Labour Force Quality Report

Canadian Labour Force Survey

February 1975

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 presanted in Appendix IV.

HIGHLIGHTS

A. SLIPPAGE

The estimated slippage rate at the Canada level increased from 4.9% in January to 5.1% in February. This change was mainly due to missed persons within households as indicated by the decrease in the average size of households (a change of − 0.0021). Furthermore, this increase in slippage continues an upward trend which has been evident since September 1974.

1 - By Province: Decreases in the estimated slippage rate were noted in Prince Edward Island, Saskatchewan, Alberta and British Columbia. The most notable decrease occurred in Prince Edward Island where the estimated slippage rate decreased from 21.9% in January to 17.5% in February. This decrease resulted from a special request to all interviewers in P.E.I. to give special attention to household membership to ensure that all persons who should be in the Labour Force Survey are indeed represented. The substantial increase in the average household size (+ 0.1253) indicates that these interviewers have been picking up missed persons within households.

Increases in the estimated slippage rate, however, occurred in Newfoundland (a change of + 1.4%), Nova Scotia (+ 0.4%), New Brunswick (+ 1.5%), Quebec (+ 1.3%), Ontario (+ 0.1%) and Manitoba (+ 0.9%). In Newfoundland and New Brunswick, missed households and missed persons within households (as indicated by changes in the estimated number of heads of households and changes in the average size of households) both contributed to increases in slippage. The changes in the average size of households and estimated number of heads of households for these two provinces are given below:

Province	Change in Average Size of Hhlds	Percentage Change in Estimated Number of Heads of Hhlds
Newfoundland	− 0.0141	− 0.8%
New Brunswick	− 0.0100	− 1.0%

In Quebec, the increase in the estimated slippage rate was mainly due to missed households as indicated by the 1.2% decrease in the estimated number of heads of households.

2 - By Age Group at the Canada Level: Marginal changes (0.5% or less) in the estimated slippage rate were noted for the 25-44, 45-64 and 65 and over age groups while an increase of 0.9% and a decrease of 0.6% were observed in the 14-19 and 20-24 age groups respectively.

B. NON-RESPONSE

The overall non-response rate for the Canada level increased from 4.3% in January to 4.7% in February. The month to month increases in the T.A. and "other" components were mainly responsible for this month's higher overall rate. The decrease in the N1 rate, however, continued the downward trend which has been evident in the N1 component since October 1974.

The overlap non-response rate increased from 0.2% in January to 0.3% in February and the adjusted overall non-response rate for February was calculated to be 4.4%.

Compared with last year's February overall non-response rate (6.0%), this year's rate was lower. In the year to year changes at the component level, decreases were noted in the T.A., N1 and N2 rates.

C. VARIANCE

At the Canada level the coefficient of variation of Employed decreased slightly from 0.38% for the January survey to 0.37% for the February survey. For the estimate of Unemployed the coefficient of variation of Unemployed decreased to 2.01% from the value of 2.14% for the January survey. The coefficient of variation of In Labour Force remained unchanged from the previous survey with a value of 0.32%.

At the provincial levels the coefficients of variation of Employed remained relatively unchanged from the corresponding coefficients for the January survey. For the estimates of Unemployed only the province of British Columbia exhibited an increase in the coefficient of variation of the Unemployed estimate.

For the estimates of Employed, Unemployed and In Labour Force at the Canada and province levels the published symbols which indicate the reliability of the estimates agreed with the corresponding symbols calculated on the basis of the February data for all but 5 of the estimates. For the estimates of Employed in Nfld. and B.C. the published symbol was lower than the calculated symbol while opposite relationship held for the estimates of Employed in Alta. and Unemployed in P.E.I. and N.B. For all 5 cases the calculated coefficients of variation had values close to the boundaries which determine the alphabetic symbol.

The analysis of subprovincial contributions to the provincial variance estimate was carried out for the characteristics Unemployed in Nfld., Man. and B.C. and Employed in Saskatchewan. From this analysis 6 pairs of PSUs were identified for which the actual percentage contribution significantly exceeded the desired percentage contribution to the provincial variance estimate.

D. REJECTED DOCUMENTS

Since August 1974, when we changed from a 1232 document to the present 1288 O.C.R. document, information on rejected documents has not been available. Commencing with January of this year the analysis of rejected documents became available again and it is interesting to note that the total number of rejected documents at the Canada level decreased from 7.4% in January to 6.9% in February with the number of careless errors at 57.9% being the highest contributor to the total number of rejected documents. When we compare February 1975 to June 1974 which was the last month when this information was available, note a considerable improvement in the rate of rejected documents which decreased from 10.2% to 6.9%.

E. ENUMERATION COST

The February enumeration costs for the Labour Force Survey at the Canada level was calculated at $ 2.88 per sample household, an increase of 11 cents from the January rate of $ 2.77.

The increase resulted from a 25 cent increase in the hourly rates paid to interviewers, effective in all regions except Ottawa where it will be implemented for the March survey. The full effect of the increase was tempered somewhat by a multi-paged questionnaire on Retirement conducted as a supplementary to the Labour Force Survey wich resulted in some cost sharing benefits to the Labour Force Survey.

At Regional levels, 7 areas registered increases, Edmonton showed a 2 cent increase over the January rate, Toronto had a 9 cent increase, Montréal and Vancouver had 12 cents, St. John's had 13 cents and Winnipeg and Halifax registered increase of 18 and 23 cents respectively.

The Ottawa region enumeration costs were calculated at $ 2.65 for February, a decrease of 13 cents from the $ 2.78 rate for January and reflects the cost sharing benefit of the retirement survey.

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

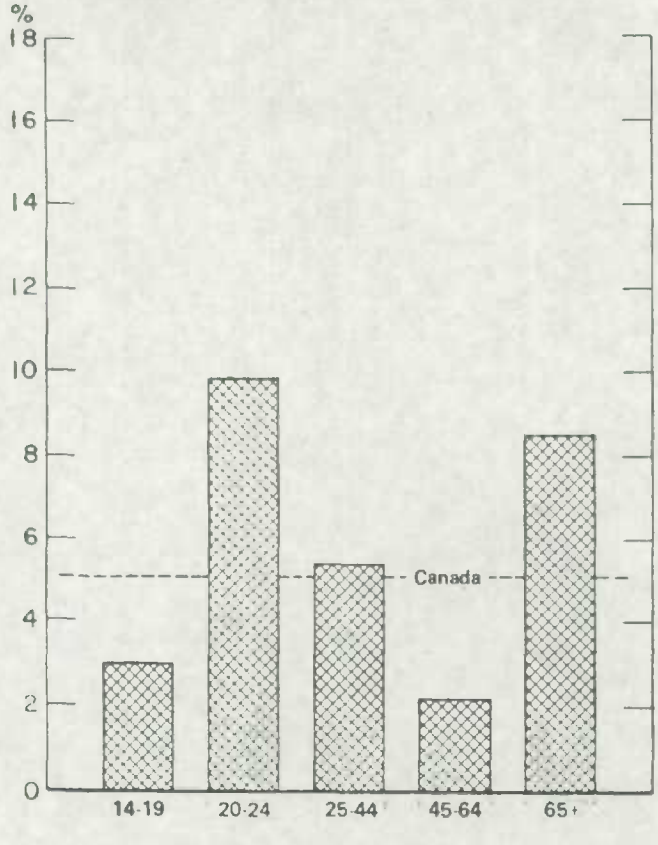
	1975		1974				1974		1973			
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.
Non-response												
Canada ..... %	4.7	4.3	4.6	4.3	5.5	5.6	6.0	6.0	6.6	5.2	5.7	6.5
St. John's ..... %	3.8	3.6	4.0	3.4	4.7	4.4	2.0	2.6	4.1	2.7	3.3	2.4
Halifax ..... %	4.8	5.0	5.7	6.0	6.7	6.2	5.9	7.2	7.6	5.5	5.5	6.1
Montréal ..... %	3.4	3.2	3.0	3.4	3.8	5.2	7.7	6.4	7.6	6.3	6.4	6.6
Ottawa ..... %	3.9	5.1	5.8	4.2	5.0	4.2	6.7	6.3	8.7	5.8	6.2	6.6
Toronto ..... %	6.5	4.6	5.6	5.0	6.1	5.7	6.0	5.6	6.4	4.5	4.9	6.7
Winnipeg ..... %	3.5	3.0	2.5	1.7	3.3	4.3	3.0	2.6	2.1	1.8	1.6	2.2
Edmonton ..... %	1.5	3.8	2.6	2.6	4.6	4.6	5.0	5.7	5.3	5.4	6.1	6.3
Vancouver ..... %	6.1	6.4	7.0	6.2	8.3	8.0	8.4	8.6	9.0	7.9	10.2	11.7
Rejected Documents (Regular Labour Force Items)												
Canada ..... %	6.9	7.4					6.4	7.1	8.2	7.1	7.8	8.5
St. John's ..... %	3.4	4.2					2.5	5.2	6.4	6.0	7.3	6.2
Halifax ..... %	7.0	8.3					6.6	8.5	8.1	7.4	7.1	7.9
Montréal ..... %	5.8	6.8			DATA		5.8	6.1	7.1	5.7	6.4	7.2
Ottawa ..... %	5.3	4.7			NOT		4.4	5.5	6.1	6.1	8.0	9.2
Toronto ..... %	8.6	9.5			AVAILABLE		8.5	8.0	9.4	7.4	8.8	9.9
Winnipeg ..... %	4.8	4.2					4.6	6.1	6.9	6.2	6.9	7.0
Edmonton ..... %	10.0	9.8					7.4	7.0	8.7	7.7	8.3	9.1
Vancouver ..... %	7.4	6.8					7.2	8.0	10.7	9.9	10.0	11.0
Enumeration Cost per Household												
Canada ..... $	2.88	2.77	2.64	2.69	2.35	2.72	2.38	2.40	2.32	2.41	2.52	2.46
St. John's ..... $	3.54	3.41	3.30	3.31	2.93	3.33	2.75	2.78	2.70	2.75	2.89	2.71
Halifax ..... $	3.09	2.86	2.67	2.69	2.31	2.64	2.24	2.31	2.18	2.29	2.29	2.29
Montréal ..... $	3.00	2.88	2.73	2.76	2.33	2.81	2.53	2.52	2.37	2.58	2.70	2.66
Ottawa ..... $	2.65	2.78	2.76	2.83	2.56	2.71	2.57	2.66	2.44	2.53	2.66	2.68
Toronto ..... $	2.85	2.76	2.63	2.65	2.34	2.80	2.39	2.42	2.43	2.47	2.67	2.60
Winnipeg ..... $	2.80	2.62	2.53	2.74	2.21	2.59	2.43	2.42	2.40	2.39	2.48	2.40
Edmonton ..... $	2.68	2.66	2.63	2.56	2.33	2.60	2.21	2.24	2.11	2.22	2.29	2.24
Vancouver ..... $	2.59	2.47	2.26	2.45	2.24	2.54	2.19	2.19	2.16	2.19	2.37	2.20

	Month-to-Month Change								Year-to-Year Change			
	1975	Dec. 1974 to Jan. 1975	1974		1974	Dec. 1973 to Jan. 1974	1973		Feb. 1974 to Feb. 1975	Jan. 1974 to Jan. 1975	Dec. 1973 to Dec. 1974	Nov. 1973 to Nov. 1974
	Jan. to Feb.		Nov. to Dec.	Oct. to Nov.	Jan. to Feb.		Nov. to Dec.	Oct. to Nov.				
Non-response												
Canada ..... %	+ 0.4	- 0.3	+ 0.3	- 1.2	-	- 0.6	+ 1.4	- 0.5	- 1.3	- 1.7	- 2.0	- 0.9
St. John's ..... %	+ 0.2	- 0.4	+ 0.6	- 1.3	- 0.6	- 1.5	+ 1.4	- 0.6	+ 1.8	+ 1.0	- 0.1	+ 0.7
Halifax ..... %	- 0.2	- 0.7	- 0.3	- 0.7	- 1.3	- 0.4	+ 2.1	-	- 1.1	- 2.2	- 1.9	+ 0.5
Montréal ..... %	+ 0.2	+ 0.2	- 0.4	- 0.4	+ 1.3	- 1.2	+ 1.3	- 0.1	- 4.3	- 3.2	- 4.6	- 2.9
Ottawa ..... %	- 1.2	- 0.7	+ 1.6	- 0.8	+ 0.4	- 2.4	+ 2.9	- 0.4	- 2.8	- 1.2	- 2.9	- 1.6
Toronto ..... %	+ 1.9	- 1.0	+ 0.6	- 1.1	+ 0.4	- 0.8	+ 1.9	- 0.4	+ 0.5	- 1.0	- 0.8	+ 0.5
Winnipeg ..... %	+ 0.5	+ 0.5	+ 0.8	- 1.6	+ 0.4	+ 0.5	+ 0.3	+ 0.2	+ 0.5	+ 0.4	+ 0.4	- 0.1
Edmonton ..... %	- 0.3	+ 1.2	-	- 2.0	- 0.7	+ 0.4	- 0.1	- 0.7	- 1.5	- 1.9	- 2.7	- 2.8
Vancouver ..... %	- 0.3	- 0.6	+ 0.8	- 2.1	- 0.2	- 0.4	+ 1.1	- 2.3	- 2.3	- 2.2	- 2.0	- 1.7
Rejected Documents (Regular Labour Force Items)												
Canada ..... %	- 0.5				- 0.7	- 1.1	+ 1.1	- 0.7	+ 0.5			
St. John's ..... %	- 0.8				- 2.7	- 1.2	+ 0.4	- 1.3	+ 0.9			
Halifax ..... %	- 1.3				- 1.9	+ 0.4	+ 0.7	+ 0.3	+ 0.4			
Montréal ..... %	- 1.0		DATA		- 0.3	- 1.0	+ 1.4	- 0.7	-		DATA	
Ottawa ..... %	+ 0.6		NOT		- 1.1	- 0.6	-	- 1.9	+ 0.9		NOT	
Toronto ..... %	- 0.9		AVAILABLE		+ 0.5	- 1.4	+ 2.0	- 1.4	+ 0.1		AVAILABLE	
Winnipeg ..... %	+ 0.6				- 1.5	- 0.8	+ 0.7	- 0.7	+ 0.2			
Edmonton ..... %	+ 0.2				+ 0.4	- 1.7	+ 1.0	- 0.6	+ 2.6			
Vancouver ..... %	+ 0.6				- 0.8	- 2.7	+ 0.8	- 0.1	+ 0.2			
Enumeration Cost per Household												
Canada ..... $	+ 0.11	+ 0.13	- 0.05	+ 0.34	- 0.02	+ 0.08	- 0.09	- 0.11	+ 0.50	+ 0.37	+ 0.32	+ 0.28
St. John's ..... $	+ 0.13	+ 0.11	- 0.01	+ 0.38	- 0.03	+ 0.08	- 0.05	- 0.14	+ 0.79	+ 0.63	+ 0.60	+ 0.56
Halifax ..... $	+ 0.23	+ 0.19	- 0.02	+ 0.38	- 0.07	+ 0.13	- 0.11	-	+ 0.85	+ 0.55	+ 0.49	+ 0.40
Montréal ..... $	+ 0.12	+ 0.15	- 0.03	+ 0.43	+ 0.01	+ 0.15	- 0.21	- 0.12	+ 0.47	+ 0.36	+ 0.36	+ 0.18
Ottawa ..... $	- 0.13	+ 0.02	- 0.07	+ 0.27	- 0.09	+ 0.22	- 0.09	- 0.13	+ 0.08	+ 0.12	+ 0.32	+ 0.30
Toronto ..... $	+ 0.09	+ 0.13	- 0.02	+ 0.31	- 0.03	- 0.01	- 0.04	- 0.20	+ 0.46	+ 0.34	+ 0.20	+ 0.18
Winnipeg ..... $	+ 0.18	+ 0.09	- 0.21	+ 0.51	+ 0.01	+ 0.02	+ 0.01	- 0.09	+ 0.37	+ 0.20	+ 0.13	+ 0.35
Edmonton ..... $	+ 0.02	+ 0.03	+ 0.07	+ 0.23	- 0.03	+ 0.13	- 0.11	- 0.07	+ 0.47	+ 0.42	+ 0.52	+ 0.34
Vancouver ..... $	+ 0.12	+ 0.21	- 0.19	+ 0.21	-	+ 0.03	- 0.03	- 0.18	+ 0.40	+ 0.28	+ 0.10	+ 0.26

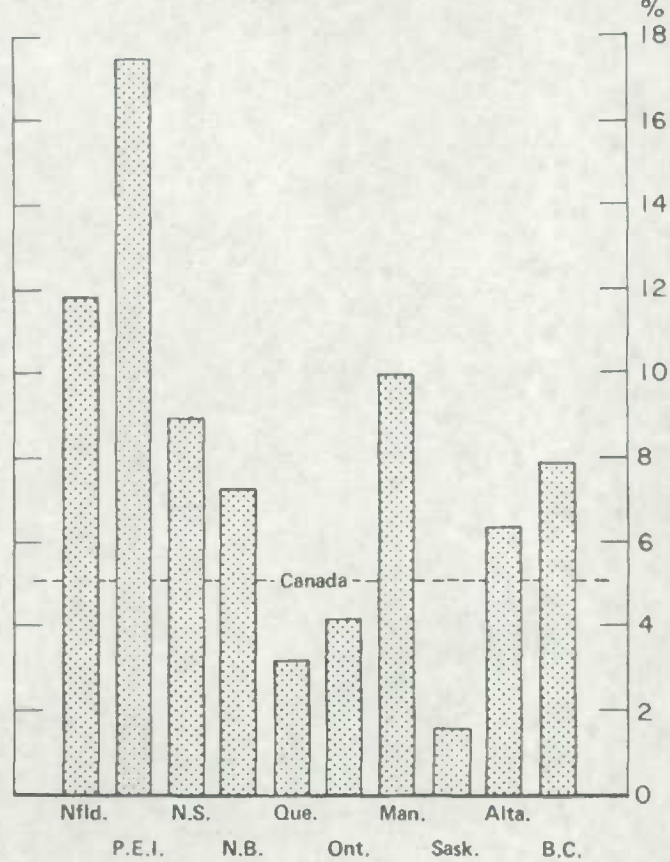
Slippage Rates(1), Canada by Age and Provincial Totals

	1975		1974					Jan. 1975 to Feb. 1975	Feb. 1974 to Feb. 1975
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Feb.		
TOTAL	5.1	4.9	4.6	4.6	4.4	4.4	5.0	+ 0.2	+ 0.1
14 - 19 years	3.0	2.1	2.0	1.8	1.3	2.6	4.8	+ 0.9	- 1.8
20 - 24 years	9.9	10.5	9.3	10.1	10.5	10.1	7.2	- 0.6	+ 2.7
25 - 44 years	5.4	4.9	4.5	4.6	4.2	3.9	4.7	+ 0.5	+ 0.7
45 - 64 years	2.2	2.4	3.0	2.8	2.9	3.1	4.4	- 0.2	- 2.2
65 and over	8.5	8.4	7.4	6.6	6.0	5.7	5.0	+ 0.1	+ 3.5
Nfld.	11.8	10.4	10.7	11.1	10.3	11.1	9.8	+ 1.4	+ 2.0
P.E.I.	17.5	21.9	20.4	18.7	17.8	17.5	9.2	- 4.4	+ 8.3
N.S.	9.0	8.6	8.4	8.7	8.1	8.7	10.3	+ 0.4	- 1.3
N.B.	7.3	5.8	6.9	7.1	7.7	7.2	6.8	+ 1.5	+ 0.5
Qué.	3.2	1.9	1.7	1.7	1.4	1.3	2.6	+ 1.3	+ 0.6
Ont.	4.2	4.1	3.7	3.7	3.2	3.7	5.1	+ 0.1	- 0.9
Man.	10.0	9.1	9.4	11.1	10.7	8.6	3.1	+ 0.9	+ 6.9
Sask.	1.6	2.6	1.5	0.5	1.2	0.7	0.9	- 1.0	+ 0.7
Alta	6.4	7.0	7.2	6.8	8.5	8.0	7.2	- 0.6	- 0.8
B.C.	7.9	9.4	8.8	8.4	7.8	8.0	7.9	- 1.5	---

Slippage Rates by Age Groups at Canada Level

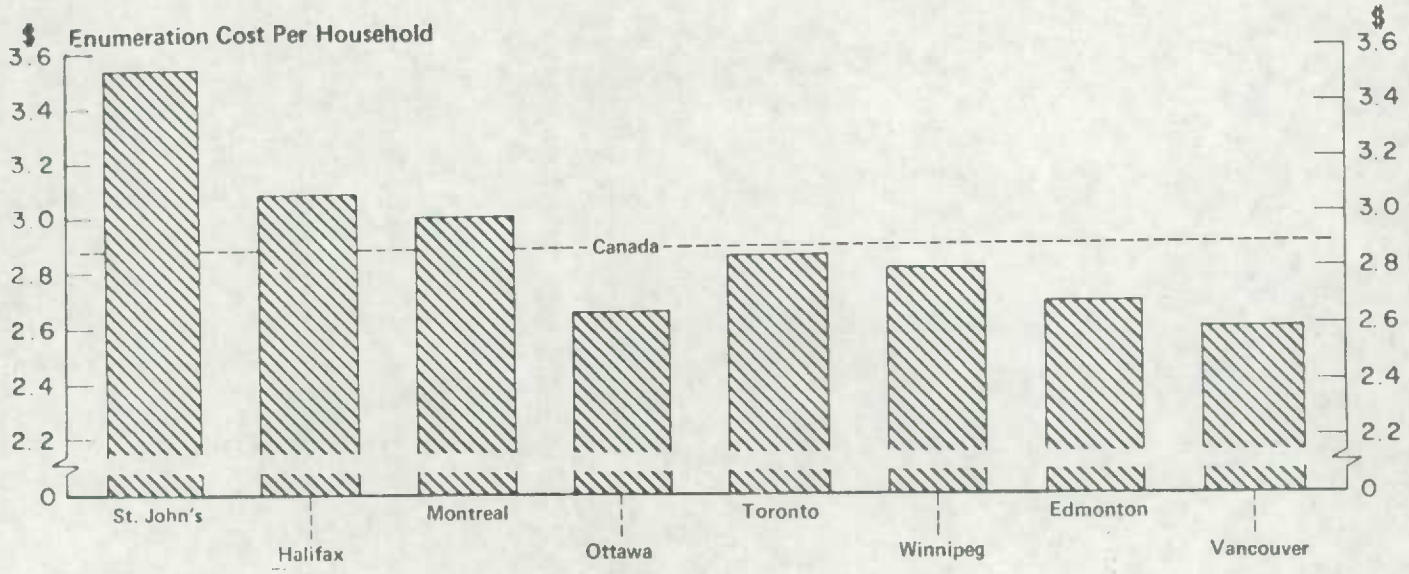


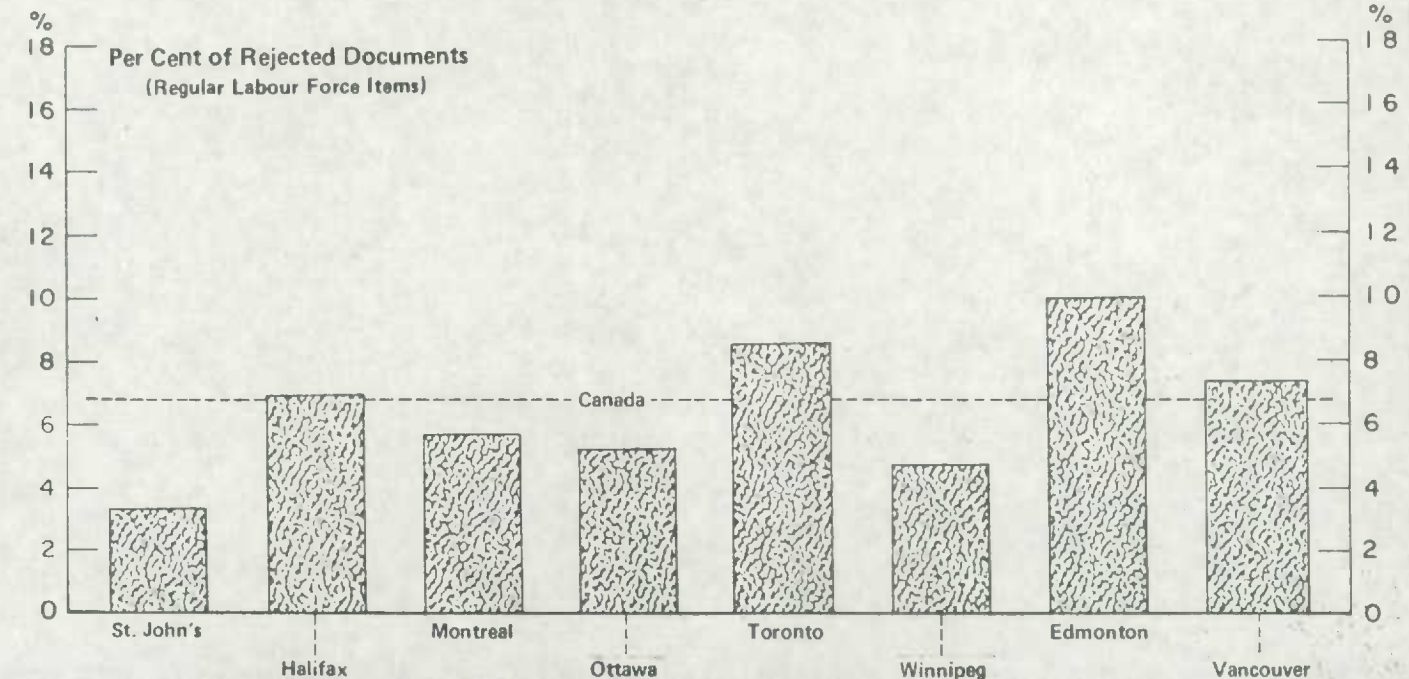
Slippage Rates by Province



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

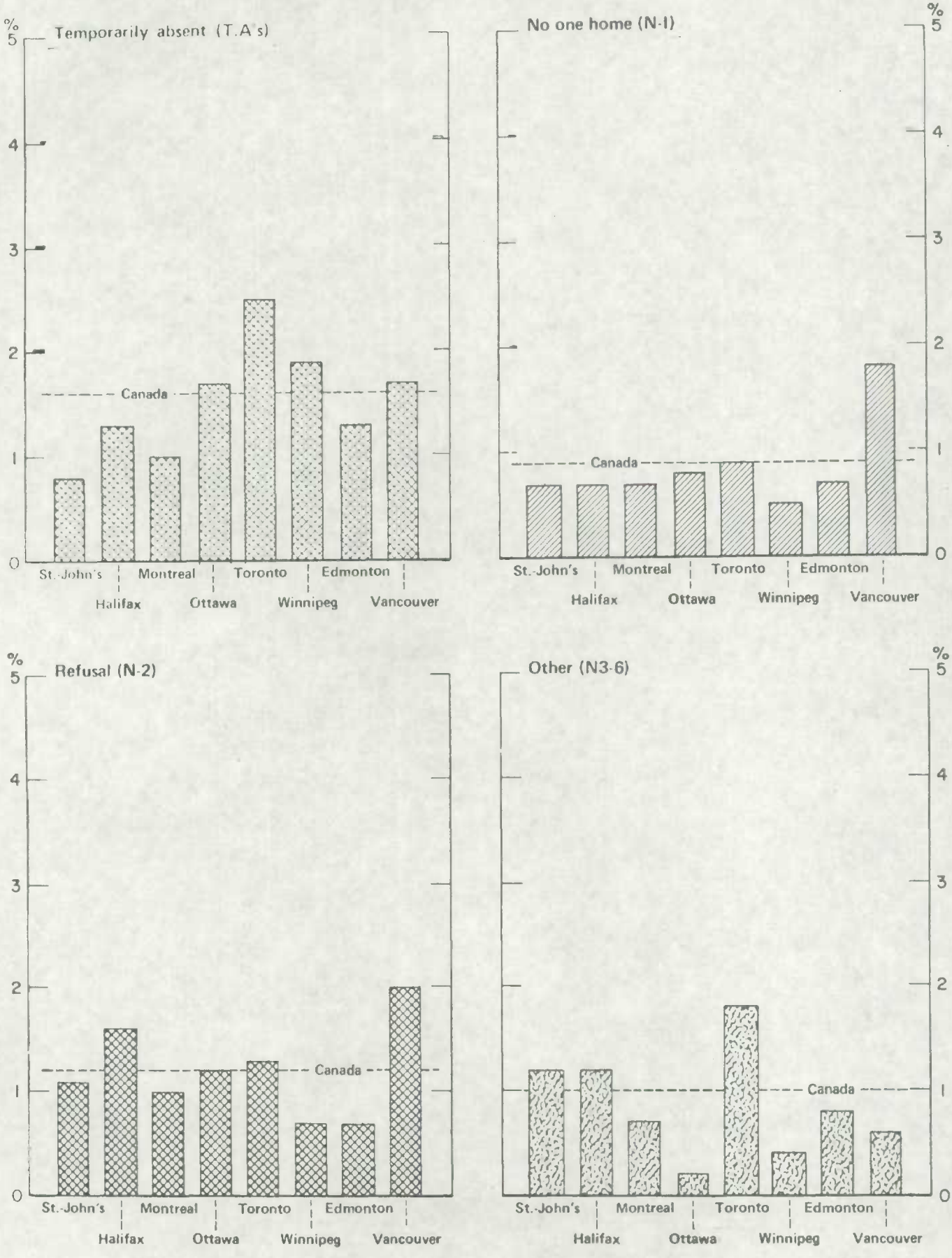
Non-response Rates, Enumeration Cost and Rejected Documents by Regional Office
February 1975



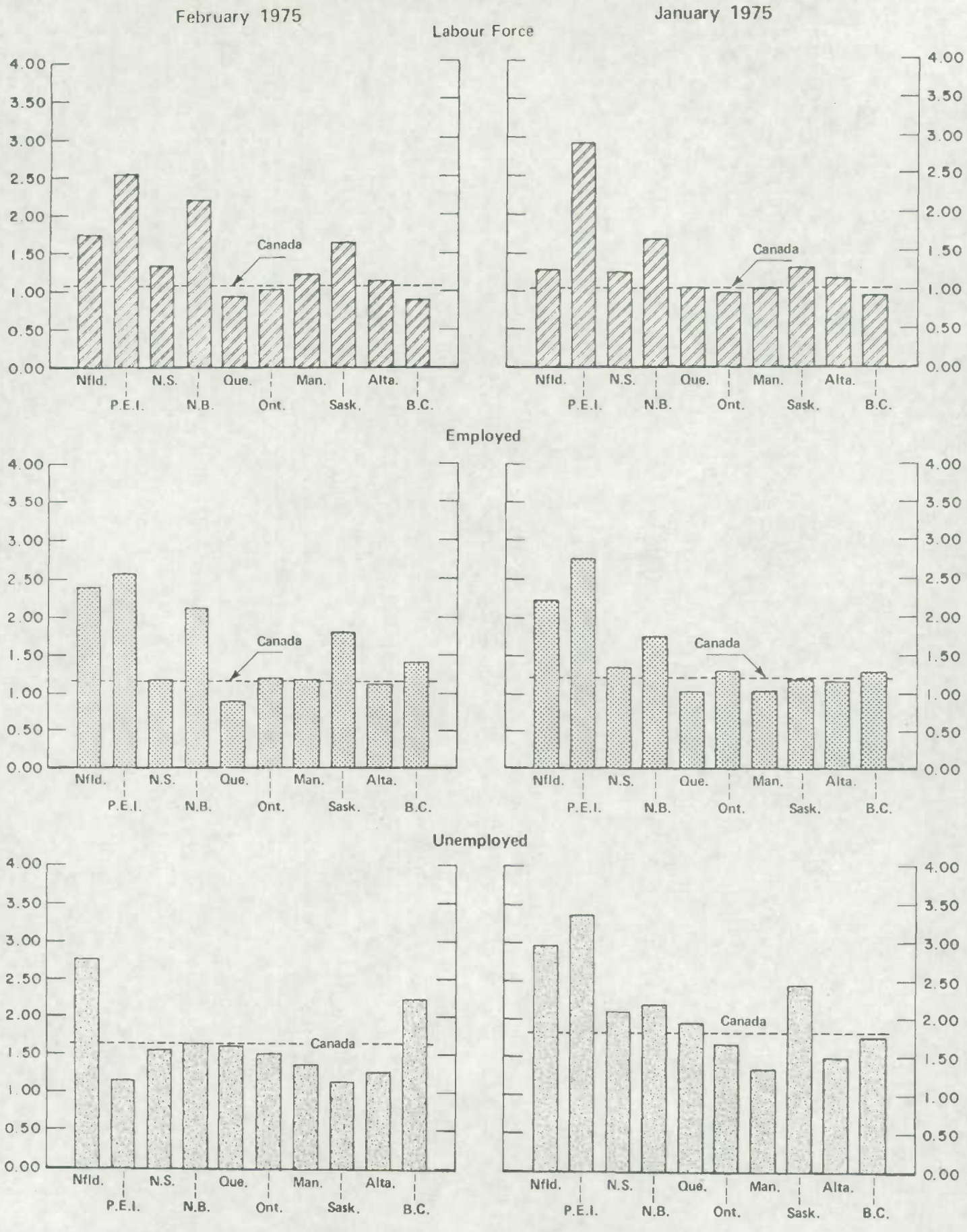


Non-response Rates, by Component

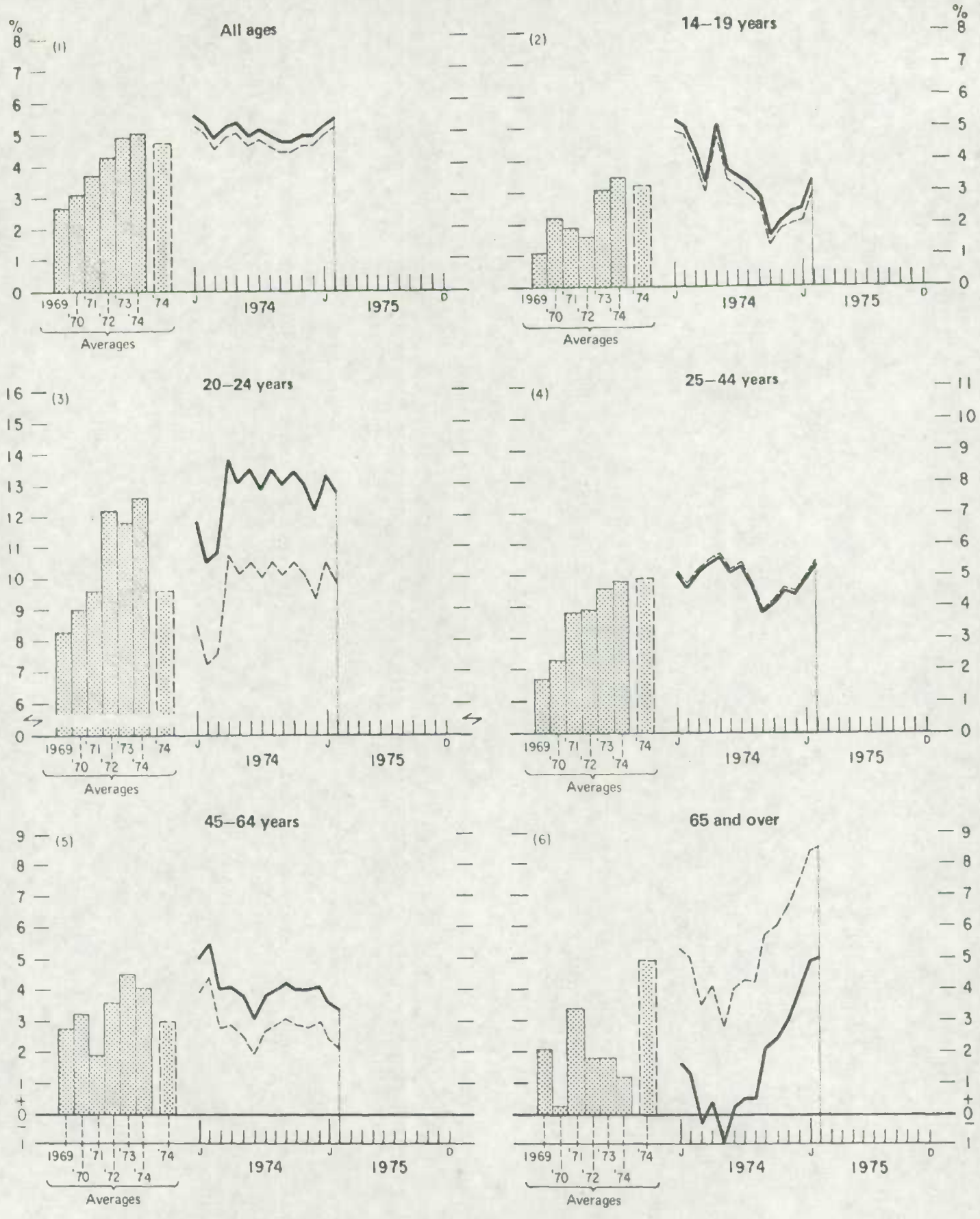
February 1975



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



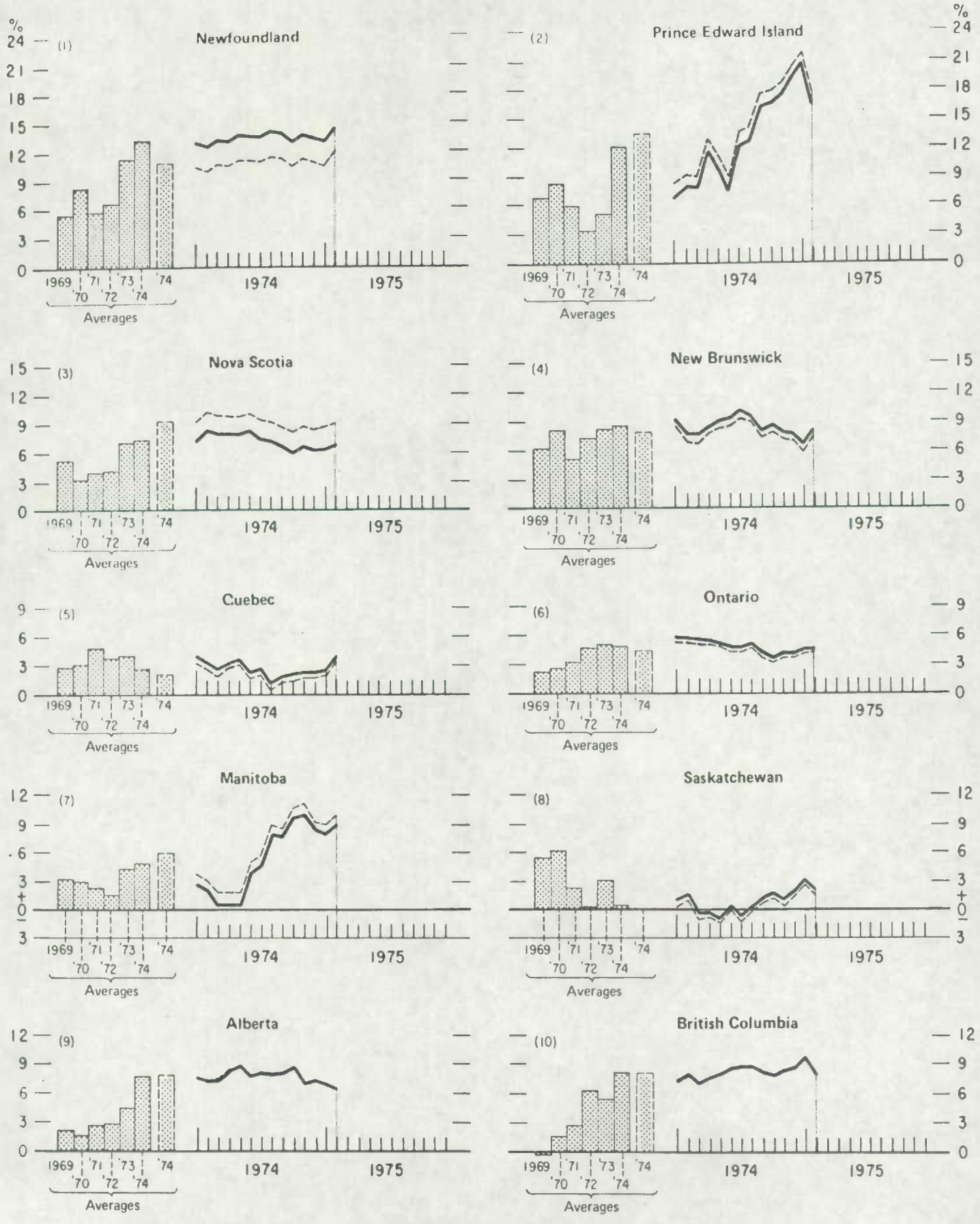
Slippage by Age Group at the Canada Level



Slippage rates were calculated on population projections based on 1961 census

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

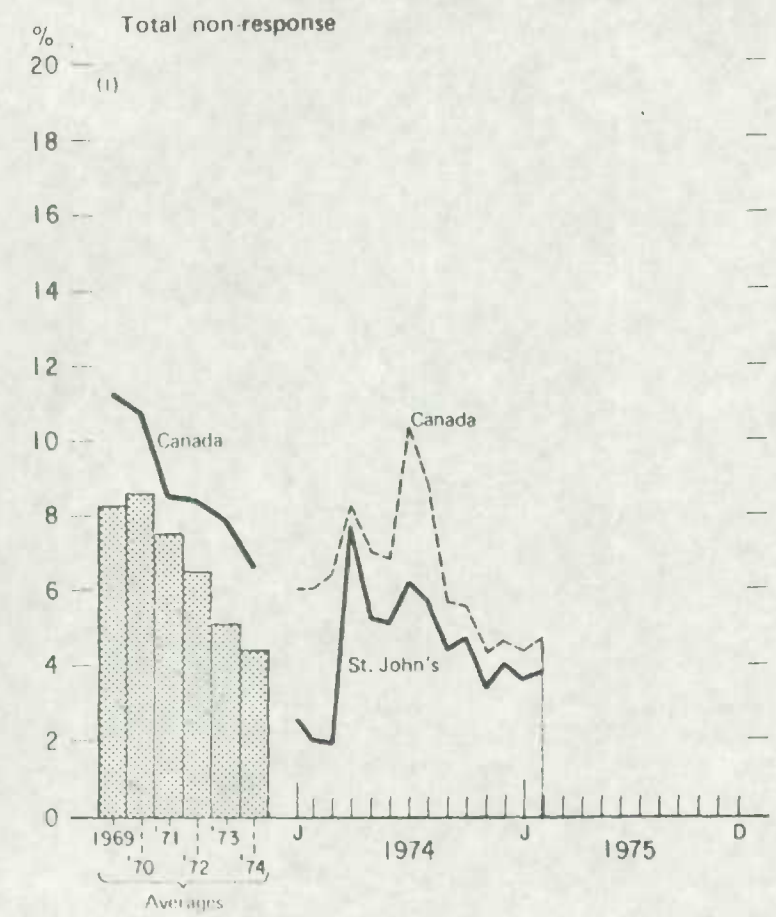
Slippage by Province

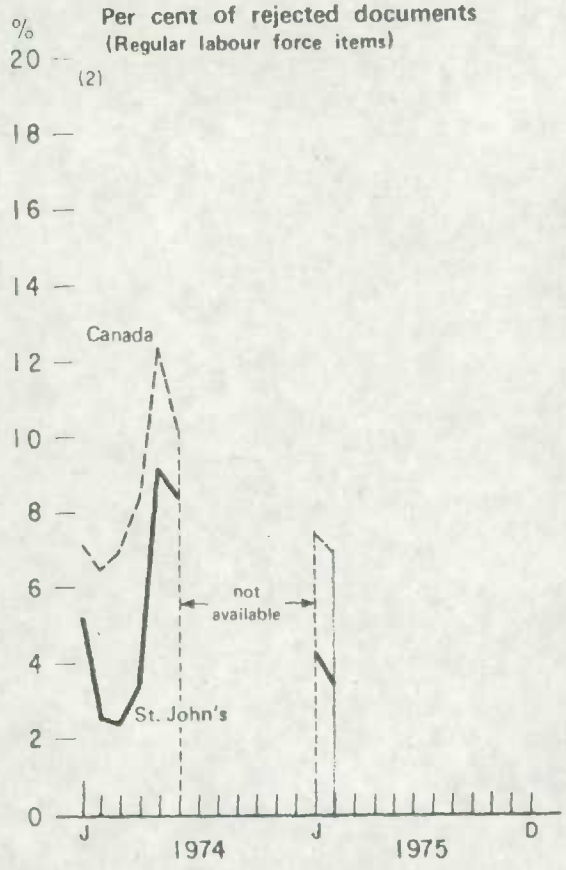


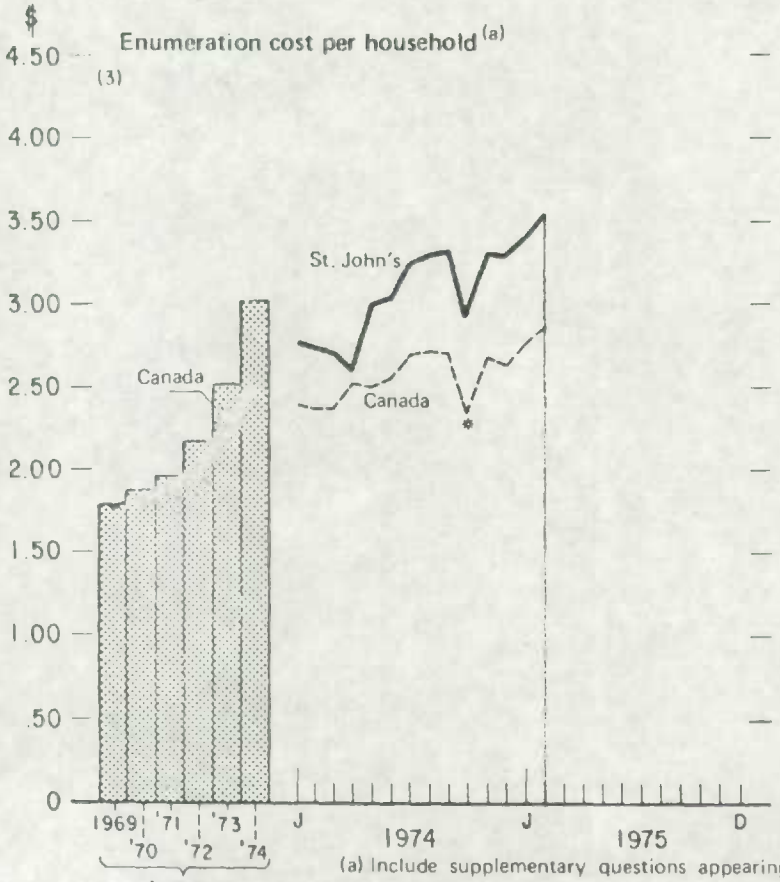
——— Slippage rates were calculated on population projections based on 1961 census

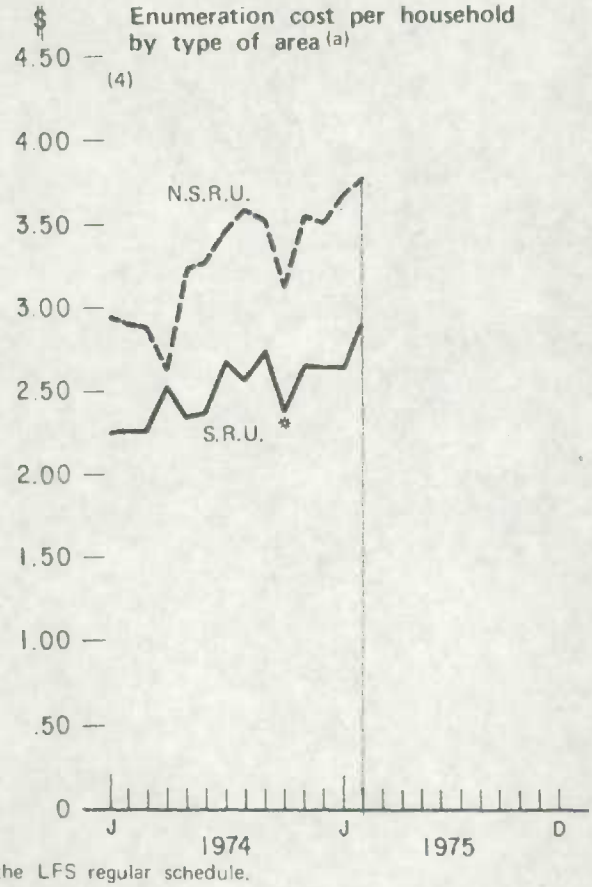
– – – – Slippage rates were calculated on preliminary population projections based on 1971 census

St. John's Regional Office







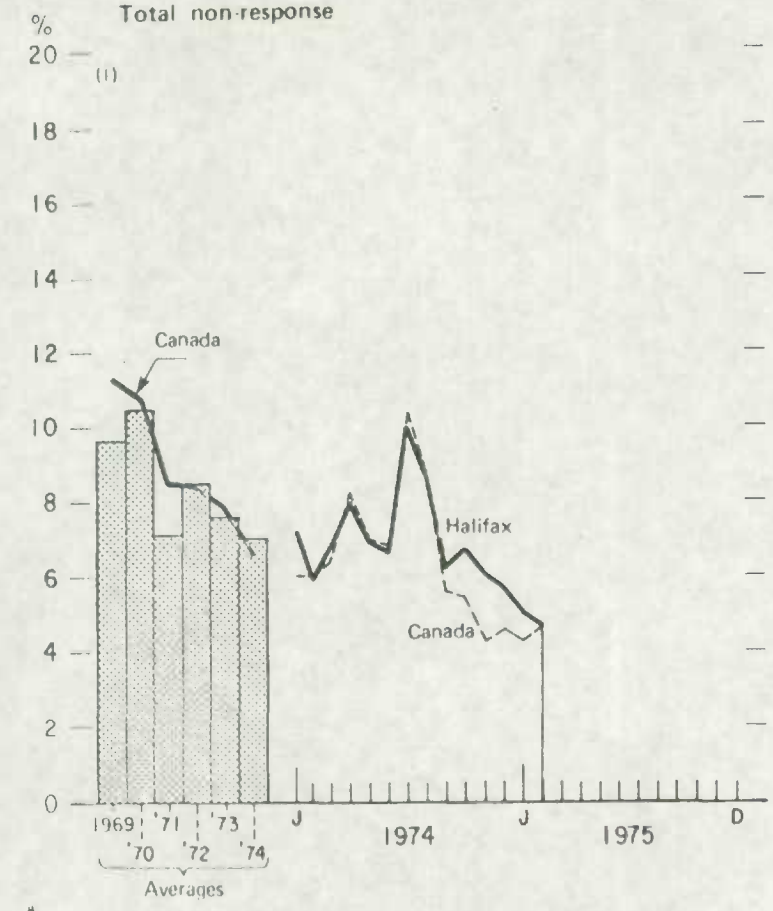


(a) Include supplementary questions appearing on the LFS regular schedule.

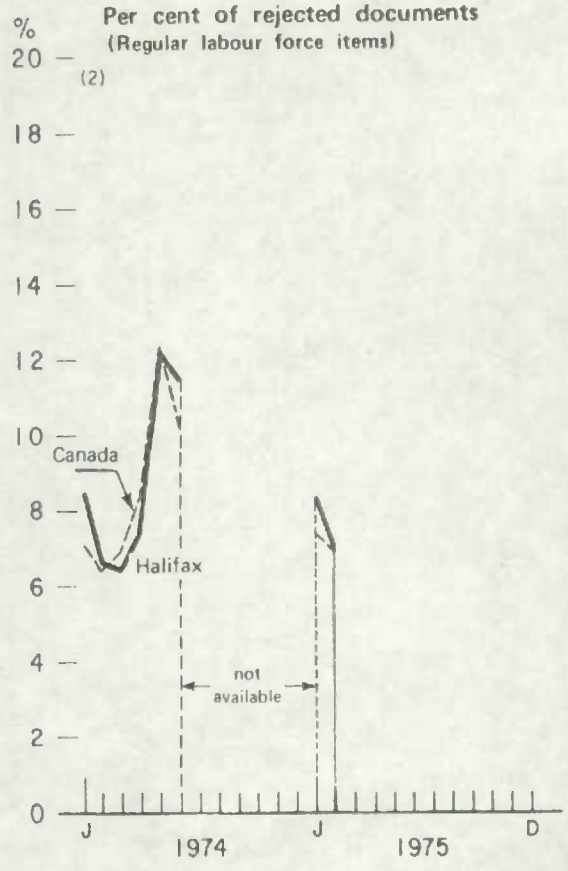
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Halifax Regional Office

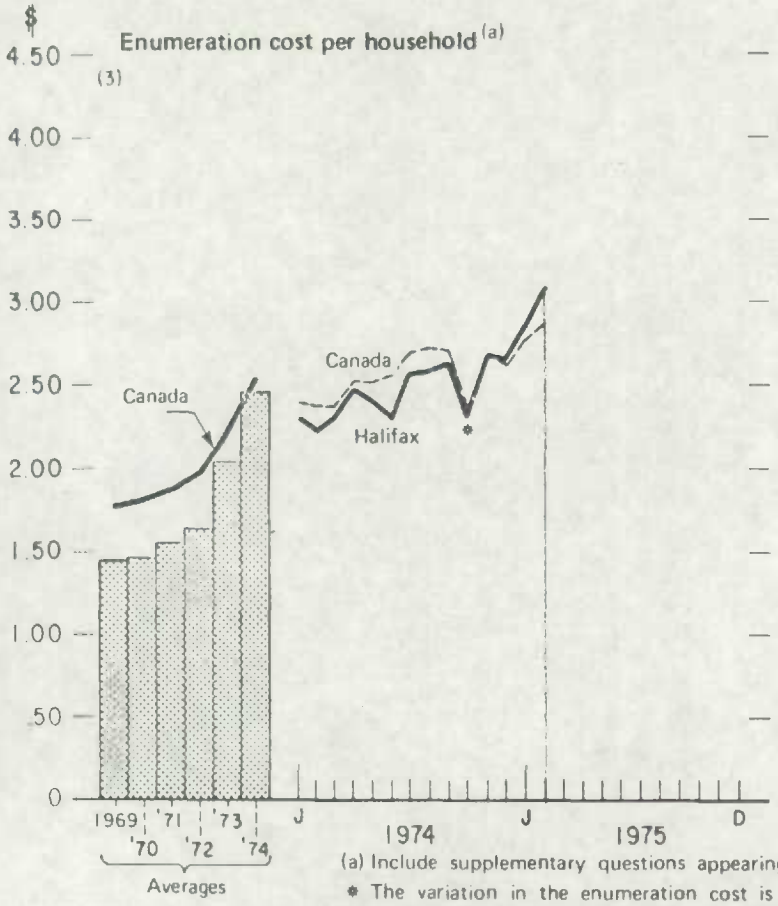
Total non-response



Per cent of rejected documents (Regular labour force items)



Enumeration cost per household (a)

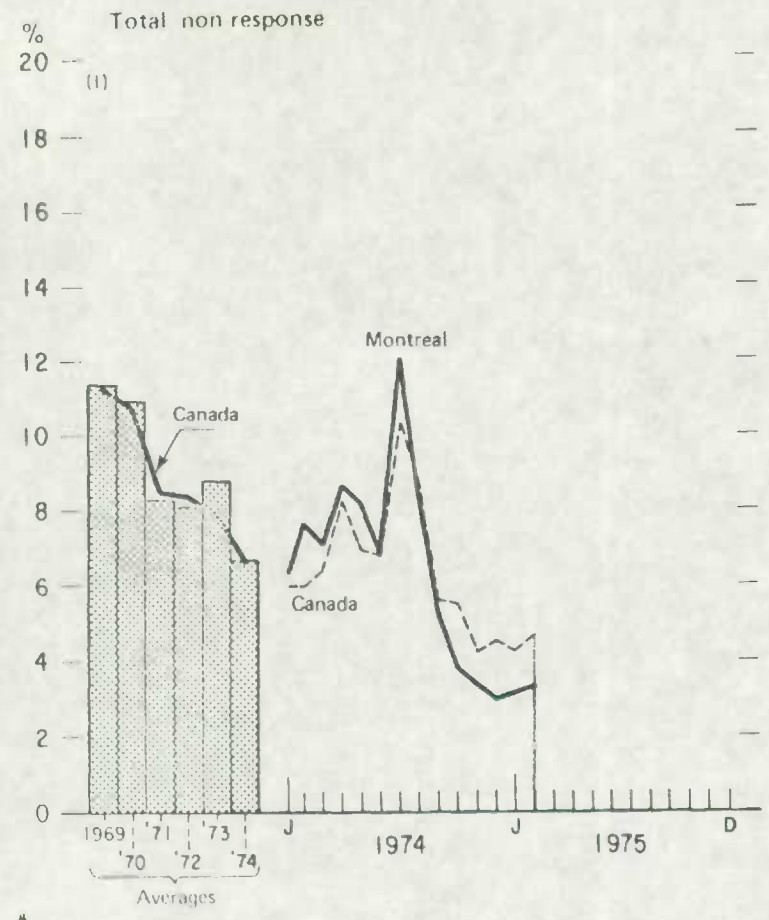


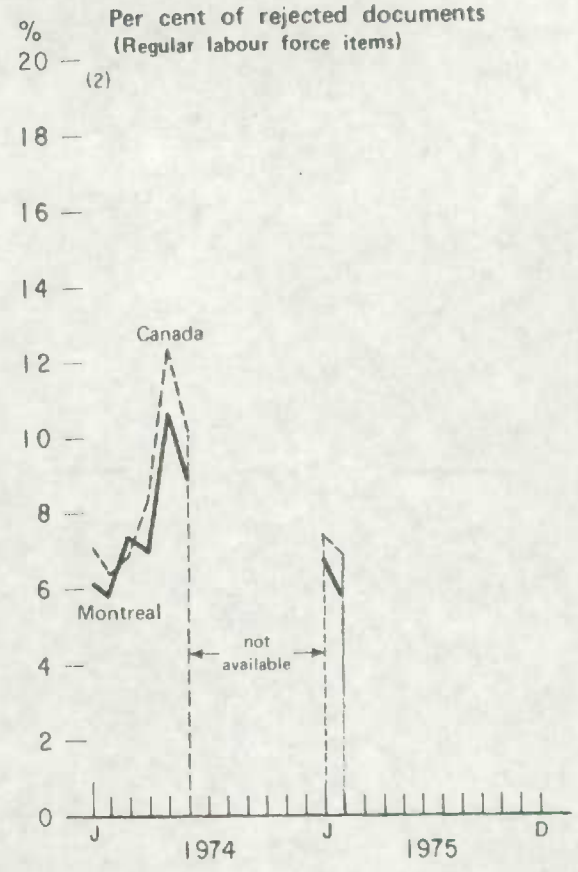
Enumeration cost per household by type of area (a)

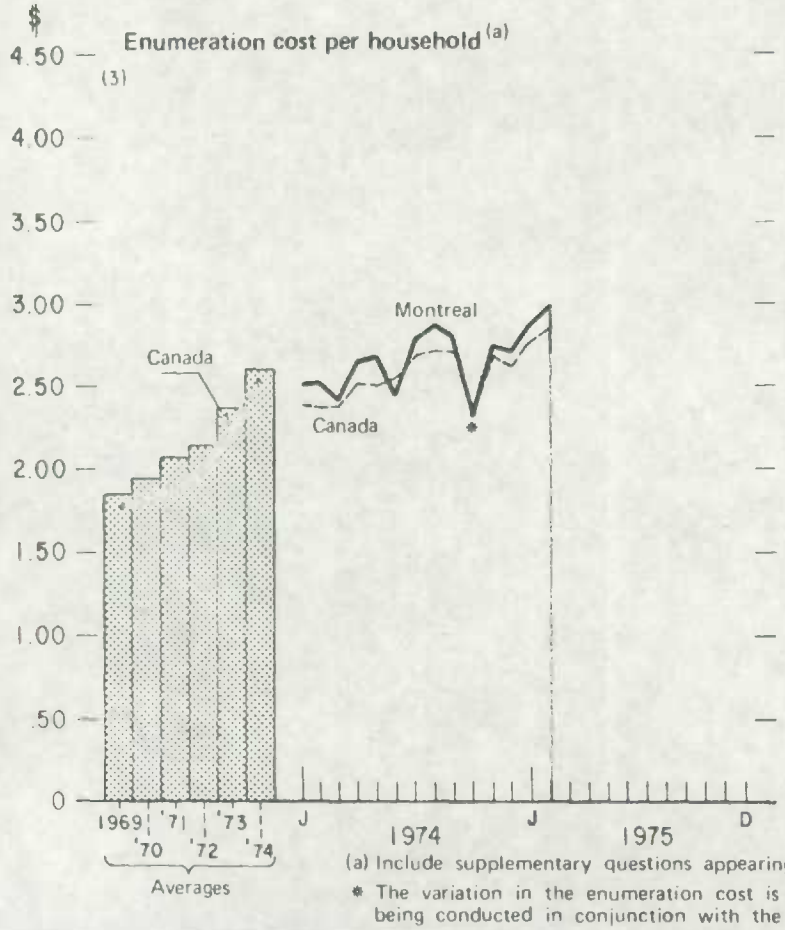
(a) Include supplementary questions appearing on the LFS regular schedule.

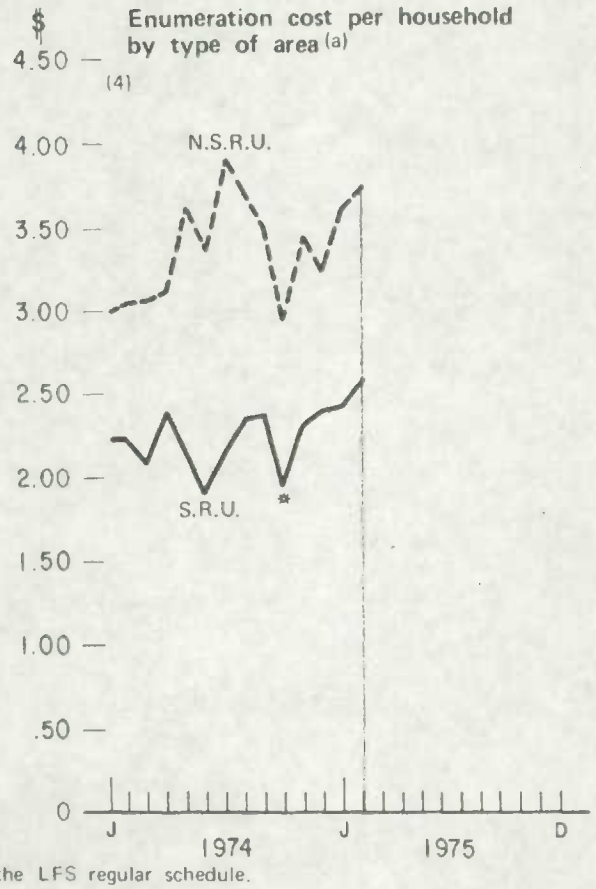
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Montreal Regional Office







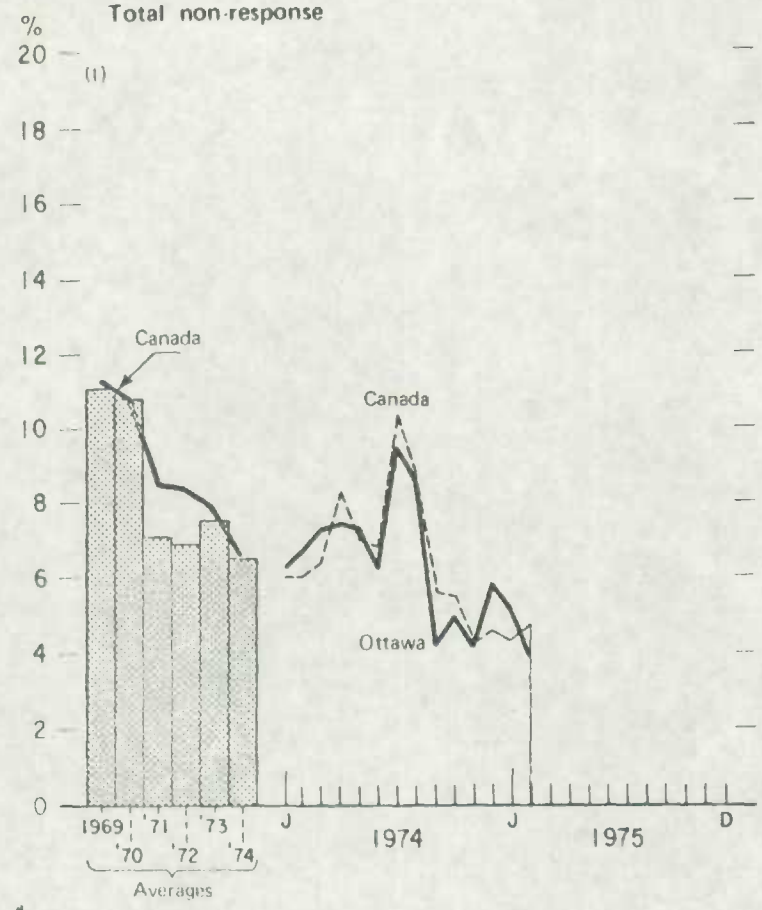


(a) Include supplementary questions appearing on the LFS regular schedule.

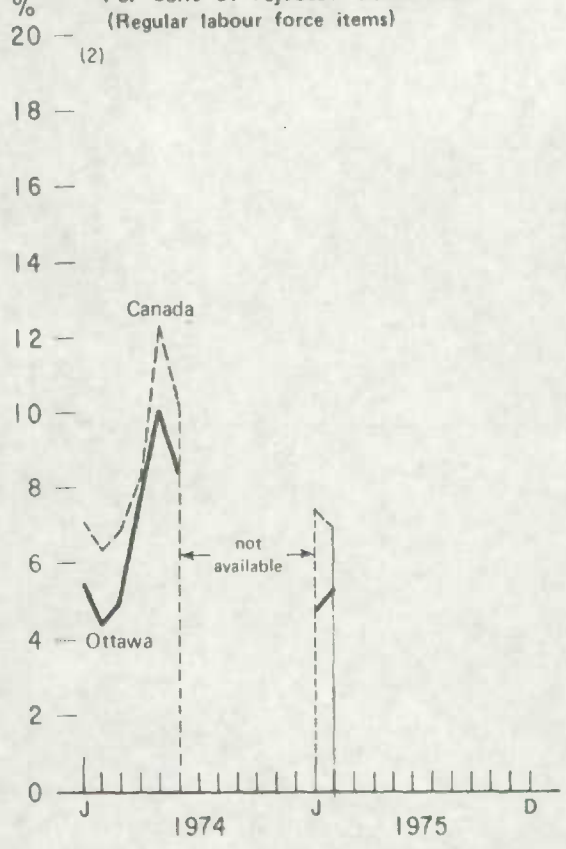
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Ottawa Regional Office

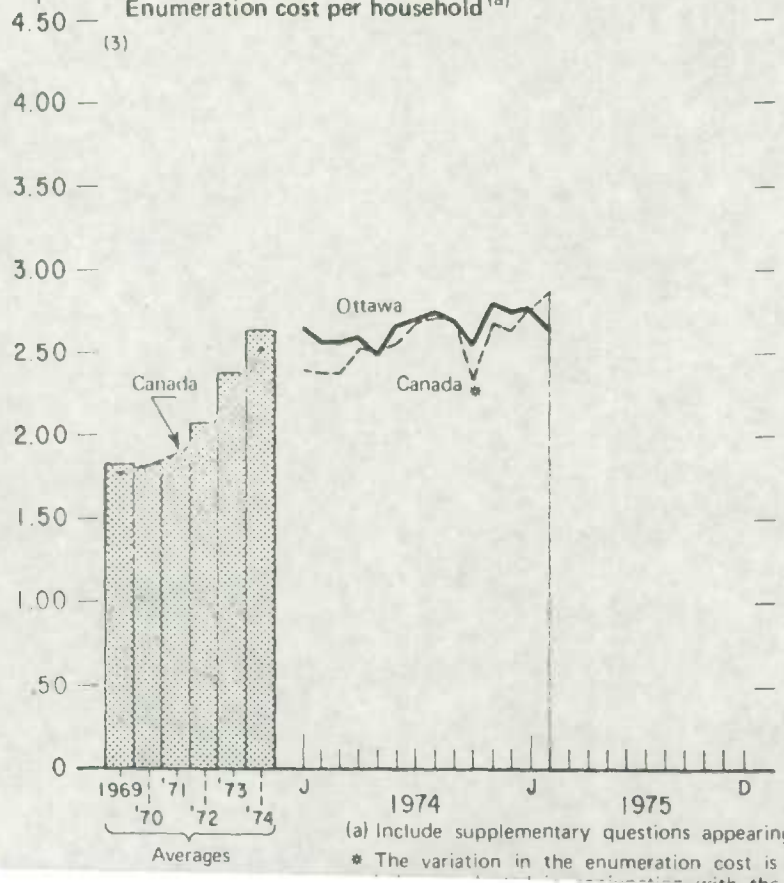
Total non-response



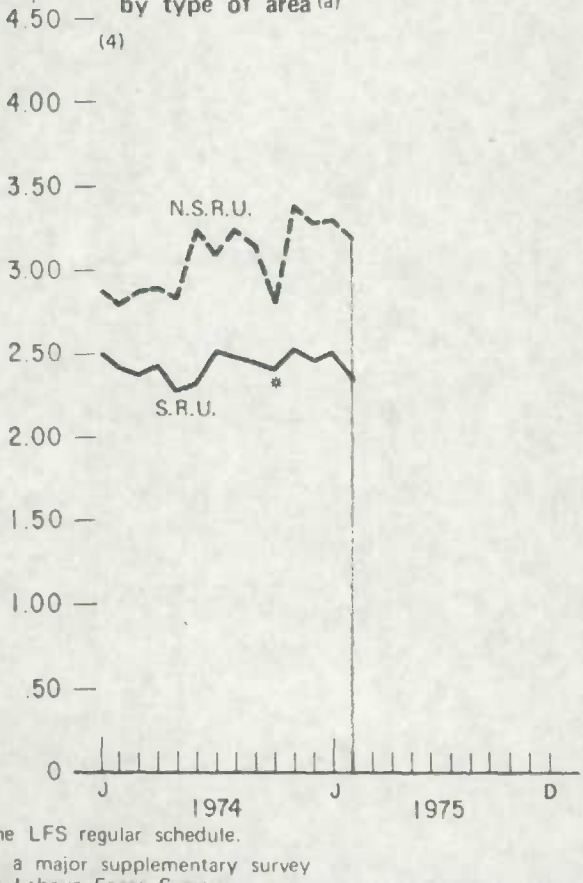
Per cent of rejected documents
(Regular labour force items)



Enumeration cost per household [a]



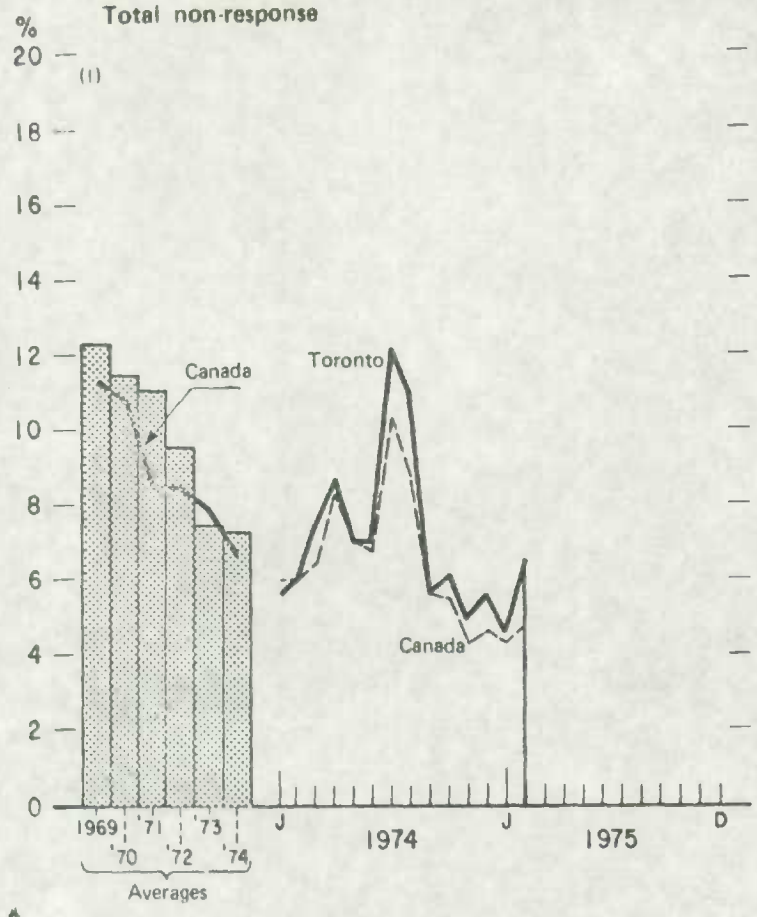
Enumeration cost per household by type of area [a]

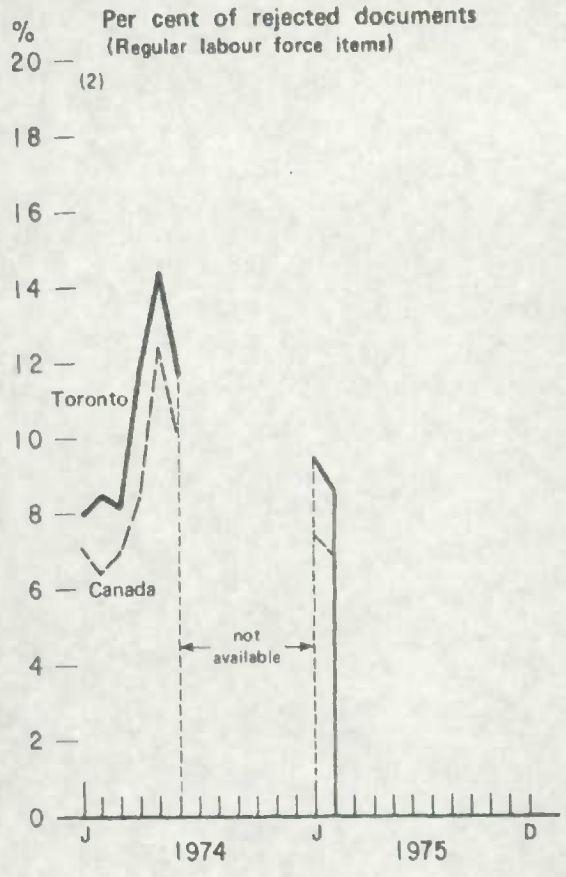


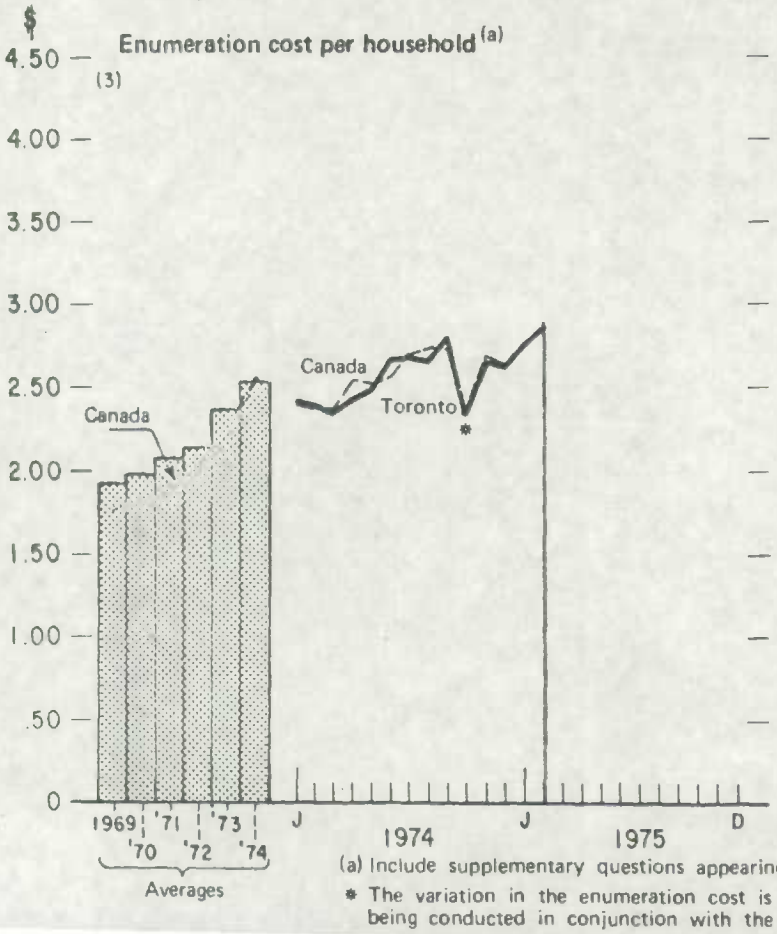
(a) Include supplementary questions appearing on the LFS regular schedule.

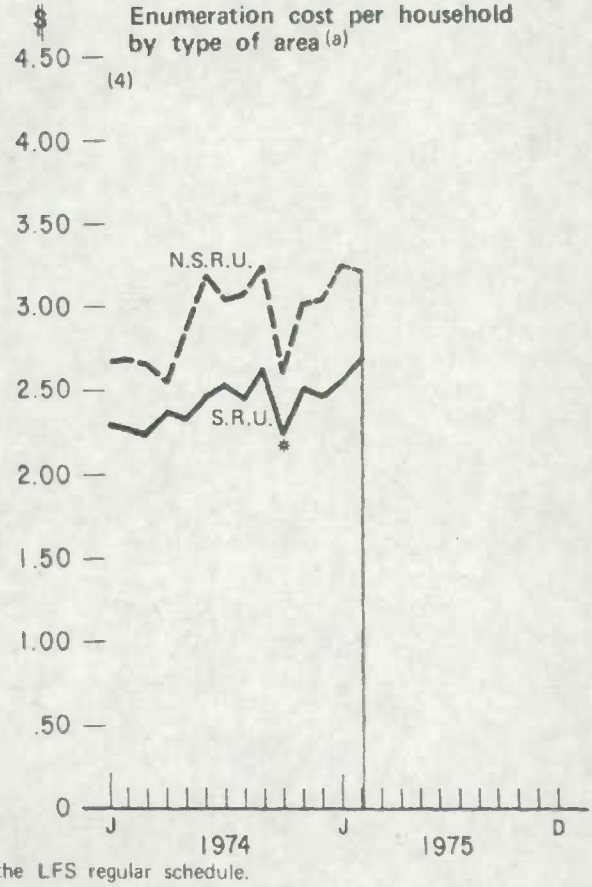
* The variation in the enumeration cost is due to a major supplementary survey

Toronto Regional Office



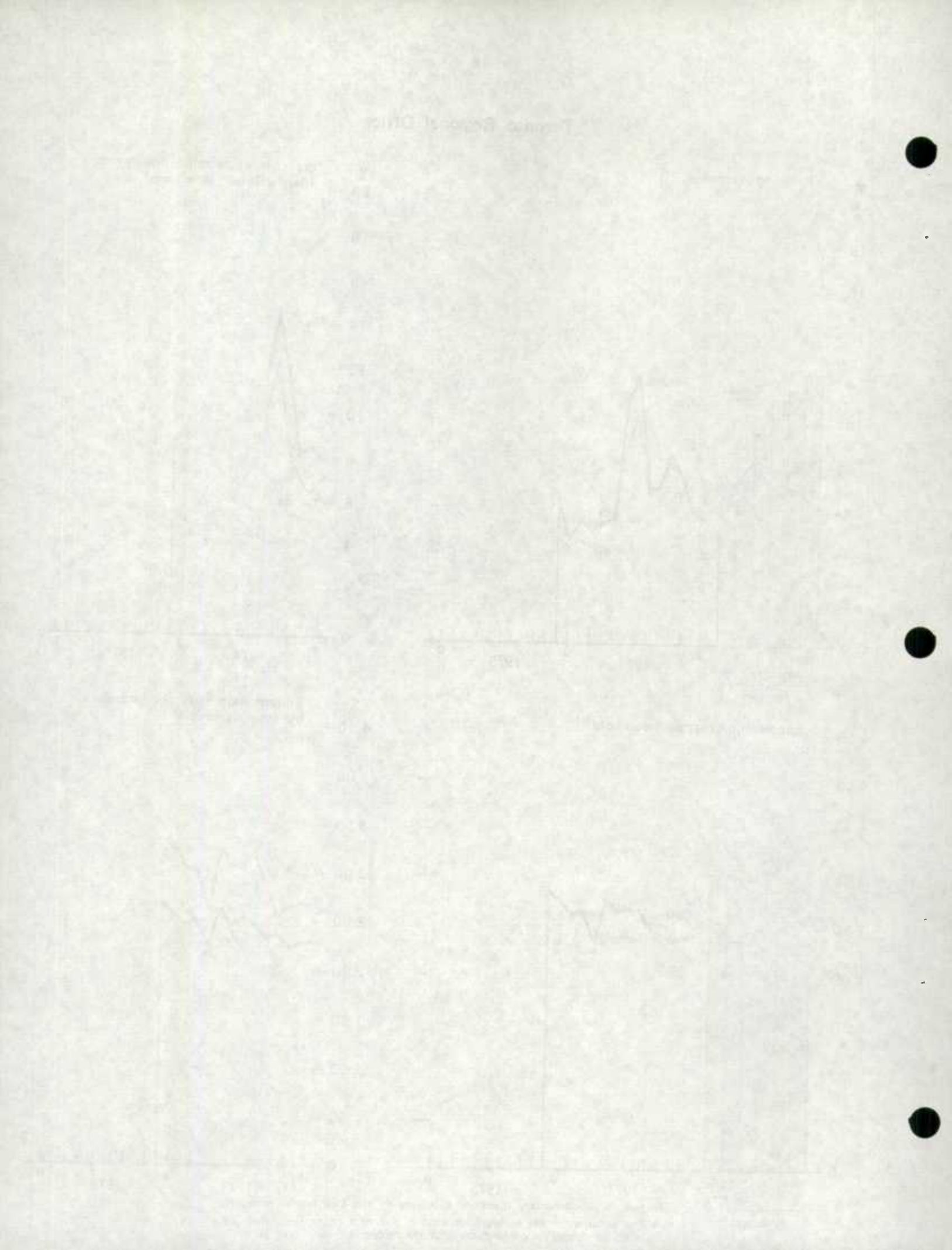






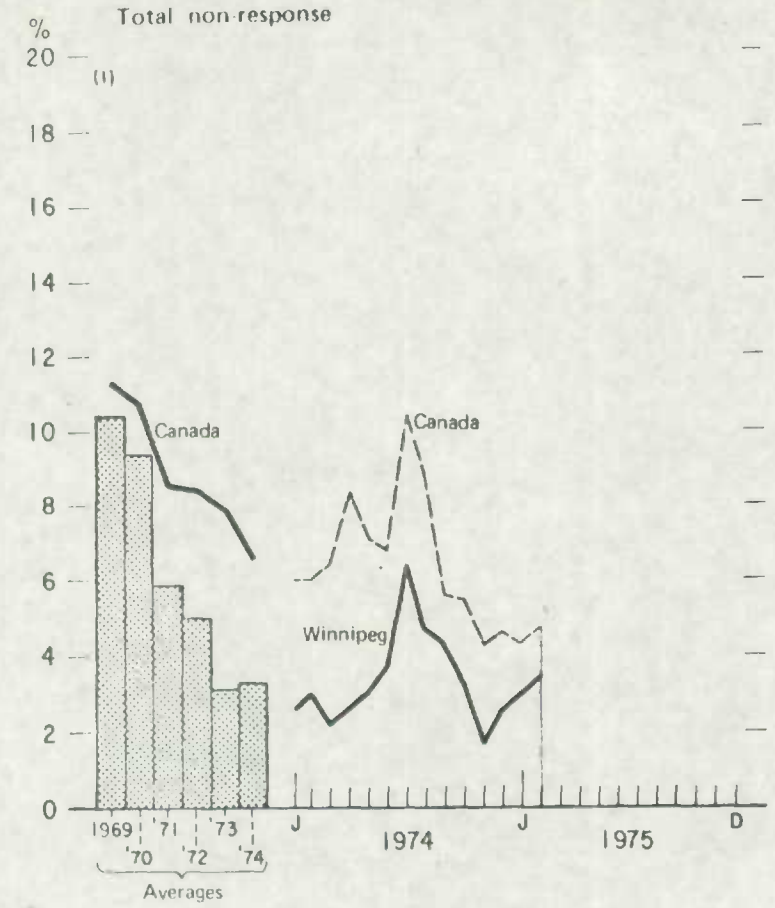
(a) Include supplementary questions appearing on the LFS regular schedule.

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

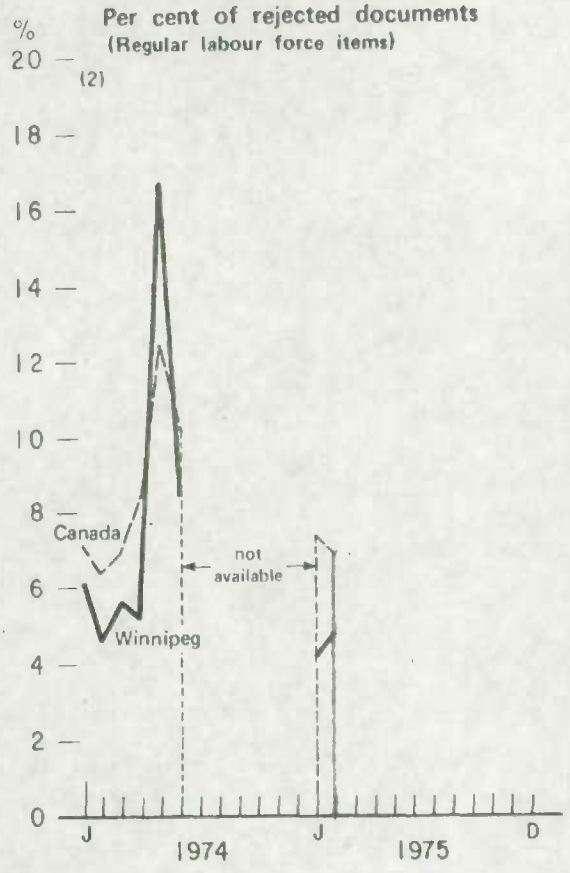


Winnipeg Regional Office

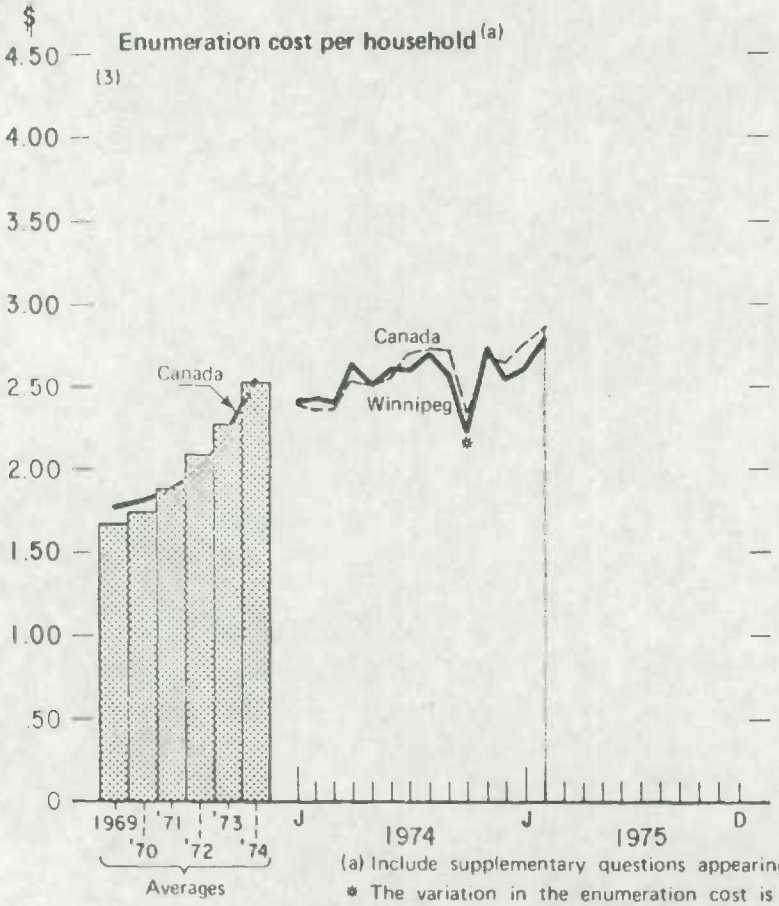
Total non-response



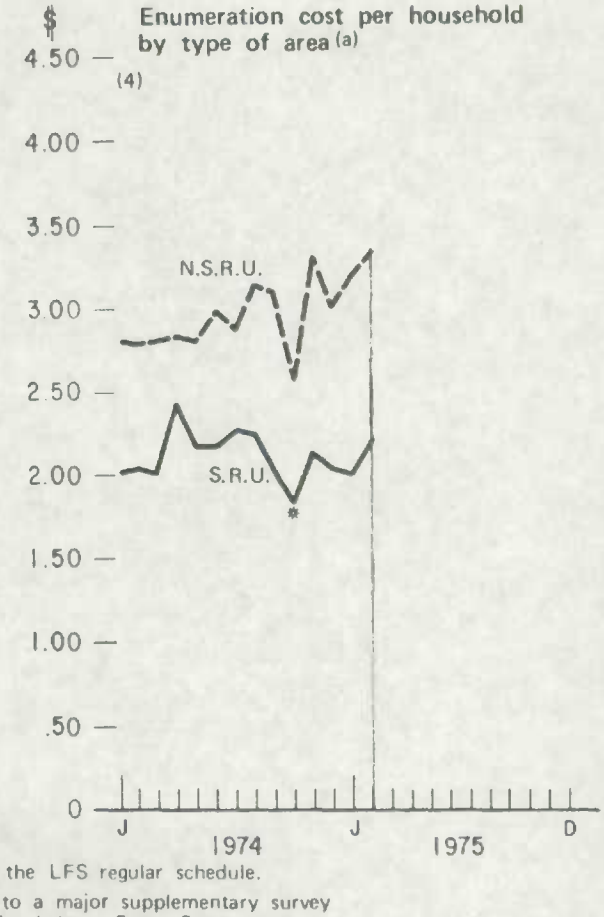
Per cent of rejected documents
(Regular labour force items)



Enumeration cost per household [a]



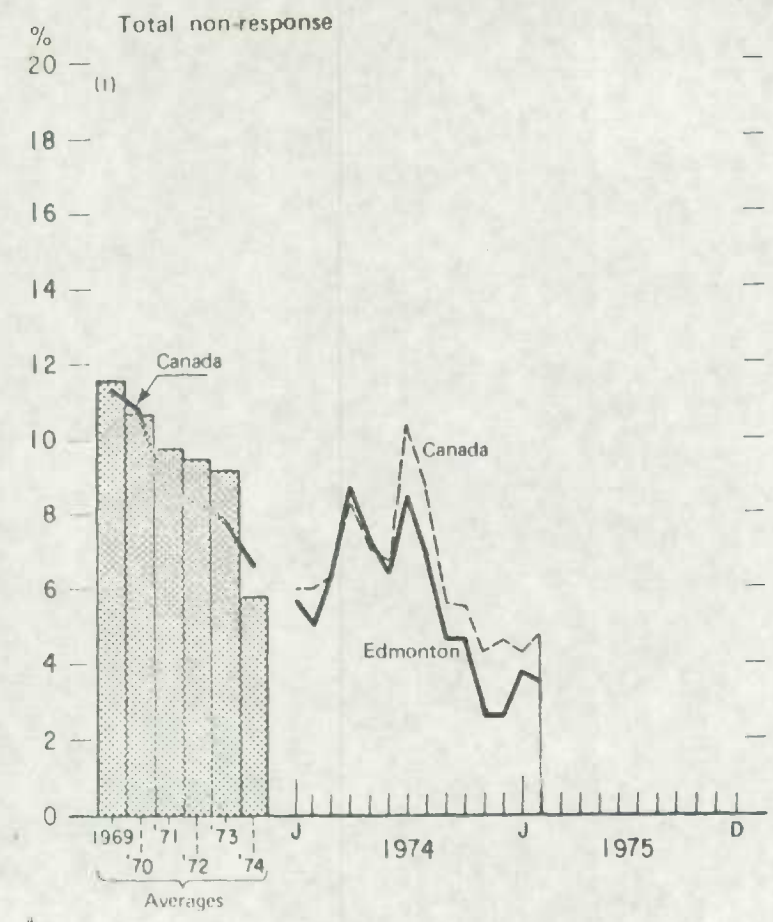
Enumeration cost per household by type of area [a]

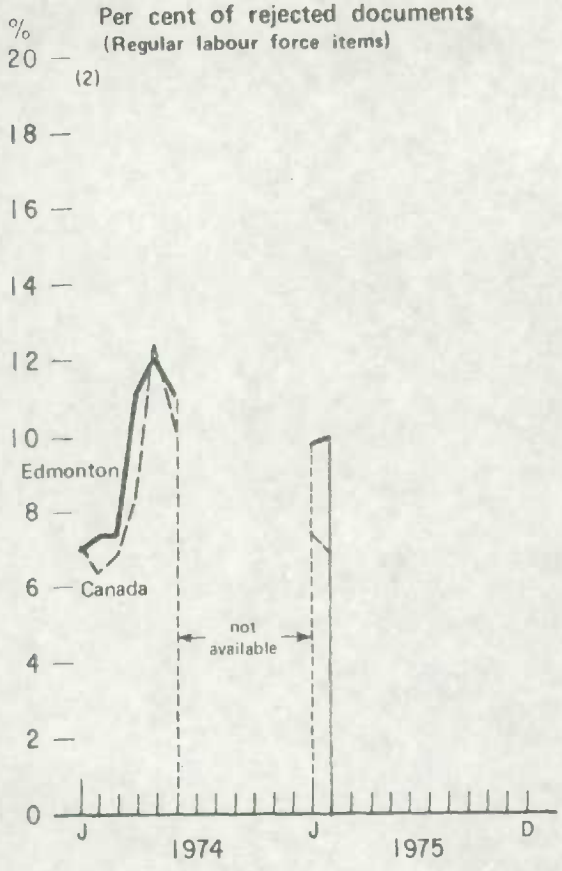


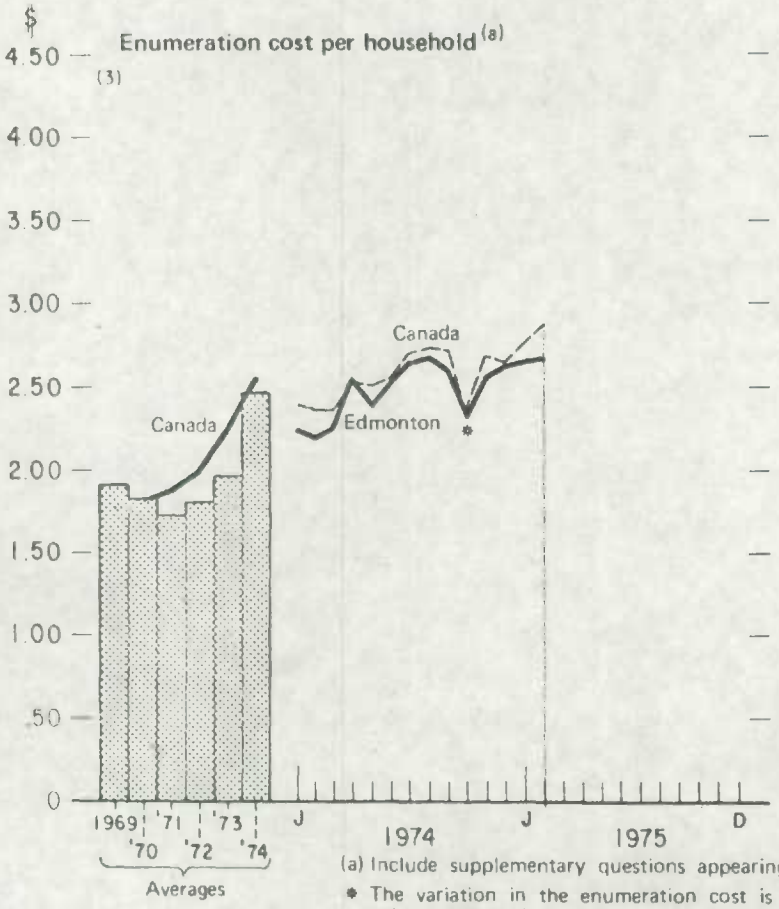
(a) Include supplementary questions appearing on the LFS regular schedule.

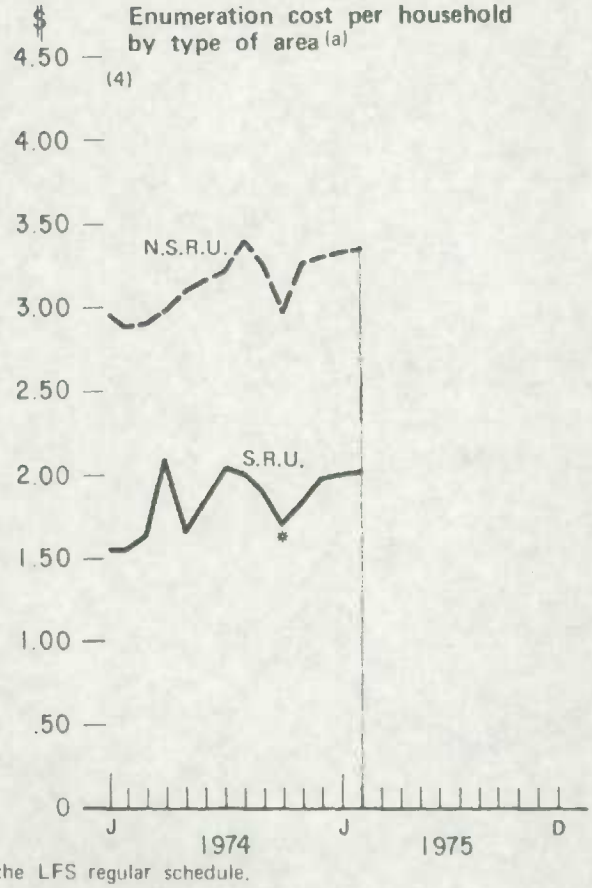
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Edmonton Regional Office









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

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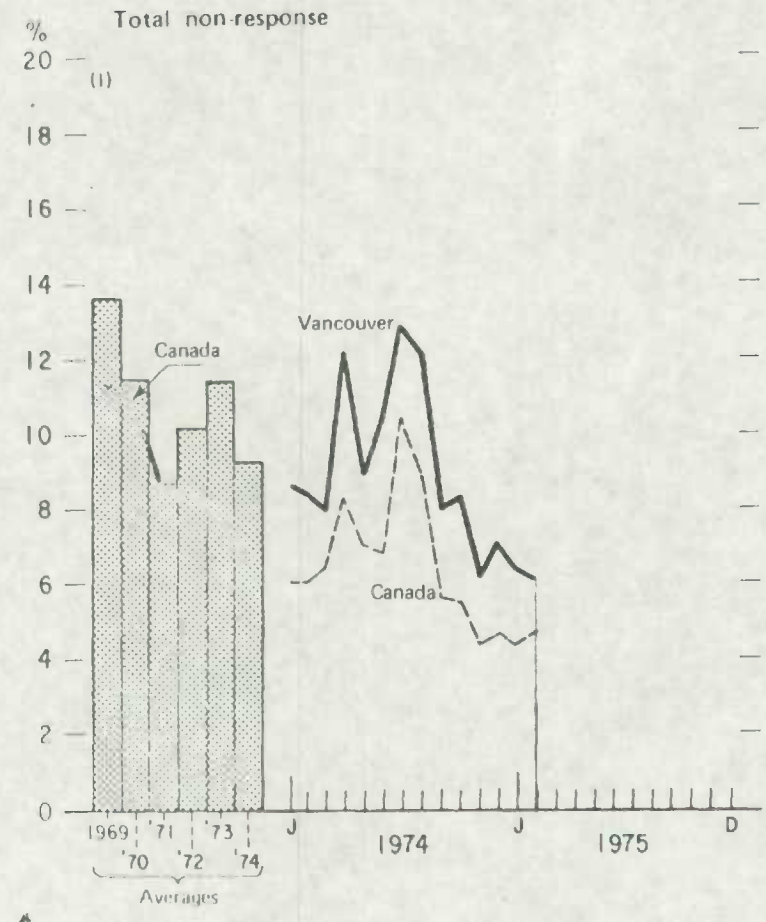
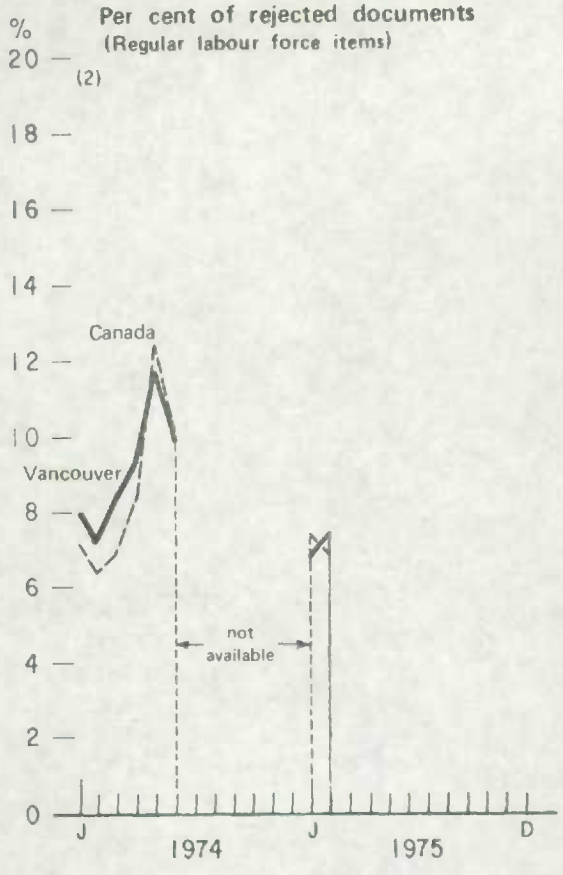
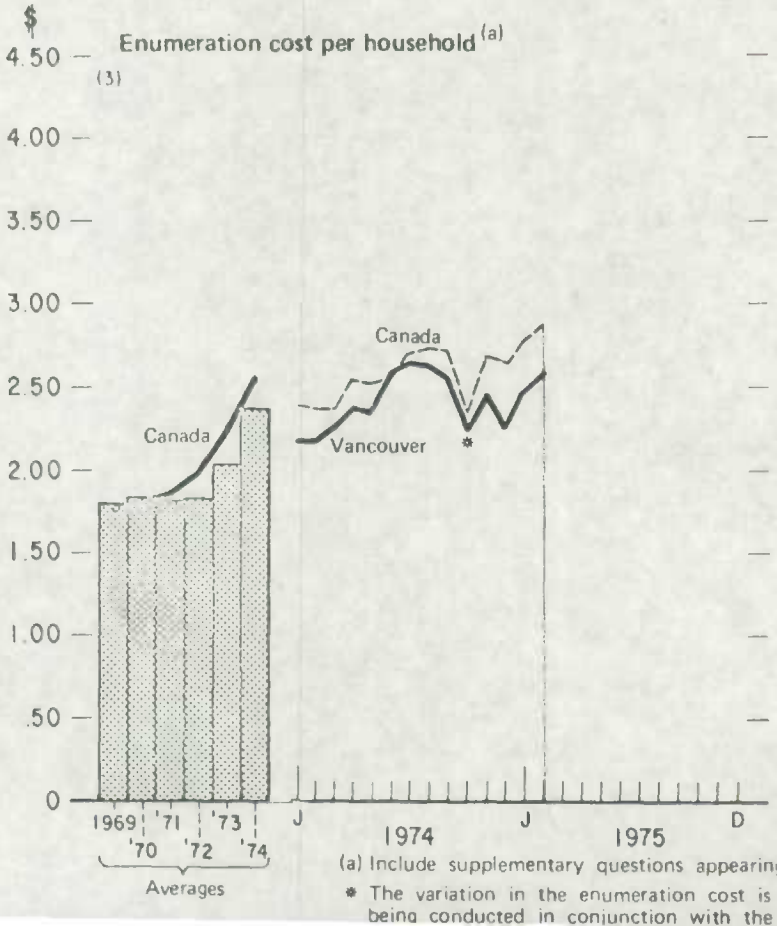
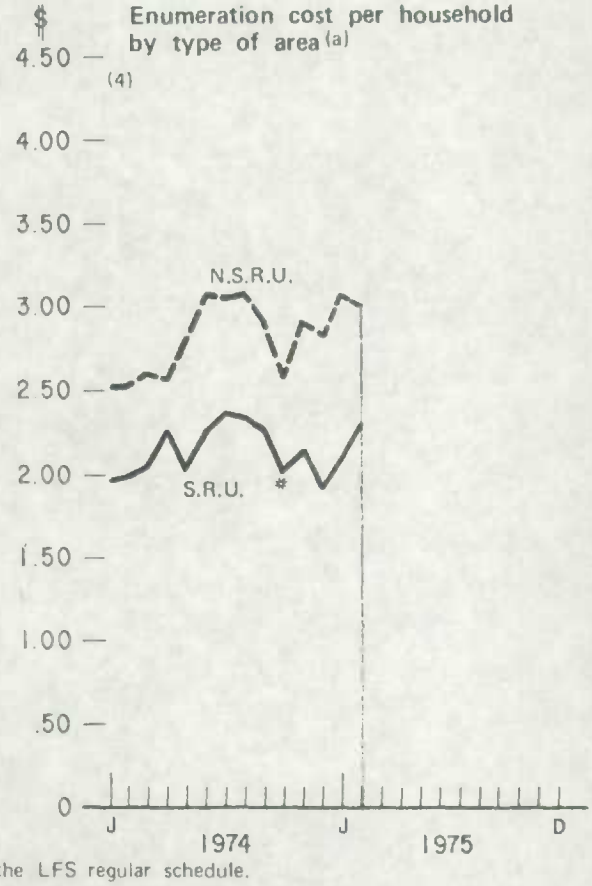
Vancouver Regional Office









(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.

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	
APRIL	10.8	9.6	10.8	8.8	9.3	7.9	9.4	7.9	8.3	
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
	Feb.	Jan.	Feb.	Jan.	Jan. to Feb. 1975	Jan. to Feb. 1974	Feb.1974 to Feb.1975
Total							
Canada	4.7	4.3	6.0	6.0	+ 0.4	---	- 1.3
St. John's	3.8	3.6	2.0	2.6	+ 0.2	- 0.6	+ 1.8
Halifax	4.8	5.0	5.9	7.2	- 0.2	- 1.3	- 1.1
Montréal	3.4	3.2	7.7	6.4	+ 0.2	+ 1.3	- 4.3
Ottawa	3.9	5.1	6.7	6.3	- 1.2	+ 0.4	- 2.8
Toronto	6.5	4.6	6.0	5.6	+ 1.9	+ 0.4	+ 0.5
Winnipeg	3.5	3.0	3.0	2.6	+ 0.5	+ 0.4	+ 0.5
Edmonton	3.5	3.8	5.0	5.7	- 0.3	- 0.7	- 1.5
Vancouver	6.1	6.4	8.4	8.6	- 0.3	- 0.2	- 2.3
Temporarily Absent							
Canada	1.6	1.4	1.8	1.7	+ 0.2	+ 0.1	- 0.2
St. John's	0.8	0.8	0.6	0.9	---	- 0.3	+ 0.2
Halifax	1.3	1.1	1.3	1.2	+ 0.2	+ 0.1	---
Montréal	1.0	0.7	1.6	1.3	+ 0.3	+ 0.3	- 0.6
Ottawa	1.7	1.5	1.4	1.6	+ 0.2	- 0.2	+ 0.3
Toronto	2.5	2.0	2.5	2.1	+ 0.5	+ 0.4	---
Winnipeg	1.9	1.5	1.5	1.5	+ 0.4	---	+ 0.4
Edmonton	1.3	1.5	1.9	1.7	- 0.2	+ 0.2	- 0.6
Vancouver	1.7	1.7	2.4	2.4	---	---	- 0.7
No one home							
Canada	0.9	1.0	1.7	1.5	- 0.1	+ 0.2	- 0.8
St. John's	0.7	1.2	0.6	0.6	- 0.5	---	+ 0.1
Halifax	0.7	0.8	1.9	1.3	- 0.1	+ 0.6	- 1.2
Montréal	0.7	0.8	2.0	2.5	- 0.1	- 0.5	- 1.3
Ottawa	0.8	1.7	3.2	2.1	- 0.9	+ 1.1	- 2.4
Toronto	0.9	0.9	1.3	1.4	---	- 0.1	- 0.4
Winnipeg	0.5	0.5	0.7	0.4	---	+ 0.3	- 0.2
Edmonton	0.7	0.7	1.2	1.2	---	---	- 0.5
Vancouver	1.8	2.0	2.4	1.9	- 0.2	+ 0.5	- 0.6
Refusals							
Canada	1.2	1.2	1.6	1.6	---	---	- 0.4
St. John's	1.1	0.8	0.6	0.4	+ 0.3	+ 0.2	+ 0.5
Halifax	1.6	1.8	1.6	1.8	- 0.2	- 0.2	---
Montréal	1.0	1.1	2.1	2.0	- 0.1	+ 0.1	- 1.1
Ottawa	1.2	1.1	1.3	1.2	+ 0.1	+ 0.1	- 0.1
Toronto	1.3	1.2	1.5	1.3	+ 0.1	+ 0.2	- 0.2
Winnipeg	0.7	0.6	0.6	0.6	+ 0.1	---	+ 0.1
Edmonton	0.7	0.7	1.4	1.5	---	- 0.1	- 0.7
Vancouver	2.0	1.9	2.8	2.7	+ 0.1	+ 0.1	- 0.8
Other							
Canada	1.0	0.7	0.9	1.2	+ 0.3	- 0.3	+ 0.1
St. John's	1.2	0.8	0.2	0.7	+ 0.4	- 0.5	+ 1.0
Halifax	1.2	1.3	1.1	2.9	- 0.1	- 1.8	+ 0.1
Montréal	0.7	0.6	2.0	0.6	+ 0.1	+ 1.4	- 1.3
Ottawa	0.2	0.8	0.8	1.4	- 0.6	- 0.6	- 0.6
Toronto	1.8	0.5	0.7	0.8	+ 1.3	- 0.1	+ 1.1
Winnipeg	0.4	0.4	0.2	0.1	---	+ 0.1	+ 0.2
Edmonton	0.8	0.9	0.5	1.3	- 0.1	- 0.8	+ 0.3
Vancouver	0.6	0.8	0.8	1.6	- 0.2	- 0.8	- 0.2

FIELD DIVISION

LABOUR FORCE SURVEY

ANALYSIS OF REJECTED DOCUMENTS

SURVEY NO. 295

SUMMARY	CANADA	ST.JOHNS	HALIFAX	MONTREAL	OTTAWA	TORONTO	WINNIPEG	EDMONTON	VANCOUVER
TOTAL DOCUMENTS RECEIVED	79,308	4547	13,786	15,944	4,939	16,188	6,864	8,721	8,319
REJECTED DOCUMENTS	5,905	192	1,141	1,088	233	1,540	290	854	567
% OF TOTAL DOCUMENTS RECEIVED	7.45	4.22	8.28	6.82	4.72	9.51	4.22	9.79	6.82
ERRORS	9,671	303	1,837	1,781	390	2,601	479	1,295	985
AVERAGE PER REJECTED DOCUMENT	1.64	1.58	1.61	1.64	1.67	1.69	1.65	1.52	1.74
ERROR BREAKDOWN									
NO. OF CARELESS ERRORS **	5,414	81	902	1,026	219	1,553	292	822	519
% OF TOTAL ERRORS	55.99	26.73	49.10	57.61	56.15	59.71	60.96	63.47	52.69
AVERAGE PER REJECTED DOCUMENT	.917	.422	.791	.943	.940	1.008	1.007	.963	.915
NO. OF ERRORS IN ITEMS 11, 12, 24 & 25	1,095	86	273	165	37	257	31	133	113
% OF TOTAL ERRORS	11.32	28.39	14.86	9.27	9.49	9.88	6.47	10.27	11.47
AVERAGE PER REJECTED DOCUMENT	.185	.448	.239	.152	.159	.167	.106	.156	.199
NO. OF ERRORS IN ITEMS 13, 20 to 23	2,534	73	502	469	119	651	145	288	287
% OF TOTAL ERRORS	26.20	24.09	27.33	26.33	30.51	25.03	30.27	22.24	29.14
AVERAGE PER REJECTED DOCUMENT	.429	.380	.440	.431	.511	.423	.500	.337	.506
NO. OF ERRORS IN ITEMS 14 & 15	561	60	149	101	11	127	8	44	61
% OF TOTAL ERRORS	5.80	19.80	8.11	5.67	2.82	4.88	1.67	3.40	6.19
AVERAGE PER REJECTED DOCUMENT	.095	.312	.131	.093	.047	.082	.028	.052	.108
NO. OF ERRORS IN ITEMS 17, 18 & 19	67	3	11	20	4	13	3	8	5
% OF TOTAL ERRORS	.69	.99	.60	1.12	1.03	.50	.63	.62	.51
AVERAGE PER REJECTED DOCUMENT	.011	.016	.010	.018	.017	.008	.010	.009	.009

* THIS ANALYSIS REPRESENTS THE MACHINE READABLE ERRORS ONLY.

* CARELESS ERROR: SUM OF ERRORS FOR ITEMS 1 to 10 AND 26,28 and EDUCATION ON THE LFS DOCUMENT

LABOUR FORCE SURVEY ENQUÊTE SUR LA POPULATION ACTIVE

ANALYSIS OF REJECTED DOCUMENTS – ANALYSE DES DOCUMENTS REJETÉS *

SURVEY No 296
ENQUÊTE

SUMMARY – SOMMAIRE	CANADA	ST JOHN'S	HALIFAX	MONTREAL	OTTAWA	TORONTO	WINNIPEG	EDMONTON	VANCOUVER
TAL DOCUMENTS RECEIVED / TOTAL DES DOCUMENTS REÇUS	79,446	4,499	13,793	15,797	4,966	16,278	7,054	8,597	8,462
JECTED DOCUMENTS / DOCUMENTS REJETÉS	5,508	151	962	922	262	1,394	336	862	619
OF TOTAL DOCUMENTS RECEIVED DES DOCUMENTS REÇUS	6.93	3.36	6.97	5.84	5.28	8.56	4.76	10.03	7.36
OTAL ERRORS / TOTAL DES ERREURS	9,263	239	1,606	1,520	402	2,390	584	1,527	995
E. ERRORS PER REJECTED DOCUMENT YENNE D'ERREURS PAR DOCUMENT REJETÉ	1.68	1.58	1.67	1.65	1.53	1.71	1.74	1.77	1.61
RROR BREAKDOWN / RÉPARTITION DES ERREURS									
O. OF CARELESS ERRORS ** MBRE DE FAUTES D'INATTENTION **	5,365	65	784	891	170	1,530	409	1,070	446
OF TOTAL ERRORS/ % DU TOTAL DES ERREURS	57.9	27.2	48.8	58.6	42.3	64.0	70.0	70.1	4.48
E. PER REJECTED DOCUMENT YENNE PAR DOCUMENT REJETÉ	.974	.430	.815	.966	.649	1.098	1.217	1.241	.721
O. OF ERRORS IN ITEMS 11, 12, 24 & 25 MBRE D'ERREURS AUX POSTES 11, 12, 24 & 25	1,039	57	224	155	50	254	47	132	120
OF TOTAL ERRORS/ % DU TOTAL DES ERREURS	11.2	23.8	14.0	10.2	12.4	10.6	8.1	8.6	12.1
E. PER REJECTED DOCUMENT YENNE PAR DOCUMENT REJETÉ	.189	.377	.233	.168	.191	.182	.140	.153	.194
O. OF ERRORS IN ITEMS 13, 20 TO 23 MBRE D'ERREURS AUX POSTES 13, 20 À 23	2,255	74	438	369	147	473	110	292	352
OF TOTAL ERRORS / % DU TOTAL DES ERREURS	24.3	31.0	27.3	24.3	36.6	19.8	18.8	19.1	35.4
E. PER REJECTED DOCUMENT YENNE PAR DOCUMENT REJETÉ	.409	.493	.455	.400	.561	.339	.327	.339	.569
O. OF ERRORS IN ITEMS 14 & 15 MBRE D'ERREURS AUX POSTES 14 & 15	532	41	150	86	29	126	8	24	68
OF TOTAL ERRORS/ % DU TOTAL DES ERREURS	5.8	17.2	9.3	5.7	7.2	5.3	1.4	1.6	6.8
E. PER REJECTED DOCUMENT YENNE PAR DOCUMENT REJETÉ	.097	.271	.156	.093	.111	.090	.024	.028	.110
O. OF ERRORS IN ITEMS 17, 18 & 19 MBRE D'ERREURS AUX POSTES 17, 18 & 19	72	2	10	19	6	7	10	9	9
OF TOTAL ERRORS/ % DU TOTAL DES ERREURS	.8	.8	.6	1.2	1.5	.3	1.7	.6	.9
E. PER REJECTED DOCUMENT YENNE PAR DOCUMENT REJETÉ	.013	.013	.010	.021	.023	.005	.030	.010	.015

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, 26, 29 AND EDUC ON THE LFS DOCUMENT
** FAUTE D'INATTENTION: TOTAL DES ERREURS AUX POSTES 1 - 10, 26, 29 ET ÉDUC. SUR LE DOCUMENT EPA

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

	1975		1974				1974		1973			
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.
All Areas												
Canada ..... $	2.88	2.77	2.64	2.69	2.35	2.72	2.38	2.40	2.32	2.41	2.52	2.46
St. John's ..... $	3.54	3.41	3.30	3.31	2.93	3.33	2.75	2.78	2.70	2.75	2.89	2.71
Halifax ..... $	3.09	2.86	2.67	2.69	2.31	2.64	2.24	2.31	2.18	2.29	2.29	2.29
Montréal ..... $	3.00	2.88	2.73	2.76	2.33	2.81	2.53	2.52	2.37	2.58	2.70	2.66
Ottawa ..... $	2.65	2.78	2.76	2.83	2.56	2.71	2.57	2.66	2.44	2.53	2.66	2.68
Toronto ..... $	2.85	2.76	2.63	2.65	2.34	2.80	2.39	2.42	2.43	2.47	2.67	2.60
Winnipeg ..... $	2.80	2.62	2.53	2.74	2.23	2.59	2.43	2.42	2.40	2.39	2.48	2.40
Edmonton ..... $	2.68	2.66	2.63	2.56	2.33	2.60	2.21	2.24	2.11	2.22	2.29	2.24
Vancouver ..... $	2.59	2.47	2.26	2.45	2.24	2.54	2.19	2.19	2.16	2.19	2.37	2.20
S.R.U.												
Canada ..... $	2.49	2.38	2.29	2.31	2.05	2.35	2.14	2.14	2.10	2.24	2.35	2.32
St. John's ..... $	2.90	2.66	2.66	2.67	2.38	2.75	2.28	2.27	2.13	2.15	2.37	2.17
Halifax ..... $	2.60	2.58	2.31	2.24	1.95	2.13	2.17	2.11	2.04	2.16	2.07	2.01
Montréal ..... $	2.59	2.44	2.43	2.34	1.96	2.39	2.25	2.25	2.12	2.42	2.55	2.52
Ottawa ..... $	2.36	2.51	2.47	2.54	2.41	2.45	2.43	2.51	2.33	2.35	2.50	2.56
Toronto ..... $	2.71	2.57	2.47	2.51	2.24	2.63	2.28	2.31	2.37	2.43	2.59	2.57
Winnipeg ..... $	2.22	2.00	2.04	2.13	1.84	2.04	2.05	2.02	2.12	2.13	2.21	2.12
Edmonton ..... $	2.02	2.01	1.98	1.85	1.70	1.92	1.56	1.56	1.40	1.63	1.74	1.81
Vancouver ..... $	2.31	2.11	1.92	2.14	2.01	2.28	1.99	1.97	1.98	2.08	2.27	2.14
N.S.R.U.												
Canada ..... $	3.40	3.29	3.10	3.19	2.74	3.19	2.70	2.75	2.61	2.64	2.74	2.65
St. John's ..... $	3.78	3.68	3.51	3.56	3.13	3.54	2.92	2.95	2.90	2.96	3.08	2.91
Halifax ..... $	3.39	3.04	2.90	2.96	2.52	2.95	2.30	2.45	2.27	2.37	2.44	2.47
Montréal ..... $	3.76	3.64	3.25	3.46	2.95	3.51	3.06	3.00	2.83	2.88	2.96	2.92
Ottawa ..... $	3.20	3.30	3.29	3.39	2.81	3.16	2.81	2.89	2.60	2.79	2.90	2.85
Toronto ..... $	3.22	3.27	3.04	3.02	2.61	3.24	2.70	2.69	2.60	2.59	2.86	2.72
Winnipeg ..... $	3.36	3.21	3.01	3.31	2.58	3.10	2.79	2.81	2.66	2.64	2.73	2.66
Edmonton ..... $	3.37	3.33	3.29	3.26	2.97	3.26	2.89	2.96	2.83	2.84	2.83	2.68
Vancouver ..... $	3.01	3.08	2.85	2.91	2.57	2.93	2.52	2.52	2.44	2.35	2.53	2.27

	Month-to-Month Change								Year-to-Year Change			
	1975	Dec. 1974 to Jan. 1975	1974		1974	Dec. 1973 to Jan. 1974	1973		Feb. 1974 to Feb. 1975	Jan. 1974 to Jan. 1975	Dec. 1973 to Dec. 1974	Nov. 1973 to Nov. 1974
	Jan. to Feb.		Nov. to Dec.	Oct. to Nov.	Jan. to Feb.		Nov. to Dec.	Oct. to Nov.				
All Areas												
Canada ..... $	+ 0.11	+ 0.13	− 0.05	+ 0.34	− 0.02	+ 0.08	− 0.09	− 0.11	+ 0.50	+ 0.37	+ 0.32	+ 0.28
St. John's ..... $	+ 0.13	+ 0.11	− 0.01	+ 0.38	− 0.03	+ 0.08	− 0.05	− 0.14	+ 0.79	+ 0.63	+ 0.60	+ 0.56
Halifax ..... $	+ 0.21	+ 0.19	− 0.02	+ 0.38	− 0.07	+ 0.13	− 0.11	−	+ 0.85	+ 0.55	+ 0.49	+ 0.40
Montréal ..... $	+ 0.12	+ 0.15	− 0.03	+ 0.43	+ 0.01	+ 0.15	− 0.21	− 0.12	+ 0.47	+ 0.36	+ 0.36	+ 0.18
Ottawa ..... $	− 0.13	+ 0.02	− 0.07	+ 0.27	− 0.09	+ 0.22	− 0.09	− 0.13	+ 0.08	+ 0.12	+ 0.32	+ 0.30
Toronto ..... $	+ 0.09	+ 0.13	− 0.02	+ 0.31	− 0.03	− 0.01	− 0.04	− 0.20	+ 0.46	+ 0.34	+ 0.20	+ 0.18
Winnipeg ..... $	+ 0.18	+ 0.09	− 0.21	+ 0.51	+ 0.01	+ 0.02	+ 0.01	− 0.09	+ 0.37	+ 0.20	+ 0.13	+ 0.35
Edmonton ..... $	+ 0.02	+ 0.03	+ 0.07	+ 0.23	− 0.03	+ 0.13	− 0.11	− 0.07	+ 0.47	+ 0.42	+ 0.52	+ 0.34
Vancouver ..... $	+ 0.12	+ 0.21	− 0.19	+ 0.21	−	+ 0.03	− 0.03	− 0.18	+ 0.40	+ 0.28	+ 0.10	+ 0.26
S.R.U.												
Canada ..... $	+ 0.11	+ 0.09	− 0.02	+ 0.26	−	+ 0.04	− 0.14	− 0.11	+ 0.35	+ 0.24	+ 0.19	+ 0.07
St. John's ..... $	+ 0.24	−	− 0.01	+ 0.29	+ 0.01	+ 0.14	− 0.02	− 0.22	+ 0.62	+ 0.39	+ 0.53	+ 0.52
Halifax ..... $	+ 0.02	+ 0.27	+ 0.07	+ 0.29	+ 0.06	+ 0.07	− 0.12	+ 0.09	+ 0.43	+ 0.47	+ 0.27	+ 0.08
Montréal ..... $	+ 0.15	+ 0.01	+ 0.09	+ 0.38	−	+ 0.13	− 0.30	− 0.13	+ 0.34	+ 0.19	+ 0.31	− 0.08
Ottawa ..... $	− 0.15	+ 0.04	− 0.07	+ 0.13	− 0.08	+ 0.18	− 0.02	− 0.15	− 0.07	−	+ 0.14	+ 0.19
Toronto ..... $	+ 0.14	+ 0.10	− 0.04	+ 0.27	− 0.03	− 0.06	− 0.06	− 0.16	+ 0.43	+ 0.26	+ 0.10	+ 0.08
Winnipeg ..... $	+ 0.22	− 0.04	− 0.09	+ 0.29	+ 0.03	− 0.10	− 0.01	− 0.08	+ 0.17	− 0.02	− 0.08	−
Edmonton ..... $	+ 0.01	+ 0.03	+ 0.13	+ 0.15	−	+ 0.16	− 0.23	− 0.11	+ 0.46	+ 0.45	+ 0.58	+ 0.22
Vancouver ..... $	+ 0.20	+ 0.19	− 0.22	+ 0.13	+ 0.02	− 0.01	− 0.10	− 0.19	+ 0.32	+ 0.14	− 0.06	+ 0.06
N.S.R.U.												
Canada ..... $	+ 0.11	+ 0.19	− 0.09	+ 0.45	− 0.05	+ 0.14	− 0.03	− 0.10	+ 0.70	+ 0.54	+ 0.49	+ 0.55
St. John's ..... $	+ 0.10	+ 0.17	− 0.05	+ 0.43	− 0.03	+ 0.05	− 0.06	− 0.12	+ 0.86	+ 0.73	+ 0.61	+ 0.60
Halifax ..... $	+ 0.35	+ 0.14	− 0.06	+ 0.44	− 0.15	+ 0.18	− 0.10	− 0.07	+ 1.09	+ 0.59	+ 0.63	+ 0.59
Montréal ..... $	+ 0.12	+ 0.39	− 0.21	+ 0.51	+ 0.06	+ 0.17	− 0.05	− 0.08	+ 0.70	+ 0.64	+ 0.42	+ 0.58
Ottawa ..... $	− 0.10	+ 0.01	− 0.10	+ 0.58	− 0.08	+ 0.29	− 0.19	− 0.11	+ 0.39	+ 0.41	+ 0.69	+ 0.60
Toronto ..... $	− 0.05	+ 0.21	+ 0.02	+ 0.41	+ 0.01	+ 0.09	+ 0.01	− 0.27	+ 0.52	+ 0.58	+ 0.44	+ 0.43
Winnipeg ..... $	+ 0.15	+ 0.20	− 0.30	+ 0.73	− 0.02	+ 0.15	+ 0.02	− 0.09	+ 0.57	+ 0.40	+ 0.35	+ 0.67
Edmonton ..... $	+ 0.04	+ 0.04	+ 0.03	+ 0.29	− 0.07	+ 0.13	− 0.01	+ 0.01	+ 0.48	+ 0.37	+ 0.46	+ 0.42
Vancouver ..... $	− 0.07	+ 0.23	− 0.06	+ 0.34	−	+ 0.08	+ 0.09	− 0.18	+ 0.49	+ 0.56	+ 0.41	+ 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 the 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 February 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	16,857	8,874	0.37	A	A	1.17	839	2.01	C	C	1.64	9,713	0.32	A	A	1.06
Nfld.	387	141	2.89	D	C	2.42	43	6.41	E	E	2.79	184	1.95	C	C	1.75
P.E.I.	83	38	4.98	D	D	2.59	4	12.60	F	G	1.17	43	4.54	D	D	2.55
N.S.	578	266	1.35	C	C	1.20	28	6.13	E	E	1.57	294	1.30	C	C	1.35
N.B.	485	210	2.07	C	C	2.14	41	5.03	D	E	1.64	251	1.77	C	C	2.20
Que.	4,686	2,343	0.72	B	B	0.92	286	3.67	D	D	1.62	2,629	0.66	B	B	0.96
Ont	6,164	3,431	0.66	B	B	1.22	261	3.88	D	D	1.51	3,692	0.55	B	B	1.04
Man.	732	404	1.49	C	C	1.21	23	10.07	F	F	1.39	427	1.41	C	C	1.24
Sask.	660	345	1.94	C	C	1.82	14	10.98	F	F	1.15	360	1.78	C	C	1.68
Alta.	1,244	719	1.04	B	C	1.13	31	8.27	E	E	1.29	750	1.00	B	B	1.17
B.C.	1,838	977	1.14	C	B	1.42	107	5.99	E	E	2.24	1,084	0.81	B	B	0.92

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 Variance for the February 1975 Survey

The binomial factor for the estimate of Unemployed in Newfoundland remains unusually high with a value of 2.79 for the February survey. The analysis of subprovincial contributions to the provincial variance estimate of this characteristic revealed two pairs of PSUs for which the actual percentage contribution significantly exceeded the desired percentage contribution.

Table 1a) Actual vs Desired Contribution to the Variance Estimate of Unemployed in Newfoundland by PSUs and Subunits

PSUs or Subunits Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
02024 & 02026	- east coast of Nfld. just north of the Avalon Peninsula	8.19	1.85
03003 & 03006	- central portion of Nfld. extending east to the Atlantic coast	9.80	1.81
All other PSUs and Subunits	-	82.01	96.37

The adjusted binomial factor with a value of 2.37 remains unusually high for this characteristic and province relative to previous surveys. This implies that the increased variance is generally spread over all areas of the province and is not restricted to a few sub-provincial areas.

In the province of Manitoba the value of 1.39 for the estimate of Unemployed is high in comparison with binomial factors for previous surveys. One pair of PSUs was identified as contributing excessively to the provincial variance estimate of Unemployed.

Table 1b) Actual vs Desired Contribution to the Variance Estimate of Unemployed in Man. by PSUs and Subunits

PSUs or Subunits Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
64029 & 64035	- south western region of the province	10.02	3.20
All other PSUs and Subunits	-	89.98	96.80

The adjusted binomial factor for this estimate has a value of 1.29 which remains slightly higher than corresponding binomial factors in previous surveys and this indicates a tendency for this higher variance to be distributed generally over the entire province.

The value of 1.82 for the binomial factor for the estimate of Employed in Saskatchewan is up considerably from the value of 1.18 for this factor for the January survey. The subprovincial analysis of variance contributions identified one pair of PSUs for which the actual percentage contribution significantly exceeded the desired percentage contribution.

Table 1c) Actual vs Desired Contribution to the Variance Estimate of Employed in Sask. by PSUs and Subunits

PSUs or Subunits Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
73008 & 73011	- east central part of Sask. along the Man. border	11.03	3.71
All other PSUs and Subunits	-	88.97	96.29

The adjusted binomial factor for this characteristic has a value of 1.68 which remains unusually high for this characteristic and this indicates that the excessive variance for the February survey is spread over most areas of the province.

In the province of British Columbia the binomial factor for the estimate of Unemployed increased to 2.24 for the February survey from the value of 1.75 for the January survey. Two pairs of PSUs were identified for which the actual percentage contribution to the variance significantly exceeded the desired percentage contribution to the variance.

Table 3d) Actual vs Desired Contribution to the Variance Estimate of Unemployed in B.C. by PSUs and Subunits

PSUs or Subunits Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
95001 & 95003	- southern part of Vancouver Island	35.41	2.38
97003 & 97008	- north central part of B.C.	15.52	3.21
All other PSUs and Subunits	-	49.07	94.41

The adjusted binomial factor for the estimate of Unemployed in British Columbia has a value of 1.16 which falls within an acceptable range of binomial factors for this characteristic and province. This indicates that the above identified subprovincial areas are primarily responsible for the high variance estimate for this characteristic.

A Detailed Analysis for Some Selected Subprovincial Areas

For the two subprovincial areas, namely a) PSUs 03003 and 03006, and b) PSUs 95001 and 95003, the actual percentage contribution to the provincial variance estimate greatly exceeded the desired percentage contribution to the provincial variance estimate. In the following, an analysis of the numbers of persons in PSUs by labour force status and industry classifications was carried out to determine possible causes of the excessive contributions by these areas.

For the pair of PSUs 03003 and 03006 in Newfoundland the actual percentage contribution to the variance of Unemployed at the provincial level was 9.80% compared to a desired contribution of 1.81%. An examination of the half-stratum estimates from each PSU of labour force status by industry classification revealed some industries, namely, other primary industries and manufacturing, which were unequally distributed between the two PSUs and an associated high unemployment in these industries resulted in a clustering of unemployment in one PSU. The result was that the unemployment rate based on half-stratum estimates from PSU 03006 was 29.48%, whereas the unemployment rate based on half-stratum estimates from PSU 03003 was 56.38%. It should be noted that the number of weighted and unweighted sample takes differs substantially between the two PSUs. This is due to the removal of persons in sampled areas of PSU 03006 under the Government Resettlement Program.

These results can be seen from the following table.

Table 3a) Estimates and Sample Takes by Characteristic and PSU

Industry	Employed				Unemployed				In Labour Force			
	03003		03006		03003		03006		03003		03006	
	Est.*	#**	Est.	#	Est.	#	Est.	#	Est.	#	Est.	#
Other Primary Ind.	454	6	0	0	1175	14	83	1	1629	20	83	1
Manufacturing	0	0	0	0	361	4	0	0	361	4	0	0
Construction	60	1	0	0	150	2	75	1	210	3	75	1
Transp. & Other Utilities	120	2	69	1	0	0	0	0	120	2	69	1
Trade	128	2	141	2	68	1	0	0	196	3	141	2
Finance	0	0	0	0	0	0	0	0	0	0	0	0
Services	535	7	168	2	0	0	0	0	535	7	168	2
Public Admin.	60	1	0	0	0	0	0	0	60	1	0	0
Total	1357	19	378	5	1754	21	158	2	3111	40	536	7

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

b) PSUs 95001 and 95003

For the estimate of Unemployed in British Columbia the actual contribution to the variance of 35.41% greatly exceeded the desired contribution to the variance of 2.38 by the pair of PSUs 95001 and 95003. There was high unemployment associated with industry classification "Other Primary Industries", and on the basis of sample results, there were many more persons in this industry in PSU 95001 (a weighted half-stratum estimate of 2908 corresponding to 17 sampled persons) than in PSU 95003 (a weighted half-stratum estimate of 1320 corresponding to 8 sampled persons). For other industry classifications, although the distributions by industry were much more equal between the two PSUs, there was a general tendency for Unemployment to be clustered in PSU 95001. The net result of these factors is that the unemployment rate is 30.69% based on weighted results from PSU 95001 and 5.43% based on weighted results from PSU 95003. This discrepancy between the two PSUs is the cause of a large contribution to the provincial variance estimate by this subprovincial area.

The following table presents weighted and unweighted estimates by PSU by Labour Force Status by Industry classification.

Table 3b) Estimates and Sample Takes by Characteristic and PSU

Industry	Employed				Unemployed				In Labour Force			
	95001		95003		95001		95003		95001		95003	
	Est.*	#**	Est.	#	Est.	#	Est.	#	Est.	#	Est.	#
Agriculture	313	2	476	3	0	0	0	0	313	2	476	3
Other Primary Ind.	515	3	955	6	2357	14	365	2	2908	17	1320	8
Manufacturing	2499	15	2537	15	352	2	342	2	2851	17	2879	17
Construction	898	5	1266	7	735	4	0	0	1633	9	1266	7
Transp.* & Other Utilities	330	2	1863	11	581	3	0	0	911	5	1863	11
Trade	1919	12	1389	8	174	1	0	0	2093	13	1389	8
Finance	352	2	479	3	0	0	0	0	352	2	479	3
Services	3433	20	7862	46	362	2	330	2	3795	22	8192	48
Public Admin.	882	5	1223	7	387	2	0	0	1269	7	1223	7
Total	11177	66	18050	106	4948	28	1037	6	16125	94	19087	112

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

NON-RESPONSE

The contents of this appendix are taken from publication NR 75-02 (February 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 (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 than 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 data 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. McLeod, 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 increased from 4.3% in January to 4.7% in February. The month to month increases in the T.A. and "other" components were mainly responsible for this month's higher overall rate. The decrease in the N1 rate, however, continued the downward trend which has been evident in the N1 component since October 1974.

The overlap non-response rate increased from 0.2% in January to 0.3% in February and the adjusted overall non-response rate for February was calculated to be 4.4%.

Compared with last year's February overall non-response rate (6.0%), this year's rate was lower. In the year to year changes at the component level, decreases were noted in the T.A., N1 and N2 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 3.6% in January to 3.8% in February. The month to month increases in the N2 and "other" components mainly accounted for the increase in the overall rate. The overlap rate decreased from 0.7% in January to 0.6% in February and the adjusted overall non-response rate for February was calculated to be 3.2%.

Compared with the 2.0% overall non-response rate in February 1974, this year's rate was considerably higher. Furthermore, all components of non-response exhibited year to year increases in their rates.

2. Halifax Regional Office

The overall non-response rate for the Halifax Regional Office decreased from 5.0% in January to 4.8% in February. At the component level, decreases in the N1, N2 and "other" components were responsible for the month to month decrease in the overall rate. The overlap rate increased from 0.6% in January to 0.7% in February and the adjusted overall non-response rate was 4.1% in February.

Compared with the overall non-response rate (5.9%) in February 1974, this year's rate was lower. This year's lower rate was due to a 1.2% year to year decrease in the N1 component.

In economic region 31, the refusal rate of 3.0% this month was the major reason for the actual contribution being higher than the expected contribution to the total non-response of the Halifax R.O. Following are the refusal rates for this E.R. over the past three months:

Economic Region 31

Month	Dec.	Jan.	Feb.
Refusal Rate (%)	4.1	3.3	3.0

It should be noted, however, that these refusal rates in Economic Region 31 have been decreasing steadily over the past three surveys.

3. Montreal Regional Office

The overall non-response rate for the Montreal Regional Office increased slightly from 3.2% in January to 3.4% in February. Increases in the T.A. and "other" components resulted in the higher overall non-response rate this month. However, there was no change in the overlap rate of 0.3% from January to February and the adjusted overall non-response rate for February was calculated to be 3.0%.

Compared with the 7.7% overall non-response rate in February 1974, this year's rate was much lower. Furthermore, year to year decreases were recorded in all the non-response components.

4. Ottawa Regional Office

The overall non-response rate for the Ottawa Regional Office decreased from 5.1% in January to 3.9% in February. Decreases in the N1 and "other" components accounted mainly for this month's lower overall rate. The overlap non-response rate increased from 0.0% in January to 0.1% in February and the adjusted overall non-response rate in February was 3.8%.

Compared with last year's February overall non-response rate (6.7%), this year's rate was much lower. This year's lower overall rate was due to decreases in the N1, N2 and "other" components of 2.4%, 0.1% and 0.6% respectively.

5. Toronto Regional Office

The overall non-response rate for the Toronto Regional Office increased from 4.6% in January to 6.5% in February. Increases in the T.A., N2 and "other" components accounted for this month's higher overall rate. It should be noted that in February there were no households in the N6 category for the Toronto Regional Office.

Compared with the 6.0% overall non-response rate in February 1974, this year's rate was higher. This year's higher rate was attributed to the 1.1% increase in the "other" component.

Economic Region 57 exhibited a non-response rate of 21.5% in February and the actual contribution was more than three times greater than the expected contribution to non-response. This was a direct result of the 16.2% rate for the "other" component in this E.R. which had 96 N3 households.

It should be noted that all interviewers were instructed not to use the mail to make their daily returns because of the strike by the blue collar workers at the post office; however, seven interviewers in economic region 57 did not receive this instruction until after the Monday of interview week. As a result, the LFS documents for 96 households were placed in the mails on the Monday of interview week and were not received by the regional office.

The T.A. for the Toronto Regional Office (2.5%) was noted to be much higher than the T.A. rate (1.6%) at the Canada level. Furthermore, all economic regions within this regional office exhibited T.A. rates of 2.0% or more. No definite explanation for the high T.A. rates can be given at the present time.

6. Winnipeg Regional Office

The overall non-response rate for the Winnipeg Regional Office increased from 3.0% in January to 3.5% in February. This month's higher overall rate was attributed to increases in the T.A. and N2 components. It should be noted that from last month, there was no change in the overlap non-response rate and the adjusted overall non-response rate for February was computed to be 3.2%.

The February overall non-response rate this year was higher than last year's rate of 3.0%. This year's higher rate was due to increases in the T.A., N2 and "other" components.

7. Edmonton Regional Office

The overall non-response rate for the Edmonton Regional Office decreased from 3.8% in January to 3.5% in February. Decreases in the T.A. and "other" components were responsible for the lower overall rate this month. However, the overlap non-response rate increased from 0.1% in January to 0.3% in February and the adjusted overall non-response rate for February was calculated to be 3.2%.

Compared with the February overall non-response rate (5.0%) last year, this year's rate was lower. This year's lower rate was due to decreases in the T.A., N1 and N2 components.

8. Vancouver Regional Office

The overall non-response rate for the Vancouver Regional Office decreased from 6.4% in January to 6.1% in February. The month to month decrease in the overall rate was due to decreases in the N1 and "other" components. The overlap non-response rate remained at 0.2% and the adjusted overall non-response rate for February was compiled to be 5.9%.

Compared with the overall non-response rate (8.4%) in February 1974, this year's rate was lower. Furthermore, the rates for all components of non-response were lower this year as compared to last year's February rates.

As shown below, rather high rates in Economic Region 97 have been noted for the major components (T.A., N1 and N2) of non-response during the past few months:

Economic Region 97

Month	T.A.(%)	N1(%)	N2(%)
December	2.2	4.5	2.7
January	3.4	4.3	3.4
February	2.5	3.4	2.9

However, while the rates for these three components in E.R. 97 were noticeably high this month, they were all lower than the rates exhibited last month.

Table 1(a)

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

Non-Response Component	Non-Response Rates		Jan. 1975 to Feb. 1975	Non-Response Rates		Jan. 1974 to Feb. 1974	Feb. 1974 to Feb. 1975
	Feb. 1975 (%)	Jan. 1975 (%)	(%)	Feb. 1974 (%)	Jan. 1974 (%)	(%)	(%)
Overall	4.7	4.3	+0.4	6.0	6.0	-	-1.3
T.A.	1.6	1.4	+0.2	1.8	1.7	+0.1	-0.2
N1	0.9	1.0	-0.1	1.7	1.5	+0.2	-0.8
N2	1.2	1.2	-	1.6	1.6	-	-0.4
Other	1.0	0.7	+0.3	0.9	1.2	-0.3	+0.1
Overlap	0.3	0.2	+0.1	-	-	-	-
Adjusted	4.4	4.1	+0.3	-	-	-	-

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	1,633	3.8	3.9	4.7
Halifax	5,687	4.8	16.8	16.4
Montreal	6,457	3.4	13.5	18.6
Ottawa	2,153	3.9	5.2	6.2
Toronto	7,362	6.5	29.4	21.3
Winnipeg	3,208	3.5	7.0	9.3
Edmonton	4,069	3.5	8.8	11.7
Vancouver	4,074	6.1	15.4	11.8

Graph G1

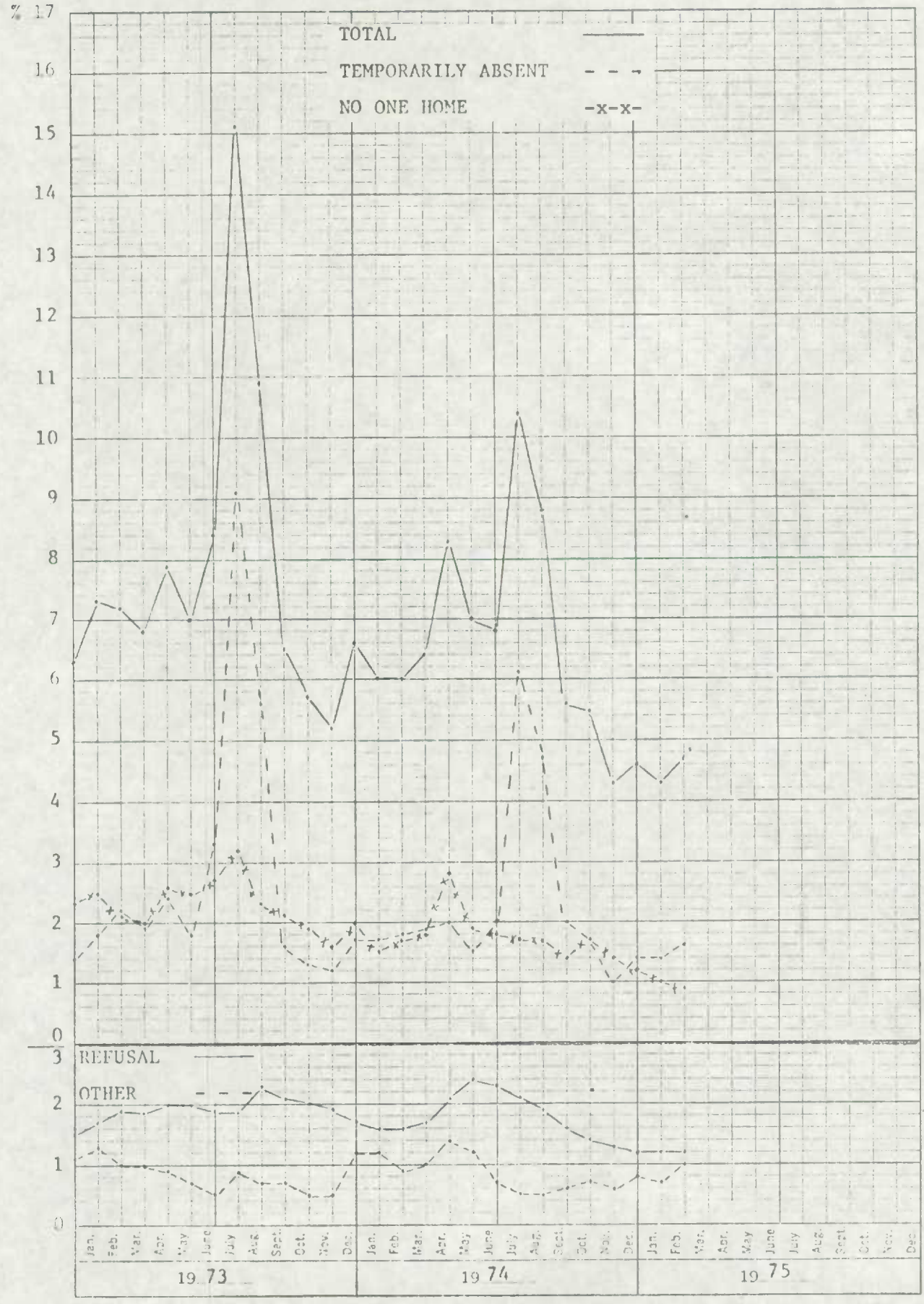


Table 2(a)

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

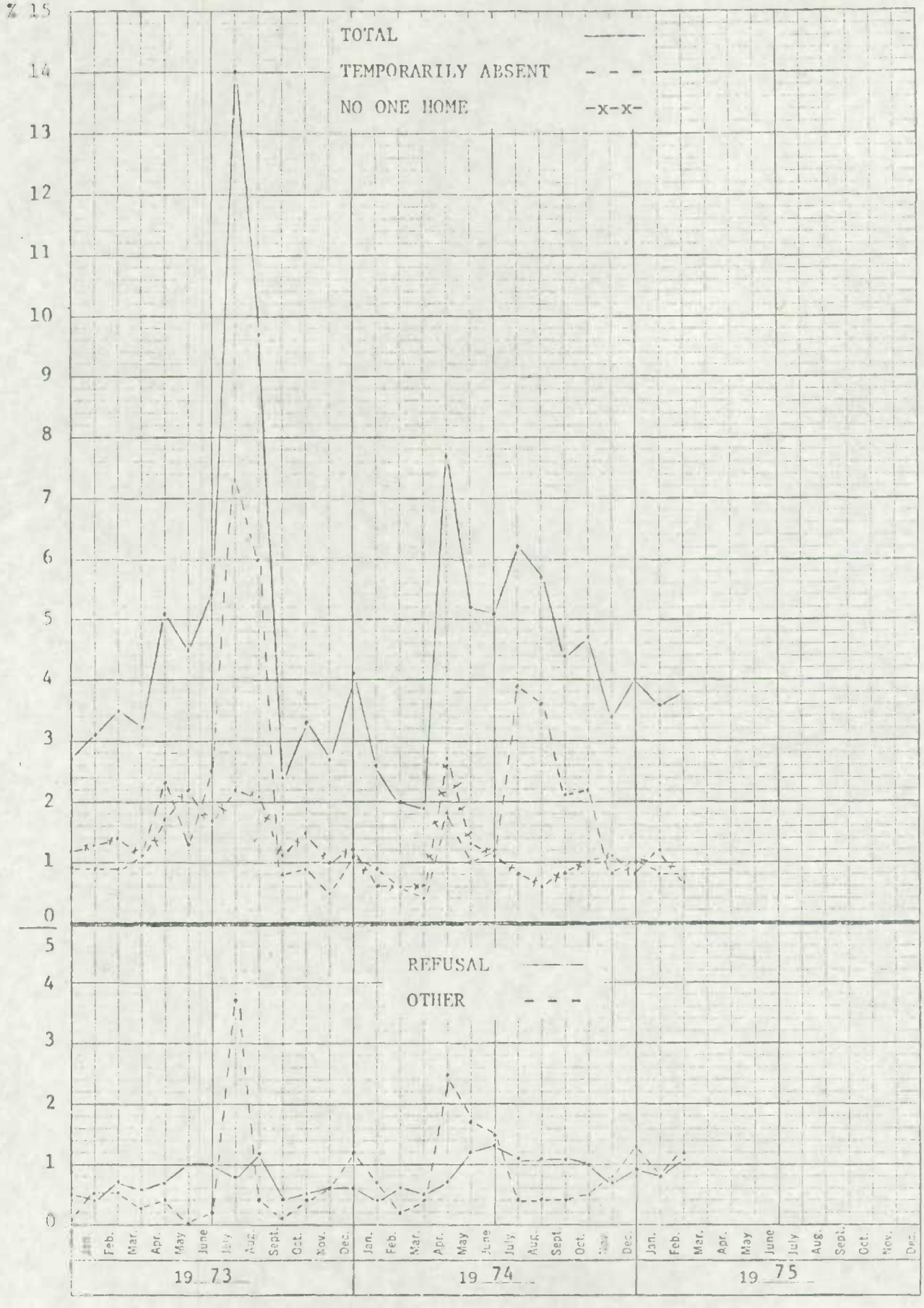
Non-Response Component	Non-Response Rates		Jan. 1975 to Feb. 1975	Non-Response Rates		Jan. 1974 to Feb. 1974	Feb. 1974 to Feb. 1975
	Feb. 1975 (%)	Jan. 1975 (%)	(%)	Feb. 1974 (%)	Jan. 1974 (%)	(%)	(%)
Overall	3.8	3.6	+0.2	2.0	2.6	-0.6	+1.8
T.A.	0.8	0.8	-	0.6	0.9	-0.3	+0.2
N1	0.7	1.2	-0.5	0.6	0.6	-	+0.1
N2	1.1	0.8	+0.3	0.6	0.4	+0.2	+0.5
Other	1.2	0.8	+0.4	0.2	0.7	-0.5	+1.0
Overlap	0.6	0.7	-0.1	-	-	-	-
Adjusted	3.2	2.9	+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	246	3.2	12.7	15.1
01	663	4.7	49.2	40.6
02	140	2.1	4.8	8.6
03	289	5.9	27.0	17.7
04	280	1.4	6.3	17.1
05	15	0.0	0.0	0.9

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		Jan. 1975 to Feb. 1975	Non-Response Rates		Jan. 1974 to Feb. 1974	Feb. 1974 to Feb. 1975
	Feb. 1975 (%)	Jan. 1975 (%)	(%)	Feb. 1974 (%)	Jan. 1974 (%)	(%)	(%)
Overall	4.8	5.0	-0.2	5.9	7.2	-1.3	-1.1
T.A.	1.3	1.1	+0.2	1.3	1.2	+0.1	-
N1	0.7	0.8	-0.1	1.9	1.3	+0.6	-1.2
N2	1.6	1.8	-0.2	1.6	1.8	-0.2	-
Other	1.2	1.3	-0.1	1.1	2.9	-1.8	+0.1
Overlap	0.7	0.6	+0.1	-	-	-	-
Adjusted	4.1	4.4	-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	3.1	4.4	6.8
20	517	6.0	11.4	9.1
21	574	5.4	11.4	10.1
22	1,369	5.1	25.6	24.1
23	482	3.7	6.6	8.5
30	517	6.2	11.7	9.1
31	604	7.0	15.4	10.6
32	661	3.5	8.4	11.6
33	577	2.4	5.1	10.1

Graph G3

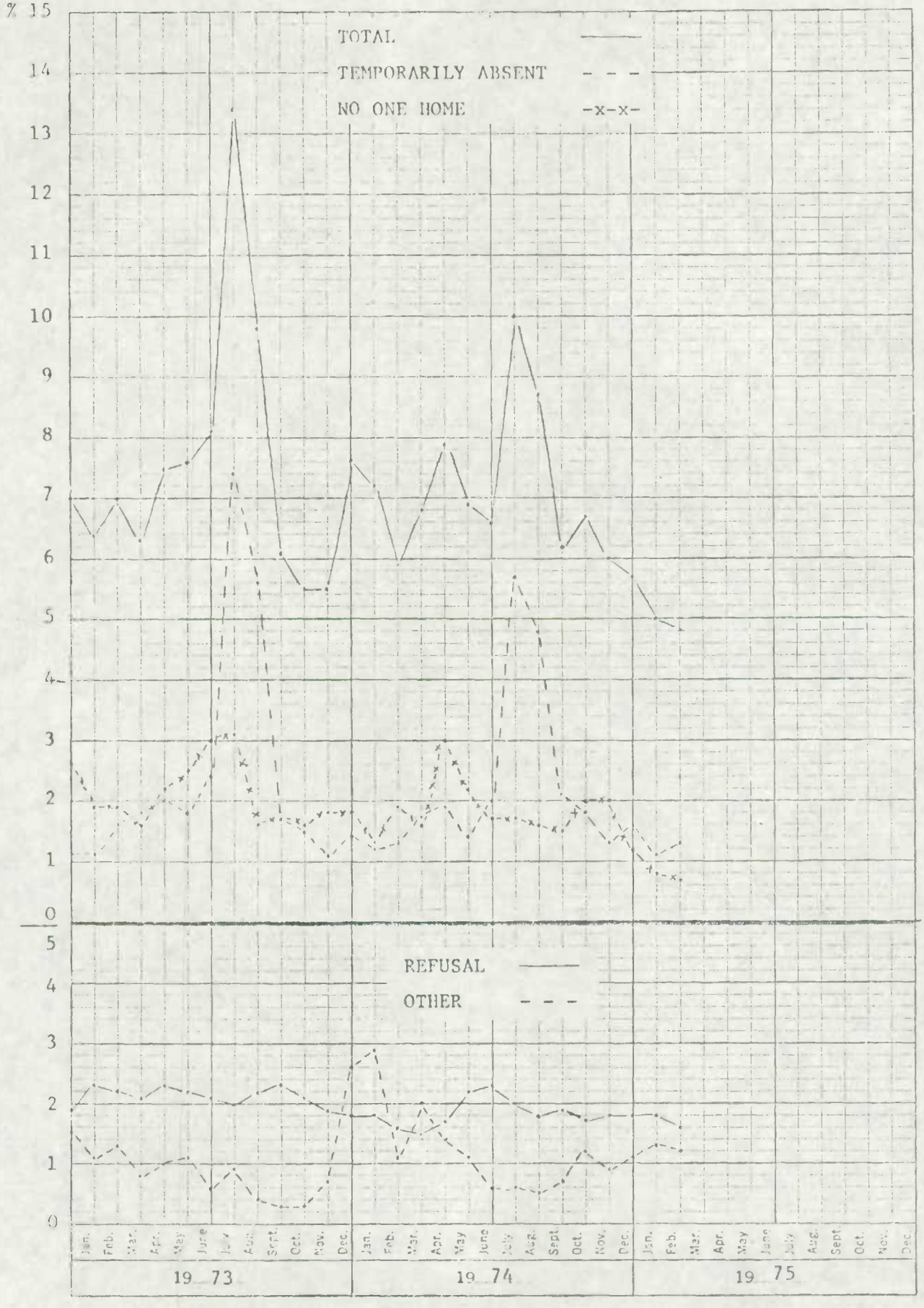


Table 4(a)

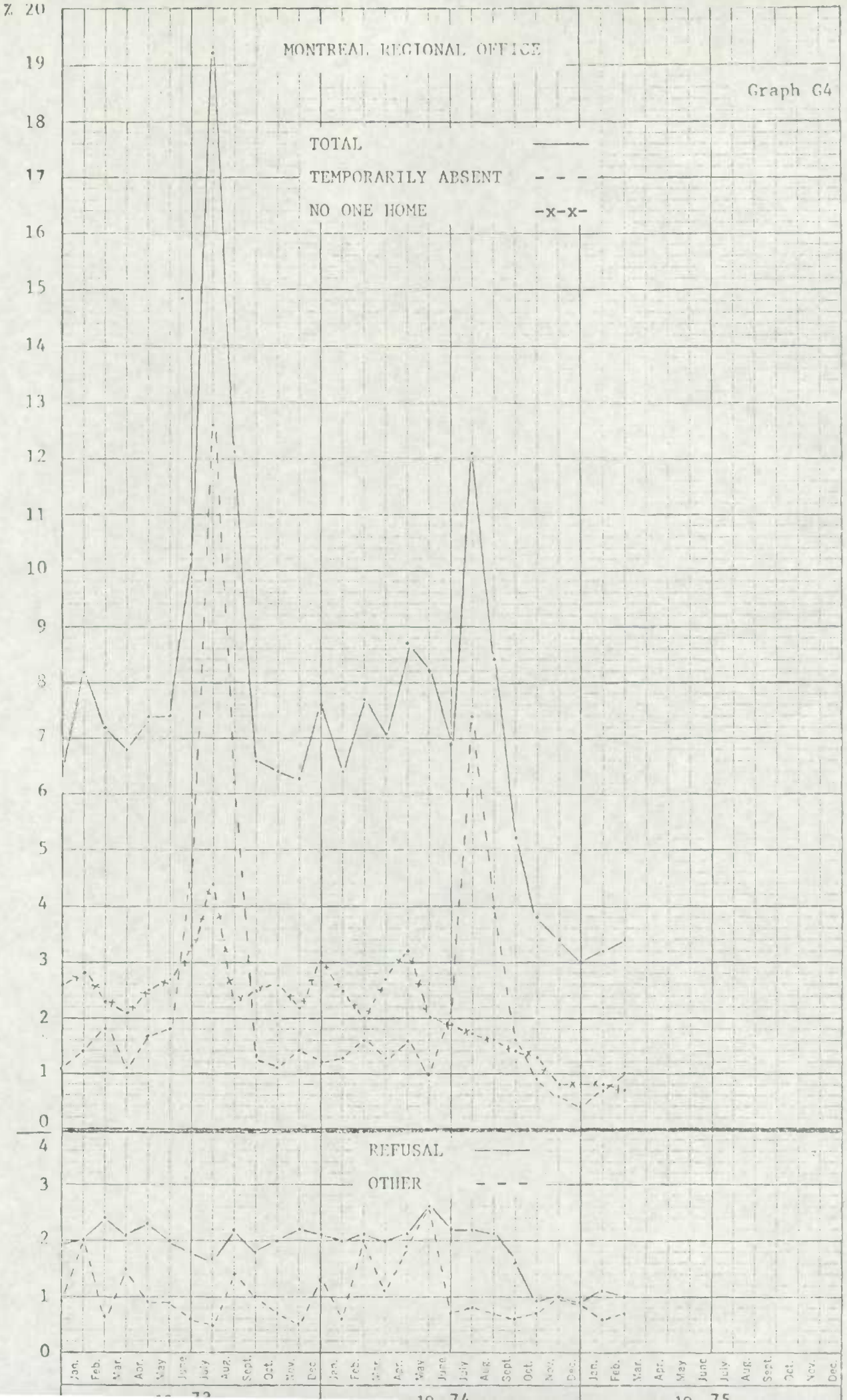
Month to Month and Year to Year Changes in the Non-Response Rates

Non-Response Component	Non-Response Rates		Jan. 1975 to Feb. 1975	Non-Response Rates		Jan. 1974 to Feb. 1974	Feb. 1974 to Feb. 1975
	Feb. 1975 (%)	Jan. 1975 (%)	(%)	Feb. 1974 (%)	Jan. 1974 (%)	(%)	(%)
Overall	3.4	3.2	+0.2	7.7	6.4	+1.3	-4.3
T.A.	1.0	0.7	+0.3	1.6	1.3	+0.3	-0.6
N1	0.7	0.8	-0.1	2.0	2.5	-0.5	-1.3
N2	1.0	1.1	-0.1	2.1	2.0	+0.1	-1.1
Other	0.7	0.6	+0.1	2.0	0.6	+1.4	-1.3
Overlap	0.3	0.3	-	-	-	-	-
Adjusted	3.1	2.9	+0.1	-	-	-	-

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	314	1.3	1.8	4.9
41	395	1.8	3.2	6.1
42	229	3.0	3.2	3.6
43	974	2.0	8.7	15.1
44	480	1.2	2.8	7.4
45	686	2.0	6.4	10.6
46	537	3.7	8.7	8.3
47	2,842	5.0	65.2	44.0



OTTAWA REGIONAL OFFICE

Table 5(a)

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

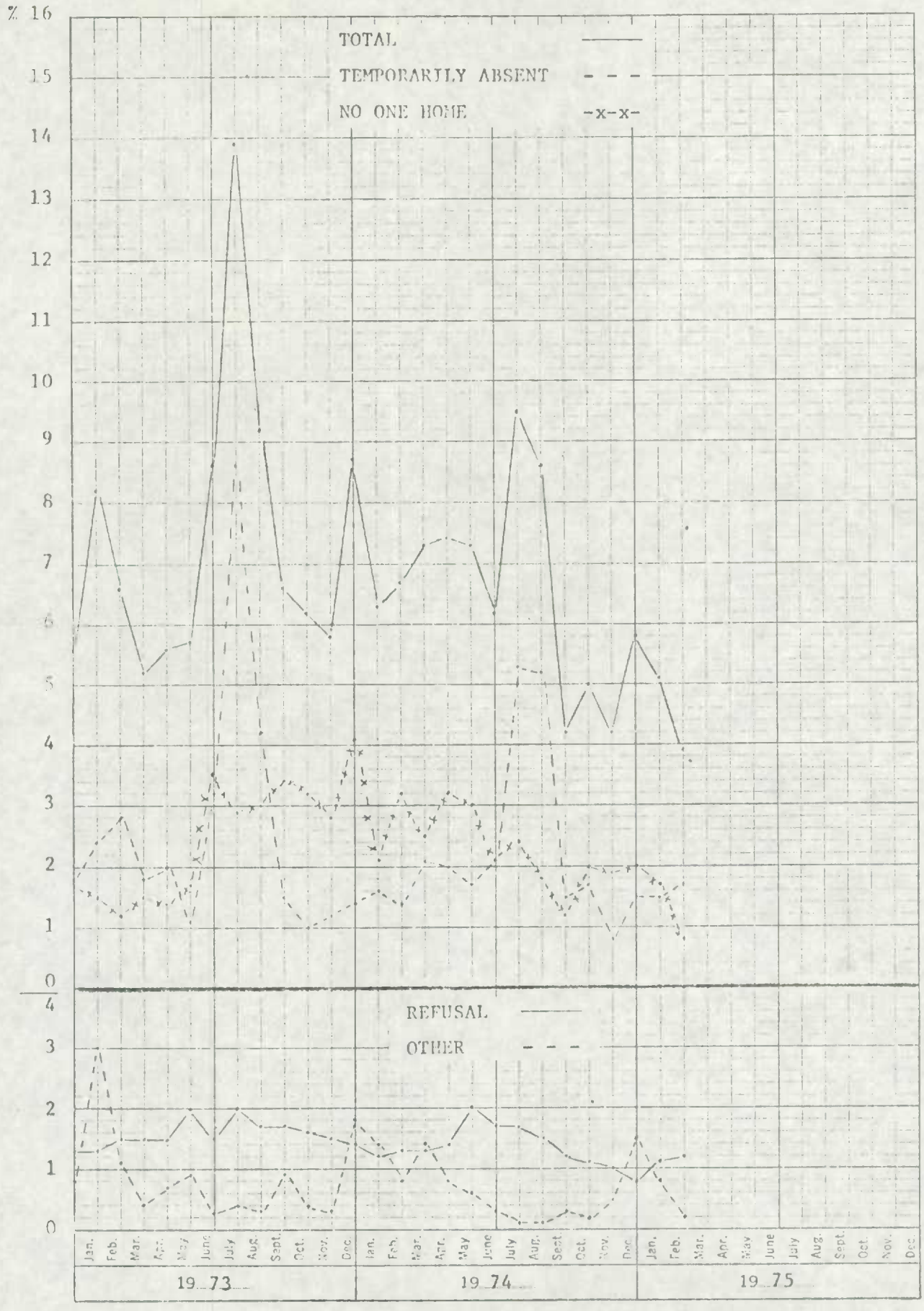
Non-Response Component	Non-Response Rates		Jan. 1975 to Feb. 1975	Non-Response Rates		Jan. 1974 to Feb. 1974	Feb. 1974 to Feb. 1975
	Feb. 1975 (%)	Jan. 1975 (%)	(%)	Feb. 1974 (%)	Jan. 1974 (%)	(%)	(%)
Overall	3.9	5.1	-1.2	6.7	6.3	+0.4	-2.8
T.A.	1.7	1.5	+0.2	1.4	1.6	-0.2	+0.3
N1	0.8	1.7	-0.9	3.2	2.1	+1.1	-2.4
N2	1.2	1.1	+0.1	1.3	1.2	+0.1	-0.1
Other	0.2	0.8	-0.6	0.8	1.4	-0.6	-0.6
Overlap	0.1	0.0	+0.1	-	-	-	-
Adjusted	3.8	5.1	-1.3	-	-	-	-

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	0.7
48	239	4.2	11.9	11.1
49	146	3.4	5.9	6.8
50	1,109	3.9	51.2	51.5
58	643	4.0	31.0	29.9

Graph G5



TORONTO REGIONAL OFFICE

Table 6(a)

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

Non-Response Component	Non-Response Rates		Jan. 1975 to Feb. 1975	Non-Response Rates		Jan. 1974 to Feb. 1974	Feb. 1974 to Feb. 1975
	Feb. 1975 (%)	Jan. 1975 (%)	(%)	Feb. 1974 (%)	Jan. 1974 (%)	(%)	(%)
Overall	6.5	4.6	+1.9	6.0	5.6	+0.4	+0.5
T.A.	2.5	2.0	+0.5	2.5	2.1	+0.4	-
N1	0.9	0.9	-	1.3	1.4	-0.1	-0.4
N2	1.3	1.2	+0.1	1.5	1.3	+0.2	-0.2
Other	1.8	0.5	+1.3	0.7	0.8	-0.1	+1.1
Overlap	0.0	0.1	-0.1	-	-	-	-
Adjusted	6.5	4.6	+1.9	-	-	-	-

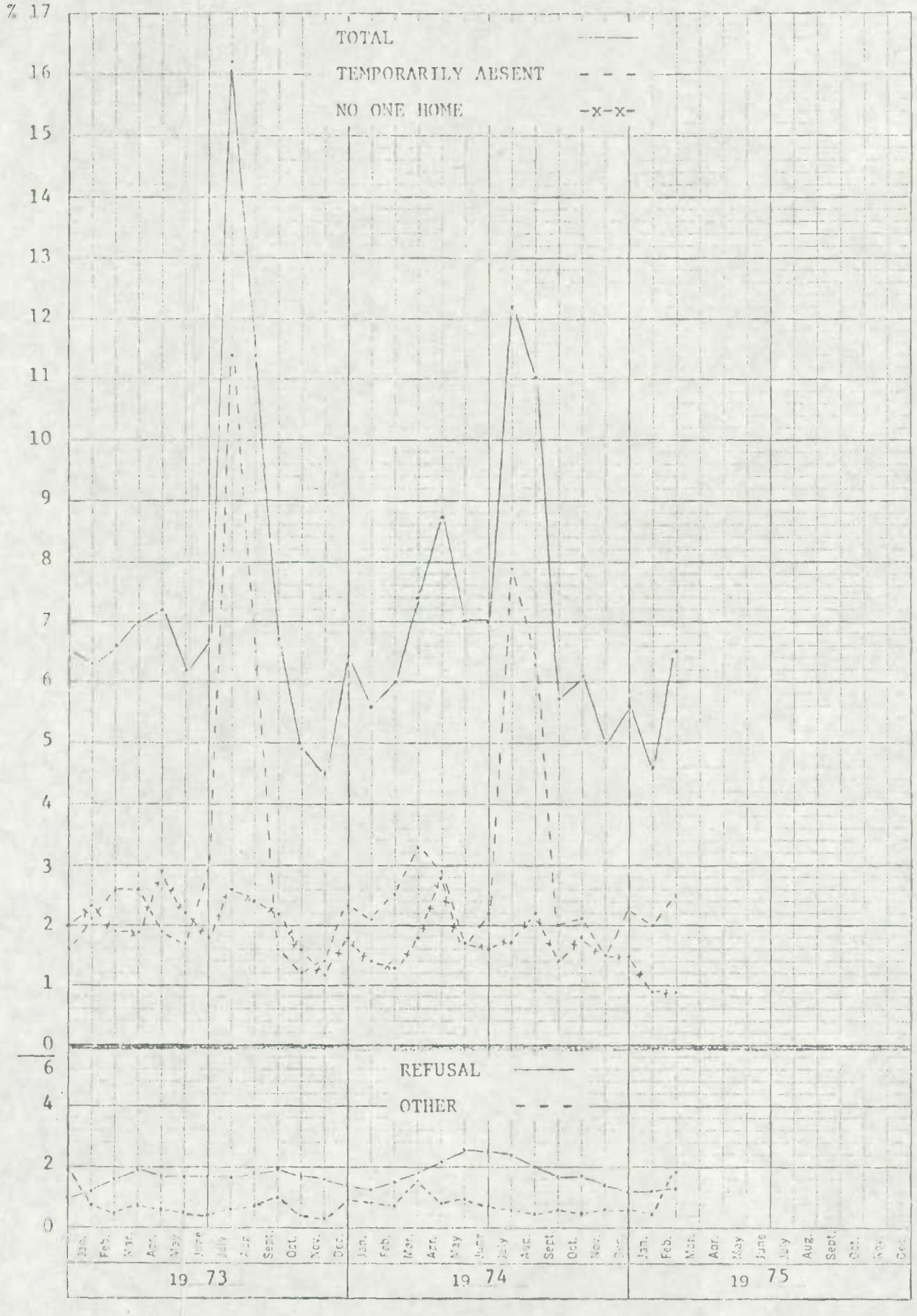
Table 6(b)

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	462	6.5	6.3	6.3
52	3,204	5.3	35.6	43.5
53	1,125	4.3	10.1	15.3
54	660	4.8	6.7	9.0
55	688	5.8	8.4	9.3
56	631	4.8	6.3	8.6
57	592	21.5	26.6	8.0

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		Jan. 1975 to Feb. 1975	Non-Response Rates		Jan. 1974 to Feb. 1974	Feb. 1974 to Feb. 1975
	Feb. 1975 (%)	Jan. 1975 (%)	(%)	Feb. 1974 (%)	Jan. 1974 (%)	(%)	(%)
Overall	3.5	3.0	+0.5	3.0	2.6	+0.4	+0.5
T.A.	1.9	1.5	+0.4	1.5	1.5	-	+0.4
N1	0.5	0.5	-	0.7	0.4	+0.3	-0.2
N2	0.7	0.6	+0.1	0.6	0.6	-	+0.1
Other	0.4	0.4	-	0.2	0.1	+0.1	+0.2
Overlap	0.3	0.3	-	-	-.	-	-
Adjusted	3.2	2.7	+0.5	-	-	-	-

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	18	0.0	0.0	0.6
59	262	1.9	4.4	8.2
60	1,081	3.8	36.3	33.7
61	157	4.4	6.2	4.9
62	65	3.1	1.8	2.0
63	137	1.5	1.8	4.3
64	268	2.6	6.2	8.4
65	138	4.3	5.3	4.3
70	507	2.6	11.5	15.8
71	296	6.1	15.9	9.2
73	276	4.3	10.6	8.6

Graph G7

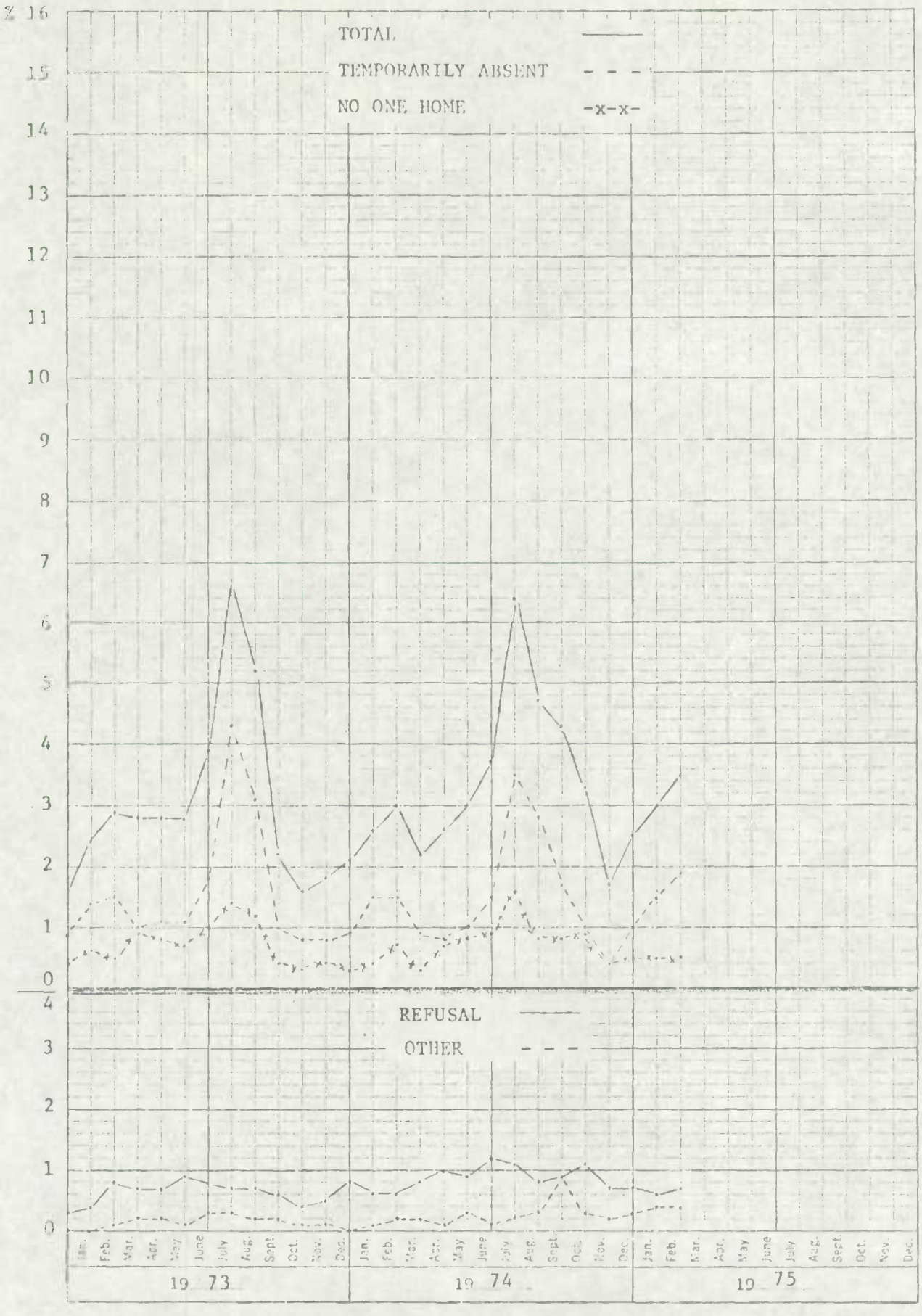


Table 8(a)

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

Non-Response Component	Non-Response Rates		Jan. 1975 to Feb. 1975	Non-Response Rates		Jan. 1974 to Feb. 1974	Feb. 1974 to Feb. 1975
	Feb. 1975 (%)	Jan. 1975 (%)	(%)	Feb. 1974 (%)	Jan. 1974 (%)	(%)	(%)
Overall	3.5	3.8	-0.3	5.0	5.7	-0.7	-1.5
T.A.	1.3	1.5	-0.2	1.9	1.7	+0.2	-0.6
N1	0.7	0.7	-	1.2	1.2	-	-0.5
N2	0.7	0.7	-	1.4	1.5	-0.1	-0.7
Other	0.8	0.9	-0.1	0.5	1.3	-0.8	+0.3
Overlap	0.3	0.1	+0.2	-	-	-	-
Adjusted	3.2	3.7	-0.5	-	-	-	-

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	403	3.0	8.5	9.9
74	446	0.7	2.1	11.0
80	130	3.1	2.8	3.2
81	222	9.9	15.5	5.4
82	940	4.5	29.6	23.1
83	264	2.7	4.9	6.5
84	1,260	3.7	32.4	31.0
85	209	1.9	2.8	5.1
86	195	1.0	1.4	4.8

EDMONTON REGIONAL OFFICE

Graph G8

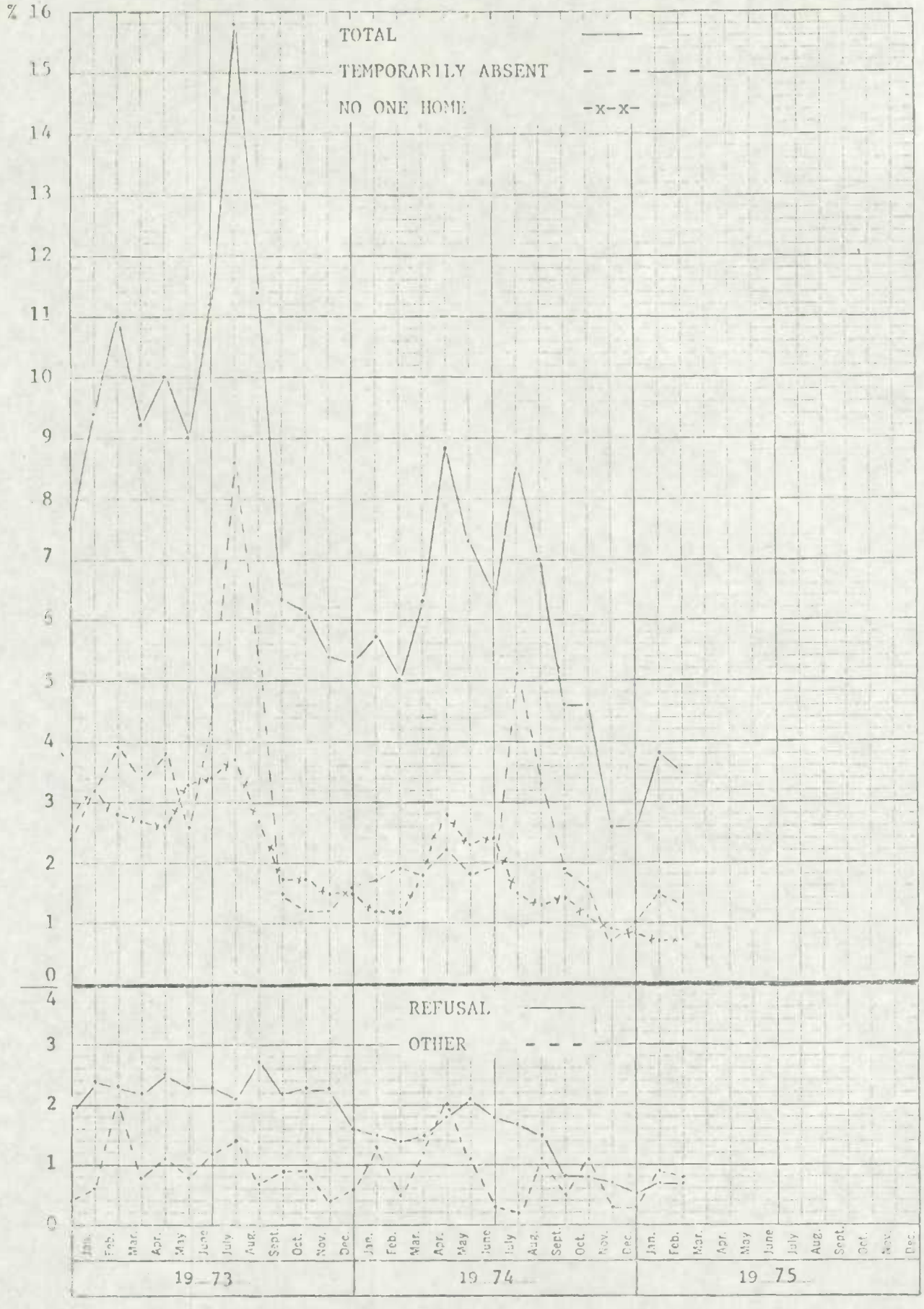


Table 9(a)

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

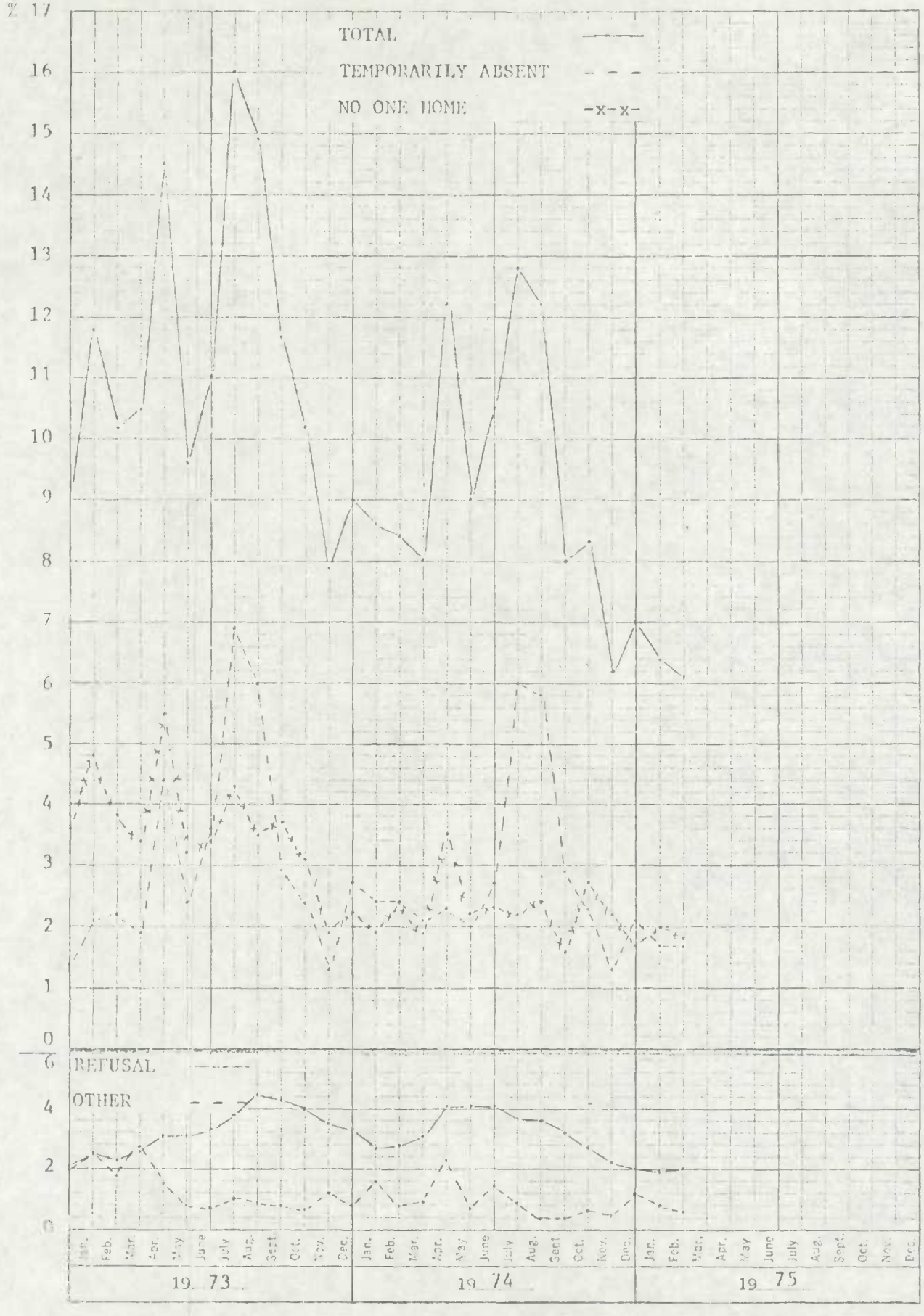
Non-Response Component	Non-Response Rates		Jan. 1975 to Feb. 1975 (%)	Non-Response Rates		Jan. 1974 to Feb. 1974 (%)	Feb. 1974 to Feb. 1975 (%)
	Feb. 1975 (%)	Jan. 1975 (%)		Feb. 1974 (%)	Jan. 1974 (%)		
Overall	6.1	6.4	-0.3	8.4	8.6	-0.2	-2.3
T.A.	1.7	1.7	-	2.4	2.4	-	-0.7
N1	1.8	2.0	-0.2	2.4	1.9	+0.5	-0.6
N2	2.0	1.9	+0.1	2.8	2.7	+0.1	-0.8
Other	0.6	0.8	-0.2	0.8	1.6	-0.8	-0.2
Overlap	0.2	0.2	-	-	-	-	-
Adjusted	5.9	6.2	-0.3	-	-	-	-

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	97	3.1	1.2	2.4
91	139	5.0	2.8	3.4
92	322	5.0	6.4	7.9
93	199	7.5	6.0	4.9
94	2,182	5.6	48.8	53.6
95	783	7.5	23.6	19.2
96	59	1.7	0.4	1.4
97	238	9.7	9.2	5.8
98	55	7.3	1.6	1.4

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.

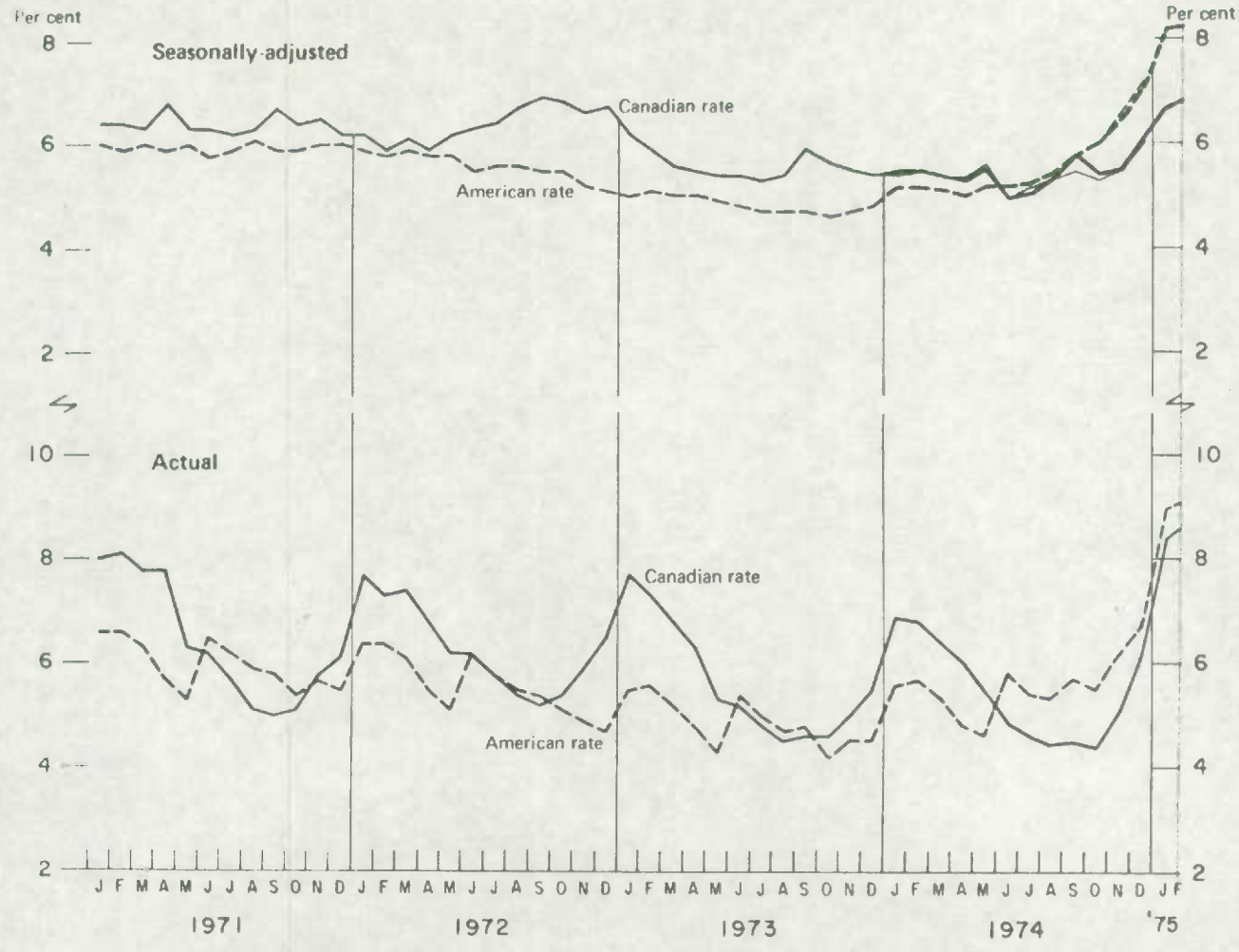
9. Expected Contribution to Non-Response

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
by Month, January 1971 to Date

	Seasonally-Adjusted				Actual	
	Canadian		American		Canadian	American
	(1)	(2)	(1)	(2)		
1975 - February	6.8	–	8.2	–	8.6	9.1
January	6.7	–	8.2	–	8.4	9.0
December	6.0	6.1	7.2	7.1	6.1	6.7
November	5.5	5.5	6.6	6.5	5.1	6.2
October	5.3	5.4	6.0	6.0	4.4	5.5
September	5.5	5.8	5.8	5.8	4.5	5.7
August	5.3	5.3	5.4	5.4	4.4	5.3
July	5.2	5.1	5.3	5.3	4.6	5.4
June	4.9	4.9	5.2	5.2	4.8	5.8
May	5.6	5.5	5.2	5.2	5.4	4.6
April	5.4	5.3	5.0	5.0	6.0	4.8
March	5.4	5.4	5.1	5.1	6.4	5.3
1974 - February	5.5	5.5	5.2	5.2	6.8	5.7

(1) - Revised rates as of January 1975
(2) - Rates as published in 1974



Comparaison 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				April	568	960	1.69
March				March	599	984	1.64
February	839			February	635	1,009	1.59
January	817	1,134	1.39	January	637	981	1.54

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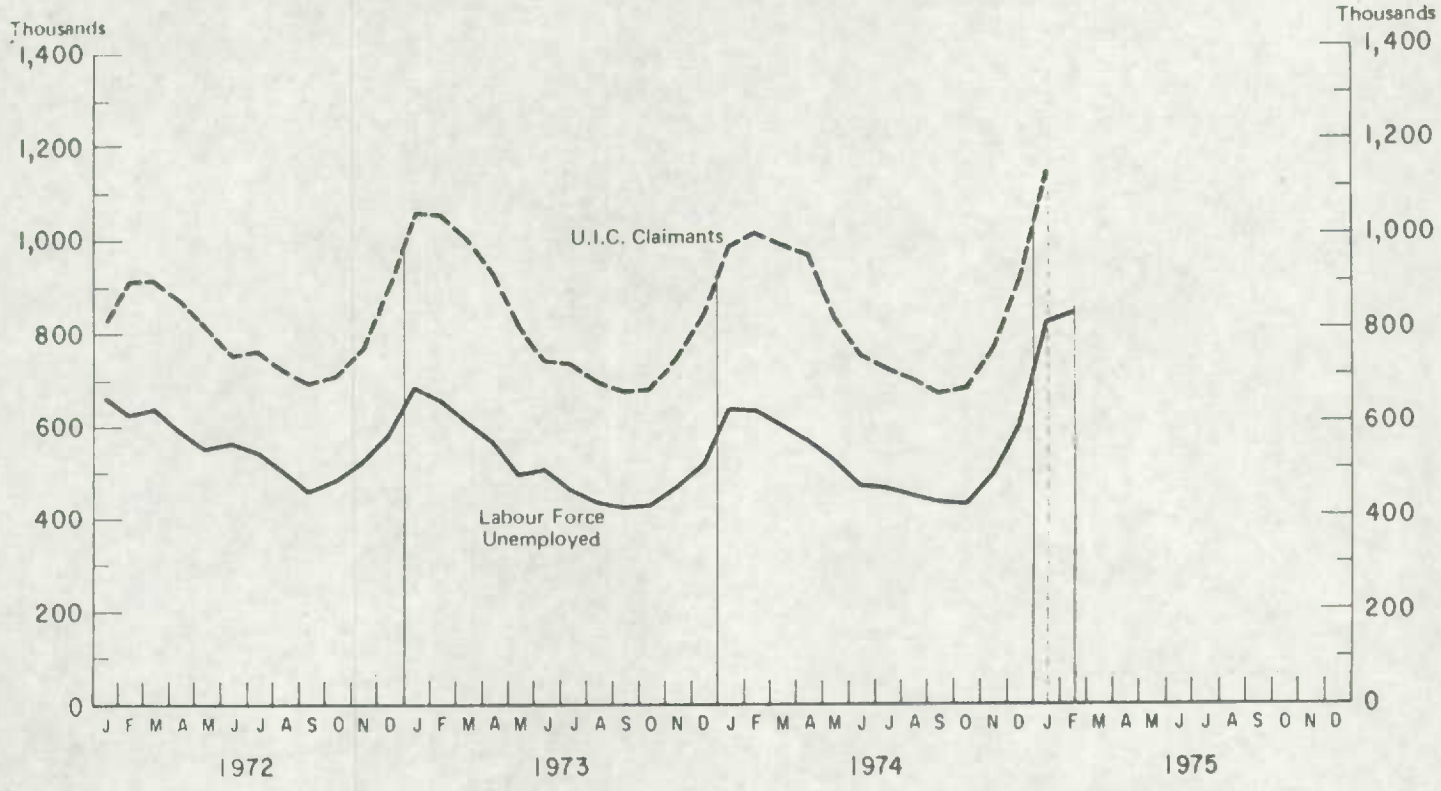
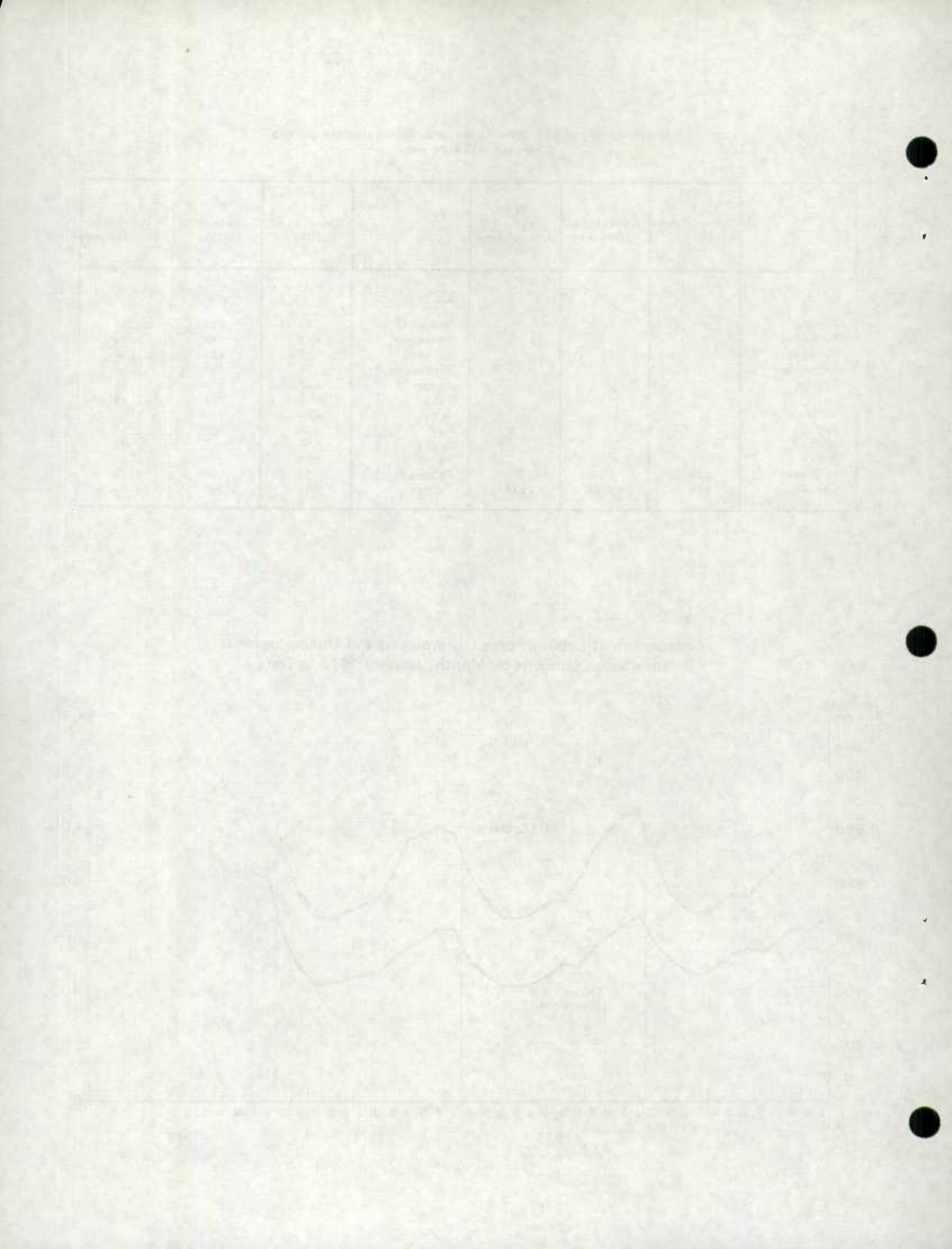
Comparison of Labour Force Unemployed and Unemployment Insurance Claimants by Month, January 1972 to Date





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