Labour Force Quality Report

Canadian Labour Force Survey

August, 1974

Statistics   Statistique
Canada   Canada

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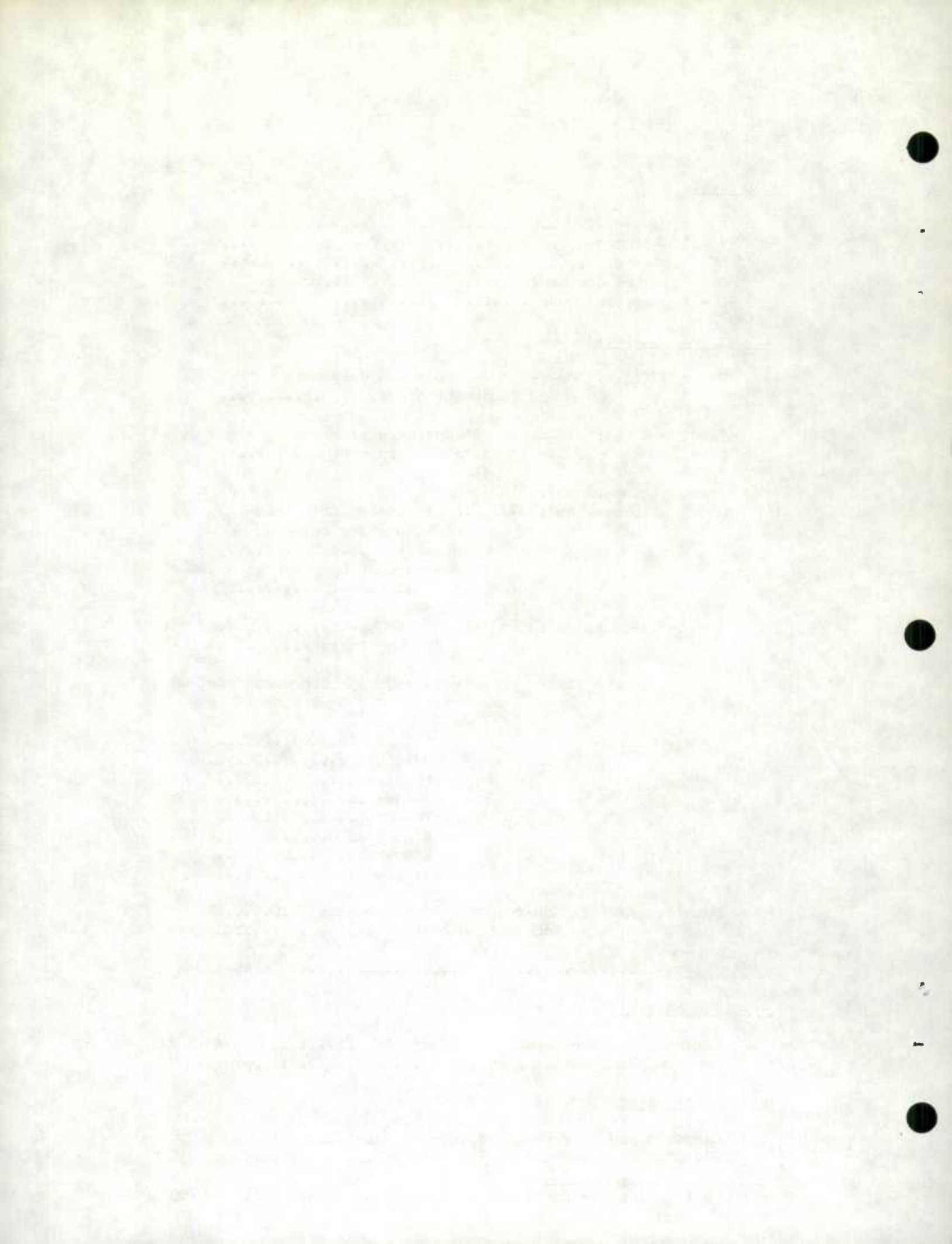
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Comparisons of: a) Canadian and American Unemployment rates, and b) UIC Claimants and LFS Unemployed are presented in Appendix IV.
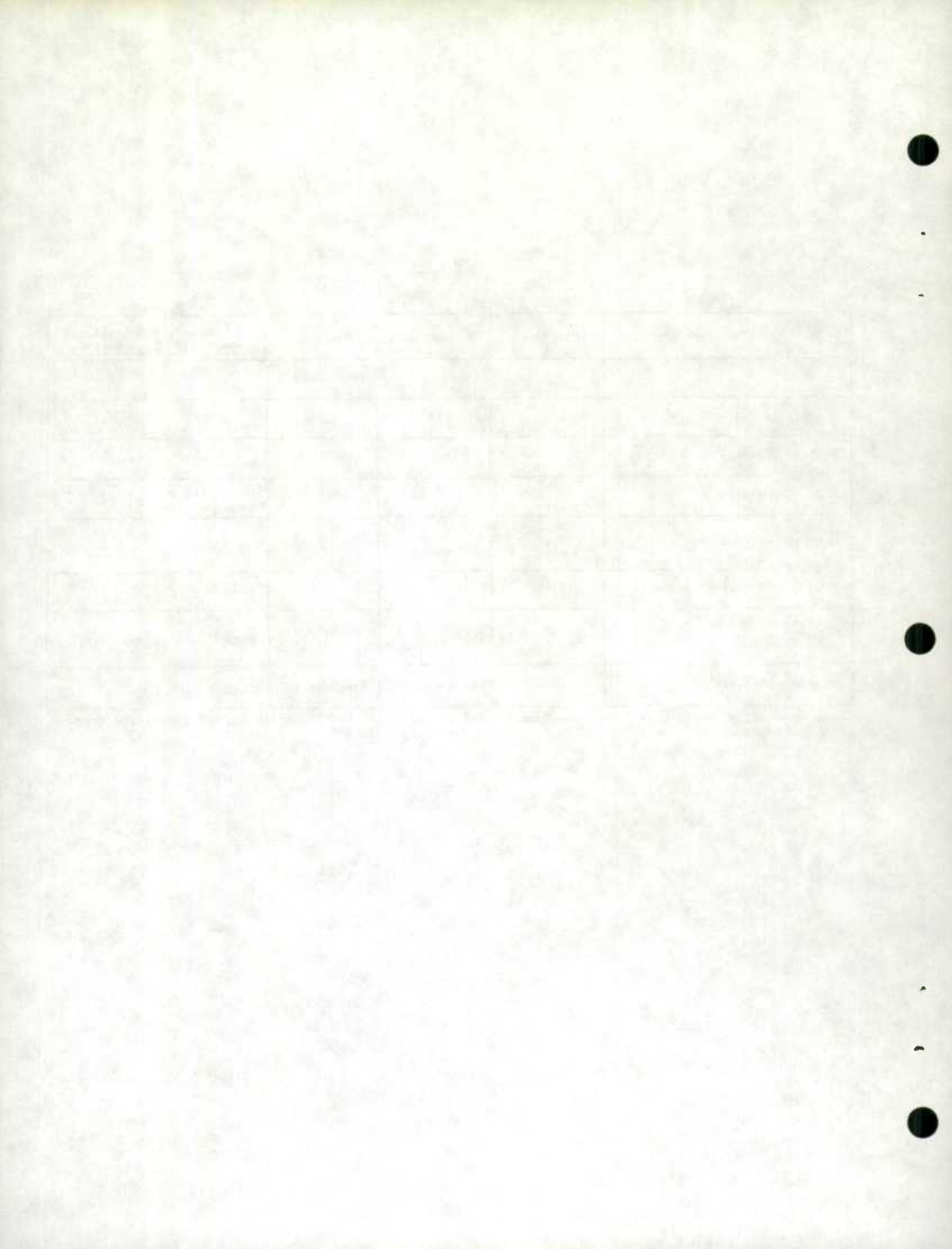
HIGHLIGHTS

A - SLIPPAGE

At the Canada level, the estimated slippage rate decreased from 4.8 %
in July to 4.6 % in August.

1. - By Province

All province except Saskatchewan showed positive estimated slippage
rates in August. From July to August, decreases in the estimated
slippage rate were noted in Nova Scotia (a change of − 0.2 %), New
Brunswick (− 0.4 %), Quebec (− 1.5 %) and Alberta (− 0.1 %). The
estimated slippage rate in British Columbia for August remained the
same as in the previous month. However, increases were noted in
Newfoundland (a change of + 0.5 %), Prince Edward Island (+ 0.3 %),
Ontario (+ 0.3 %), Manitoba (+ 3.3 %) and Saskatchewan (+ 1.1 %).

2. - By Age Group at the Canada Level

All age groups at the Canada level exhibited positive slippage rates
in August. From July to August, increases in the estimated slippage
rates were noted in the 20-24 (a change of + 0.5 %) and 45-64 (+ 0.2 %)
age groups. Each of the other age groups showed decreases in the
estimated slippage rate.

B - NON-RESPONSE

The overall non-response rate for the Canada level decreased from
10.4 % in July to 8.8 % in August. This decrease was much smaller
than the one exhibited between the same two months one year ago. The
decrease in the T.A. component was mainly responsible for the decrease
in the overall non-response rate.

Compared with last year's August non-response rate (10.9 %), this
year's rate was lower. At the component level, all components dis-
played decreases in non-response.

C - VARIANCE

At the Canada level the coefficient of variation of Employed decreased
from 0.35 % in July to 0.33 % in August. For the estimate of Unem-
ployed the coefficient of variation remained unchanged at 2.58 %
despite a decrease 17,000 in the estimated level of Unemployed from
the July survey to the August survey.

At the provincial levels there were 4 provinces - Newfoundland, New
Brunswick, Quebec and Ontario - in which decreases in the coefficients
of variation for Employed were observed between the July and August
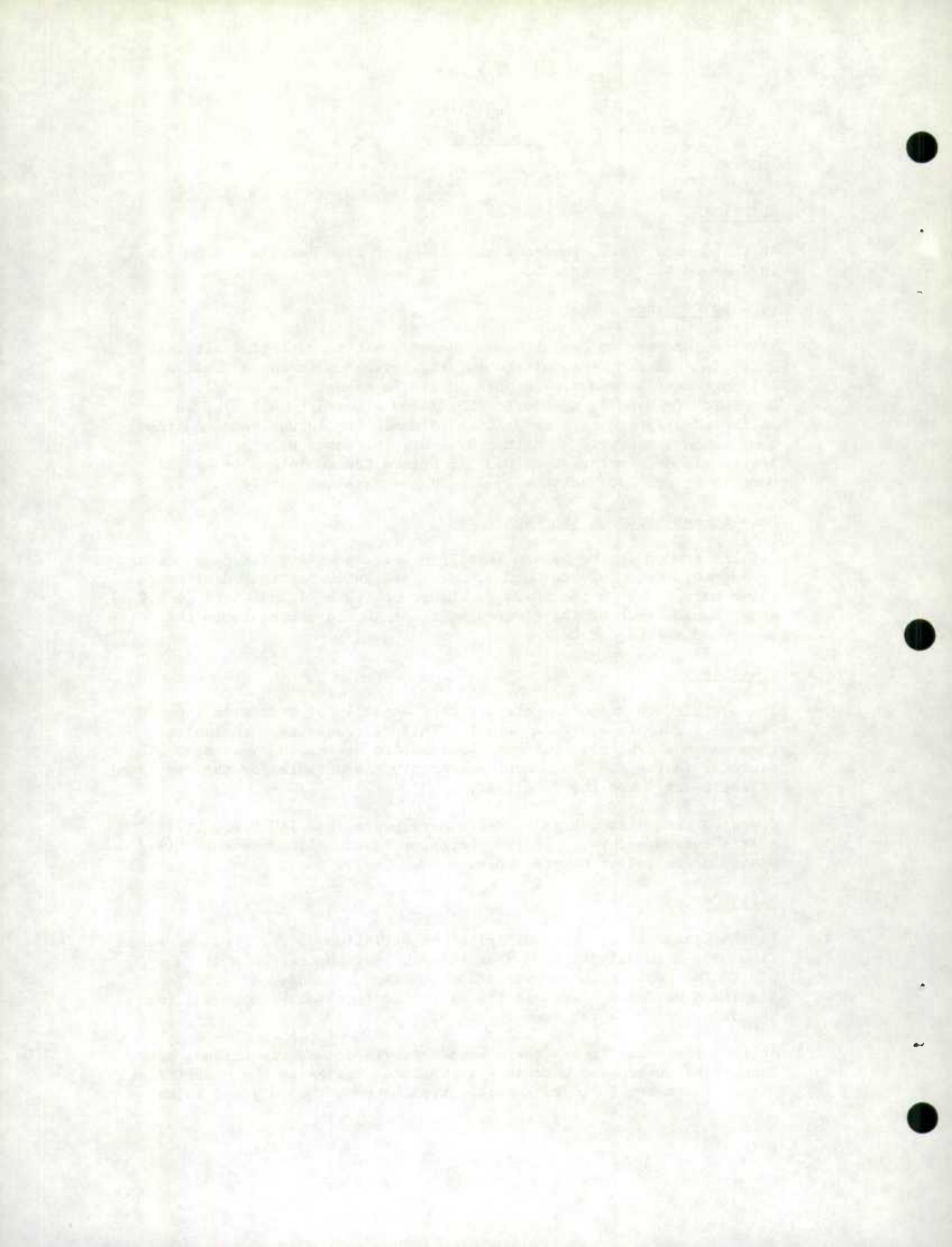
surveys. For the estimates of Unemployed, increases in the coefficients of variation between the July and August surveys were noted in Nova Scotia, Quebec, Alberta and British Columbia. Most of the changes in the coefficients of variation of Employed and Unemployed at the provincial levels can be explained by changes in the estimated levels of Employed or Unemployed.

The published symbols indicating the range of the coefficient of variation for estimates have been updated and are now based on the annual average of the monthly coefficients of variation for the year 1973. For any survey the estimate for a Labour Force characteristic may be subject to a higher sampling variability than the average based on the preceding calendar year. The reason for this may be due to pecularities of the particular sample obtained, due to a seasonal effect on the sampling variance, due to an outdatedness of the samples on which the symbols were based etc. For the August survey for the estimates of the Labour Force characteristics Employed, Unemployed and In Labour Force, there were 9 cases in which the symbol as obtained from the estimate of the % SD based on the August survey data differed from the published symbol for the August estimates - 2 for Employed estimates, 4 for Unemployed estimates and 2 for In Labour Force estimates. In 4 cases the published figure indicated a greater degree of reliability than was indicated by the estimate of the sampling variability obtained from the August data, namely for the estimates of Employed in B.C. and Unemployed in Canada, Ontario and Alberta. For the other cases - Employed in Ontario and Alberta, Unemployed in Prince Edward Island and In Labour Force in Prince Edward Island and Ontario, the symbol based on the August survey data indicated a greater degree of reliability than the symbol based on the 1973 average.

D - REJECTED DOCUMENTS

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

E - ENUMERATION COSTS

The August enumeration cost per sample household at the Canada level was calculated at $2.73, an increase of 3 cents from the $2.70 average for July. This 1.1 % increase in enumeration costs results from the extra attention given non-response by most regions. "Temporary absent" and "no one at home" households in many assignments received "Monday follow-up" attention resulting in a non-response rate of 8.8 %
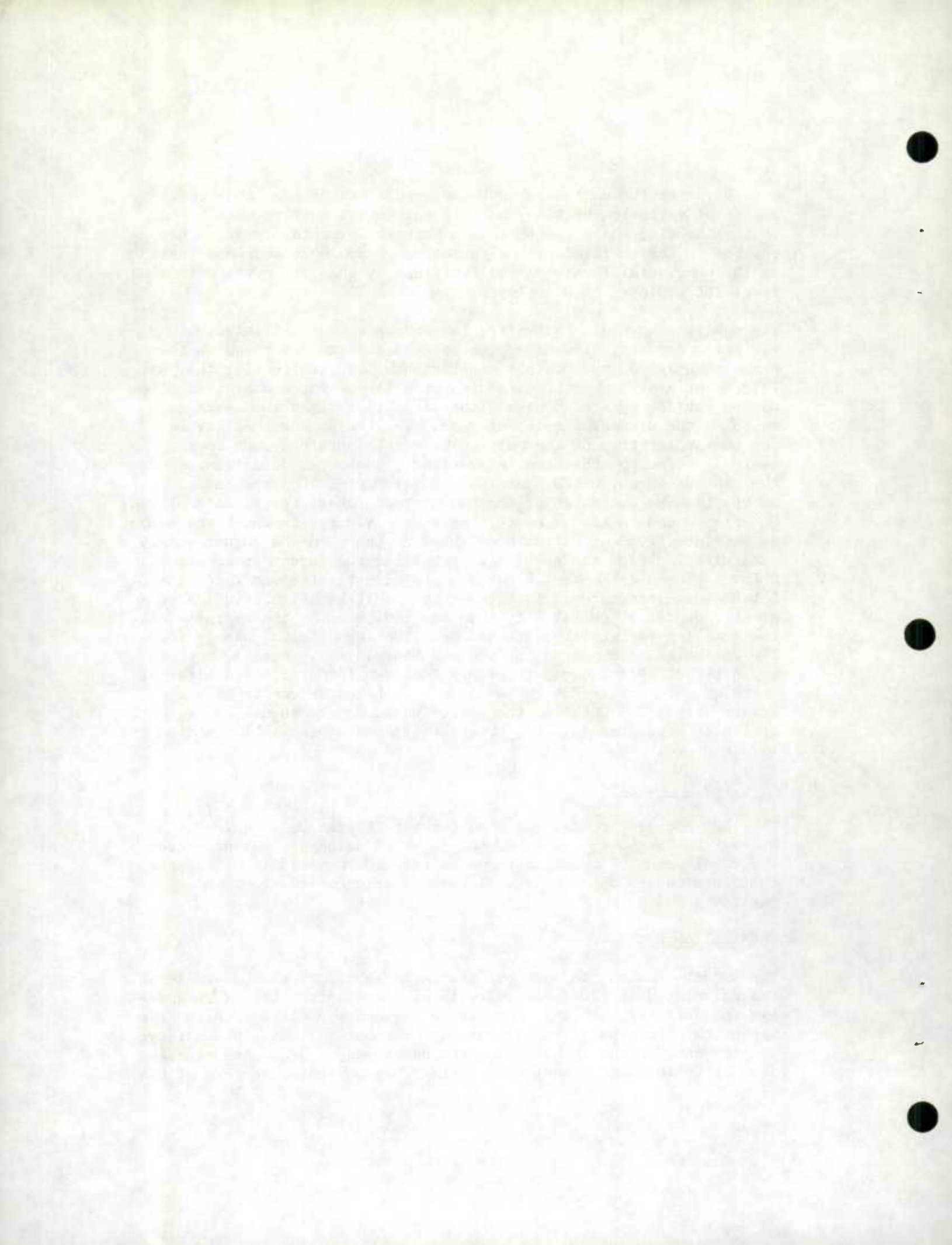
for August, the lowest for August Surveys since 1966 and 1.3 %
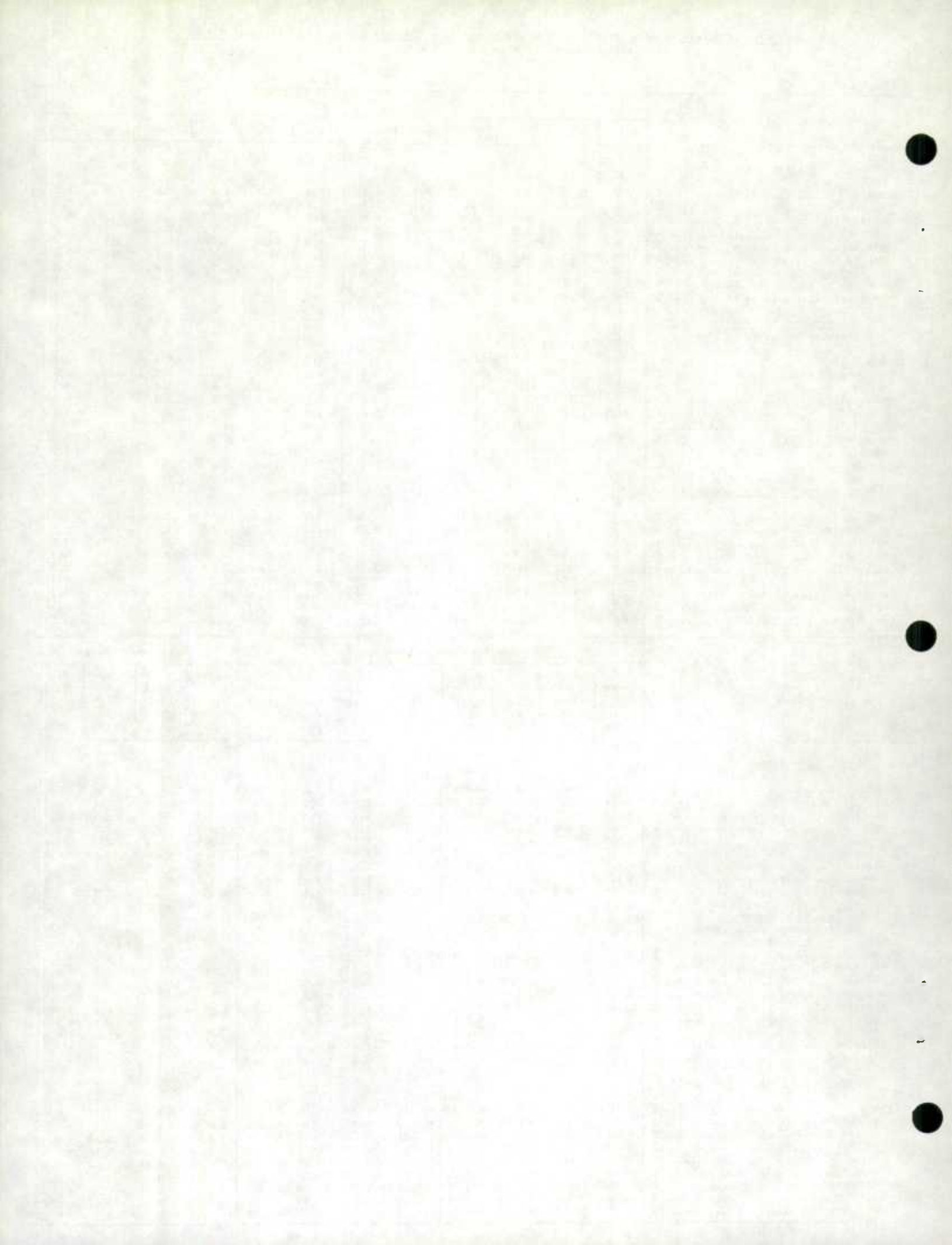below the previous low of 10.1 % for August 1972.

Six regions had increases in enumeration costs ranging from 2 to 11
cents. Winnipeg and Montreal with 11 and 7 cents respectively had
the larger increases; however, this can be associated with the notice-
able decrease in their non-response. Toronto and Vancouver registered
a decrease of 4 and 2 cents respectively.

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

- 5 -

	1974						1973					
	August	July	June	May	April	March	August	July	June	May	April	March
Non-response												
Canada .... %	8.8	10.4	6.8	7.0	8.3	6.4	10.9	15.1	8.4	7.0	7.9	6.8
St. John's .... %	5.7	6.2	5.1	5.2	7.7	1.9	9.7	14.0	5.4	4.5	5.1	3.2
Halifax .... %	8.7	10.0	6.6	6.9	7.9	6.8	9.8	13.4	8.1	7.6	7.5	6.3
Montreal .... %	8.4	12.1	6.9	8.2	8.7	7.1	12.1	19.2	10.3	7.4	7.4	6.8
Ottawa .... %	8.6	9.5	6.2	7.3	7.4	7.3	9.2	13.9	8.6	5.7	5.6	5.2
Toronto .... %	11.0	12.2	7.0	7.0	8.7	7.4	11.4	16.2	6.7	6.2	7.2	7.0
Winnipeg .... %	4.7	6.4	3.7	3.0	2.6	2.2	5.2	6.7	3.9	2.8	2.8	2.8
Edmonton .... %	7.0	8.5	6.4	7.3	8.8	6.3	11.4	15.8	11.2	9.0	10.0	9.1
Vancouver .... %	12.2	12.8	10.5	9.0	12.2	8.0	14.9	16.0	11.0	9.6	14.5	10.5
Rejected Documents (Regular Labour Force Items)												
Canada .... %			10.2	12.4	8.4	6.9	9.9	9.1	9.0	8.2	7.6	7.4
St. John's .... %			8.4	9.2	3.4	2.4	6.8	5.1	6.3	4.9	5.9	4.1
Halifax .... %	See Highlights,		11.5	12.3	7.4	6.4	10.0	10.0	9.8	9.0	7.9	8.1
Montreal .... %	Section D,		8.9	10.7	7.0	7.4	8.7	8.8	7.8	7.2	6.4	5.9
Ottawa .... %	Page 3.		8.4	10.1	7.8	5.0	12.0	9.3	7.6	7.0	7.1	7.2
Toronto .... %			11.7	14.4	11.9	8.2	10.6	10.7	11.0	9.8	10.1	10.1
Winnipeg .... %			8.4	16.7	5.2	5.6	8.8	6.3	5.8	6.5	5.7	6.2
Edmonton .... %			11.1	12.0	11.1	7.4	11.0	8.1	9.9	8.1	6.6	6.0
Vancouver .... %			9.9	11.7	9.3	8.4	11.0	10.6	10.4	9.4	9.0	8.0
Enumeration Cost per Household												
Canada .... $	2.73	2.70	2.56	2.51	2.53	2.38	2.24	1.98	2.20	2.17	1.89	2.17
St. John's .... $	3.32	3.26	3.04	3.01	2.61	2.72	2.50	2.10	2.50	2.59	2.17	2.52
Halifax .... $	2.59	2.57	2.32	2.41	2.48	2.32	2.10	1.89	2.02	1.98	1.74	1.95
Montreal .... $	2.88	2.81	2.45	2.69	2.67	2.43	2.41	2.07	2.30	2.36	2.00	2.37
Ottawa .... $	2.76	2.73	2.68	2.49	2.61	2.57	2.44	2.07	2.49	2.33	2.05	2.36
Toronto .... $	2.64	2.68	2.67	2.49	2.43	2.35	2.37	2.09	2.37	2.29	1.98	2.27
Winnipeg .... $	2.71	2.60	2.61	2.51	2.64	2.41	2.22	2.16	2.25	2.19	2.07	2.24
Edmonton .... $	2.69	2.65	2.53	2.40	2.54	2.26	2.06	1.72	1.91	1.78	1.66	1.79
Vancouver .... $	2.63	2.65	2.58	2.34	2.39	2.26	1.92	1.84	2.01	1.98	1.72	2.00

|	Month-to-month Change								Year-to-year Change			
	1974				1973				August 1973 to August 1974	July 1973 to July 1974	June 1973 to June 1974	May 1973 to May 1974
	July to August	June to July	May to June	April to May	July to August	June to July	May to June	April to May				
Non-response												
Canada .... %	− 1.6	+ 3.6	− 0.2	− 1.3	− 4.2	+ 6.7	+ 1.4	− 0.9	− 2.1	− 4.7	− 1.6	—
St. John's .... %	− 0.5	+ 1.1	− 0.1	− 2.5	− 4.3	+ 8.6	+ 0.9	− 0.6	− 4.0	− 7.8	− 0.3	+ 0.7
Halifax .... %	− 1.3	+ 3.4	− 0.3	− 1.0	− 3.6	+ 5.3	+ 0.5	+ 0.1	− 1.1	− 3.4	− 1.5	− 0.7
Montreal .... %	− 3.7	+ 5.2	− 1.3	− 0.5	− 7.1	+ 8.9	+ 2.9	—	− 3.7	− 7.1	− 3.4	+ 0.8
Ottawa .... %	− 0.9	+ 3.3	− 1.1	− 0.1	− 4.7	+ 5.3	+ 2.9	+ 0.1	− 0.6	− 4.4	− 2.4	+ 1.6
Toronto .... %	− 1.2	+ 5.2	—	− 1.7	− 4.8	+ 9.5	+ 0.5	− 1.0	− 0.4	− 4.0	+ 0.3	+ 0.8
Winnipeg .... %	− 1.7	+ 2.7	+ 0.7	+ 0.4	− 1.5	+ 2.8	+ 1.1	—	− 0.5	− 0.3	− 0.2	+ 0.2
Edmonton .... %	− 1.5	+ 2.1	− 0.9	− 1.5	− 4.4	+ 4.6	+ 2.2	− 1.0	− 4.4	− 7.3	− 4.8	− 1.7
Vancouver .... %	− 0.6	+ 2.3	+ 1.5	− 3.2	− 1.1	+ 5.0	+ 1.4	− 4.9	− 2.7	− 3.2	− 0.5	− 0.6
Rejected Documents (Regular Labour Force Items)												
Canada .... %			− 2.2	+ 4.0	+ 0.8	+ 0.1	+ 0.8	+ 0.6			+ 1.2	+ 4.2
St. John's .... %			− 0.8	+ 5.8	+ 1.7	− 1.2	+ 1.4	− 1.0			+ 2.1	+ 4.3
Halifax .... %	See Highlights,		− 0.8	+ 4.9	—	+ 0.2	+ 0.8	+ 1.1	See Highlights,		+ 1.7	+ 3.3
Montreal .... %	Section D,		− 1.8	+ 3.7	− 0.1	+ 1.0	+ 0.6	+ 0.8	Section D,		+ 1.1	+ 3.5
Ottawa .... %	Page 3.		− 1.7	+ 2.3	+ 2.7	+ 1.7	+ 0.6	− 0.1	Page 3.		+ 0.8	+ 3.1
Toronto .... %			− 2.7	+ 4.5	− 0.1	− 0.3	+ 1.2	− 0.3			+ 0.7	+ 4.6
Winnipeg .... %			− 8.3	+11.5	+ 2.5	+ 0.5	− 0.7	+ 0.8			+ 2.6	+10.2
Edmonton .... %			− 0.9	+ 0.9	+ 2.9	− 1.8	+ 1.8	+ 1.5			+ 1.2	+ 3.9
Vancouver .... %			− 1.8	+ 2.4	+ 0.4	+ 0.2	+ 1.0	+ 0.4			− 0.5	+ 2.3
Enumeration Cost per Household												
Canada .... $	+ 0.03	+ 0.14	+ 0.05	− 0.02	+ 0.26	− 0.22	+ 0.03	+ 0.28	+ 0.49	+ 0.72	+ 0.36	+ 0.34
St. John's .... $	+ 0.06	+ 0.22	+ 0.03	+ 0.40	+ 0.40	− 0.40	− 0.09	+ 0.42	+ 0.82	+ 1.16	+ 0.54	+ 0.42
Halifax .... $	+ 0.02	+ 0.25	− 0.09	− 0.07	+ 0.21	− 0.13	+ 0.04	+ 0.24	+ 0.49	+ 0.68	+ 0.30	+ 0.43
Montreal .... $	+ 0.07	+ 0.36	− 0.24	+ 0.02	+ 0.34	− 0.23	− 0.06	+ 0.36	+ 0.47	+ 0.74	+ 0.15	+ 0.33
Ottawa .... $	+ 0.03	+ 0.05	+ 0.19	− 0.12	+ 0.37	− 0.42	+ 0.16	+ 0.28	+ 0.32	+ 0.66	+ 0.19	+ 0.16
Toronto .... $	− 0.04	+ 0.01	+ 0.18	+ 0.06	+ 0.28	− 0.28	+ 0.08	+ 0.31	+ 0.27	+ 0.59	+ 0.30	+ 0.20
Winnipeg .... $	+ 0.11	− 0.01	+ 0.10	− 0.13	+ 0.06	− 0.09	+ 0.06	+ 0.12	+ 0.49	+ 0.44	+ 0.36	+ 0.32
Edmonton .... $	+ 0.04	+ 0.12	+ 0.13	− 0.14	+ 0.34	− 0.19	+ 0.13	+ 0.12	+ 0.63	+ 0.93	+ 0.62	+ 0.62
Vancouver .... $	− 0.02	+ 0.07	+ 0.24	− 0.05	+ 0.08	− 0.17	+ 0.03	+ 0.26	+ 0.71	+ 0.81	+ 0.57	+ 0.36

Slippage Rates[1] Canada by Age and Provincial Totals

July and August 1974

	August 1974	July 1974	July to August Change		August 1974	July 1974	July to August Change
CANADA	4.6	4.8	− 0.2	Nfld.	11.3	10.8	+ 0.5
				P.E.I.	13.9	13.6	+ 0.3
14-19 years	2.9	3.2	− 0.3	N.S.	9.3	9.5	− 0.2
				N.B.	8.9	9.3	− 0.4
20-24 years	10.5	10.0	+ 0.5	Que.	0.5	2.0	− 1.5
				Ont.	4.6	4.3	+ 0.3
25-44 years	4.8	5.4	− 0.6	Man.	9.0	5.7	+ 3.3
				Sask.	−0.3	−1.4	+ 1.1
45-64 years	2.9	2.7	+ 0.2	Alta.	7.8	7.9	− 0.1
				B.C.	8.8	8.8	−
65 and over	4.2	4.3	− 0.1				

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

Slippage Rates by Age Groups at Canada Level
August 1974
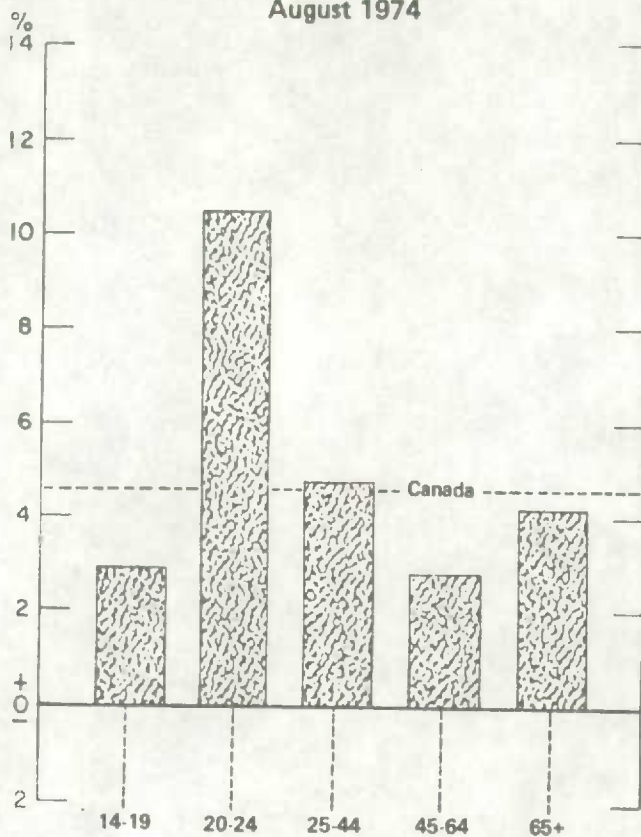
Slippage Rates by Province
August 1974
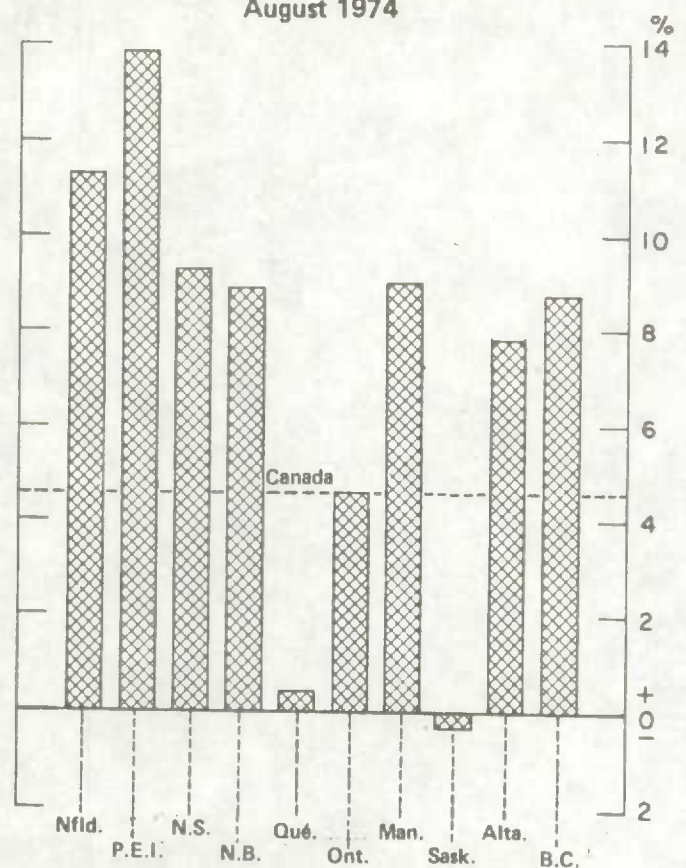
(1) The Above Rates are Calculated on Population Projections Based on 1971 Census.
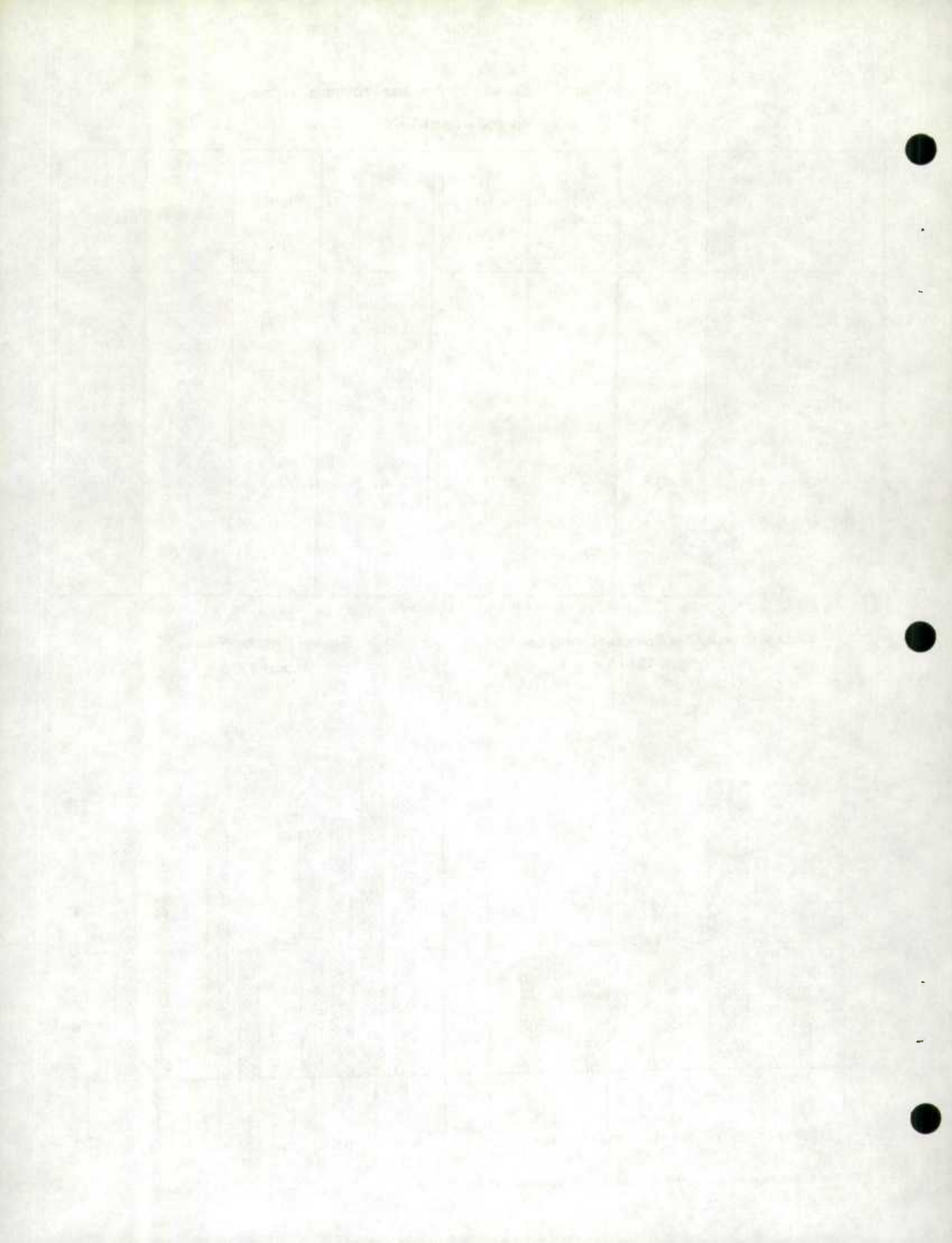
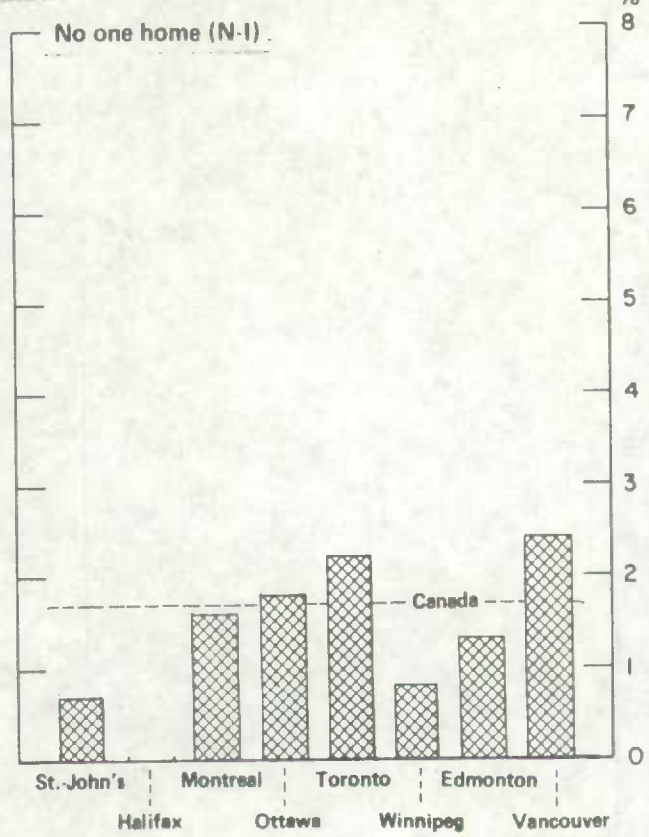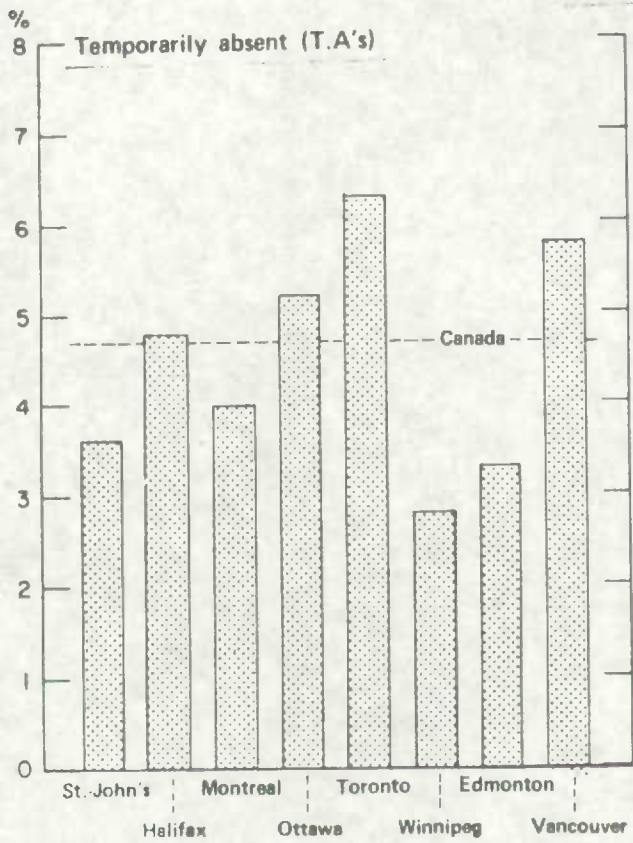# Non-response Rates, Enumeration Cost and Rejected Documents by Regional Office

August 1974

Total Non-response

Enumeration Cost Per Household

Per Cent of Rejected Documents
(Regular Labour Force Items)

June 1974
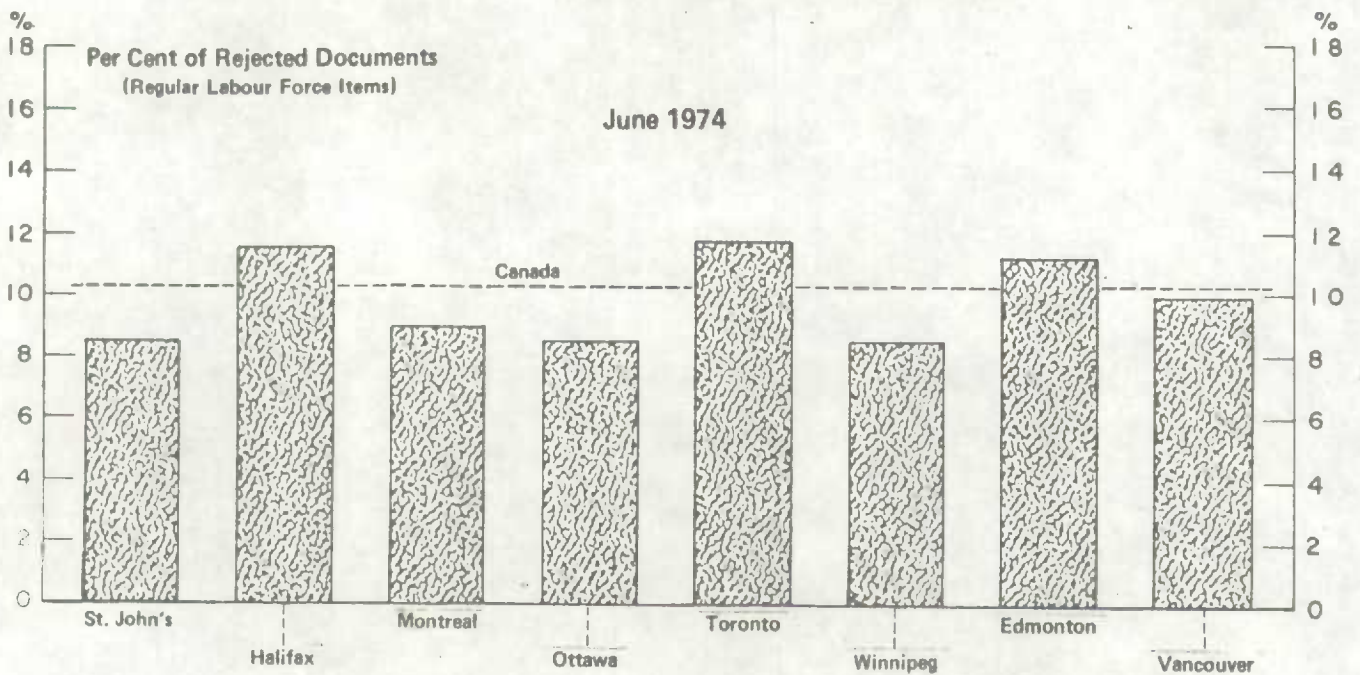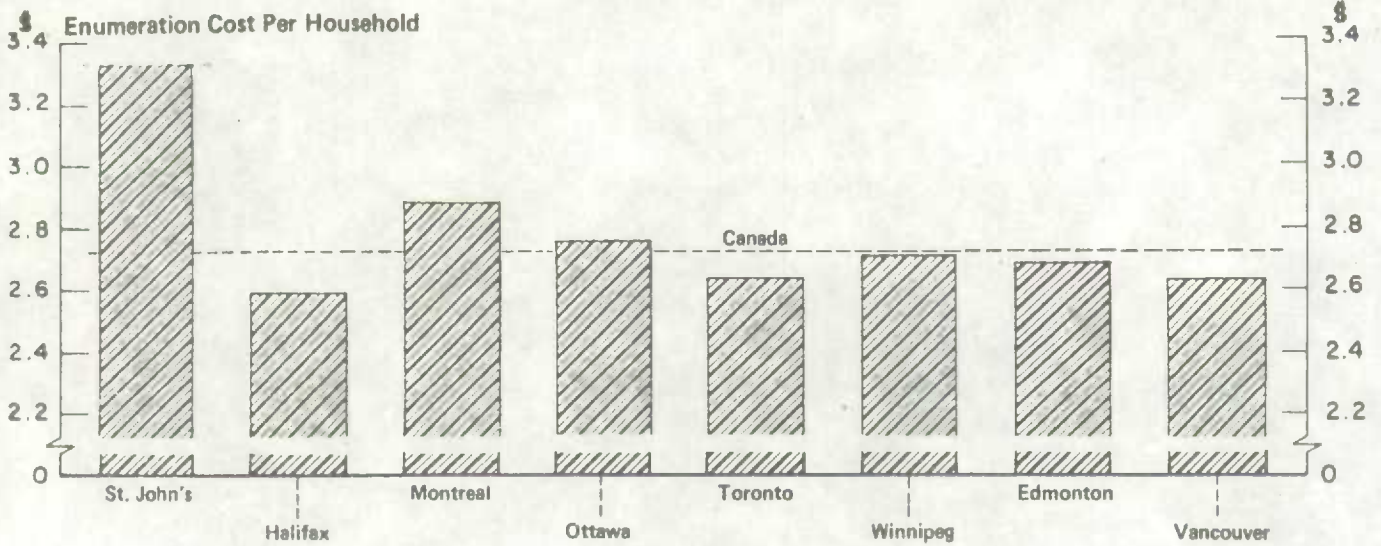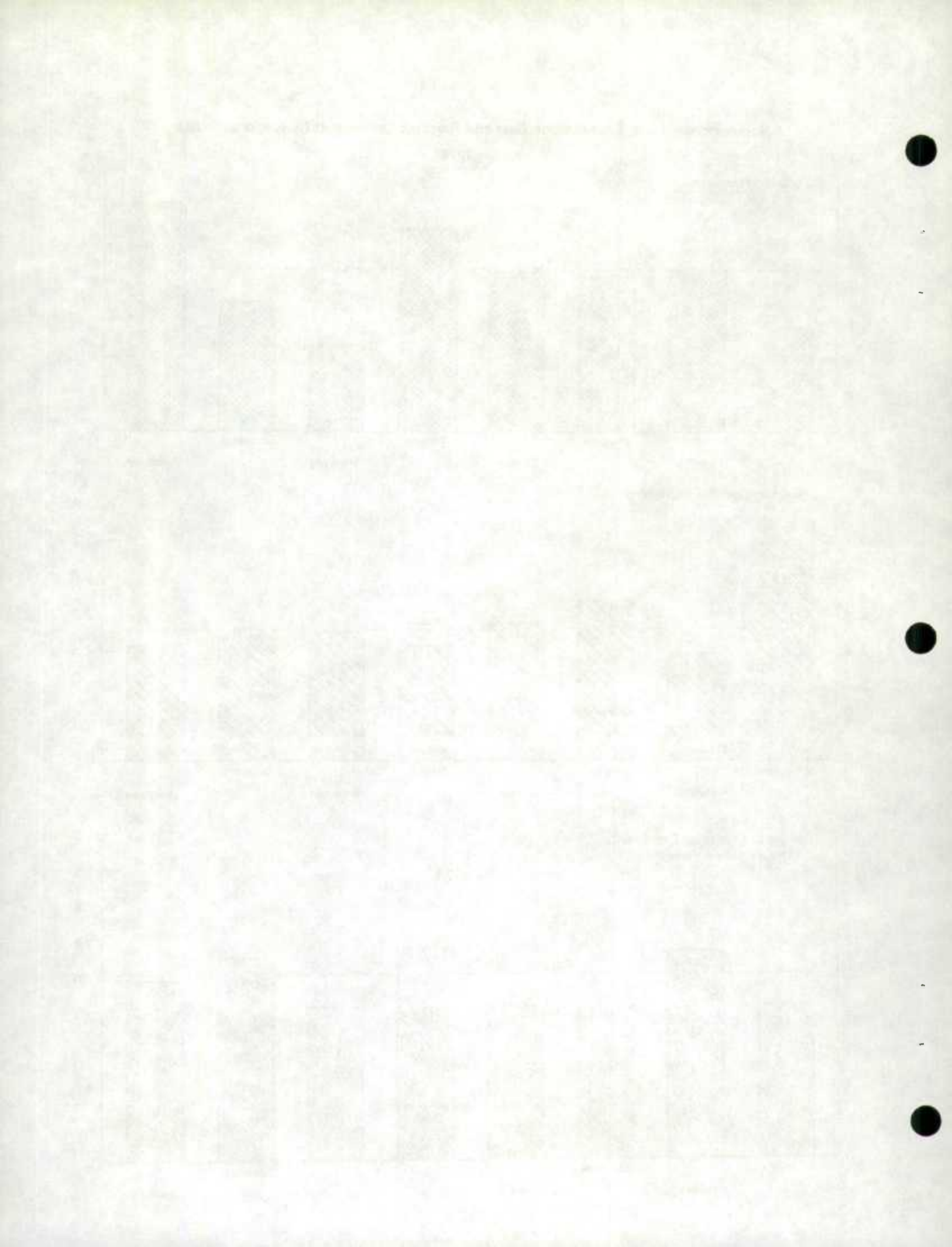
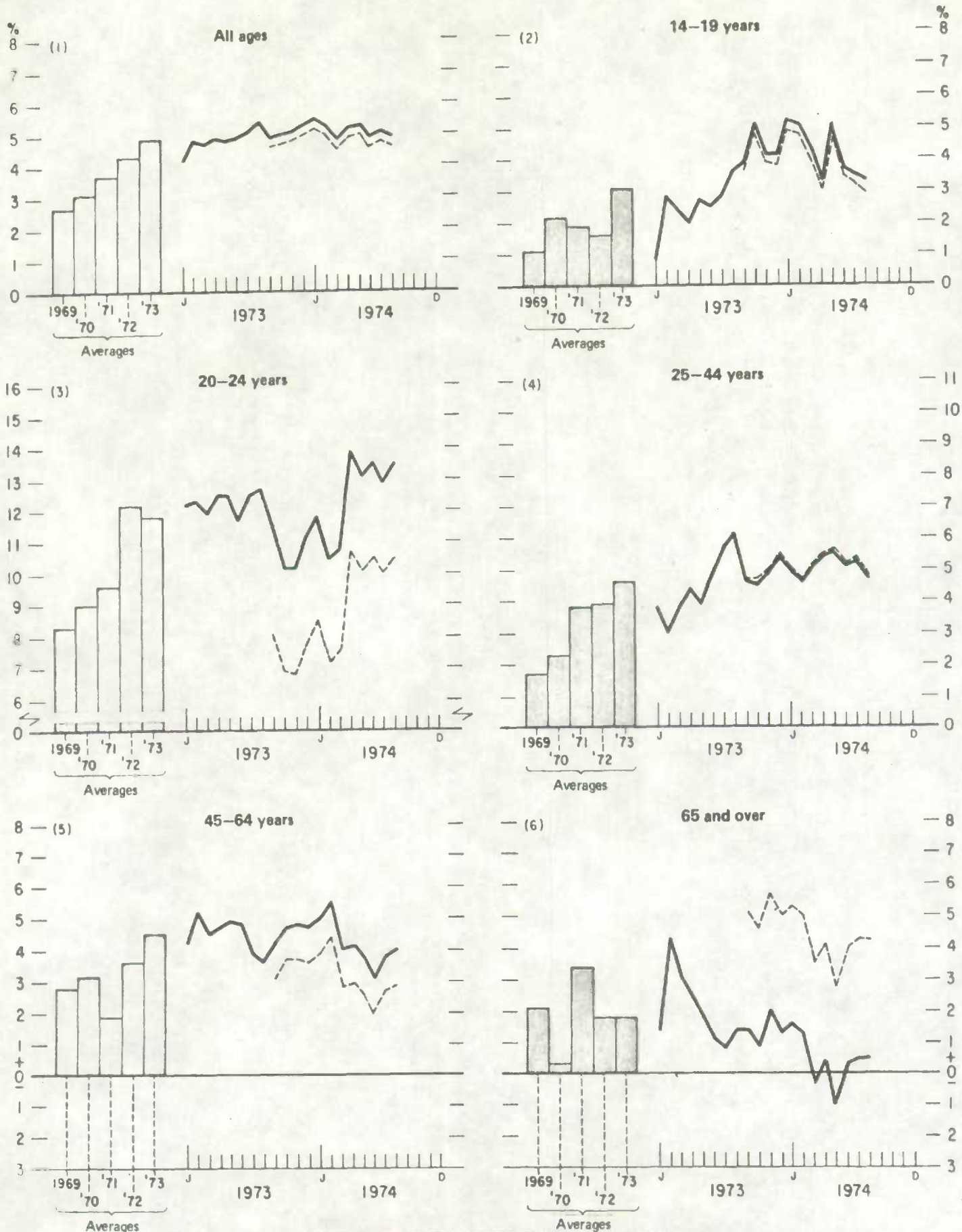# Non-response Rates, by Component

August 1974
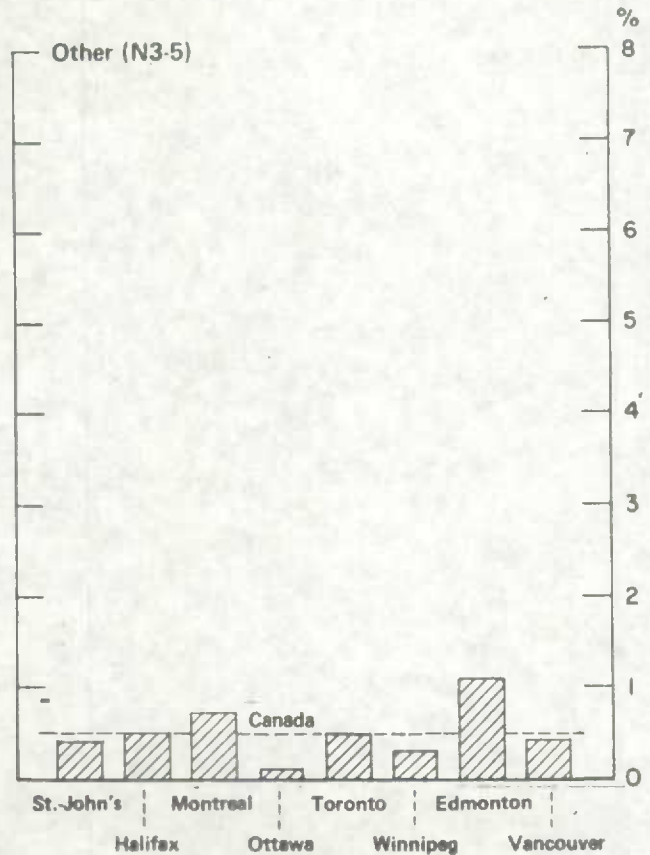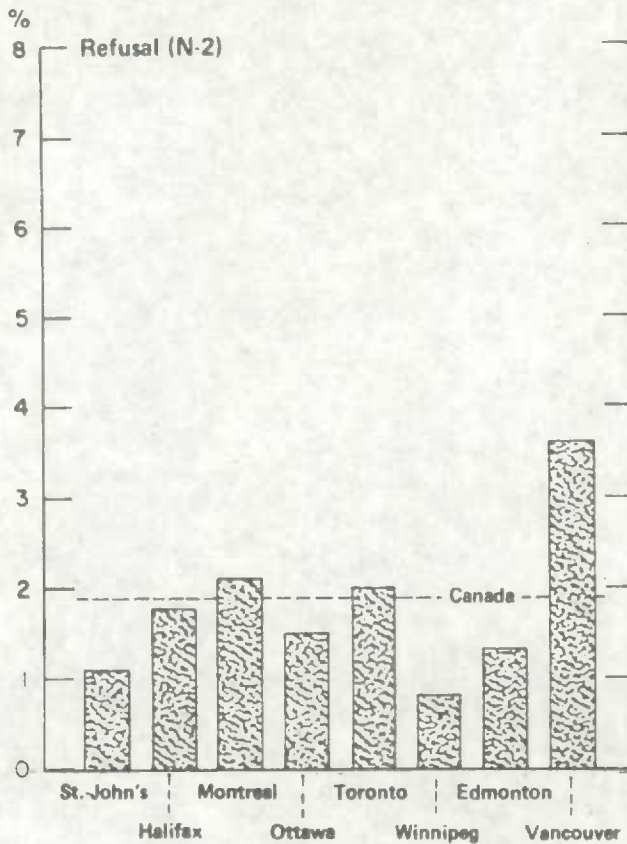
Binomial Factors for the Labour Force, Employed and Unemployed, Canada and the Provinces
August 1974
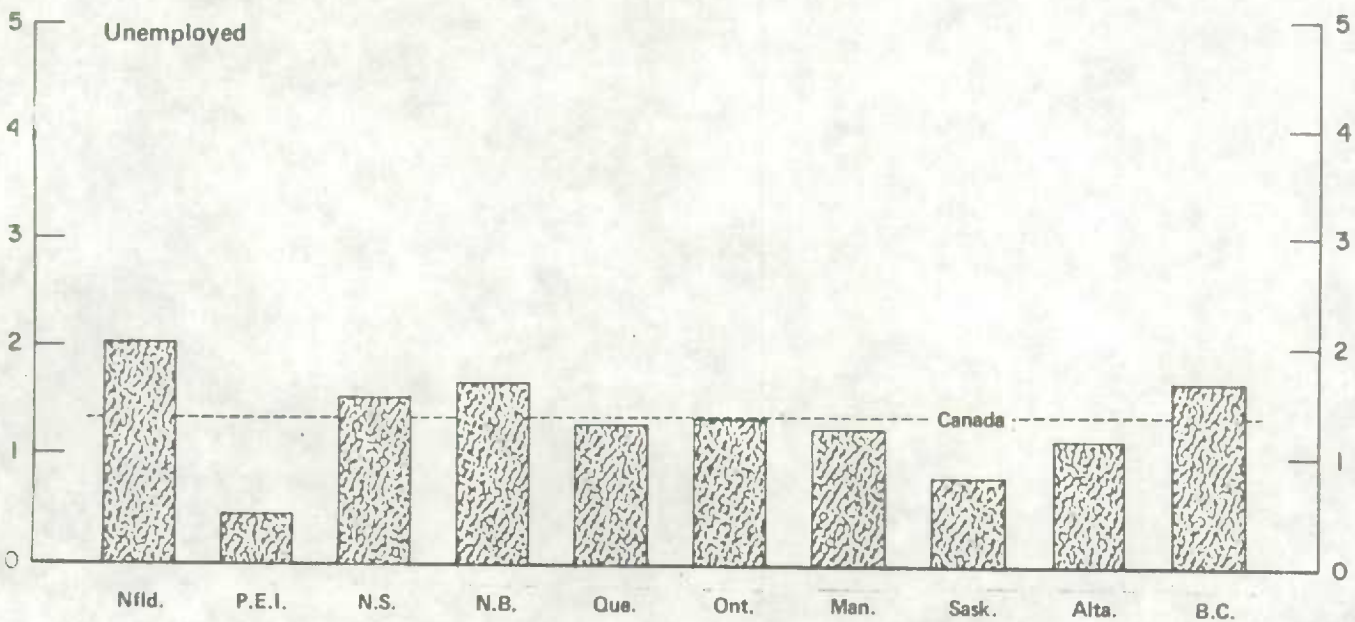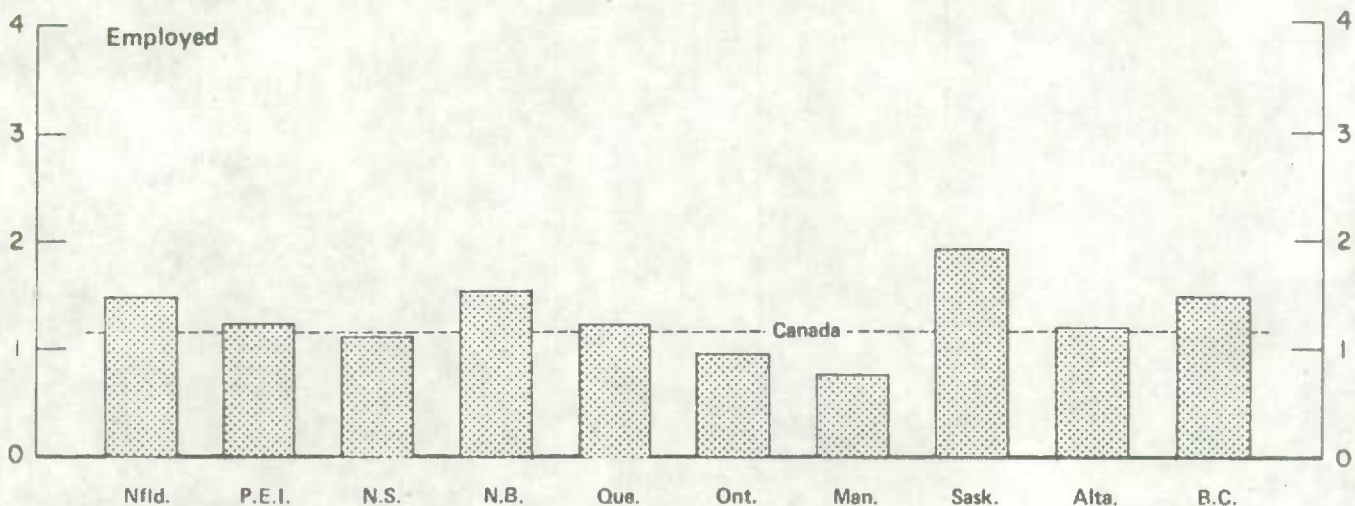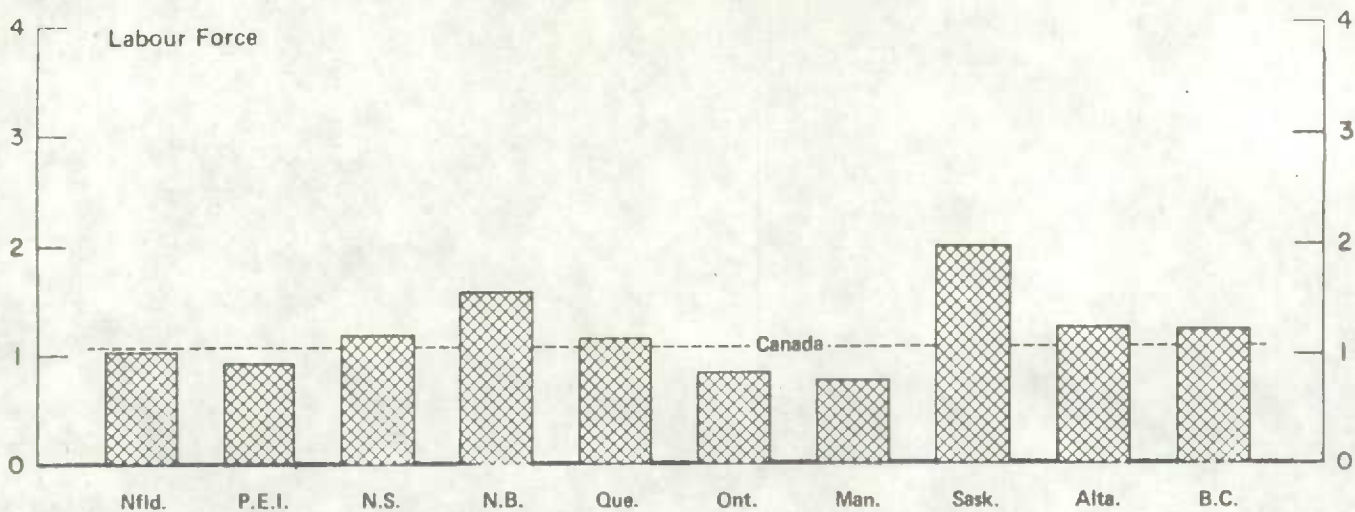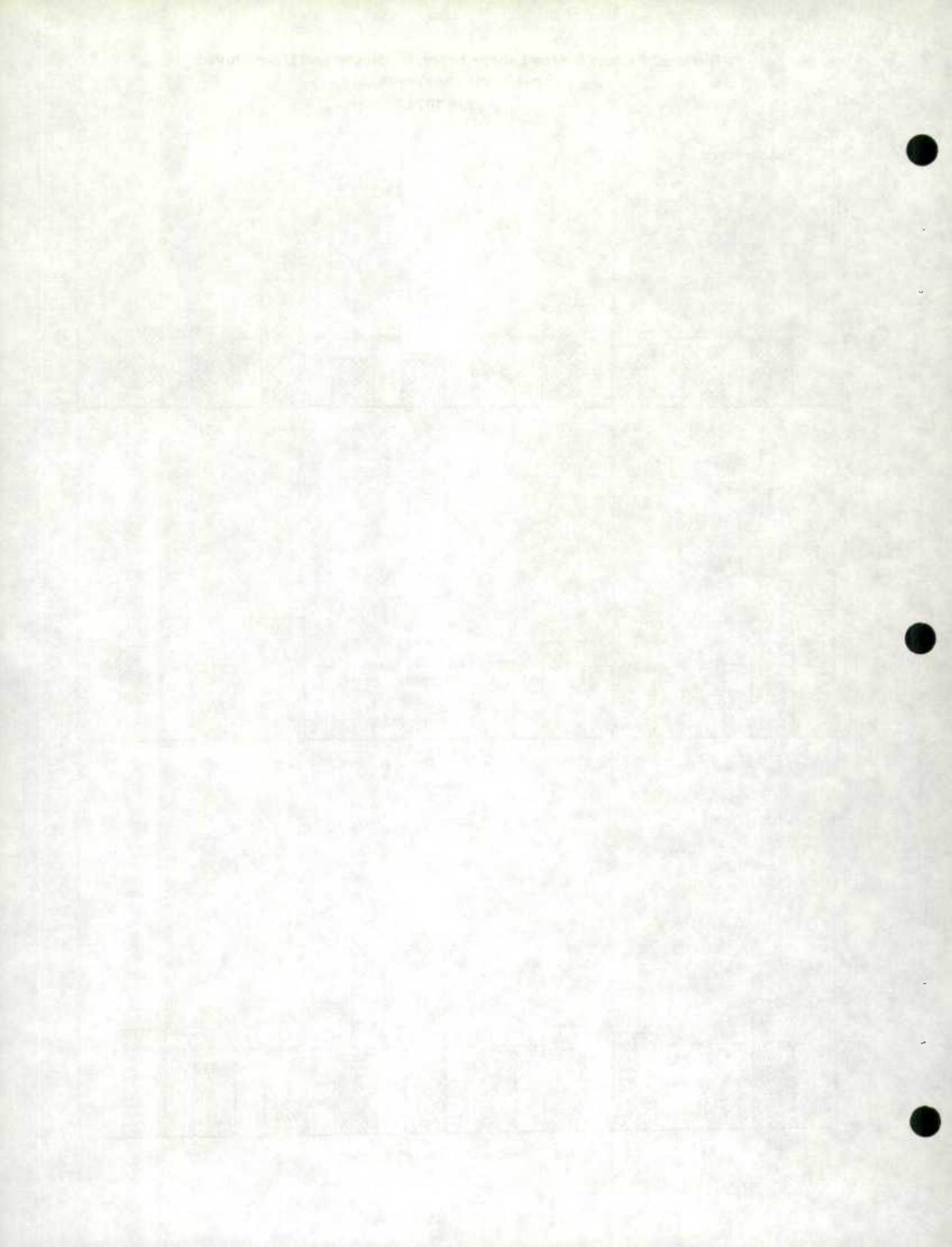
Slippage by Age Group at the Canada Level

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

G-3

St. John's Regional Office

Total non-response

(1)

%
20 —
18 —
16 —
14 —
12 —
10 — Canada
8 —
6 —
4 —
2 —
0 —

Canada

St. John's

1969 '71 '73
'70 '72
Averages

J   1973   J   1974   D

Per cent of rejected documents
(Regular labour force items)

(2)

%
20 —
18 —
16 —
14 —
12 —
10 — Canada
8 —
6 —
4 —
2 —
0 —

St. John's

June

J   1973   J   1974   D

Enumeration cost per household (a)

(3)

$
4.00 —
3.50 —
3.00 —
2.50 — Canada
2.00 —
1.50 —
1.00 —
.50 —
0 —

St. John's

Canada

*   *

1969 '71 '73
'70 '72
Averages

J   1973   J   1974   D

**Enumeration cost per household
by type of area** (a)

(4)

$
4.00 —
3.50 —
3.00 — N.S.R.U.
2.50 —
2.00 — S.R.U.
1.50 —
1.00 —
.50 —
0 —

*

*

J   1973   J   1974   D
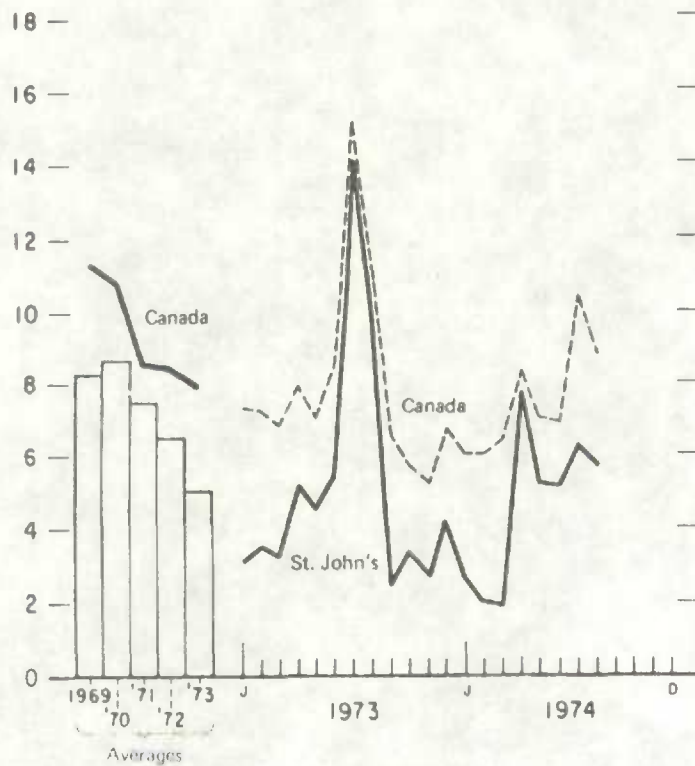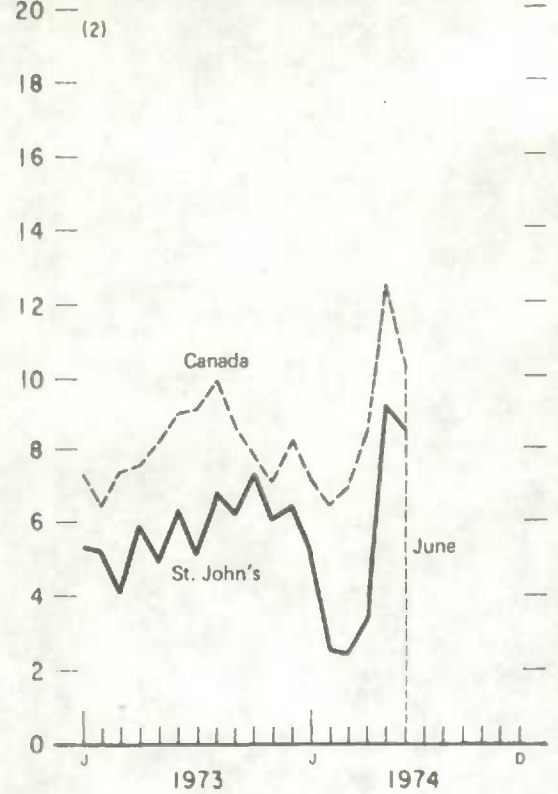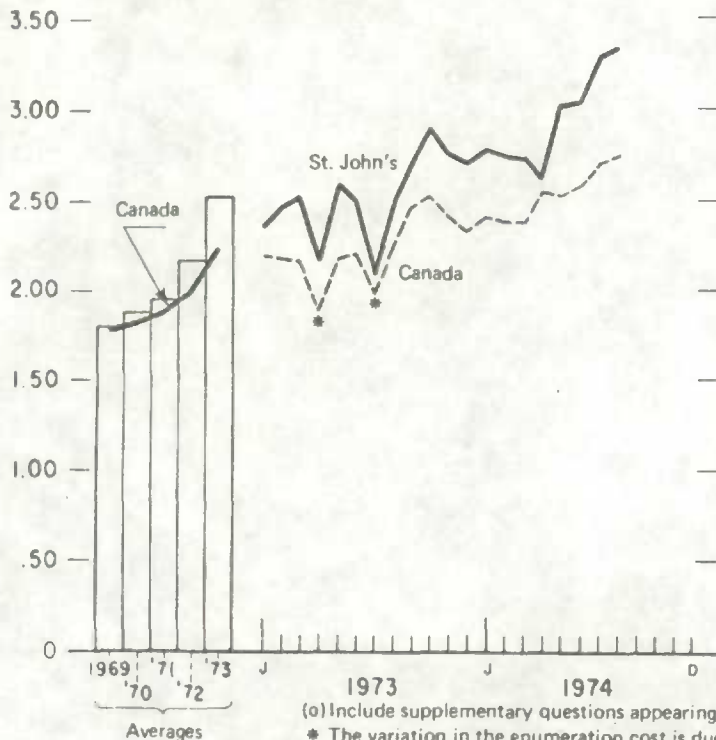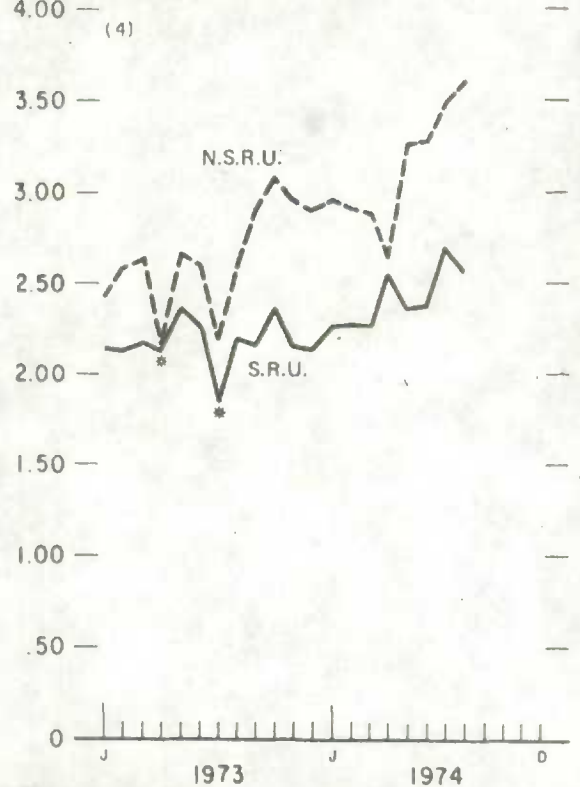
(a) Include supplementary questions appearing on the LFS regular schedule.
* The variation in the enumeration cost is due to a major supplementary
survey being conducted in conjunction with the regular Labour Force Survey.

Halifax Regional Office

Total non-response
(1)

Per cent of rejected documents
(Regular labour force items)
(2)

Enumeration cost per household (a)
(3)

Enumeration cost per household by type of area (a)
(4)

(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

Total non-response

%
(1)

20 —
18 —
16 —
14 —
12 —
10 —
8 —
6 —
4 —
2 —
0

Montreal

Canada

Canada

1969 '71 '73
'70 '72
Averages

1973   1974

Per cent of rejected documents
(Regular labour force items)

%
(2)

20 —
18 —
16 —
14 —
12 —
10 —
8 —
6 —
4 —
2 —
0

Canada

Montreal   June

1973   1974

Enumeration cost per household (a)

$
(3)

4.00 —
3.50 —
3.00 —
2.50 —
2.00 —
1.50 —
1.00 —
.50 —
0

Canada

Montreal

Canada

1969 '71 '73
'70 '72
Averages

1973   1974

Enumeration cost per household by type of area (a)

$
(4)

4.00 —
3.50 —
3.00 —
2.50 —
2.00 —
1.50 —
1.00 —
.50 —
0

N.S.R.U.

S.R.U.

1973   1974

(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**
(1)

Per cent of rejected documents
% (Regular labour force items)
(2)

Canada

Canada

Ottawa

1969 '71 '73 J
'70 '72
Averages

1973   J   1974   D

Ottawa

Canada

June

J   1973   J   1974   D

$ **Enumeration cost per household** (a)
(3)

Enumeration cost per household
$ by type of area (a)
(4)

Ottawa

Canada

Canada

1969 '71 '73 J
'70 '72
Averages

1973   J   1974   D

N.S.R.U.

S.R.U.

J   1973   J   1974   D

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

Toronto Regional Office

Total non-response

% (1)

Canada

Canada

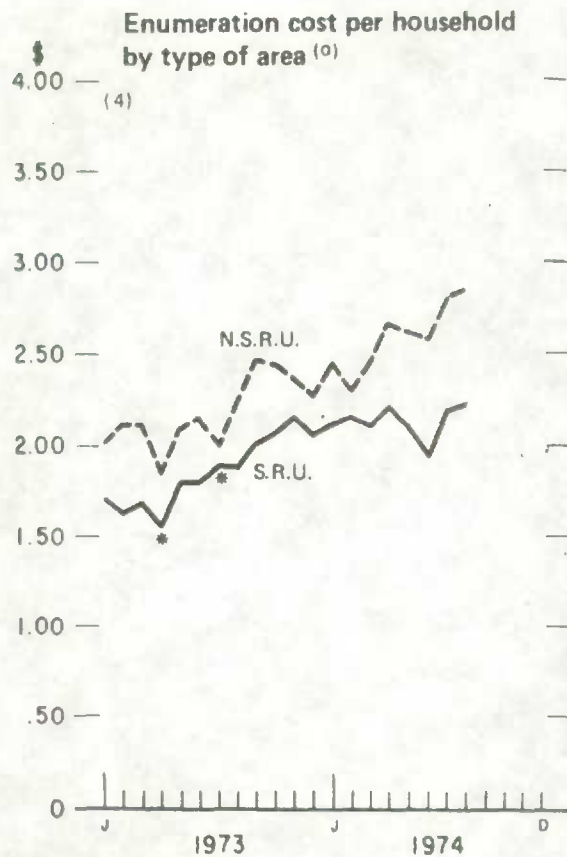Toronto

1969 '71 '73
'70 '72
Averages

1973   1974

Per cent of rejected documents
(Regular labour force items)

% (2)

Toronto

Canada

June

J   1973   J   1974   D

Enumeration cost per household (o)

$ (3)

Canada

Toronto

Canada

*   *

1969 '71 '73
'70 '72
Averages

J   1973   J   1974   D

Enumeration cost per household by type of area (o)
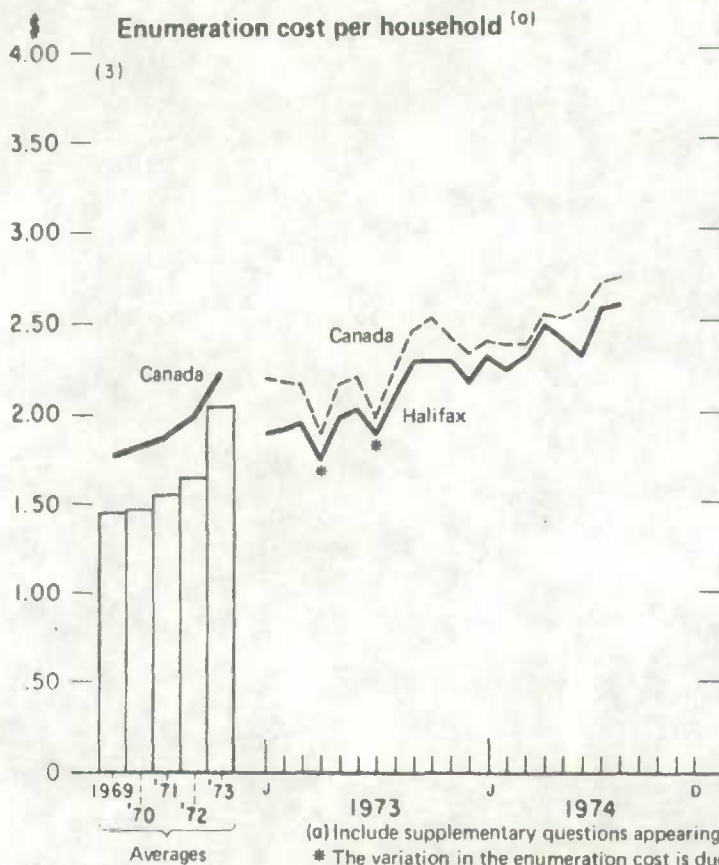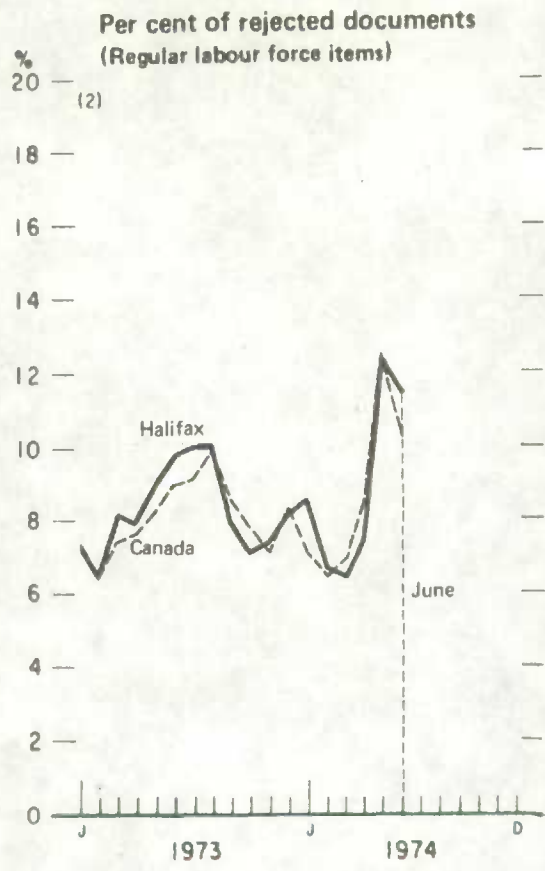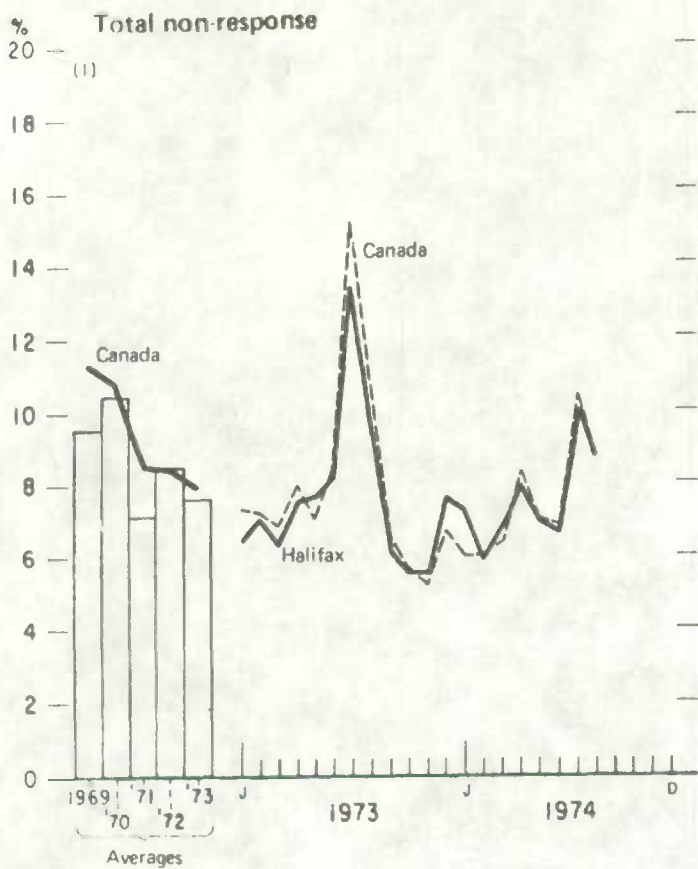
$ (4)

N.S.R.U.

S.R.U.

*   *

J   1973   J   1974   D

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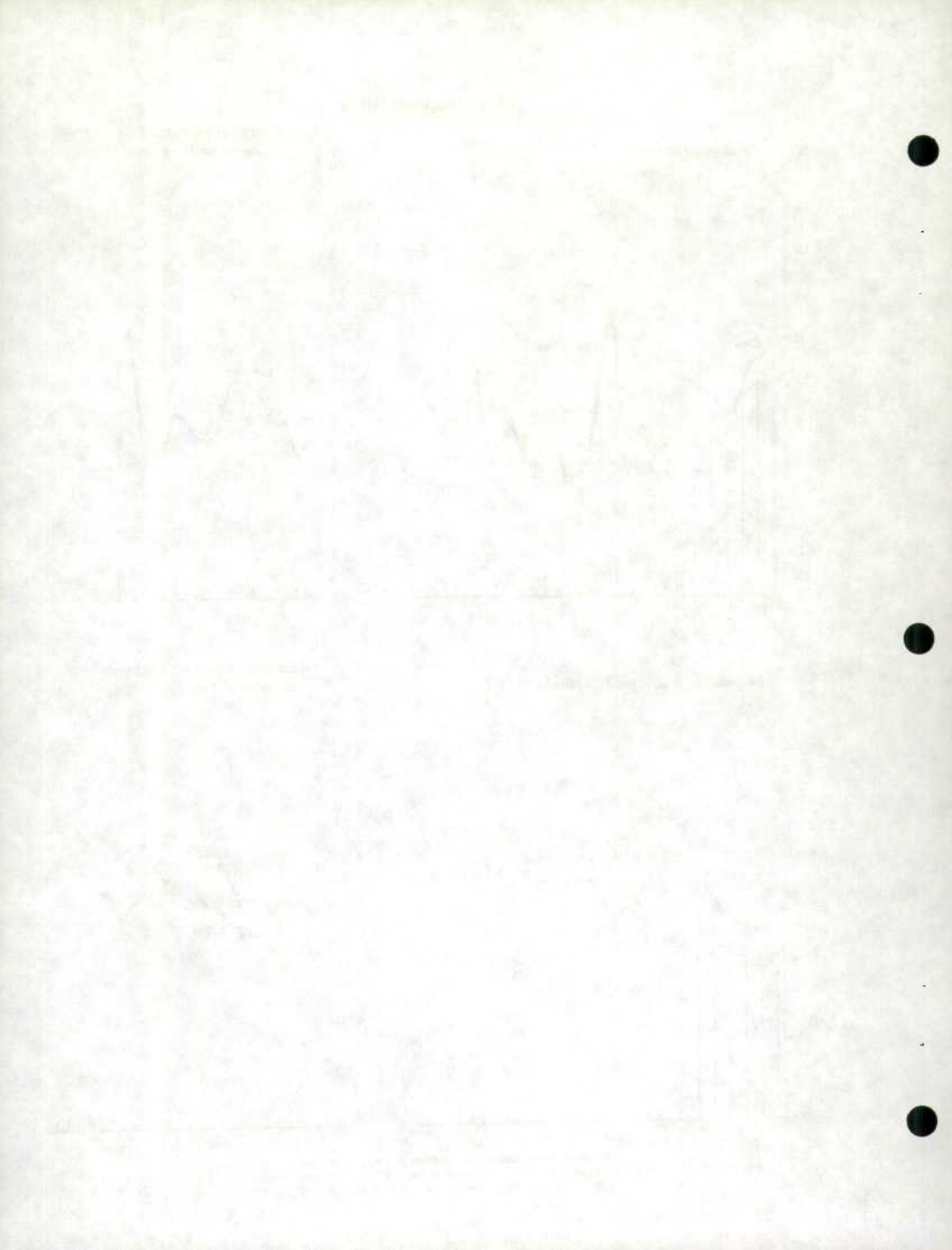
Winnipeg Regional Office

Total non-response

%
20 —
(1)

18 —

16 —

14 —

12 —

10 — Canada

8 —

6 —

4 —

2 —

Canada

Winnipeg

0
1969 '71 '73
'70 '72
Averages
J   1973   J   1974   D

Per cent of rejected documents
(Regular labour force items)

%
20 —
(2)

18 —

16 —

14 —

12 —

10 — Canada

8 —

6 — Winnipeg

4 —

2 —

June

0
J   1973   J   1974   D

Enumeration cost per household (a)

$
4.00 —
(3)

3.50 —

3.00 —

2.50 — Canada   Winnipeg

2.00 — Canada

1.50 —

1.00 —

.50 —

0
1969 '71 '73
'70 '72
Averages
J   1973   J   1974   D

Enumeration cost per household by type of area (a)

$
4.00 —
(4)

3.50 —

3.00 — N.S.R.U.

2.50 —

2.00 — S.R.U.

1.50 —

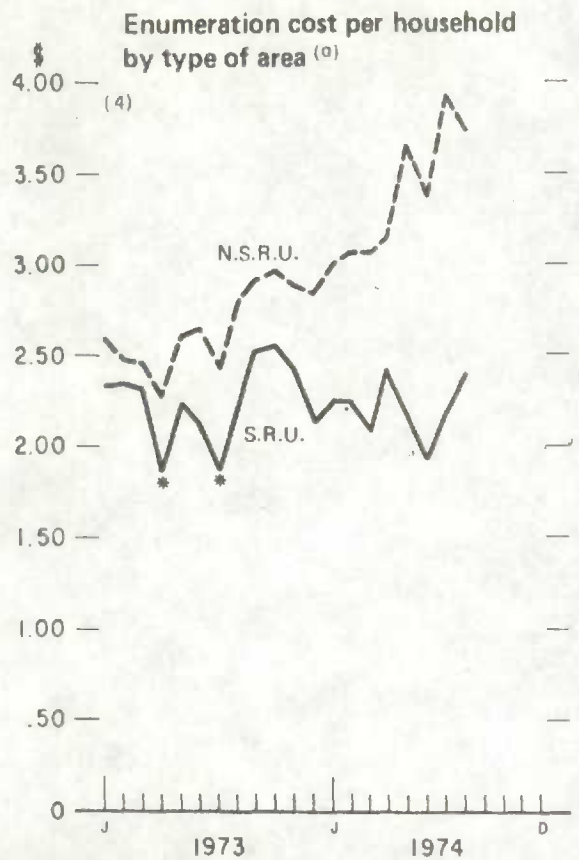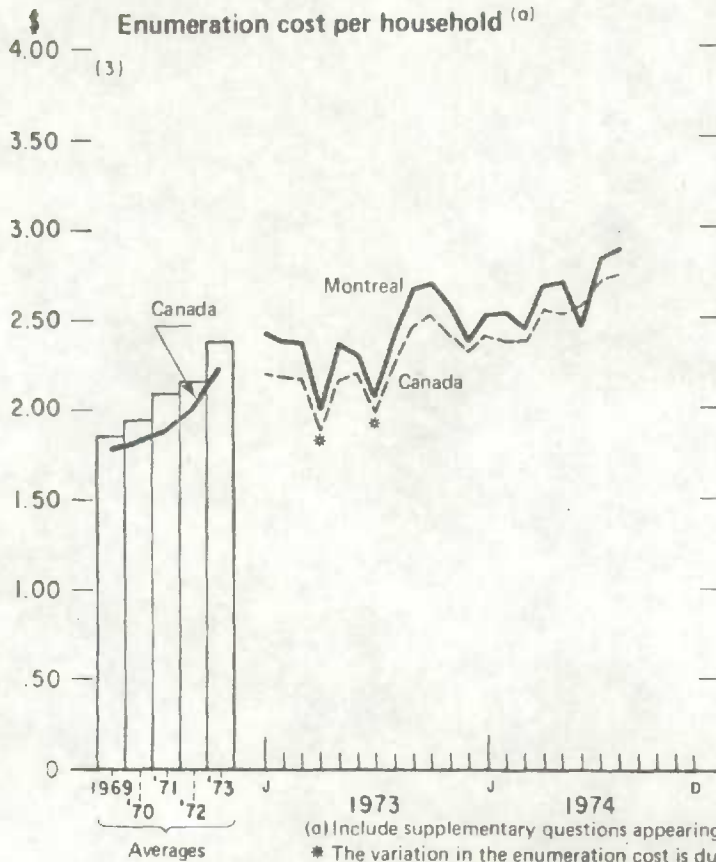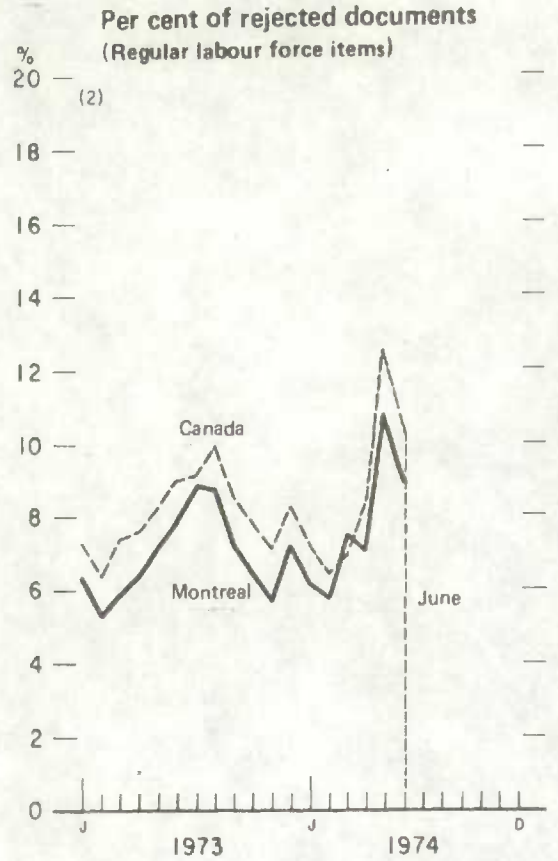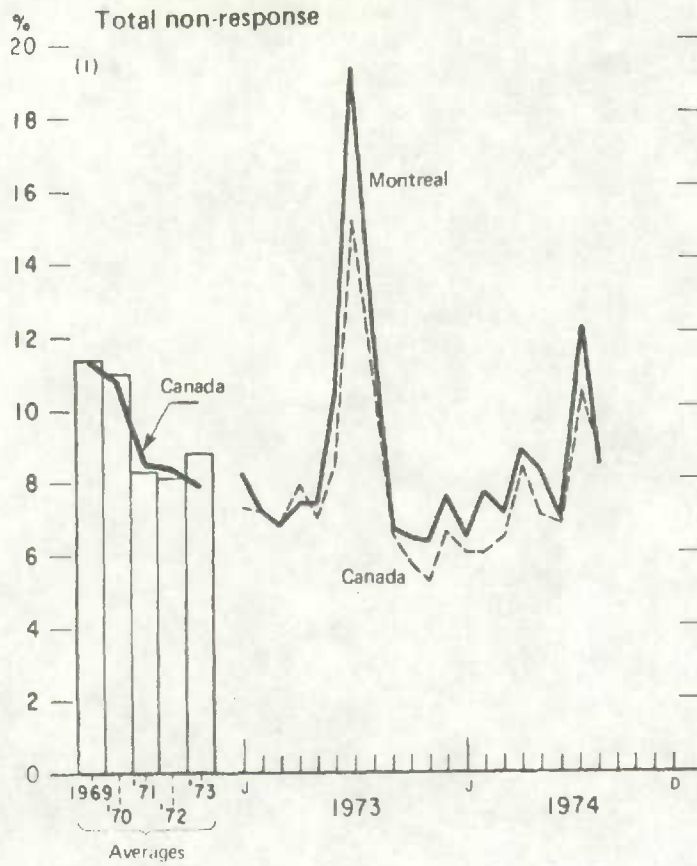1.00 —

.50 —

0
J   1973   J   1974   D

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

Edmonton Regional Office

Total non-response

%
20 —
(1)

18 —

16 —

14 —

12 — Canada
    Edmonton

10 —

8 —
    Canada

6 —

4 —

2 —

0 —
1969 '71 '73 J   1973   J   1974   D
   '70 '72

Averages

Per cent of rejected documents
(Regular labour force items)

%
20 —
(2)

18 —

16 —

14 —

12 — Edmonton

10 —

8 —
    Canada

6 —
                    June

4 —

2 —

0 —
J   1973   J   1974   D

Enumeration cost per household (o)

$
4.00 —
(3)

3.50 —

3.00 —

2.50 — Canada

2.00 —
Canada   Edmonton

1.50 —
    *   *

1.00 —

50 —

0 —
1969 '71 '73 J   1973   J   1974   D
   '70 '72

Averages

Enumeration cost per household
by type of area (o)

$
4.00 —
(4)

3.50 —

3.00 —
    N.S.R.U.

2.50 —

2.00 —
    S.R.U.

1.50 —
    *   *

1.00 —

.50 —

0 —
J   1973   J   1974   D

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

Vancouver Regional Office
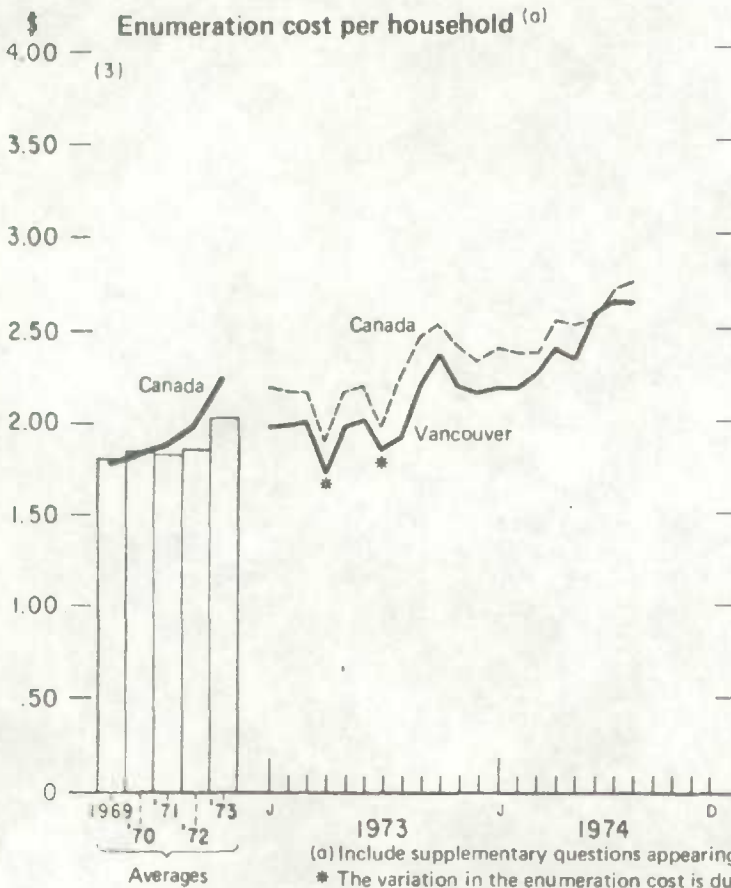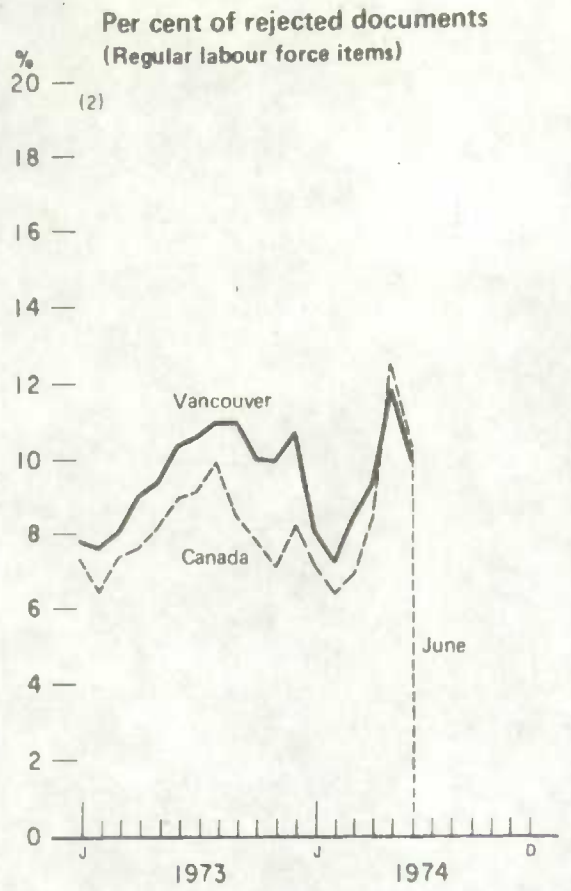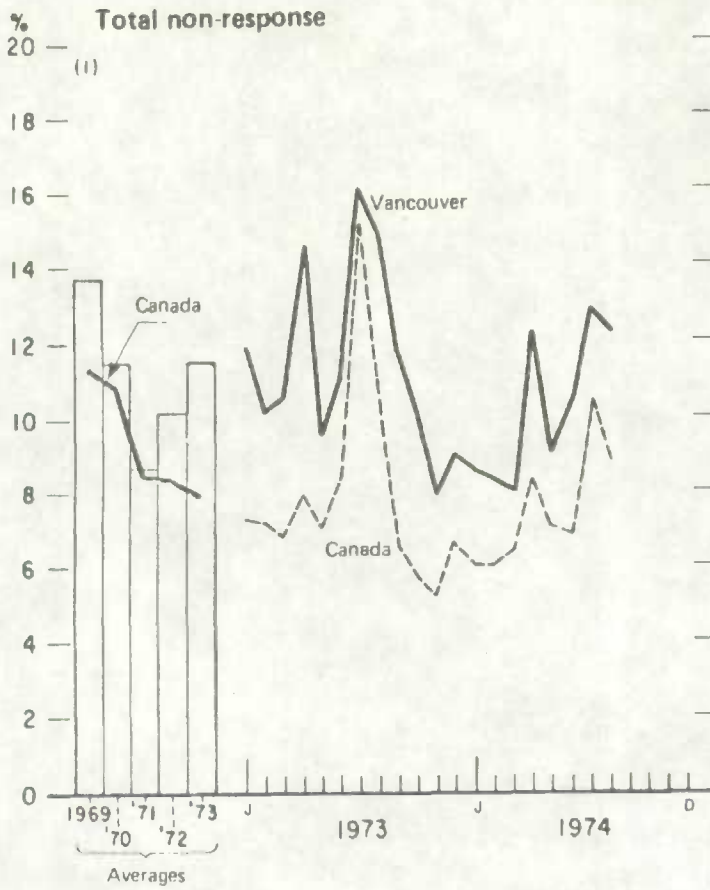
Total non-response

Per cent of rejected documents
(Regular labour force items)

Enumeration cost per household (a)

Enumeration cost per household by type of area (a)
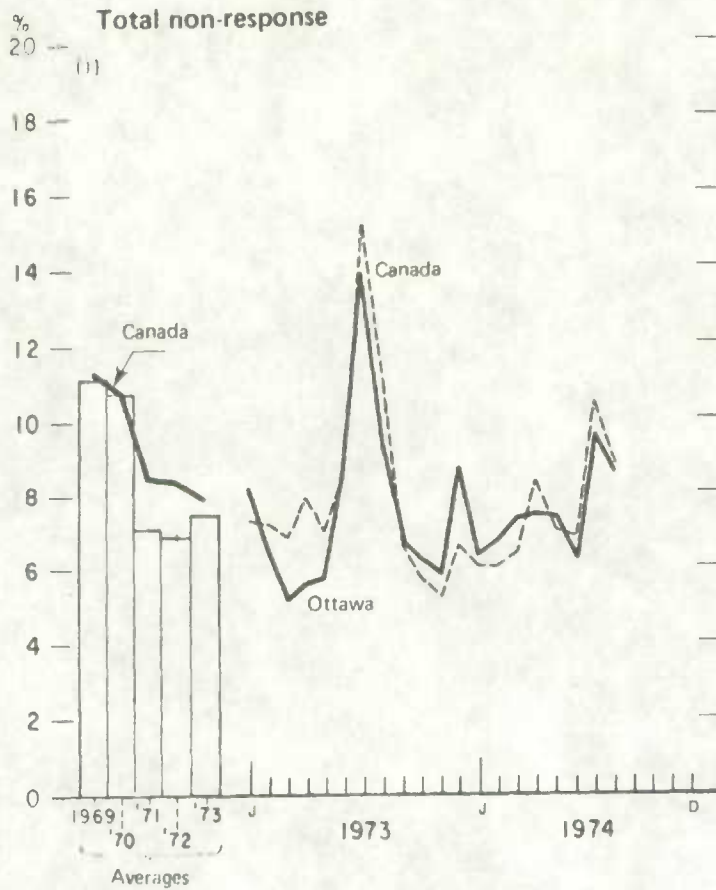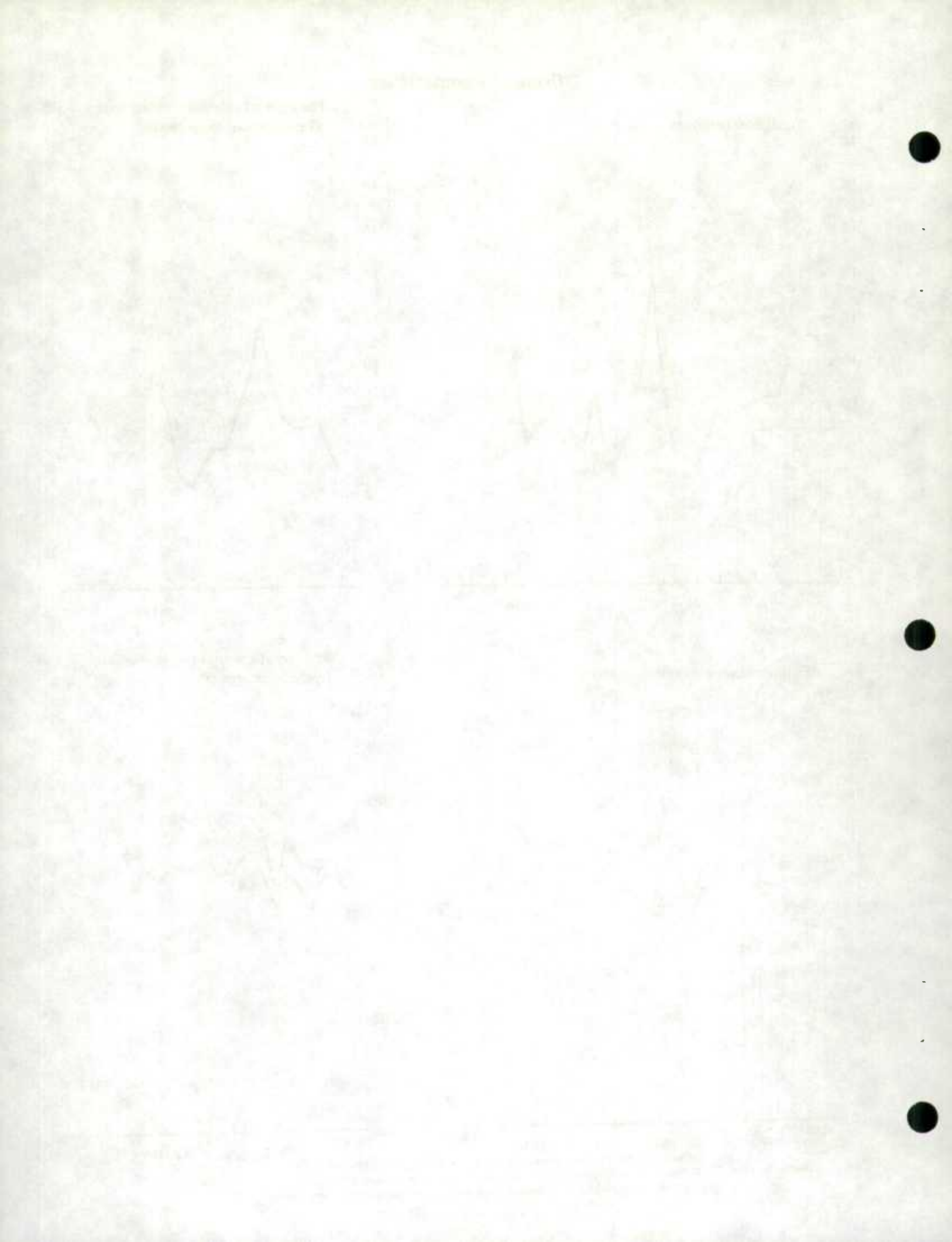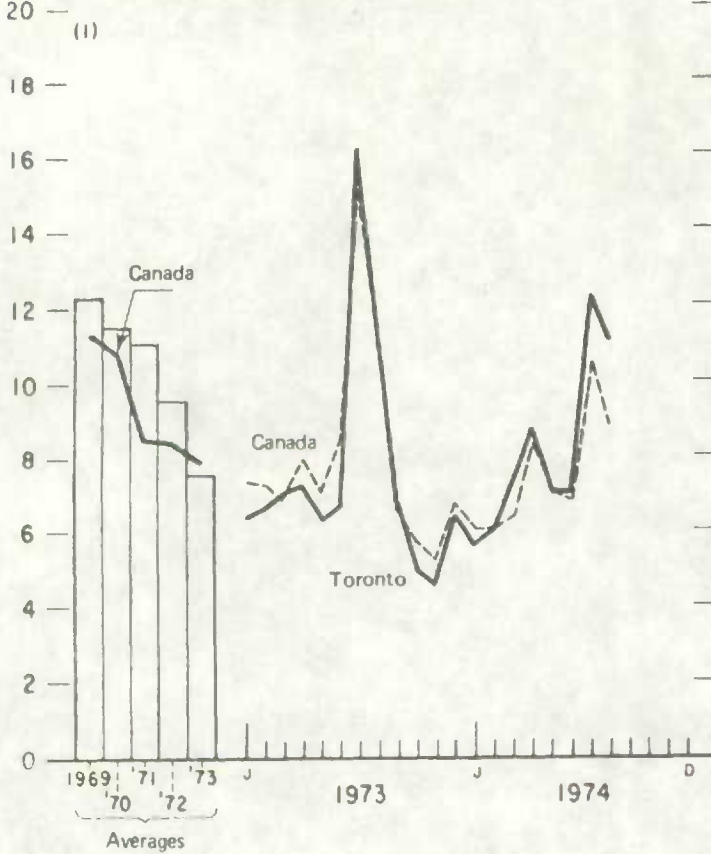

(a) Include supplementary questions appearing on the LFS regular schedule.
* The variation in the enumeration cost is due to a major supplementary
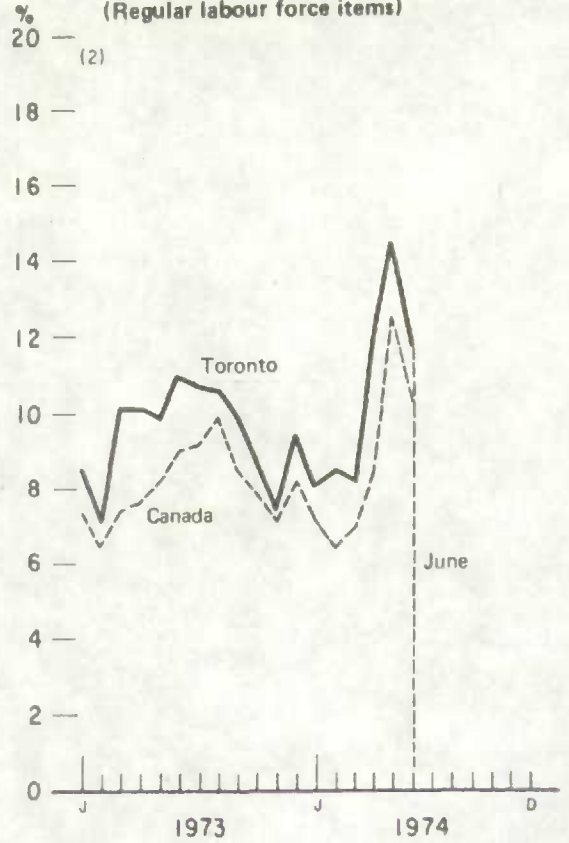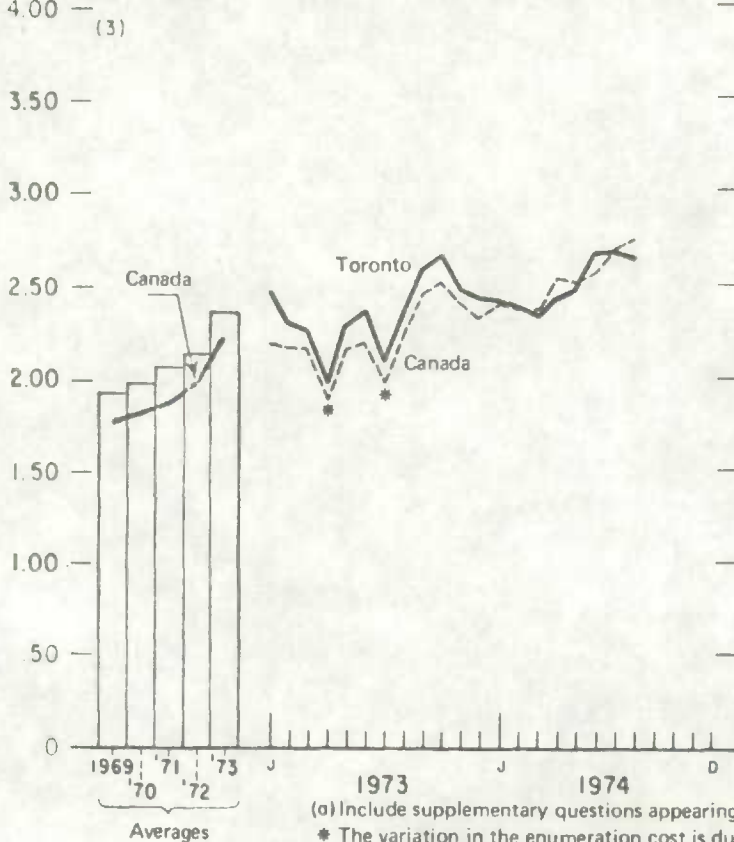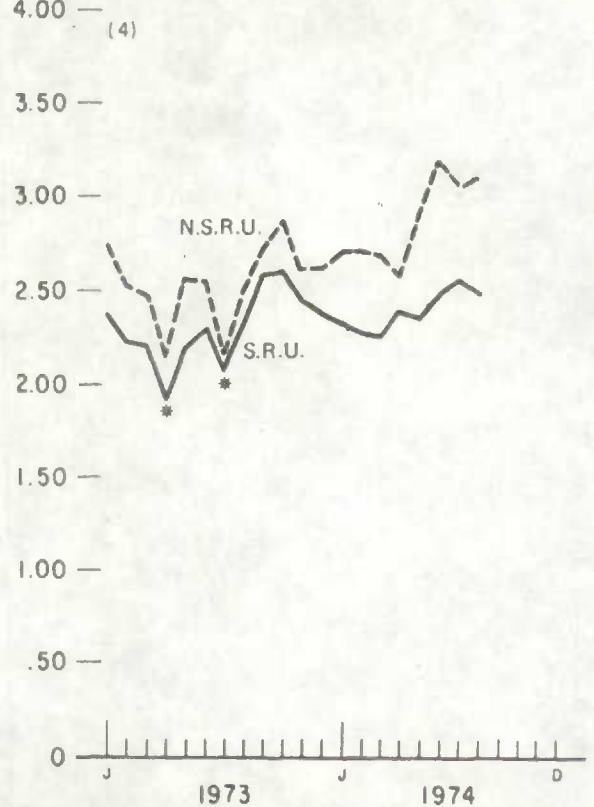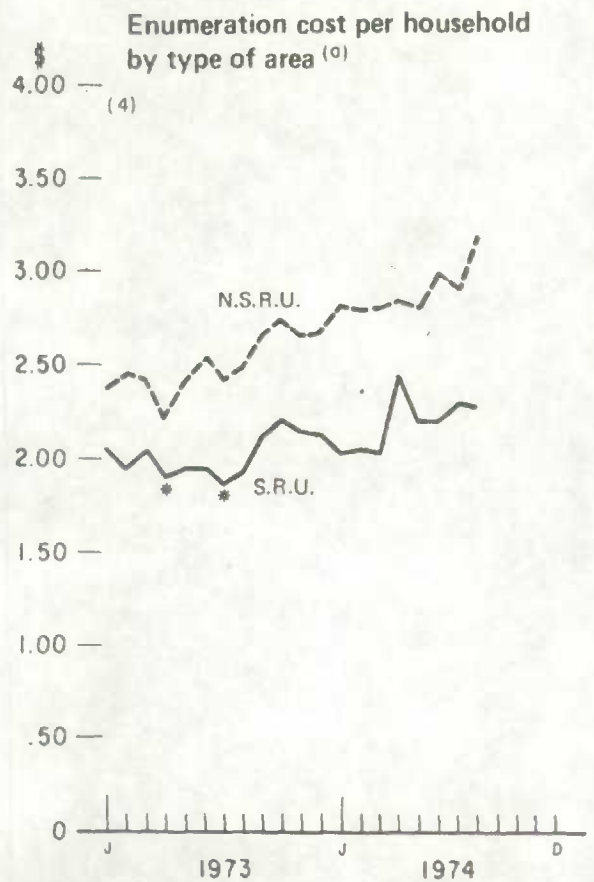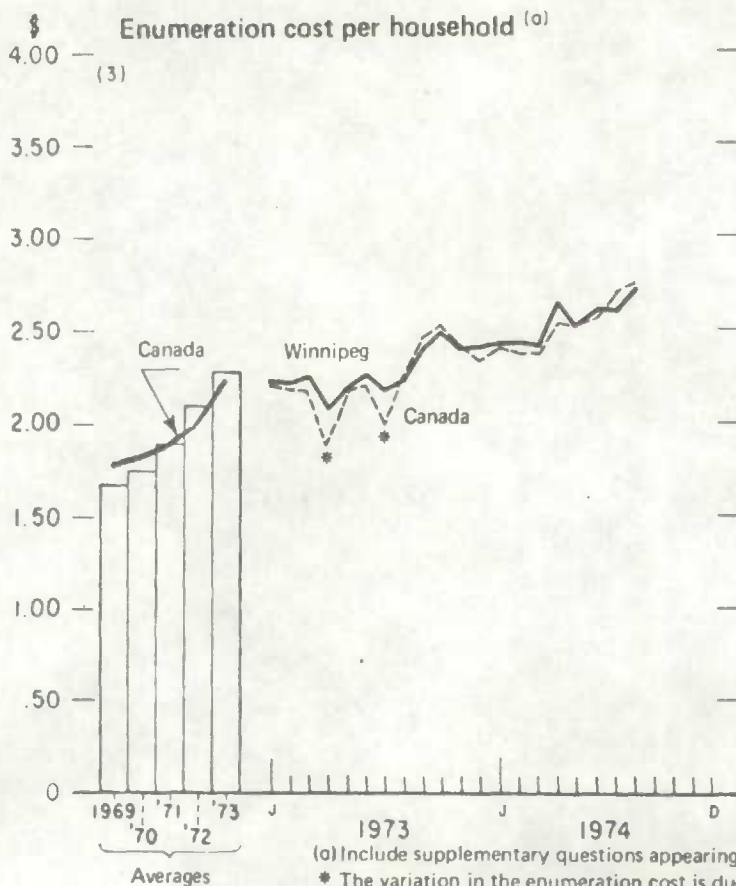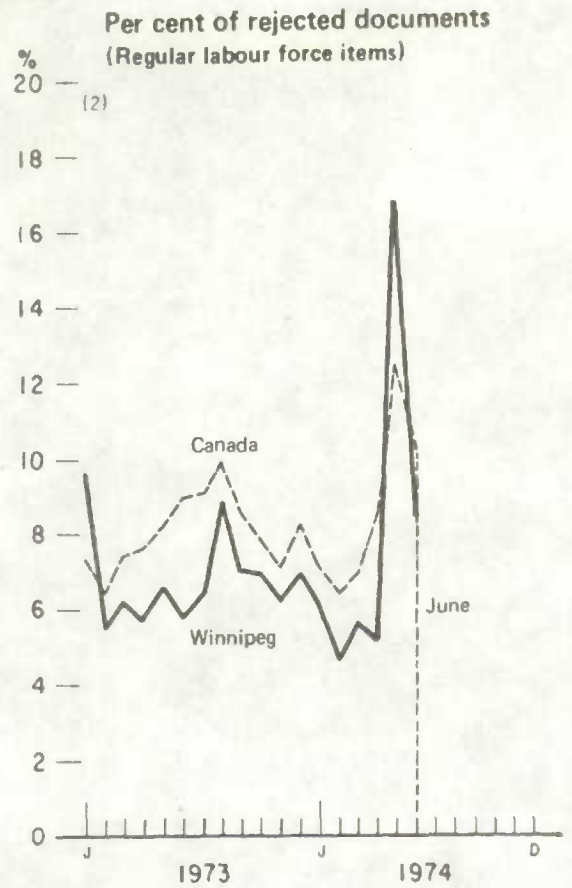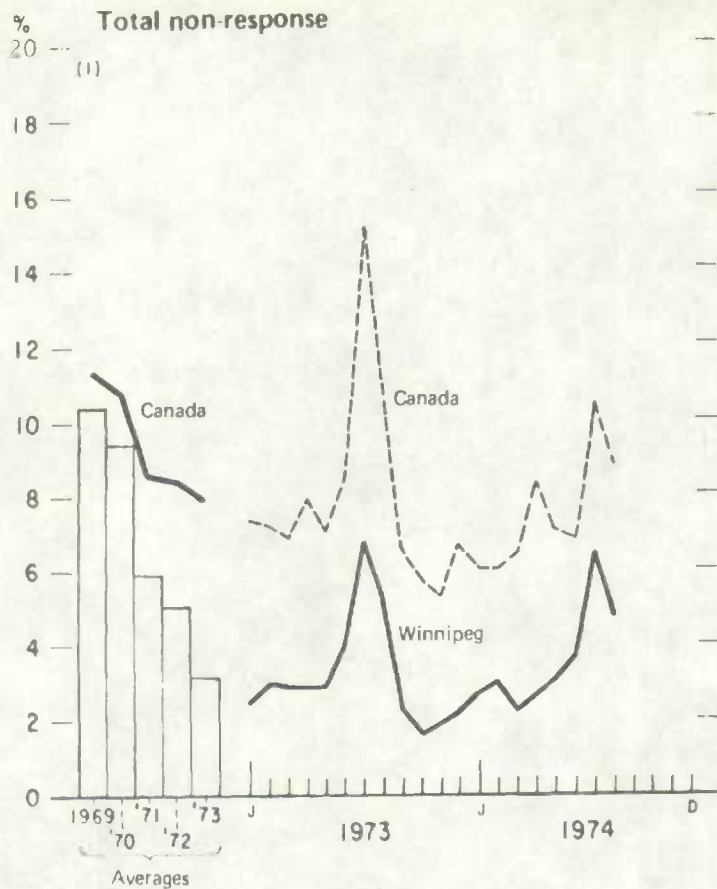survey being conducted in conjunction with the regular Labour Force Survey.
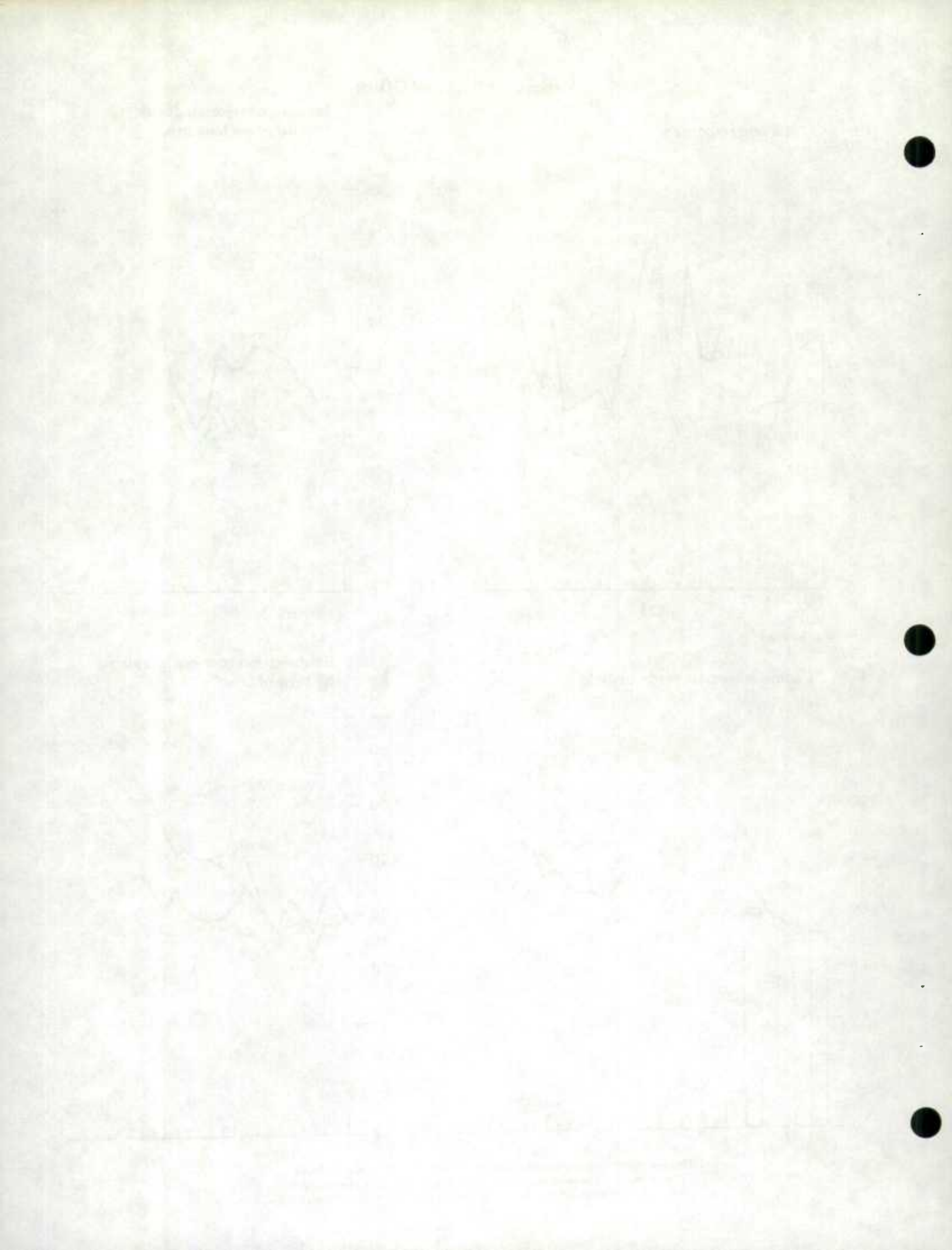
Non-Response Rates by Components, Canada and the Regional Offices
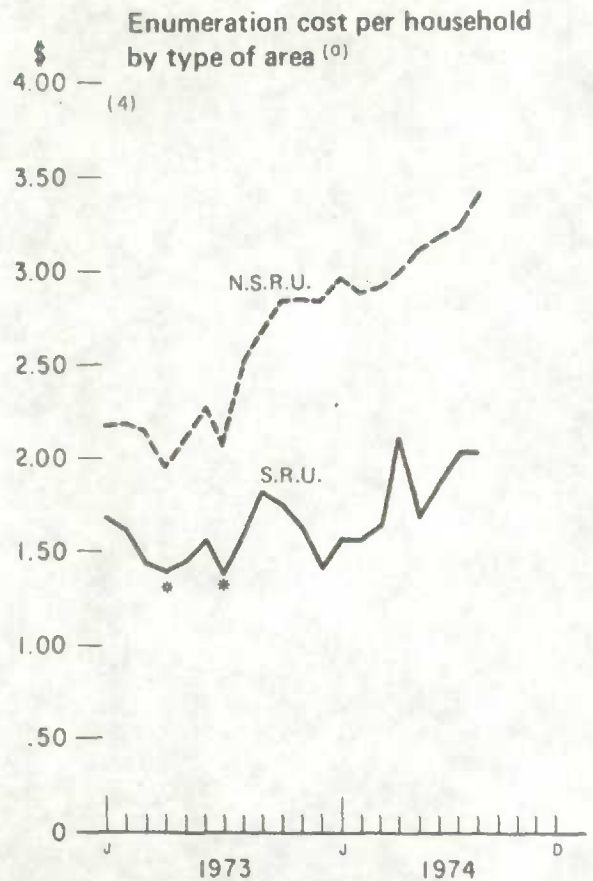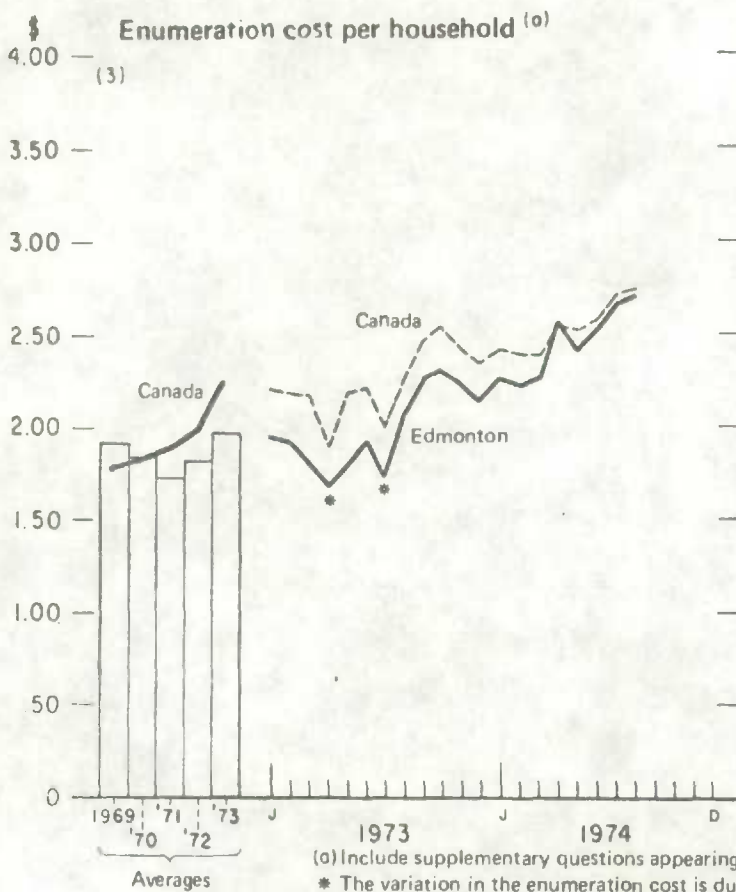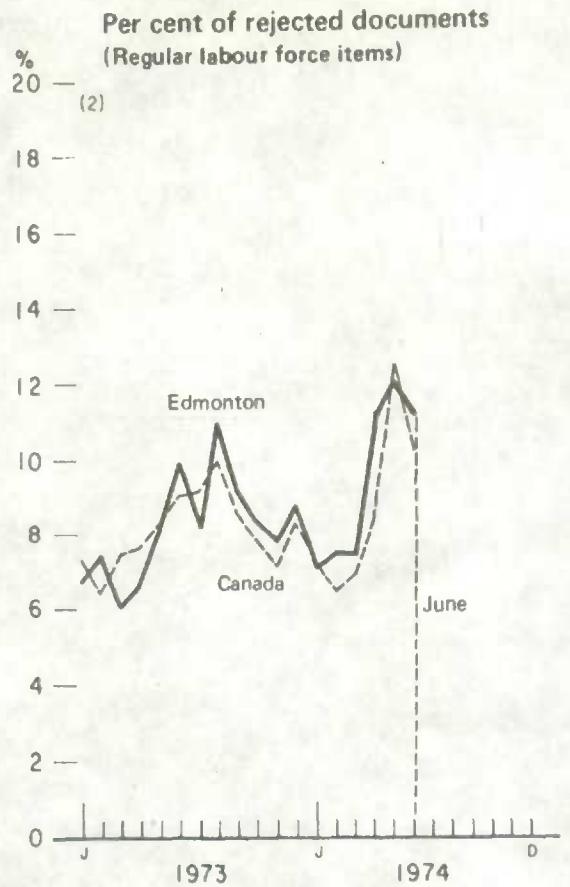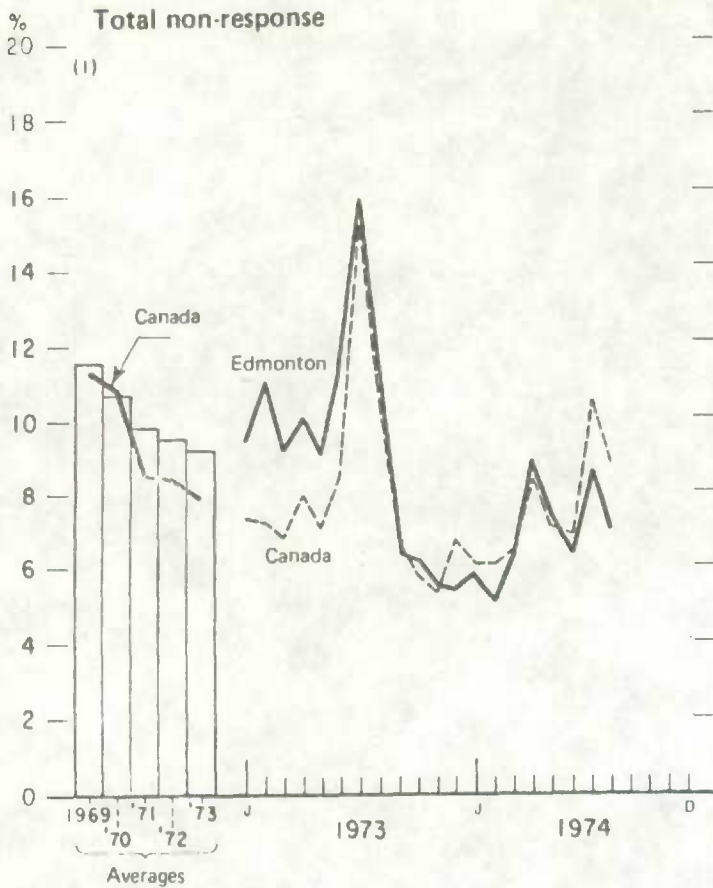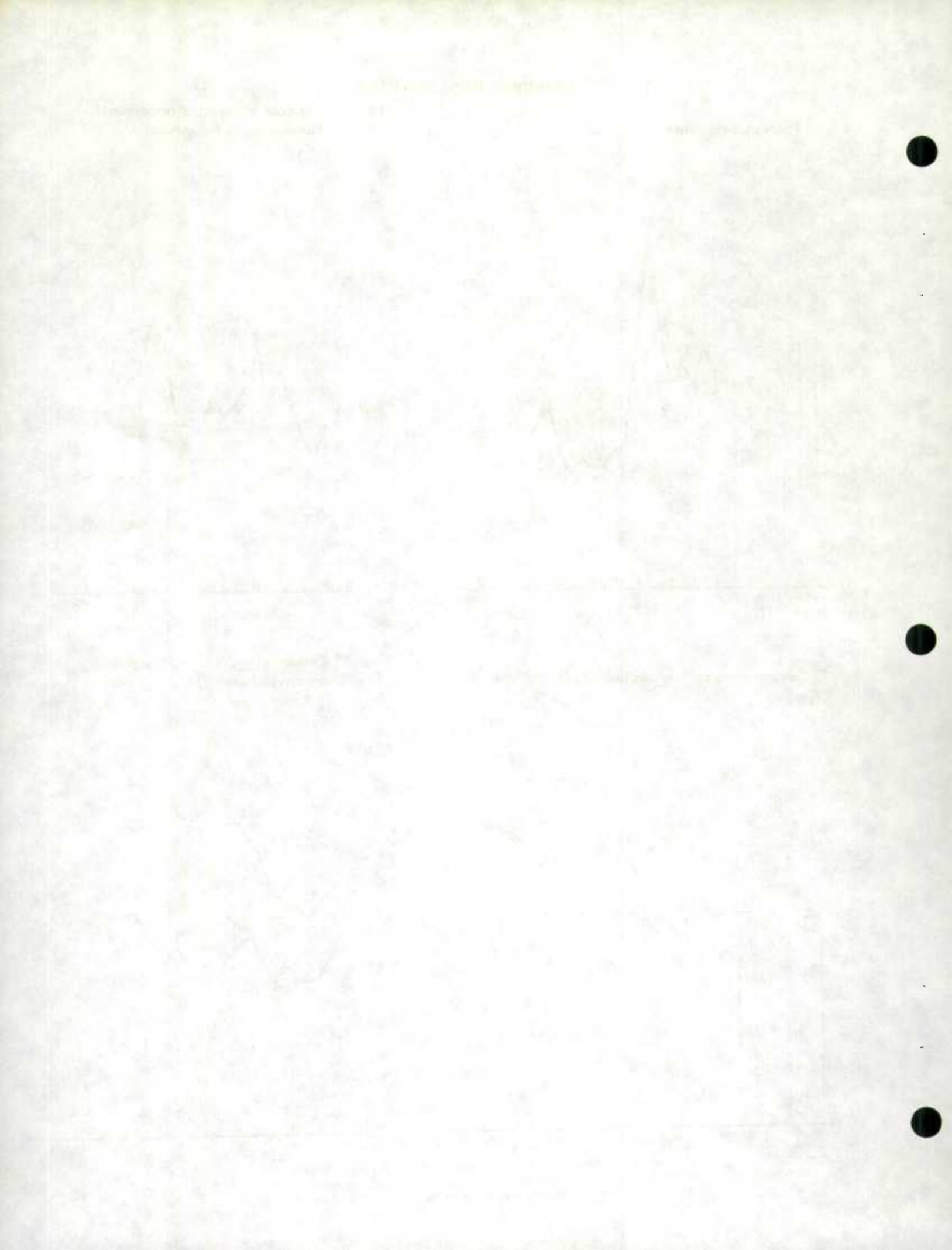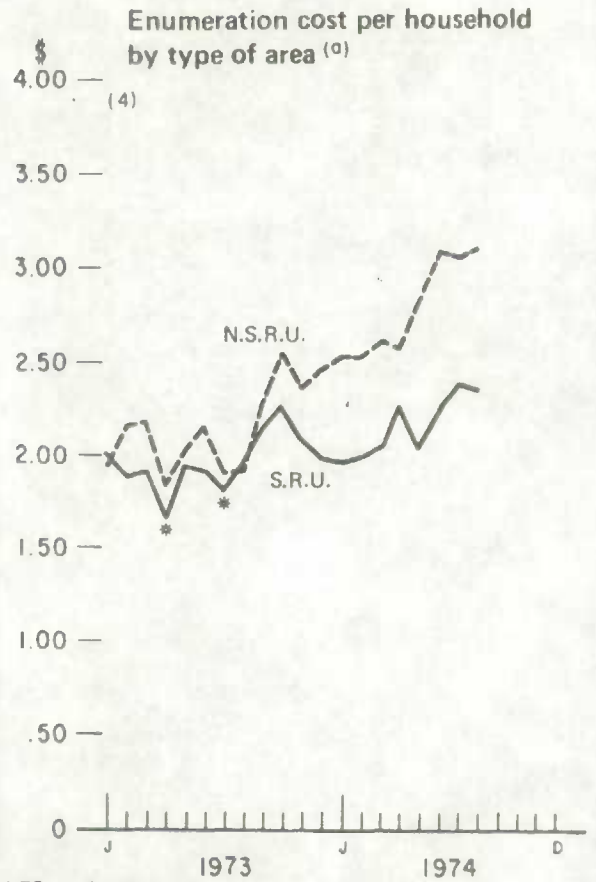July and August 1972, 1973 and 1974

	1974		1973		1972	
	August	July	August	July	August	July
Total						
Canada	8.8	10.4	10.9	15.1	10.1	12.4
St. John's	5.7	6.2	9.7	14.0	8.0	9.5
Halifax	8.7	10.0	9.8	13.4	9.3	9.4
Montreal	8.4	12.1	12.1	19.2	10.3	15.7
Ottawa	8.6	9.5	9.2	13.9	7.9	9.8
Toronto	11.0	12.2	11.4	16.2	11.2	13.8
Winnipeg	4.7	6.4	5.2	6.7	4.9	7.2
Edmonton	7.0	8.5	11.4	15.8	11.7	14.8
Vancouver	12.2	12.8	14.9	16.0	13.8	13.5
Temporarily Absent						
Canada	4.7	6.1	5.6	9.1	5.1	7.3
St. John's	3.6	3.9	6.0	7.3	5.0	6.6
Halifax	4.8	5.7	5.6	7.4	4.5	4.9
Montreal	4.0	7.4	6.2	12.6	4.9	9.9
Ottawa	5.2	5.3	4.2	8.6	4.3	5.5
Toronto	6.3	7.7	6.5	11.4	6.3	8.9
Winnipeg	2.8	3.5	3.1	4.3	2.5	4.3
Edmonton	3.3	5.1	5.3	8.6	6.1	8.1
Vancouver	5.8	6.0	6.0	6.9	5.9	6.8
No one home						
Canada	1.7	1.7	2.3	3.2	2.0	2.1
St. John's	0.6	0.8	2.1	2.2	1.2	1.0
Halifax	1.6	1.7	1.6	3.1	1.5	1.4
Montreal	1.6	1.7	2.3	4.4	2.7	3.0
Ottawa	1.8	2.4	3.0	2.9	1.4	1.5
Toronto	2.2	1.7	2.4	2.6	2.1	1.9
Winnipeg	0.8	1.6	1.2	1.4	0.6	0.7
Edmonton	1.3	1.5	2.7	3.7	3.0	3.7
Vancouver	2.4	2.2	3.5	4.3	2.7	2.6
Refusals						
Canada	1.9	2.1	2.3	1.9	2.3	2.4
St. John's	1.1	1.1	1.2	0.8	0.8	0.9
Halifax	1.8	2.0	2.2	2.0	2.5	2.6
Montreal	2.1	2.2	2.2	1.7	2.4	2.5
Ottawa	1.5	1.7	1.7	2.0	1.8	2.2
Toronto	2.0	2.2	1.8	1.6	2.1	2.6
Winnipeg	0.8	1.1	0.7	0.7	1.6	1.7
Edmonton	1.3	1.7	2.7	2.1	2.0	2.1
Vancouver	3.6	3.7	4.5	3.8	2.9	3.3
Other						
Canada	0.5	0.5	0.7	0.9	0.7	0.6
St. John's	0.4	0.4	0.4	3.7	1.0	1.0
Halifax	0.5	0.6	0.4	0.9	0.8	0.5
Montreal	0.7	0.8	1.4	0.5	0.3	0.3
Ottawa	0.1	0.1	0.3	0.4	0.4	0.6
Toronto	0.5	0.6	0.7	0.6	0.7	0.4
Winnipeg	0.3	0.2	0.2	0.3	0.2	0.5
Edmonton	1.1	0.2	0.7	1.4	0.6	0.9
Vancouver	0.4	0.9	0.9	1.0	2.3	0.8
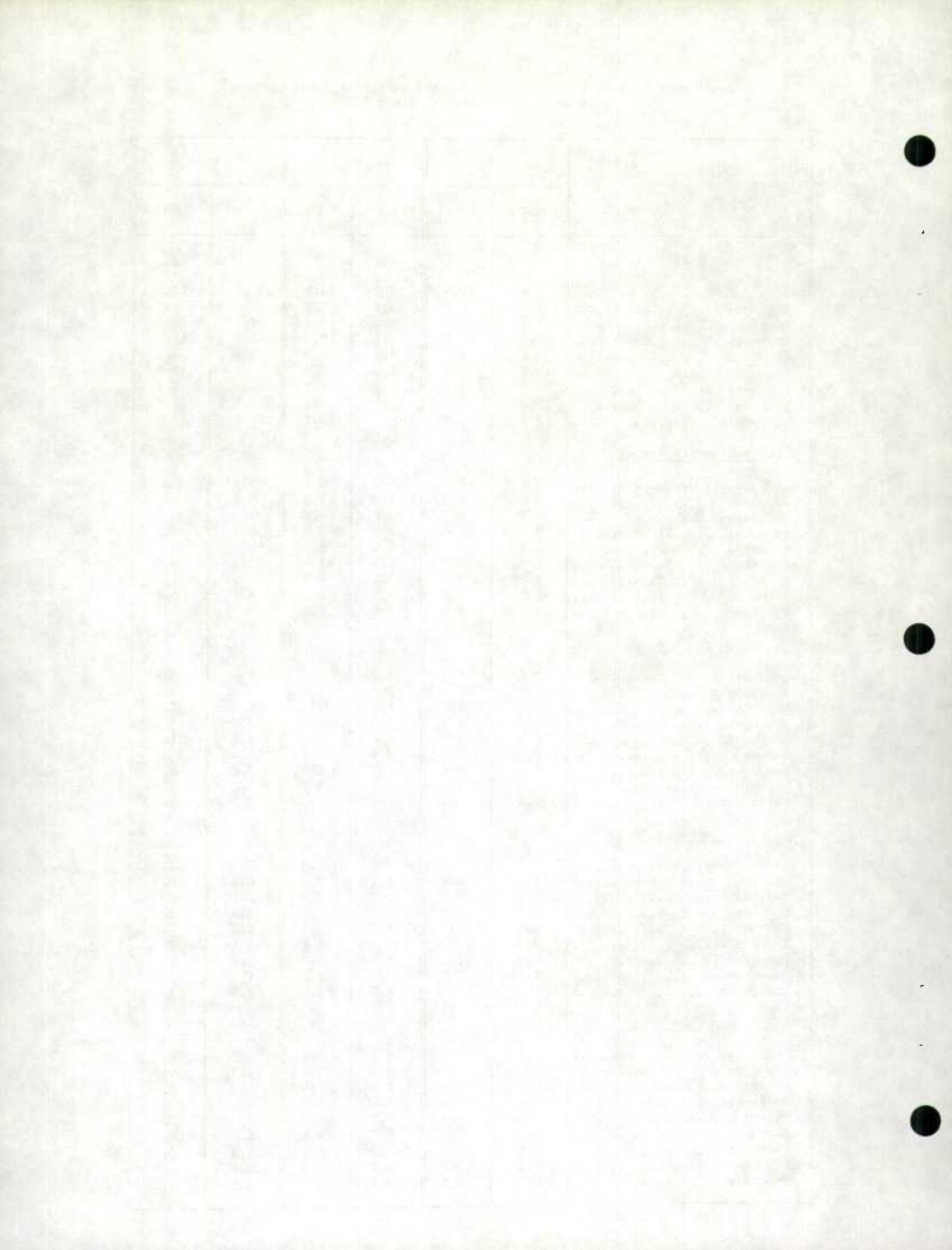
Enumeration Cost per Household by Regional Office, S.R.U. and N.S.R.U.
March to August, 1973 and 1974

	1974						1973					
	August	July	June	May	April	March	August	July	June	May	April	March
All areas												
Canada $	2.73	2.70	2.56	2.51	2.53	2.38	2.24	1.98	2.20	2.17	1.89	2.17
St. John's $	3.32	3.26	3.04	3.01	2.61	2.72	2.50	2.10	2.50	2.59	2.17	2.52
Halifax $	2.59	2.57	2.32	2.41	2.48	2.32	2.10	1.89	2.02	1.98	1.74	1.95
Montreal $	2.88	2.81	2.45	2.69	2.67	2.43	2.41	2.07	2.30	2.36	2.00	2.37
Ottawa $	2.76	2.73	2.68	2.49	2.61	2.57	2.44	2.07	2.49	2.33	2.05	2.36
Toronto $	2.64	2.68	2.67	2.49	2.43	2.35	2.37	2.09	2.37	2.29	1.98	2.27
Winnipeg $	2.71	2.60	2.61	2.51	2.64	2.41	2.22	2.16	2.25	2.07	2.07	2.24
Edmonton $	2.69	2.65	2.53	2.40	2.54	2.26	2.06	1.72	1.91	1.78	1.66	1.79
Vancouver $	2.63	2.65	2.58	2.34	2.39	2.26	1.92	1.84	2.01	1.98	1.72	2.00
S.R.U.												
Canada $	2.34	2.33	2.17	2.16	2.34	2.09	2.09	1.85	2.06	2.04	1.78	2.04
St. John's $	2.57	2.69	2.38	2.35	2.54	2.27	2.20	1.85	2.27	2.36	2.13	2.18
Halifax $	2.22	2.19	1.94	2.10	2.20	2.10	1.88	1.89	1.80	1.80	1.55	1.68
Montreal $	2.37	2.18	1.92	2.17	2.41	2.09	2.21	1.88	2.13	2.23	1.86	2.32
Ottawa $	2.48	2.53	2.34	2.29	2.44	2.39	2.28	2.03	2.36	2.24	1.98	2.32
Toronto $	2.46	2.53	2.47	2.33	2.39	2.24	2.32	2.06	2.31	2.20	1.92	2.19
Winnipeg $	2.25	2.28	2.19	2.19	2.43	2.01	1.92	1.86	1.94	1.94	1.90	2.04
Edmonton $	2.01	2.04	1.86	1.68	2.10	1.63	1.60	1.37	1.55	1.44	1.39	1.43
Vancouver $	2.34	2.38	2.26	2.03	2.26	2.04	1.94	1.80	1.92	1.94	1.65	1.90
N.S.R.U.												
Canada $	3.23	3.17	3.05	2.97	2.78	2.75	2.44	2.15	2.40	2.32	2.04	2.31
St. John's $	3.60	3.47	3.28	3.25	2.64	2.89	2.59	2.20	2.60	2.67	2.18	2.64
Halifax $	2.83	2.80	2.56	2.61	2.65	2.46	2.24	2.00	2.16	2.10	1.85	2.12
Montreal $	3.73	3.92	3.38	3.64	3.13	3.07	2.80	2.43	2.64	2.61	2.28	2.46
Ottawa $	3.26	3.10	3.27	2.85	2.91	2.89	2.67	2.13	2.72	2.46	2.16	2.41
Toronto $	3.07	3.05	3.18	2.89	2.55	2.67	2.51	2.16	2.54	2.55	2.14	2.47
Winnipeg $	3.15	2.89	2.99	2.80	2.83	2.80	2.48	2.41	2.52	2.41	2.22	2.42
Edmonton $	3.40	3.22	3.17	3.11	2.99	2.91	2.51	2.05	2.26	2.09	1.93	2.14
Vancouver $	3.07	3.05	3.08	2.79	2.57	2.60	1.91	1.90	2.15	2.03	1.84	2.17

	Month-to-month Change								Year-to-year Change			
	1974				1973				August 1973 to August 1974	July 1973 to July 1974	June 1973 to June 1974	May 1973 to May 1974
	July to August	June to July	May to June	April to May	July to August	June to July	May to June	April to May				
All areas												
Canada $	+ 0.03	+ 0.14	+ 0.05	- 0.02	+ 0.26	- 0.22	+ 0.03	+ 0.28	+ 0.49	+ 0.72	+ 0.36	+ 0.34
St. John's $	+ 0.06	+ 0.22	+ 0.03	+ 0.40	+ 0.40	- 0.40	- 0.09	+ 0.42	+ 0.82	+ 1.16	+ 0.54	+ 0.42
Halifax $	+ 0.02	+ 0.25	- 0.09	- 0.07	+ 0.21	- 0.13	+ 0.04	+ 0.24	+ 0.49	+ 0.68	+ 0.30	+ 0.43
Montreal $	+ 0.07	+ 0.36	- 0.24	+ 0.02	+ 0.34	- 0.23	- 0.06	+ 0.36	+ 0.47	+ 0.74	+ 0.15	+ 0.33
Ottawa $	+ 0.03	+ 0.05	+ 0.19	- 0.12	+ 0.37	- 0.42	+ 0.16	+ 0.28	+ 0.32	+ 0.66	+ 0.19	+ 0.16
Toronto $	- 0.04	+ 0.01	+ 0.18	+ 0.06	+ 0.28	- 0.28	+ 0.08	+ 0.31	+ 0.27	+ 0.59	+ 0.30	+ 0.20
Winnipeg $	+ 0.11	- 0.01	+ 0.10	- 0.13	+ 0.06	- 0.09	+ 0.06	+ 0.12	+ 0.49	+ 0.44	+ 0.36	+ 0.32
Edmonton $	+ 0.04	+ 0.12	+ 0.13	- 0.14	+ 0.34	- 0.19	+ 0.13	+ 0.12	+ 0.63	+ 0.93	+ 0.62	+ 0.62
Vancouver $	- 0.02	+ 0.07	+ 0.24	- 0.05	+ 0.08	- 0.17	+ 0.03	+ 0.26	+ 0.71	+ 0.81	+ 0.57	+ 0.36
S.R.U.												
Canada $	+ 0.01	+ 0.16	+ 0.01	- 0.18	+ 0.24	- 0.21	+ 0.02	+ 0.26	+ 0.25	+ 0.48	+ 0.11	+ 0.12
St. John's $	- 0.12	+ 0.31	+ 0.03	- 0.19	+ 0.35	- 0.42	- 0.09	+ 0.23	+ 0.37	+ 0.84	+ 0.11	- 0.01
Halifax $	+ 0.03	+ 0.25	- 0.16	- 0.10	- 0.01	+ 0.09	-	+ 0.25	+ 0.34	+ 0.30	+ 0.14	+ 0.30
Montreal $	+ 0.19	+ 0.26	- 0.25	- 0.24	+ 0.33	- 0.25	- 0.10	+ 0.37	+ 0.16	+ 0.30	- 0.21	- 0.06
Ottawa $	- 0.05	+ 0.19	+ 0.05	- 0.15	+ 0.25	- 0.33	+ 0.12	+ 0.26	+ 0.20	+ 0.50	- 0.02	+ 0.05
Toronto $	- 0.07	+ 0.06	+ 0.14	- 0.06	+ 0.26	- 0.25	+ 0.11	+ 0.28	+ 0.14	+ 0.47	+ 0.16	+ 0.13
Winnipeg $	- 0.03	+ 0.09	-	- 0.24	+ 0.06	- 0.08	-	+ 0.04	+ 0.33	+ 0.42	+ 0.25	+ 0.25
Edmonton $	- 0.03	+ 0.18	+ 0.18	- 0.42	+ 0.23	- 0.18	+ 0.11	+ 0.05	+ 0.41	+ 0.67	+ 0.31	+ 0.24
Vancouver $	- 0.04	+ 0.12	+ 0.23	- 0.23	+ 0.14	- 0.12	- 0.02	+ 0.29	+ 0.40	+ 0.58	+ 0.34	+ 0.09
N.S.R.U.												
Canada $	+ 0.06	+ 0.12	+ 0.08	+ 0.19	+ 0.29	- 0.25	+ 0.08	+ 0.28	+ 0.79	+ 1.02	+ 0.65	+ 0.65
St. John's $	+ 0.13	+ 0.19	+ 0.03	+ 0.61	+ 0.39	- 0.40	- 0.07	+ 0.49	+ 1.01	+ 1.27	+ 0.68	+ 0.58
Halifax $	+ 0.03	+ 0.24	- 0.05	- 0.04	+ 0.24	- 0.16	+ 0.06	+ 0.25	+ 0.59	+ 0.80	+ 0.40	+ 0.51
Montreal $	- 0.19	+ 0.54	- 0.26	+ 0.51	+ 0.37	- 0.21	+ 0.03	+ 0.33	+ 0.93	+ 1.49	+ 0.74	+ 1.03
Ottawa $	+ 0.16	- 0.17	+ 0.42	- 0.06	+ 0.54	- 0.59	+ 0.26	+ 0.30	+ 0.59	+ 0.97	+ 0.55	+ 0.39
Toronto $	+ 0.02	- 0.13	+ 0.29	+ 0.34	+ 0.35	- 0.38	- 0.01	+ 0.41	+ 0.56	+ 0.89	+ 0.64	+ 0.34
Winnipeg $	+ 0.26	- 0.10	+ 0.19	- 0.03	+ 0.07	- 0.11	+ 0.11	+ 0.19	+ 0.67	+ 0.48	+ 0.47	+ 0.39
Edmonton $	+ 0.18	+ 0.05	+ 0.06	+ 0.12	+ 0.46	- 0.21	+ 0.17	+ 0.16	+ 0.89	+ 1.17	+ 0.91	+ 1.02
Vancouver $	+ 0.02	- 0.03	+ 0.29	+ 0.22	+ 0.01	- 0.25	+ 0.12	+ 0.19	+ 1.16	+ 1.15	+ 0.93	+ 0.76

DEFINITIONS

RELATED TO SECTION 1A

Slippage - population slippage is defined as the percentage dif-
ference 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.
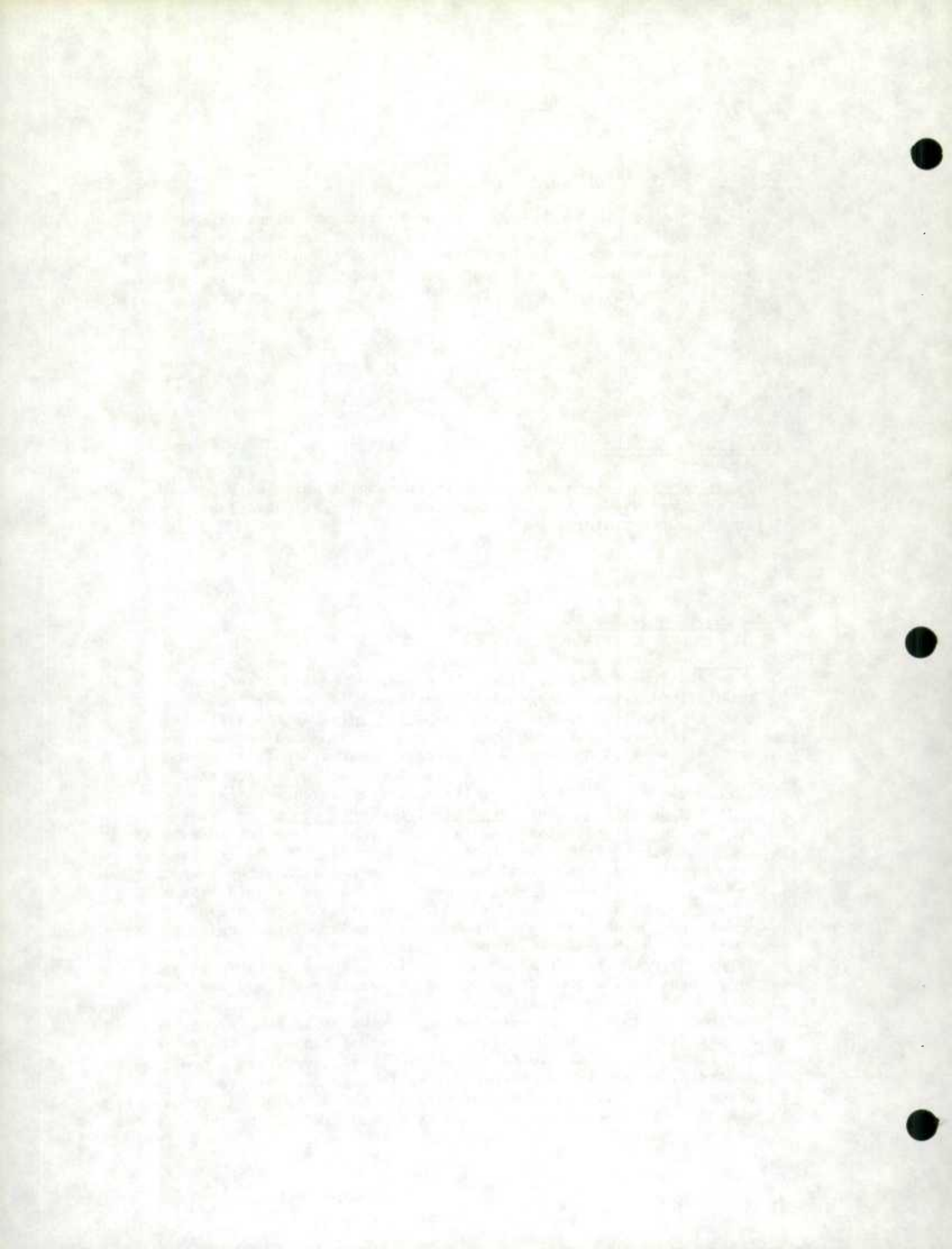
RELATED TO SECTION 1D

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
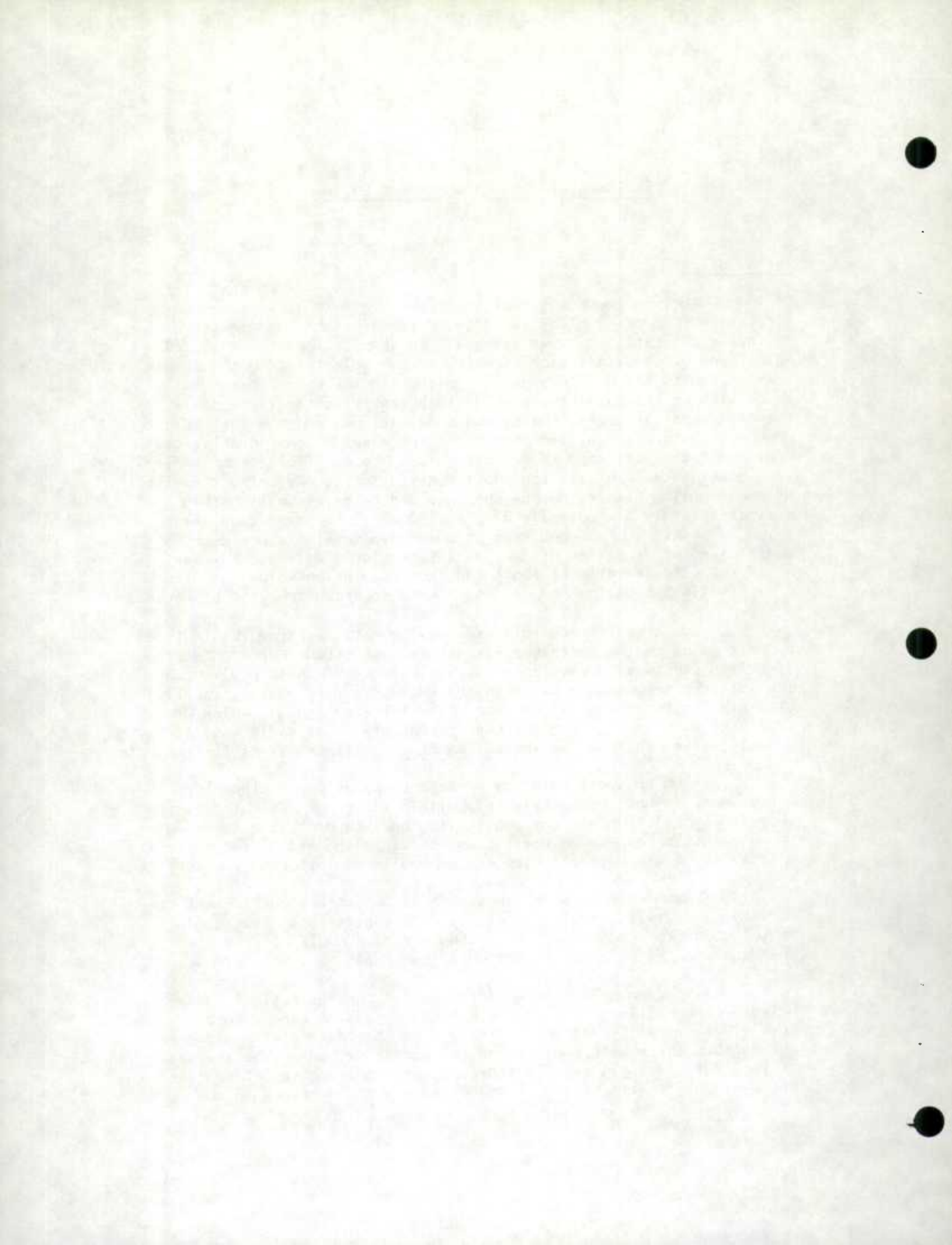
population, the sample size and the frequency of the characteristic, the calculated variances should be compared with some standard values.

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 vari-
ance 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 con-
fidence 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 August, 1974

	Population Estimate	Employed				Unemployed				In Labour Force			
		Estimate	C.V.	Symbol	B.F.	Estimate	C.V.	Symbol	B.F.	Estimate	C.V.	Symbol	B.F.
Canada	16,626	9,705	0.33	A	1.14	448	2.58	D	1.35	10,153	0.30	A	1.04
Nfld.	380	174	1.89	C	1.50	24	7.67	E	2.02	198	1.37	C	1.02
P.E.I.	82	47	2.70	D	1.21	2	13.03	F	0.46	49	2.28	C	0.94
N.S.	571	299	1.15	C	1.10	19	7.83	E	1.53	318	1.07	C	1.09
N.B.	478	252	1.47	C	1.55	13	9.50	E	1.67	265	1.41	C	1.59
Que.	4,635	2,606	0.74	B	1.22	159	4.52	D	1.28	2,765	0.66	B	1.13
Ont.	6,076	3,710	0.52	A	0.96	140	5.05	E	1.32	3,850	0.47	A	0.85
Man.	725	430	1.10	C	0.78	11	14.07	F	1.23	441	1.07	C	0.79
Sask.	656	376	1.81	C	1.93	6	14.42	F	0.82	382	1.80	C	1.99
Alta.	1,221	766	0.98	B	1.19	16	10.94	F	1.14	782	0.97	B	1.26
B.C.	1,800	1,044	1.06	C	1.48	57	7.41	E	1.69	1,101	0.91	B	1.23

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 +
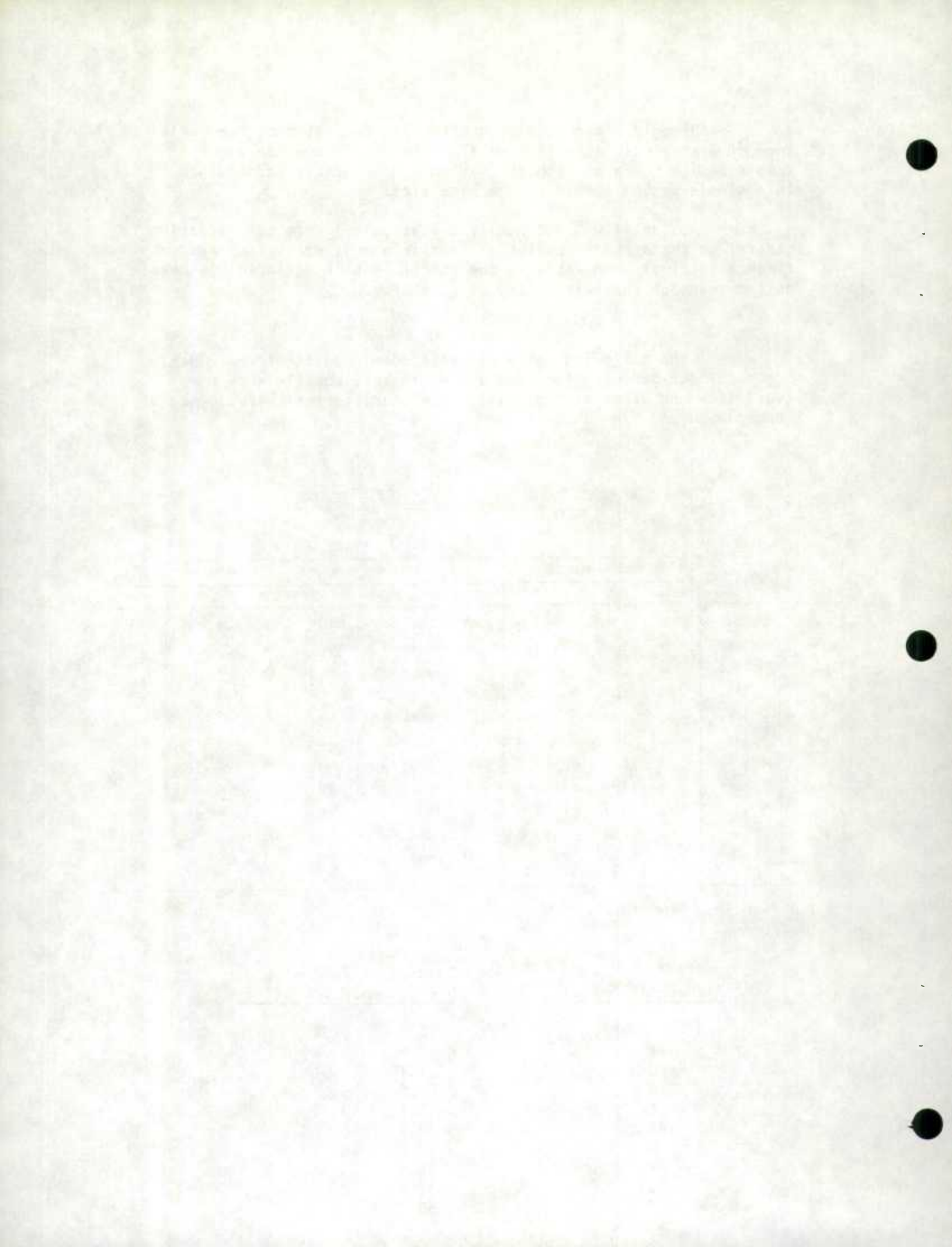
Analysis of Sub-Provincial Contributions to the Variance

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.

For the estimate of Unemployed in New Brunswick the binomial factor has a value of 1.67. This value is considerably less than the binomial factor of 2.64 for the July survey but is higher than the binomial factors for Unemployed in most other provinces. The analysis of the subprovincial contributions to the provincial variance estimate resulted in the following table.

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

Identification	Location	Percentage of the Variance Contributed	Desired Percentage Contribution
32009 & 32020	– mid western part of N.B.	18.8	4.4
33003 & 33005	– this stratum composes the southeast part of Economic Region 33 (*)	11.1	3.4
30205	– a subunit in Moncton	6.9	2.3
31101	– a subunit in Saint John	6.7	2.1
All Other PSUs and Subunits	–	56.5	87.8

(*) Economic region 33 is located in the northeast portion of the province bounded by the Gaspe Peninsula on the north and the Gulf of St. Lawrence on the east.

The adjusted binomial factor for the estimate of Unemployed in New Brunswick has a value of 1.07 which indicates that the above sub-provincial areas are the main cause of the high sampling variability for the estimate of Unemployed in New Brunswick.

As noted, the pair of PSUs 32009 and 32010 contributed 18.8% of the variance of the estimate of Unemployed in New Brunswick. This is to be compared with a desired contribution of 4.4%. A detailed analysis was carried out to determine the causes of this excessive contribution.
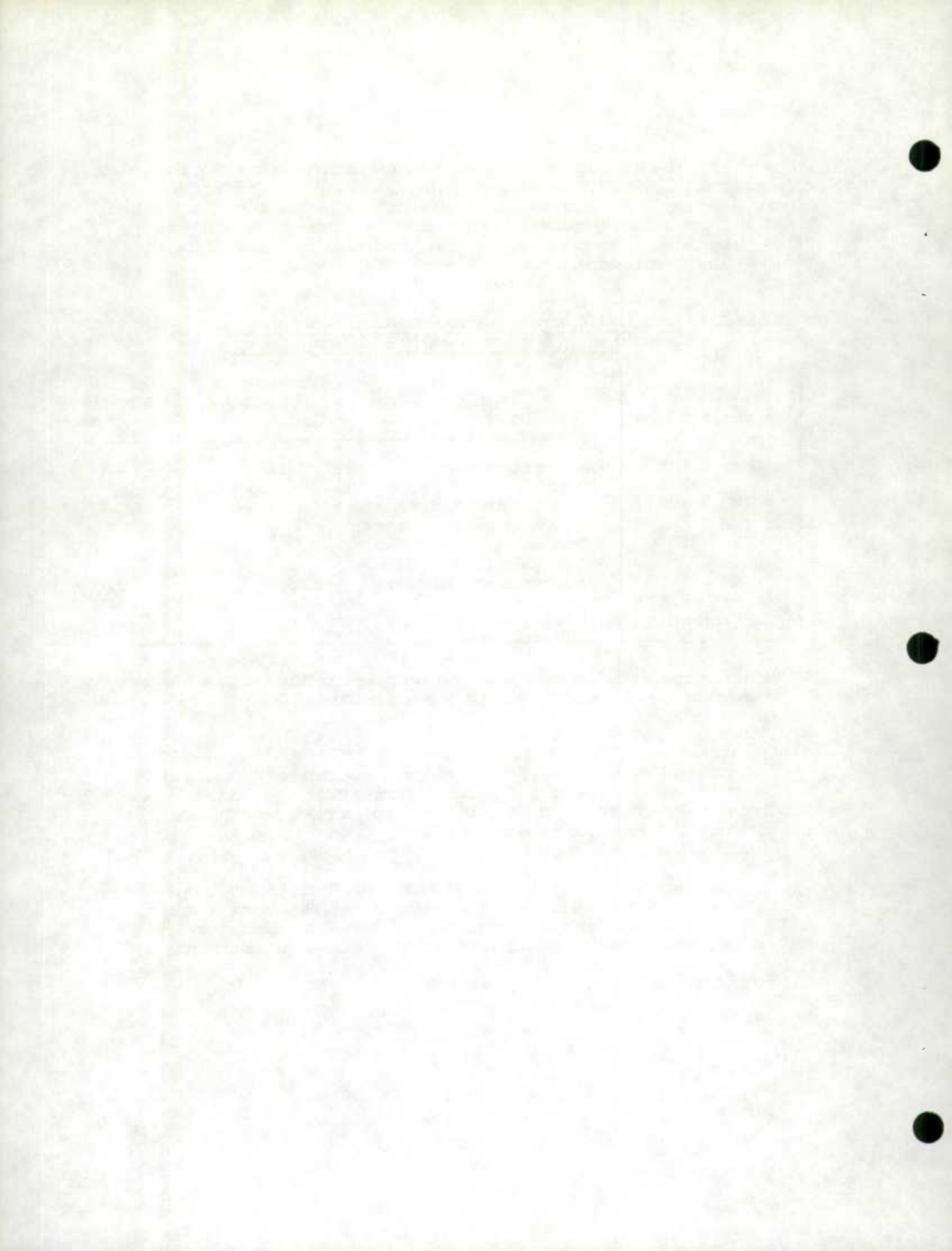
Estimates and Sample Takes by Characteristic and
PSU for PSUs 32009 and 32010

Industry	Employed				Unemployed				In Labour Force			
	32009 (*) (**)		32010		32009		32010		32009		32010	
	Estimate	#	Estimate	#	Estimate	#	Estimate	#	Estimate	#	Estimate	#
Agriculture	287	4	206	3	0	0	0	0	287	4	206	3
Other Primary Industries	606	7	1,328	16	157	2	0	0	763	9	1,328	16
Manufacturing	1,290	17	1,187	16	154	2	0	0	1,444	19	1,187	16
Construction	857	11	518	8	0	0	0	0	857	11	518	8
Transp. and Other Util.	709	10	633	10	0	0	0	0	709	10	633	10
Trade	1,101	14	1,211	16	134	2	72	1	1,235	16	1,283	17
Finance	70	1	0	0	0	0	0	0	70	1	0	0
Services	859	11	1,392	20	225	3	0	0	1,084	14	1,392	20
Public Admin.	767	10	532	6	0	0	68	1	767	10	600	7
TOTAL	6,546	85	7,007	95	670	9	140	2	7,216	94	7,147	97

(*) Est refers to the weighted sample take for the PSU
(**) # refers to the unweighted sample take for the PSU

From the above table it can be seen that there is a tendency
for the unemployment to occur in PSU 32009 although there does not appear
to be an unequal distribution of persons by industry between the two
PSUs. There are 9 sampled individuals (corresponding to a half stratum
estimate of 670 persons) who are classified as unemployed from PSU 32009
whereas there are 2 sampled individuals (corresponding to a half stratum
estimate of 140 persons) who are classified as unemployed from PSU 32010.
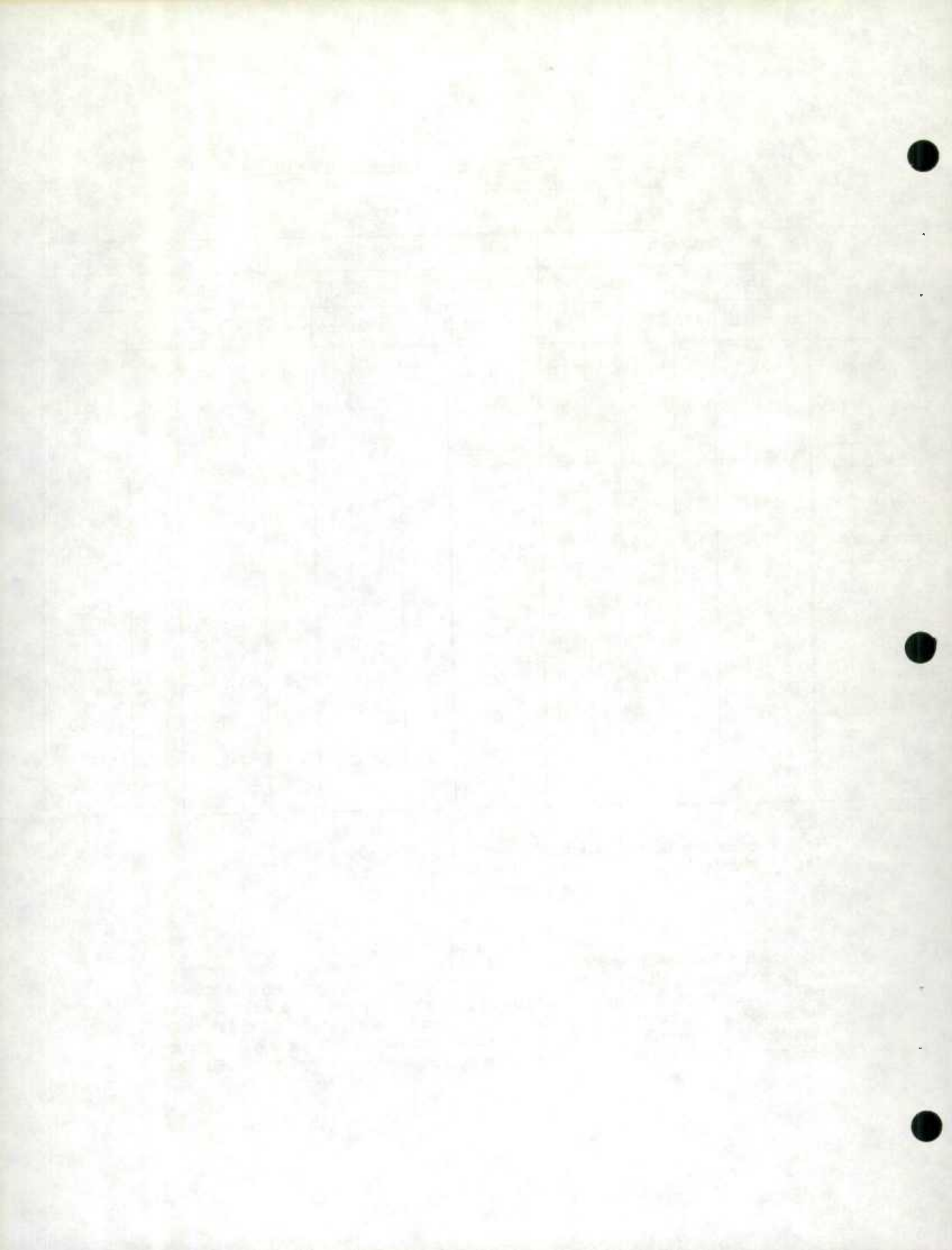
The binomial factor for the estimate of Employed in Saskatchewan increased from 1.55 in July to 1.93 in August. One pair of PSUs were identified in which the actual contribution significantly exceeded the desired contribution by this subprovincial area.

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

| Identification	Location	Percentage of the Variance Contributed	Desired Percentage Contribution
71003 & 71009	- in the south-western part of Saskatchewan	11.7	1.9
All Other PSUs and Subunits	-	88.3	98.1

The adjusted binomial factor has a value of 1.74. Since the adjusted binomial factor remains high, the cause of high sampling variability for this characteristic is only partly due to the excessive contributions by PSUs 71003 and 71009.

In British Columbia the binomial factor for the estimate of Employed is high relative to the other provinces. An analysis of the subprovincial contributions to the variance was carried out and the following table presents the results of this study.

Table 2c) Actual vs Desired Contribution to the Variance of Employed in British Columbia by PSUs and Subunits

Identification	Location	Percentage of the Variance Contributed	Desired Percentage Contribution
97003 & 97008	- north central part of B.C.	15.6	3.4
92201	Penticton	3.2	2.2
92301	Vernon	2.9	1.0
All Other PSUs and Subunits	-	78.3	94.5

Based on the identification of the above subprovincial areas, the adjusted binomial factor has a value of 1.23. Since this value lies within a reasonable range for this characteristic the high estimate of the sampling variability can be explained by the excessive contributions in the above subprovincial areas.
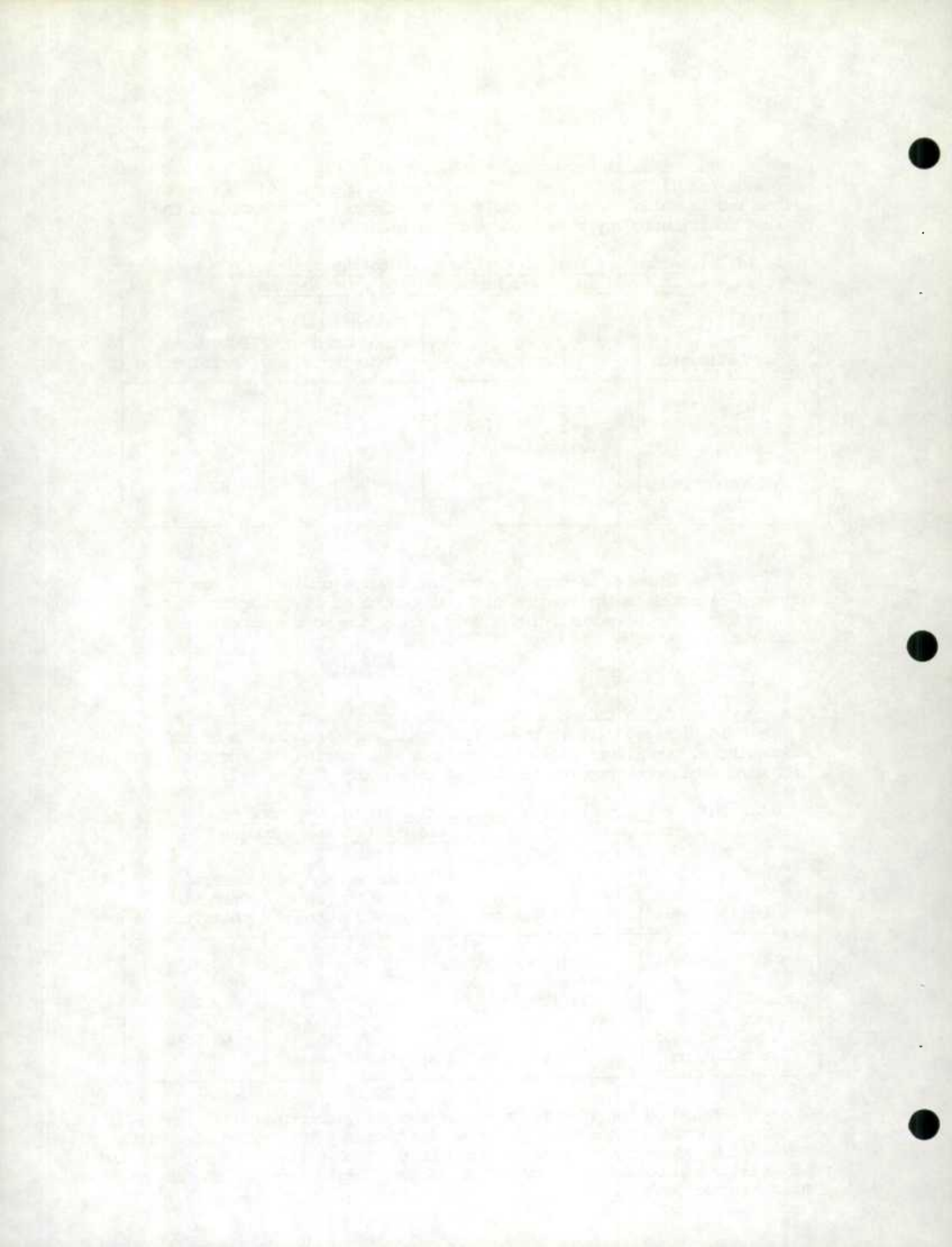
In addition to the major Labour Force characteristics (Employed, Unemployed and In Labour Force), tables with estimates, coefficients of variation and binomial factors have been prepared for the estimated totals of persons employed and unemployed in selected industries at the provincial levels. On the basis of the binomial factors for these estimates, an analysis of the subprovincial contributions to the variance of some provincial estimates has been carried out. The estimates involved are:

- Employed Other Primary Industries in Newfoundland, Saskatchewan and British Columbia

- Employed Manufacturing in Newfoundland

The results of these analyses are discussed in subsequent sections of this report.

The binomial factor corresponding to the estimate of Employed - Other Primary Industries in Newfoundland has a value of 6.75 which is extremely high relative to the binomial factors in other provinces for this characteristic. An analysis of the subprovincial contributions to the variance estimate for the provincial estimate revealed 3 pairs of PSUs in which the actual contribution significantly exceeded the desired contribution to the variance estimate.

Table 4a) Actual vs Desired Contribution to the Variance of Employed In Other Primary Industries for Newfoundland by PSUs and Subunits

Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
03003 & 03006 03041 & 03042	- Central portion of Nfld. extending east to the Atlantic coast	34.01	1.87
04021 & 04025	- western part of Nfld.	22.76	3.77
All Other PSUs and Subunits	-	35.67	92.38

The adjusted binomial factor for this characteristic has a value of 2.61 which lies within a reasonable range of the corresponding binomial factors for other provinces thus indicating that except for these identified subprovincial areas, the estimated variance is of a similar quality to the variance estimates for other provinces for this characteristic.

Table 3a) Level Estimates, Variance Estimates and Binomial
Factors for Employed in Some Selected Industries

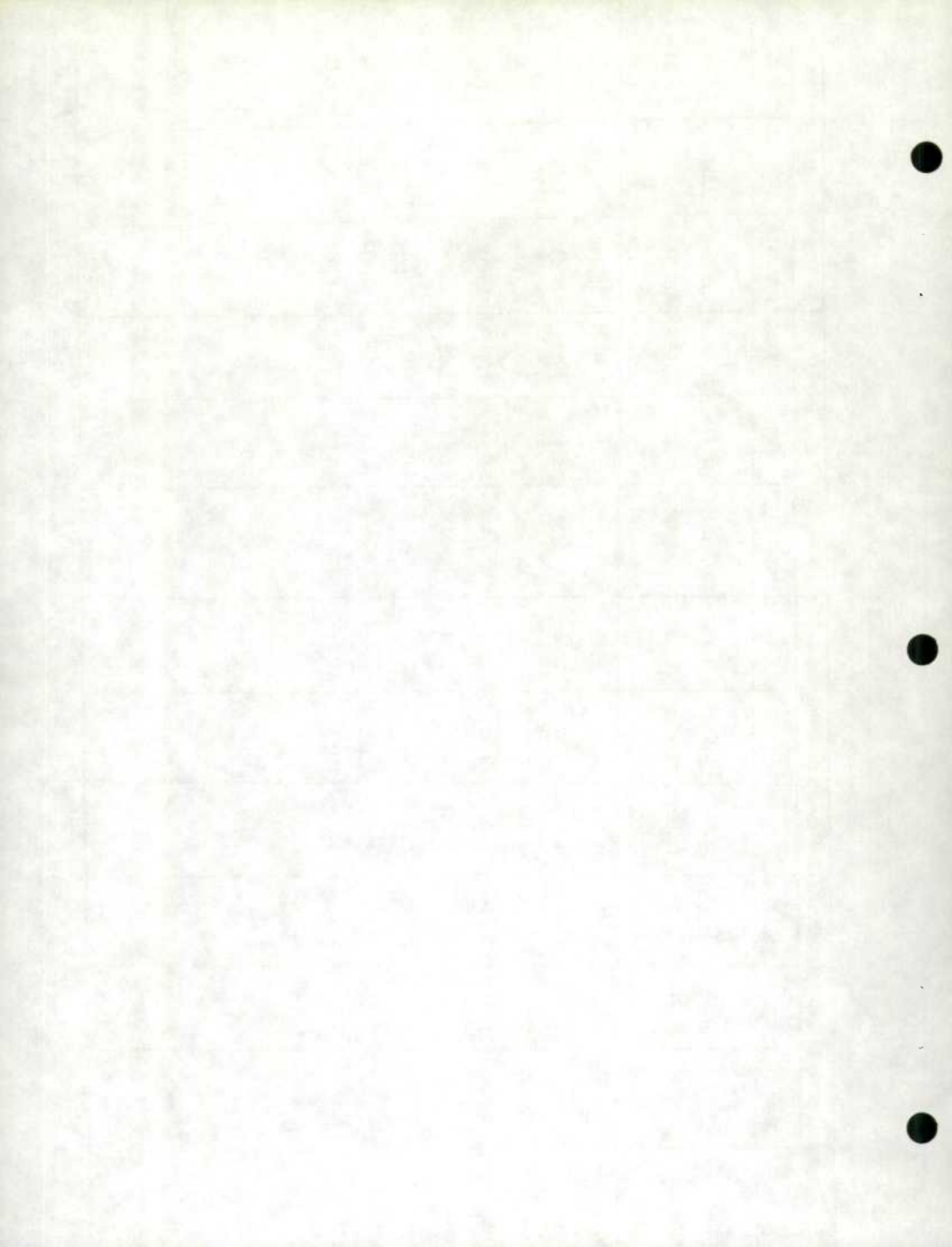|	Employed Agriculture			Employed Other Primary Ind.			Employed Manufacturing			Employed Construction		
	Estimate	C.V.	B.F.	Estimate	C.V.	B.F.	Estimate	C.V.	B.F.	Estimate	C.V.	B.F.
Can.	541,821	2.98	3.40	258,911	4.65	3.19	2,131,535	1.29	1.69	708,267	2.06	1.41
Nfld.	1,710	21.77	1.15	11,360	19.56	6.75	23,426	10.22	3.45	19,927	9.11	2.33
P.E.I.	6,898	18.90	4.45	2,105	22.10	1.69	4,361	15.49	1.60	4,937	12.24	1.15
N.S.	11,291	13.19	3.26	15,706	9.36	2.01	54,397	4.93	1.96	25,148	5.87	1.25
N.B.	7,183	8.69	0.89	18,212	8.37	2.08	43,381	5.43	1.93	24,675	7.54	1.99
Que.	102,823	7.16	2.79	62,353	8.48	2.00	643,229	2.31	1.49	279,034	4.23	1.27
Ont.	136,382	6.91	3.26	53,201	8.20	1.41	1,002,601	1.94	1.64	265,912	3.73	1.43
Man.	48,526	8.39	3.35	3,358	23.32	1.30	60,876	6.62	1.68	25,750	9.35	1.38
Sask.	103,307	5.95	3.95	9,113	35.97	7.67	24,296	14.31	3.29	15,025	10.92	1.15
Alta.	103,643	6.80	4.61	28,131	13.00	2.93	76,462	5.48	1.44	66,803	5.36	1.22
B.C.	20,057	15.32	2.95	55,374	14.43	7.53	198,504	4.88	2.79	81,005	6.39	1.85

Table 3b) Level Estimates, Variance Estimates, and Binomial Factors
for Unemployed in Some Selected Industries

	Unemployed Agriculture			Unemp. Other Primary Ind.			Unemployed Manufacturing			Unemployed Construction		
	Estimate	C.V.	B.F.	Estimate	C.V.	B.F.	Estimate	C.V.	B.F.	Estimate	C.V.	B.F.
Can.	5,321	20.26	1.26	16,755	11.72	1.41	92,005	5.29	1.10	48,316	7.42	1.25
Nfld.	214	73.38	1.43	2,296	19.89	1.41	4,074	20.70	2.38	5,231	15.09	1.67
P.E.I.	169	70.49	1.37	185	58.82	1.04	212	79.04	1.72	307	67.81	1.77
N.S.	544	60.73	3.27	756	44.95	2.26	2,856	15.12	0.87	2,248	18.35	1.02
N.B.	253	59.69	1.47	1,514	24.13	1.35	2,471	20.42	1.43	1,462	22.20	1.10
Que.	1,252	42.66	1.15	5,139	26.64	1.62	34,594	8.86	1.05	17,852	13.42	1.27
Ont.	1,202	50.41	1.09	1,333	51.40	1.40	35,796	9.10	1.09	12,284	15.64	1.07
Man.	140	101.02	1.15	288	70.51	0.91	2,313	27.67	0.95	364	73.81	1.21
Sask.	148	98.16	1.15	357	16.73	0.08	630	45.20	0.79	394	57.57	1.06
Alta.	531	60.04	1.55	775	36.19	0.72	922	45.38	1.14	1,833	33.91	1.19
B.C.	867	51.10	1.22	4,113	23.35	1.27	8,136	16.64	1.25	6,338	22.11	1.68
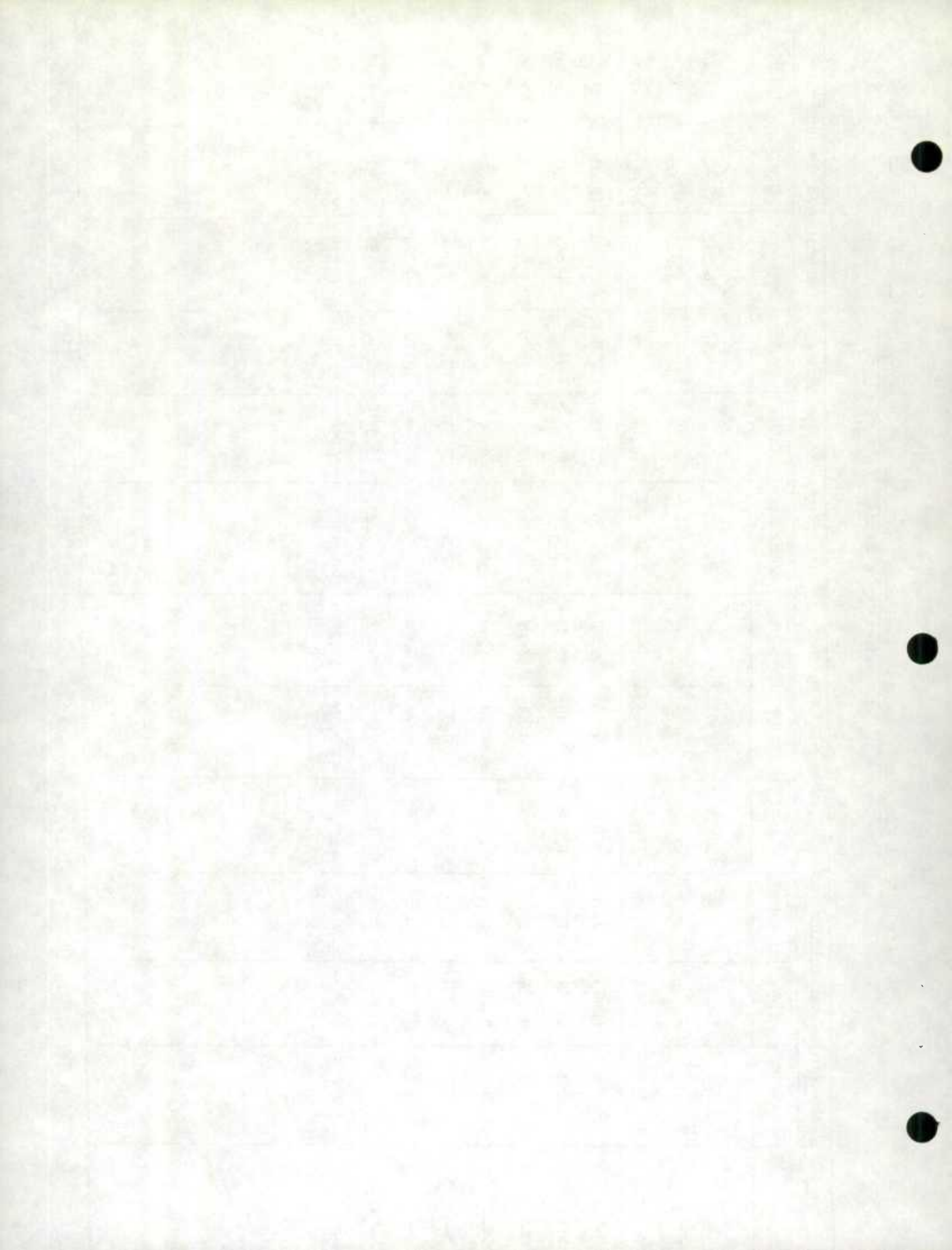
Also in the province of Newfoundland the binomial factor corresponding to the estimate of employed persons whose industry classification is manufacturing had a value of 3.45 for the August survey. This is the highest binomial factor for this characteristic for any of the provinces. Two pairs of PSUs were identified as having contributed excessively to the provincial variance estimate.

Table 4b) Actual vs Desired Contribution to the Variance of Employed in Manufacturing for Newfoundland by PSUs and Subunits

Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
00001 & 00003	- along the south coast of Nfld. from Port-aux-Basques east	35.90	2.27
02041 & 02045	- east coast of Nfld. just north of the Avalon Peninsula	15.66	1.58
All Other PSUs and Subunits	-	48.44	96.15

For the estimate of Employed in manufacturing in Newfoundland, the adjusted binomial factor of 1.74 indicates an approximate 50% reduction in the variance estimate would occur if for the above pair os subprovincial areas the actual contribution per population element was approximately the same as the actual contribution per population element in the remainder of the province.

In Saskatchewan, the binomial factor for the estimated total number of employed persons whose industrial classification is "Other Primary Industries" has a value of 7.67 which is considerably higher than the value of the corresponding binomial factors for other provinces. An analysis of the subprovincial contributions to the variance yielded the following subprovincial areas for which the actual contribution greatly exceeded the desired contribution.

Table 4c) Actual vs Desired Contribution to the Variance of Employed
in Other Primary Industries for Saskatchewan by PSUs and Subunits

Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
72010 & 72012	- west central part of Sask.	24.03	3.45
70901 - 70902*	- each subunit contains a military segment, a hospital segment and a remote area segment spread throughout the the province	65.65	2.22
All Other PSUs and Subunits	-	10.32	94.33

* Special areas, as these, often present a design problem with subsequent
high variances.

An adjusted binomial factor of 0.84 for this characteristic
indicates that the variance for this characteristic would be somewhat
less than the variance of an estimated obtained from a simple random
sample if the above 2 subprovincial areas had contributed in a some-
what similar manner (corresponding to the population size) as the
remaining subprovincial areas.

In British Columbia the estimated total number of persons
employed in "Other Primary Industries" had a corresponding binomial
factor with a value of 7.53 which is high in relation to the corresponding
binomial factors for the estimates of Employed in Other Primary Industries
in other provinces. The following table presents the results of this
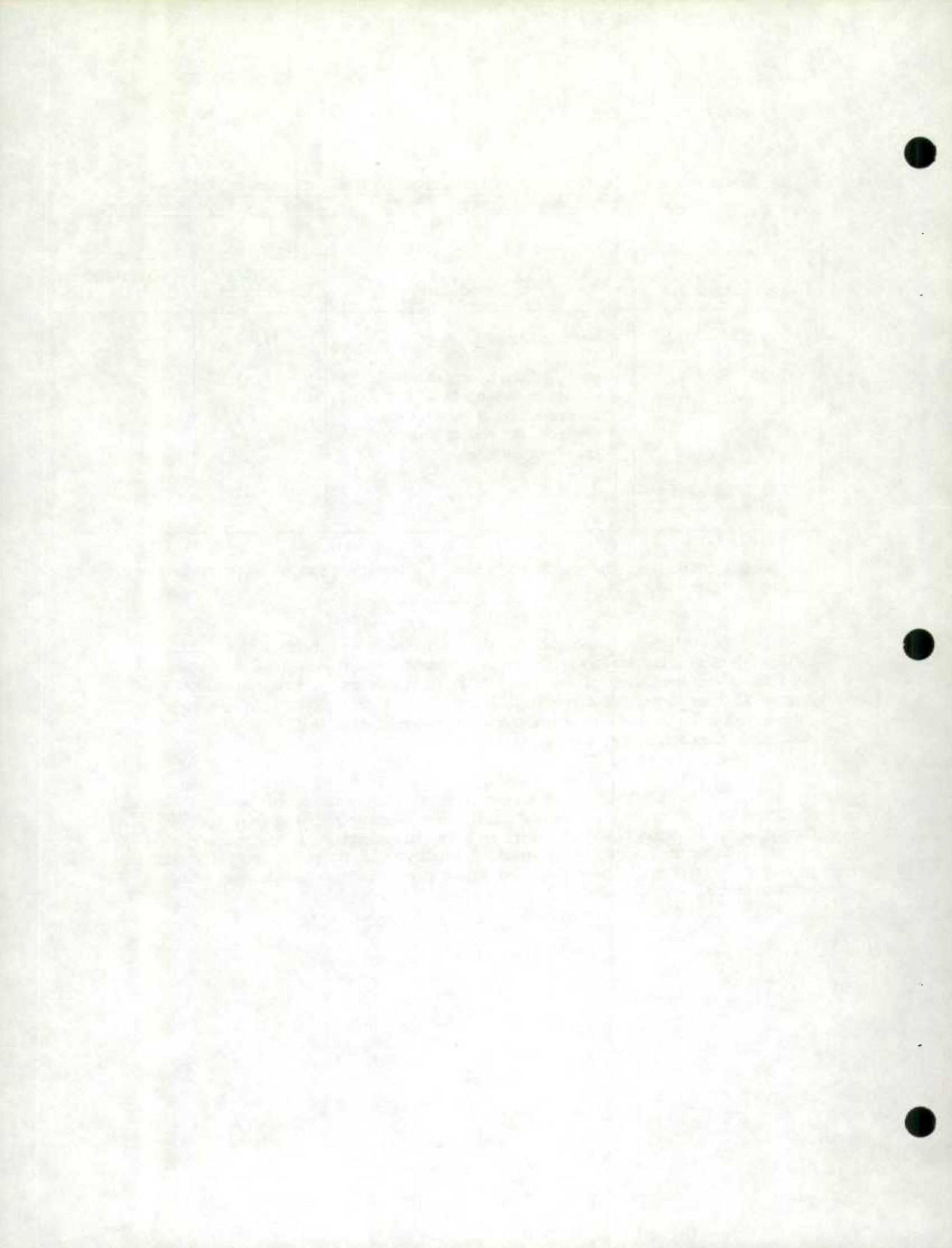subprovincial analysis.

Table 4d) Actual vs Desired Contribution to the Variance
for Employed in Other Primary Industries for
British Columbia by PSUs and Subunits

Identification	Location	Actual Percentage Contribution	Desired Percentage Contribution
92003 & 92013	- southern part of B.C. in the Okanagan district	21.94	4.65
97003 & 97008	- north central part of B.C.	56.72	3.40
All Other PSUs and Subunits	-	21.84	91.95

The adjusted binomial factor for Employed in Other Primary
Industries in B.C. has a value of 1.79. This value is comparable to
the corresponding binomial factors for other provinces and indicates
that except for the above subprovincial areas the contribution per element
to the variance was approximately the same in this province as in other
provinces.

NR 74-08 (August 1974)

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NON-RESPONSE IN THE CANADIAN

LABOUR FORCE SURVEY

Non-Response in the Canadian
Labour Force Survey

I. Introduction

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

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

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

II. Monthly Meeting on Non-Response

A meeting on non-response with J.R. Norris and F.T. Newton, Household
Surveys Development Staff and E.T. 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-2

III Analysis

A. At the Canada Level

The overall non-response rate for the Canada level decreased from
10.4% in July to 8.8% in August. This decrease was much smaller
than the one exhibited between the same two months one year ago.
The decrease in the T.A. component was mainly responsible for the
decrease in the overall non-response rate.

Compared with last year's August non-response rate (10.9%), this
year's rate was lower. At the component level, all components
displayed decreases in non-response.

It is noted that this month there has been another component of
non-response added to the existing components. This new component
is termed as "N6" and refers to dwellings which have not been
contacted for the current Labour Force Survey because of overlap
with the Revised Labour Force Survey. In August, there were 8
such N6-type households and were distributed within the St. John's,
Halifax and Montreal Regional Offices. For the purpose of this
report, such households have been included in the "other" component
(thus changing the "other" component from N3-N5 to N3-N6).

B. At the Regional Office Level

1. St. John's Regional Office

The overall non-response for the St. John's Regional Office decreased
from 6.2% in July to 5.7% in August. This decrease was much smaller
than the one recorded over the same two months last year. The month
to month decrease in the overall non-response rate this year was due
to decreases in the T.A. and N1 components.

Compared with last year's August non-response rate (9.7%), this
year's rate was lower. Decreases in the T.A. and N1 components were
mainly responsible for the decrease in the overall non-response rate
this year.

As noted at the Canada level, there are a few households termed as
N6. There are three of these households found in the St. John's
Regional Office; two of which are located in E.R. 01 and the other
is located in E.R. 04. These households make up half the total for
the "other" component.

2. Halifax Regional Office

The overall non-response rate for the Halifax Regional Office decreased
from 10.0% in July to 8.7 in August. This decrease was much smaller than
the one recorded between July and August of 1973. All components
displayed decreases in non-response this year with the T.A. component
exhibiting the largest decrease.

The August non-response rate this year was lower than last year's rate
of 9.8%. This year's lower rate was mainly attributable to the lower
rates in the T.A. and refusal (N2) components.

As shown below, there has been a general month to month decrease in the
refusal rates in economic regions 22, 30 and 31 where these rates have
been high in previous months:

Refusal Rates

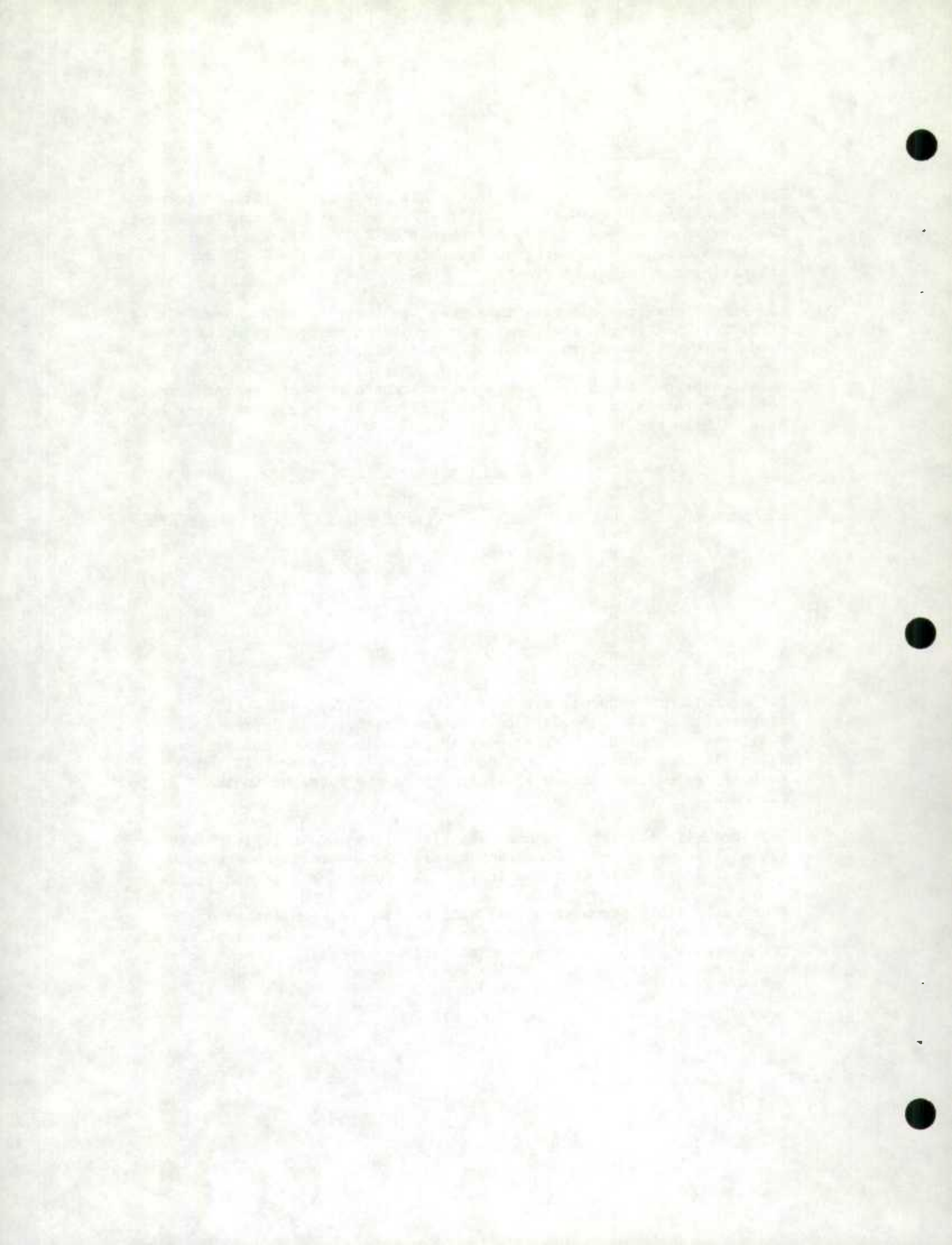| Economic Region	May	June	July	August
22	3.2%	3.0%	2.8%	2.4%
30	3.8%	3.2%	3.2%	2.8%
31	3.1%	4.7%	4.6%	3.8%

3. Montreal Regional Office

The overall non-response rate for the Montreal Regional Office
decreased from 12.1% in July to 8.4% in August. This decrease was
smaller than the one recorded over the same two months one year ago.
While all components exhibited decreases, the lower overall non-
response rate this month was mainly due to the decrease in the T.A.
component.

Compared with the non-response rate (12.1%) in August 1973, this year's
August rate was lower. Decreases by all components of non-response
were noted with the decrease in the T.A. component being the largest.

From table 4(b), the most noteable difference between the actual and
expected contribution to non-response was in E.R. 47 (Metropolitan area
of Montreal). The percentage contributions by each component to the
total non-response of E.R. 47 are given below:

E.R. 47

	(%)
T.A.	49.7
N1	20.7
N2	22.8
Other	6.8

The high contributions to the total non-response rate in E.R. 47 were made by the T.A. and N2 (refusals) components. These components showed non-response rates of 5.7% and 2.6% respectively. This economic region contained 43.5% of the sampled households in the Montreal Regional Office; however 62.2% of all T.A. households and 54.0% of all N2 households in the Montreal Regional Office are located in this economic region.

4. Ottawa Regional Office

The overall non-response rate for the Ottawa Regional Office decreased from 9.5% in July to 8.6% in August. This decrease was much smaller than the one recorded between July and August of 1973. Decreases in the T.A., N1 and N2 components accounted for the decrease in the month to month change in the overall non-response rate this year.

Compared with the non-response rate (9.2%) in August 1973, this year's rate was lower. The N1, N2 and "other" components accounted for the decrease in the overall non-response rate this year.

5. Toronto Regional Office

The non-response rate for the Toronto Regional Office decreased from 12.2% in July to 11.0% in August. This decrease was much less than the one recorded from July to August 1973. Decreases of 1.4% in the T.A. component and 0.2% in refusals were partially offset by a 0.5% increase in the "no one at home" component.

Compared with the non-response rate (11.4%) in August 1973, this year's August rate was slightly lower. The lower rate this year was attributed to decreases in the T.A., N1, and "other" components.

At the economic region level, the most notable difference between the actual and expected contributions to non-response was noted in economic 52 (Metropolitan Toronto and surrounding area). The percentage contribution made by each of the four non-response components to the total non-response in this E.R. are given below:

E.R. 52

(%)

T.A.	53.1
N1	21.9
N2	20.6
Other	4.4

It is evident that the major contribution was made by the T.A. component. It is interesting to note that E.R. 52 contains approximately 54% of all the Nl households and 56% of all the refusal households in the Toronto Regional Office. However, the refusal rate in this economic region has been declining steadily since last June as shown below:

Economic Region	June (%)	July (%)	August (%)
52	3.2	2.8	2.6

Economic Region 54 (London, Woodstock, St. Thomas area) continues to exhibit a refusal rate in excess of 3.0% as shown below:

Economic Region	June (%)	July (%)	August (%)
54	3.2	3.4	3.4

6. Winnipeg Regional Office

The non-response rate for the Winnipeg Regional Office decreased from 6.4% in July to 4.7% in August. Decreases in the T.A., Nl and N2 components accounted for the month to month increase in the overall non-response rate this year.

Compared with the non-response rate (5.2%) in August 1973, this year's August rate was lower. The decreases in the T.A. and Nl components of 0.3% and 0.4% respectively accounted for the lower non-response rate this year.

At the economic region level, one of the economic regions where the actual contribution exceeded the expected contribution was E.R. 60. The percentage contributions by each of the four non-response components to the total non-response in this E.R. are given below:

E.R. 60	(%)
T.A.	63.4
Nl	21.1
N2	12.7
Other	2.8

The high contributions were made by the T.A. and N1 components.
Furthermore, this economic region contained 32.8% of all the sampled
households in the Winnipeg Regional Office; however it also contained
49.5% of all the T.A. households and 60.0% of all the N1 households
in this regional office.

7. Edmonton Regional Office

The non-response rate for the Edmonton Regional Office decreased from
8.5% in July to 7.0% in August. This year's month to month decrease
in the overall non-response rate was due to decreases in the T.A., N1
and N2 components. However, the effect of these decreases on the
overall non-response rate was lessened by an increase of 0.9% in the
"other" component.

Compared the non-response rate (11.4%) in August 1973, this year's
August rate was considerably lower. This year's lower rate was due
to sizeable decreases in the T.A., N1 and N2 components.

At the economic region level, the most noteable difference between the
actual and expected contributions to non-response was recorded in
E.R. 80 (southeast corner of Saskatchewan). The percentage contribu-
tion by each of the four non-response components to the total non-
response of this E.R. are given below:

E.R. 80

(%)

T.A.	9.8
N1	0.0
N2	2.4
Other	87.8

The high contribution to non-response was made by the "other" compo-
nent. In this economic region 36 of the 41 households recorded as N3
for the Edmonton Regional Office were found here. Of these 36 N3
households in E.R. 80, 35 were the result of the returns having been
lost in the mail.

8. Vancouver Regional Office

The overall non-response rate for the Vancouver Regional Office
decreased from 12.8% in July to 12.2% in August. The decrease in the
overall month to month change in non-response this year was mainly
attributed to decreases in the T.A., N2 and "other" components.
Again this month, a slight improvement (a decrease of 0.1% over last
month) in the refusal rate (N2) was recorded.

Compared with last year's August non-response rate (14.3%), this year's August rate was lower. Furthermore, all of the components of non-response exhibited lower rates this year.

The refusal rate in economic region 94 decreased from 4.6% in July to 4.5% in August. Again this change was encouraging but yet the refusal rate continues to be rather high. Furthermore, this economic region contained 52.5% of all the sampled households in the Vancouver Regional Office but it also contained 64.6% of all the refusal households in this regional office.

The most noteable difference between the actual and expected contributions to the total non-response of the regional office was in E.R. 97 (central area of B.C.). This difference was mainly due to the relatively high number of T.A. households. The T.A. rate for E.R. 97 was 12.3%.

CANADA

August, 1974

Table 1(a)

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

Non -Response Component	Non-Response Rates		Jul. 1974 to Aug. 1974 (%)	Non-Response Rates		Jul. 1973 to Aug. 1973 (%)	Aug. 1973 to Aug. 1974 (%)
	Aug. 1974 (%)	Jul. 1974 (%)		Aug. 1973 (%)	Jul. 1973 (%)		
Overall	8.8	10.4	-1.6	10.9	15.1	-4.2	-2.1
T.A.	4.7	6.1	-1.4	5.6	9.1	-3.5	-0.9
N.1	1.7	1.7	–	2.3	3.2	-0.9	-0.6
N.2	1.9	2.1	-0.2	2.3	1.9	0.4	-0.4
Other	0.5	0.5	–	0.7	0.9	-0.2	-0.2

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	1,641	5.7	3.1	4.8
Halifax	5,685	8.7	16.4	16.6
Montreal	6,472	8.4	18.0	18.9
Ottawa	2,143	8.6	6.2	6.3
Toronto	7,189	11.0	26.2	21.0
Winnipeg	3,200	4.7	5.0	9.4
Edmonton	3,907	7.0	9.0	11.4
Vancouver	3,952	12.2	16.1	11.6
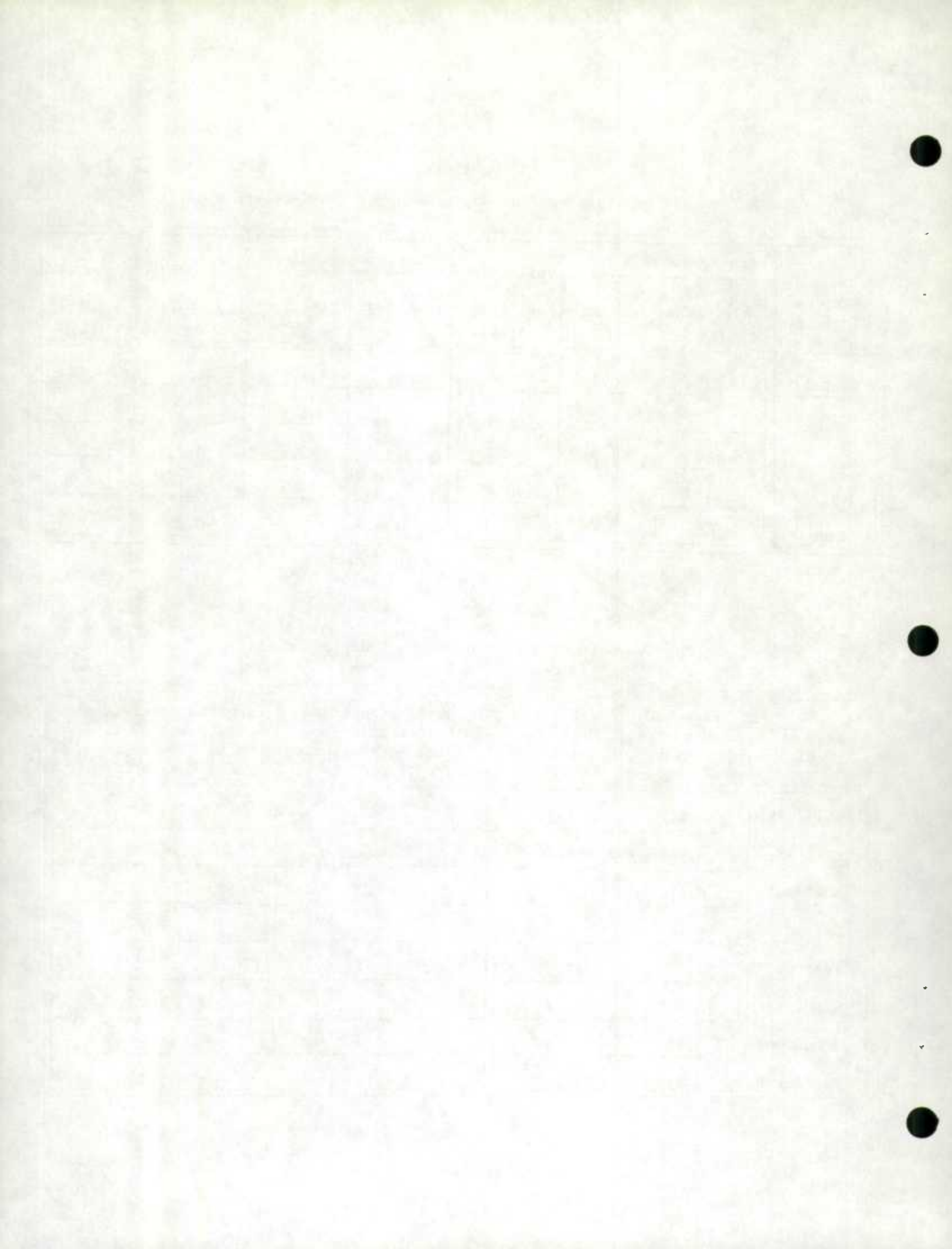
Graph G1
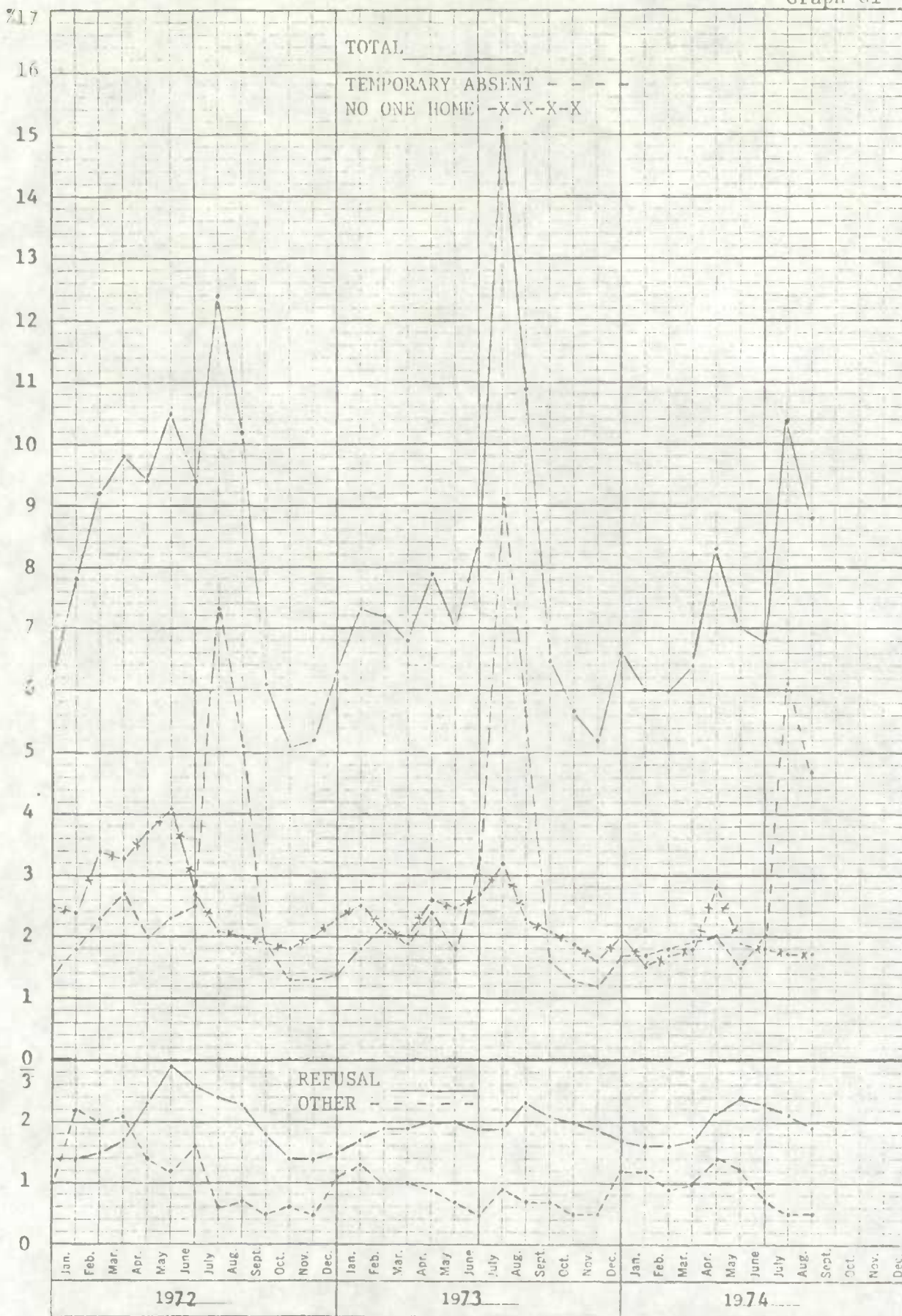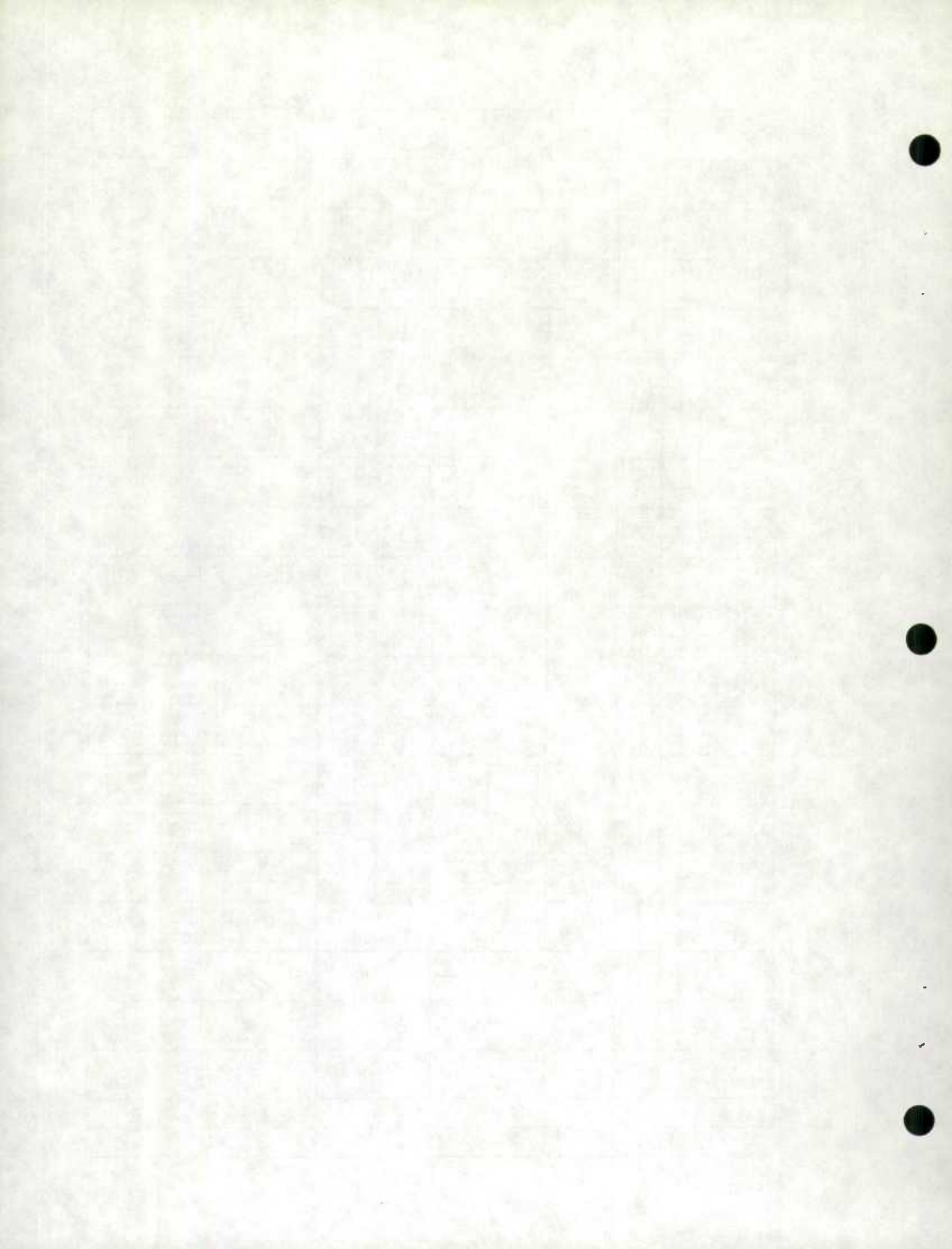
ST. JOHN'S REGIONAL OFFICE

Table 2(a)   August, 1974

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

Non -Response Component	Non-Response Rates		Jul. 1974 to Aug. 1974 (%)	Non-Response Rates		Jul. 1973 to Aug. 1973 (%)	Aug. 1973 to Aug. 1974 (%)
	Aug. 1974 (%)	Jul. 1974 (%)		Aug. 1973 (%)	Jul. 1973 (%)		
Overall	5.7	6.2	-0.5	9.7	14.0	-4.3	-4.0
T.A.	3.6	3.9	-0.3	6.0	7.3	-1.3	-2.4
N.1	0.6	0.8	-0.2	2.1	2.2	-0.1	-1.5
N.2	1.1	1.1	-	1.2	0.8	0.4	-0.1
Other	0.4	0.4	-	0.4	3.7	-3.3	-

Table 2(b)

Non-Response Data at the Economic Region Level

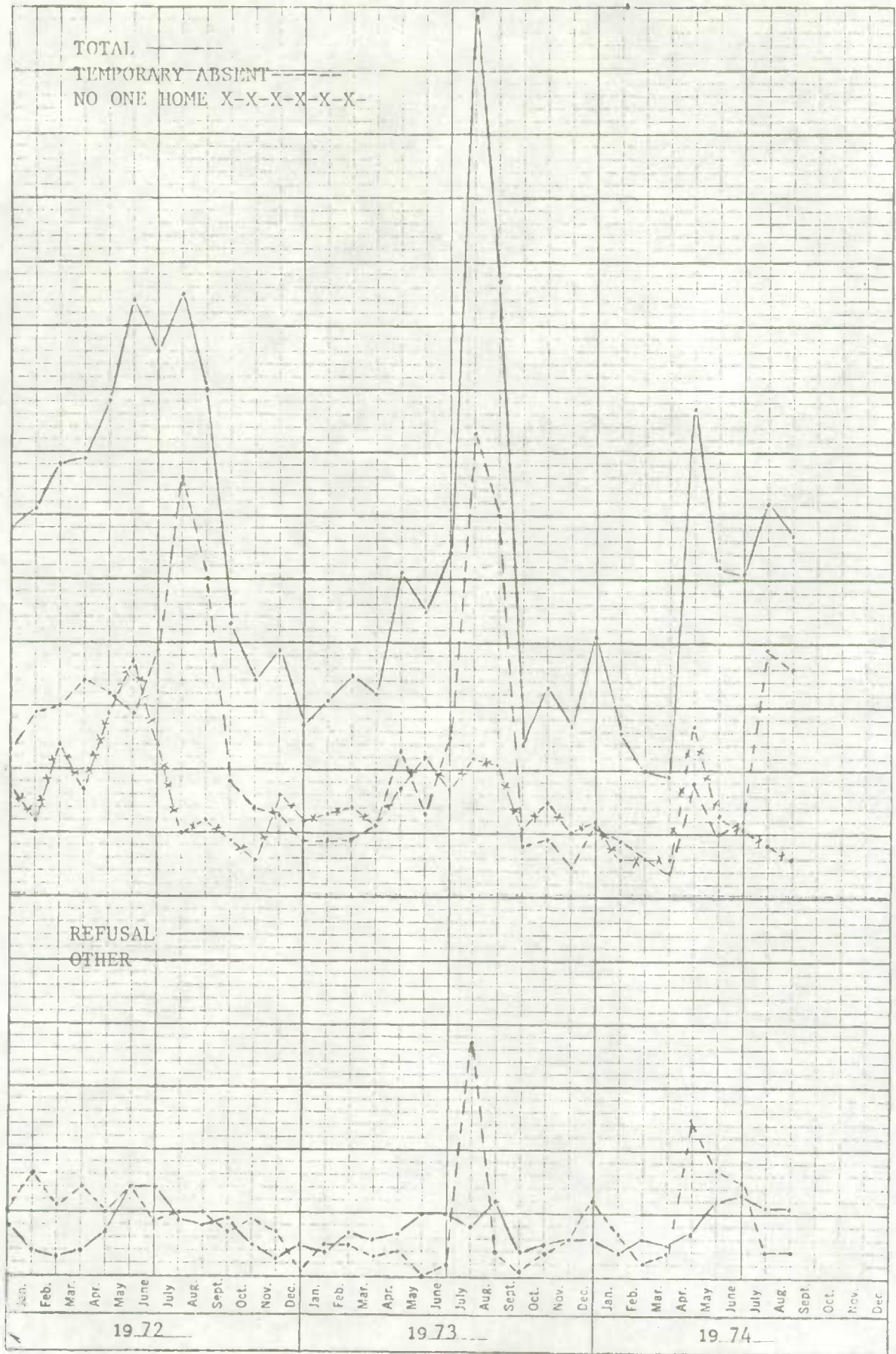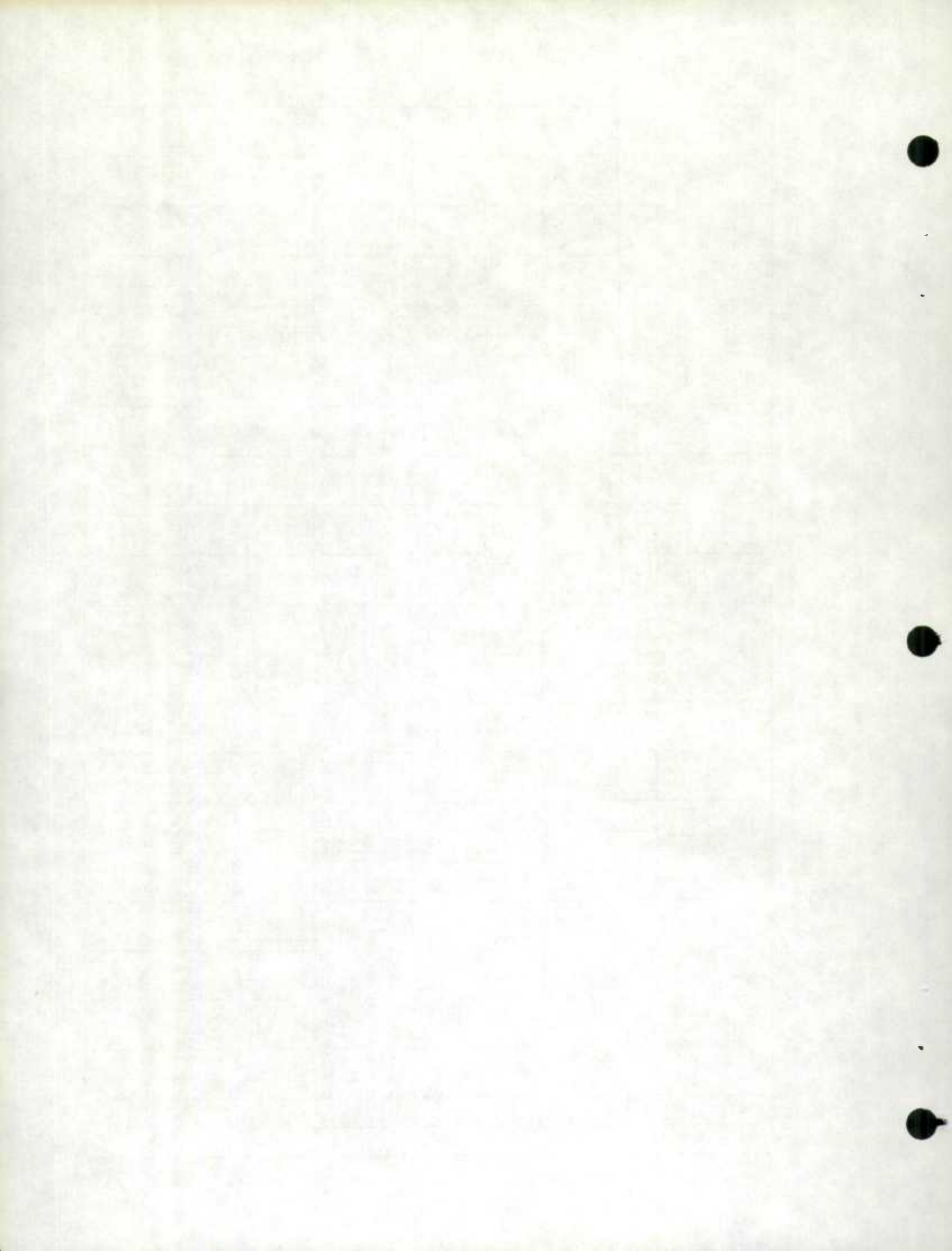| Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
00	250	4.8	12.8	15.2
01	652	6.7	46.8	39.7
02	145	2.8	4.3	8.9
03	291	6.5	20.2	17.7
04	283	4.7	13.8	17.3
05	20	10.0	2.1	1.2

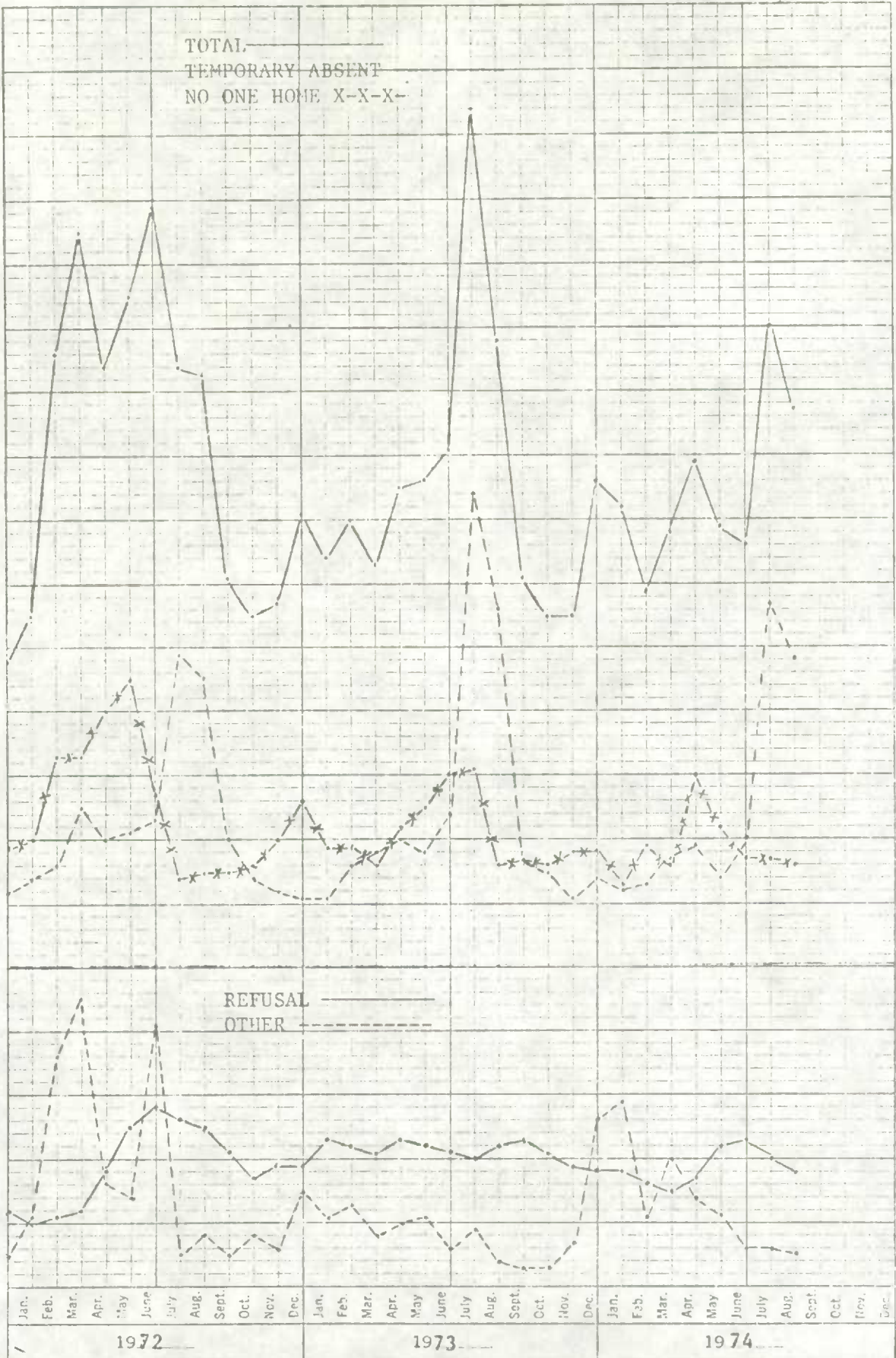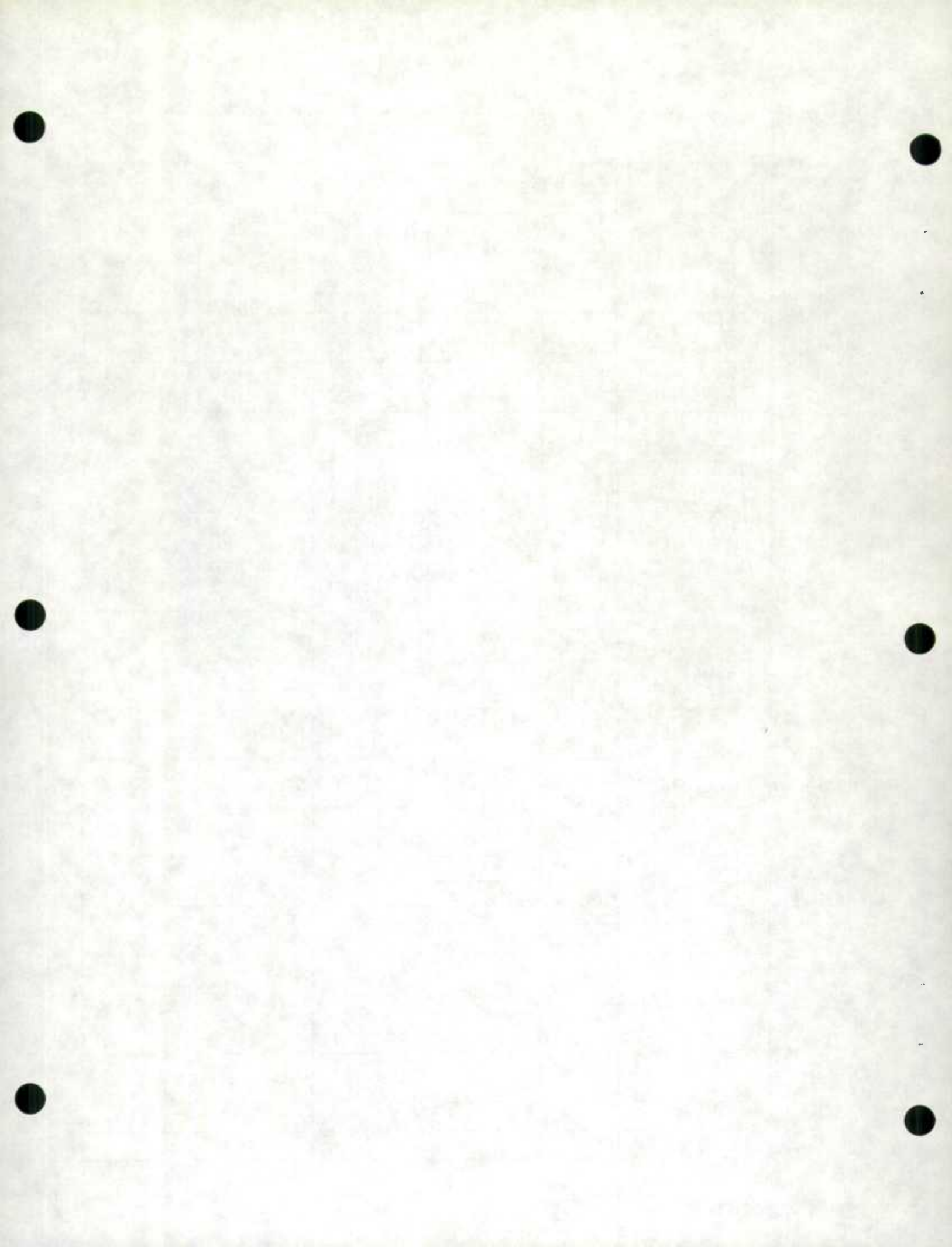Graph G2

HALIFAX REGIONAL OFFICE

Table 3(a)   August, 1974

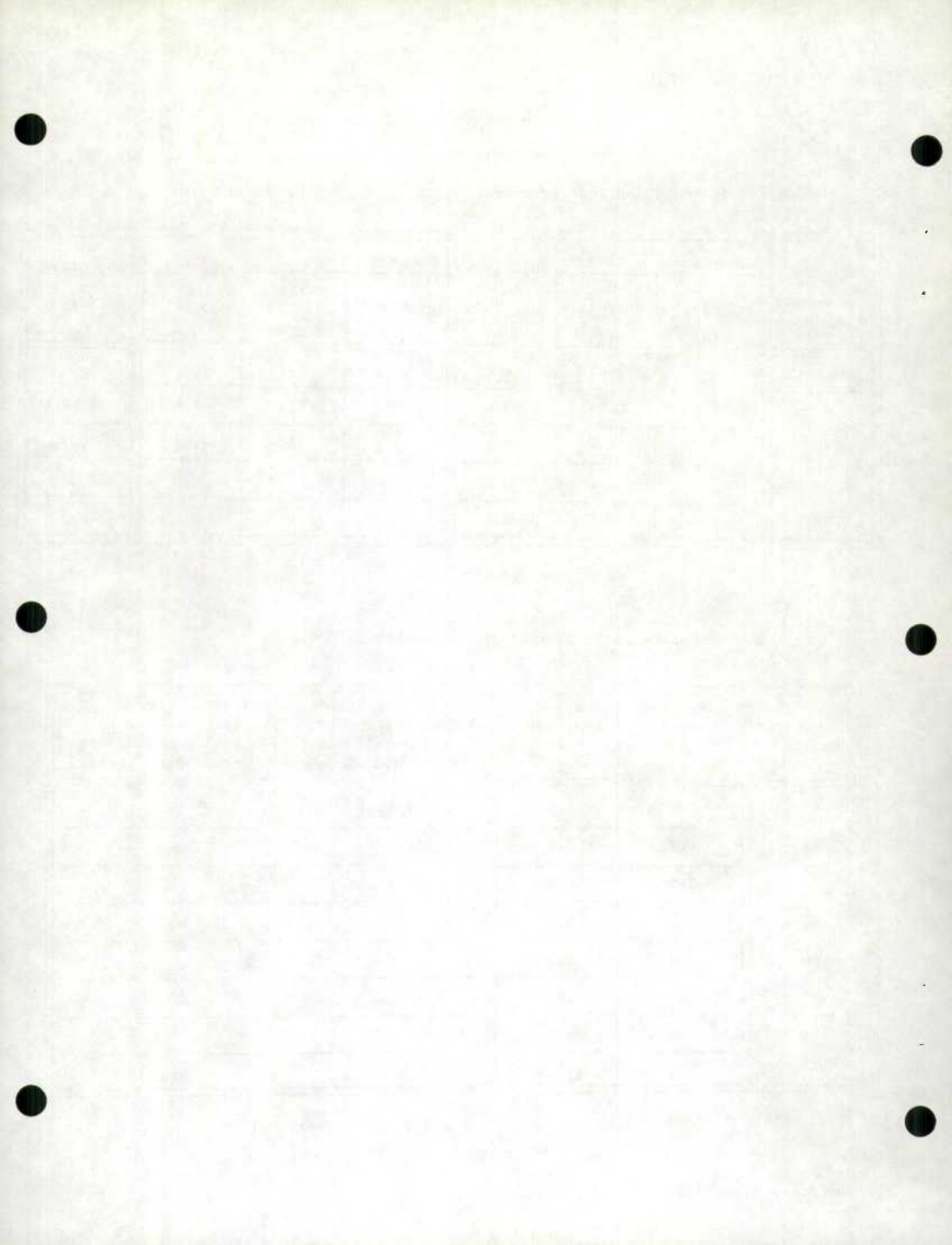Month to Month and Year to Year Changes in the Non-Response Rates

Non -Response Component	Non-Response Rates		Jul. 1974 to Aug. 1974 (%)	Non-Response Rates		Jul. 1973 to Aug. 1973 (%)	Aug. 1973 to Aug. 1974 (%)
	Aug. 1974 (%)	Jul. 1974 (%)		Aug. 1973 (%)	Jul. 1973 (%)		
Overall	8.7	10.0	-1.3	9.8	13.4	-3.6	-1.1
T.A.	4.8	5.7	-0.9	5.6	7.4	-1.8	-0.8
N.1	1.6	1.7	-0.1	1.6	3.1	-1.5	-
N.2	1.8	2.0	-0.2	2.2	2.0	0.2	-0.4
Other	0.5	0.6	-0.1	0.4	0.9	-0.5	0.1

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	415	5.5	4.7	7.3
20	503	8.6	8.7	8.8
21	611	7.7	9.6	10.7
22	1,345	9.4	25.8	23.7
23	465	10.5	10.0	8.2
30	499	12.4	12.6	8.8
31	580	11.6	13.6	10.2
32	690	6.4	8.9	12.1
33	577	5.2	6.1	10.2

TOTAL ————
TEMPORARY ABSENT ————
NO ONE HOME X-X-X-

REFUSAL ————
OTHER -----------

1972   1973   1974

MONTREAL REGIONAL OFFICE

Table 4(a)

August, 1974

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

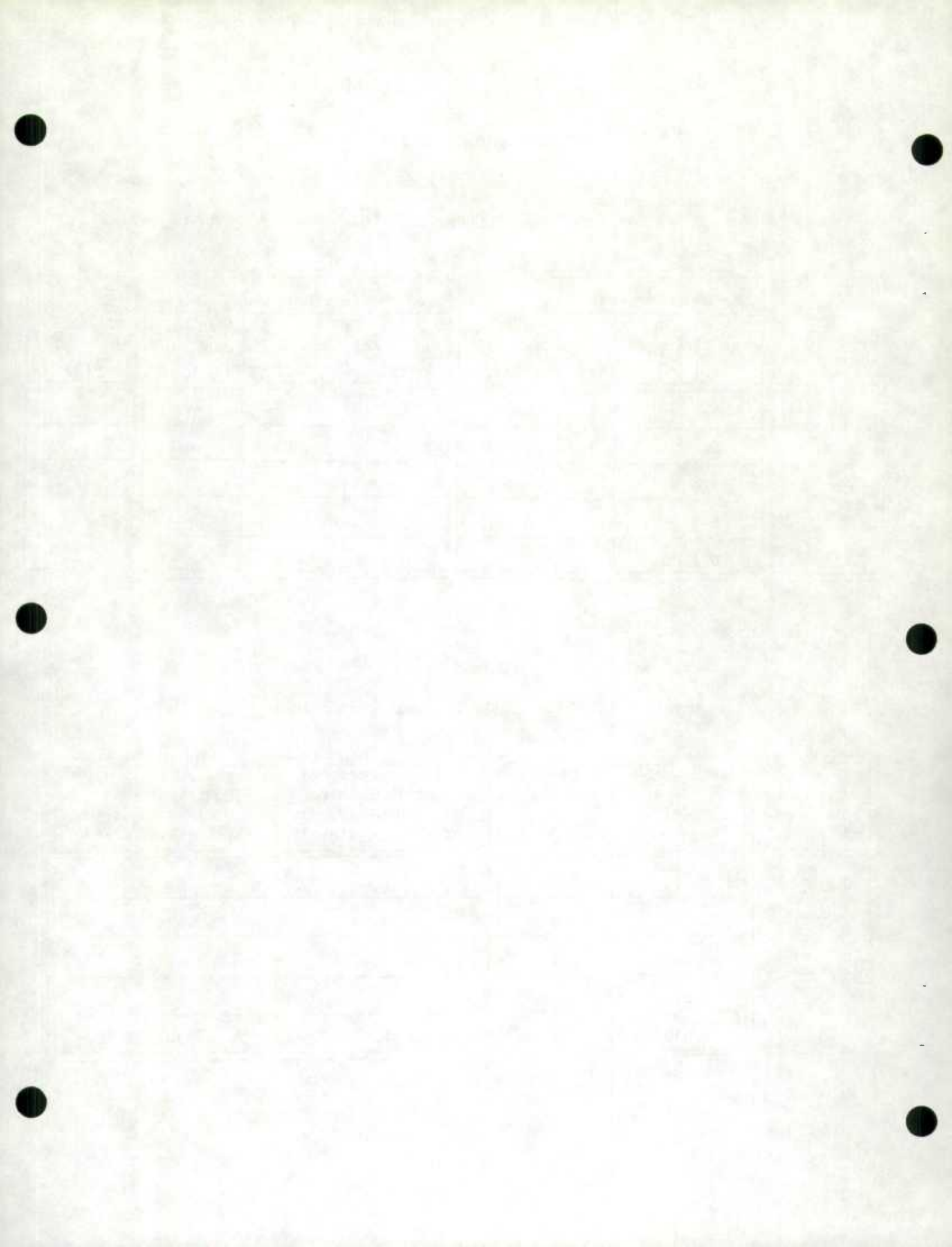| Non--Response Component	Non-Response Rates		Jul. 1974 to Aug. 1974 (%)	Non-Response Rates		Jul. 1973 to Aug. 1973 (%)	Aug. 1973 to Aug. 1974 (%)
	Aug. 1974 (%)	Jul. 1974 (%)		Aug. 1973 (%)	Jul. 1973 (%)		
Overall	8.4	12.1	-3.7	12.1	19.2	-7.1	-3.7
T.A.	4.0	7.4	-3.4	6.2	12.6	-6.4	-2.2
N.1	1.6	1.7	-0.1	2.3	4.4	-2.1	-0.7
N.2	2.1	2.2	-0.1	2.2	1.7	0.5	-0.1
Other	0.7	0.8	-0.1	1.4	0.5	0.9	-0.7

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	339	7.1	4.4	5.2
41	413	3.8	2.9	6.4
42	212	10.8	4.2	3.3
43	1,002	5.5	10.1	15.5
44	540	8.8	8.7	8.3
45	644	4.4	5.2	10.0
46	508	5.2	4.8	7.8
47	2,814	11.5	59.7	43.5

Montreal Regional Office

Graph G4

%20

TOTAL
TEMPORARY ABSENT ----------
NO ONE HOME X-X-X-X-X-X-

REFUSAL
OTHER -----------

Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.
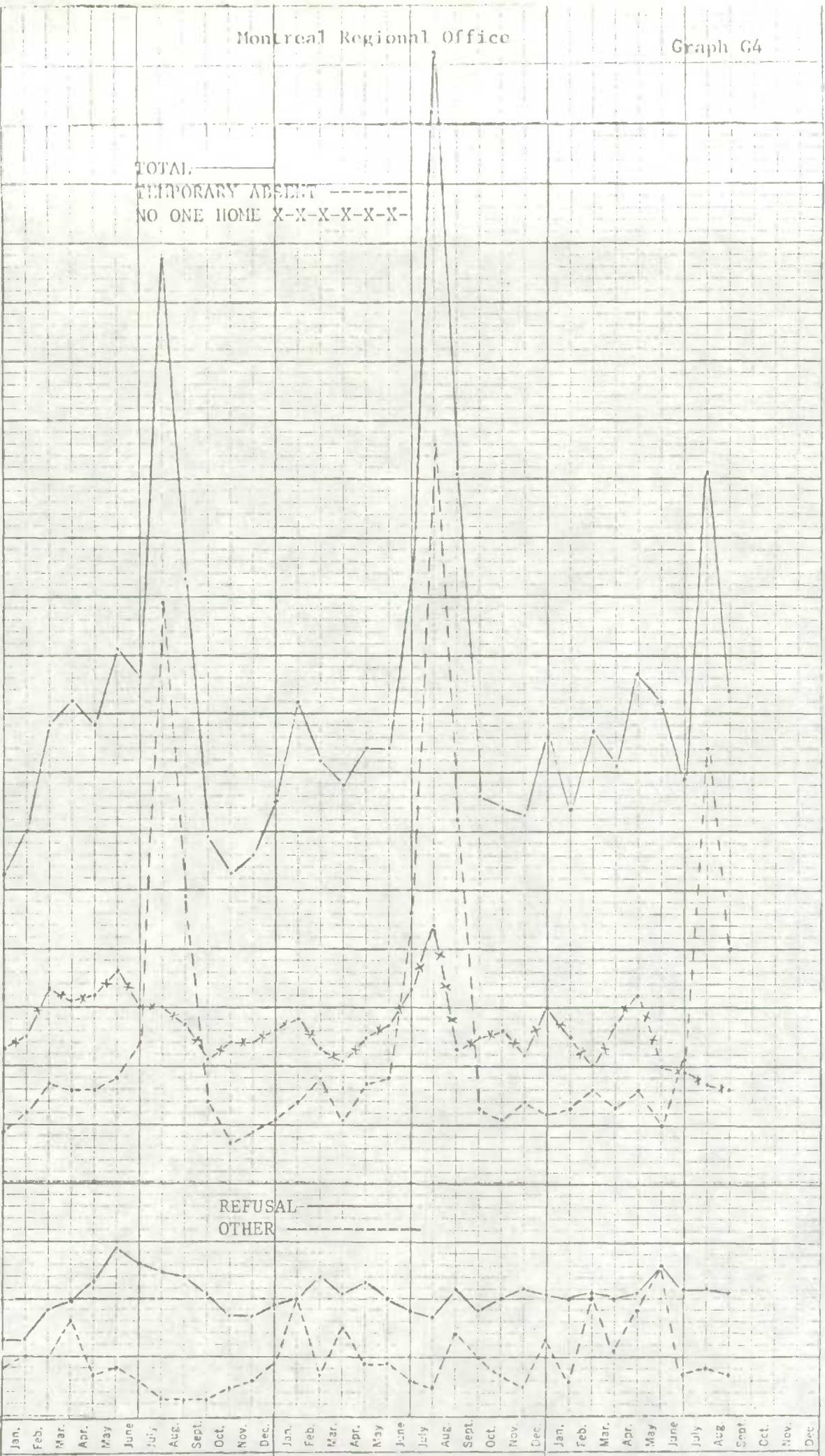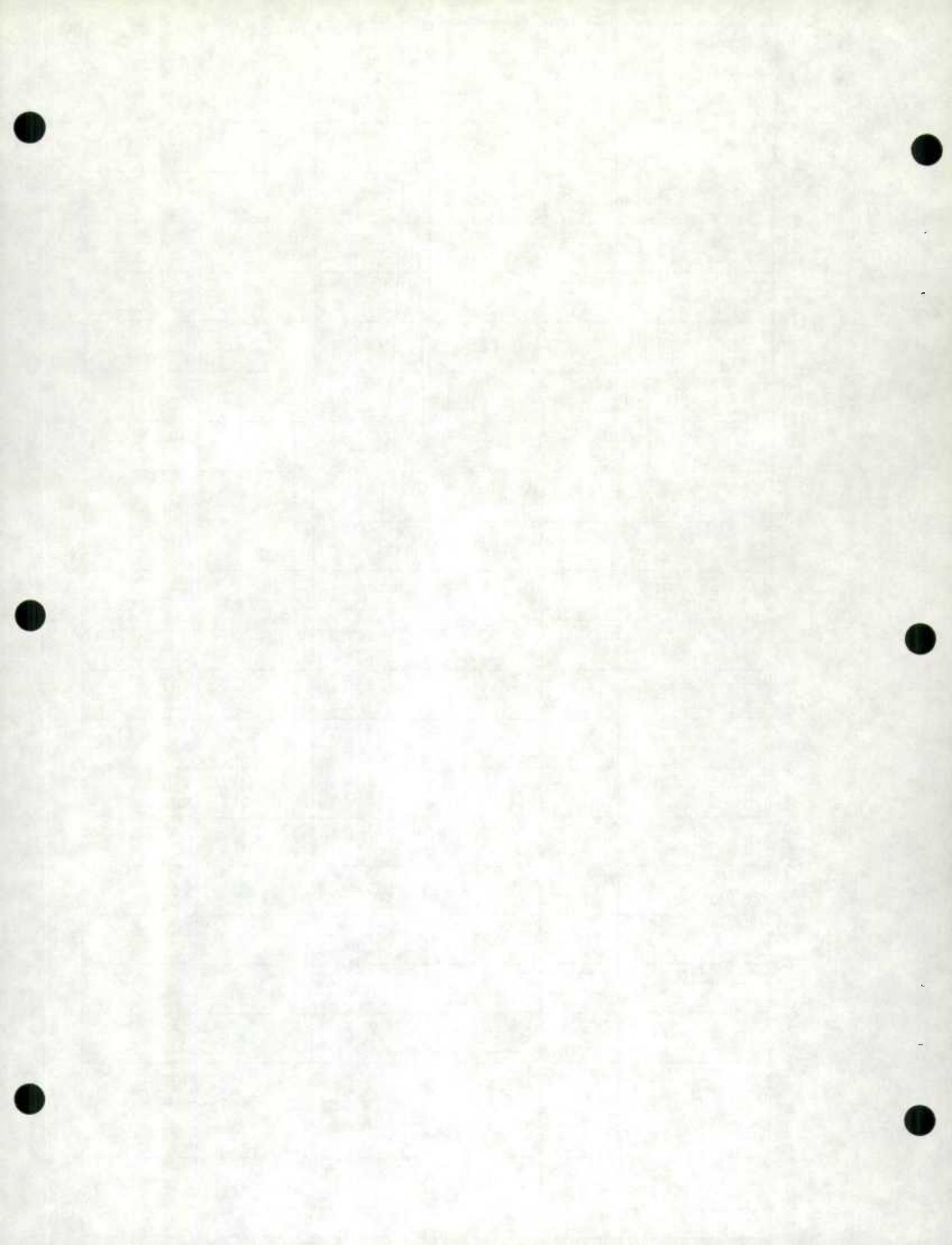
OTTAWA REGIONAL OFFICE

Table 5(a)   .   August, 1974

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

Non -Response Component	Non-Response Rates		Jul. 1974 to Aug. 1974 (%)	Non-Response Rates		Jul. 1973 to Aug. 1973 (%)	Aug. 1973 to Aug. 1974 (%)
	Aug. 1974 (%)	Jul. 1974 (%)		Aug. 1973 (%)	Jul. 1973 (%)		
Overall	8.6	9.5	-0.9	9.2	13.9	-4.7	-0.6
T.A.	5.2	5.3	-0.1	4.2	8.6	-4.4	1.0
N.1	1.8	2.4	-0.6	3.0	2.9	0.1	-1.2
N.2	1.5	1.7	-0.2	1.7	2.0	-0.3	-0.2
Other	0.1	0.1	-	0.3	0.4	-0.1	-0.2

Table 5(b)

Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
40	18	0.0	0.0	0.8
48	243	9.9	12.9	11.3
49	136	5.9	4.3	6.4
50	1,116	8.6	51.4	52.1
58	630	9.3	31.4	29.4
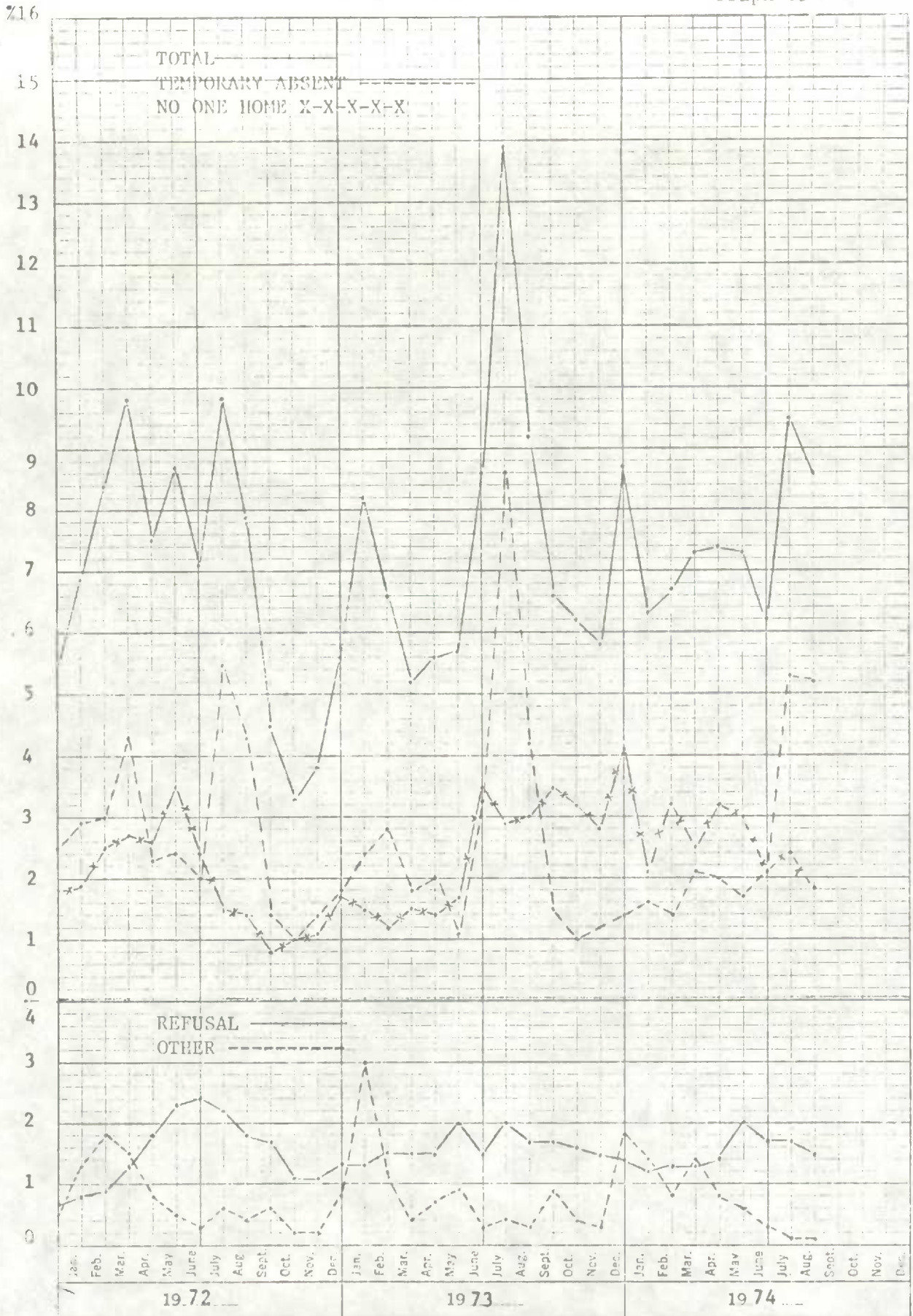
Ottawa Regional Office
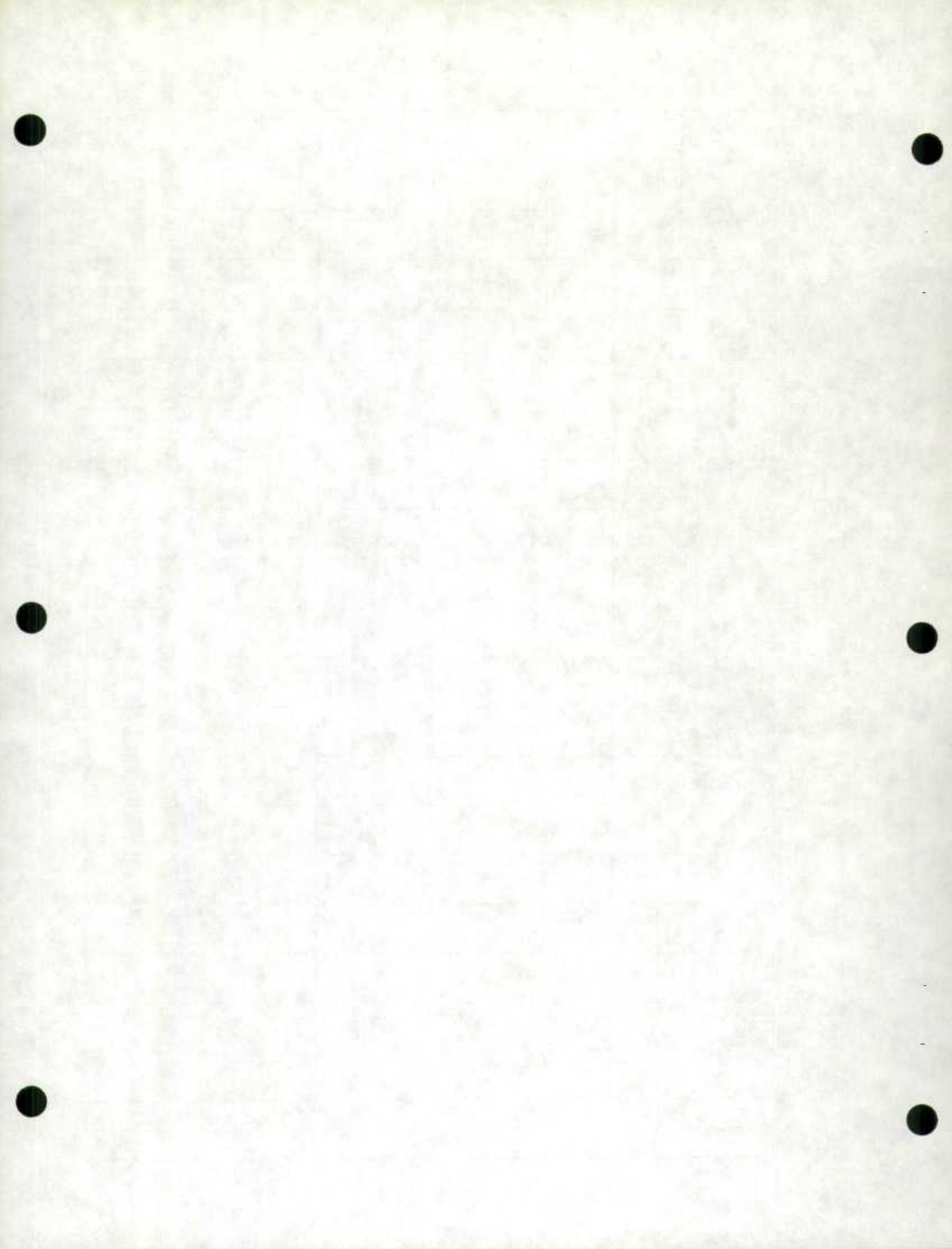
TORONTO REGIONAL OFFICE   August, 1974

Table 6(a)

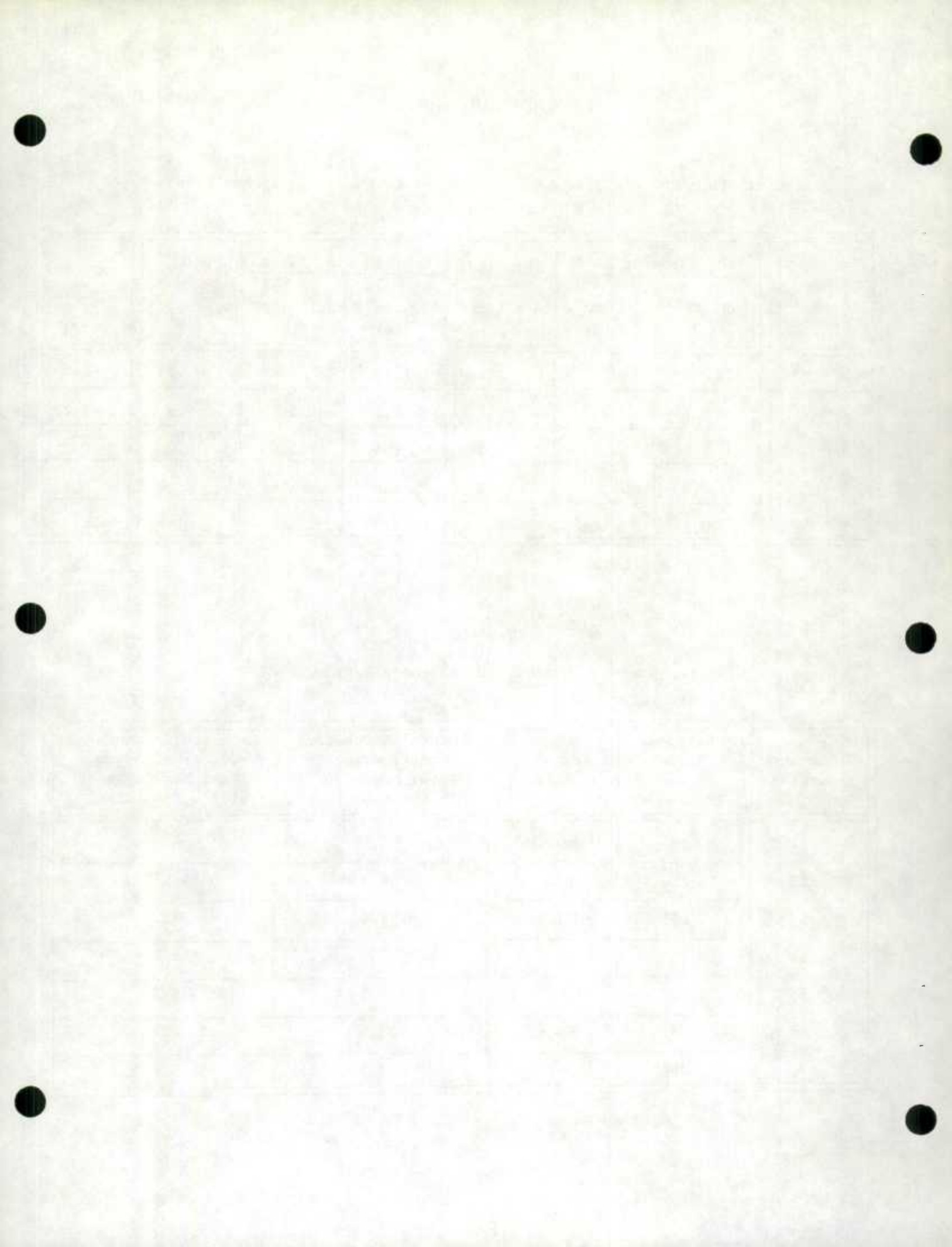Month to Month and Year to Year Changes in the Non-Response Rates

Non -Response Component	Non-Response Rates		Jul. 1974 to Aug. 1974 (%)	Non-Response Rates		Jul. 1973 to Aug. 1973 (%)	Aug. 1973 to Aug. 1974 (%)
	Aug. 1974 (%)	Jul. 1974 (%)		Aug. 1973 (%)	Jul. 1973 (%)		
Overall	11.0	12.2	-1.2	11.4	16.2	-4.8	-0.4
T.A.	6.3	7.7	-1.4	6.5	11.4	-4.9	-0.2
N.1	2.2	1.7	0.5	2.4	2.6	-0.2	-0.2
N.2	2.0	2.2	-0.2	1.8	1.6	0.2	0.2
Other	0.5	0.6	-0.1	0.7	0.6	0.1	-0.2

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	484	10.5	6.5	6.7
52	3,054	12.6	48.7	42.5
53	1,091	8.3	11.4	15.2
54	625	12.8	10.2	8.7
55	667	6.2	5.3	9.3
56	642	12.4	10.0	8.9
57	626	9.9	7.9	8.7

Toronto Regional Office

Graph G6
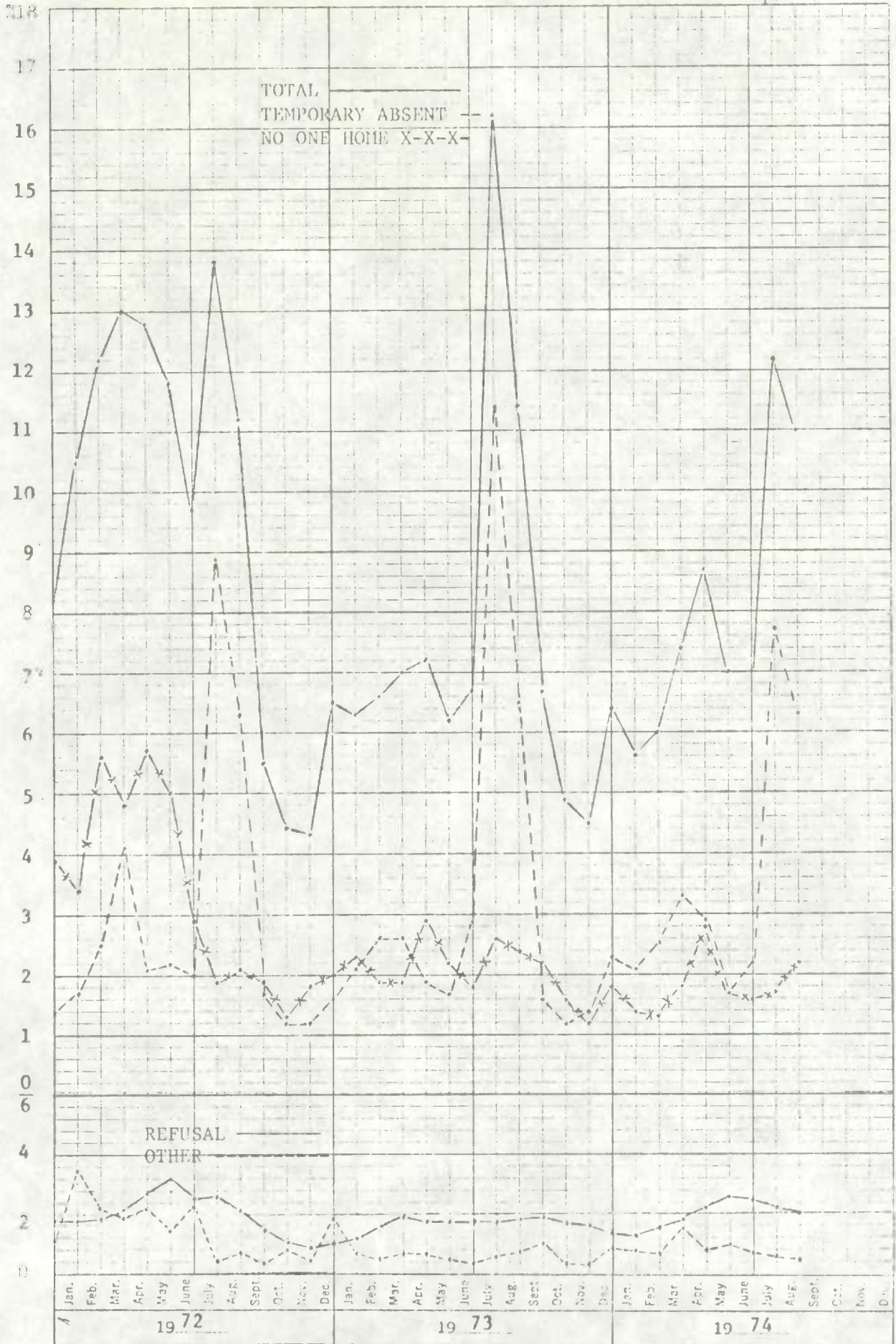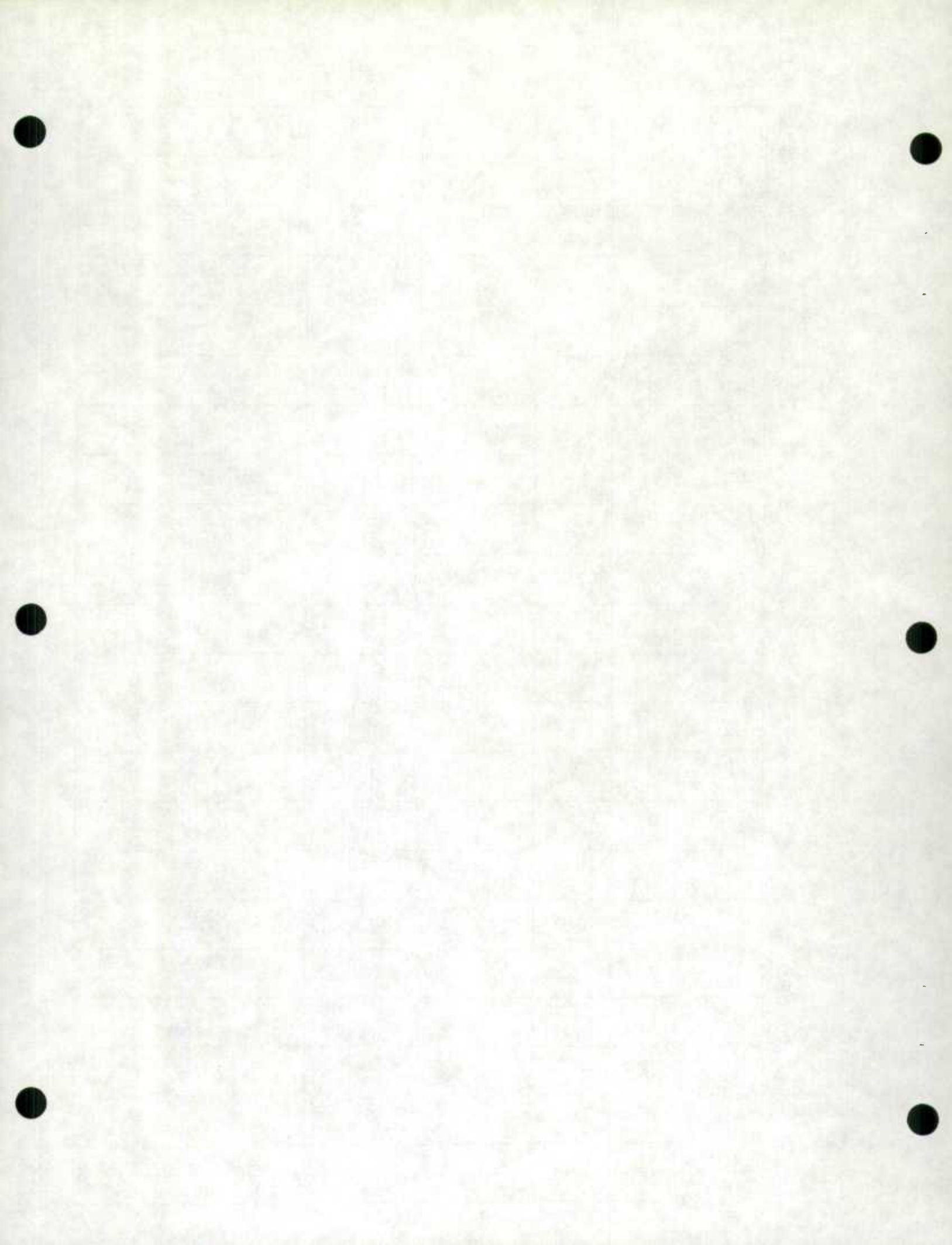
WINNIPEG REGIONAL OFFICE

Table 7(a)   August, 1974

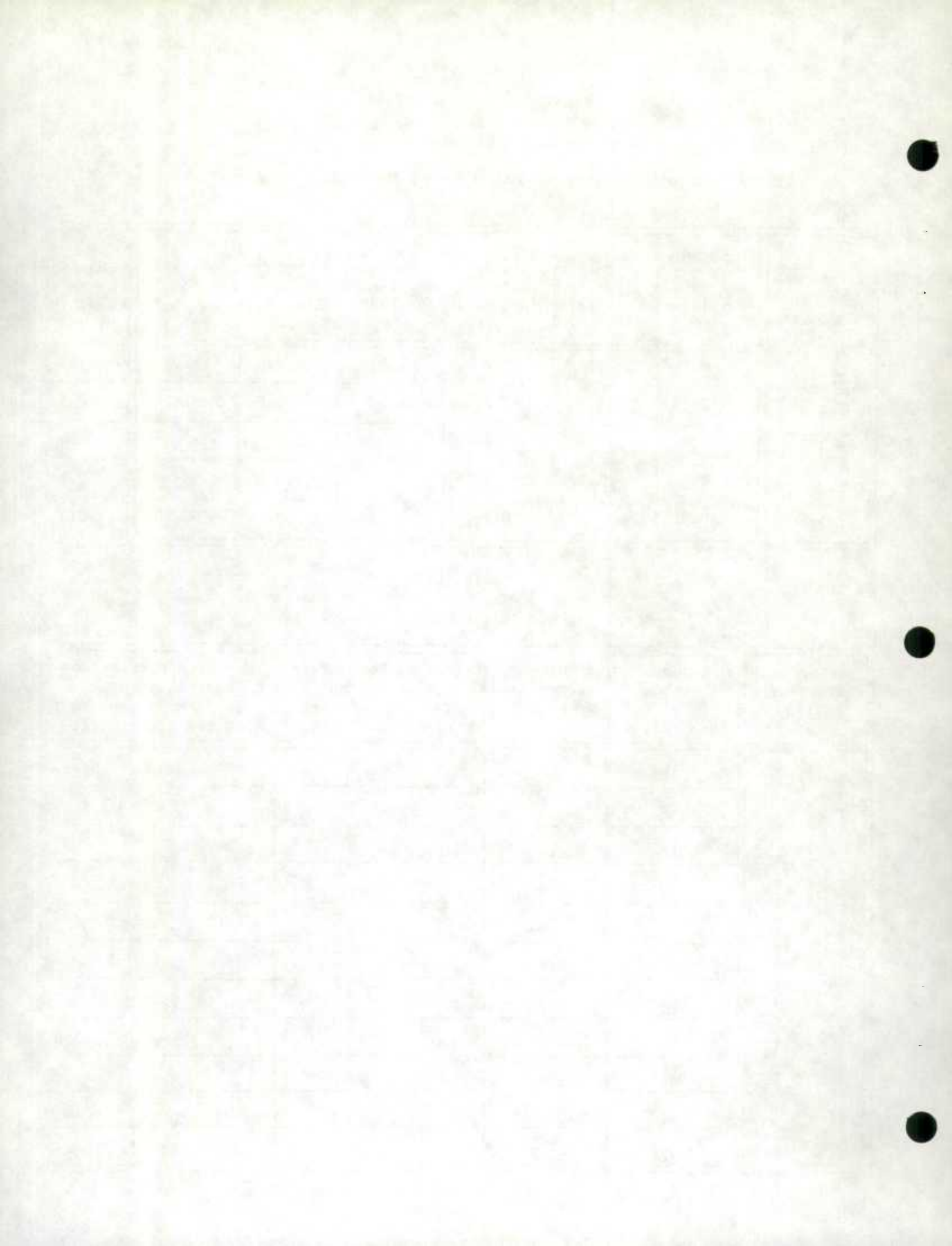Month to Month and Year to Year Changes in the Non-Response Rates

Non -Response Component	Non-Response Rates		Jul. 1974 to Aug. 1974 (%)	Non-Response Rates		Jul. 1973 to Aug. 1973 (%)	Aug. 1973 to Aug. 1974 (%)
	Aug. 1974 (%)	Jul. 1974 (%)		Aug. 1973 (%)	Jul. 1973 (%)		
Overall	4.7	6.4	-1.7	5.2	6.7	-1.5	-0.5
T.A.	2.8	3.5	-0.7	3.1	4.3	-1.2	-0.3
N.1	0.8	1.6	-0.8	1.2	1.4	-0.2	-0.4
N.2	0.8	1.1	-0.3	0.7	0.7	-	0.1
Other	0.3	0.2	0.1	0.2	0.3	-0.1	0.1

Table 7(b)

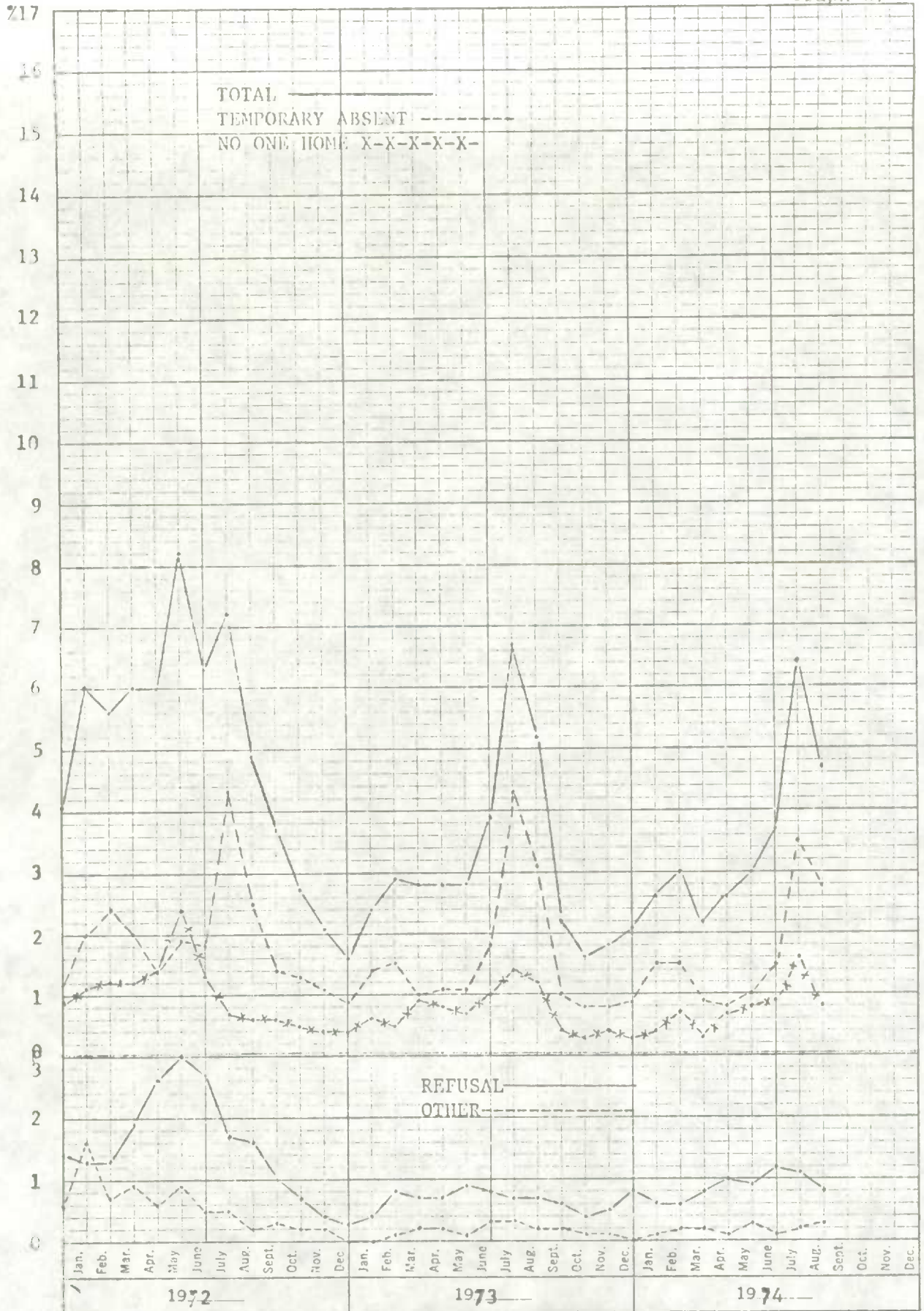Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
509	17	0.0	0.0	0.5
59	226	4.9	7.3	7.1
60	1,050	6.8	47.0	32.8
61	159	1.8	2.0	5.0
62	71	1.4	0.7	2.2
63	129	1.6	1.3	4.0
64	286	2.7	5.3	8.9
65	140	0.7	0.7	4.4
70	507	5.1	17.2	15.9
71	323	3.9	8.6	10.1
73	292	5.1	9.9	9.1

TOTAL ————————
TEMPORARY ABSENT ————————
NO ONE HOME X-X-X-X-X-

REFUSAL————————
OTHER————————

1972   1973   1974

EDMONTON REGIONAL OFFICE

Table 8(a)   August, 1974

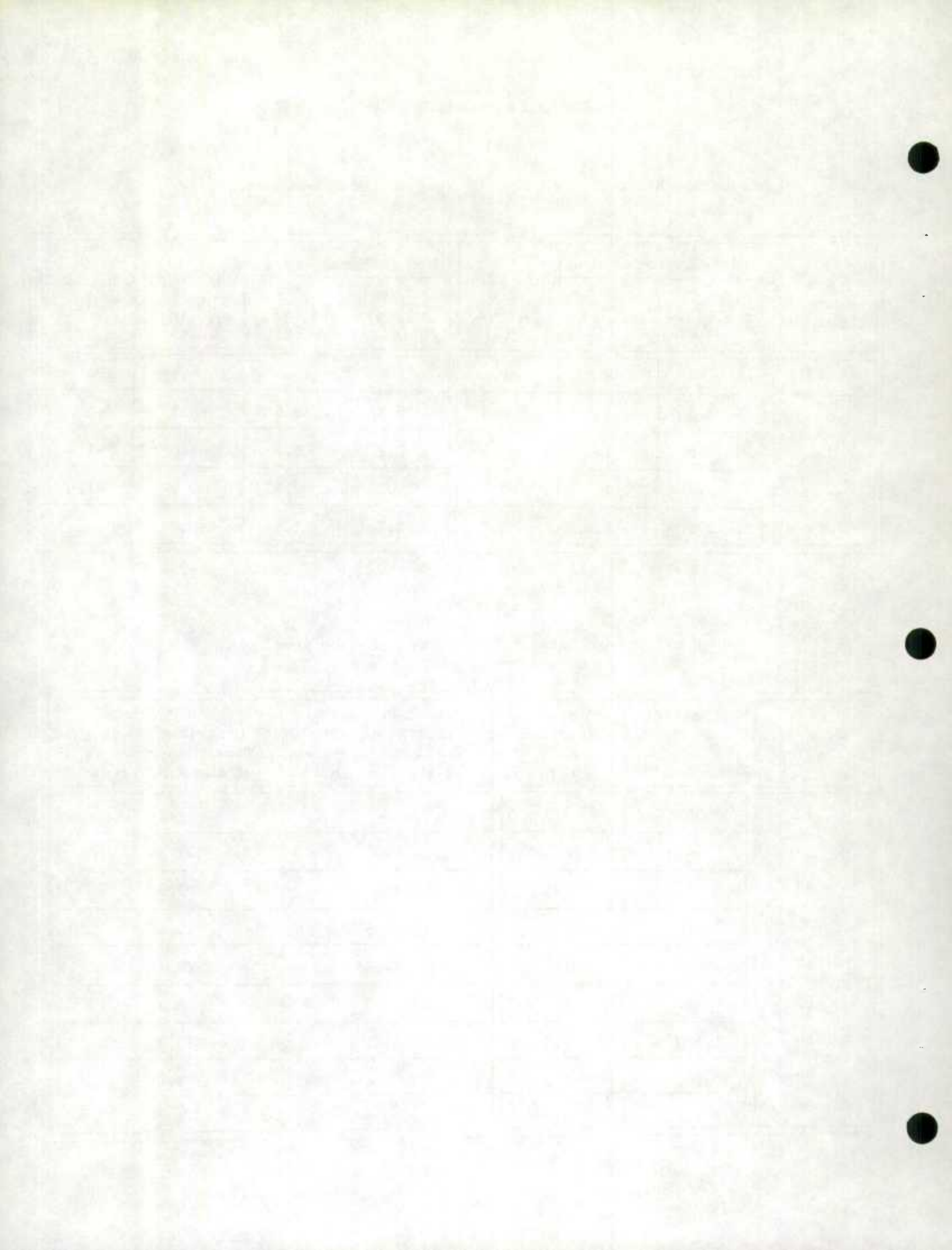Month to Month and Year to Year Changes in the Non-Response Rates

Non -Response Component	Non-Response Rates		Jul. 1974 to Aug. 1974 (%)	Non-Response Rates		Jul. 1973 to Aug. 1973 (%)	Aug. 1973 to Aug. 1974 (%)
	Aug. 1974 (%)	Jul. 1974 (%)		Aug. 1973 (%)	Jul. 1973 (%)		
Overall	7.0	8.5	-1.5	11.4	15.8	-4.4	-4.4
T.A.	3.3	5.1	-1.8	5.3	8.6	-3.3	-2.0
N.1	1.3	1.5	-0.2	2.7	3.7	-1.0	-1.4
N.2	1.3	1.7	-0.4	2.7	2.1	0.6	-1.4
Other	1.1	0.2	0.9	0.7	1.4	-0.7	0.4

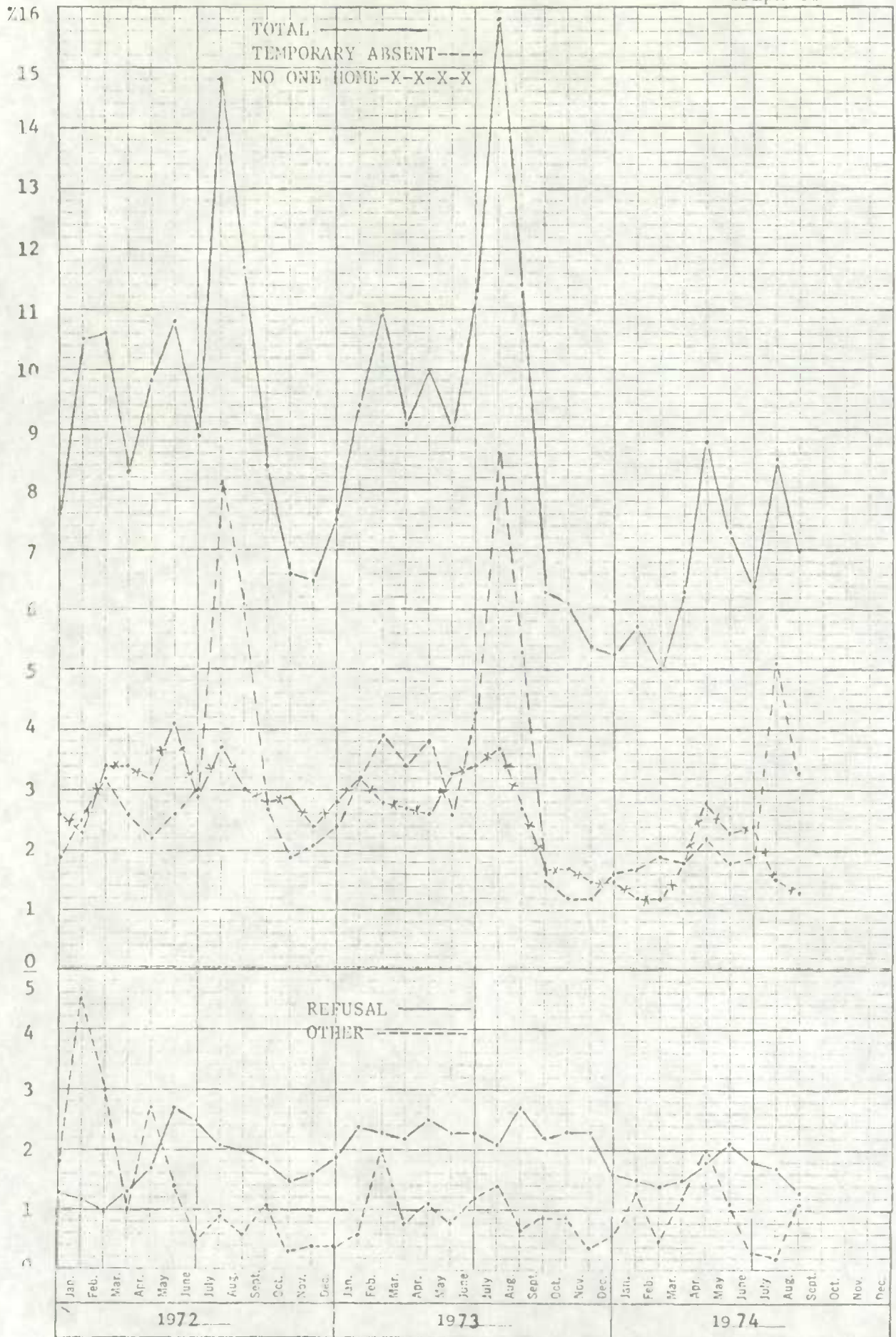Table 8(b)

Non-Response Data at the Economic Region Level

Economic Region	Expected Number of Households	Non-Response Rate (%)	Actual Percentage Contribution to Total Non-Response at the R.O. Level	Expected Percentage Contribution to Total Non-Response at the R.O. Level
72	383	5.5	7.7	9.8
74	442	6.3	10.3	11.3
80	153	26.8	15.1	3.9
81	218	10.5	8.5	5.6
82	925	7.1	24.3	23.7
83	247	4.4	4.0	6.3
84	1,179	5.8	25.4	30.2
85	201	2.5	1.8	5.1
86	159	5.0	2.9	4.1

Graph G8

TOTAL ————
TEMPORARY ABSENT————
NO ONE HOME-X-X-X-X

REFUSAL ————
OTHER————————

1972   1973   1974
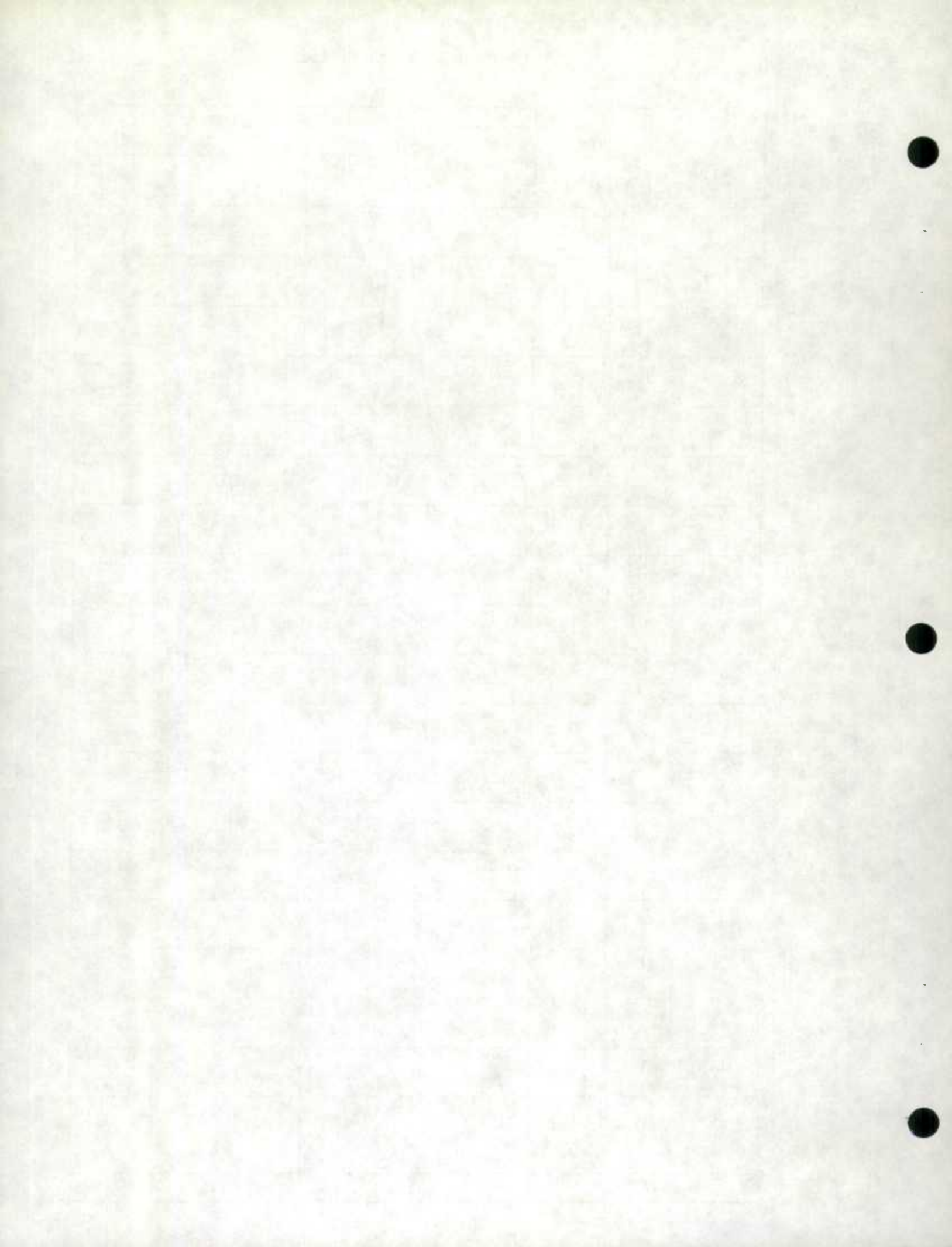
VANCOUVER REGIONAL OFFICE

Table 9(a)   August, 1974

Month to Month and Year to Year Changes in the Non-Response Rates
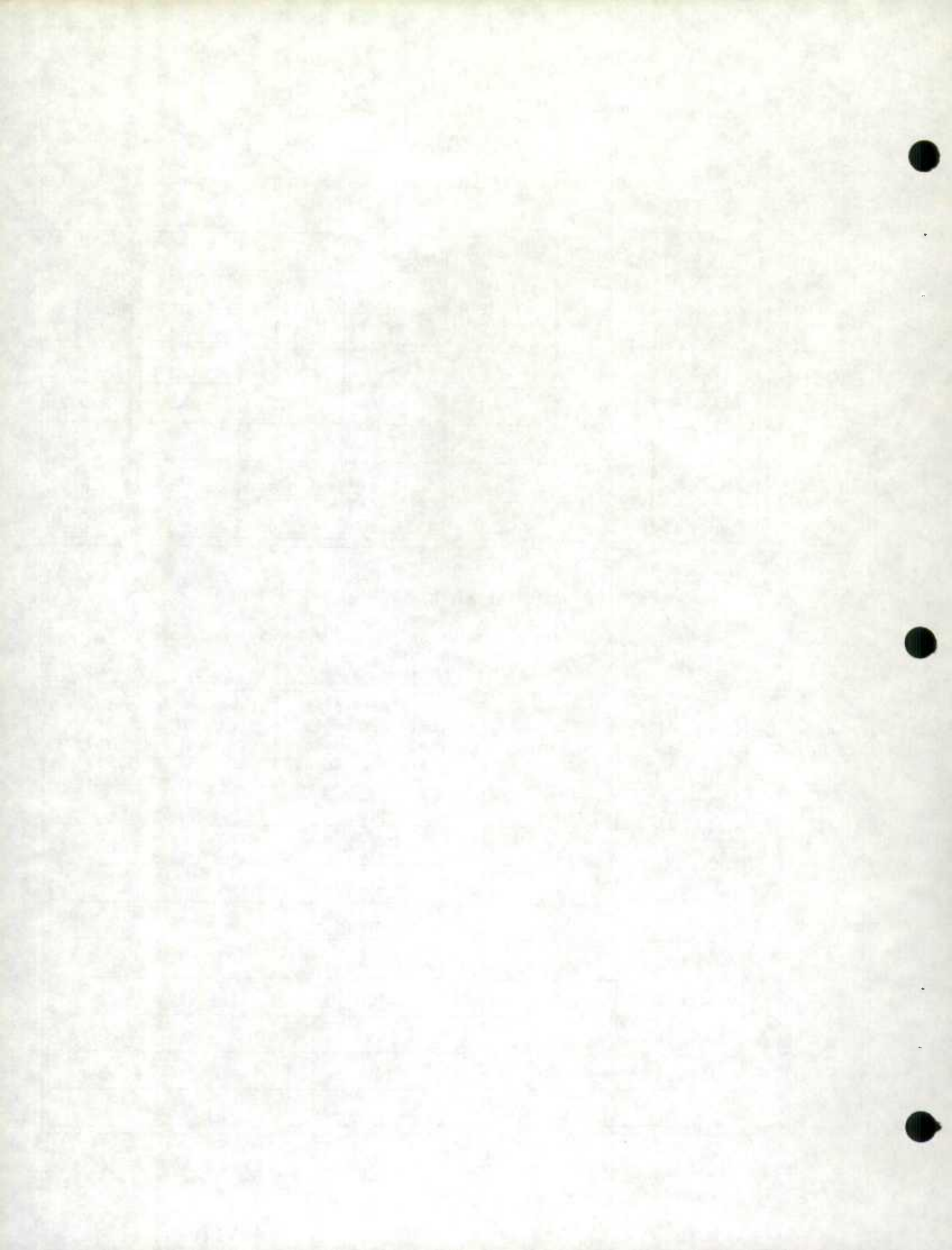
Non -Response Component	Non-Response Rates		Jul. 1974 to Aug. 1974 (%)	Non-Response Rates		Jul. 1973 to Aug. 1973 (%)	Aug. 1973 to Aug. 1974 (%)
	Aug. 1974 (%)	Jul. 1974 (%)		Aug. 1973 (%)	Jul. 1973 (%)		
Overall	12.2	12.8	-0.6	14.9	16.0	-1.1	-2.7
T.A.	5.8	6.0	-0.2	6.0	6.9	-0.9	-0.2
N.1	2.4	2.2	0.2	3.5	4.3	-0.8	-1.1
N.2	3.6	3.7	-0.1	4.5	3.8	0.7	-0.9
Other	0.4	0.9	-0.5	0.9	1.0	-0.1	-0.5

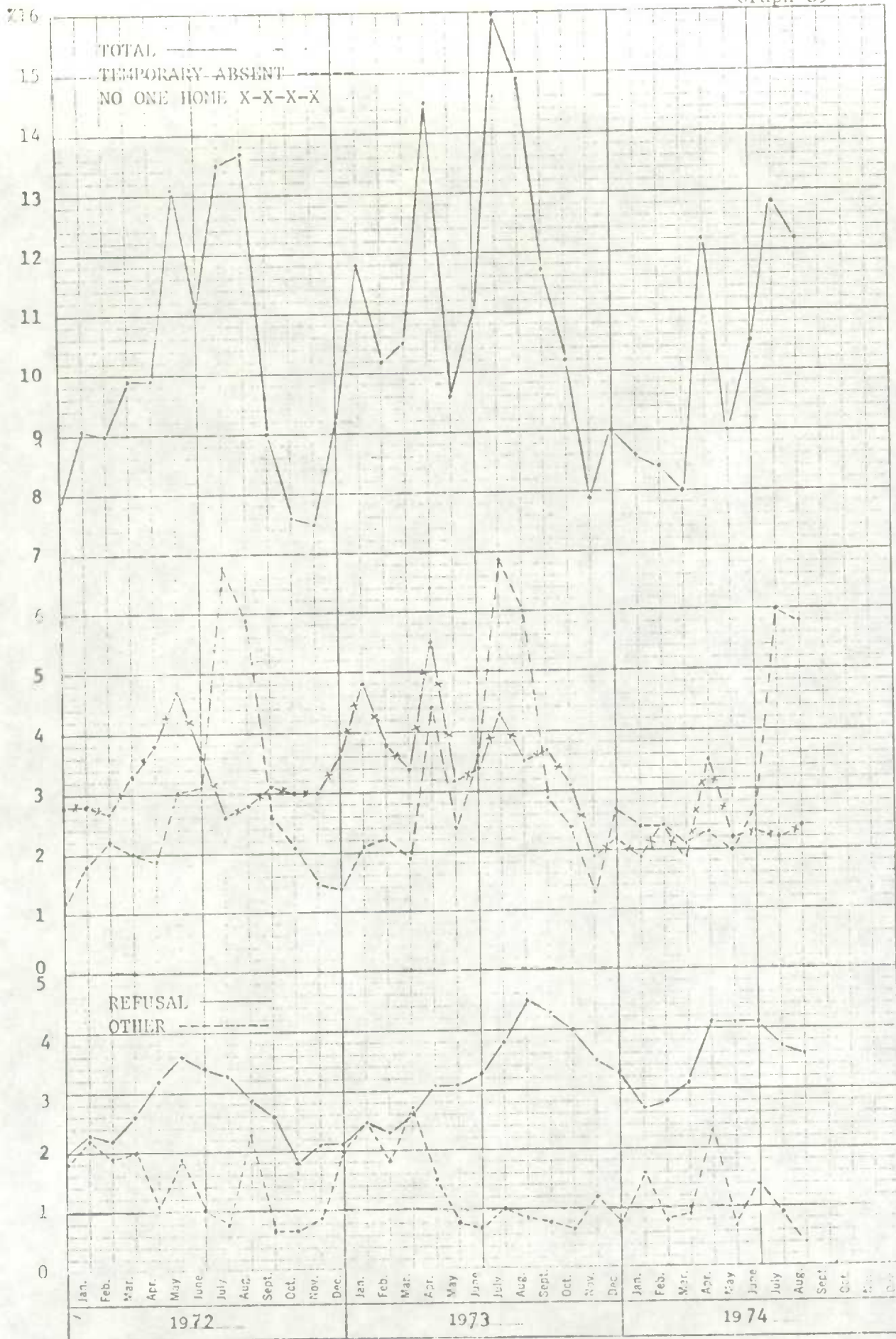Table 9(b)

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	89	10.1	1.9	2.3
91	141	15.6	4.5	3.6
92	293	7.2	4.3	7.4
93	177	15.2	5.6	4.5
94	2,076	11.8	50.6	52.5
95	818	11.8	20.0	20.7
96	61	11.5	1.5	1.5
97	244	20.1	10.1	6.2
98	53	13.2	1.5	1.3

Graph G9
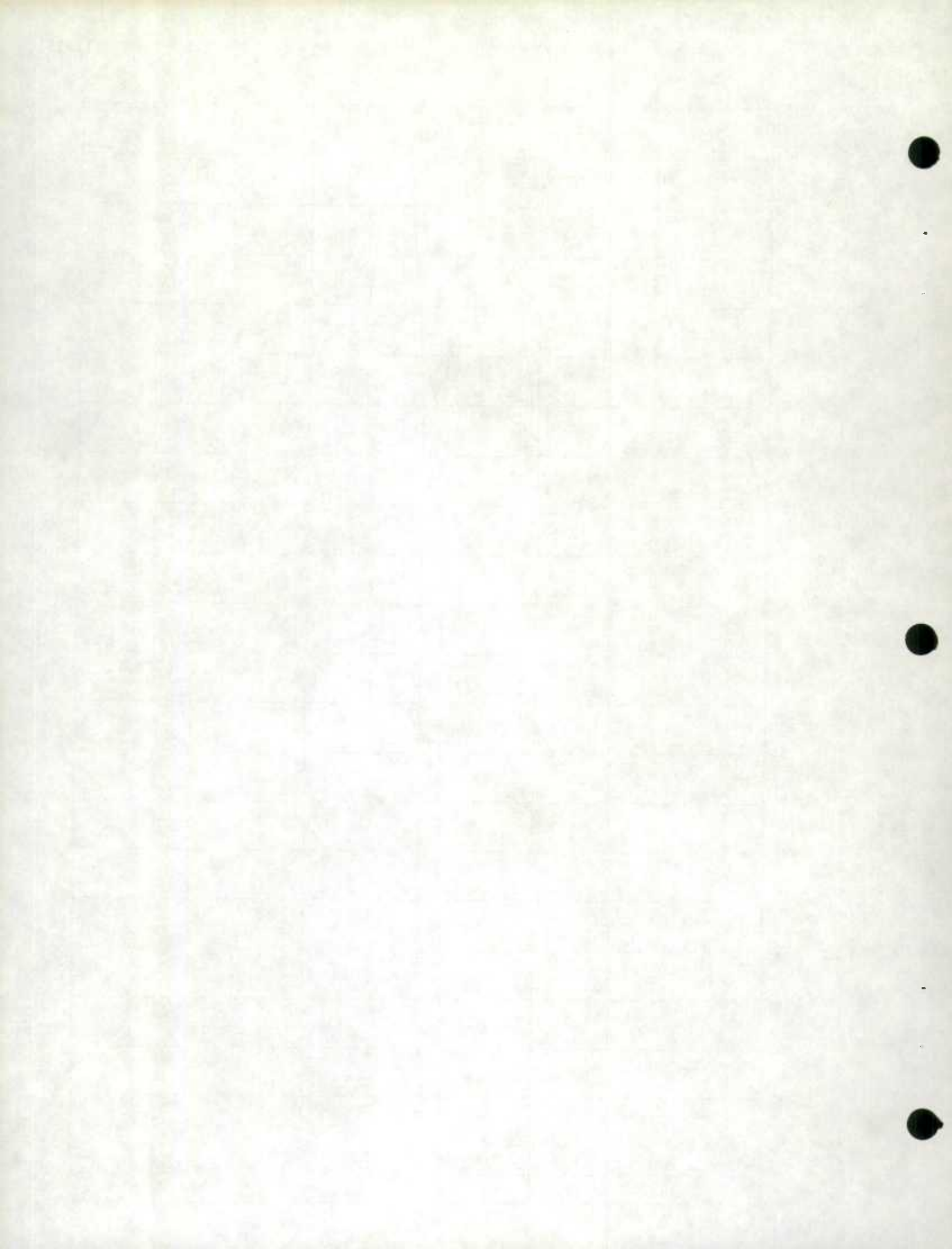
Definitions

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 my consist of a group of unrelated persons sharing a dwelling, or even one person living alone. Hotels, motels and institutions may also contain one or more households composed of staff members, employees, permanent residents or persons who have no usual place of residence elsewhere.

3. Expected Number of Households

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

4. Non-Response Rate

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

(i) Temporarily absent (T.A.)

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

(ii) No one home (N1)

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

(iii) Refusal (N2)

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

(iv) Other (N3-N6)

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

5. Economic Region (E.R.)

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

6. Actual Contribution to Non-Response

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

7. Expected Contribution to Non-Response

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

Comparison of Canadian and American Unemployment Rates
August 1973 to August 1974

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

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Comparison of Canadian and American Unemployment Rates
## by Month, January 1971 to Date
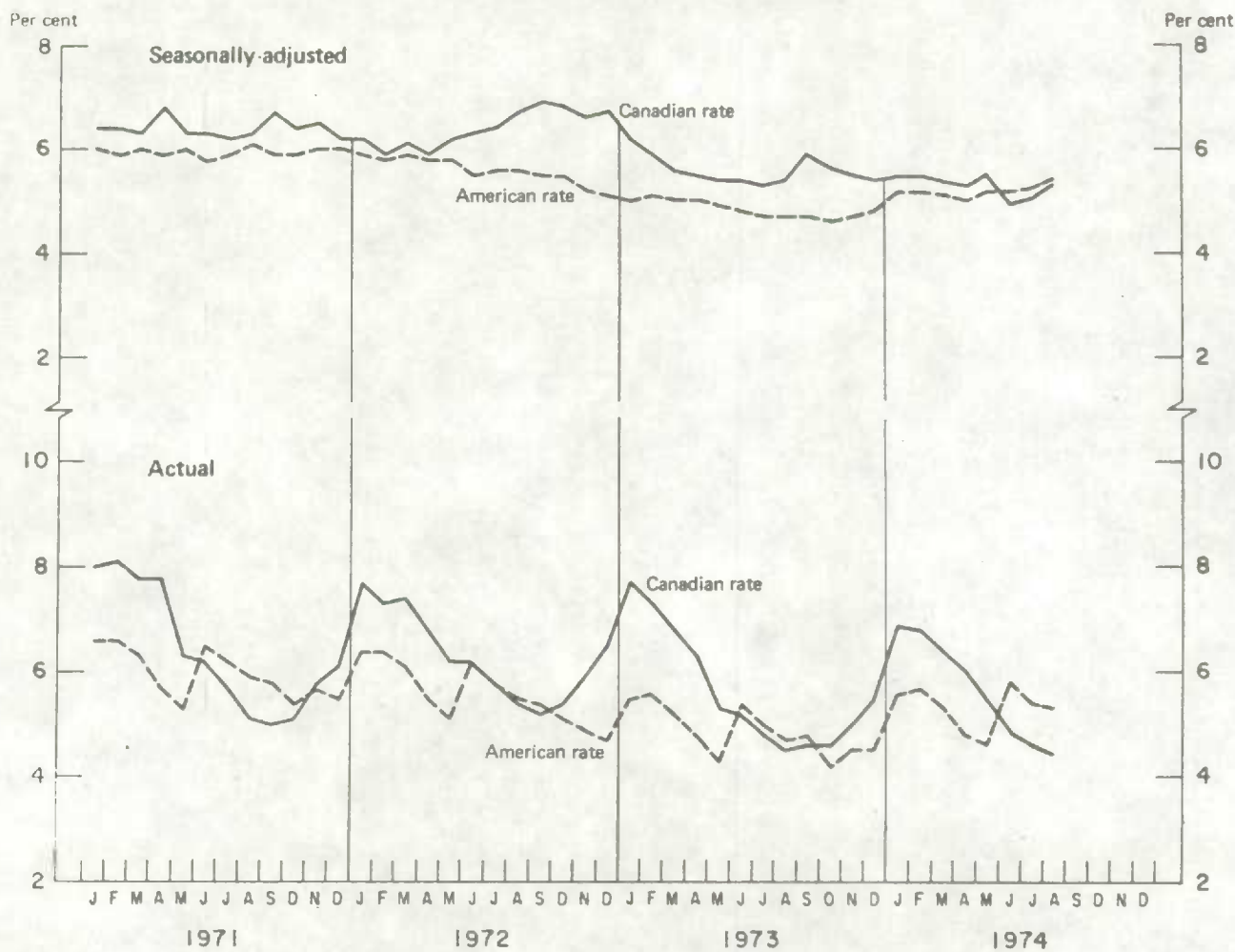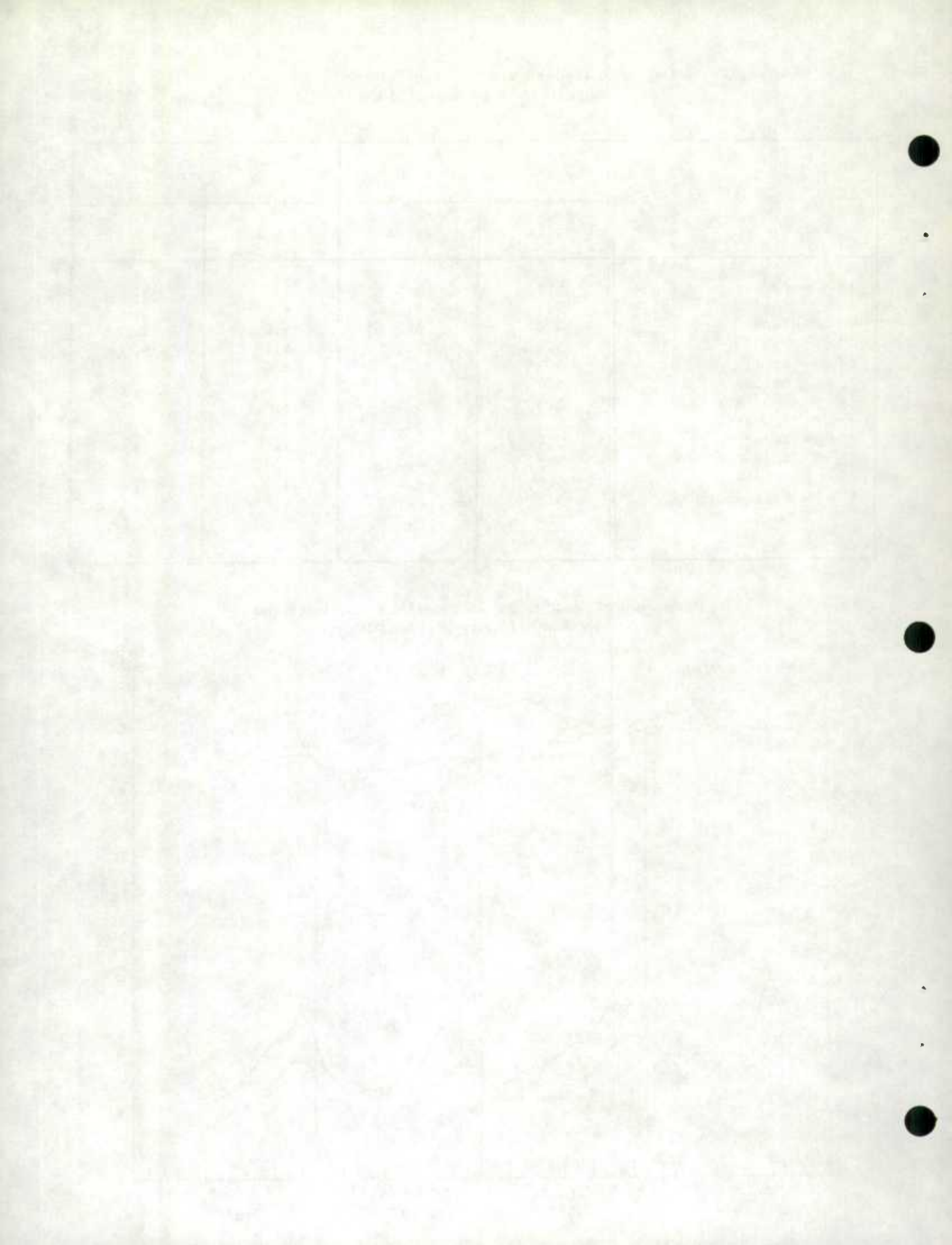
Comparison of LFS Unemployed and UIC Claimants Series
January 1973 to date

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

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Comparison of Labour Force Unemployed and Unemployment Insurance Claimants by Month, January 1971 to Date
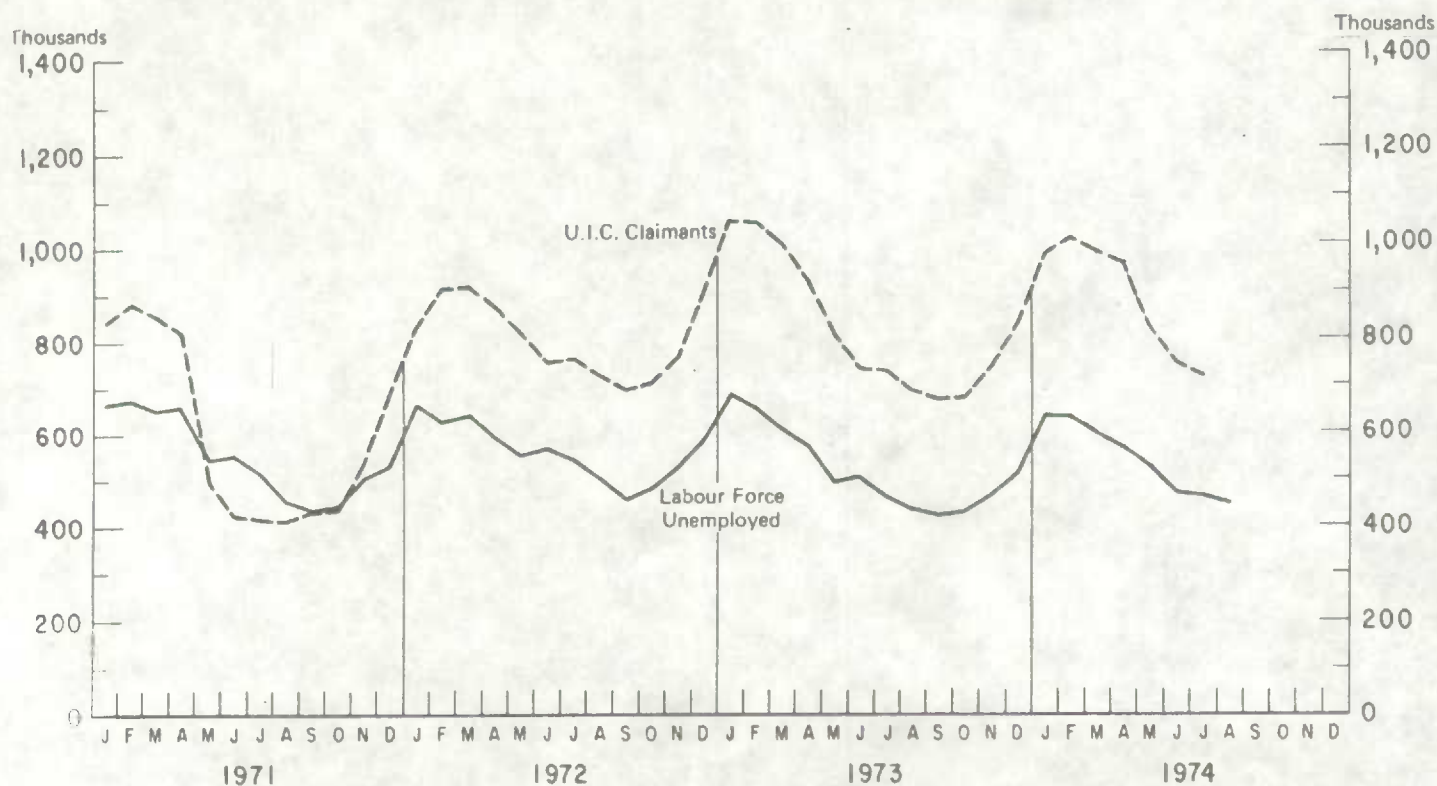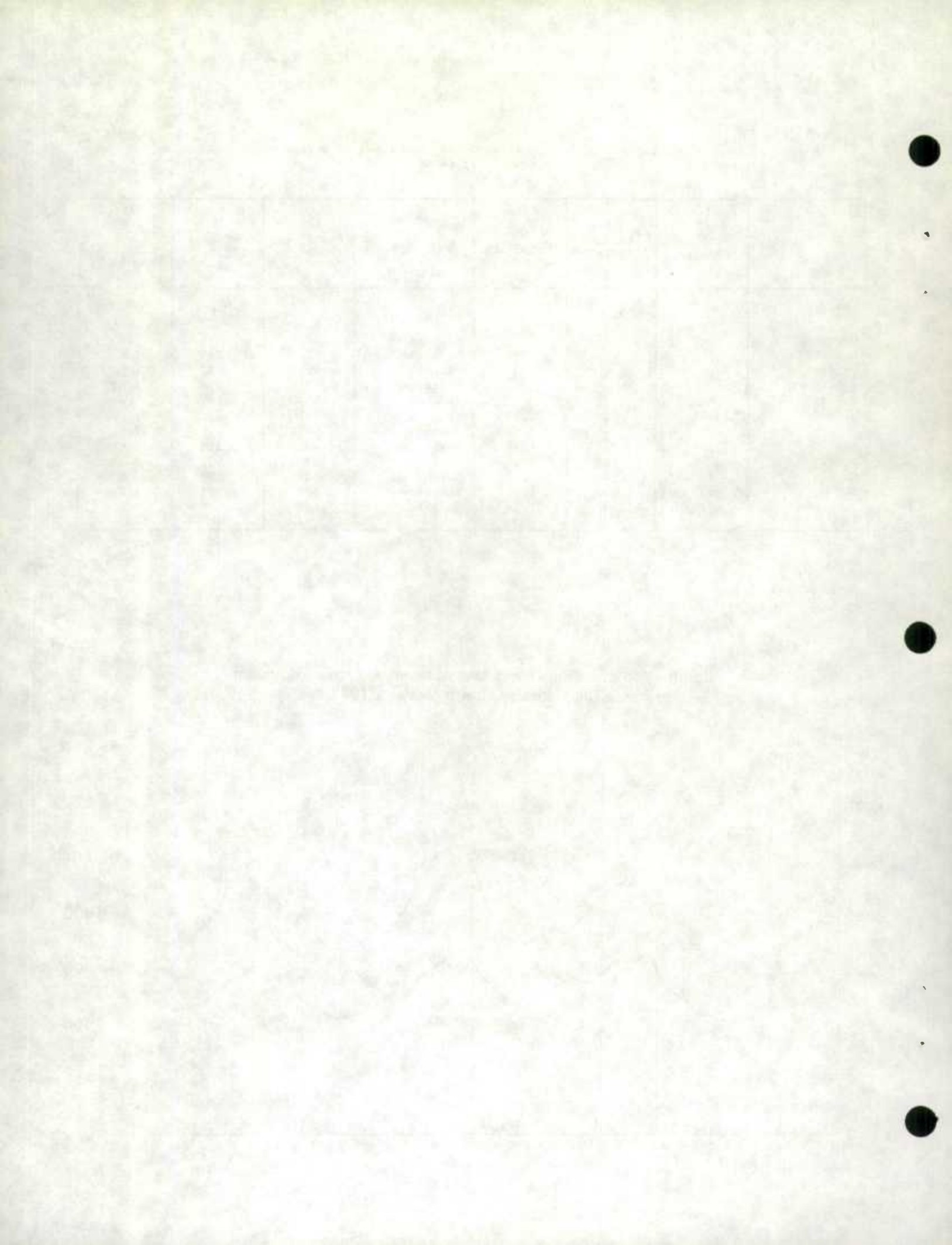
Unemployment rate represents the number unemployed as a per cent of the civilian labour force.

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