	434	482
OF TOTAL ERRORS / % DU TOTAL DES ERREURS	57.1	44.3	55.5	62.4	52.8	60.0	65.2	50.8	54.4
E. PER REJECTED DOCUMENT YENNE PAR DOCUMENT REJETÉ	.869	.717	.834	.958	.771	.934	1.021	.739	.813
. OF ERRORS IN ITEMS 11, 12, 24 & 25 RE D'ERREURS AUX POSTES 11, 12, 24 & 25	658	39	134	86	32	170	45	72	80
OF TOTAL ERRORS / % DU TOTAL DES ERREURS	9.3	13.1	10.1	8.1	10.4	10.0	7.6	8.4	9.0
E. PER REJECTED DOCUMENT YENNE PAR DOCUMENT REJETÉ	.142	.212	.151	.125	.152	.155	.119	.123	.135
. OF ERRORS IN ITEMS 13, 20 TO 23 RE D'ERREURS AUX POSTES 13, 20 À 23	1,996	104	385	246	101	423	148	311	278
OF TOTAL ERRORS / % DU TOTAL DES ERREURS	28.4	34.9	28.9	23.2	32.9	24.6	25.0	36.4	31.4
E. PER REJECTED DOCUMENT YENNE PAR DOCUMENT REJETÉ	.431	.565	.435	.357	.481	.385	.392	.530	.469
. OF ERRORS IN ITEMS 14 & 15 RE D'ERREURS AUX POSTES 14 & 15	298	22	61	42	10	82	8	33	40
OF TOTAL ERRORS / % DU TOTAL DES ERREURS	4.2	7.4	4.6	4.0	3.3	4.8	1.4	3.8	4.5
E. PER REJECTED DOCUMENT YENNE PAR DOCUMENT REJETÉ	.064	.120	.069	.061	.048	.075	.021	.036	.067
OF ERRORS IN ITEMS 17, 18 & 19 RE D'ERREURS AUX POSTES 17, 18 & 19	66	1	12	24	2	11	5	5	6
OF TOTAL ERRORS / % DU TOTAL DES ERREURS	1.0	.3	.9	2.3	.6	.6	.8	.6	.7
E. PER REJECTED DOCUMENT YENNE PAR DOCUMENT REJETÉ	.014	.005	.014	.035	.010	.010	.013	.009	.010

-4000: 3-3-75

* THIS ANALYSIS REPRESENTS THE MACHINE READABLE ERRORS ONLY.
* CETTE ANALYSE REPRÉSENTE LES ERREURS LISIBLES PAR MACHINE SEULEMENT.

** CARELESS ERROR: SUM OF ERRORS FOR ITEMS 1 TO 10, 29 AND EDUC ON THE LFS DOCUMENT.
** FAUTE D'INATTENTION: TOTAL DES ERREURS AUX POSTES 1 - 10, 29 ET ÉDUC SUR LE DOCUMENT EPA.

Enumeration Cost per Household by Regional Office, S.R.U. and N.S.R.U.
November to April 1973 and 1974 to November to April 1974 and 1975

	1975				1974		1974				1973	
	April	March	Feb.	Jan.	Dec.	Nov.	April	March	Feb.	Jan.	Dec.	Nov.
All Areas												
Canada ..... $	3.02	2.94	2.88	2.77	2.64	2.69	2.53	2.38	2.38	2.40	2.32	2.41
St. John's ..... $	3.67	3.45	3.54	3.41	3.30	3.31	2.61	2.72	2.75	2.78	2.70	2.75
Halifax ..... $	2.99	3.09	3.09	2.86	2.67	2.69	2.48	2.32	2.24	2.31	2.18	2.29
Montréal ..... $	3.32	3.00	3.00	2.88	2.73	2.76	2.67	2.43	2.53	2.52	2.37	2.58
Ottawa ..... $	2.96	2.98	2.65	2.78	2.76	2.83	2.61	2.57	2.57	2.66	2.44	2.53
Toronto ..... $	3.06	2.83	2.85	2.76	2.63	2.65	2.43	2.35	2.39	2.42	2.43	2.47
Winnipeg ..... $	2.93	2.91	2.80	2.62	2.53	2.74	2.64	2.41	2.43	2.42	2.40	2.39
Edmonton ..... $	2.78	2.72	2.68	2.66	2.63	2.56	2.54	2.26	2.21	2.24	2.11	2.22
Vancouver ..... $	2.64	2.81	2.59	2.47	2.26	2.45	2.39	2.26	2.19	2.19	2.16	2.19
S.R.U.												
Canada ..... $	2.54	2.52	2.49	2.38	2.29	2.31	2.34	2.09	2.14	2.14	2.10	2.24
St. John's ..... $	3.11	2.73	2.90	2.66	2.66	2.67	2.54	2.27	2.28	2.27	2.13	2.15
Halifax ..... $	2.35	2.55	2.60	2.58	2.31	2.24	2.20	2.10	2.17	2.11	2.04	2.16
Montréal ..... $	2.89	2.57	2.59	2.44	2.43	2.34	2.41	2.09	2.25	2.25	2.12	2.42
Ottawa ..... $	2.68	2.77	2.36	2.51	2.47	2.54	2.44	2.39	2.43	2.51	2.33	2.35
Toronto ..... $	2.82	2.66	2.71	2.57	2.47	2.51	2.39	2.24	2.28	2.31	2.37	2.43
Winnipeg ..... $	2.12	2.20	2.22	2.00	2.04	2.13	2.43	2.01	2.05	2.02	2.12	2.13
Edmonton ..... $	2.02	2.12	2.02	2.01	1.98	1.85	2.10	1.63	1.56	1.56	1.40	1.63
Vancouver ..... $	2.31	2.47	2.31	2.11	1.92	2.14	2.26	2.04	1.99	1.97	1.98	2.08
N.S.R.U.												
Canada ..... $	3.57	3.47	3.40	3.29	3.10	3.19	2.78	2.75	2.70	2.75	2.61	2.64
St. John's ..... $	3.87	3.72	3.78	3.68	3.51	3.56	2.64	2.89	2.92	2.95	2.90	2.96
Halifax ..... $	3.38	3.42	3.39	3.04	2.90	2.96	2.65	2.46	2.30	2.45	2.27	2.37
Montréal ..... $	3.90	3.78	3.76	3.64	3.25	3.46	3.13	3.07	3.06	3.00	2.83	2.88
Ottawa ..... $	3.36	3.34	3.20	3.30	3.29	3.39	2.91	2.89	2.81	2.89	2.60	2.79
Toronto ..... $	3.56	3.30	3.22	3.27	3.04	3.02	2.55	2.67	2.70	2.69	2.60	2.59
Winnipeg ..... $	3.72	3.61	3.36	3.21	3.01	3.31	2.83	2.80	2.79	2.81	2.66	2.64
Edmonton ..... $	3.55	3.33	3.37	3.33	3.29	3.26	2.99	2.91	2.89	2.96	2.83	2.84
Vancouver ..... $	3.25	3.30	3.01	3.08	2.85	2.91	2.57	2.60	2.52	2.52	2.44	2.35

	Month-to-Month Change								Year-to-Year Change			
	1975			Dec. 1974 to Jan. 1975	1974			Dec. 1973 to Jan. 1974	April 1974 to April 1975	March 1974 to March 1975	Feb. 1974 to Feb. 1975	Jan. 1974 to Jan. 1975
	March to April	Feb. to March	Jan. to Feb.		March to April	Feb. to March	Jan. to Feb.					
All Areas												
Canada ..... $	+ 0.08	+ 0.06	+ 0.11	+ 0.13	+ 0.15	–	– 0.02	+ 0.08	+ 0.49	+ 0.56	+ 0.50	+ 0.37
St. John's ..... $	+ 0.22	– 0.09	+ 0.13	+ 0.11	– 0.11	– 0.03	– 0.03	+ 0.08	+ 1.06	+ 0.73	+ 0.79	+ 0.63
Halifax ..... $	– 0.10	–	+ 0.23	+ 0.19	+ 0.16	+ 0.08	– 0.07	+ 0.13	+ 0.51	+ 0.77	+ 0.85	+ 0.55
Montréal ..... $	+ 0.32	–	+ 0.12	+ 0.15	+ 0.24	– 0.10	+ 0.01	+ 0.15	+ 0.65	+ 0.57	+ 0.47	+ 0.36
Ottawa ..... $	– 0.02	+ 0.33	– 0.13	+ 0.02	+ 0.04	–	– 0.09	+ 0.22	+ 0.35	+ 0.41	+ 0.08	+ 0.12
Toronto ..... $	+ 0.23	– 0.02	+ 0.09	+ 0.13	+ 0.08	– 0.04	– 0.03	– 0.01	+ 0.63	+ 0.48	+ 0.46	+ 0.34
Winnipeg ..... $	+ 0.02	+ 0.11	+ 0.18	+ 0.09	+ 0.23	– 0.02	+ 0.01	+ 0.02	+ 0.29	+ 0.50	+ 0.37	+ 0.20
Edmonton ..... $	+ 0.06	+ 0.04	+ 0.02	+ 0.03	+ 0.28	+ 0.05	– 0.03	+ 0.13	+ 0.24	+ 0.46	+ 0.47	+ 0.42
Vancouver ..... $	– 0.17	+ 0.22	+ 0.12	+ 0.21	+ 0.13	+ 0.07	–	+ 0.03	+ 0.25	+ 0.55	+ 0.40	+ 0.28
S.R.U.												
Canada ..... $	+ 0.02	+ 0.03	+ 0.11	+ 0.09	+ 0.25	– 0.05	–	+ 0.04	+ 0.20	+ 0.43	+ 0.35	+ 0.24
St. John's ..... $	+ 0.38	– 0.17	+ 0.24	–	+ 0.27	– 0.01	+ 0.01	+ 0.14	+ 0.57	+ 0.46	+ 0.62	+ 0.39
Halifax ..... $	– 0.20	– 0.05	+ 0.02	+ 0.27	+ 0.10	– 0.07	+ 0.06	+ 0.07	+ 0.15	+ 0.45	+ 0.43	+ 0.47
Montréal ..... $	+ 0.32	– 0.02	+ 0.15	+ 0.01	+ 0.32	– 0.16	–	+ 0.13	+ 0.48	+ 0.48	+ 0.34	+ 0.19
Ottawa ..... $	– 0.09	+ 0.41	– 0.15	+ 0.04	+ 0.05	– 0.04	– 0.08	+ 0.18	+ 0.24	+ 0.38	– 0.07	–
Toronto ..... $	+ 0.16	– 0.05	+ 0.14	+ 0.10	+ 0.15	– 0.04	– 0.03	– 0.06	+ 0.43	+ 0.42	+ 0.43	+ 0.26
Winnipeg ..... $	– 0.08	– 0.02	+ 0.22	– 0.04	+ 0.42	– 0.04	+ 0.03	– 0.10	– 0.31	+ 0.19	+ 0.17	– 0.02
Edmonton ..... $	– 0.10	+ 0.10	+ 0.01	+ 0.03	+ 0.47	+ 0.07	–	+ 0.16	– 0.08	+ 0.49	+ 0.46	+ 0.45
Vancouver ..... $	– 0.16	+ 0.16	+ 0.20	+ 0.19	+ 0.22	+ 0.05	+ 0.02	– 0.01	+ 0.05	+ 0.43	+ 0.32	+ 0.14
N.S.R.U.												
Canada ..... $	+ 0.10	+ 0.07	+ 0.11	+ 0.19	+ 0.03	+ 0.05	– 0.05	+ 0.14	+ 0.79	+ 0.72	+ 0.70	+ 0.54
St. John's ..... $	+ 0.15	– 0.06	+ 0.10	+ 0.17	– 0.25	– 0.03	– 0.03	+ 0.05	+ 1.23	+ 0.83	+ 0.86	+ 0.73
Halifax ..... $	– 0.04	+ 0.03	+ 0.35	+ 0.14	+ 0.19	+ 0.16	– 0.15	+ 0.18	+ 0.73	+ 0.96	+ 1.09	+ 0.59
Montréal ..... $	+ 0.12	+ 0.02	+ 0.12	+ 0.39	+ 0.06	+ 0.01	+ 0.06	+ 0.17	+ 0.77	+ 0.71	+ 0.70	+ 0.64
Ottawa ..... $	+ 0.02	+ 0.14	– 0.10	+ 0.01	+ 0.02	+ 0.08	– 0.08	+ 0.29	+ 0.45	+ 0.45	+ 0.39	+ 0.41
Toronto ..... $	+ 0.26	+ 0.08	– 0.05	+ 0.23	– 0.12	– 0.03	+ 0.01	+ 0.09	+ 1.01	+ 0.63	+ 0.52	+ 0.58
Winnipeg ..... $	+ 0.11	+ 0.25	+ 0.15	+ 0.20	+ 0.03	+ 0.01	– 0.02	+ 0.15	+ 0.89	+ 0.81	+ 0.57	+ 0.40
Edmonton ..... $	+ 0.22	– 0.04	+ 0.04	+ 0.04	+ 0.08	+ 0.02	– 0.07	+ 0.13	+ 0.56	+ 0.42	+ 0.48	+ 0.37
Vancouver ..... $	– 0.05	+ 0.29	– 0.07	+ 0.23	– 0.03	+ 0.08	–	+ 0.08	+ 0.68	+ 0.70	+ 0.49	+ 0.56

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.

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.

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 sub-provincial 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 April 1975

	Population Estimate	Employed					Unemployed					In Labour Force				
		Estimate	C.V.	Symbol Cal'd	Symbol Pub'd	B.F.	Estimate	C.V.	Symbol Cal'd	Symbol Pub'd	B.F.	Estimate	C.V.	Symbol Cal'd	Symbol Pub'd	B.F.
Canada	16,925	9,009	0.39	A	A	1.25	795	2.22	C	D	1.87	9,804	0.34	A	A	1.13
Nfld.	387	148	2.83	D	C	2.50	41	6.84	E	E	2.99	189	1.56	C	C	1.14
P.E.I.	84	37	6.90	E	D	4.44	5	19.24	G	G	3.13	42	7.24	E	D	6.19
N.S.	580	266	1.44	C	C	1.38	27	7.69	E	E	2.24	292	1.25	C	C	1.27
N.B.	487	212	2.27	C	C	2.60	39	9.97	E	E	5.95	250	1.73	C	C	2.05
Que.	4,703	2,358	0.86	B	B	1.26	273	4.05	D	D	1.86	2,631	0.72	B	B	1.07
Ont.	6,187	3,487	0.65	B	B	1.20	248	4.18	D	E	1.66	3,736	0.58	B	A	1.13
Man.	734	399	1.47	C	C	1.11	19	11.02	F	F	1.37	418	1.34	C	C	0.99
Sask.	663	357	1.53	C	C	1.15	14	12.80	F	F	1.47	371	1.22	C	C	0.83
Alta.	1,252	732	1.04	B	C	1.19	36	8.44	E	F	1.57	768	0.97	B	C	1.19
B.C.	1,848	1,014	1.04	B	B	1.28	93	6.37	E	E	2.19	1,107	0.90	B	B	1.22

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 presented in LFSP-74-119 (Nov. 1974) entitled "Binomial Factors in the Labour Force Survey".

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 the Subprovincial Contributions to the Provincial Variance Estimates for the April 1975 Survey

For the estimate of Unemployed in Newfoundland, the binomial factor remains unusually high with a value of 2.99. An analysis of the subprovincial contributions to the provincial variance estimate revealed 5 pairs of PSUs and 1 SRU subunit for which the actual contribution significantly exceeded the desired percentage contribution to the provincial variance estimate.

Table 2a) Actual vs Desired Contribution to the Provincial Variance Estimate of Unemployed in Newfoundland by PSUs and Subunits

PSUs or Subunits Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
00021 & 00022	- Hermitage Bay area	11.84	2.45
03003 & 03006	- Notre Dame Bay area	17.38	1.97
03041 & 03042	- Grand Falls area and Northeast of Botwood	14.6	3.69
04003 & 04005	- North of Corner Brook on the Gulf of St. Lawrence	10.78	3.38
04041 & 04043	- In the western part of Newfoundland	6.96	1.43
03102	- Windsor-Grand Falls	5.07	1.57
All other PSUs and Subunits	-	33.37	85.51

The adjusted binomial factor with a value of 1.17 indicates that although these subprovincial areas are the cause of the high variance estimate, there has been some over-compensation for the excessive variance contribution by these areas in the calculation of an adjusted variance.

In Prince Edward Island the binomial factor for the estimate of Unemployed increased from 0.78 for the March survey to 3.13 for the April survey. The analysis of subprovincial contributions to the provincial variance estimates resulted in the identification of one pair of PSUs which contributed in excess of its desired contribution.

Table 2b) Actual vs Desired Contribution to the Provincial Variance Estimate of Unemployed in Prince Edward Island by PSUs and Subunits

PSUs or Subunits Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
10023 & 10025	- North Rustico and Kensington area	86.73	30.49
All other PSUs and Subunits	-	13.27	69.51

The adjusted binomial factor for this characteristic has a value of 0.60 which falls within an acceptable range of binomial factors for previous surveys and thus indicates that the above PSU is primarily responsible for the increased variance estimate.

The binomial factor for the estimate of Unemployed in Nova Scotia remained unusually high with a value of 2.24. Three pairs of PSUs and two SRU subunits were identified as contributing excessively to the provincial variance estimate.

Table 2c) Actual vs Desired Contribution to the Provincial Variance Estimate of Unemployed in Nova Scotia by PSUs and Subunits

PSUs or Subunits Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
20022 & 20024	- Gabarouse Bay area	11.74	2.29
21002 & 21007	- Antigonish and southwest of Chedabucto Bay area	6.21	2.18
21042 & 21046	- Oxford and Picton area	6.86	2.29
20102	- Sydney-Glace Bay	5.23	1.53
20103	- Sydney-Glace Bay	3.90	1.38
All other PSUs and Subunits	-	66.06	90.33

The adjusted binomial factor with a value of 1.64 lies within an acceptable range in relation to binomial factors for previous surveys and it can be concluded that the above PSUs and subunits are primarily responsible for the increased variance estimate.

The estimate of the total number of Employed persons in New Brunswick has an associated binomial factor with a value of 2.60 which is unusually high for this characteristic. Three pairs of PSUs and one pair of special area PSUs were identified in which the actual percentage contribution significantly exceeded the desired percentage contribution.

Table 2d) Actual vs Desired Contribution to the Provincial Variance Estimate of Employed in New Brunswick by PSUs and Subunits

PSUs or Subunits Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
32021 & 32028	- North of Fredericton Town and Woodstock area	14.98	5.09
32042 & 32043	- Perth and Grand Falls area	8.46	2.55
33061 & 33066	- South of Dalhousie and north of Bathurst	18.69	5.35
30901 & 30902	- Special areas	10.32	1.40
All other PSUs and Subunits	-	47.55	85.61

The adjusted binomial factor for the estimate of Employed in New Brunswick is 1.44. This value compares favourably with binomial factors for this characteristic for previous surveys. The above mentioned PSUs thus account for the high variance estimate.

Also in New Brunswick, the binomial factor for the estimate of Unemployed increased considerably from 2.20 for the Marcy survey to 5.95 for the April survey. Two pairs of PSUs were identified in which the actual percentage contribution to the variance estimate greatly exceeded the desired percentage contribution.

Table 2e) Actual vs Desired Contribution to the Provincial Variance Estimate of Unemployed in New Brunswick by PSUs and Subunits

PSUs or Subunits Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
33003 & 33005	- Shippegan and Caraquet Bay area	11.86	3.41
33061 & 33066	- South of Dalhousie and north of Bathurst	67.12	5.35
All other PSUs and Subunits	-	21.02	91.24

The adjusted binomial factor for the characteristic Unemployed in New Brunswick has a value of 1.37. This value is comparable with corresponding binomial factors for previous surveys which indicates that these two subprovincial areas were the main cause of the increased binomial factor.

In British Columbia the binomial factor for the estimated total of unemployed persons has a value of 2.19 which remains unusually high for this estimate. The subprovincial analysis identified 4 pairs of PSUs and 1 SRU subunit for which the actual contribution to the variance by these PSUs was greatly in excess of the desired contribution.

Table 2f) Actual vs Desired Contribution to the Provincial Variance Estimate of Unemployed in British Columbia by PSUs and Subunits

PSUs or Subunits Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
92003 & 92013	- Northeast of Kelowna and west of Penticton	15.96	2.88
94013 & 94017	- South of Fraser River and southeast of New Westminster	15.83	3.96
97003 & 97008	- Prince George area	16.95	3.27
98002 & 98004	- Southeast of Dawson Creek and Fort St. John area	1.39	0.45
92201	- Penticton	3.93	1.06
All other PSUs and Subunits	-	45.94	88.38

The adjusted binomial factor with a value of 1.14 indicates that although these subprovincial areas are the cause of the high variance estimate, there has been some over-compensation for the excessive variance contributions by these areas in the calculation of an adjusted variance.

Detailed Analysis to Determine Causes of Excessive Contributions by Selected Strata

For the province of Newfoundland, the pair of PSUs 03003 and 03006 contributed 17.38% of the provincial variance estimate of Unemployed, whereas the desired contribution by this pair of PSUs was 1.97%. The cause of this excessive contribution is due to the fact that the sample size in

PSU 03006 is considerably less than that for PSU 03003 due to the removal of persons in sampled areas of PSU 03006 under the Government Resettlement Program. There was a half-stratum estimate of 2013 persons (corresponding to 26 sampled individuals) classified as unemployed, whereas from PSU 03006 there was a half-stratum estimate of 174 unemployed persons (corresponding to a sampled 2 individuals).

For the pair of PSUs 20022 and 20024 in Nova Scotia, the actual contribution was 11.74% compared to a desired contribution of 2.29%. Although the distributions by industry of persons "in Labour Force" for the two PSUs were relatively equal, nonetheless, there was a definite tendency for unemployment to be higher in PSU 20024 than in PSU 20022. In PSU 20022 the unemployment rate based on half-stratum estimates was 9.7%, whereas in PSU 20024 the unemployment rate was 36.2%. A table of Labour Force status by major industry breakdowns follows.

Table 3b) Estimates and Sample Takes by Characteristic and PSU for April 1975

Industry	Employed				Unemployed				In Labour Force			
	20022		20024		20022		20024		20022		20024	
	Est.*	#**	Est.	#	Est.	#	Est.	#	Est.	#	Est.	#
Agriculture	0	0	0	0	0	0	0	0	0	0	0	0
Other Primary Ind.	227	3	63	1	0	0	232	3	227	3	295	4
Manufacturing	1107	14	163	2	84	1	235	3	1191	15	398	5
Construction	711	9	0	0	168	2	231	3	879	11	231	3
Transp. & Other Utilities	390	5	197	3	94	1	235	3	484	6	432	6
Trade	746	9	443	6	0	0	0	0	746	9	443	6
Finance	0	0	0	0	0	0	0	0	0	0	0	0
Services	665	9	734	10	94	1	0	0	759	10	734	10
Public Admin.	259	3	161	2	0	0	66	1	259	3	227	3
Total	4105	52	1761	24	440	5	999	13	4545	57	2760	37

*) denotes half-stratum estimates based on the PSU
**) denotes unweighted sample takes

In the province of New Brunswick the actual contribution to the provincial variance estimate of 67.12% significantly exceeds the desired contribution of 5.35% for PSUs 33061 and 33066. Although the distribution by industry of persons in the Labour Force was more or less the same between the two PSUs, there was a definite tendency for unemployment to be higher within PSU 33066 than PSU 33061 for some industries, notably Other Primary Industries and Construction. The resultant unemployment rates based on weighted sample takes for PSUs 33061 and 33066 were 13.7% and 58.3%, respectively. Table 3c) presents a tabulation of Labour Force by industry classification for these PSUs.

Table 3c) Estimates and Sample Takes by Characteristic and PSU for April 1975

Industry	Employed				Unemployed				In Labour Force			
	33061		33066		33061		33066		33061		33066	
	Est.*	#**	Est.	#	Est.	#	Est.	#	Est.	#	Est.	#
Agriculture	0	0	62	1	0	0	0	0	0	0	62	1
Other Primary Ind.	1644	22	0	0	73	1	1635	23	1717	23	1635	23
Manufacturing	590	8	411	6	467	5	491	7	1057	13	902	13
Construction	492	7	161	2	421	5	1037	14	913	12	1198	16
Transp. & Other Utilities	417	6	63	1	82	1	209	3	499	7	272	4
Trade	2001	26	690	10	170	2	225	3	2171	28	915	13
Finance	97	1	87	1	0	0	0	0	97	1	87	1
Services	1824	26	1337	19	69	1	334	5	1893	27	1671	24
Public Admin.	1040	13	0	0	0	0	0	0	1040	13	0	0
Total	8105	109	2811	40	1282	15	3931	55	9387	124	6742	95

*) denotes half-stratum estimates based on the PSU
**) denotes unweighted sample takes

NON-RESPONSE

The contents of this appendix are taken from publication NR 75-03 (March 1975), Non-response in the Canadian Labour Force Survey, prepared by F.T. Newton and J.R. Norris, Household Surveys Development Staff, and E.T. McLeod of Field Division.

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 at the Canada level increased slightly from 4.6% in March to 4.7% in April. This increase was due to higher rates in the N1, N2 and "other" components this month. The overlap non-response rate increased 0.1% from March to April and the adjusted non-response rate for the April survey was calculated to be 4.3%.

Compared with last year's overall non-response rate of 8.3% for April, this year's rate was lower. Furthermore, all components of non-response exhibited year to year decreases in their rates.

B. At the Regional Office Level

1. St. John's Regional Office

The overall non-response rate for the St. John's Regional Office increased from 3.1% in March to 3.7% in April. Increases in the T.A., N1 and "other" components accounted for this month's higher rate. The overlap rate for April remained the same as the 0.5% rate recorded in March and the adjusted non-response rate for the April survey was computed to be 3.2%.

Compared with last year's April overall non-response rate of 7.7%, this year's rate was lower. Decreases in the T.A., N1 and "other" components were responsible for this year's lower rate.

2. Halifax Regional Office

The overall non-response rate for the Halifax Regional Office increased from 5.4% in March to 5.7% in April. This month's higher rate was attributed to increases in the N2 and "other" components. The overlap rate for April remained the same as the 0.7% rate recorded in March and the adjusted overall non-response rate for April was calculated to be 5.0%.

Compared with the 7.9% overall non-response rate in April 1974, this year's rate was lower. At the component level, decreases in the T.A. and N1 rates accounted for this year's lower rate.

In Economic Region 31, the "No One Home" (N1) component decreased substantially, while the "Refusal" (N2) component increased. Given in the table below are the N1 and N2 rates over the past 4 months:

Economic Region 31

	No One Home (%)	Refusal (%)
January	1.5	3.3
February	2.0	3.0
March	3.3	1.8
April	1.3	3.1

The number of refusals in economic region 31 for March was 11 and increased to 19 for April. While there is no factual information on the cause of the sudden increase, it may have been effected by the recent training program given all interviewers on "Doorstep Diplomacy".

3. Montreal Regional Office

The overall non-response rate for the Montreal Regional Office decreased from 3.6% in March to 3.3% in April. This month's lower rate was attributed to the 0.4% decrease in the T.A. component. The overlap rate increased 0.1% from March to April and the adjusted non-response rate was computed to be 2.9% for the April survey.

Compared with last year's April overall non-response rate (8.7%), this year's rate was considerably lower. Furthermore, all components of non-response exhibited substantial year to year decreases in their rates.

4. Ottawa Regional Office

The overall non-response rate for the Ottawa Regional Office decreased from 6.0% in March to 5.7% in April. At the component level, decreases in the T.A. and N1 rates were responsible for this month's lower rate. There was no change recorded in the overlap rate of 0.1% from March to April and the adjusted non-response rate was calculated to be 5.6% for the April survey.

Compared with the overall non-response rate of 7.4% in April 1974, this year's rate was lower. This year's lower rate was due to decreases in the T.A., N1 and N2 components.

In Economic Region 58, it was noted that the T.A. and N1 components this month decreased considerably from the previous month. The T.A. and N1 rates for the March and April surveys are given below:

Economic Region 58

	Temporarily Absent (%)	No One Home (%)
March	3.0	2.9
April	2.0	1.7

5. Toronto Regional Office

The overall non-response rate for the Toronto Regional Office increased from 5.0% in March to 5.3% in April. It should be noted that, while the T.A. component decreased 0.7% this month, the increase in the overall rate was mainly due to the 0.5% and 0.4% increases in the N1 and N2 components respectively. Again this month, there was no overlap rate in the Toronto R.O. since the 2 households recorded in the N6 category did not affect the non-response rate.

Compared with last year's April overall non-response rate of 8.7%, this year's rate was lower. Furthermore, all components of non-response exhibited year to year decreases in their rates.

6. Winnipeg Regional Office

The overall non-response rate for the Winnipeg Regional Office decreased slightly from 2.9% in March to 2.8% in April. Decreases of 0.5% and 0.1% were recorded in the T.A. and N1 components respectively, while increases of 0.3% and 0.2% were noted in the N2 and "other" components respectively. The overlap rate decreased from 0.4% in March to 0.3% in April and the adjusted non-response rate for April was calculated to be 2.5%.

Compared with last year's April overall non-response rate of 2.6%, this year's rate was higher. This year's higher rate was attributed to increases in the N2 and "other" components.

7. Edmonton Regional Office

The overall non-response rate for the Edmonton Regional Office decreased from 3.2% in March to 3.0% in April. This month's lower rate was mainly due to decreases in the T.A. and N1 components. There was no change in the 0.4% overlap rate from March to April and the adjusted non-response rate was computed to be 2.6% for the April survey.

Compared with the 8.8% overall non-response rate in April 1974, this year's rate was considerably lower. Furthermore, decreases were recorded in the year to year changes by all components of non-response.

8. Vancouver Regional Office

The overall non-response rate for the Vancouver Regional Office increased from 6.8% in March to 7.4% in April. Increases in the T.A., N1 and "other" components were mainly responsible for this month's higher rate. The overlap rate for April did not change from the 0.3% rate recorded in March and the April adjusted non-response rate was calculated to be 7.1%.

Compared with last year's April overall non-response rate (12.2%), this year's rate was lower. Furthermore, all components of non-response exhibited year to year decreases in their rates.

In Economic Region 97, the rates for the T.A., N1 and N2 components over the past 4 months are given below:

Economic Region 97

	T.A. (%)	N1 (%)	N2 (%)
January	3.4	4.3	3.4
February	2.5	3.4	2.9
March	4.5	4.1	3.7
April	3.2	5.6	1.2

Although the T.A. and N2 rates have decreased this month, the rate for the N1 component has increased to a rather high level. While the HF & E survey did increase the interviewers work load for April - well organized re-calls on "No one home" households should effectively reduce the N1 rate for economic region 97.

Table 1(a)

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

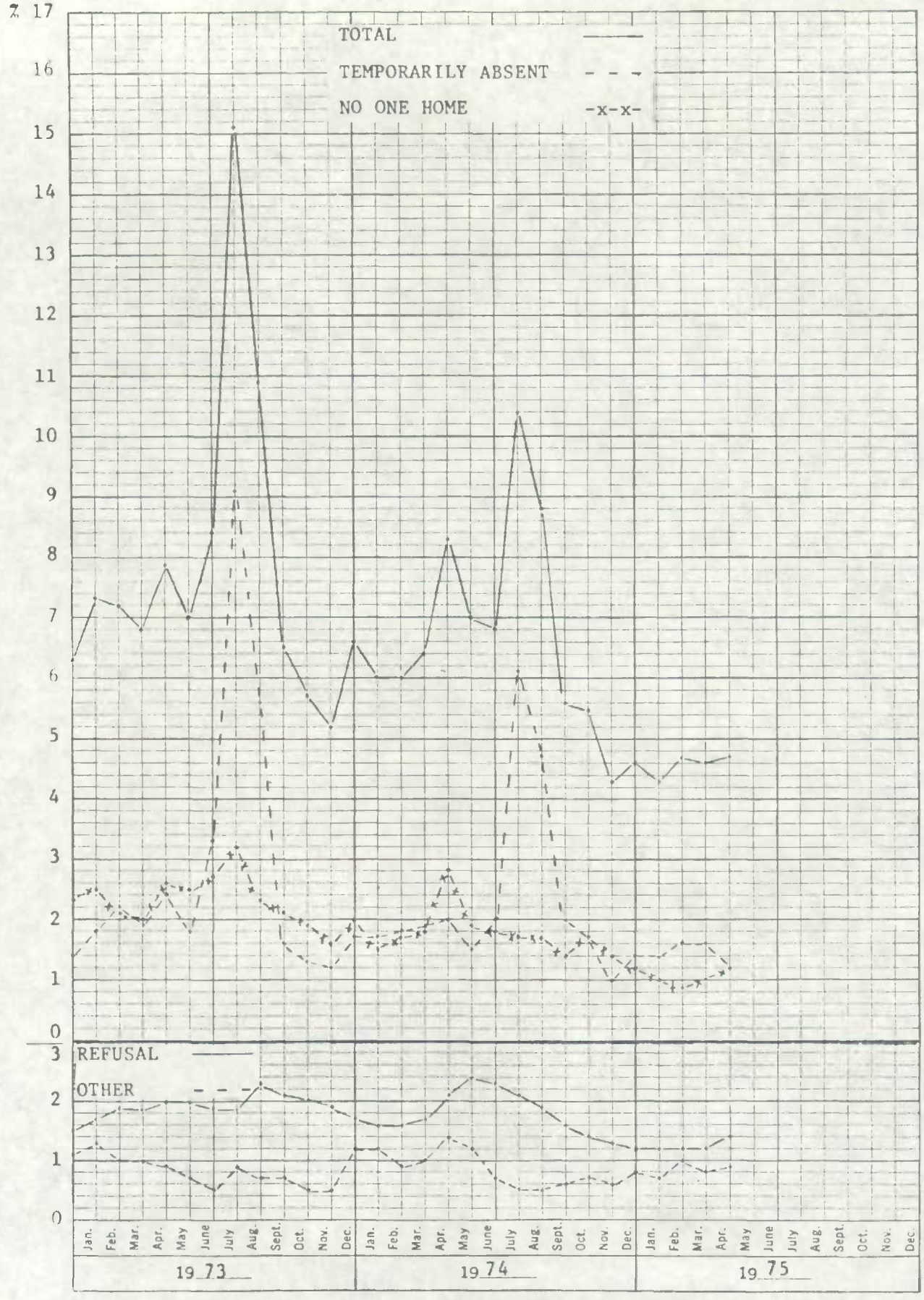
Non-Response Component	Non-Response Rates		Mar. 1975 to Apr. 1975	Non-Response Rates		Mar. 1974 to Apr. 1974	Apr. 1974 to Apr. 1975
	Apr. 1975 (%)	Mar. 1975 (%)	(%)	Apr. 1974 (%)	Mar. 1974 (%)	(%)	(%)
Overall	4.7	4.6	+0.1	8.3	6.4	+1.9	-3.6
T.A.	1.2	1.6	-0.4	2.0	1.9	+0.1	-0.8
N1	1.2	1.0	+0.2	2.8	1.8	+1.0	-1.6
N2	1.4	1.2	+0.2	2.1	1.7	+0.4	-0.7
Other	0.9	0.8	+0.1	1.4	1.0	+0.4	-0.5
Overlap	0.4	0.3	+0.1	-	-	-	-
Adjusted	4.3	4.3	-	-	-	-	-

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	1,666	3.7	4.0	5.2
Halifax	5,726	5.7	21.5	17.8
Montreal	5,408	3.3	11.8	16.8
Ottawa	1,886	5.7	7.2	5.9
Toronto	6,140	5.3	21.5	19.1
Winnipeg	3,189	2.8	5.9	9.9
Edmonton	4,041	3.0	8.1	12.6
Vancouver	4,075	7.4	20.0	12.7

Graph G1



ST. JOHN'S REGIONAL OFFICE

Table 2(a)

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

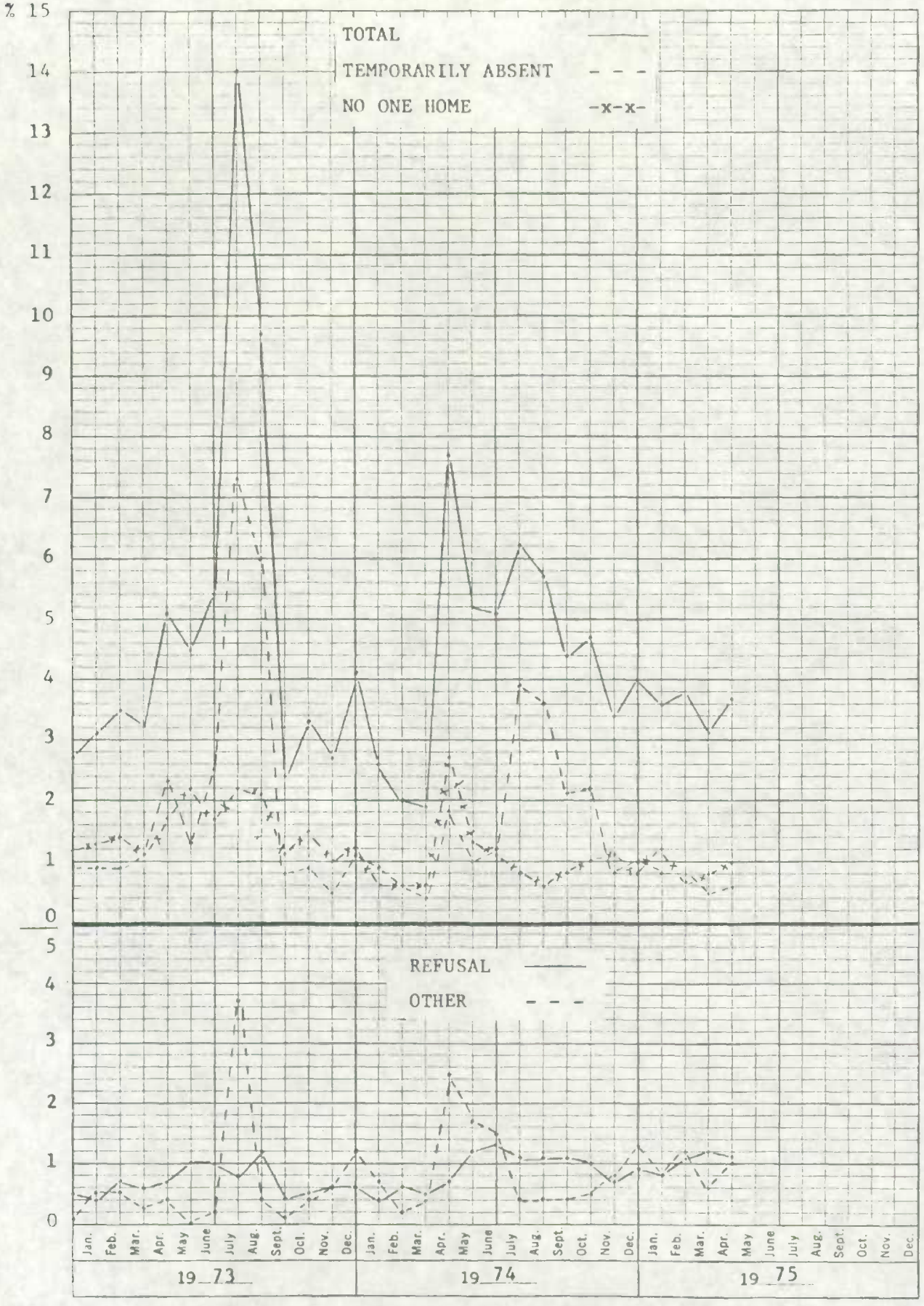
Non-Response Component	Non-Response Rates		Mar. 1975 to Apr. 1975	Non-Response Rates		Mar. 1974 to Apr. 1974	Apr. 1974 to Apr. 1975
	Apr. 1975 (%)	Mar. 1975 (%)	(%)	Apr. 1974 (%)	Mar. 1974 (%)	(%)	(%)
Overall	3.7	3.1	+0.6	7.7	1.9	+5.8	-4.0
T.A.	0.6	0.5	+0.1	1.8	0.4	+1.4	-1.2
N1	1.0	0.8	+0.2	2.7	0.6	+2.1	-1.7
N2	1.1	1.2	-0.1	0.7	0.5	+0.2	+0.4
Other	1.0	0.6	+0.4	2.5	0.4	+2.1	-1.5
Overlap	0.5	0.5	-	-	-	-	-
Adjusted	3.2	2.6	+0.6	-	-	-	-

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	253	1.2	4.9	15.2
01	666	4.7	50.8	40.0
02	146	2.7	6.6	8.7
03	293	5.1	24.6	17.6
04	291	2.7	13.1	17.5
05	17	0.0	0.0	1.0

Graph G2



HALIFAX REGIONAL OFFICE

Table 3(a)

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

Non-Response Component	Non-Response Rates		Mar. 1975 to Apr. 1975 (%)	Non-Response Rates		Mar. 1974 to Apr. 1974 (%)	Apr. 1974 to Apr. 1975 (%)
	Apr. 1975 (%)	Mar. 1975 (%)		Apr. 1974 (%)	Mar. 1974 (%)		
Overall	5.7	5.4	+0.3	7.9	6.8	+1.1	-2.2
T.A.	1.4	1.6	-0.2	1.8	1.7	+0.1	-0.4
N1	1.1	1.1	-	3.0	1.6	+1.4	-1.9
N2	1.7	1.3	+0.4	1.7	1.5	+0.2	-
Other	1.5	1.4	+0.5	1.4	2.0	-0.6	+0.1
Overlap	0.7	0.7	-	-	-	-	-
Adjusted	5.0	4.7	+0.3	-	-	-	-

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	386	4.4	5.2	6.8
20	535	4.7	7.7	9.3
21	577	6.6	11.7	10.1
22	1,360	5.6	23.4	23.8
23	483	4.1	6.2	8.4
30	518	8.7	13.8	9.0
31	614	8.5	16.0	10.7
32	676	4.3	8.9	11.8
33	577	4.0	7.1	10.1

HALIFAX REGIONAL OFFICE

Graph G3

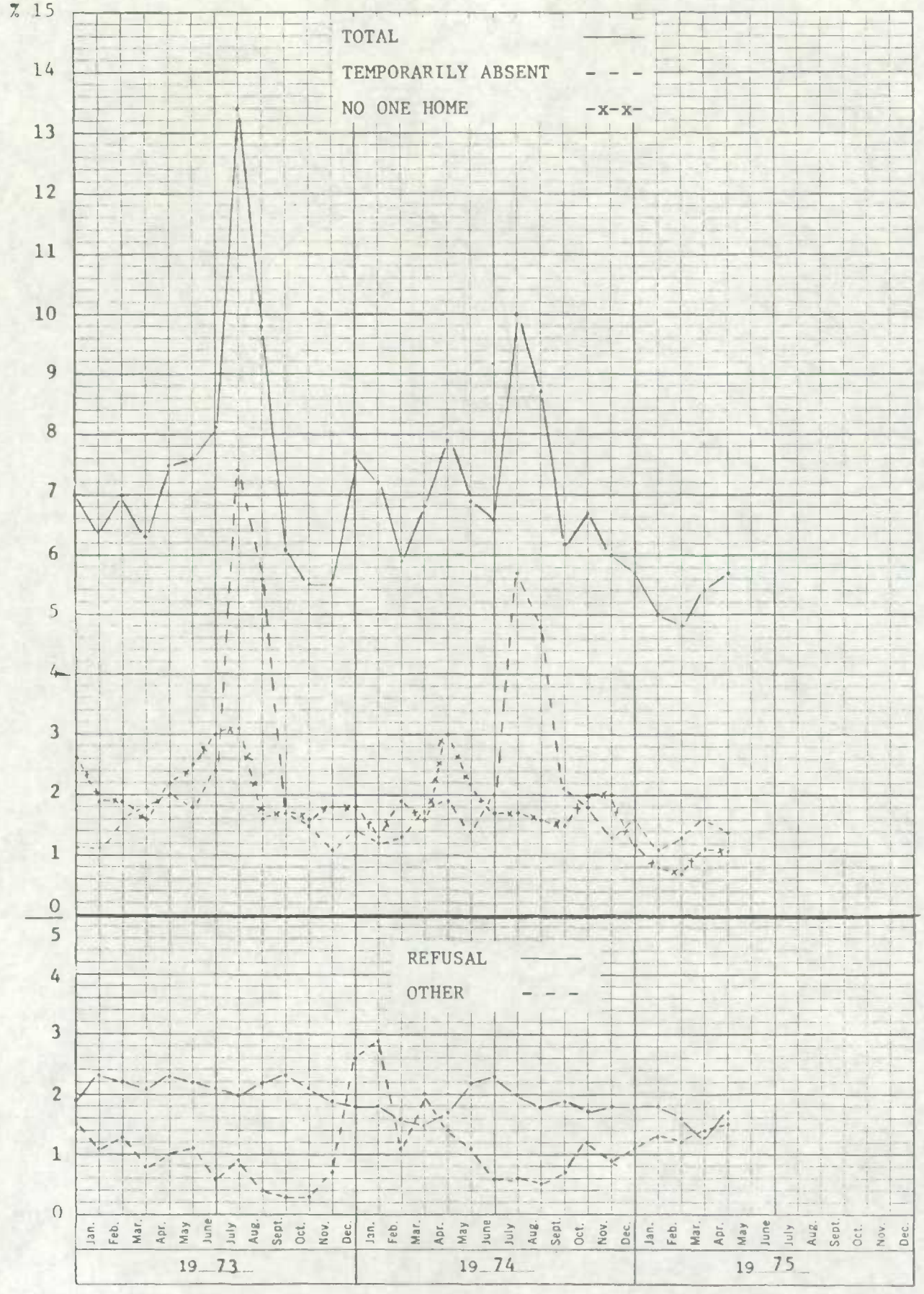


Table 4(a)

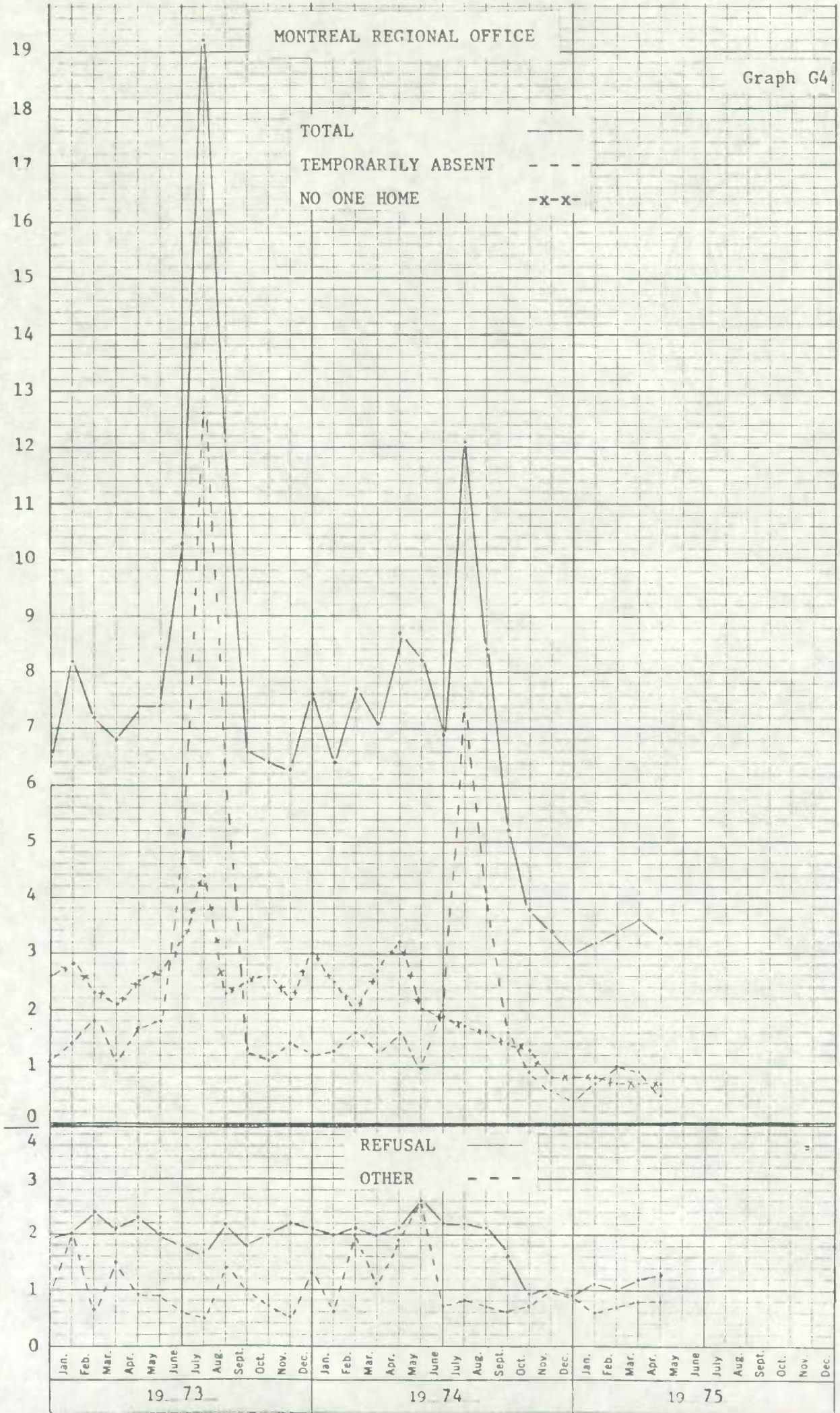
Month to Month and Year to Year Changes in the Non-Response Rates

Non-Response Component	Non-Response Rates		Mar. 1975 to Apr. 1975	Non-Response Rates		Mar. 1974 to Apr. 1974	Apr. 1974 to Apr. 1975
	Apr. 1975 (%)	Mar. 1975 (%)	(%)	Apr. 1974 (%)	Mar. 1974 (%)	(%)	(%)
Overall	3.3	3.6	-0.3	8.7	7.1	+1.6	-5.4
T.A.	0.5	0.9	-0.4	1.6	1.3	+0.3	-1.1
N1	0.7	0.7	-	3.2	2.7	+0.5	-2.5
N2	1.3	1.2	+0.1	2.1	2.0	+0.1	-0.8
Other	0.8	0.8	-	1.8	1.1	+0.7	-1.0
Overlap	0.4	0.3	+0.1	-	-	-	-
Adjusted	2.9	3.1	-0.2	-	-	-	-

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	293	1.4	2.2	5.4
41	386	1.8	3.9	7.1
42	209	1.9	2.2	3.9
43	833	2.3	10.6	15.4
44	453	3.3	8.4	8.4
45	650	1.4	5.1	12.0
46	481	2.9	7.8	8.9
47	2,103	5.1	59.8	38.9



OTTAWA REGIONAL OFFICE

Table 5(a)

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

Non-Response Component	Non-Response Rates		Mar. 1975 to Apr. 1975 (%)	Non-Response Rates		Mar. 1974 to Apr. 1974 (%)	Apr. 1974 to Apr. 1975 (%)
	Apr. 1975 (%)	Mar. 1975 (%)		Apr. 1974 (%)	Mar. 1974 (%)		
Overall	5.7	6.0	-0.3	7.4	7.3	+0.1	-1.7
T.A.	1.7	2.4	-0.7	2.0	2.1	-0.1	-0.3
N1	1.7	1.9	-0.2	3.2	2.5	+0.7	-1.5
N2	1.3	1.0	+0.3	1.4	1.3	+0.1	-0.1
Other	1.0	0.7	+0.3	0.8	1.4	-0.6	+0.2
Overlap	0.1	0.1	-	-	-	-	-
Adjusted	5.6	5.9	-0.3	-	-	-	-

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	16	0.0	0.0	0.8
48	223	5.8	12.1	11.8
49	137	2.9	3.7	7.3
50	967	6.1	54.6	51.3
58	543	5.9	29.6	28.8

OTTAWA REGIONAL OFFICE

Graph G5

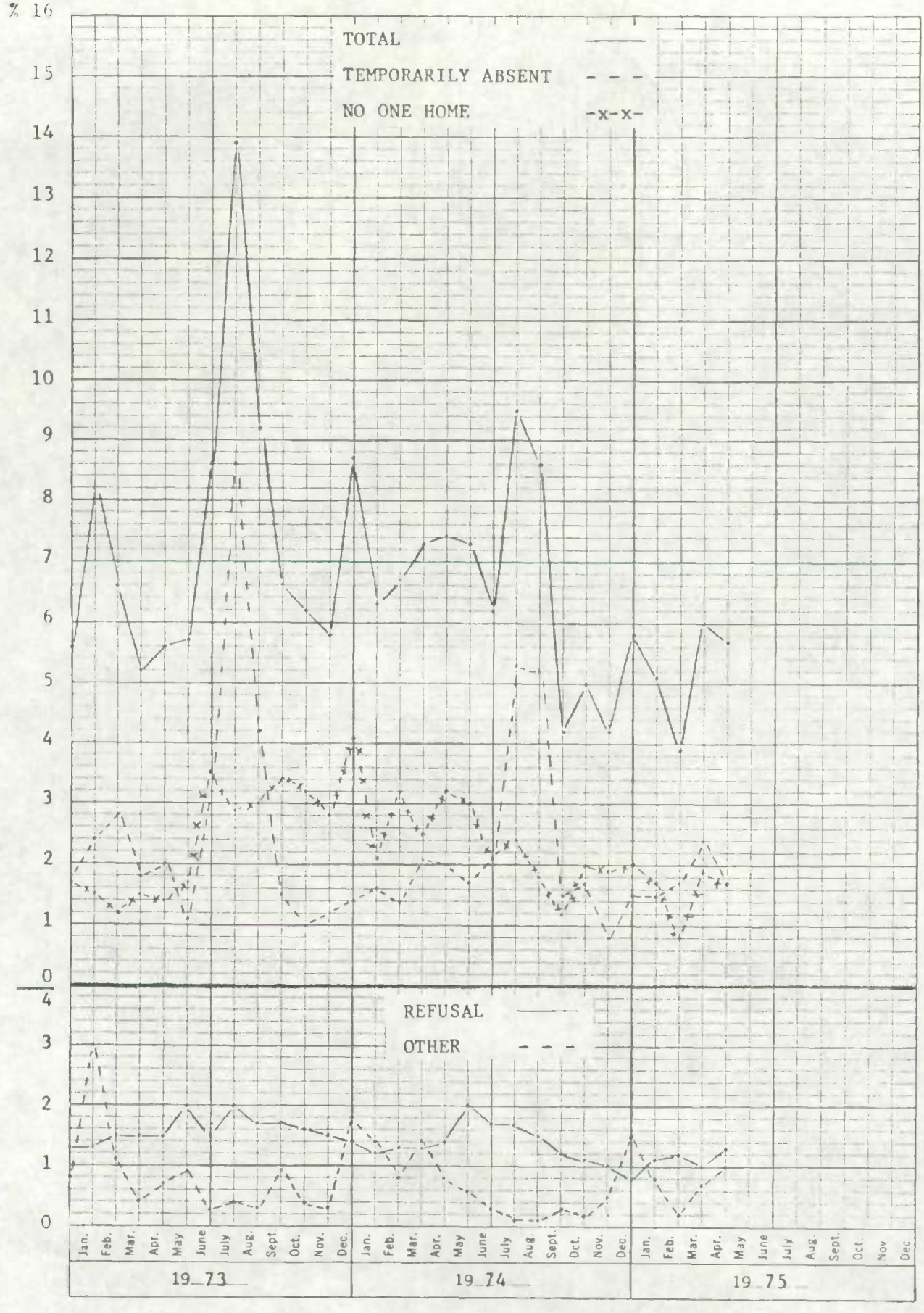


Table 6(a)

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

Non-Response Component	Non-Response Rates		Mar. 1975 to Apr. 1975 (%)	Non-Response Rates		Mar. 1974 to Apr. 1974 (%)	Apr. 1974 to Apr. 1975 (%)
	Apr. 1975 (%)	Mar. 1975 (%)		Apr. 1974 (%)	Mar. 1974 (%)		
Overall	5.3	5.0	+0.3	8.7	7.4	+1.3	-3.4
T.A.	1.5	2.2	-0.7	2.9	3.3	-0.4	-1.4
N1	1.6	1.1	+0.5	2.8	1.8	+1.0	-1.2
N2	1.6	1.2	+0.4	2.2	1.8	+0.4	-0.6
Other	0.6	0.5	+0.1	0.8	0.5	+0.3	-0.2
Overlap	0.0	0.0	-	-	-	-	-
Adjusted	5.3	5.0	+0.3	-	-	-	-

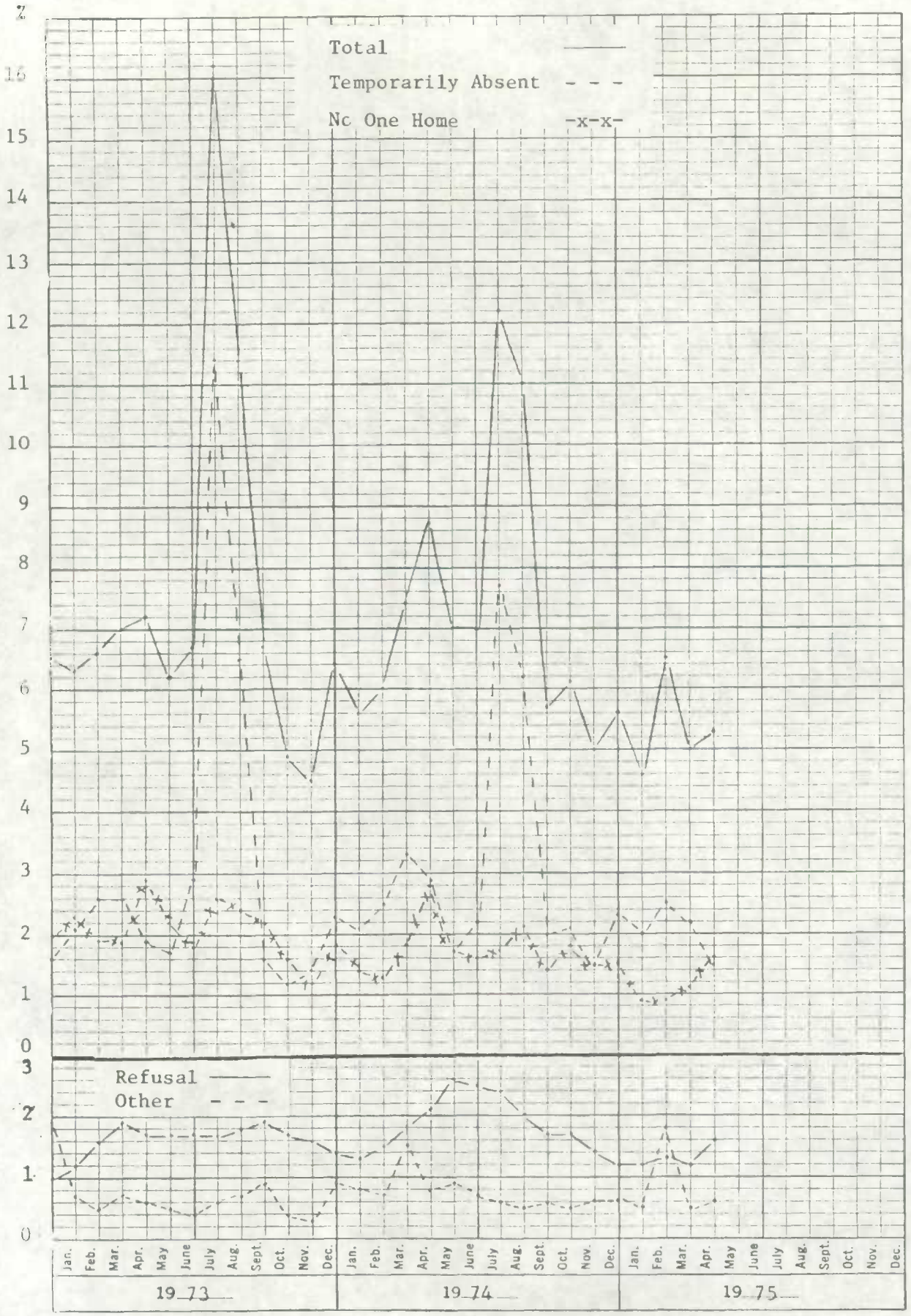
Table 6(b)

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	466	8.4	12.0	7.6
52	2,502	5.5	42.1	40.7
53	899	4.4	12.3	14.6
54	601	6.2	11.4	9.8
55	593	4.0	7.4	9.7
56	533	3.8	6.2	8.7
57	546	5.1	8.6	8.9

TORONTO REGIONAL OFFICE

Graph G6



WINNIPEG REGIONAL OFFICE

Table 7(a)

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

Non-Response Component	Non-Response Rates		Mar. 1975 to Apr. 1975	Non-Response Rates		Mar. 1974 to Apr. 1974	Apr. 1974 to Apr. 1975
	Apr. 1975 (%)	Mar. 1975 (%)	(%)	Apr. 1974 (%)	Mar. 1974 (%)	(%)	(%)
Overall	2.8	2.9	-0.1	2.6	2.2	+0.4	+0.2
T.A.	0.7	1.2	-0.5	0.8	0.9	-0.1	-0.1
N1	0.4	0.5	-0.1	0.7	0.3	+0.4	-0.3
N2	1.1	0.8	+0.3	1.0	0.8	+0.2	+0.1
Other	0.6	0.4	+0.2	0.1	0.2	-0.1	+0.5
Overlap	0.3	0.4	-0.1	-	-	-	-
Adjusted	2.5	2.5	-	-	-	-	-

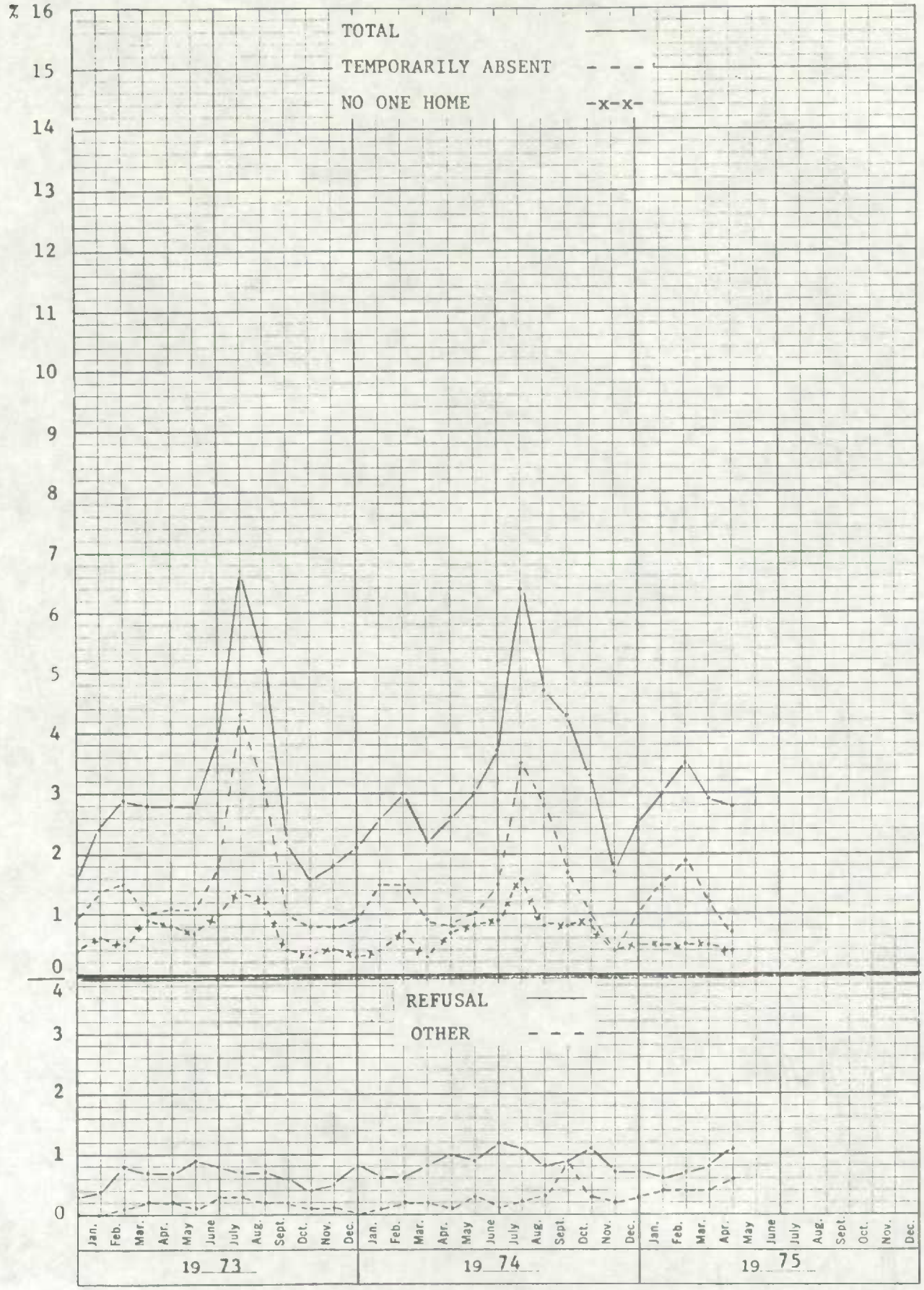
Table 7(b)

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	235	2.6	6.8	7.4
60	1,092	3.5	42.7	34.2
61	166	1.2	2.2	5.2
62	56	3.6	2.2	1.8
63	137	1.5	2.2	4.3
64	273	1.5	4.5	8.6
65	146	3.4	5.6	4.6
70	499	3.8	21.4	15.6
71	290	1.4	4.5	9.1
73	278	2.5	7.9	8.7

WINNIPEG REGIONAL OFFICE

Graph G7



EDMONTON REGIONAL OFFICE

Table 8(a)

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

Non-Response Component	Non-Response Rates		Mar. 1975 to Apr. 1975 (%)	Non-Response Rates		Mar. 1974 to Apr. 1974 (%)	Apr. 1974 to Apr. 1975 (%)
	Apr. 1975 (%)	Mar. 1975 (%)		Apr. 1974 (%)	Mar. 1974 (%)		
Overall	3.0	3.2	-0.2	8.8	6.3	+2.5	-5.8
T.A.	0.8	1.1	-0.3	2.2	1.8	+0.4	-1.4
N1	0.6	0.7	-0.1	2.8	1.8	+1.0	-2.2
N2	0.9	0.8	+0.1	1.8	1.5	+0.3	-0.9
Other	0.7	0.6	+0.1	2.0	1.2	+0.8	-1.3
Overlap	0.4	0.4	-	-	-	-	-
Adjusted	2.6	2.8	-0.1	-	-	-	-

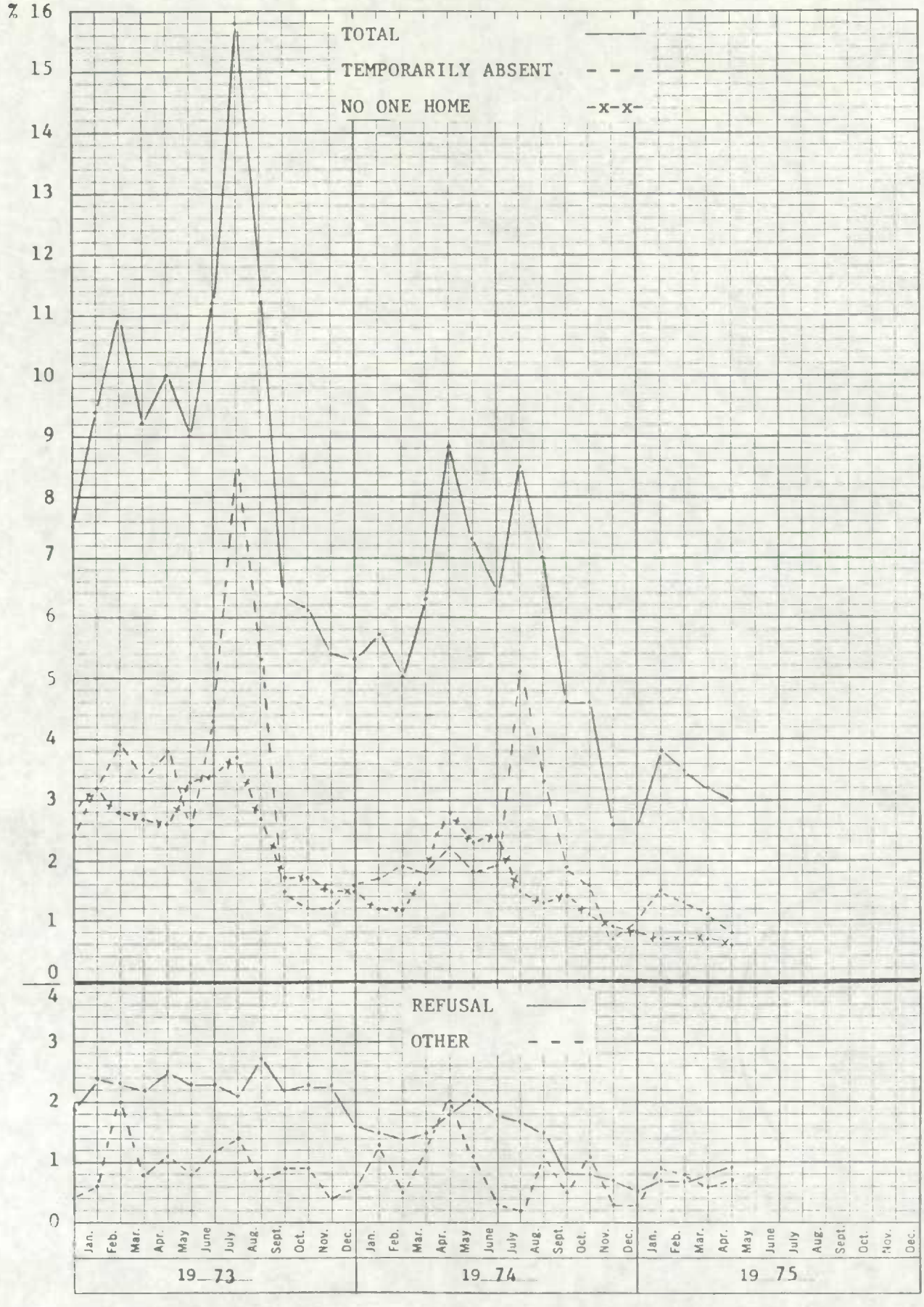
Table 8(b)

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	409	1.5	4.9	10.1
74	434	0.7	2.4	10.7
80	129	3.9	4.1	3.2
81	225	7.6	13.8	5.6
82	942	4.7	35.8	23.3
83	260	1.5	3.2	6.4
84	1,239	2.8	28.5	30.7
85	209	2.9	4.9	5.2
86	194	1.5	2.4	4.8

EDMONTON REGIONAL OFFICE

Graph G8



VANCOUVER REGIONAL OFFICE

Table 9(a)

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

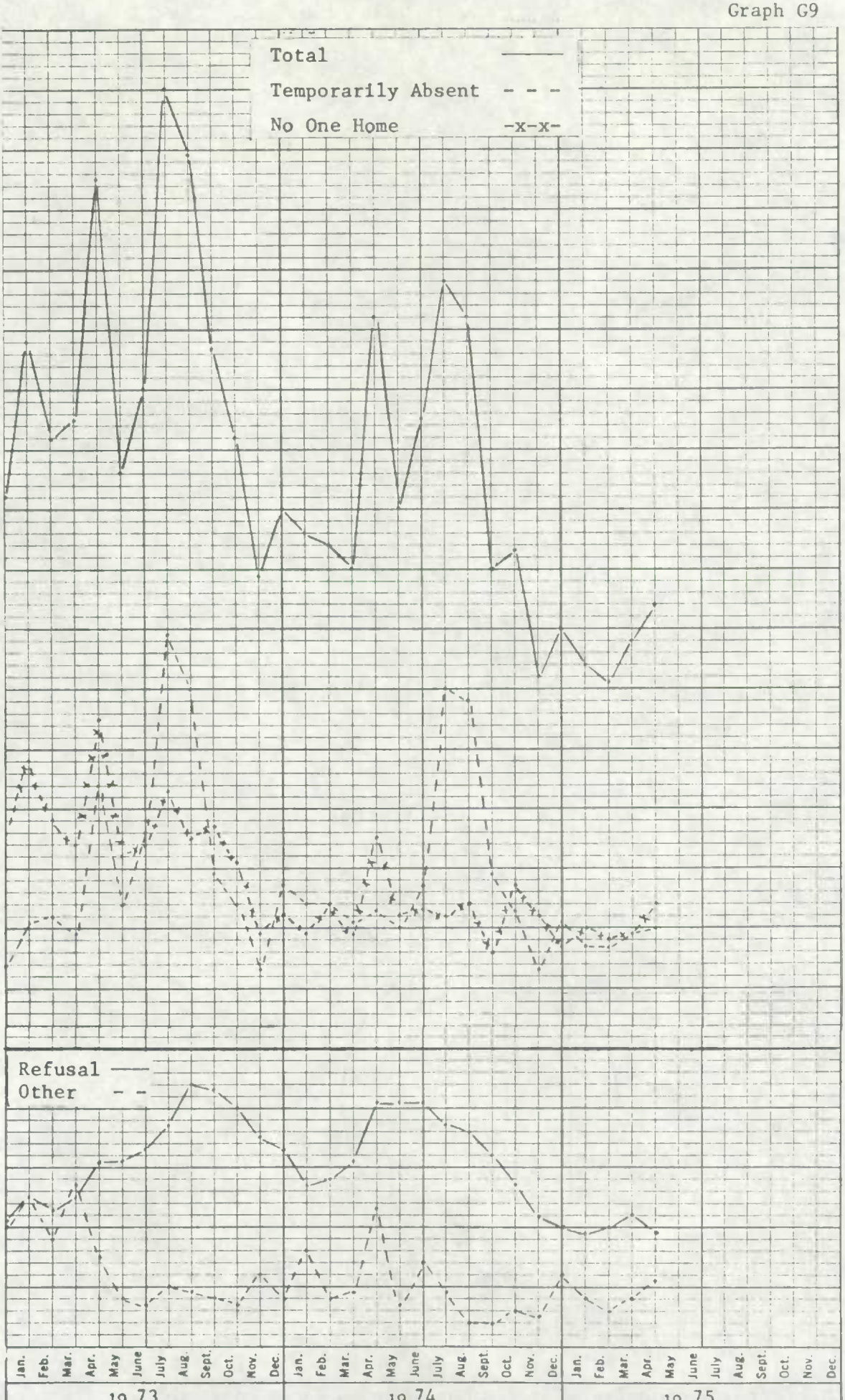
Non-Response Component	Non-Response Rates		Mar. 1975 to Apr. 1975	Non-Response Rates		Mar. 1974 to Apr. 1974	Apr. 1974 to Apr. 1975
	Apr. 1975 (%)	Mar. 1975 (%)	(%)	Apr. 1974 (%)	Mar. 1974 (%)	(%)	(%)
Overall	7.4	6.8	+0.6	12.2	8.0	+4.2	-4.8
T.A.	2.0	1.9	+0.1	2.3	2.1	+0.2	-0.3
N1	2.4	1.9	+0.5	3.5	1.9	+1.6	-1.1
N2	1.9	2.2	-0.3	4.1	3.1	+1.0	-2.2
Other	1.1	0.8	+0.3	2.3	0.9	+1.4	-1.2
Overlap	0.3	0.3	-	-	-	-	-
Adjusted	7.1	6.5	+0.6	-	-	-	-

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	101	23.8	7.9	2.5
91	137	8.0	3.6	3.4
92	295	5.1	5.0	7.3
93	209	6.7	4.6	5.1
94	2,192	6.3	45.2	53.8
95	779	7.7	19.8	19.1
96	65	16.9	3.6	1.6
97	249	10.4	8.6	6.1
98	46	10.9	1.7	1.1

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. Dwellings classified as V-types are not included in this count as they contain no households.

4. Overlap (N6)

A dwelling is designated as an overlap if it was selected to be in both the existing Labour Force Survey and the Revised Labour Force Survey but was not assigned for field enumeration in the existing Labour Force Survey.

5. Non-Response Rate

The overall non-response rate refers to the percentage of the expected number of households that were not interviewed due to their unavailability to the survey interviewer or to the lack of co-operation on the part of the householder. It is the sum of the following four components of non-response 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 at Home (N1)

A non-interview household is designated as "No One at 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' returns lost in the mail, overlap with the Revised Labour Force Survey, etc.

6. Adjusted Non-Response Rate

The adjusted non-response rate is an estimate of what the overall non-response rate would have been if there had been no overlap. Algebraically, it is defined as follows:

$$\text{Adjusted Non-Response Rate} = \left[\frac{n(TA) + n(N1) + n(N2) + n(N3 + N4 + N5)}{\text{Expected Number of Households} - n(N6)}\right] \cdot 100$$

where $n(\alpha)$ is the number of households which have been assigned the non-response code α.

7. 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.

8. Actual Contribution to Non-Response

This term is defined as the ratio of the number of 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.

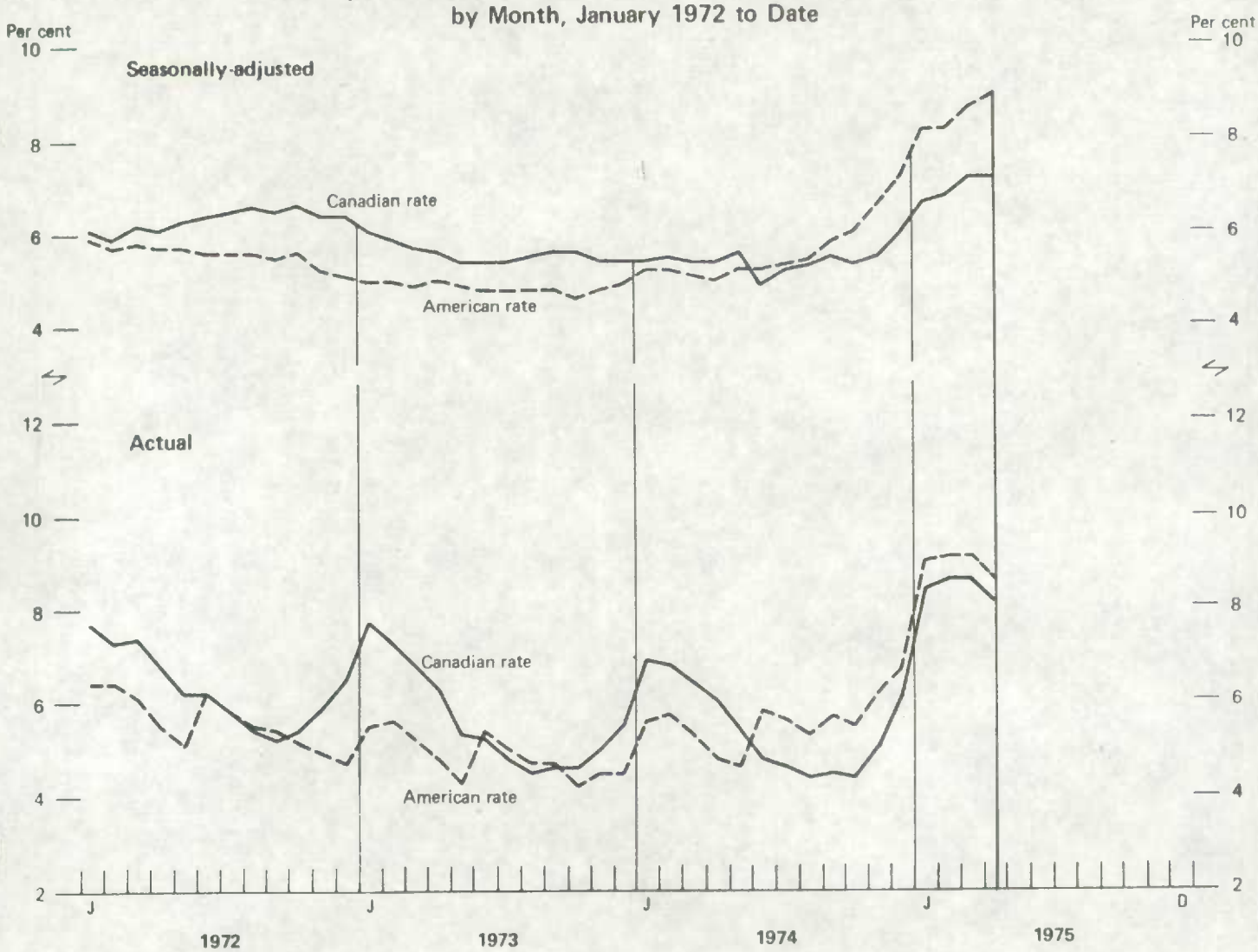
9. Expected Contribution to Non-Response

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 a regional office (or in Canada). This ratio is expressed as a percentage.

Comparison of Canadian and American Unemployment Rates

	Seasonally-Adjusted		Actual	
	Canadian	American	Canadian	American
1975 - April	7.2	8.9	8.1	8.6
March	7.2	8.7	8.6	9.1
February	6.8	8.2	8.6	9.1
January	6.7	8.2	8.4	9.0
December	6.0	7.2	6.1	6.7
November	5.5	6.6	5.1	6.2
October	5.3	6.0	4.4	5.5
September	5.5	5.8	4.5	5.7
August	5.3	5.4	4.4	5.3
July	5.2	5.3	4.6	5.4
June	4.9	5.2	4.8	5.8
May	5.6	5.2	5.4	4.6
1974 - April	5.4	5.0	6.0	4.8

Comparison of Canadian and American Unemployment Rates by Month, January 1972 to Date



Comparison of LFS Unemployed and UIC Claimants Series
January 1974 to date

	LFS Unemployed (000's)	UIC Claimants (000's)	Ratio Claimants / Unemployed		LFS Unemployed (000's)	UIC Claimants (000's)	Ratio Claimants / Unemployed
1975				1974			
December				December	597	910	1.52
November				November	493	760	1.54
October				October	430	679	1.58
September				September	431	664	1.54
August				August	447	694	1.55
July				July	465	719	1.55
June				June	469	748	1.59
May				May	524	825	1.57
April	795			April	568	960	1.69
March	840	1,221	1.45	March	599	984	1.64
February	839	1,214	1.45	February	635	1,009	1.59
January	817	1,134	1.39	January	637	981	1.54

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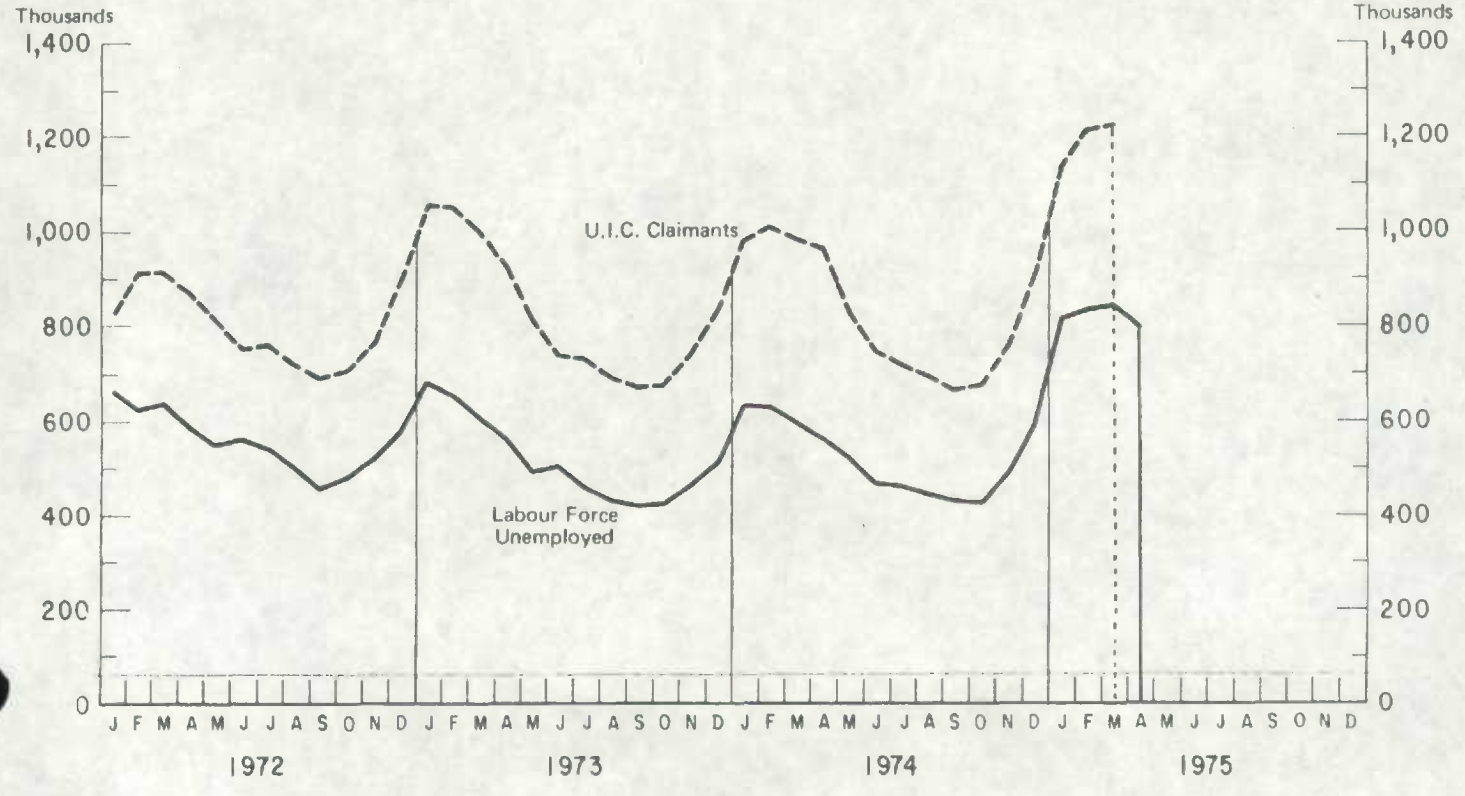
Comparison of Labour Force Unemployed and Unemployment Insurance Claimants by Month, January 1972 to Date



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