Labour Force Quality Report

Canadian Labour Force Survey

October, 1973

Household Surveys Development Staff
Labour Force Survey Division
Field Division

Statistics Canada Statistique Canada

TABLE OF CONTENTS
(also see Guide on next page)

	Page
Highlights	
A - Slippage	2
B - Non-response	3
C - Variance	3
D - Rejected documents	3
E - Enumeration cost	4
Tables and Charts(1)	
Summary Table: Non-response, rejected documents and enumeration cost	5
Table and Charts: Current slippage rates based on 1971 population projections	6
Charts (comparing levels for current month): Total non-response, enumeration cost, rejected documents	7
Non-response by components	8
Binomial factors	9
Charts (1968 to date): Slippage - by age	10
- by province	11
Non-response, rejected documents, enumeration cost by Regional Office	
- St. John's	12
- Halifax	13
- Montreal	14
- Ottawa	15
- Toronto	16
- Winnipeg	17
- Edmonton	18
- Vancouver	19
Detailed Tables: Non-response by components	20
Analysis of rejected documents	21
Enumeration cost	22
Definitions	Appendix 1
Detailed Analysis	
Variances in the Labour Force Survey	Appendix 2
Non-response Monthly Report	Appendix 3
Comparison of Series	
Canadian and American Unemployment Rates	Appendix 4 p.1
UIC Claimants and LFS Unemployed	Appendix 4 p.2

(1) Other tables are contained in Appendices 2 and 3, and other charts in Appendix 2.

	Slippage	Non-response	Variance	Rejected Documents	Enumeration Cost
	page number				
Highlights	2	2	3	3	4
Tables: Summary	6	5 and App. 3	App. 2	5	5
Detailed		20 and App. 3	App. 2	21	22
Charts: Current Levels	6	7, 8 and App. 3	9	7	7
Historical Series	10, 11	12 to 19		12 to 19	12 to 19
Definitions	App. 1, p. 1	App. 1, p. 1 App. 3, p. 2	App. 1, p. 1 App. 2, p. 2	App. 1, p. 2	App. 1, p. 2
Detailed Analysis		Appendix 3	Appendix 2		

Comparisons of: a) Canadian and American Unemployment rates, and b) UIC Claimants and LFS Unemployed are presented in Appendix 4.

HIGHLIGHTS

A. SLIPPAGE

In this month's report we introduce the new estimated slippage rates based on preliminary population projection from 1971 Census. The level of slippage decreased in Newfoundland, New Brunswick, Québec, Ontario and Saskatchewan while it increased in Prince Edward Island, Nova Scotia and Manitoba. The estimated slippage rate in the 20-24 and 45-64 age group diminished while in the 65 and over age group the rate increased.

The following table gives the estimated slippage rates for October based on 1961 and 1971 Census:

	1971 Census	1961 Census	Difference
Canada	4.7	5.0	- 0.3
14-19 years	4.8	5.1	- 0.3
20-24 years	6.9	10.2	- 3.3
25-44 years	4.7	4.5	+ 0.2
45-64 years	3.7	4.7	- 1.0
65 & over	4.6	0.9	+ 3.7
Newfoundland	9.2	11.9	- 2.7
Prince Edward Island	6.0	4.6	+ 1.4
Nova Scotia	10.1	8.0	+ 2.1
New Brunswick	10.1	10.7	- 0.6
Quebec	4.0	4.6	- 0.6
Ontario	3.8	4.2	- 0.4
Manitoba	5.1	3.9	+ 1.2
Saskatchewan	2.4	3.0	- 0.6
Alberta	4.8	4.8	-
British Columbia	6.0	6.1	- 0.1

The revised slippage rates have been introduced to the charts on pages 10 and 11.

The estimated slippage rate at the Canada level has increased by 0.1 in October 73 (4.7%): there was no noticeable departure from the rate level prevailing since February except in August when it was 5.4.

1. - By province: All provinces exhibited positive slippage rates in October. Major changes occurred in Newfoundland and British Columbia, respectively a decrease of 0.9 and an increase of 1.2. The latter change could be explained by a decrease of .0217 in the average size of households.

2. - By Age at the Canada Level: All age groups exhibited positive slippage rates in October. A 1.2 increase in the 14-19 age group slippage rate was attributed to persons 14 to 16. No specific reason for this could be determined. There was a decrease of 1.2 in the estimated slippage rate of the 20-24 age group.

See table and charts on pages 6, 10 and 11.

B. NON-RESPONSE

The overall rate at the Canada level decreased from 6.5% in September to 5.7% in October. Each component decreased by between 0.1% (N_2) and 0.3% (T.A.). In 1972 there was a larger decrease between September and October. Last year the rate declined from 6.1% to 5.1% with the largest decrease (0.6%) occurring in the T.A. component. Whereas there were decreases in all components in October 1973, in 1972 the T.A., N_1 and N_2 components decreased and "other" increased 0.1%.

Again in October the Winnipeg Office indicated the lowest overall rate, 1.6%, and the Vancouver Office the highest, 10.2%.

See tables on pages 5 and 20, charts on pages 7, 8, 12 to 19, and for further details, Appendix 3.

C. VARIANCE

At the Canada level for the October survey the coefficients of variation of Employed, Unemployed and "In Labour Force " decreased from the September survey to 0.34%, 2.61% and 0.32% respectively.

Nova Scotia was the only province to exhibit an increase in the coefficient of variation of the estimate of the total employed. The provinces of Newfoundland, Nova Scotia, Manitoba, Saskatchewan, Alberta and British Columbia showed increases in the coefficient of variation of Unemployed while decreases occurred in the remaining provinces. The coefficients of variation of "In Labour Force" increased in N.S., N.B., Sask., and B.C.

See charts on page 9 and Appendix 2 for more details.

D. REJECTED DOCUMENTS

The reject rate at the Canada level for Labour Force Items was 7.8% down 0.7 from the 8.5% registered for September. Seven regions registered reductions ranging between 0.1% and 1.2% when compared with the September results. Newfoundland was the only region to show an increase (+ 1.1). At the Canada level, blanks in identification average .036 per document, down from the .042 rate for September. The careless errors resulting from the coding of items 1 to 10 on the Labour Force Document accounted for more than 50% of the total rejects for Labour Force items.

Computer edits for Labour Force items and Supplementary items rejected 11.1% of total documents, down 0.5 from the September rate of 11.6%.

At the Canada level the rate of rejects for Supplementary items was 3.3%, up 0.2 from the 3.1% registered for September. Blanks and inconsistent entries for Supplementary items accounted for 29.7% of the total documents rejected.

See tables on pages 5 and 21 and charts on pages 7, and 12 to 19.

E. ENUMERATION COSTS

At the Canada level the October Labour Force enumeration costs were calculated at $2.52 per sample household, up 6 cents from the September average cost of $2.46. This 2% increase resulted from a 3 cent increase in enumeration cost for SRU household and a 9 cent increase for NRSU.

Enumeration costs were higher in October for six regions, with the increases ranging from 5 to 17 cents. Halifax region remained unchanged while Ottawa region reflected a decrease of 2 cents per household between September and October.

It should be noted that accurate costing of the enumeration for the October L.F. survey was almost impossible because interviewers were also involved in leaving self-enumeration documents (dropped-off in interview week for pick-up the following week) for the Child Care Survey and the Survey of Retirement and Pre-retirement Characteristics. Also affecting cost to a lesser degree was the increased efforts of interviewers to improve the survey response. The non-response rate was 5.7% for October, down 0.8 percent from the September rate of 6.5%.

See tables on pages 5 and 22, and charts on pages 7, and 12 to 19.

Non-Response Rates, Rejected Document Rates and Enumeration Cost per Household by Regional Office
May to October 1972 and 1973

	1973						1972					
	Oct.	Sept.	Aug.	July	June	May	Oct.	Sept.	Aug.	July	June	May
Non-response												
Canada ... %	5.7	6.5	10.9	15.1	8.4	7.0	5.1	6.1	10.1	12.4	9.4	10.5
St. John's ... %	3.3	2.4	9.7	14.0	5.4	4.5	3.4	4.3	8.0	9.5	8.6	9.4
Halifax ... %	5.5	6.1	9.8	13.4	8.1	7.6	5.5	6.1	9.3	9.4	11.9	10.5
Montreal ... %	6.4	6.6	12.1	19.2	10.3	7.4	5.3	5.9	10.3	15.7	8.6	9.1
Ottawa ... %	6.2	6.6	9.2	13.9	8.6	5.7	3.3	4.5	7.9	9.8	7.1	8.7
Toronto ... %	4.9	6.7	11.4	16.2	6.7	6.2	4.4	5.5	11.2	13.8	9.7	11.8
Winnipeg ... %	1.6	2.2	5.2	6.7	3.9	2.8	2.7	3.3	4.9	7.2	6.3	8.2
Edmonton ... %	6.1	6.3	11.4	15.8	11.2	9.0	6.6	8.4	11.7	14.8	8.9	10.8
Vancouver ... %	10.2	11.7	14.9	16.0	11.0	9.6	7.6	9.0	13.8	13.5	11.1	13.2
Rejected Documents (Regular Labour Force Items)												
Canada ... %	7.8	8.5	9.9	9.1	9.0	8.2	9.9	8.4	11.6	9.6	9.5	10.3
St. John's ... %	7.3	6.2	6.8	5.1	6.3	4.9	7.0	6.1	7.7	7.5	8.6	8.3
Halifax ... %	7.1	7.9	10.0	10.0	9.8	9.0	6.7	7.6	10.7	9.9	9.6	10.6
Montreal ... %	6.4	7.2	8.7	8.8	7.8	7.2	9.1	6.6	10.1	7.6	8.4	9.8
Ottawa ... %	8.0	9.2	12.0	9.3	7.6	7.0	10.4	12.9	13.3	9.6	9.7	8.8
Toronto ... %	8.8	9.9	10.6	10.7	11.0	9.8	13.9	10.1	16.1	12.5	11.3	12.3
Winnipeg ... %	6.9	7.0	8.8	6.3	5.8	6.5	8.3	9.1	10.7	8.5	7.2	10.1
Edmonton ... %	8.3	9.1	11.0	8.1	9.9	8.1	10.3	7.6	9.0	9.1	8.5	8.3
Vancouver ... %	10.0	11.0	11.0	10.6	10.4	9.4	11.2	8.9	12.2	9.7	11.5	11.2
Enumeration Cost per Household (1)												
Canada ... $	2.52	2.46	2.24	1.98	2.20	2.17	2.10	2.08	2.11	2.13	2.10	1.72
St. John's ... $	2.89	2.71	2.50	2.10	2.50	2.59	2.35	2.27	2.40	2.38	2.27	1.81
Halifax ... $	2.29	2.29	2.10	1.89	2.02	1.98	1.75	1.77	1.77	1.83	1.67	1.36
Montreal ... $	2.70	2.66	2.41	2.07	2.30	2.36	2.27	2.29	2.36	2.25	2.31	1.80
Ottawa ... $	2.66	2.68	2.44	2.07	2.49	2.33	2.26	2.29	2.25	2.31	2.28	1.70
Toronto ... $	2.67	2.60	2.37	2.09	2.37	2.29	2.29	2.26	2.26	2.22	2.30	1.77
Winnipeg ... $	2.48	2.40	2.22	2.16	2.25	2.19	2.16	2.16	2.19	2.43	2.16	1.87
Edmonton ... $	2.29	2.24	2.06	1.72	1.91	1.78	1.88	1.83	1.86	1.89	1.89	1.93
Vancouver ... $	2.37	2.20	1.92	1.84	2.01	1.98	1.97	1.89	1.88	1.94	1.95	1.59

	Month-to-month change								Year-to-year change			
	1973				1972							
	Sept. to Oct.	Aug. to Sept.	July to Aug.	June to July	Sept. to Oct.	Aug. to Sept.	July to Aug.	June to July	Oct. 1972 to Oct. 1973	Sept. 1972 to Sept. 1973	Aug. 1972 to Aug. 1973	July 1972 to July 1973
Non-response												
Canada ... %	- 0.8	- 4.4	- 4.2	+ 6.7	- 1.0	- 4.0	- 2.3	+ 3.0	+ 0.6	+ 0.4	+ 0.8	+ 2.7
St. John's ... %	+ 0.9	- 7.3	- 4.3	+ 8.6	- 0.9	- 3.7	- 1.5	+ 0.9	- 0.1	- 1.9	+ 1.7	+ 4.5
Halifax ... %	- 0.6	- 3.7	- 3.6	+ 5.3	- 0.6	- 3.2	- 0.1	- 2.5	-	-	+ 0.5	+ 4.0
Montreal ... %	- 0.2	- 5.5	- 7.1	+ 8.9	- 0.6	- 4.4	- 5.4	+ 7.1	+ 1.1	+ 0.7	+ 1.8	+ 3.5
Ottawa ... %	- 0.4	- 2.6	- 4.7	+ 5.3	- 1.2	- 3.4	- 1.9	+ 2.7	+ 2.9	+ 2.1	+ 1.3	+ 4.1
Toronto ... %	- 1.8	- 4.7	- 4.8	+ 9.5	- 1.1	- 5.7	- 2.6	+ 4.1	+ 0.5	+ 1.2	+ 0.2	+ 2.4
Winnipeg ... %	- 0.6	- 3.0	- 1.5	+ 2.8	- 0.6	- 1.6	- 2.3	+ 0.9	- 1.1	- 1.1	+ 0.3	- 0.5
Edmonton ... %	- 0.2	- 5.1	- 4.4	+ 4.6	- 1.8	- 3.3	- 3.1	+ 5.9	- 0.5	- 2.1	- 0.3	+ 1.0
Vancouver ... %	- 1.5	- 3.2	- 1.1	+ 5.0	- 1.4	- 4.8	+ 0.3	+ 2.4	+ 2.6	+ 2.7	+ 1.1	+ 2.5
Rejected Documents (Regular Labour Force Items)												
Canada ... %	- 0.7	- 1.4	+ 0.8	+ 0.1	+ 1.5	- 3.2	+ 2.0	+ 0.1	- 2.1	+ 0.1	- 1.7	- 0.5
St. John's ... %	+ 1.1	- 0.6	+ 1.7	- 1.2	+ 0.9	- 1.6	+ 0.2	- 1.1	+ 0.3	+ 0.1	- 0.9	- 2.4
Halifax ... %	- 0.8	- 2.1	-	+ 0.2	- 0.9	- 3.1	+ 0.8	+ 0.3	+ 0.4	+ 0.3	- 0.7	+ 0.1
Montreal ... %	- 0.8	- 1.5	- 0.1	+ 1.0	+ 2.5	- 3.5	+ 2.5	- 0.8	- 2.7	+ 0.6	- 1.4	+ 1.2
Ottawa ... %	- 1.2	- 2.8	+ 2.7	+ 1.7	- 2.5	- 0.4	+ 3.7	- 0.1	- 2.4	- 3.7	- 1.3	- 0.3
Toronto ... %	- 1.1	- 0.7	- 0.1	- 0.3	+ 3.8	- 6.0	+ 3.6	+ 1.2	- 5.1	- 0.2	- 5.5	- 1.8
Winnipeg ... %	- 0.1	- 1.8	+ 2.5	+ 0.5	- 0.8	- 1.6	+ 2.2	+ 1.3	- 1.4	- 2.1	- 1.9	- 2.2
Edmonton ... %	- 0.8	- 1.9	+ 2.9	- 1.8	+ 2.7	- 1.4	- 0.1	+ 0.6	- 2.0	+ 1.5	+ 2.0	- 1.0
Vancouver ... %	- 1.0	-	+ 0.4	+ 0.2	+ 2.3	- 3.3	+ 2.5	- 1.8	- 1.2	+ 2.1	- 1.2	+ 0.9
Enumeration Cost per Household (1)												
Canada ... $	+ 0.06	+ 0.22	+ 0.26	- 0.22	+ 0.02	- 0.03	- 0.02	+ 0.03	+ 0.42	+ 0.38	+ 0.13	- 0.15
St. John's ... $	+ 0.18	+ 0.21	+ 0.40	- 0.40	+ 0.08	- 0.13	+ 0.02	+ 0.11	+ 0.54	+ 0.44	+ 0.10	- 0.28
Halifax ... $	-	+ 0.19	+ 0.21	- 0.13	- 0.02	-	- 0.06	+ 0.16	+ 0.54	+ 0.52	+ 0.33	+ 0.06
Montreal ... $	+ 0.04	+ 0.25	+ 0.34	- 0.23	- 0.02	- 0.07	+ 0.11	- 0.06	+ 0.43	+ 0.37	+ 0.05	- 0.18
Ottawa ... $	- 0.02	+ 0.24	+ 0.37	- 0.42	- 0.03	+ 0.04	- 0.06	+ 0.03	+ 0.40	+ 0.39	+ 0.19	- 0.24
Toronto ... $	+ 0.07	+ 0.23	+ 0.28	- 0.28	+ 0.03	-	+ 0.04	- 0.08	+ 0.38	+ 0.34	+ 0.11	- 0.13
Winnipeg ... $	+ 0.08	+ 0.18	+ 0.06	- 0.09	-	- 0.03	- 0.24	+ 0.27	+ 0.32	+ 0.24	+ 0.03	- 0.27
Edmonton ... $	+ 0.05	+ 0.18	+ 0.34	- 0.19	+ 0.05	- 0.03	- 0.03	-	+ 0.41	+ 0.41	+ 0.20	- 0.17
Vancouver ... $	+ 0.17	+ 0.28	+ 0.08	- 0.17	+ 0.08	+ 0.01	- 0.06	- 0.01	+ 0.40	+ 0.31	+ 0.04	- 0.10

(1) The variation in the enumeration cost for July 1973 is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

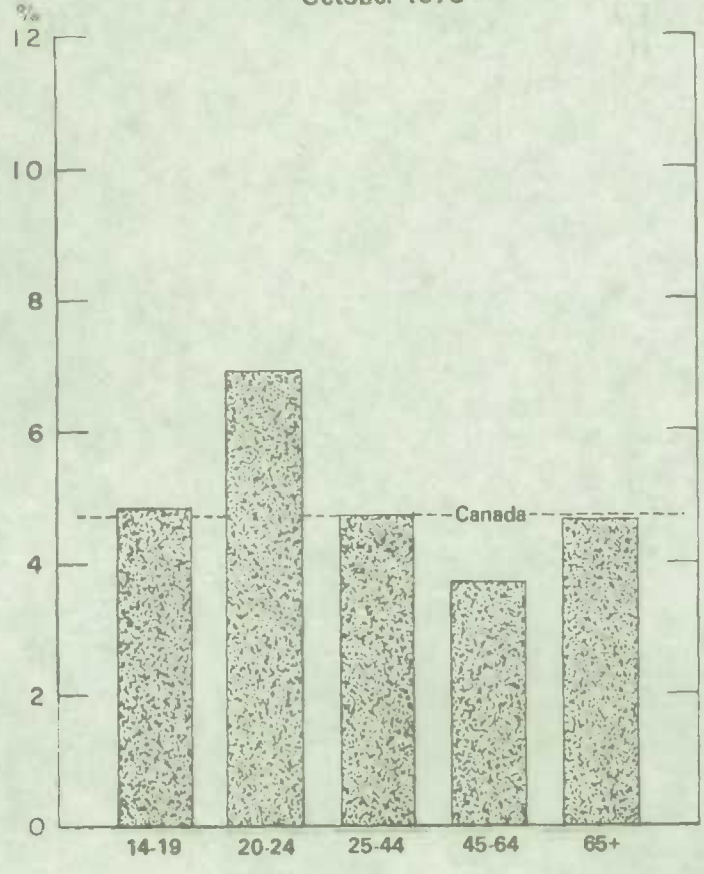
Note: Slippage rates have been deleted temporarily from this table as historical rates are not yet available on the revised basis. However, a table is given on next page giving slippage rates for September and October 1973 calculated on population projections based on 1971 Census.

Slippage Rates(1), Canada by Age and Provincial Totals
September and October 1973

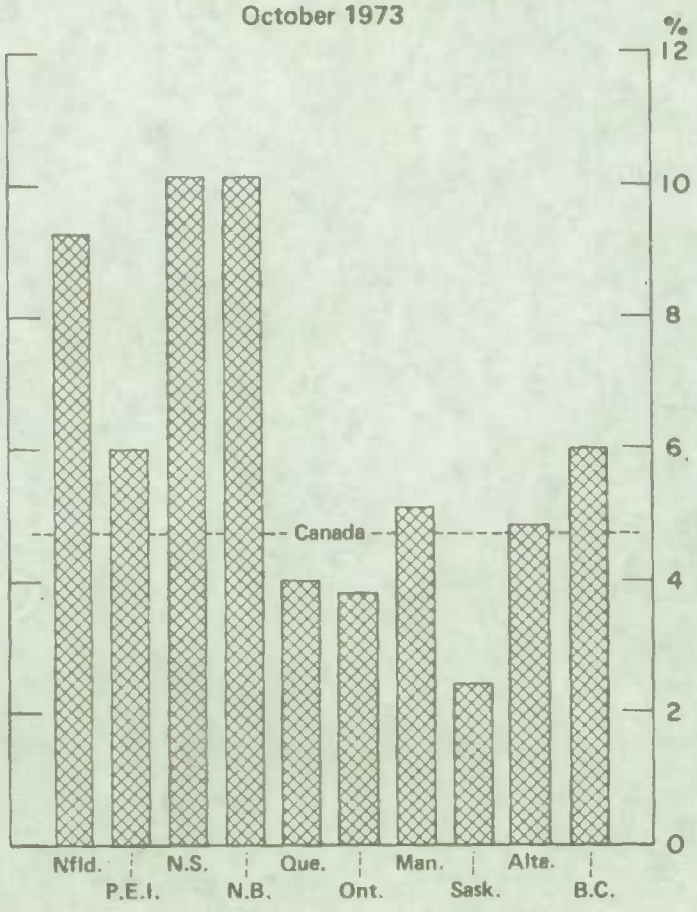
	Oct. 1973	Sept. 1973	Sept.-to-Oct. Change
Canada	4.7	4.6	+ 0.1
14-19 years	4.8	3.6	+ 1.2
20-24 years	6.9	8.1	- 1.2
25-44 years	4.7	4.7	-
45-64 years	3.7	3.1	+ 0.6
65 and over	4.6	5.1	- 0.5

	Oct. 1973	Sept. 1973	Sept.-to-Oct. Change
Nfld.	9.2	10.1	- 0.9
P.E.I.	6.0	6.3	- 0.3
N.S.	10.1	10.1	-
N.B.	10.1	9.5	+ 0.6
Que.	4.0	4.1	- 0.1
Ont.	3.8	3.6	+ 0.2
Man.	5.1	5.5	- 0.4
Sask.	2.4	2.8	- 0.4
Alta.	4.8	4.7	+ 0.1
B.C.	6.0	4.8	+ 1.2

Slippage Rates by Age Groups at Canada Level
October 1973



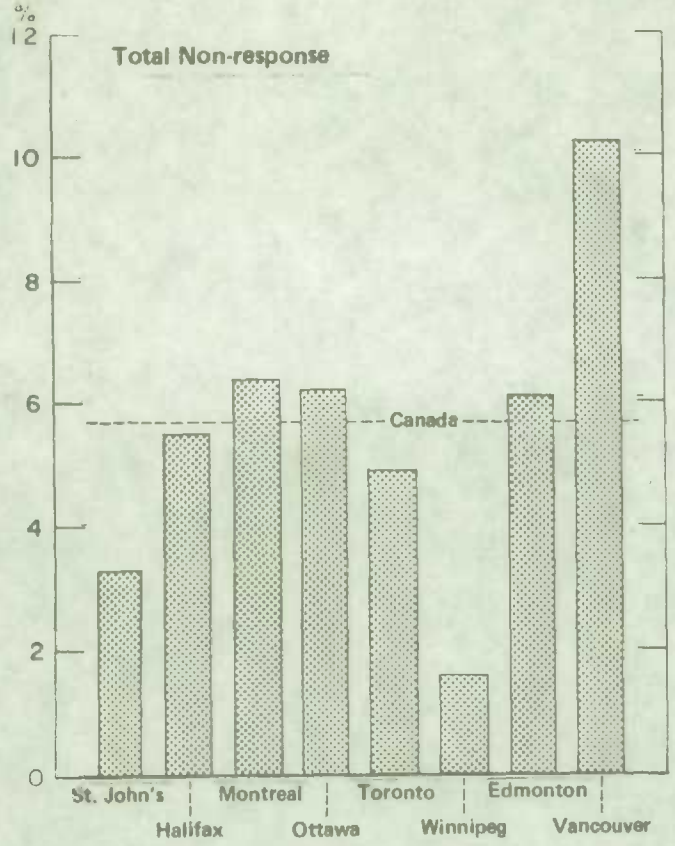
Slippage Rates by Province
October 1973

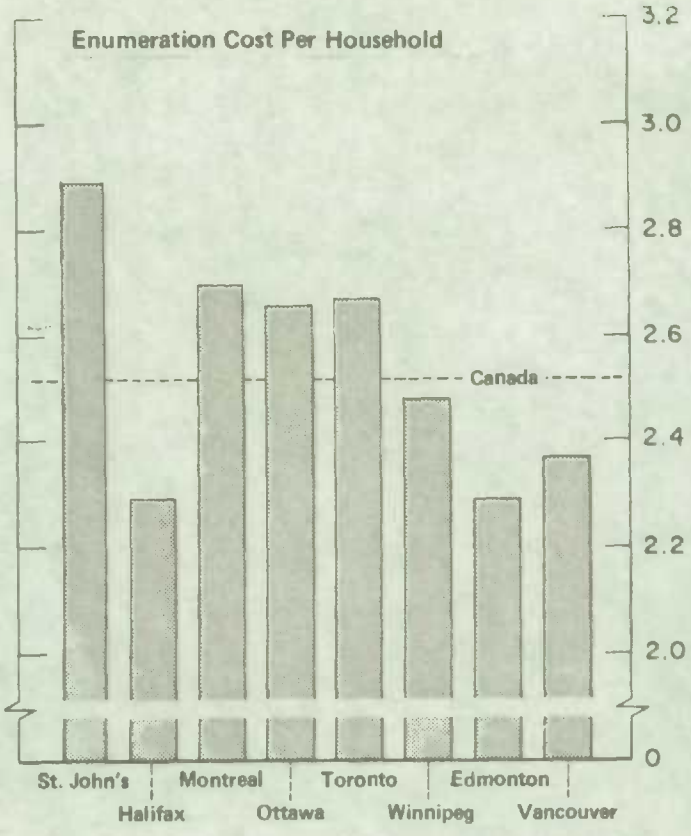


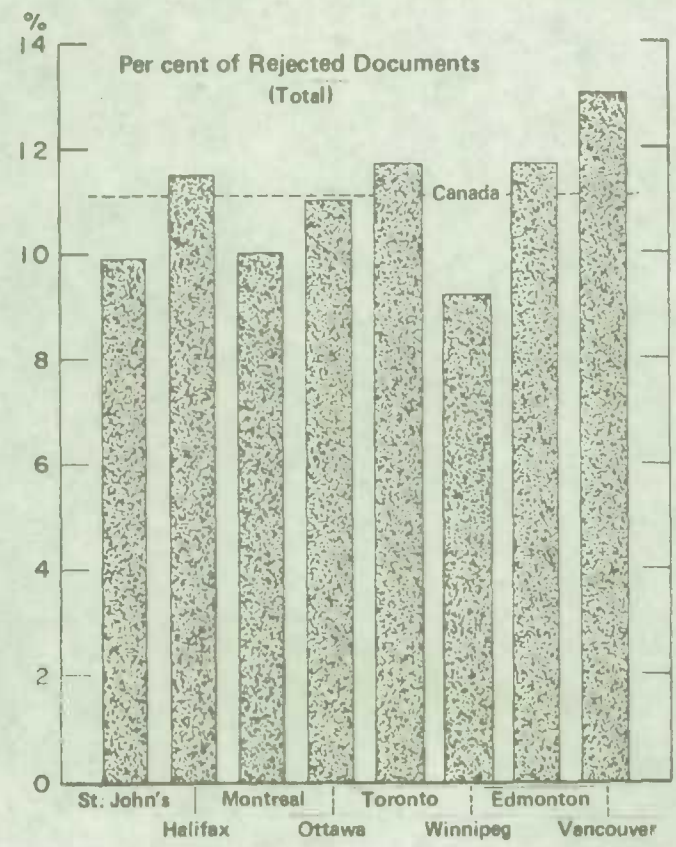
(1) The Above Rates are Calculated on Population Projections Based on 1971 Census.

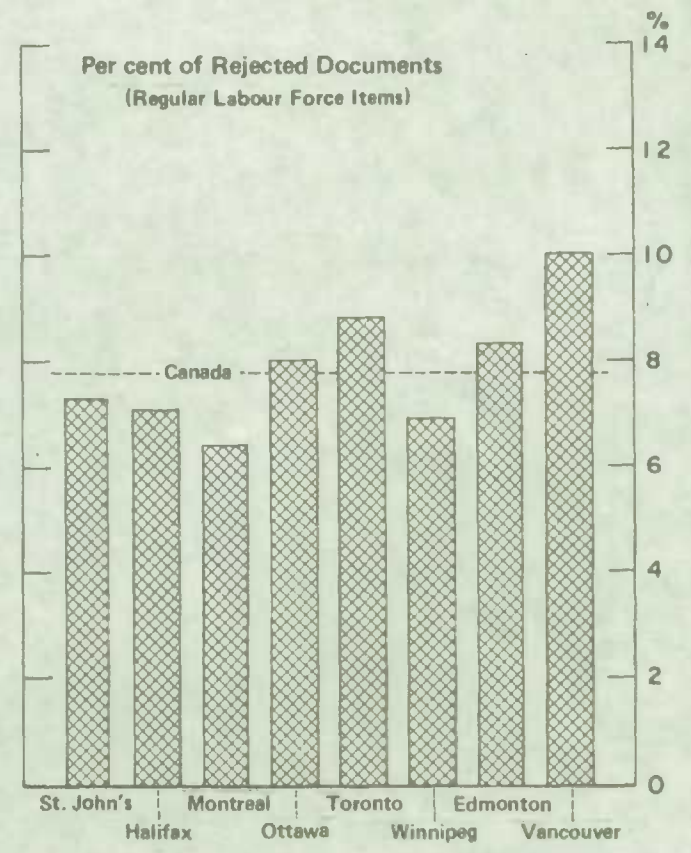
Non-response Rates, Enumeration Cost and Rejected Documents by Regional Office

October 1973



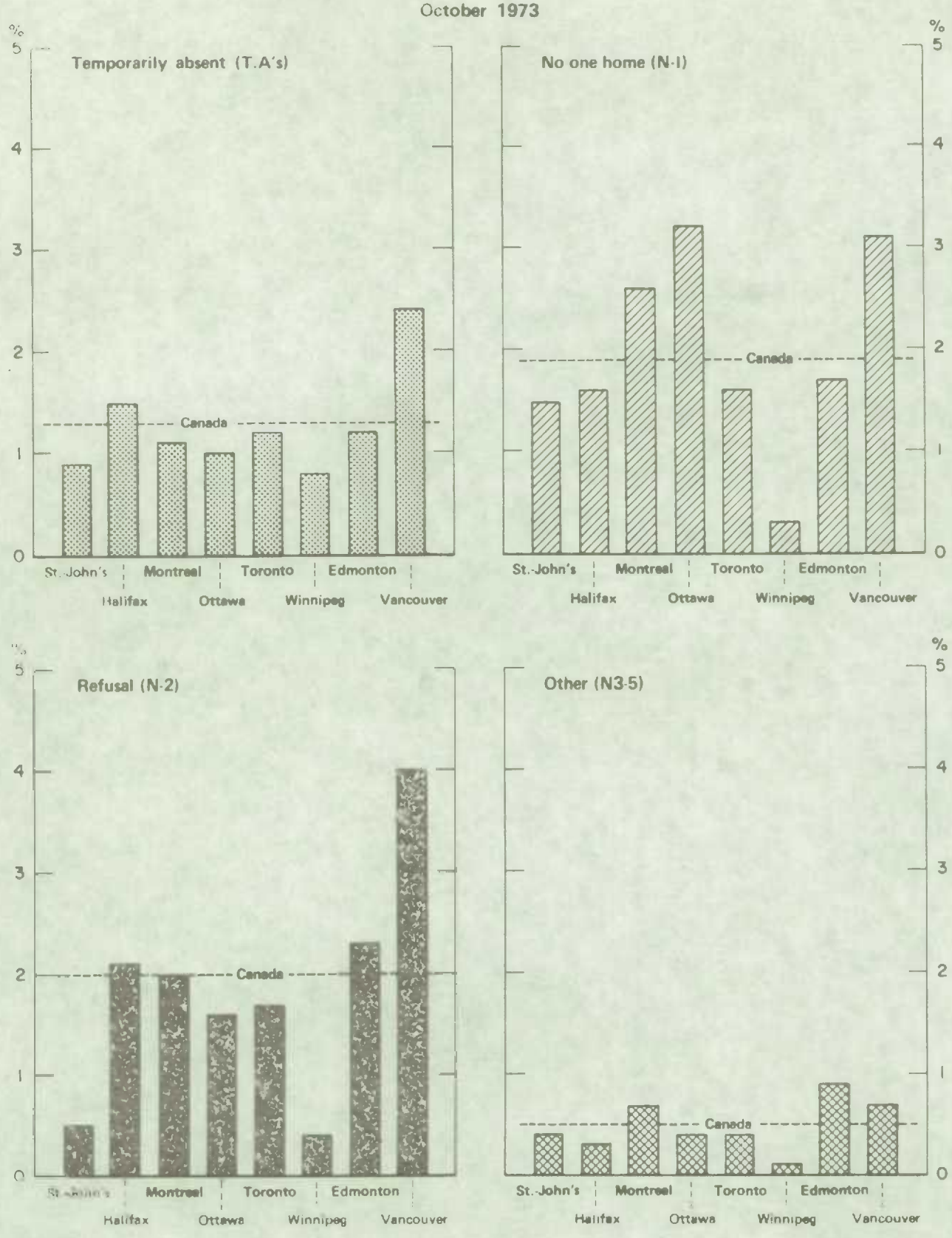






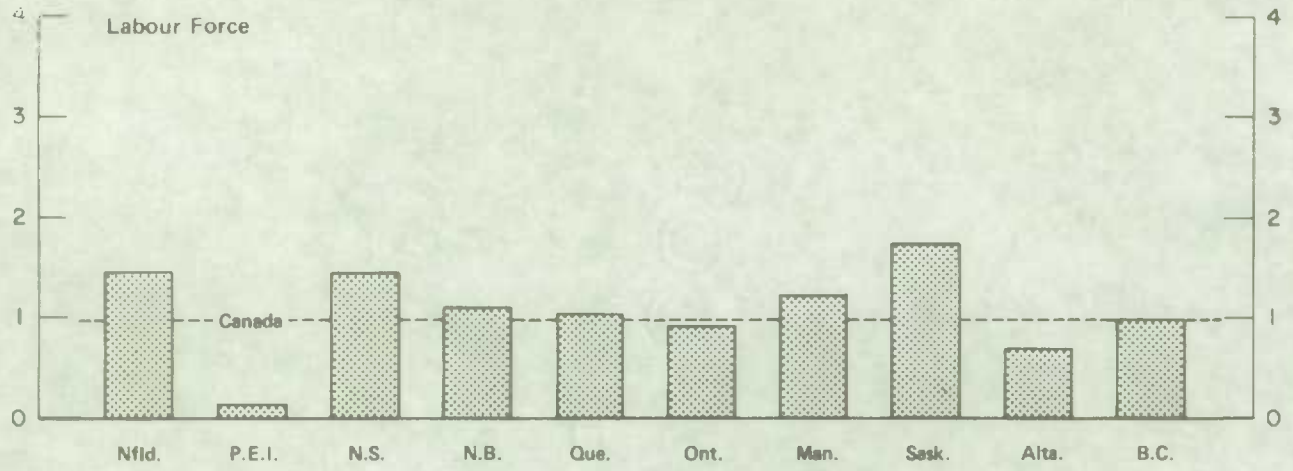
Non-response Rates, by Component

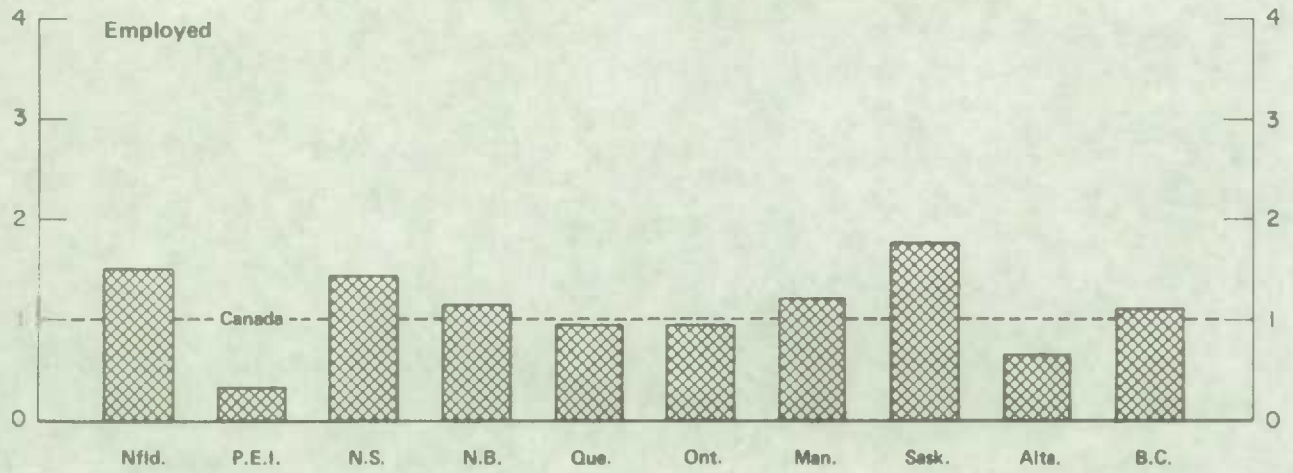
October 1973

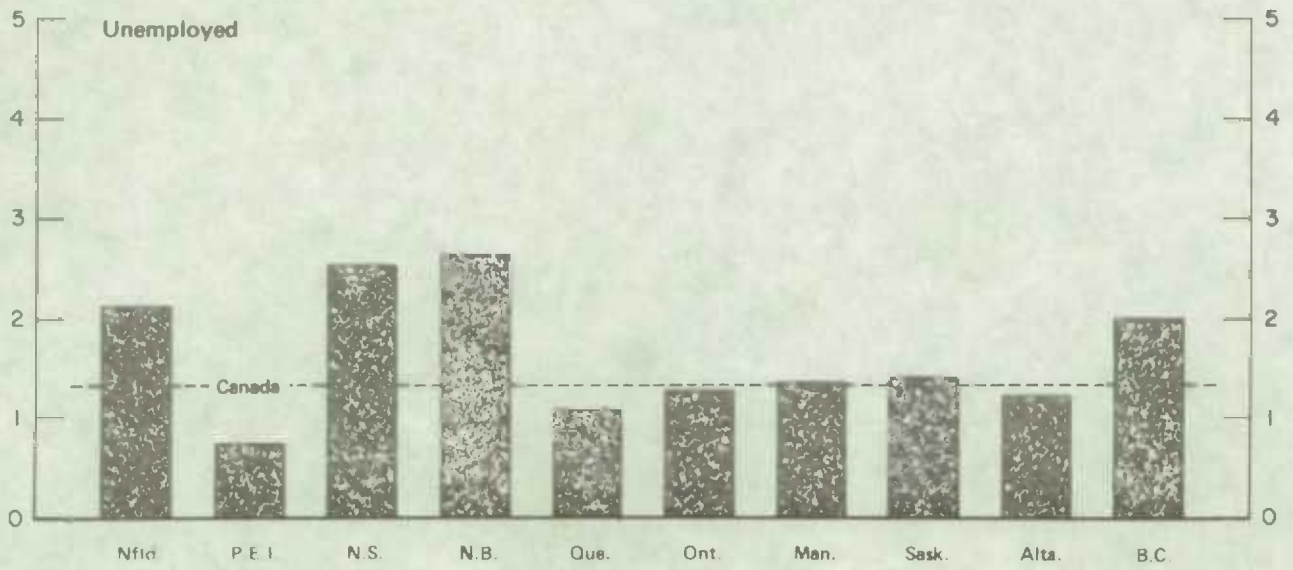


Binomial Factors for the Labour Force, Employed and Unemployed, Canada and the Provinces

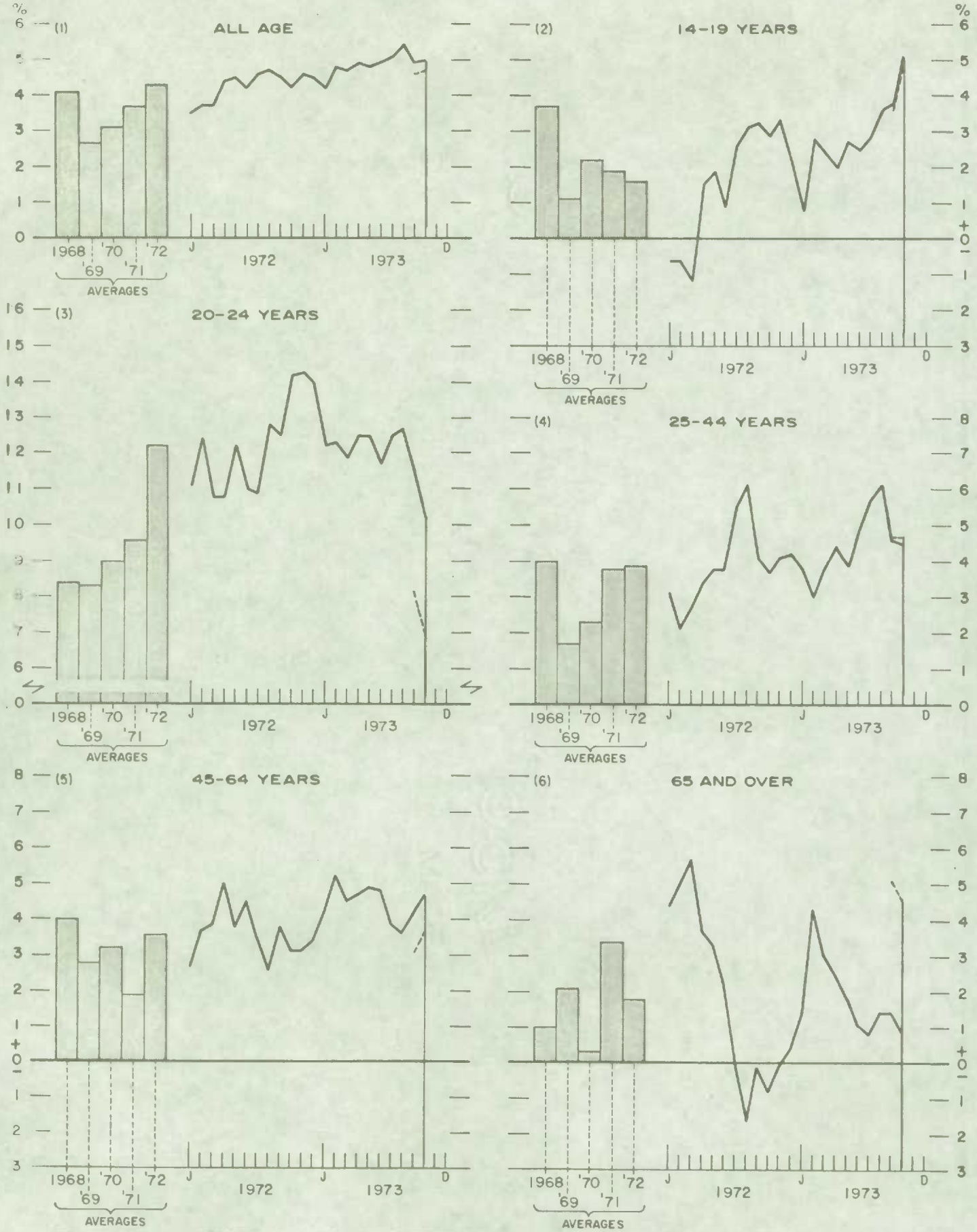
October 1973





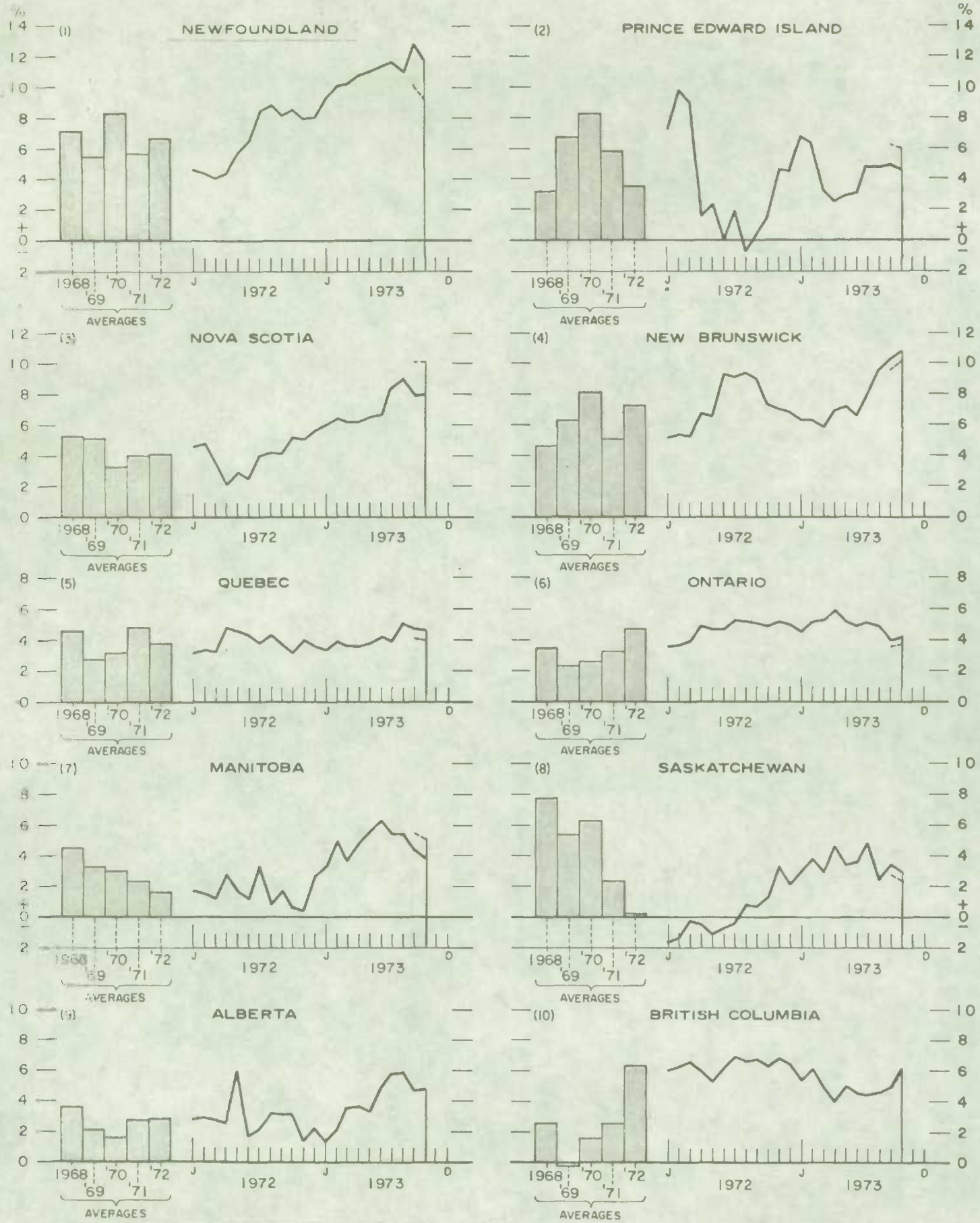


Slippage by Age Group at the Canada Level



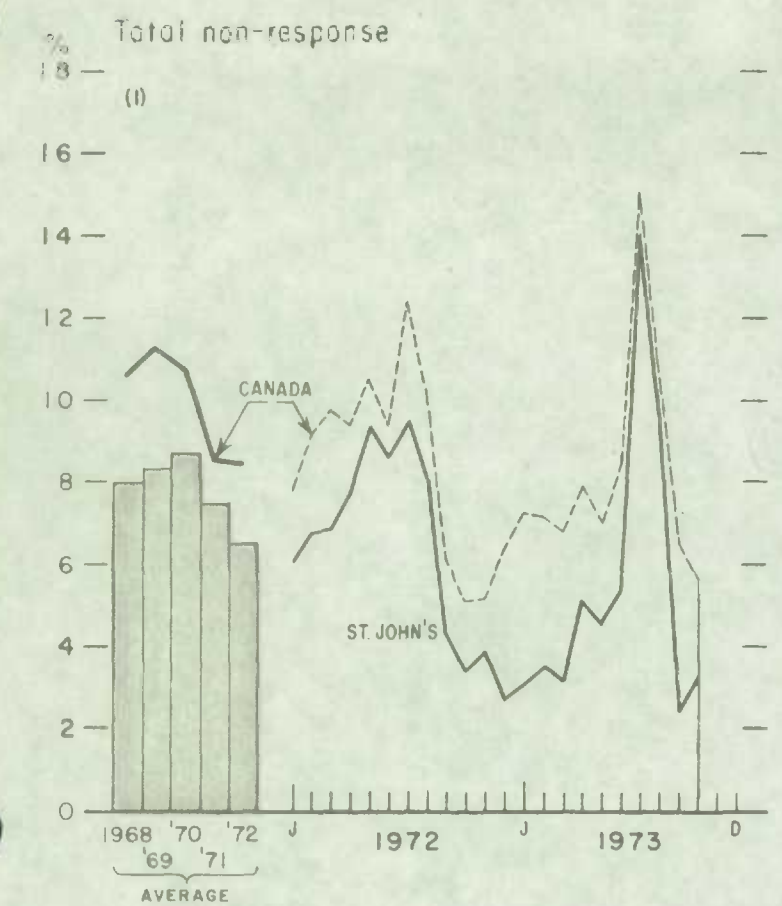
—— Slippage Rates were Calculated on Population Projections Based on 1961 Census.

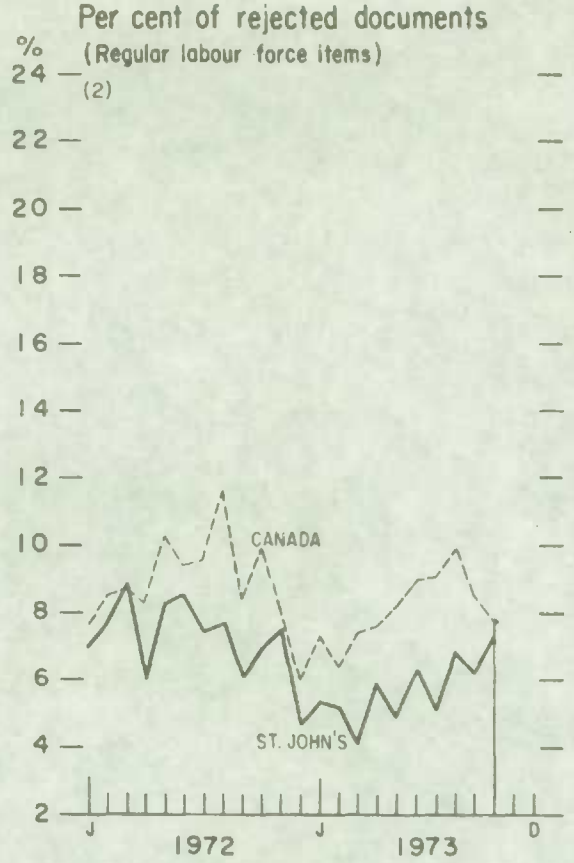
Slippage by Province

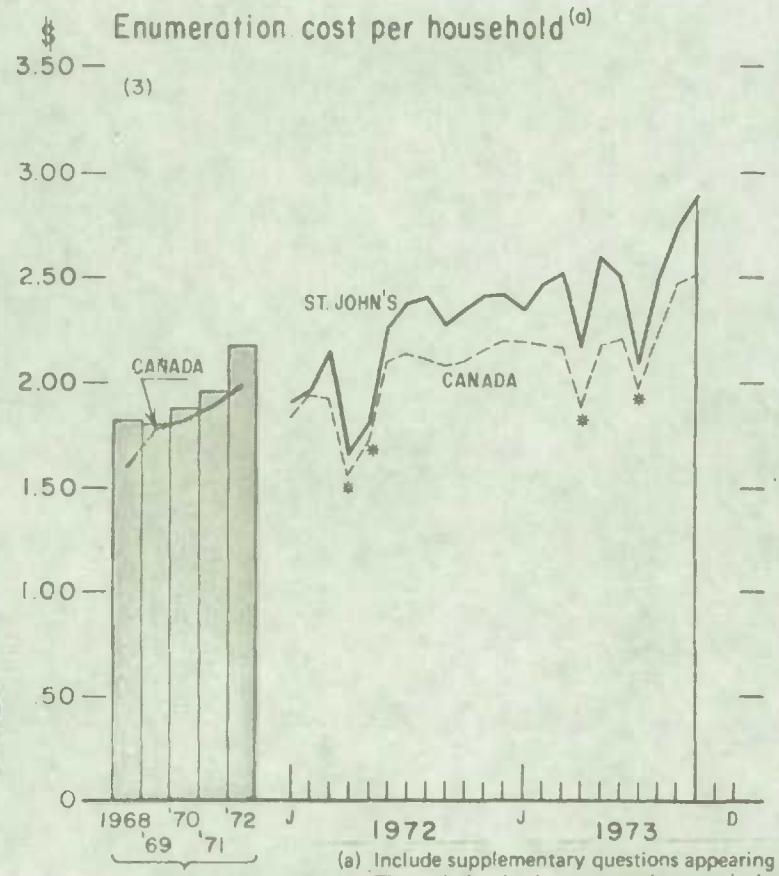


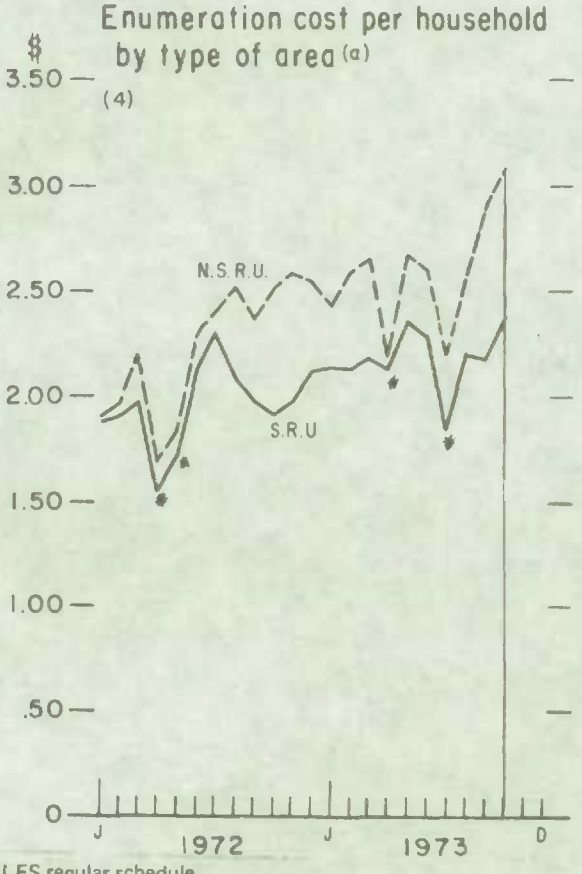
—— Slippage Rates were Calculated on Population Projections Based on 1961 Census.

St. John's Regional Office



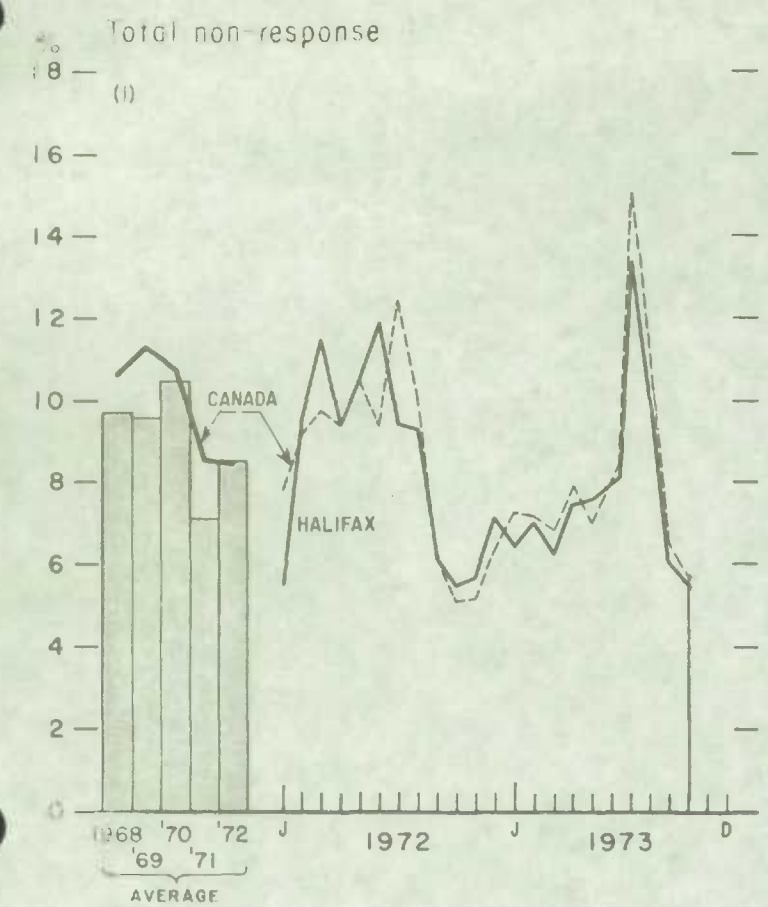


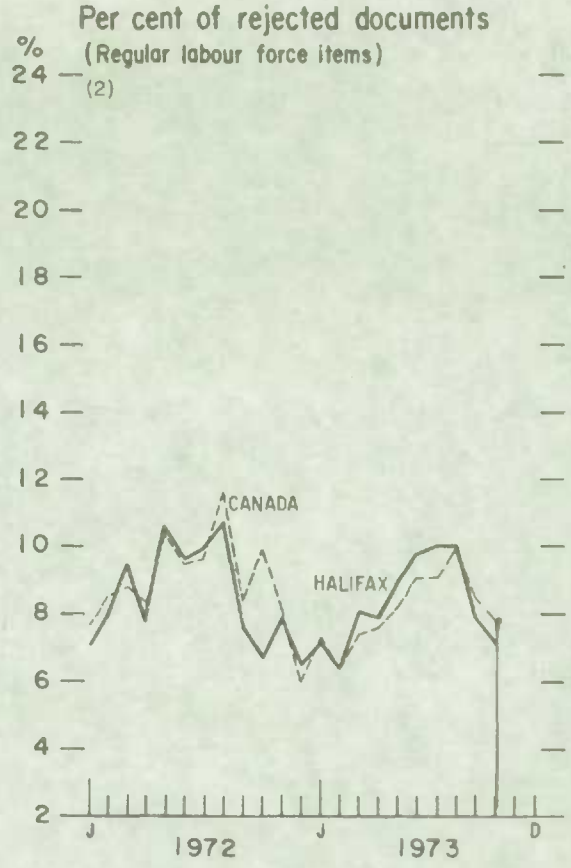


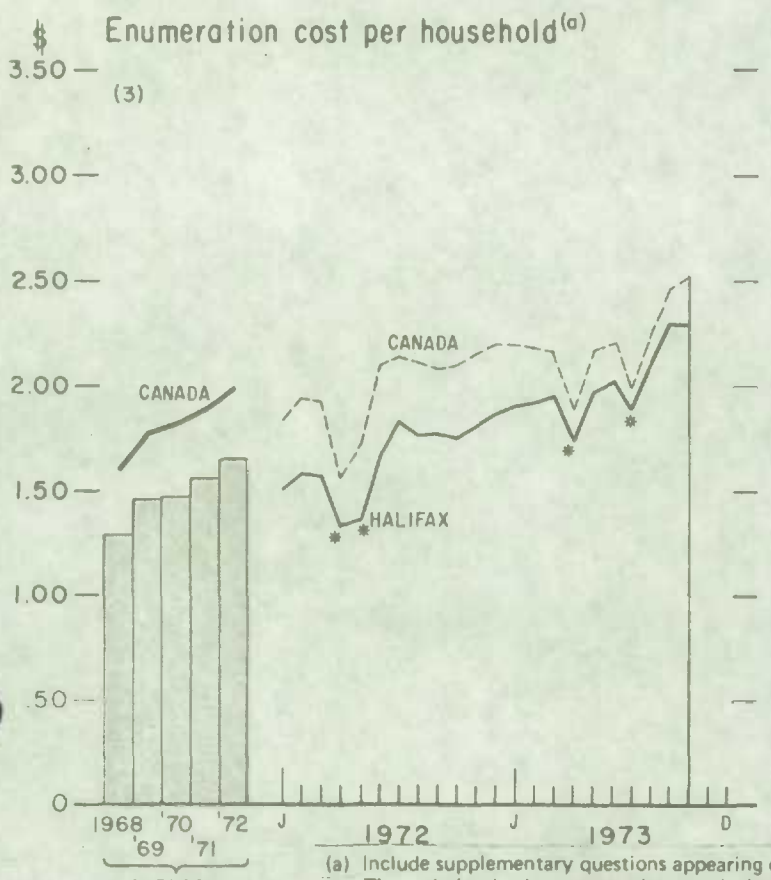


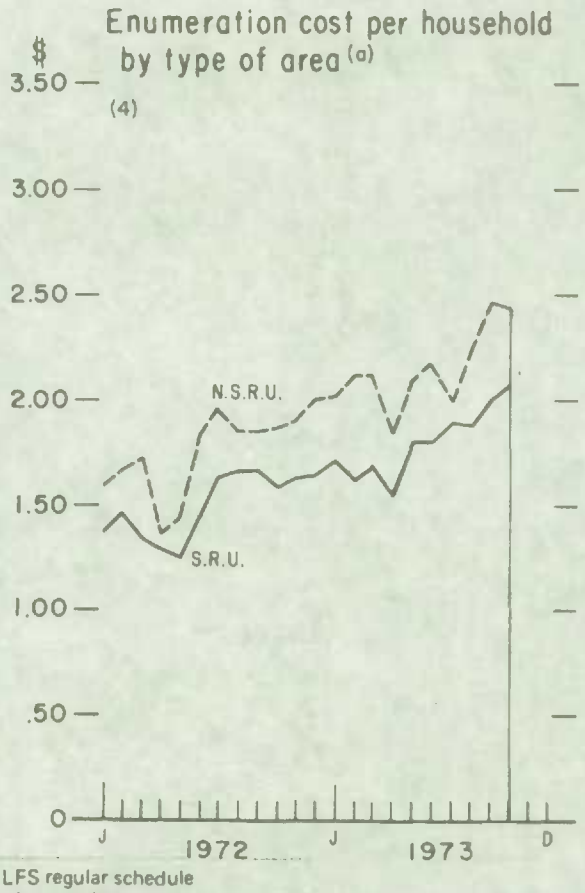
(a) Include supplementary questions appearing on the LFS regular schedule
* The variation in the enumeration cost is due to a major supplementary

Halifax Regional Office





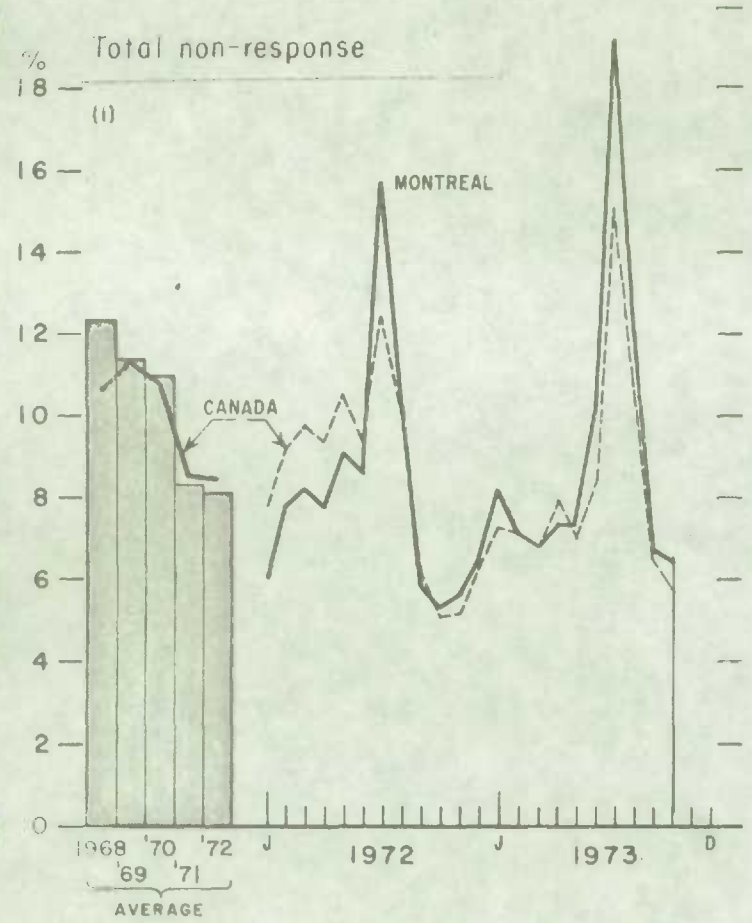


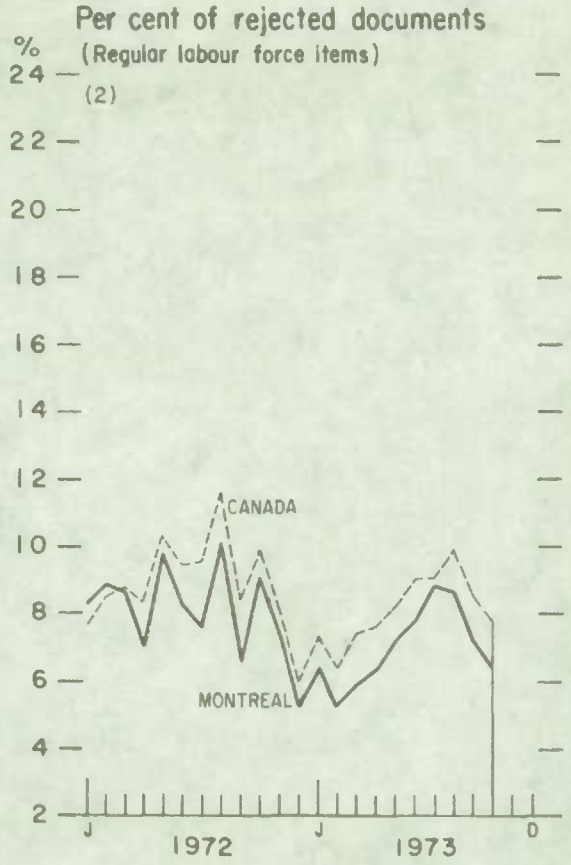


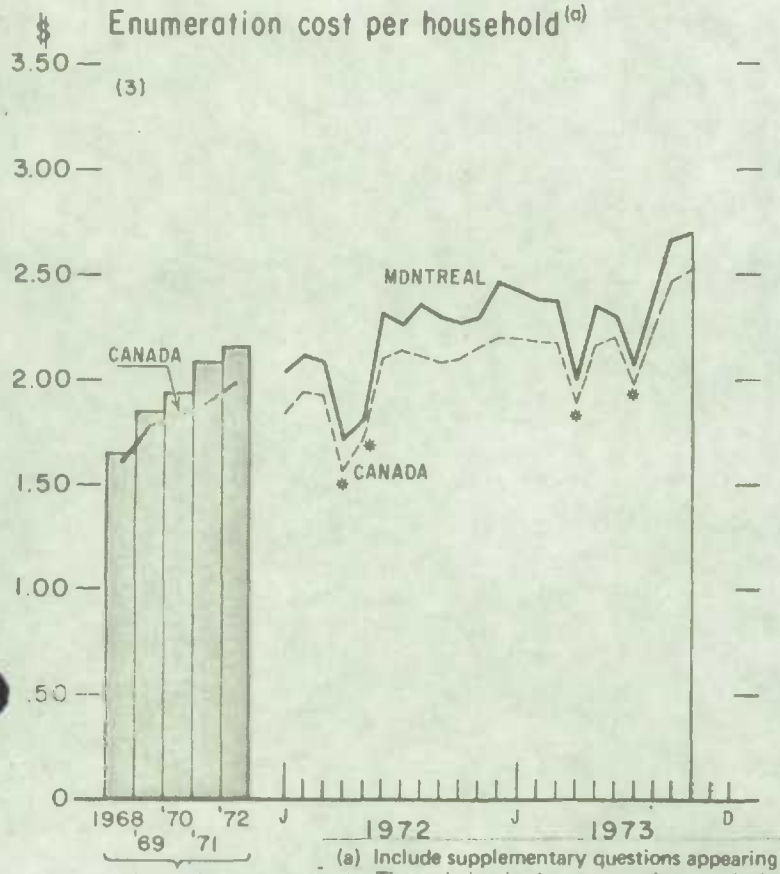
(a) Include supplementary questions appearing on the LFS regular schedule

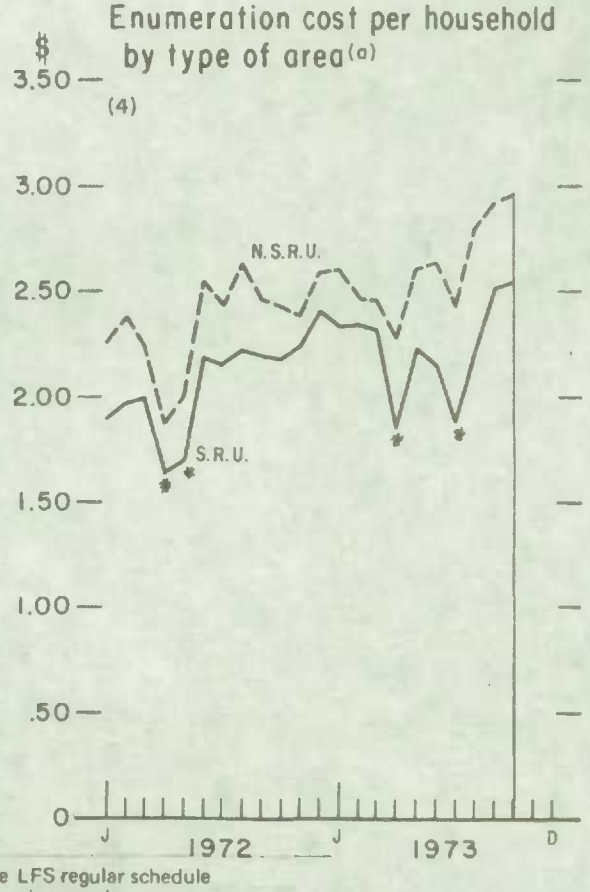
* The variation in the enumeration cost is due to a major supplementary

Montreal Regional Office







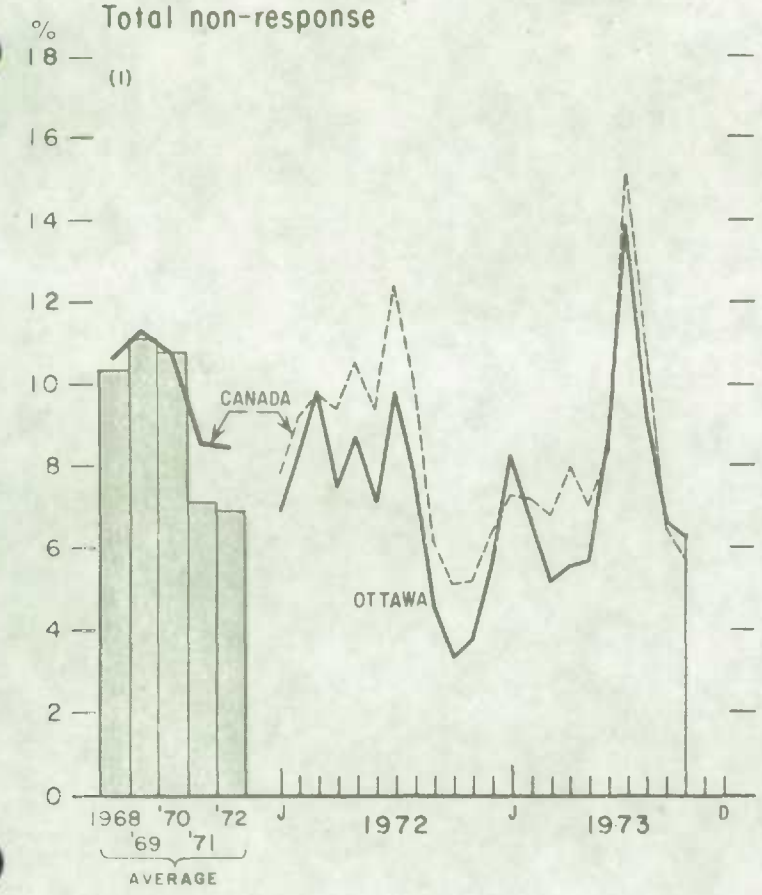


(a) Include supplementary questions appearing on the LFS regular schedule

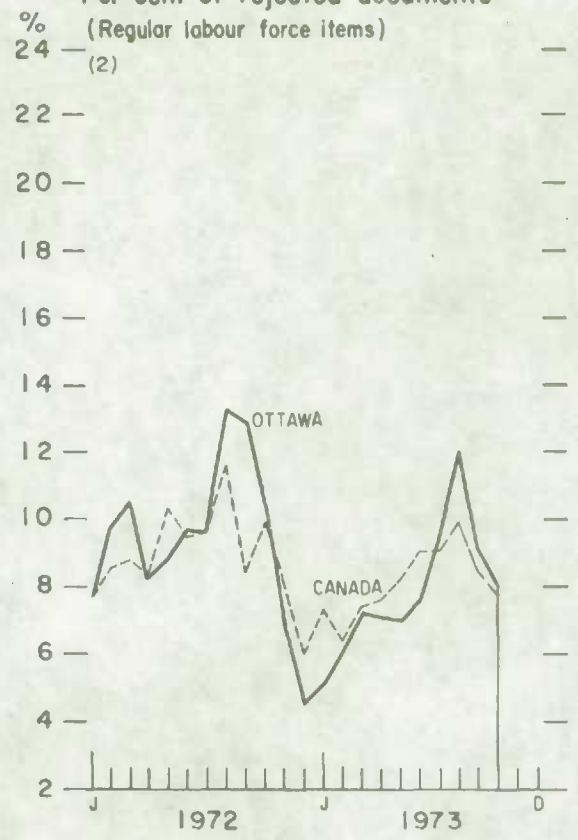
* The variation in the enumeration cost is due to a major supplementary

Ottawa Regional Office

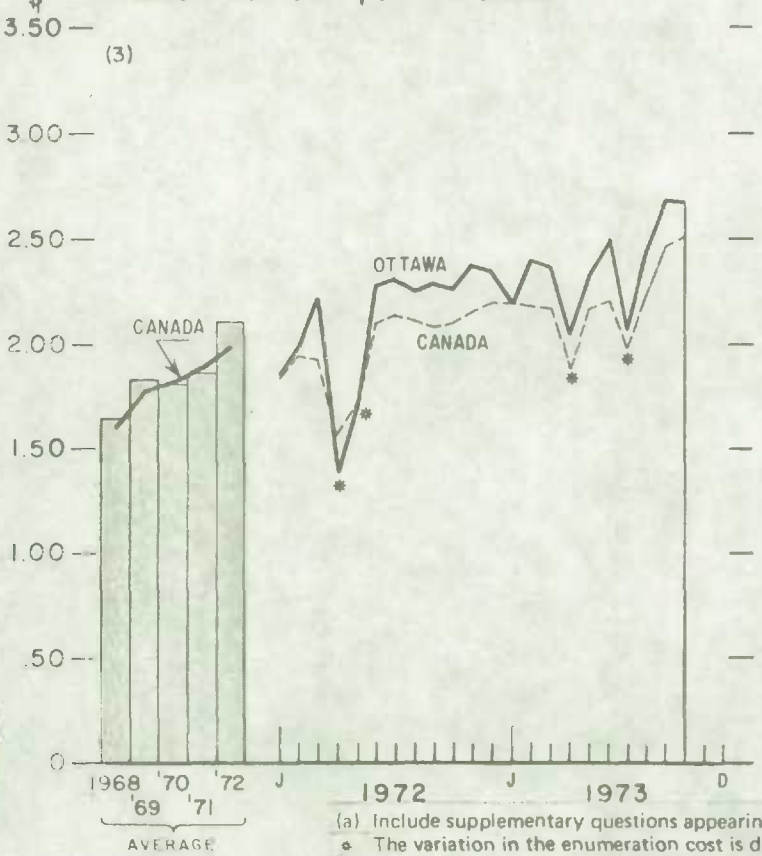
Total non-response



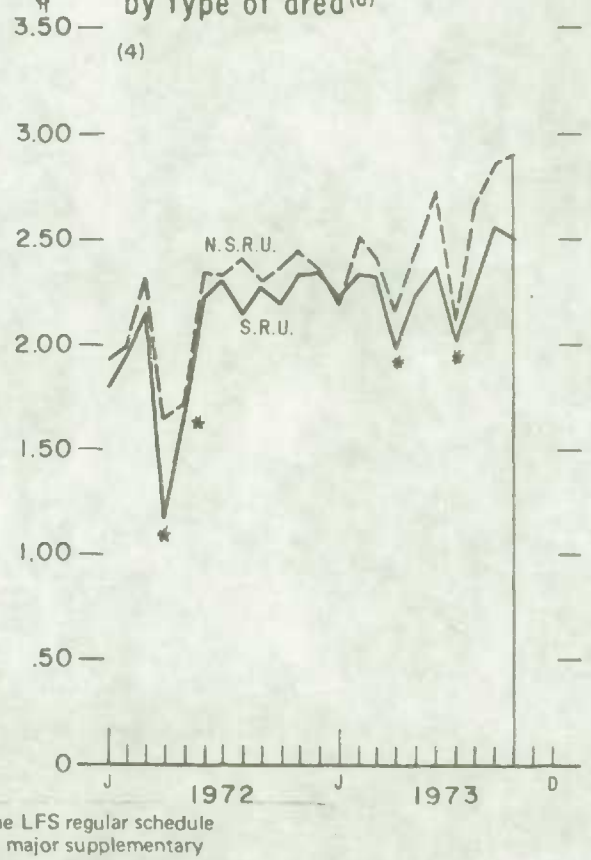
Per cent of rejected documents



Enumeration cost per household[a]



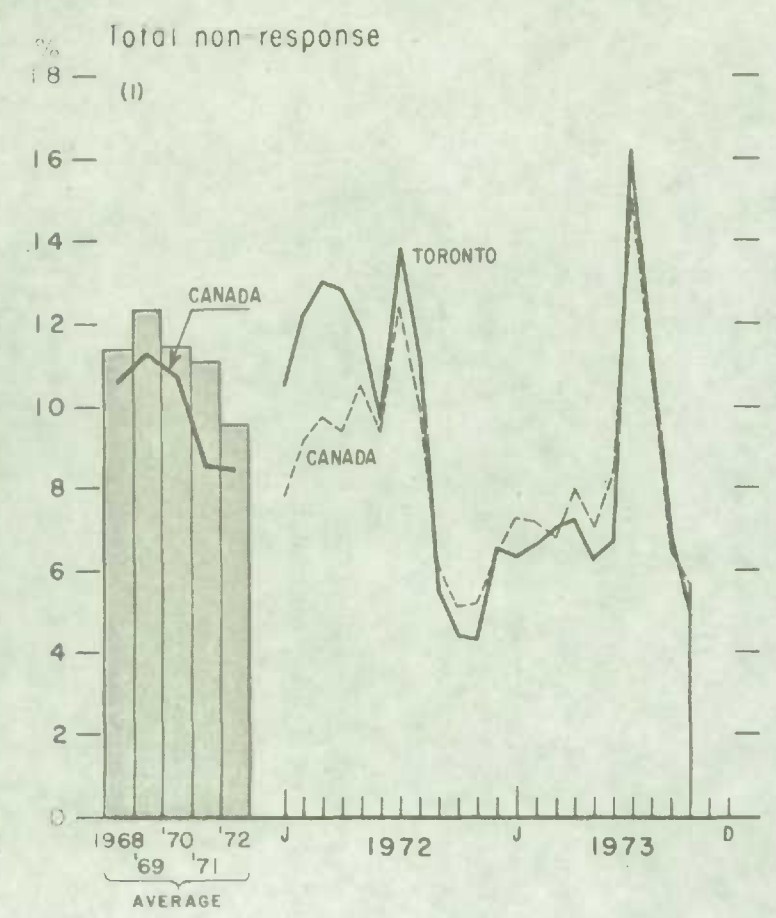
Enumeration cost per household by type of area[a]

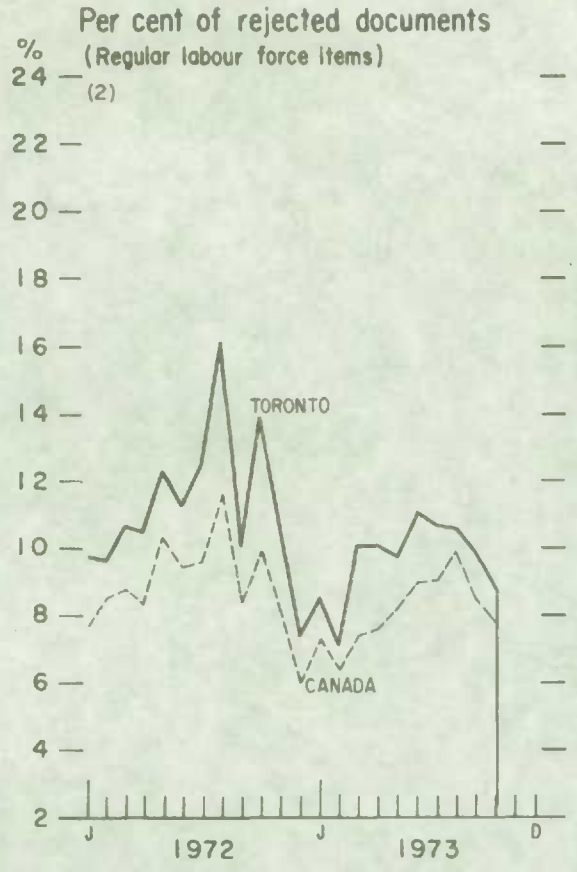


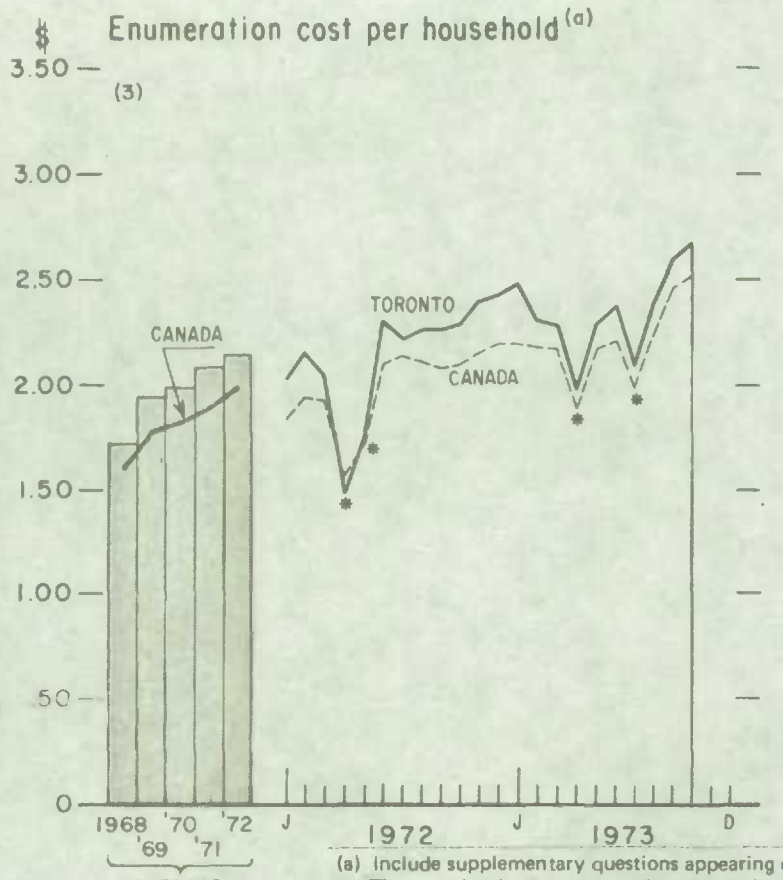
(a) Include supplementary questions appearing on the LFS regular schedule

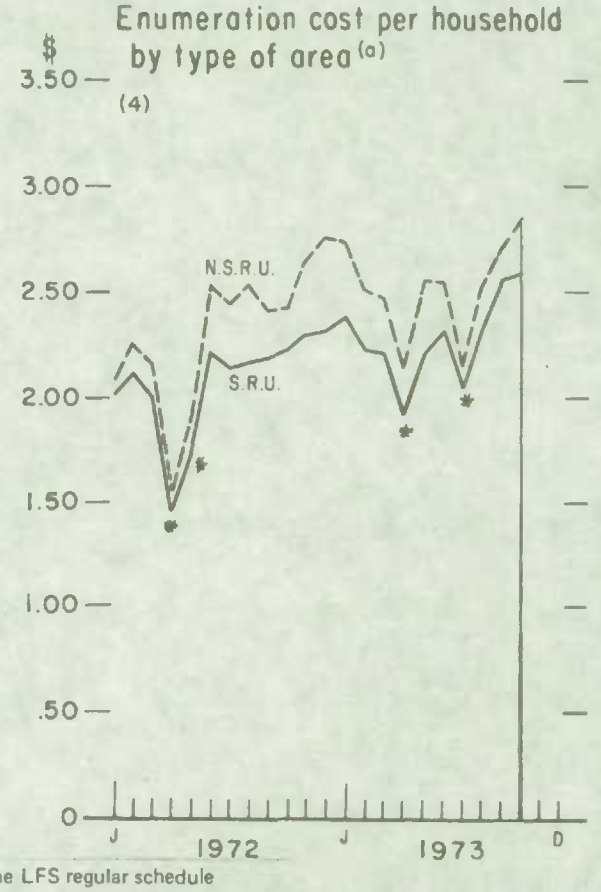
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Toronto Regional Office



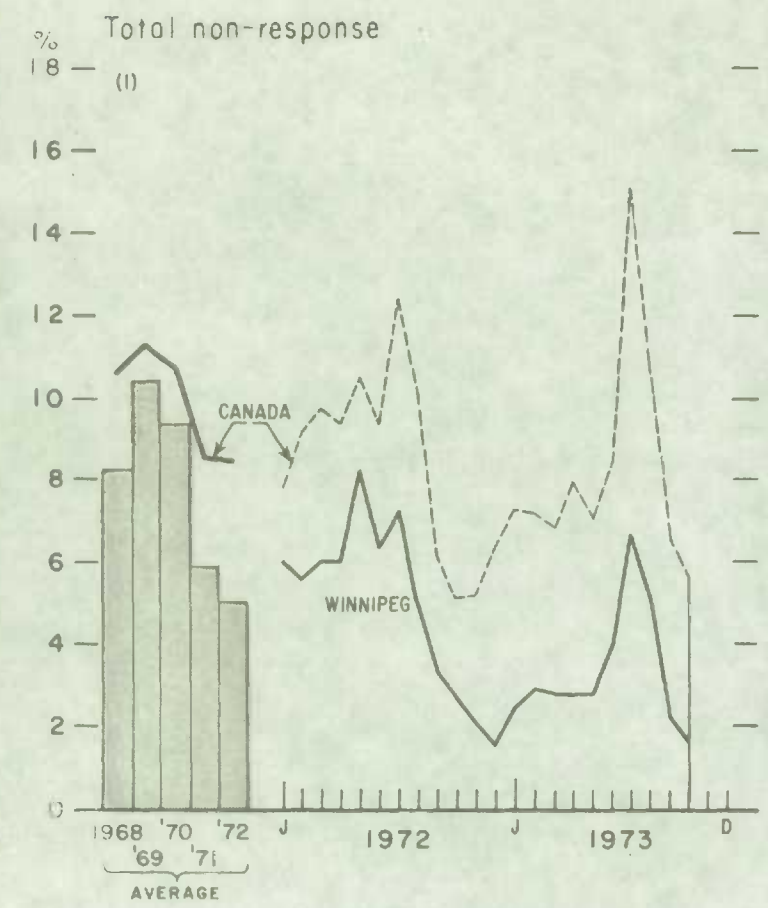


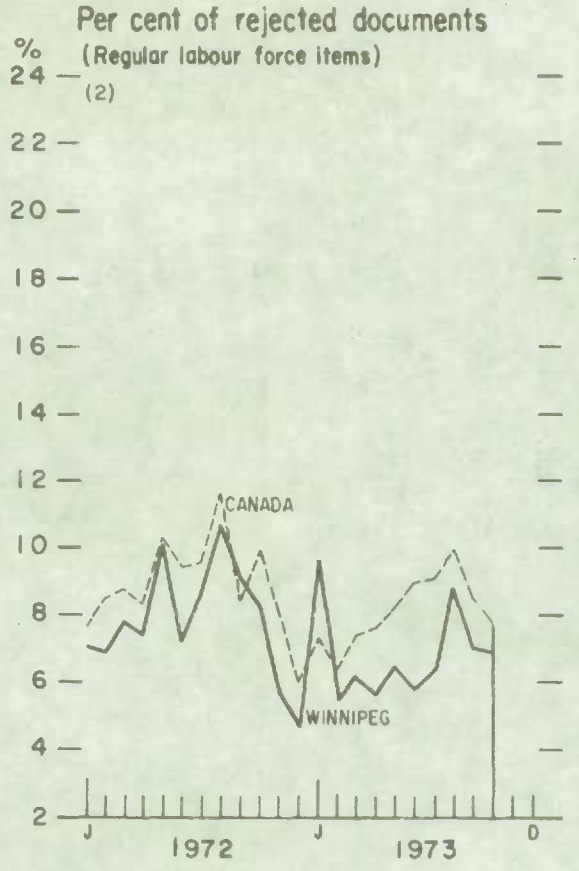


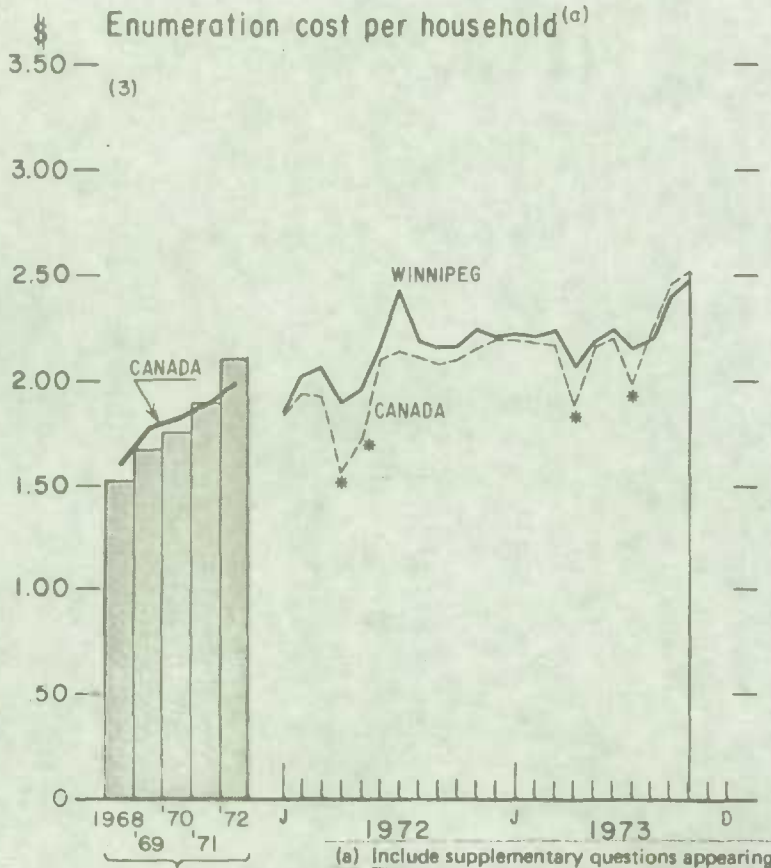


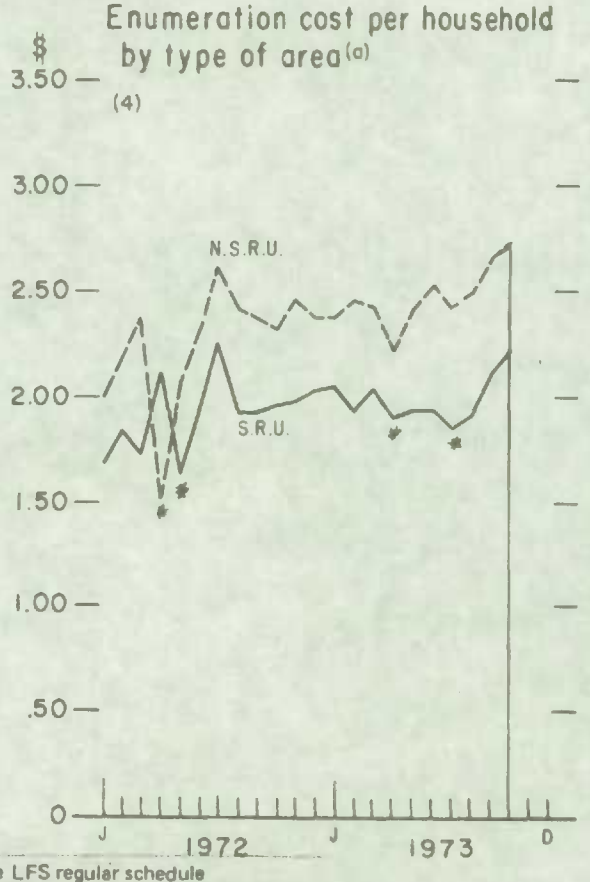
(a) Include supplementary questions appearing on the LFS regular schedule
* The variation in the enumeration cost is due to a major supplementary

Winnipeg Regional Office



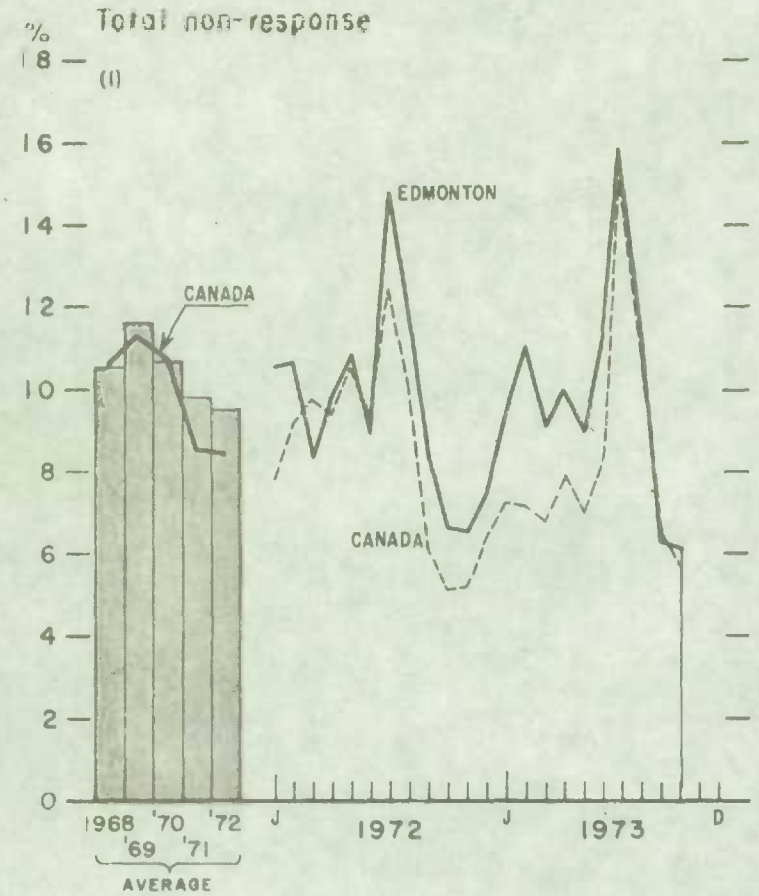


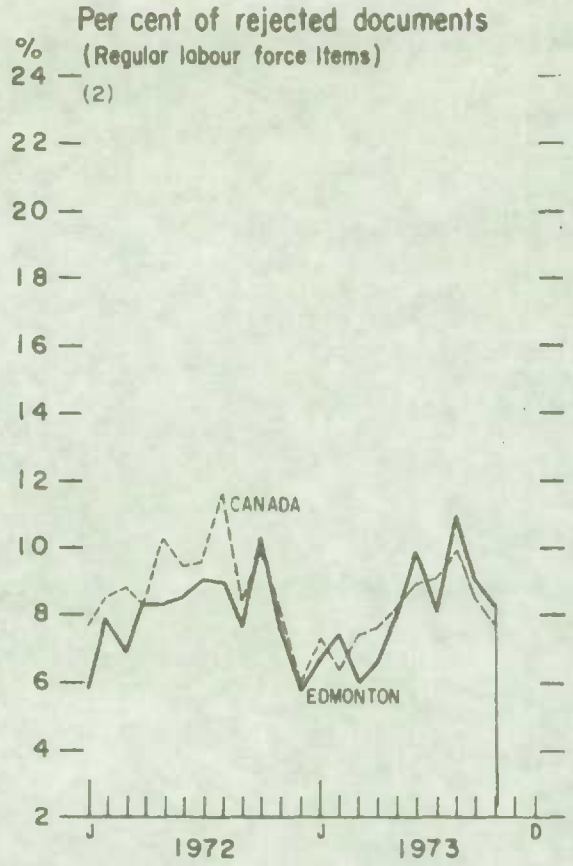


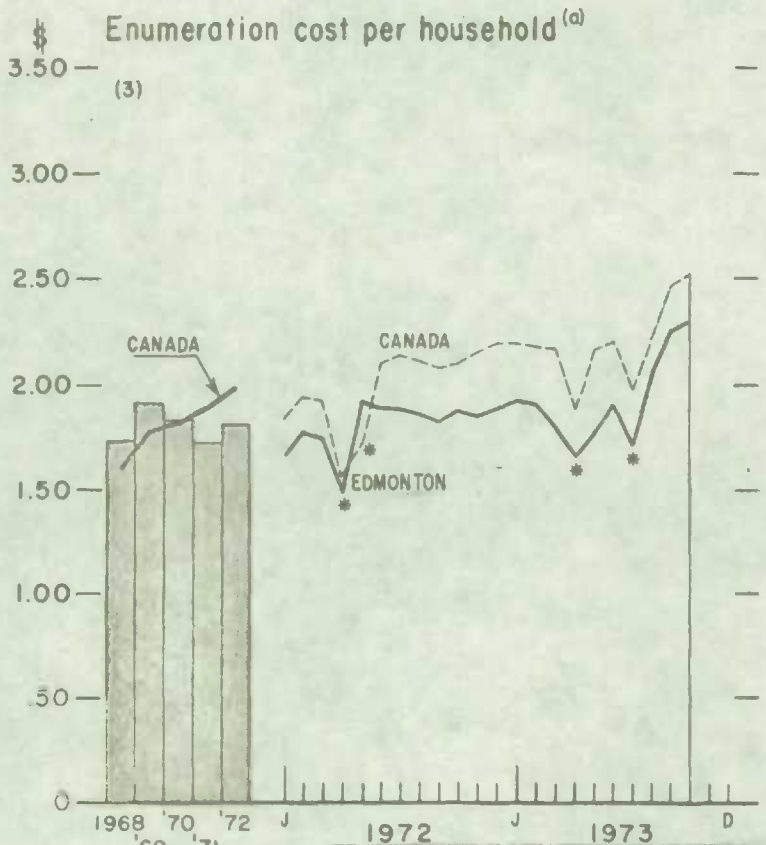


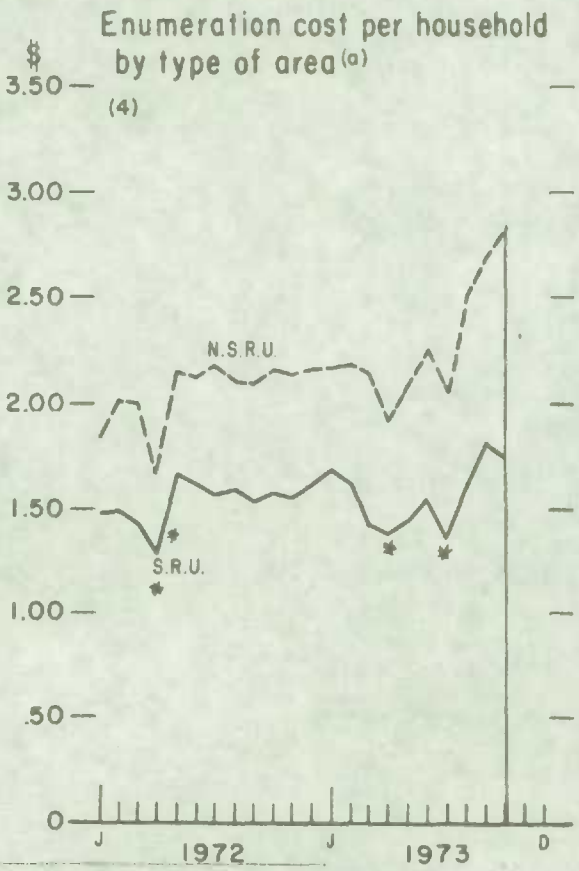
(a) Include supplementary questions appearing on the LFS regular schedule
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey

Edmonton Regional Office



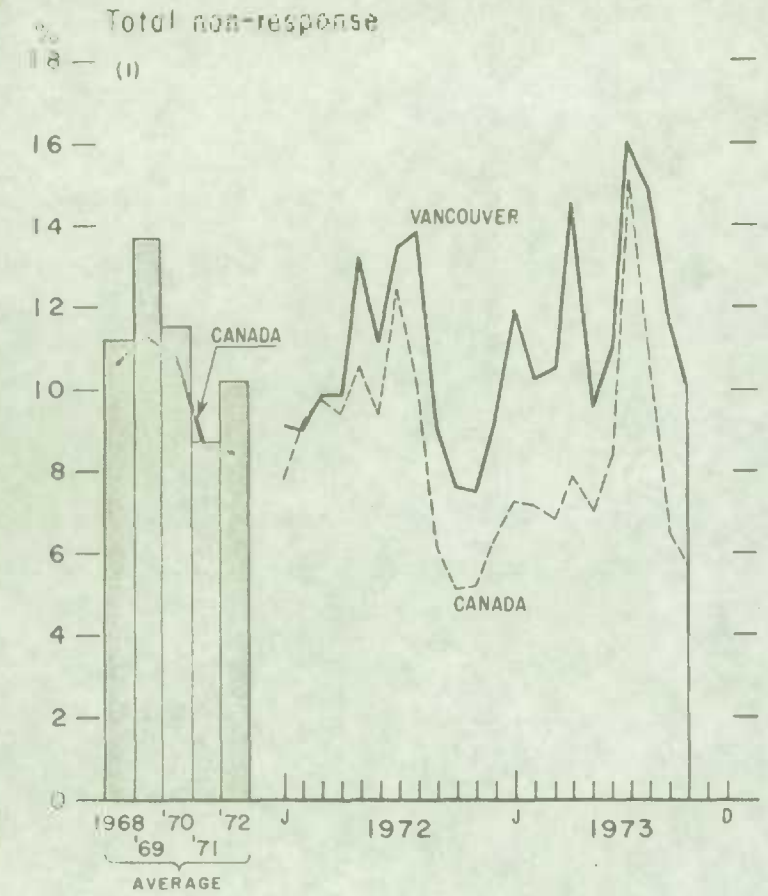


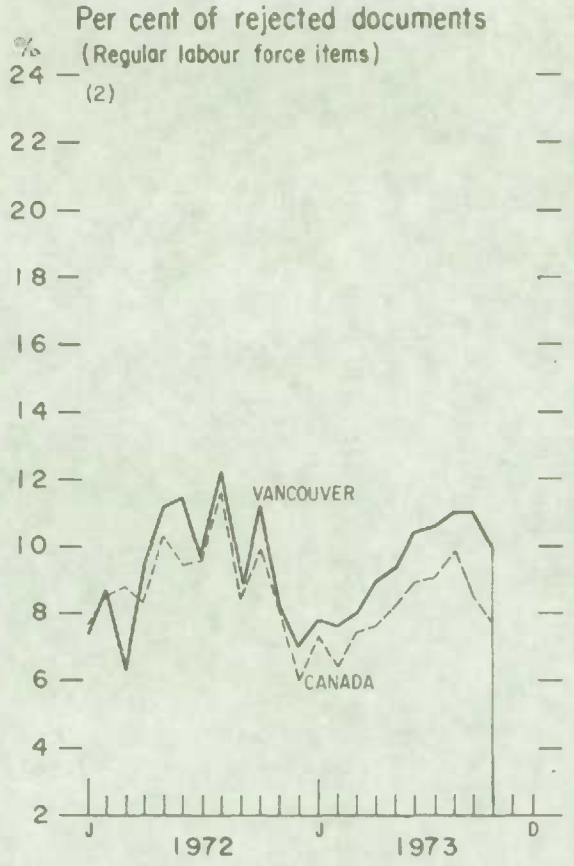


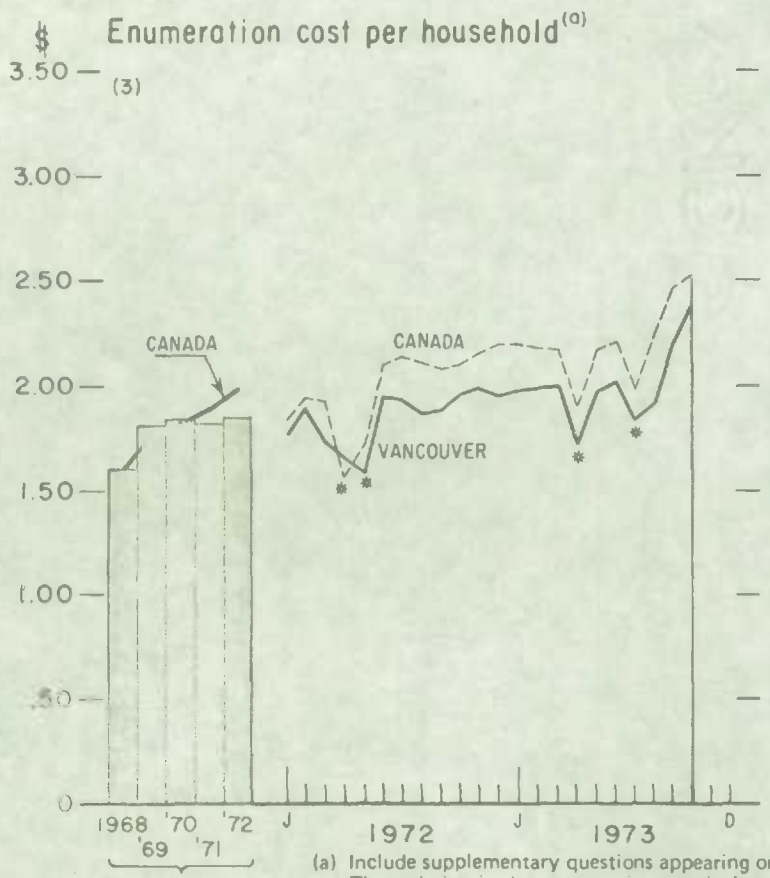


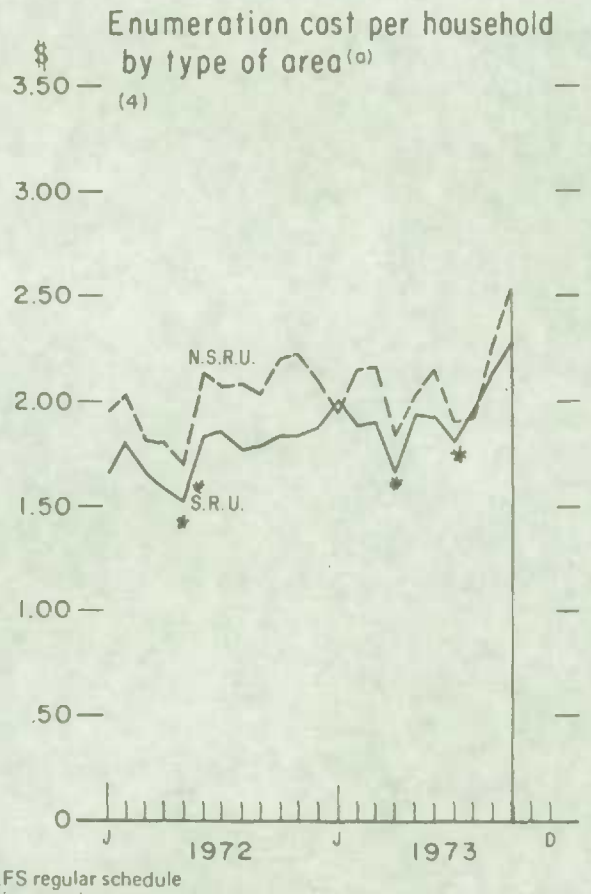
(a) Include supplementary questions appearing on the LFS regular schedule
* The variation in the enumeration cost is due to a major supplementary survey being conducted in conjunction with the regular Labour Force

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

Non-Response Rates by Component, Canada and the Regional Offices
September and October 1971, 1972 and 1973

	1973		1972		1971	
	Oct.	Sept.	Oct.	Sept.	Oct.	Sept.
Total						
Canada	5.7	6.5	5.1	6.1	7.1	7.0
St. John's	3.3	2.4	3.4	4.3	6.1	6.0
Halifax	5.5	6.1	5.5	6.1	6.9	7.4
Montreal	6.4	6.6	5.3	5.9	6.8	5.8
Ottawa	6.2	6.6	3.3	4.5	5.2	5.8
Toronto	4.9	6.7	4.4	5.5	9.0	8.2
Winnipeg	1.6	2.2	2.7	3.3	4.4	5.3
Edmonton	6.1	6.3	6.6	8.4	8.0	8.6
Vancouver	10.2	11.7	7.6	9.0	7.1	6.9
Temporarily Absent						
Canada	1.3	1.6	1.3	1.9	1.7	2.1
St. John's	0.9	0.8	1.4	1.8	2.2	2.1
Halifax	1.5	1.8	1.4	2.0	1.6	2.4
Montreal	1.1	1.3	0.7	1.4	1.2	1.3
Ottawa	1.0	1.5	1.0	1.4	1.8	2.4
Toronto	1.2	1.6	1.2	1.7	1.5	2.0
Winnipeg	0.8	1.0	1.3	1.4	1.4	1.8
Edmonton	1.2	1.5	1.9	2.7	2.3	2.3
Vancouver	2.4	2.9	2.1	2.6	2.3	2.6
No one home						
Canada	1.9	2.1	1.8	1.9	2.6	2.7
St. John's	1.5	1.1	0.6	0.9	1.8	1.8
Halifax	1.6	1.7	1.6	1.5	2.6	3.0
Montreal	2.6	2.5	2.4	2.1	2.6	2.6
Ottawa	3.2	2.5	1.0	0.8	2.0	1.9
Toronto	1.6	2.2	1.3	1.9	3.5	3.3
Winnipeg	0.3	0.4	0.5	0.6	1.4	1.4
Edmonton	1.7	1.7	2.9	2.8	3.0	3.8
Vancouver	3.1	3.7	3.0	3.1	2.2	2.0
Refusals						
Canada	2.0	2.1	1.4	1.8	1.5	1.5
St. John's	0.5	0.4	0.5	0.9	0.6	0.8
Halifax	2.1	2.3	1.7	2.1	1.6	1.4
Montreal	2.0	1.8	1.7	2.1	1.4	1.4
Ottawa	1.6	1.7	1.1	1.7	1.2	1.3
Toronto	1.7	1.9	1.1	1.5	1.9	1.7
Winnipeg	0.4	0.6	0.7	1.0	1.3	1.5
Edmonton	2.3	2.2	1.5	1.8	1.3	1.7
Vancouver	4.0	4.3	1.8	2.6	1.8	1.8
Other						
Canada	0.5	0.7	0.6	0.5	1.3	0.7
St. John's	0.4	0.1	0.9	0.7	1.5	1.3
Halifax	0.3	0.3	0.8	0.5	1.1	0.6
Montreal	0.7	1.0	0.5	0.3	1.6	0.5
Ottawa	0.4	0.9	0.2	0.6	0.2	0.2
Toronto	0.4	1.0	0.8	0.4	2.1	1.2
Winnipeg	0.1	0.2	0.2	0.3	0.3	0.6
Edmonton	0.9	0.9	0.3	1.1	1.4	0.8
Vancouver	0.7	0.8	0.7	0.7	0.8	0.5

FIELD DIVISION — DIVISION DES OPÉRATIONS RÉGIONALES

LFS 74

LABOUR FORCE SURVEY — ANALYSIS OF REJECTED DOCUMENTS
ENQUÊTE SUR LA MAIN-D'OEUVRE — ANALYSE DES DOCUMENTS REJETÉS

SURVEY No. 280
ENQUÊTE
Octobre 1973 October

	CANADA	ST.JOHN'S	HALIFAX	MONTRÉAL	OTTAWA	TORONTO	WINNIPEG	EDMONTON	VANCOUVER
TOTAL DOCUMENTS RECEIVED TOTAL DES DOCUMENTS REÇUS	76490	4512	12986	14646	4881	15903	7173	8459	7930
REJECTED DOCUMENTS DOCUMENTS REJETÉS	8482	446	1495	1469	536	1855	662	991	1028
% REJECTED DOCUMENTS POURCENTAGE DES DOCUMENTS REJETÉS	11.1	9.9	11.5	10.0	11.0	11.7	9.2	11.7	13.0
SUPPLEMENTARY ITEMS ARTICLES SUPPLÉMENTAIRES									
REJECTED DOCUMENTS DOCUMENTS REJETÉS	2516	119	572	533	144	453	166	290	239
% OF TOTAL DOCUMENTS POURCENTAGE DU TOTAL DES DOCUMENTS	3.3	2.6	4.4	3.6	3.0	2.9	2.3	3.4	3.0
% OF REJECTED DOCUMENTS POURCENTAGE DES DOCUMENTS REJETÉS	29.7	26.7	38.3	36.3	26.9	24.4	25.1	29.3	23.2
LABOUR FORCE ITEMS ARTICLES DE LA MAIN-D'OEUVRE									
REJECTED DOCUMENTS DOCUMENTS REJETÉS	5966	327	923	936	392	1402	496	701	789
% OF TOTAL DOCUMENTS POURCENTAGE DE TOUS LES DOCUMENTS	7.8	7.3	7.1	6.4	8.0	8.8	6.9	8.3	10.0
% OF REJECTED DOCUMENTS POURCENTAGE DES DOCUMENTS REJETÉS	70.3	73.3	61.7	63.7	73.1	75.6	74.9	70.7	76.8
No. OF CARELESS ERRORS NOMBRE DE FAUTES D'INATTENTION	5042	385	507	794	288	1148	463	691	766
AVE. PER DOCUMENT MOYENNE PAR DOCUMENT	.066	.085	.039	.054	.059	.072	.064	.082	.096
AVE. PER REJECTED DOCUMENT MOYENNE PAR DOCUMENT REJETÉ	.594	.863	.339	.540	.537	.619	.699	.697	.745
No. OF BLANKS IN ID. NOMBRE DE BLANCS À L'IDENTIFICATION	2759	249	203	434	128	565	299	402	479
AVERAGE PER DOCUMENT MOYENNE PAR DOCUMENT	.036	.055	.016	.030	.026	.036	.042	.048	.060
AVE. PER REJECTED DOCUMENT MOYENNE PAR DOCUMENT REJETÉ	.325	.558	.136	.295	.239	.304	.452	.406	.466

CARELESS ERROR: sum of errors for items 1 to 10 and 24, 25, and 26 on the LFS document.
FAUTE D'INATTENTION: total des erreurs aux articles 1-10 et 24, 25 et 26 sur le document LFS.

Enumeration Cost per Household by Regional Office, S.R.U. and N.S.R.U.
May to October 1972 and 1973

	1973						1972					
	Oct.	Sept.	Aug.	July	June	May	Oct.	Sept.	Aug.	July	June	May
All areas												
Canada ..... %	2.52	2.46	2.24	1.98	2.20	2.17	2.10	2.08	2.11	2.13	2.10	1.72
St. John's ..... %	2.89	2.71	2.50	2.10	2.50	2.59	2.35	2.27	2.40	2.38	2.27	1.81
Halifax ..... %	2.29	2.29	2.10	1.89	2.02	1.98	1.75	1.77	1.77	1.83	1.67	1.36
Montreal ..... %	2.70	2.66	2.41	2.07	2.30	2.36	2.27	2.29	2.36	2.25	2.31	1.80
Ottawa ..... %	2.66	2.68	2.44	2.07	2.49	2.33	2.26	2.29	2.25	2.31	2.28	1.70
Toronto ..... %	2.67	2.60	2.37	2.09	2.37	2.29	2.29	2.26	2.26	2.22	2.30	1.77
Winnipeg ..... %	2.48	2.40	2.22	2.16	2.25	2.19	2.16	2.16	2.19	2.43	2.16	1.87
Edmonton ..... %	2.29	2.24	2.06	1.72	1.91	1.78	1.88	1.83	1.86	1.89	1.89	1.93
Vancouver ..... %	2.37	2.20	1.92	1.84	2.01	1.98	1.97	1.89	1.88	1.94	1.95	1.59
S.R.U.												
Canada ..... %	2.35	2.32	2.09	1.85	2.06	2.04	1.99	1.99	1.98	2.01	1.98	1.62
St. John's ..... %	2.37	2.17	2.20	1.85	2.27	2.36	1.92	1.98	2.08	2.30	2.13	1.72
Halifax ..... %	2.07	2.01	1.88	1.89	1.80	1.80	1.58	1.66	1.66	1.63	1.45	1.25
Montreal ..... %	2.55	2.52	2.21	1.88	2.13	2.23	2.18	2.20	2.22	2.15	2.19	1.70
Ottawa ..... %	2.50	2.56	2.28	2.03	2.36	2.24	2.19	2.27	2.14	2.30	2.23	1.68
Toronto ..... %	2.59	2.57	2.32	2.06	2.31	2.20	2.23	2.19	2.17	2.14	2.22	1.72
Winnipeg ..... %	2.21	2.12	1.92	1.86	1.94	1.94	1.97	1.93	1.93	2.25	1.96	1.63
Edmonton ..... %	1.74	1.81	1.60	1.37	1.55	1.44	1.57	1.53	1.59	1.57	1.61	1.66
Vancouver ..... %	2.27	2.14	1.94	1.80	1.92	1.94	1.84	1.79	1.77	1.86	1.84	1.53
N.S.R.U.												
Canada ..... $	2.74	2.65	2.44	2.15	2.40	2.32	2.23	2.19	2.26	2.27	2.22	1.83
St. John's ..... $	3.08	2.91	2.59	2.20	2.60	2.67	2.52	2.36	2.52	2.40	2.31	1.84
Halifax ..... $	2.44	2.47	2.24	2.00	2.16	2.10	1.86	1.85	1.85	1.96	1.83	1.43
Montreal ..... $	2.96	2.92	2.80	2.43	2.64	2.61	2.43	2.46	2.63	2.44	2.55	2.00
Ottawa ..... $	2.90	2.85	2.67	2.13	2.72	2.46	2.37	2.30	2.41	2.33	2.34	1.72
Toronto ..... $	2.86	2.72	2.51	2.16	2.54	2.55	2.43	2.42	2.53	2.44	2.53	1.90
Winnipeg ..... $	2.73	2.66	2.48	2.41	2.52	2.41	2.32	2.37	2.42	2.61	2.32	2.07
Edmonton ..... $	2.83	2.68	2.51	2.05	2.26	2.09	2.16	2.09	2.10	2.18	2.12	2.15
Vancouver ..... $	2.53	2.27	1.91	1.90	2.15	2.03	2.20	2.03	2.08	2.07	2.14	1.70

	Month-to-month change								Year-to-year change			
	1973				1972							
	Sept. to Oct.	Aug. to Sept.	July to Aug.	June to July	Sept. to Oct.	Aug. to Sept.	July to Aug.	June to July	Oct. 1972 to Oct. 1973	Sept. 1972 to Sept. 1973	Aug. 1972 to Aug. 1973	July 1972 to July 1973
All areas												
Canada ..... %	+ 0.06	+ 0.22	+ 0.26	- 0.22	+ 0.02	- 0.03	- 0.02	+ 0.03	+ 0.42	+ 0.38	+ 0.13	- 0.15
St. John's ..... %	+ 0.18	+ 0.21	+ 0.40	- 0.40	+ 0.08	- 0.13	+ 0.02	+ 0.11	+ 0.54	+ 0.44	+ 0.10	- 0.28
Halifax ..... %	-	+ 0.19	+ 0.21	- 0.13	- 0.02	-	- 0.06	+ 0.16	+ 0.54	+ 0.52	+ 0.33	+ 0.06
Montreal ..... %	+ 0.04	+ 0.25	+ 0.34	- 0.23	- 0.02	- 0.07	+ 0.11	- 0.06	+ 0.43	+ 0.37	+ 0.05	- 0.18
Ottawa ..... %	- 0.02	+ 0.24	+ 0.37	- 0.42	- 0.03	+ 0.04	- 0.06	+ 0.03	+ 0.40	+ 0.39	+ 0.19	- 0.24
Toronto ..... %	+ 0.07	+ 0.23	+ 0.28	- 0.28	+ 0.03	-	+ 0.04	- 0.08	+ 0.38	+ 0.34	+ 0.11	- 0.13
Winnipeg ..... %	+ 0.08	+ 0.18	+ 0.06	- 0.09	-	- 0.03	- 0.24	+ 0.27	+ 0.32	+ 0.24	+ 0.03	- 0.27
Edmonton ..... %	+ 0.05	+ 0.18	+ 0.34	- 0.19	+ 0.05	- 0.03	- 0.03	-	+ 0.41	+ 0.41	+ 0.20	- 0.17
Vancouver ..... %	+ 0.17	+ 0.28	+ 0.08	- 0.17	+ 0.08	+ 0.01	- 0.06	- 0.01	+ 0.40	+ 0.31	+ 0.04	- 0.10
S.R.U.												
Canada ..... %	+ 0.03	+ 0.23	+ 0.24	- 0.21	-	+ 0.01	- 0.03	+ 0.03	+ 0.36	+ 0.33	+ 0.11	- 0.16
St. John's ..... %	+ 0.20	- 0.03	+ 0.35	- 0.42	- 0.06	- 0.10	- 0.22	+ 0.17	+ 0.45	+ 0.19	+ 0.12	- 0.45
Halifax ..... %	+ 0.06	+ 0.13	- 0.01	+ 0.09	- 0.08	-	+ 0.03	+ 0.18	+ 0.49	+ 0.35	+ 0.22	+ 0.26
Montreal ..... %	+ 0.03	+ 0.31	+ 0.33	- 0.25	- 0.02	- 0.02	+ 0.07	- 0.04	+ 0.37	+ 0.32	- 0.01	- 0.27
Ottawa ..... %	- 0.06	+ 0.28	+ 0.25	- 0.33	- 0.08	+ 0.13	- 0.16	+ 0.07	+ 0.31	+ 0.29	+ 0.14	- 0.27
Toronto ..... %	+ 0.02	+ 0.25	+ 0.26	- 0.25	+ 0.04	+ 0.02	+ 0.03	- 0.08	+ 0.36	+ 0.38	+ 0.15	- 0.08
Winnipeg ..... %	+ 0.09	+ 0.20	+ 0.06	- 0.08	+ 0.04	-	- 0.32	+ 0.29	+ 0.24	+ 0.19	- 0.01	- 0.39
Edmonton ..... %	- 0.07	+ 0.21	+ 0.23	- 0.18	+ 0.04	- 0.06	+ 0.02	- 0.04	+ 0.17	+ 0.28	+ 0.01	- 0.20
Vancouver ..... %	+ 0.13	+ 0.20	+ 0.14	- 0.12	+ 0.05	+ 0.02	- 0.09	+ 0.02	+ 0.43	+ 0.35	+ 0.17	- 0.06
N.S.R.U.												
Canada ..... $	+ 0.09	+ 0.21	+ 0.29	- 0.25	+ 0.04	- 0.07	- 0.01	+ 0.05	+ 0.51	+ 0.46	+ 0.18	- 0.12
St. John's ..... $	+ 0.17	+ 0.32	+ 0.39	- 0.40	+ 0.16	- 0.16	+ 0.12	+ 0.09	+ 0.56	+ 0.55	+ 0.07	- 0.20
Halifax ..... $	- 0.03	+ 0.23	+ 0.24	- 0.16	+ 0.01	-	- 0.11	+ 0.13	+ 0.58	+ 0.62	+ 0.39	+ 0.04
Montreal ..... $	+ 0.04	+ 0.12	+ 0.37	- 0.21	- 0.03	- 0.17	+ 0.19	- 0.11	+ 0.53	+ 0.46	+ 0.17	- 0.01
Ottawa ..... $	+ 0.05	+ 0.18	+ 0.54	- 0.59	+ 0.07	- 0.11	+ 0.08	- 0.01	+ 0.53	+ 0.55	+ 0.26	- 0.20
Toronto ..... $	+ 0.14	+ 0.21	+ 0.35	- 0.38	+ 0.01	- 0.11	+ 0.09	- 0.09	+ 0.43	+ 0.30	- 0.02	- 0.28
Winnipeg ..... $	+ 0.07	+ 0.18	+ 0.07	- 0.11	- 0.05	- 0.05	- 0.19	+ 0.29	+ 0.41	+ 0.29	+ 0.06	- 0.20
Edmonton ..... $	+ 0.15	+ 0.17	+ 0.46	- 0.21	+ 0.07	- 0.01	- 0.08	+ 0.06	+ 0.67	+ 0.59	+ 0.41	- 0.13
Vancouver ..... $	+ 0.26	+ 0.36	+ 0.01	- 0.25	+ 0.17	- 0.05	+ 0.01	- 0.07	+ 0.33	+ 0.24	- 0.17	- 0.17

(1) The variation in the enumeration cost for July 1973 is due to a major supplementary survey being conducted in conjunction with the regular Labour Force Survey.

Note: Slippage rates have been deleted temporarily from this table as historical rates are not yet available on the revised basis. However, a table is given on next page giving slippage rates for September and October 1973 calculated on population projections based on 1971 Census.

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.

A complete analysis of rejects for the current month, including rejects for the additional questions (supplementary), is given in a separate table. It should be noted that the total reject rate is affected considerably by the supplementary questions which vary in complexity from one month to the next.

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 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 October, 1973

	Population Estimate	Employed				Unemployed				In Labour Force			
		Estimate	C.V.	Symbol	B.F.	Estimate	C.V.	Symbol	B.F.	Estimate	C.V.	Symbol	B.F.
Canada	16,247	8,882	0.34	A	1.00	429	2.61	D	1.33	9,311	0.32	A	0.98
Nfld.	373	160	2.03	C	1.51	18	8.97	E	2.12	179	1.80	C	1.45
P.E.I.	80	39	1.74	C	0.33	2	14.88	F	0.73	41	1.11	C	0.14
N.S.	561	268	1.45	C	1.43	15	11.52	F	2.55	283	1.38	C	1.44
N.B.	467	228	1.39	C	1.15	17	10.53	F	2.68	245	1.26	C	1.09
Que.	4,550	2,395	0.71	B	0.96	152	4.29	D	1.09	2,547	0.68	B	1.01
Ont.	5,923	3,386	0.58	B	0.96	128	5.19	E	1.28	3,514	0.53	A	0.91
Man.	711	397	1.49	C	1.21	11	14.31	F	1.37	409	1.44	C	1.21
Sask.	652	352	1.87	C	1.79	7	18.54	G	1.41	359	1.79	C	1.73
Alta.	1,192	699	0.81	B	0.67	22	9.60	E	1.22	721	0.79	B	0.70
B.C.	1,736	957	0.98	B	1.10	56	8.11	E	2.00	1,013	0.92	B	0.99

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

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

Analysis of Sub-Provincial Contributions to the Variance

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

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

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

The binomial factor of 2.12 for the estimate of unemployed in Newfoundland is high, especially in comparison with the binomial factor of 1.77 for the September survey. The variance contribution by PSUs 04041 & 04043 to the variance of the estimate of unemployed in Newfoundland has been excessively large in 3 of the 4 most recent months that the sub-provincial analysis has been undertaken.

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

PSUs or Subunits	Percentage of the Variance Contributed	Desired Percentage Contribution
04003 & 04005	22.8	2.5
04041 & 04043	14.1	1.7
03102	4.0	1.2
04201	8.7	3.2
All other PSUs and Subunits	50.4	91.4

In Nova Scotia the binomial factor of 2.55 for the estimate of Unemployed indicates that a study of sub-provincial contributions to the variance should be carried out. The analysis revealed that two pairs of PSUs and 3 subunits were a major cause of the high factor.

Table 2b) Actual vs Desired Contribution to the Nova Scotia Variance of Unemployed by PSUs or Subunits

PSUs or Subunits	Percentage of the Variance Contributed	Desired Percentage Contribution
21042 & 21046	10.9	2.3
21062 & 21064	25.4	2.5
20101	9.3	2.6
20107	6.9	1.2
22201	7.3	2.1
All other PSUs and Subunits	40.2	89.3

Also in Nova Scotia, the binomial factor for the estimate of Employed increased to 1.43 in October from 1.04 in September. Economic regions 20 and 22 contained 1 and 3 "problem areas" respectively. These are presented in the following table. Of particular interest in Nova Scotia is the pair of special areas 20901-02 forming a type of area which often presents a design problem with consequent high variances.

Table 2c) Actual vs Desired Contribution to the N.S. Variance of Employed by PSUs or Subunits

PSUs or Subunits	Percentage of the Variance Contributed	Desired Percentage Contribution
22002 & 22008	14.3	4.6
20901 - 20902	8.9	1.1
22108	6.0	1.9
22109	8.2	2.6
All other PSUs and Subunits	62.6	89.8

New Brunswick's binomial factor for the estimate of Unemployed was 2.68. An analysis revealed that 3 pairs of PSUs and 2 subunits contributed 57.4% of the variance while the desired contribution was 16.4%.

Table 2d) Actual vs Desired Contribution to the N.B. Variance of Unemployed by PSUs or Subunits

PSUs or Subunits	Percentage of the Variance Contributed	Desired Percentage Contribution
30002 & 30004	14.8	4.3
33022 & 33027	16.2	3.4
33061 & 33066	13.3	4.4
30101	9.2	2.9
31107	3.9	1.4
All other PSUs and Subunits	42.6	83.6

The binomial factor for Employed in Saskatchewan is the highest binomial factor for Employed in any province. Although at a value of 1.79 the binomial factor is down slightly from September, it is nonetheless higher in magnitude than for previous months. An analysis of sub-provincial contributions to the variance resulted in one pair of PSUs in which the percentage contribution far exceeded the desired percentage contribution.

Table 2e) Actual vs Desired Contribution to the Saskatchewan Variance of Employed by PSUs or Subunits

PSUs or Subunits	Percentage of the Variance Contributed	Desired Percentage Contribution
74004 & 74016	28.8	5.5
All other PSUs and Subunits	71.2	94.5

In British Columbia the value of 2.00 for the binomial factor of Unemployed is up considerably from the value of 1.51 in September. A subunit in economic region 95 contributed an excessively large portion of the provincial variance.

Table 2f) Actual vs Desired Contribution to the British Columbia Variance of Unemployed by PSUs or Subunits

PSUs or Subunits	Percentage of the Variance Contributed	Desired Percentage Contribution
95201	22.9	1.2
All other PSUs and Subunits	77.1	98.8

NON-RESPONSE

The contents of this appendix are taken from publication NR73-10 (October 1973), Non-Response Rates in the Canadian Labour Force Survey, prepared by D.S. Murray, Household Surveys Development Staff, and E.T. McLeod of Field Division.

Non-Response Rates

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.

The non-response rates are presented in the form of graphs for Canada and for regional offices. The rate of non-response is given for each of the four components[1] and for total non-response by month and year.

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).

II. Format of Non-Response Graphs and Monthly Meeting

The non-response rate for each regional office is presented by component on a separate page. This format facilitates the examination of the contributions of each component of non-response to the total non-response. In this form, comparison of regional offices can also be made.

The monthly meeting on non-response with D.S. Murray, Labour Force Methodology Section and E.T. McLeod, Field Division, deals with the more pronounced movements in the current non-response data.

Commencing with the report on January, 1973, non-response bar charts have been included to show the non-response for each Economic Region (E.R.) in each regional office. The R.O. levels, in total, are shown in a chart under the section headed Canada. Table 1, contains, for Canada and each regional office, the total non-response and each of its components.

[1] See definitions on Page 2

Definitions

Total households includes all sampled households but excluding vacant dwellings, households not to be interviewed, etc.

Non-response is defined as the proportion of total households which were not interviewed for the reasons shown and is the sum of the four components given below.

1 Temporarily absent. When all household members are away for the entire interview week. (T.A.)

2 No one home. When after a reasonable number of callbacks, there is no responsible member to interview. (N_1)

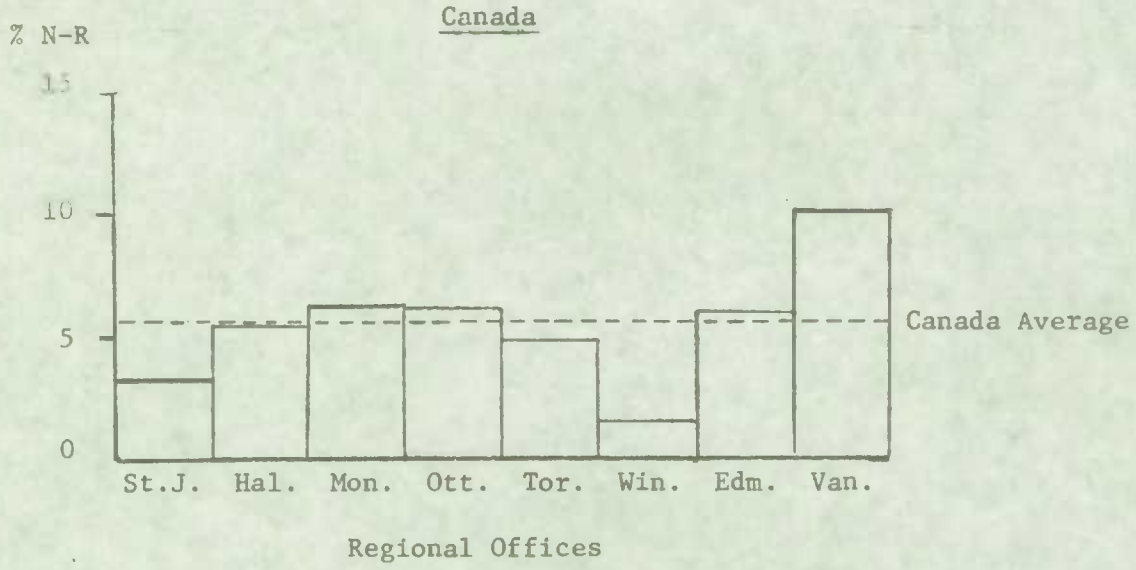
3 Refusal. When a responsible member of the household definitely refuses to provide the survey information requested. (N_2)

4 Other. When none of the foregoing reasons are applicable, e.g., roads impassable, enumerator not available, death, illness, language problems, etc. (N_{3-5})

Canada

The overall rate at the Canada level decreased from 6.5% in September to 5.7% in October. Each component decreased by between 0.1% (N_2) and 0.3% (T.A.). In 1972 there was a larger decrease between September and October. Last year the rate declined from 6.1% to 5.1% with the largest decrease (0.6%) occurring in the T.A. component. Whereas there were decreases in all components in October 1973, in 1972 the T.A., N_1 and N_2 components decreased and "other" increased 0.1%.

Again in October the Winnipeg Office indicated the lowest overall rate, 1.6%, and the Vancouver Office the highest, 10.2%.



St.John's

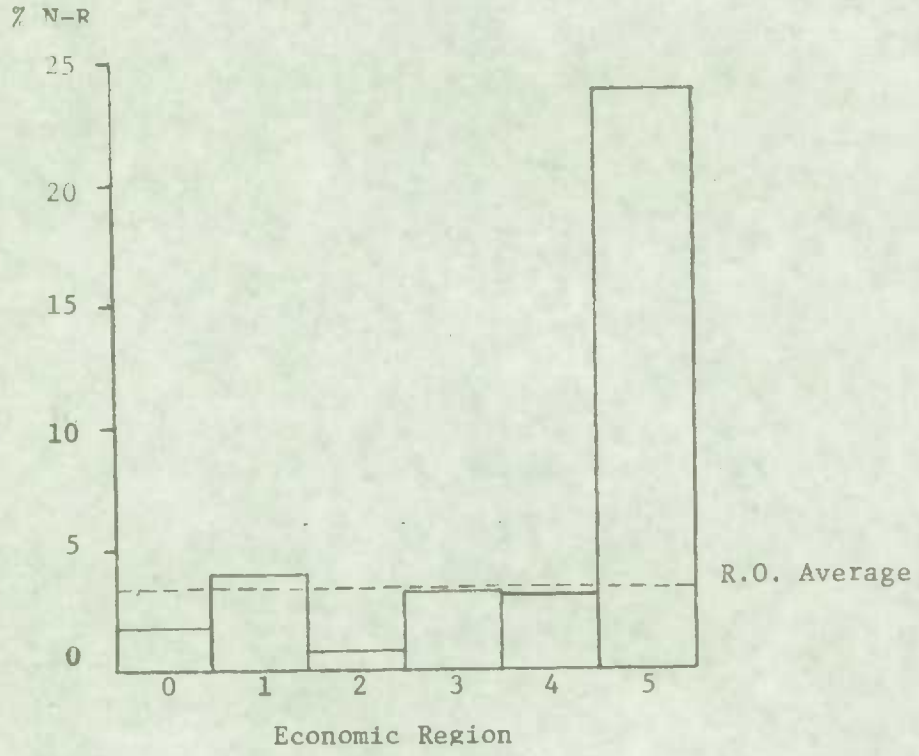
The overall non-response increased from 2.4% in September to 3.3% in October. Although the St.John's Office was the only office to show a higher October rate than in September the present level is the second lowest in Canada and remains well below the Canada level.

All components increased between 0.1% (T.A., N_2) and 0.4% (N_1). The levels for the T.A., N_1 and N_2 components were the second lowest in Canada.

Only E.R. 05, Goose Bay, indicated an overall rate in excess of 4.0%. Of the 21 households in the E.R. 4 or 19.0% were non-respondent due to N_1 and 1 or 4.8% refused.

Despite the 0.9% increase overall from September to October this year, the rate remains below the 3.4% shown in October 1972.

St.John's



Halifax

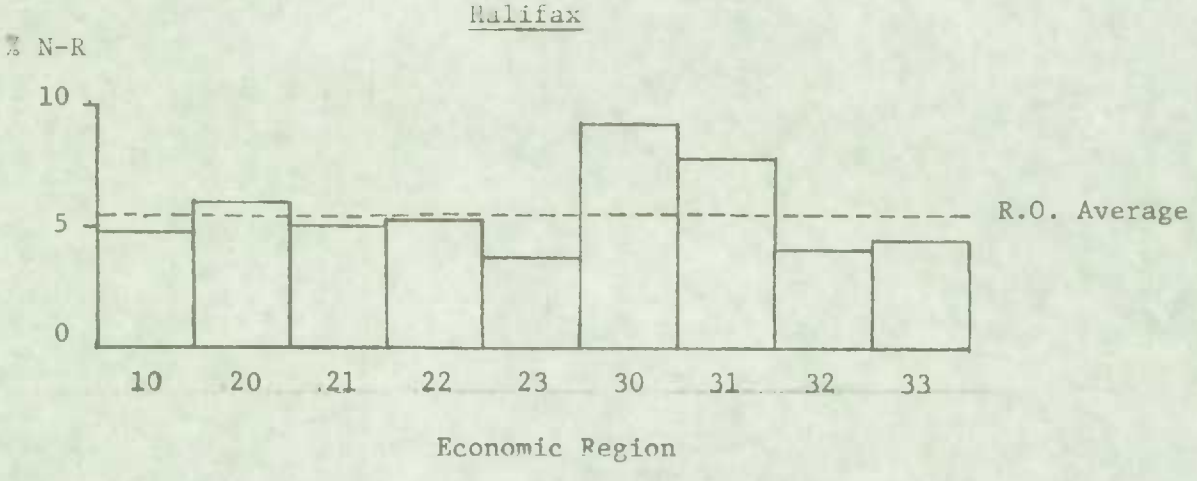
The non-response rate in the Halifax Office decreased from 6.1% in September to 5.5% in October. The T.A., N_1 and N_2 rates declined by 0.3%, 0.1% and 0.2% respectively and the "other" component remained constant at 0.3%. Unfortunately, the refusal rate, at 2.1%, was the largest component of non-response for the office.

Although the N_2 rate for the office declined from 2.3% in September, two E.R.'s continued to indicate rates in excess of 2.5%:

E.R. 30	Moncton	5.0%	N_2
E.R. 31	St.John	2.8%	N_2

These two E.R.'s contain 20% the households in the regional office but contributed 36% of the refusal households. It should, however, be noted that the N_2 rates in these E.R.'s did decrease from 6.1% and 3.1% in September, respectively. It is hoped that these decreases are the beginings of longer term trends.

Compared with the rate in October 1972 the overall Halifax non-response rate indicates no change. Small changes occurred in three components : T.A. and N_2 increased by 0.1% and 0.4% respectively ; "other" decreased by 0.5% and N_1 remained constant.



Montreal

The overall rate decreased slightly from 6.6% in September to 6.4% in October. Small changes occurred in all components : T.A. and "other" decreased and N_1 and N_2 increased.

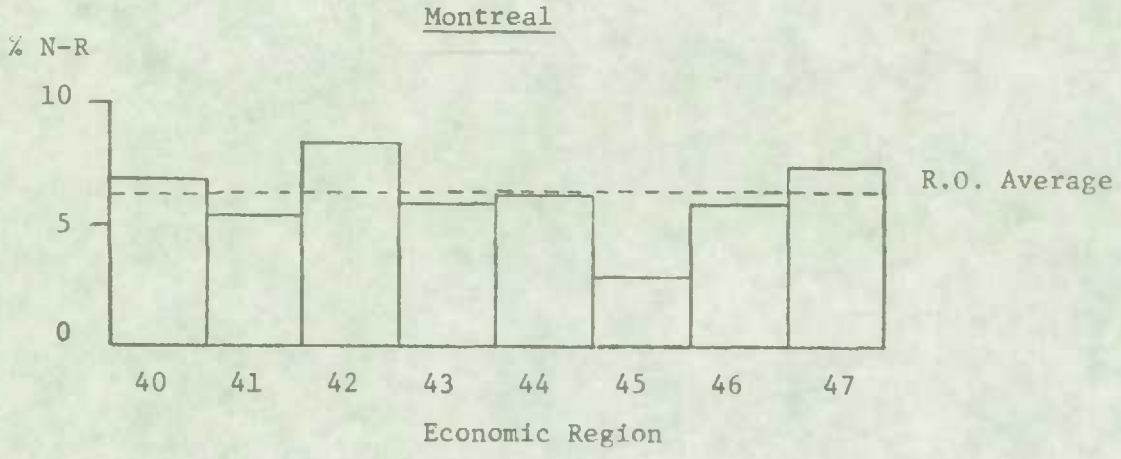
None of the 8 E.R.'s covered by this office indicated overall rates in execess of 7.4%. The two large metropolitan areas of the Province of Quebec indicated fairly high N_2 rates :

Quebec City	2.9%	refusal rate
Montreal and area	2.4%	refusal rate

These two areas contained 80 of the 120 refusal households attributable to the regional office and are primarily responsible for the office refusal rate increasing to 2.0%.

The October 1973 overall rate was 1.1% higher than the October 1972 rate of 5.3%. All components were higher in 1973. The components and overall rate changed as follows :

	T.A.	N_1	N_2	other	Overall
October 1972	0.7%	2.4%	1.7%	0.5%	5.3%
October 1973	1.1	2.6	2.0	0.7	6.4
Change (1973-1972)	0.4	0.2	0.5	0.2	1.1



Ottawa

The overall non-response rate declined by 0.4% to 6.2% in October. From September to October changes occurred as follows :

	September	October	Change (Oct. - Sept.)
T.A.	1.5%	1.0%	-0.5%
N_1	2.5	3.2	0.7
N_2	1.7	1.6	-0.1
other	0.9	0.4	-0.5
overall	6.6	6.2	-0.4

The increase in the N_1 rate is peculiar in that only one E.R. had a higher rate in October than in September. In September the regional office indicated 50 households were not enumerated due to "no one at home" : 10 of these were in E.R. 48, Hull. In October the office showed 66 such households of which 28 were in E.R. 48. All remaining E.R.'s, both in Ontario and Quebec, covered by this office showed the same number of or fewer N_1 households in October. Thus, all of the increase in N_1 at the office level is attributalbe to E.R. 48.

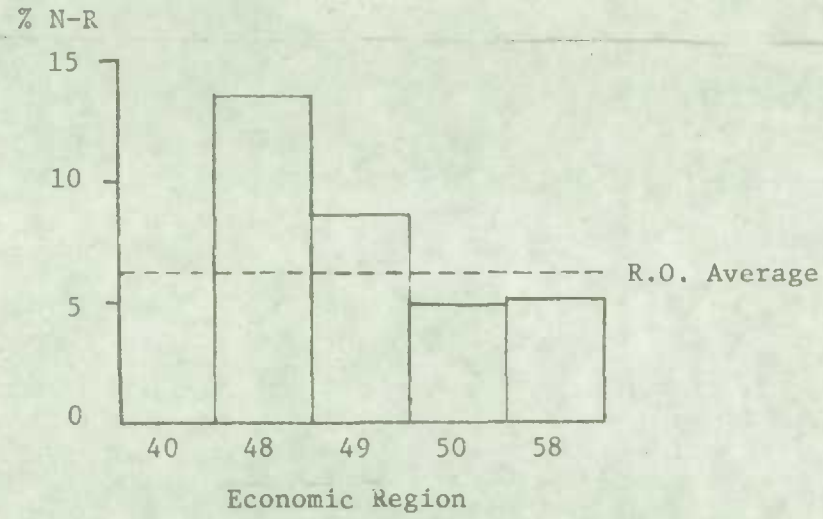
These 28 households were contained in four assignments. It appears that a large percentage of these households was not covered due to "no interviewer available". Thus the categorization of some of these households as N_1, by the regional office staff, was inaccurate. At least some of these households should have been classified as not interviewed due to "other" reasons. One of the four interviewers resigned during the survey and another interviewer became ill and was not able to complete the assignment. The remaining two interviewers had 4 and 2 households which were classified as N_1 by the regional office. The office has provided no information on these 6 households and thus an explanation for their being N_1 is not available. Had the N_1 rate for the office not increased the overall non-response for Ottawa would have been below the Canada level.

Compared with the October 1972 overall rate of 3.3% this year's October rate is high. Changes occurred as follows:

	October 1972	October 1973	Change (1973-1972)
T.A.	1.0%	1.0%	0.0%
N_1	1.0	3.2	2.2
N_2	1.1	1.6	0.5
other	0.2	0.4	0.2
overall	3.3	6.2	2.9

It can be seen that the N_1 component is largely responsible for the higher October, 1973 rate.

Ottawa



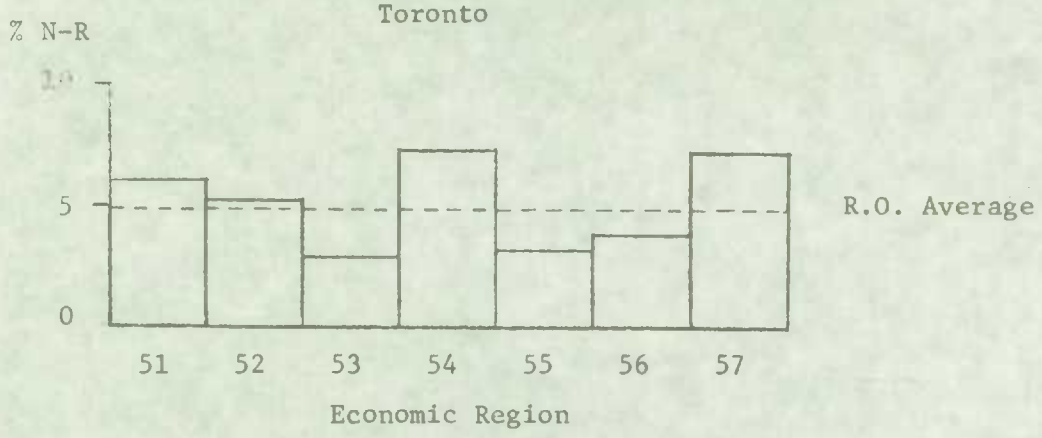
Toronto

From September to October the overall rate declined by 1.8% to 4.9%. Decreases occurred in all components ; the largest being 0.6% in "other".

The lower "other" rate cannot be attributed to improved interviewer coverage. In September schedules for 39 households were lost in the mails. In the October survey, no households were classified as non-respondent for this reason and consequently, the "other" component was reduced by 39 households or 0.6%. Regardless, the overall rate is well below the Canada level and none of the components is at an unacceptably high level.

The non-response in the 7 E.R.'s showed overall rates between 2.9% and 7.3%.

Compared with the October 1972 rate of 4.4% there has been an increase in this year's October level. The T.A. component remained constant at 1.2% ; N_1 and N_2 increased from 1.3% and 1.1% to 1.6% and 1.7% respectively ; the "other" component declined from 0.8% to 0.4%.



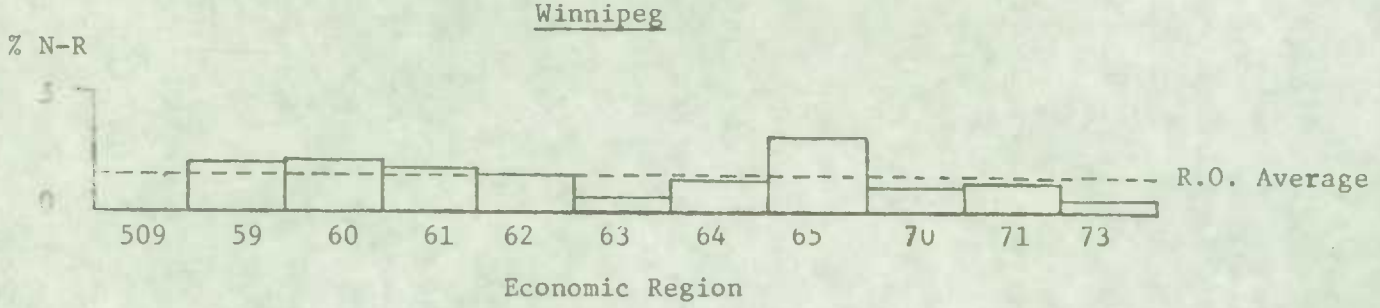
Winnipeg

The Winnipeg Office showed a 1.1% overall decrease from September to October (from 2.7% to 1.6%). Each component decreased between 0.1% ("other") and 0.5% (T.A.).

The October rate was the lowest indicated by all offices since December, 1972 when this same office again showed a 1.6% rate.

The very few non-respondent households were distributed evenly throughout all E.R.'s : the rates ranging from 0.7% in E.R. 73 (an area North-East of Moose Jaw) to 3.1% in E.R. 65 (an area North of Brandon).

The 1973 October rate was 0.6% lower than the rate in October last year. All components were lower in 1973 by between 0.1% and 0.2%.



Edmonton

In October, the Edmonton Office continued to show a lower overall non-response rate. The rate declined from 6.3% in September to 6.1% in October. A decrease, from 1.5% to 1.2% in T.A. was partially offset by an increase, from 2.2% to 2.3%, in the N_2 rate. The N_1 and "other" components remained constant at 1.7% and 0.9% respectively.

The N_2 rate for the regional office was in excess of the Canada level. Two E.R.'s had high rates :

E.R.84, Edmonton - Red Deer, 3.5% N_2

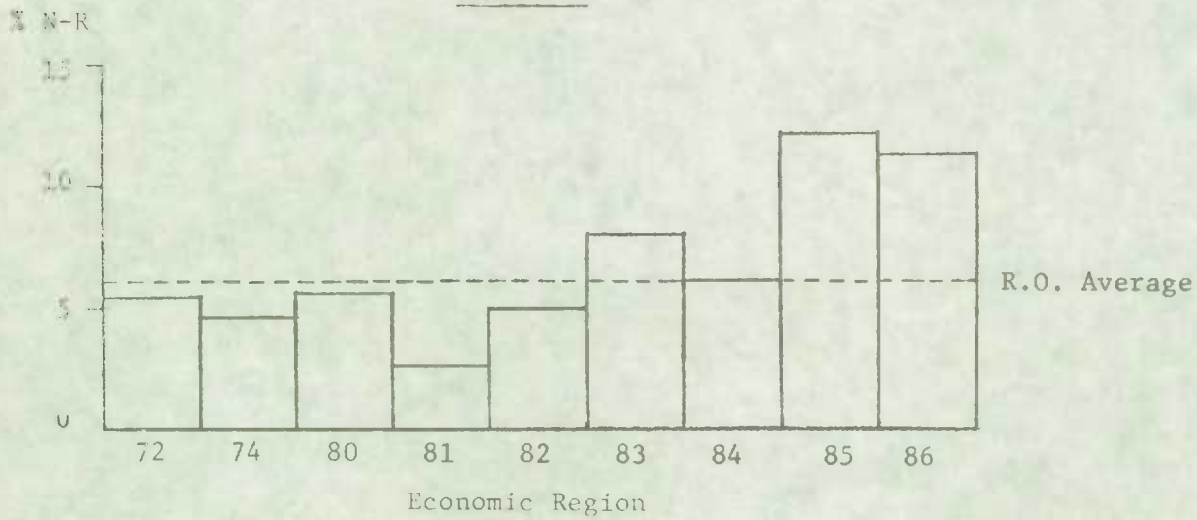
E.R.85, an area north of the North Saskatchewan River, 3.8% N_2

It is the number of "refusal" households in E.R. 84 that maintained the rate at a high level. This E.R. contained 40 of the 91 households in the office that refused. The E.R. contained 44% of the "refusal" households and 29% of all households covered by the regional office.

It should be noted that, while the N_2 component was the highest component of non-response in the office, the T.A. and N_1 components were below the national levels and the overall rate was lower than those for three other regional offices.

The October 1972 rate, at 6.6%, was 0.5% higher than this year's October rate. Last year, the highest component was N_1 (2.9%) whereas this year the N_1 component was relatively small at 1.7%.

Edmonton



Vancouver

Despite the large decrease in the overall rate from September (11.7%) to October (10.2%) the Vancouver Office indicated the highest non-response in Canada. Decreases occurred in each of the components :

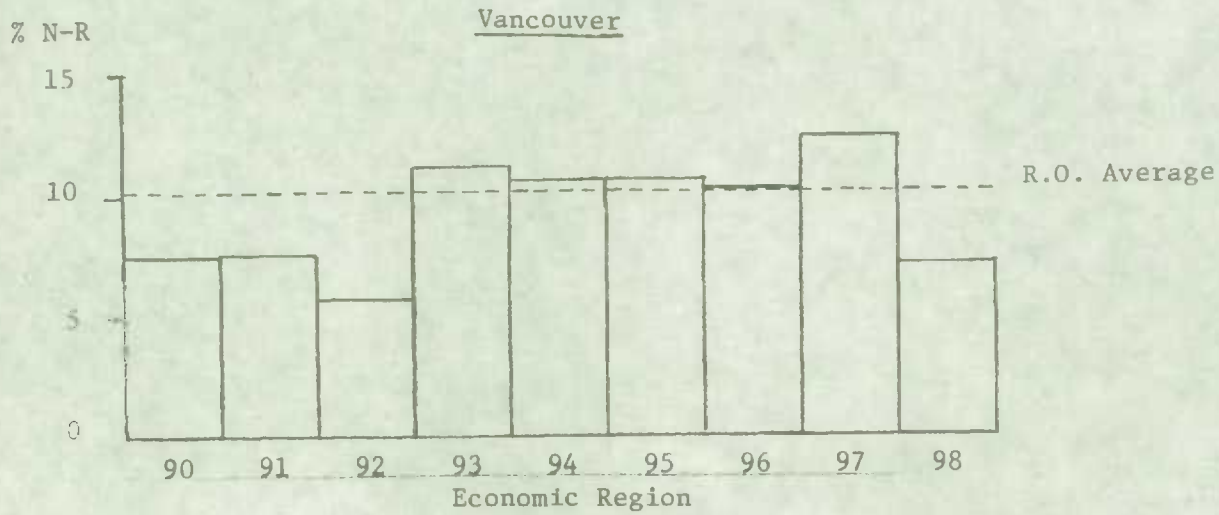
	September	October	Change (Oct.-Sept.)
T.A.	2.9%	2.4%	-0.5%
N_1	3.7	3.1	-0.6
N_2	4.3	4.0	-0.3
other	0.8	0.7	-0.1
overall	11.7	10.2	- 1.5

It can be seen that, although the rate showed a small decrease, the N_2 component remained very high in October. The 4.0% rate shown in October was twice the Canada level and constituted the largest component of non-response in the Vancouver Office. Economic Region 94 (Vancouver) contained approximately 52% of the households covered by the office but also contained approximately 64% of the "refusal" households, (see also pages 13 to 21 of this report for a summary on N_2 non-response in this regional office).

The decline in the overall rate was fairly evenly distributed throughout the 9 E.R.'s covered by the office. Small increases occurred in 3 small E.R.'s and decreases in 6 of the larger E.R.'s.

Economic Region 97, Prince Rupert - Kitimat, indicated the highest overall rate, 12.4%. The level increased from 11.9% in September due to higher T.A., N_1 and N_2 rates. Although the E.R. contained only 6.7% of households covered by the regional office, 8.2% of the non-respondents were located here.

Compared with the overall rate for the regional office in October 1972, 7.6%, this year's level of 10.2% was much higher. The T.A., N_1, and N_2 components were higher and the "other" component remained constant. The N_2 rate increased from 1.8% to 4.0% and was primarily responsible for the large year to year increase.



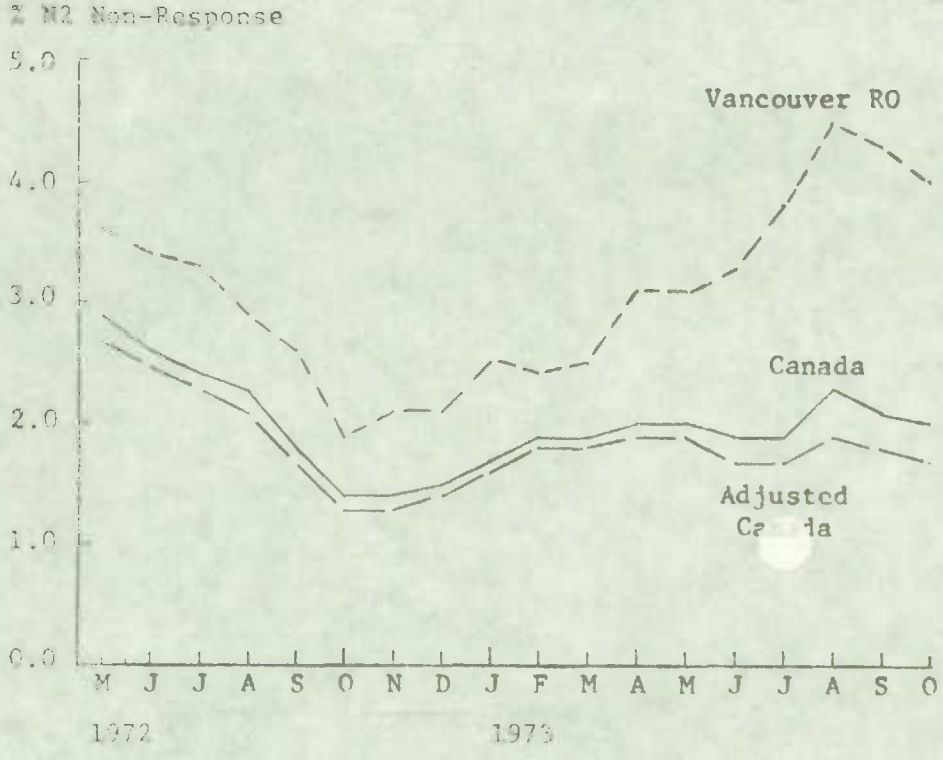
For at least the past one and one half years the Vancouver Regional Office has shown a high "refusal" rate. Graph A shows the N_2 rates for the Vancouver Office and Canada and the "adjusted" Canada level. The adjusted figure is calculated as follows:

$$\text{adjusted } N_2 \text{ rate} = \frac{N_{ci} - N_{vi}}{H_{ci} - H_{vi}} \times 100$$

where :

N	number of N_2 households
H	total number of households
c	Canada
v	Vancouver Regional Office
i	month of the survey

Graph 1



The graph indicates that the Vancouver N_2 rate was in excess of the Canada level for every survey and thus the Canada N_2 rate was adversely affected. The magnitudes of the differences between the Canada and the adjusted Canada rates are not great. Table A shows the proportion of the total households in Canada that are in the Vancouver Office and the proportion of N_2 households.

TABLE A

Total and Refusal Households, Canada, Vancouver Regional Office;
May 1972 - October 1973.

Date	Total Households		$\frac{\text{Vancouver}}{\text{Canada}} \times 100$	N_2 Households		$\frac{\text{Vancouver } N_2}{\text{Canada } N_2} \times 100$
	Canada	Vancouver		Canada	Vancouver	
May	31,787	3,631	11.4%	904	132	14.6%
June	31,919	3,639	11.4	845	125	14.8
July	31,985	3,645	11.4	773	121	15.7
Aug.	32,018	3,716	11.6	696	107	15.4
Sept.	32,144	3,728	11.6	583	97	16.6
Oct.	32,253	3,759	11.7	442	70	15.8
Nov.	32,270	3,766	11.7	448	77	17.2
Dec.	32,331	3,774	11.7	478	78	16.3
Jan.'73	32,375	3,809	11.8	554	94	17.0
Feb.	32,368	3,808	11.8	611	90	14.7
Mar.	32,528	3,857	11.9	610	97	15.9
Apr.	32,448	3,864	11.9	660	121	18.3
May	32,712	3,850	11.8	656	119	18.1
June	32,748	3,878	11.8	618	126	20.4
July	32,808	3,919	11.9	632	150	23.7
Aug.	32,940	3,959	12.0	738	177	24.0
Sept.	33,296	3,968	11.9	685	169	24.7
Oct.	33,529	3,966	11.8	662	159	24.0
Average	32,421	3,796	11.7	648	117	18.1

It can be seen that the Vancouver Office contributed more than a proportionate share of the N_2 non-response to the Canada level, particularly in recent months.

The distribution of the N2 non-response indicates a concentration in two E.R.'s (see Table B).

TABLE B

Refusal Rates (N2) by Economic Region, Vancouver Regional Office, January-October, 1973.

ER / Month	90	91	92	93	94	95	96	97	98	R.O. Vancouver
Jan. 1973	0.0%	0.0%	1.1%	3.0%	2.5%	4.1%	0.0%	2.0%	1.7%	2.5%
Feb.	0.0	0.6	0.0	1.8	2.6	3.8	0.0	2.0	1.7	2.4
Mar.	0.0	1.9	0.4	2.8	2.8	3.4	0.0	2.2	1.8	2.5
Apr.	1.9	1.2	0.4	2.7	3.7	3.9	0.0	1.9	1.8	3.1
May	0.9	0.6	0.7	2.9	3.8	3.5	1.4	2.7	0.0	3.1
June	2.7	0.7	0.7	1.7	4.2	2.7	1.4	4.0	1.8	3.3
July	1.8	0.7	1.1	2.9	4.9	3.4	1.4	4.3	0.0	3.8
Aug.	1.8	1.8	3.0	3.0	5.7	4.2	1.5	3.0	0.0	4.5
Sept.	1.9	1.3	2.2	3.4	5.2	4.6	1.4	2.8	0.0	4.3
Oct.	0.9	1.4	2.9	3.1	4.9	3.7	1.5	3.4	0.0	4.0
Average	1.2	1.0	1.2	2.7	4.1	3.8	0.7	2.8	0.9	3.4

Table C indicates the numbers of refusal households, in the Vancouver Office for the period January to October, 1973.

TABLE C

Number of N_2 Households, Vancouver Regional Office by E.R., January-October, 1973.

E.R. / Date 1973	Economic Region									Vancouver Regional Office
	90	91	92	93	94	95	96	97	98	
Jan.	0	0	3	5	50	30	0	5	1	94
Feb.	0	1	0	3	52	28	0	5	1	90
Mar.	0	3	1	5	56	25	0	6	1	97
Apr.	2	2	1	5	73	32	0	5	1	121
[illegible]	1	1	2	5	75	27	1	7	0	119
June	3	1	2	3	84	21	1	10	1	126
July	2	1	3	5	100	27	1	11	0	150
Aug.	2	2	8	5	118	33	1	8	0	177
Sept.	2	2	6	6	108	37	1	7	0	169
Oct.	1	2	8	5	102	31	1	9	0	159
Total	13	15	34	47	818	291	6	73	5	1,302

Economic Region 94 contains approximately 52% of the sampled households covered by the regional office and accounts for about 63% of the refusal households. Similarly, E.R. 95 has more than 22% of the refusal households but only 20% of the sampled households. Together these two E.R.'s account for approximately 85% of the Vancouver Office refusals and about 72% of the sampled households.

Economic Regions 94 (Vancouver area) and 95 (Vancouver Island) have indicated N_2 rates in excess of the Canada average for each of the surveys under consideration. Although E.R.'s 93 and 97 have also shown high rates, relative to the Canada figures, these E.R.'s are small and do not contribute significantly to the N_2 rate for the Vancouver Regional Office.

Taken together these four economic regions, 93 to 95 and 97, account for slightly more than 94% of all refusals in the Vancouver regional office area (see Table C for number of households).

Economic Region 94

Within this E.R., there are 42 interviewer assignments : 33 in the Census Metropolitan Area of Vancouver and 9 outside the Met Area. From January to August the non Met Area part of E.R. 94 contained 8 assignments ; one was added in the September survey. The Met Area contained 32 assignments until May when one was added. The number has been constant, at 33, since May. Due to the large number of assignments in the E.R. that have shown high N_2 rates, only the four assignments having the highest rates will be considered.

TABLE D

Number Refusal (N_2) Households; Total Number Households; % N_2, for selcted assignments January-October 1973. (survey 271-280)

Survey No / Assign.	271	272	273	274	275	276	277	278	279	280
94106	1	1	1	5	6	5	5	3	2	1
94126	0	2	2	1	4	5	7	9	8	10
94129	3	5	4	4	4	6	5	5	6	6
94133	—	—	—	—	3	5	4	3	5	3

Total Number Households (excluding V-type non-interviews)

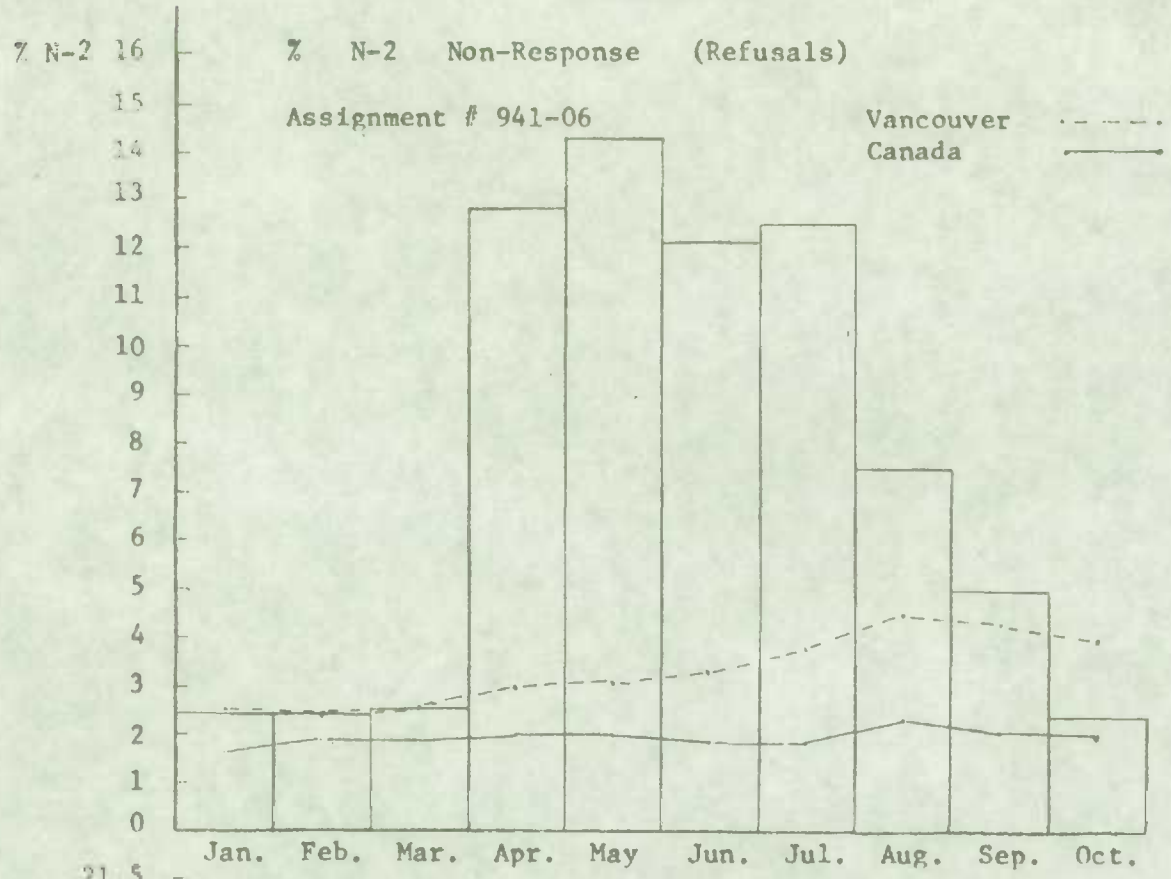
Survey No / Assign.	271	272	273	274	275	276	277	278	279	280
94106	42	41	40	39	42	41	40	40	40	41
94126	43	43	42	43	42	43	43	45	47	47
94129	49	48	50	50	50	50	54	50	53	53
94133	—	—	—	—	51	51	40	43	39	38

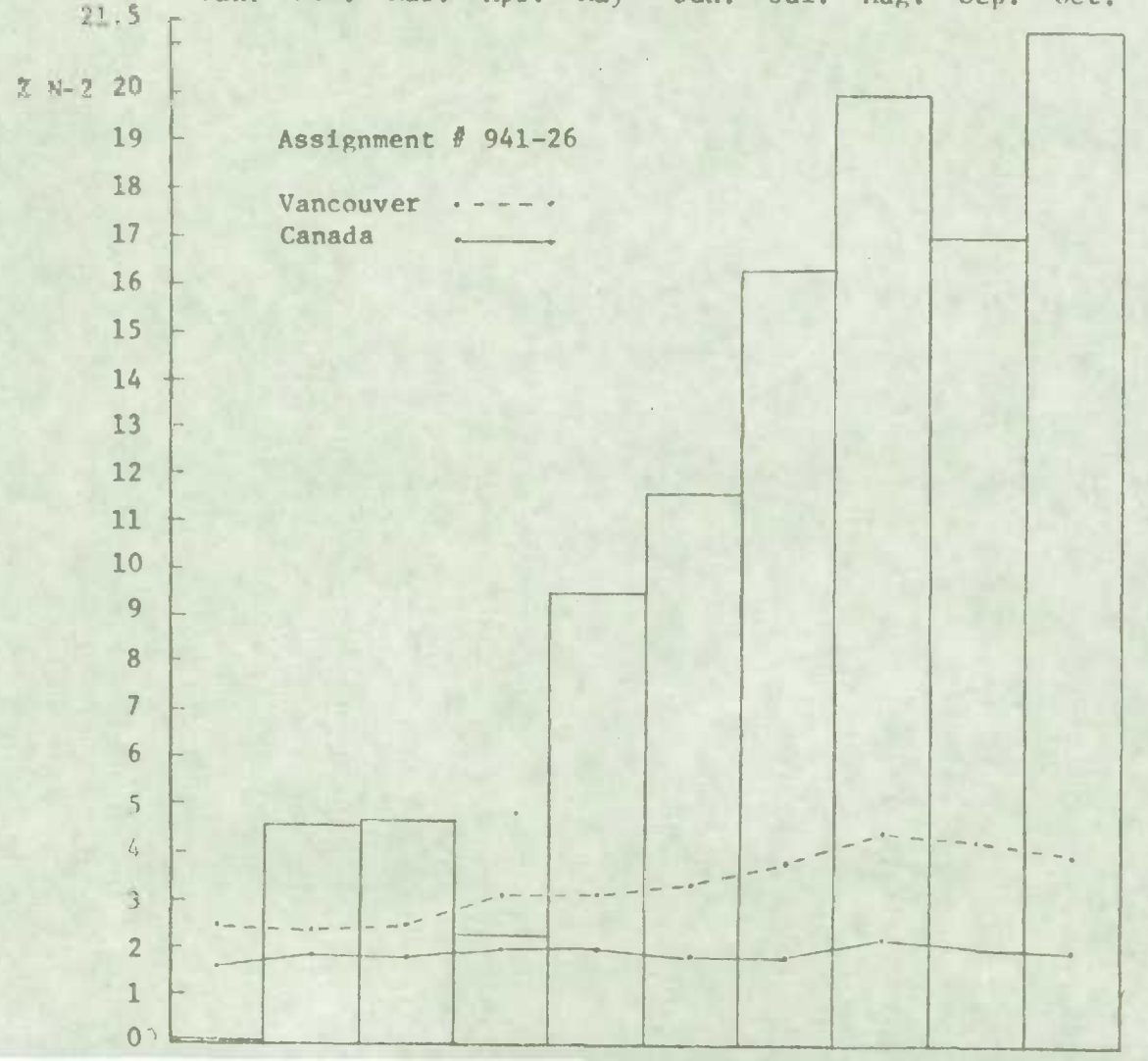
% R_2

Survey No / Assign.	271	272	273	274	275	276	277	278	279	280	Averag
94106	2.4%	2.4%	2.5%	12.8%	14.3%	12.2%	12.5%	7.5%	5.0%	2.4%	7.4
94126	0.0	4.7	4.8	2.3	9.5	11.6	16.3	20.0	17.0	21.3	11.0
94129	6.1	10.4	8.7	8.0	8.0	12.0	9.3	10.0	11.3	11.3	9.5
94133	—	—	—	—	5.9	9.8	10.0	7.0	12.8	7.9	8.8

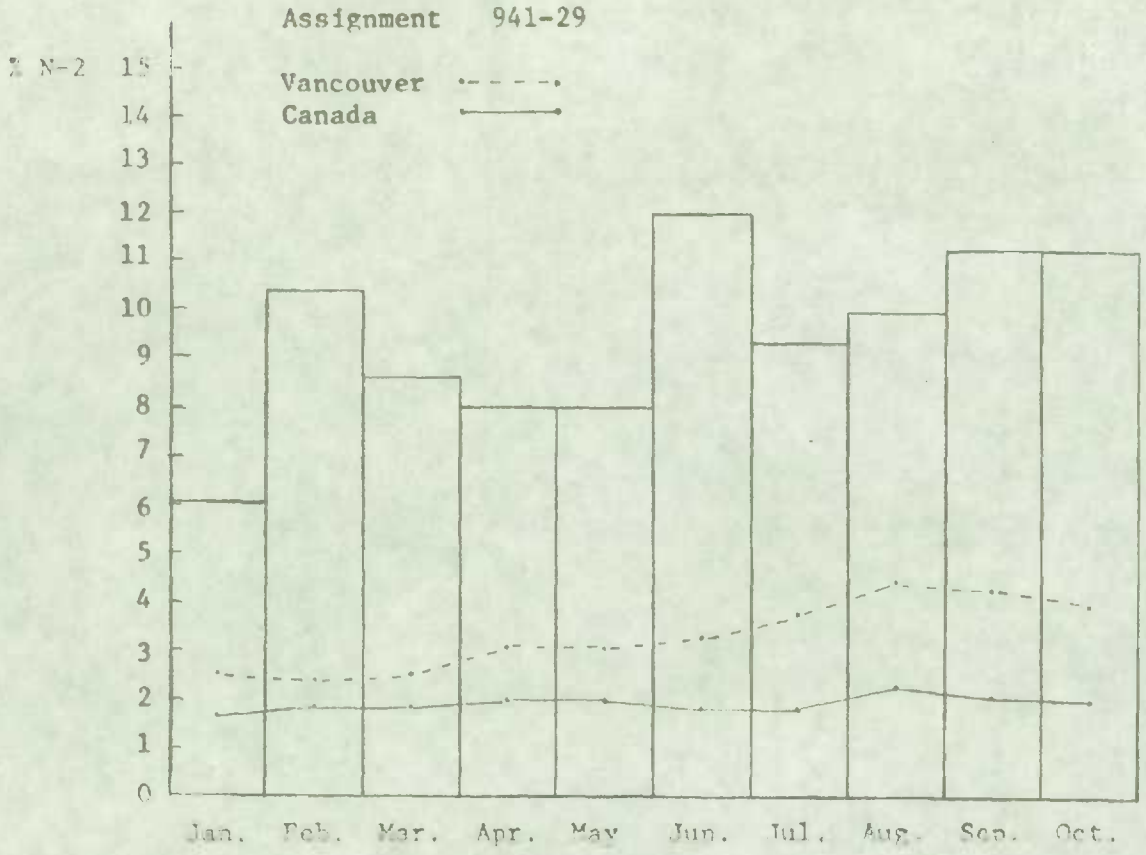
Note : assignment 94106, for the period under study, has been completed using two interviewers. One interviewer covers 1 or 2 segments and the other interviewer the remainder of the assignment. The figures given above refer only to the larger part of the assignment. These comments also apply to assignment 94126.

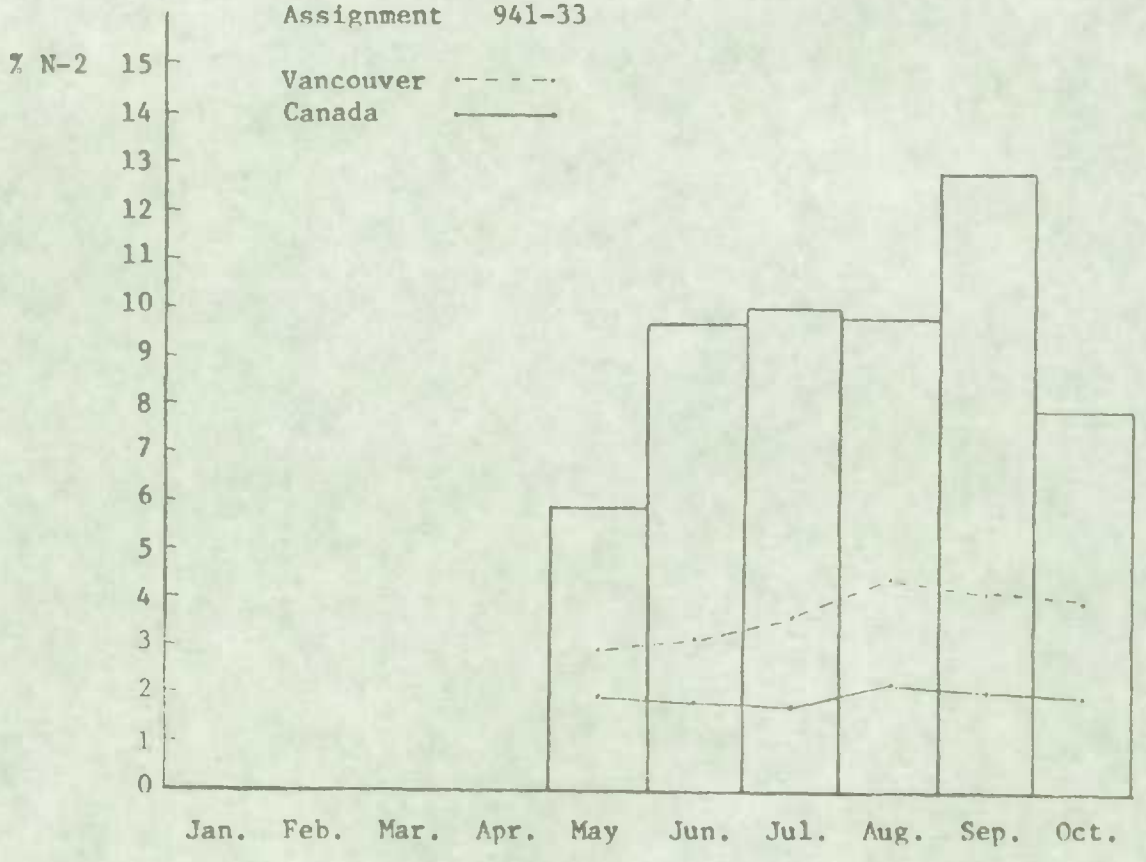
Graph II


% N-2
% N-2 Non-Response (Refusals)
Assignment # 941-06
Vancouver
Canada
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
Jan.
Feb.
Mar.
Apr.
May
Jun.
Jul.
Aug.
Sep.
Oct.


% N-2
21.5
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
Assignment # 941-26
Vancouver
Canada

Graph II

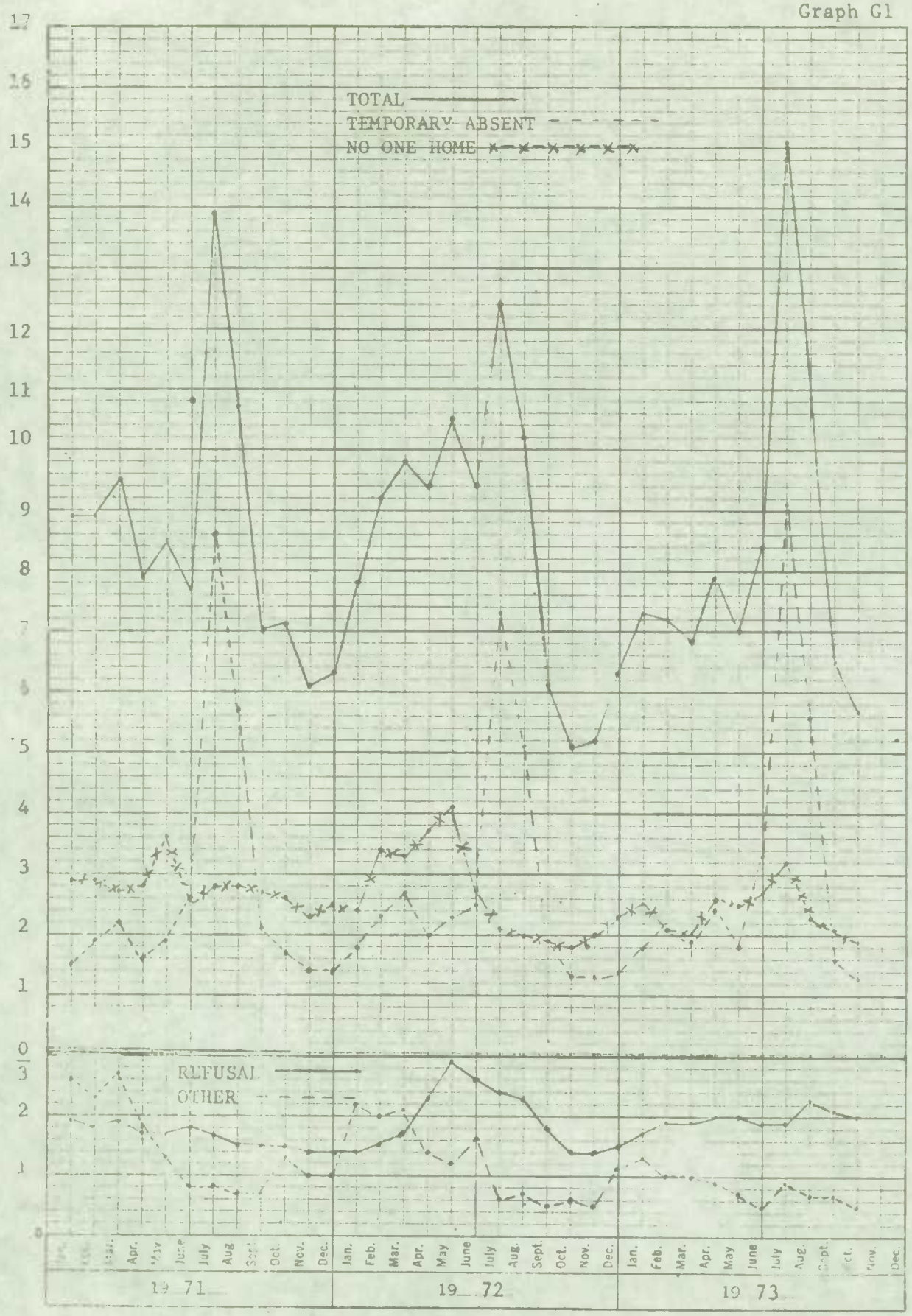

Assignment 941-29
% N-2
Vancouver
Canada
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Jan.
Feb.
Mar.
Apr.
May
Jun.
Jul.
Aug.
Sep.
Oct.


Assignment 941-33
% N-2
Vancouver
Canada
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Jan.
Feb.
Mar.
Apr.
May
Jun.
Jul.
Aug.
Sep.
Oct.

Graph II indicates the N_2 rates shown by each of assignments 94106, 94126, 94129, and 94133 from January to October, 1973. The Vancouver Office and Canada rates are plotted to indicate the great differences between the rates for these assignments and the rates elsewhere in Canada. With few exceptions these four assignments showed rates in excess of both the Canada and Vancouver Office rates.

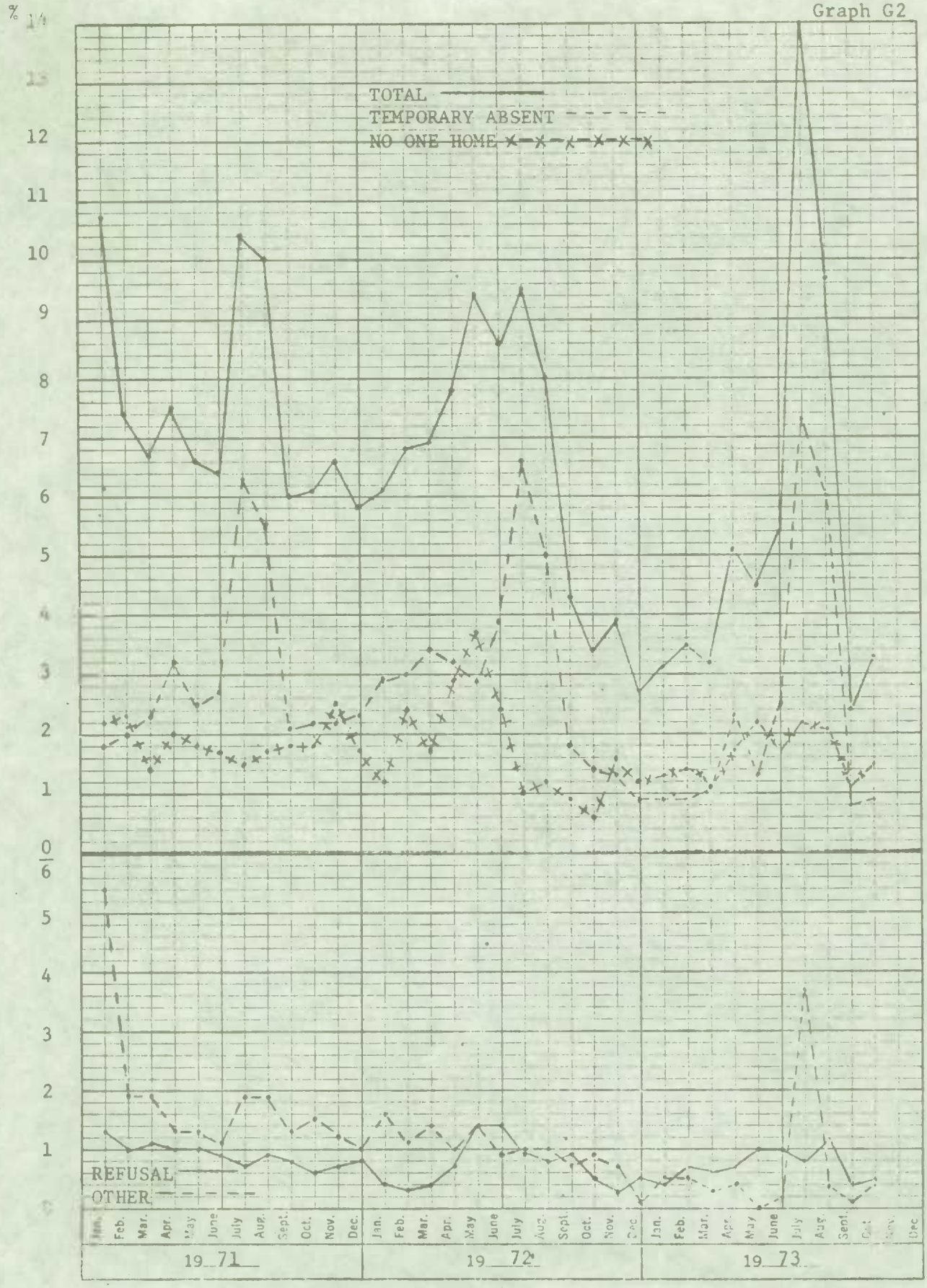
In some surveys, assignments 94106 and 94126 contained 0, 1, or 2 refusal households. Two such households can result in an N_2 rate of 5.0%, (assignment 94106 in survey 279), a high rate. However, it can be seen that any interviewer may have the misfortune of having 2 refusals regardless of her tact and persuasiveness and for this reason the presence of one or two refusal households in a particular assignment, while undesireable, may be tolerable in the short run. However, any long term increase in the rate or a sudden short term upsurge would be cause for great concern. These four assignments fall into the latter category. If the N_2 rates, which on occasion reach 20.0%, could be reduced to the Canada level, the Vancouver Office N_2 rate would be substantially reduced.

Graph G1



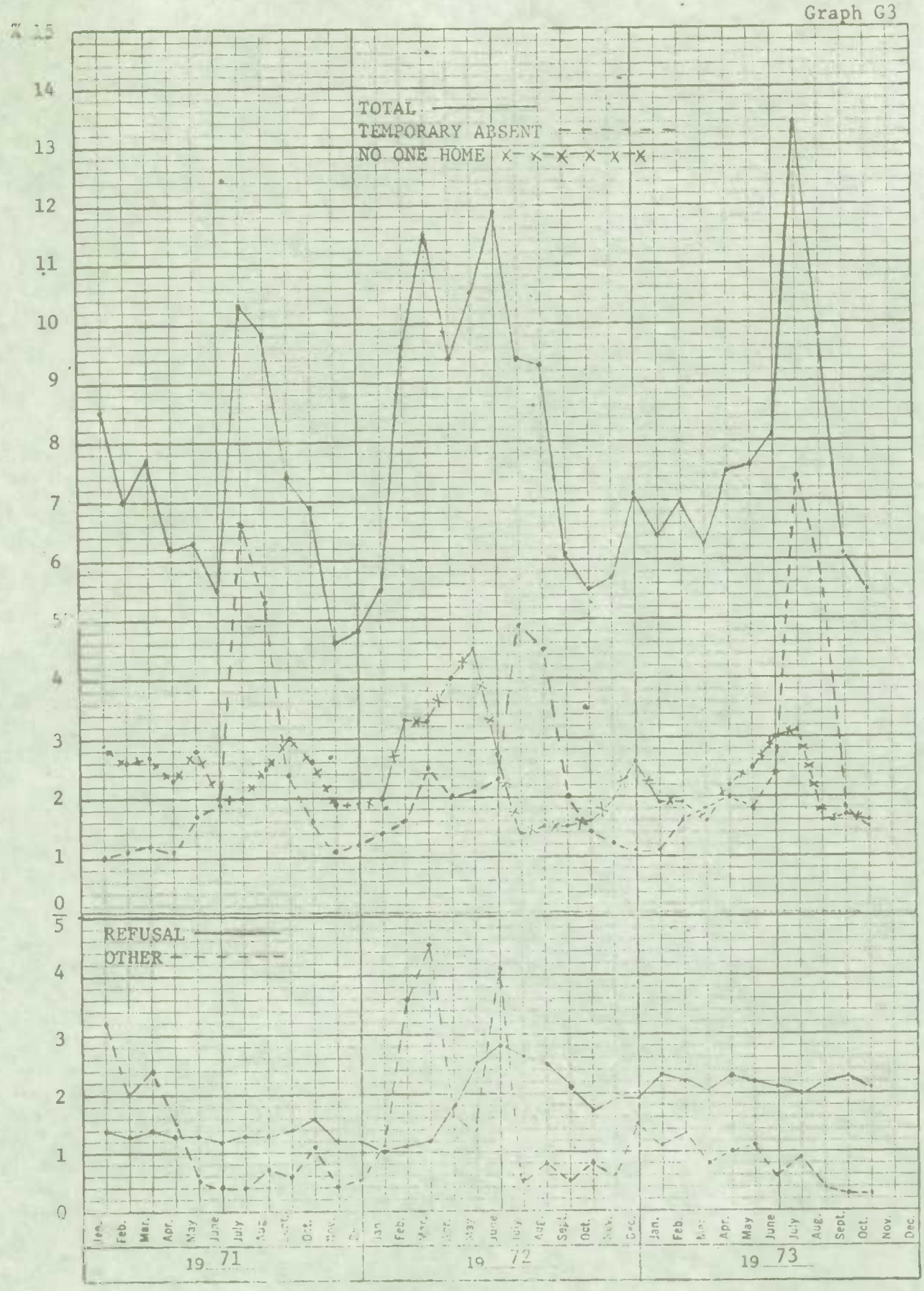
St.John's Regional Office

Graph G2



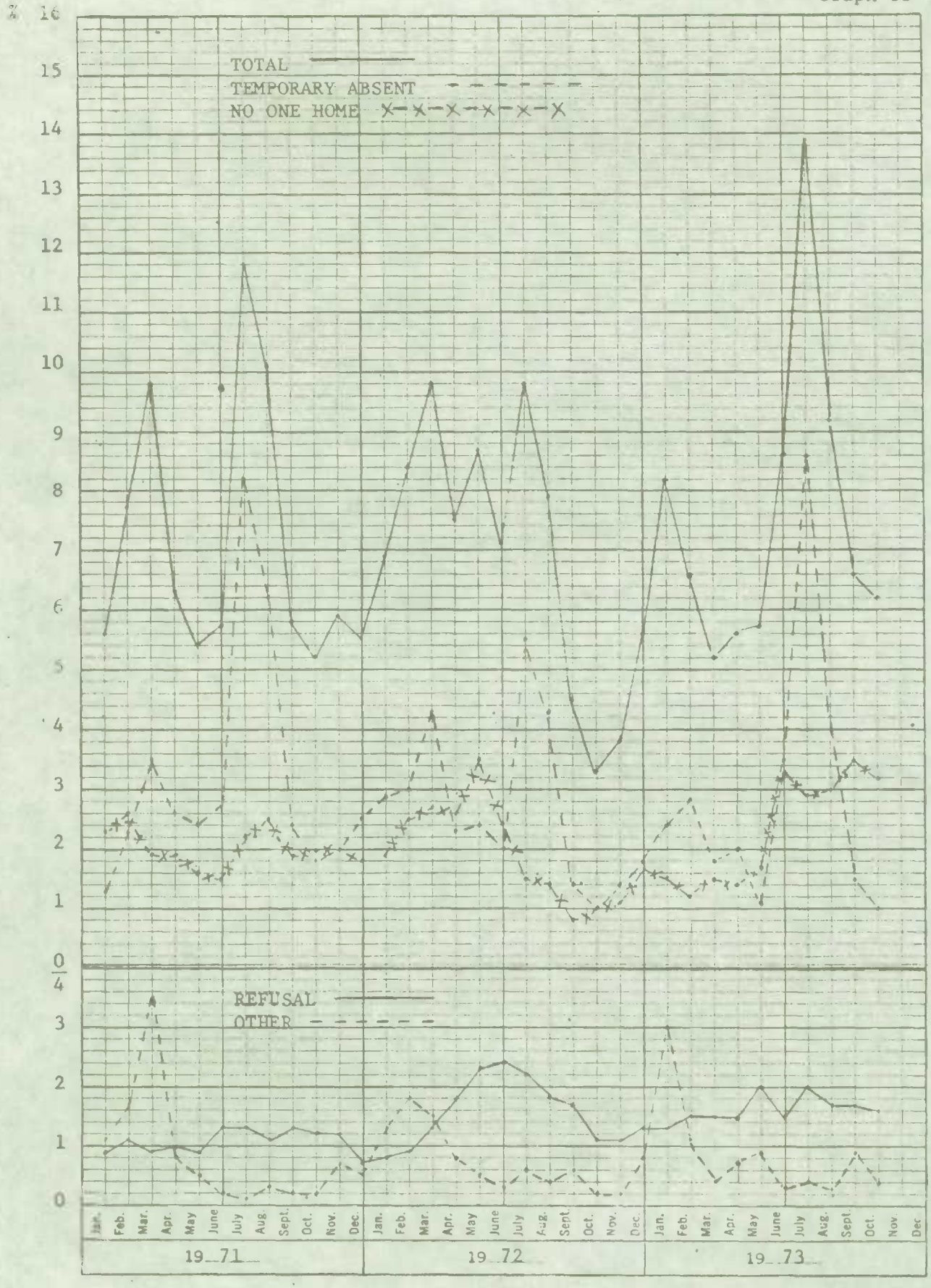
Halifax Regional Office

Graph G3



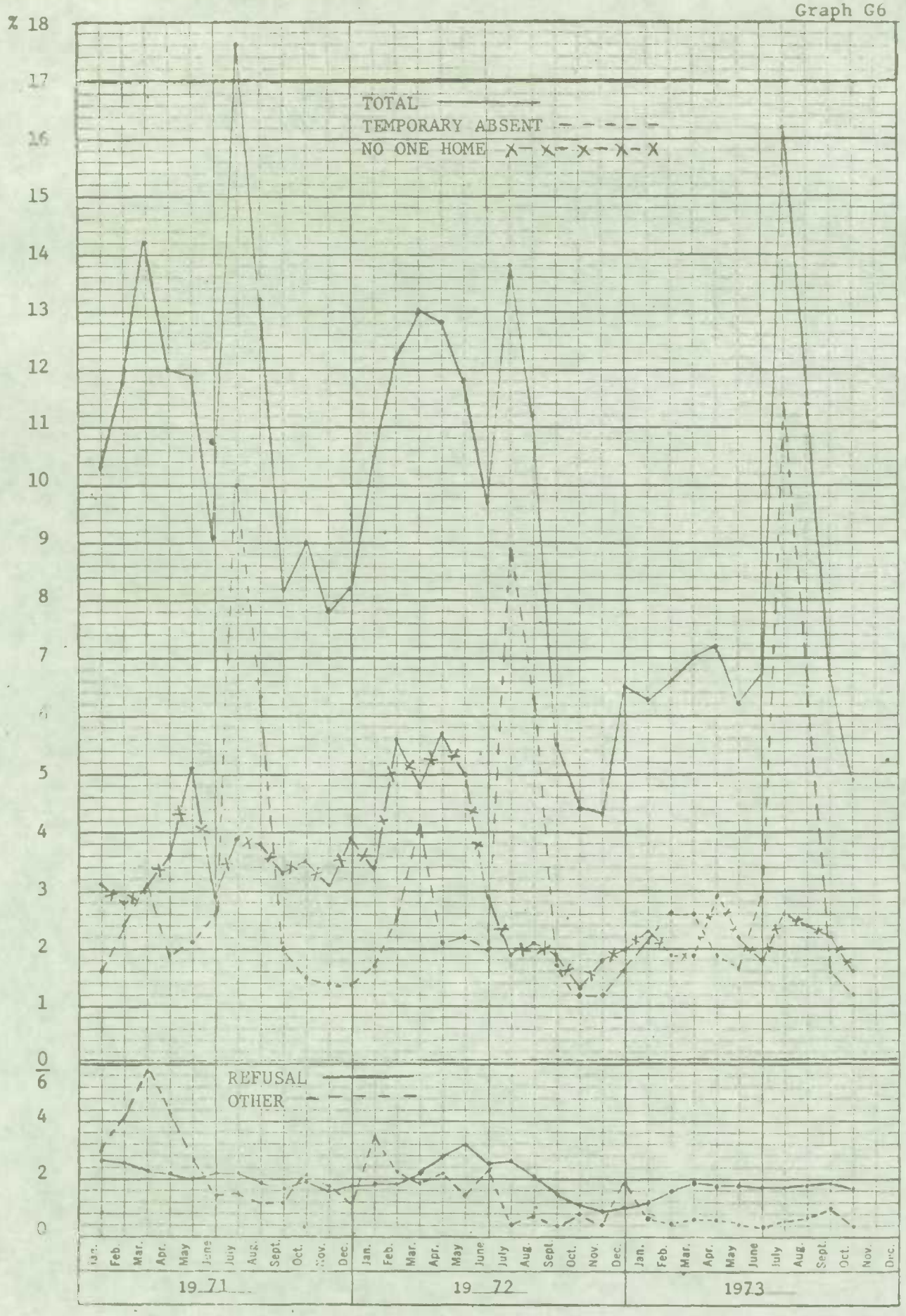
Ottawa Regional Office

Graph G5

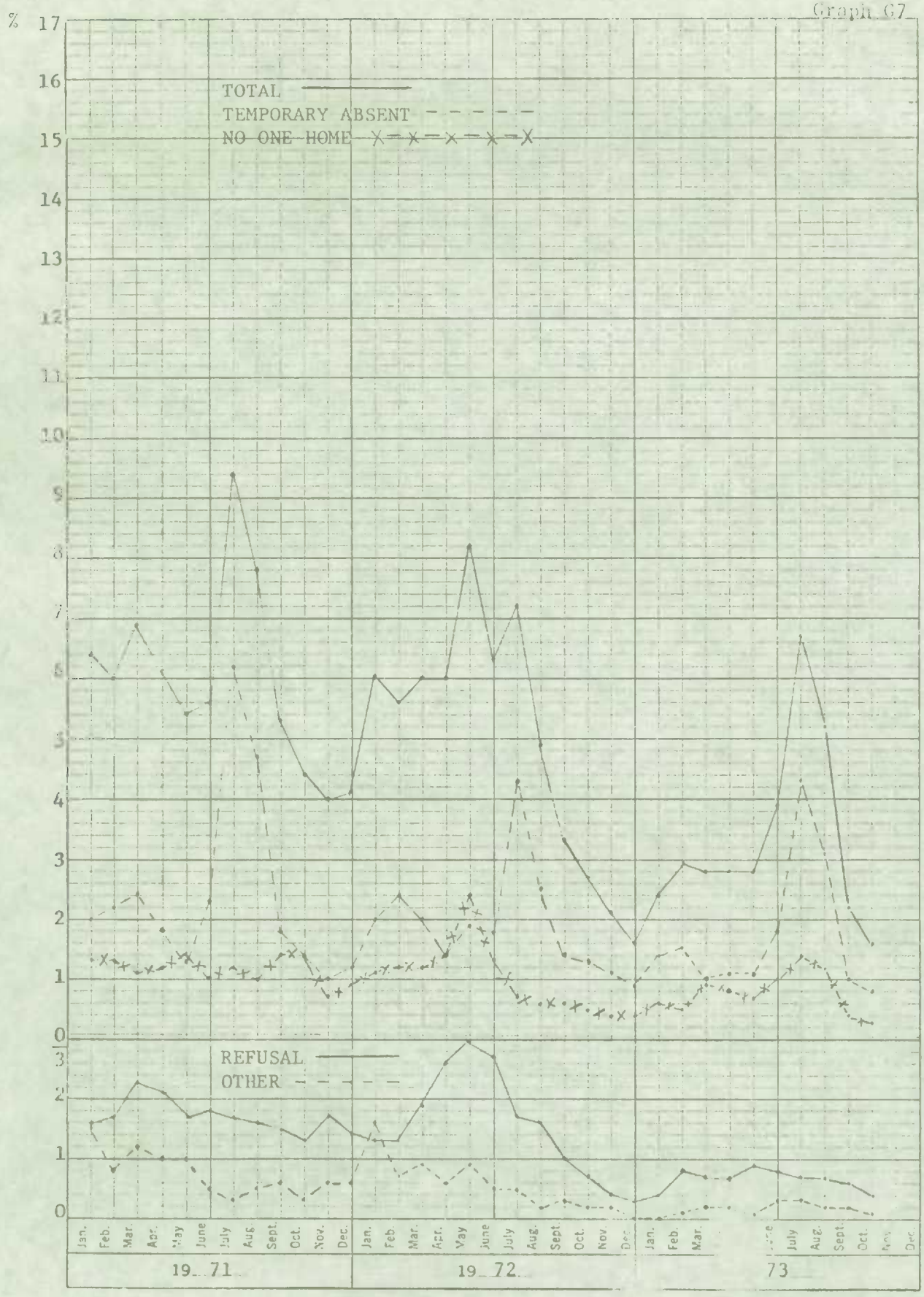


Toronto Regional Office

Graph G6

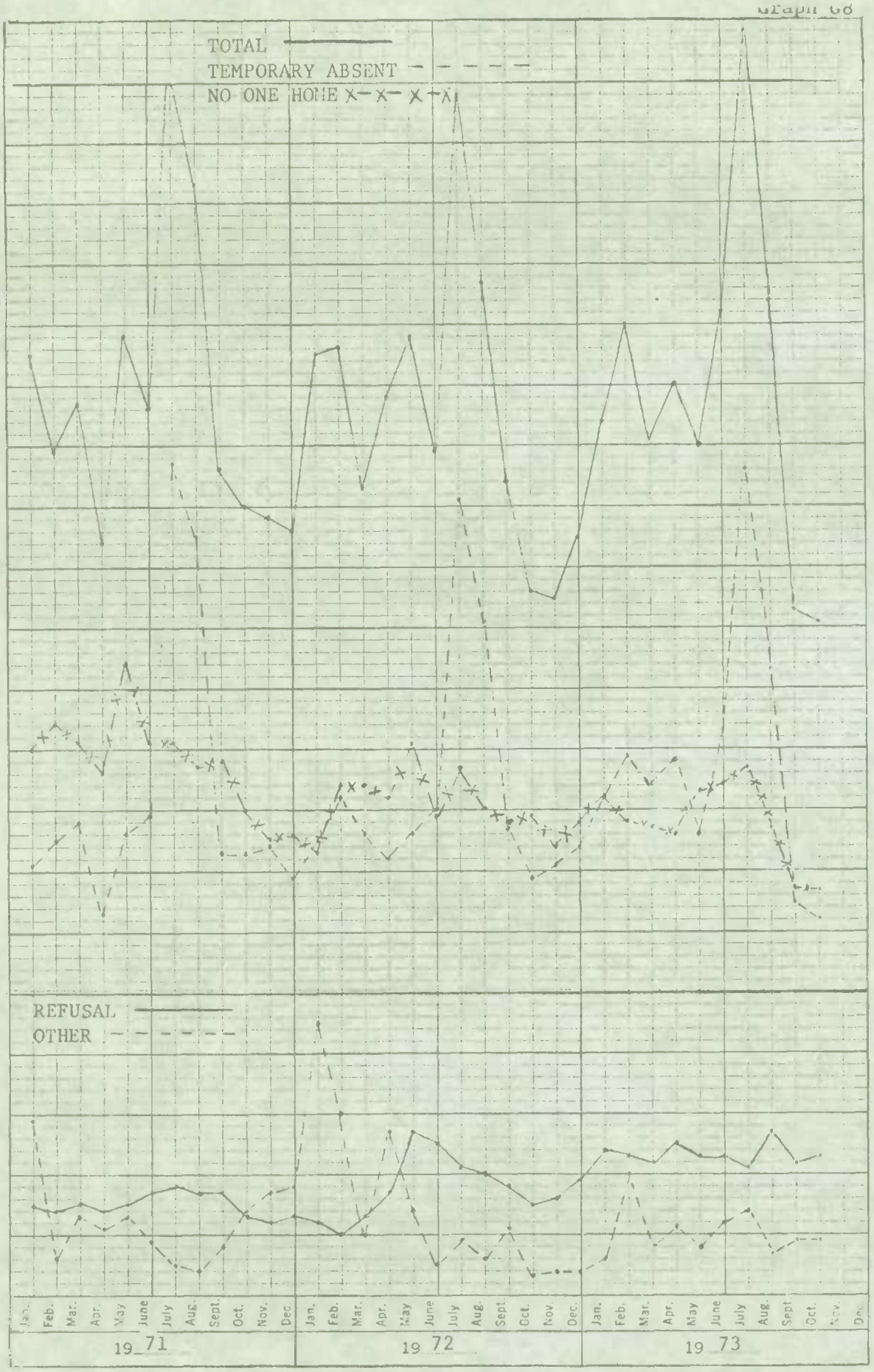


Graph G7



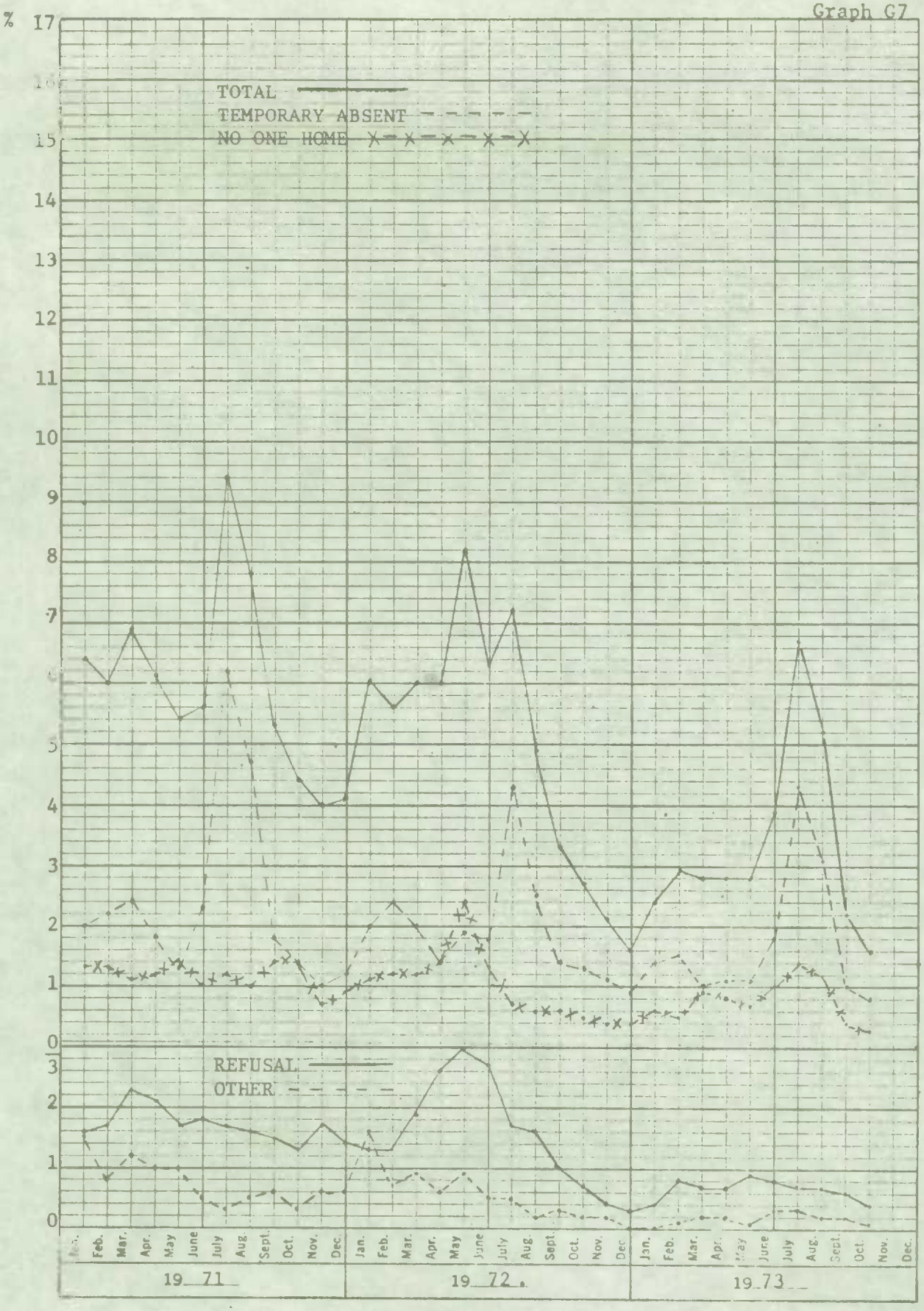
Edmonton Regional Office

Graph 68



Winnipeg Regional Office

Graph G7



Vancouver Regional Office

Graph G9

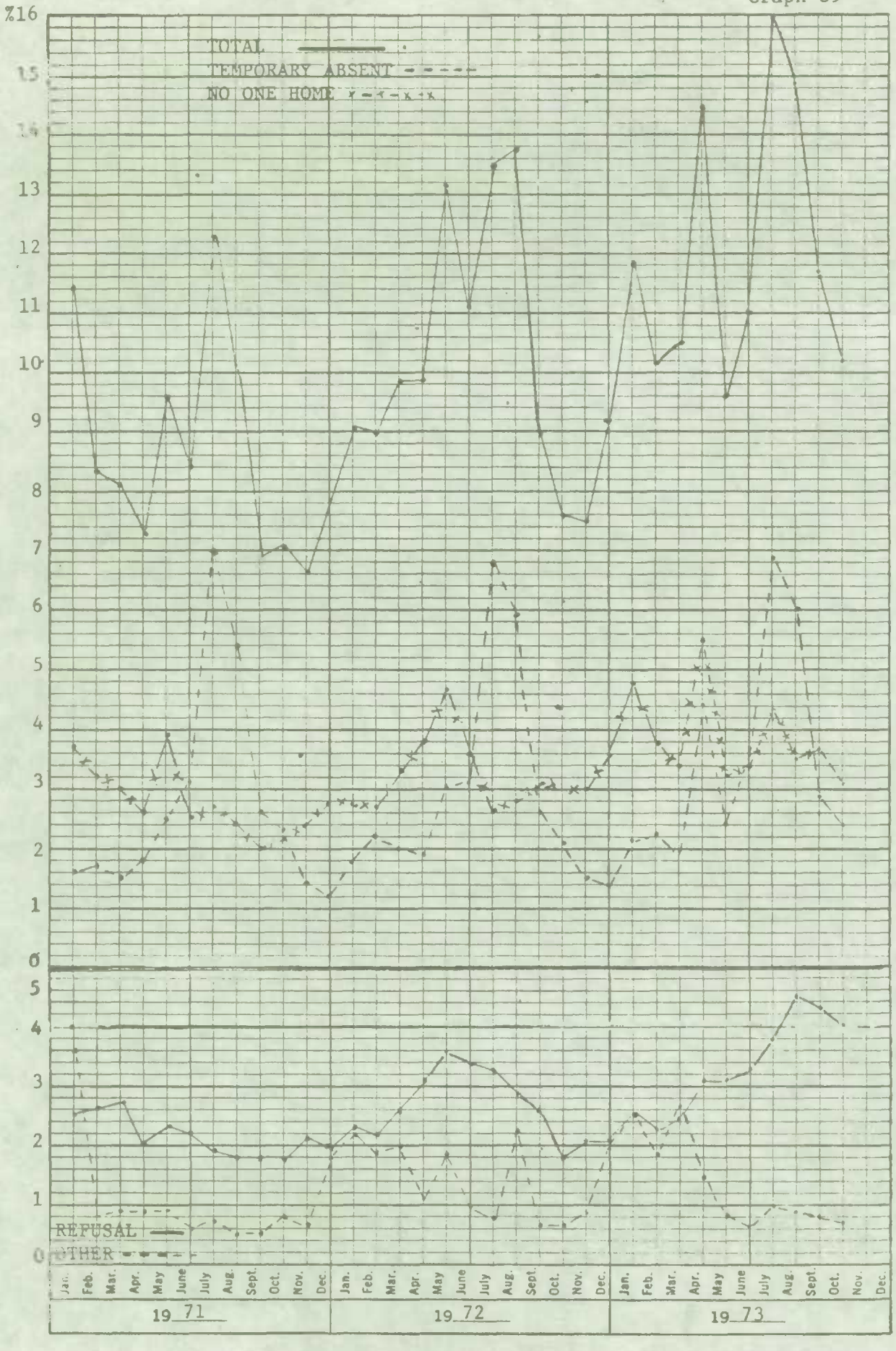


TABLE 1.

October, 1973

NON-RESPONSE RATES BY COMPONENT,

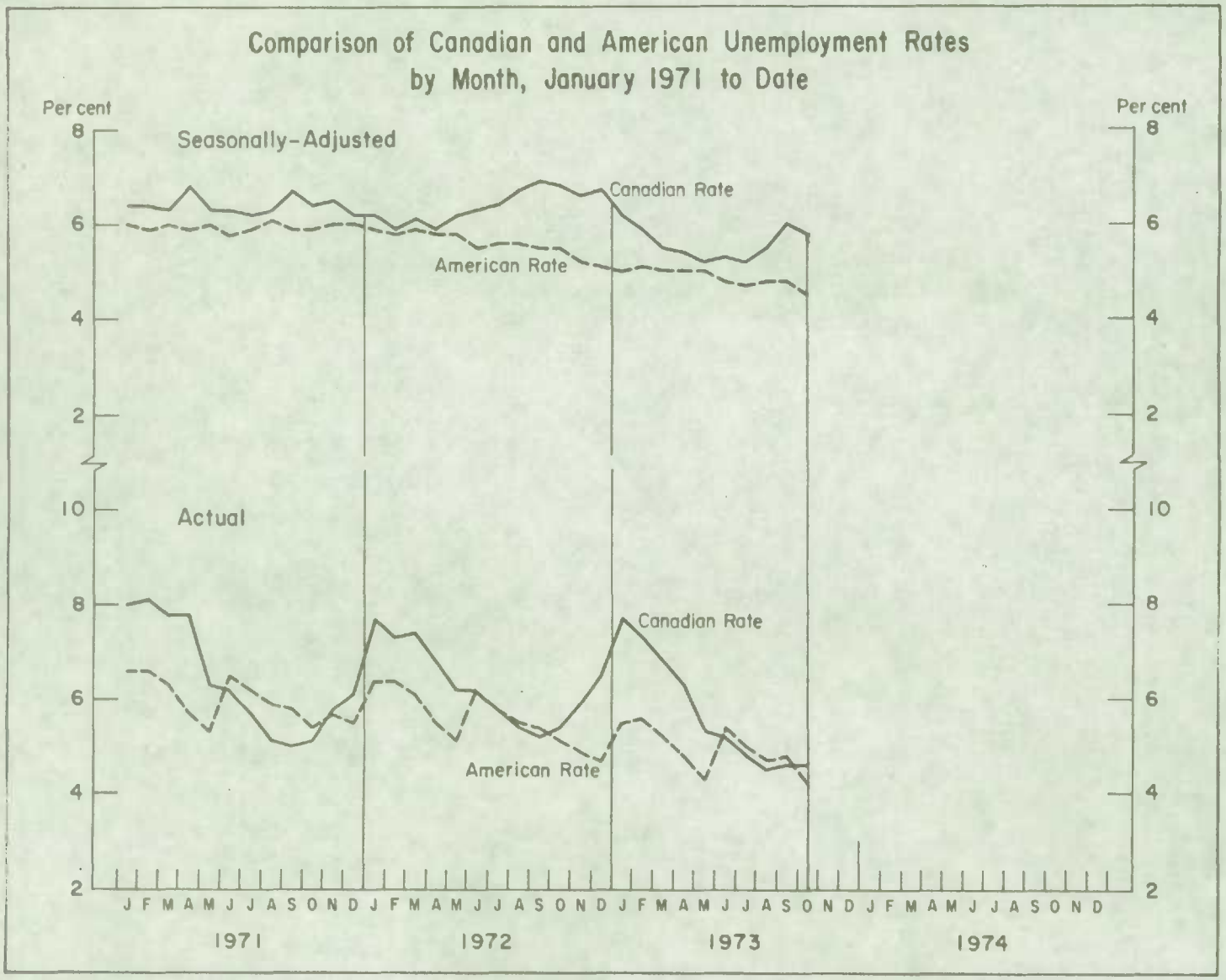
CANADA, AND REGIONAL OFFICES

(Percent)

	Total	T. A.	N. 1.	N. 2.	Other
Canada	5.7	1.3	1.9	2.0	0.5
St. John's	3.3	0.9	1.5	0.5	0.4
Halifax	5.5	1.5	1.6	2.1	0.3
Montreal	6.4	1.1	2.6	2.0	0.7
Ottawa	6.2	1.0	3.2	1.6	0.4
Toronto	4.9	1.2	1.6	1.7	0.4
Winnipeg	1.6	0.8	0.3	0.4	0.1
Edmonton	6.1	1.2	1.7	2.3	0.9
Vancouver	10.2	2.4	3.1	4.0	0.7

Comparison of Canadian and American Unemployment Rates
October 1972 to October 1973

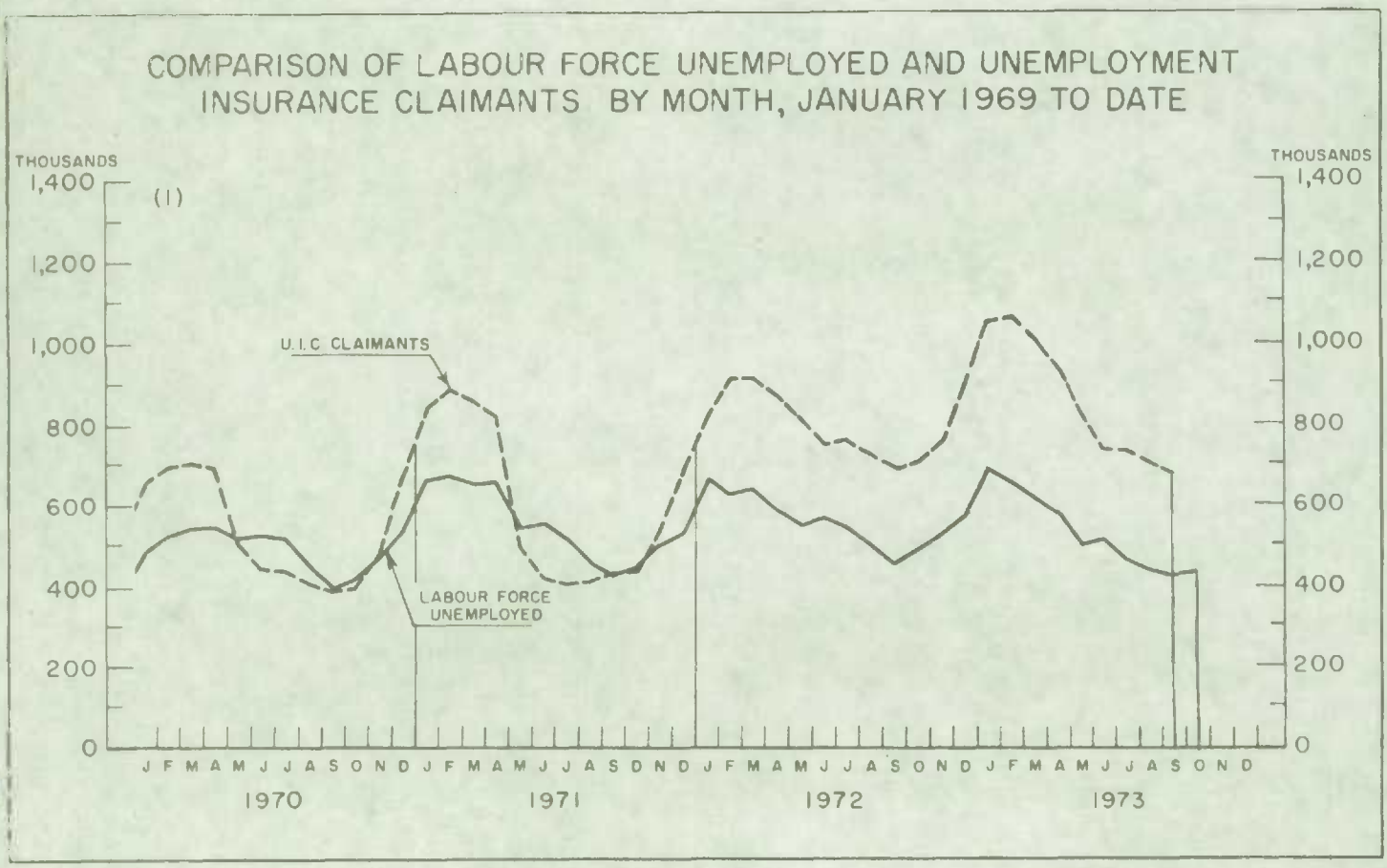
	Seasonally-Adjusted		Actual	
	Canadian	American	Canadian	American
1973 – October	5.8	4.5	4.6	4.2
September	6.0	4.8	4.6	4.8
August	5.5	4.8	4.5	4.7
July	5.2	4.7	4.8	5.0
June	5.3	4.8	5.2	5.4
May	5.2	5.0	5.3	4.3
April	5.4	5.0	6.3	4.8
March	5.5	5.0	6.8	5.2
February	5.9	5.1	7.3	5.6
January	6.2	5.0	7.7	5.5
1972 – December	6.7	5.1	6.5	4.7
November	6.6	5.2	5.9	4.9
October	6.8	5.5	5.4	5.1



Comparison of LFS Unemployed and UIC Claimants Series
January 1972 to date

	LFS Unemployed (000's)	UIC Claimants (000's)	Ratio Claimants / Unemployed		LFS Unemployed (000's)	UIC Claimants (000's)	Ratio Claimants / Unemployed
1973				1972			
December				December	584	903	1.55
November				November	524	765	1.46
October	429			October	483	709	1.47
September	421	676	1.61	September	459	692	1.51
August	433	691	1.60	August	503	722	1.44
July	461	733	1.59	July	543	762	1.40
June	503	739	1.47	June	568	753	1.33
May	493	810	1.64	May	552	814	1.47
April	570	921	1.62	April	592	874	1.48
March	608	1,003	1.65	March	642	914	1.42
February	655	1,055	1.61	February	627	912	1.45
January	688	1,056	1.53	January	665	827	1.24

Note: It is difficult to draw any conclusion when comparing the LFS and UIC data due to conceptual differences. See Appendix 3 of the April issue of this report.



Unemployment rate represents the number 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 worked a single hour in reference week