DOMINION BUREAU OF STATISTICS CATALOGUE No. 71-001 OTTAWA - CANADA MONTHLY Published by Authority of the Minister of Prode and Commerce 1.3 JAN Vot 25 No. 11 1970 Price: \$2.00 per year 6 THE LABOUR FORCE LIBRAR NOVEMBER 1969 In the week ended November 15, 1969, the

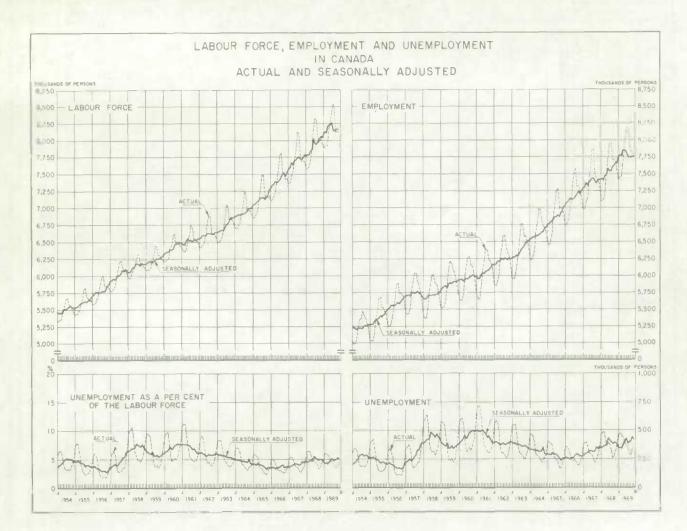
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Canadian civilian labour force was estimated at 8,115,000. This total included 7,761,000 persons employed for all or part of the week and 354,000 unemployed for the whole week. Employment decreased by 67,000 between October and November, while unemployment increased by 40,000; there was a net decrease of 27,000 in the labour force. Compared with November 1968, the labour force was higher by 100,000, employment by 84,000 and unemployment by 16,000.

Agricultural employment declined by 57,000 from October, there was a slight decrease in

nonagricultural employment. Employment was lower than in November last year by 32,000 in agriculture and higher by 116,000 in nonagricultural industries. Between October and November, employment decreased by 49,000 among men and by 18,000 among women. Employment was higher than in November 1968 by 69,000 for men and by 15,000 for women.

Expressed as a percentage of the labour force, the unemployment rate was 4.4 in November, compared with 3.9 in October 1969 and 4.2 in November 1968. Seasonally adjusted, the unemployment rate was 5.1 in November 1969.



Special Surveys Division

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### The Unemployed: Family Dat 11) October 1968 - October 1999

Beginning in July 1960, labour force data relating to families in which someone was unemployed have been tabulated at quarterly intervals and published several times a year. Since the most recent publication (in the August 1969 report), data referring to the week ended October 18, 1969, have been compiled. These statistics are included in the following tables along with previously published data for October 1968 and for January, April and July 1969. Comments on the October 1969 estimates and on seasonal patterns follow.

Of the 314,000 persons unemployed in October 1969, 106,000 (34%) were heads of family units, 173,000 (55%) were sons, daughters or other relatives of family heads, and 35,000 (11%) were not members of family units.

The 279,000 unemployed members of families were distributed throughout 253,000 family units. In 174,000 (69%) of these units, the membership of the unit included, in addition to the unemployed member or members, at least one person who was employed.

# Unemployed Persons

Pronomical second patterns above up in the partial for which the dues are writeline. Noteby, the proportion of in July (29-39%) and highest in January and April (40-51%). On the other hand, the proportion of the unemployed who were single sons and daughters of heads of families has been highest in July (40-50%), when many students are available for summer jobs, and lowest in January and April (30-36%). The proportion of families having one or more employed members, in addition to the unemployed member or members, ranged from 49 to 60 per cent in January and April and from 59 to 73 per cent in July and October.

Further detail for October 1969 is presented in the following tables, along with estimates for the four preceding reference periods. Table 1 refers to unemployed <u>persons</u>. Tables 2 and 3 refer to <u>family units</u> in which one or more persons were unemployed.

Table 1		Unemployed persons									
lassified as heads, other members, or non-members of	Total		Members o	f family units (1)		Non-members					
family units	unemployed	Total	Head of units	Single sons or daughters	Other relatives	of family units(1)					
Number (in thousands)											
October 18, 1969	314	279	106	117	56	35					
July 19, 1969	349	325	101	176	48	24					
April 19, 1969	432	401	174	155	72	31					
January 18, 1969	467	429	204	150	75	38					
October 19, 1968	288	263	110	106	47	25					
Percent distribution	and the second second										
October 13, 1969	100	89	34	37	18	11					
July 19, 1969	100	93	29	50	14	7					
April 19, 1969	100	93	40	36	17	7					
January 18, 1969	100	92	44	32	16	8					
October 19, 1968	100	91	38	37	16	9					

#### Family Units(1)

Table 2		Family	units with on	e or more persons	unemployed			
By number of employed persons in unit,		No person	One or more persons in unit employed					
Canada	Total units	in unit employed	Total	l employed	2 employed	3 or more employed		
Number (in thousands)								
October 18, 1969	253	79	174	107	46	21		
July 19, 1969	288	77	211	109	59	43		
April 19, 1969	353	140	213	134	50	29		
January 18, 1969	384	154	230	139	62	29		
October 19, 1968	244	83	161	95	46	20		
Percent distribution	and the second second							
October 18, 1969	100	31	69	42	18	9		
July 19, 1969	100	27	73	38	20	15		
April 19, 1969	100	40	60	38	14	8		
January 18, 1969	100	40	60	36	16	8		
October 19, 1968	100	34	66	39	19	8		

(1) The <u>family unit</u> used in these tables is defined as "a group of two or more persons who are living together in the same dwelling and who are related by blood, marriage or adoption". A person living alone or who is related to no one else in the dwelling where he lives is classified under "Non-members of family units".

The <u>head</u> of a family unit is defined generally as the person who is mainly responsible for the maintenance of the unit. However, in families consisting of husband and wife (with or without unmarried children), the husband is always designated as the head. In families composed of parent and unmarried child (or children), the parent invariably is recorded as the head of the unit. (continued on page b)

## Technical Notes

## Scope of Labour Force Survey

The statistics contained in this report are based on information obtained through a sample survey of households. Interviews are carried out in about 30,000 households chosen by area sampling methods across the country(1). The Labour Force Survey, started in November 1945, was taken at quarterly intervals until November 1952. Since then it has been carried out monthly. Estimates of employment, unemployment and non-labour force activity refer to the specific week covered by the survey each month.

The sample used in the surveys of the labour force has been designed to represent all persons in the population 14 years of age and over residing in Canada, with the exception of: residents of the Yukon and Northwest Territories, Indians living on

<u>Contents of the Tables</u> - The results of the survey are presented in the tables on pages 4 to 7 of this report.

> Canada, Labour Force (pages 4 and 5). Tables 1 to 3 refer to the labour force, employment and unemployment and contain labour force participation and unemployment rates. <u>Canada, Employed</u> (page 6). Tables 4 to 6 contain further detail on employment.

<u>Canada, Unemployed</u> (page 7). Table 7 contains further detail on unemployment. <u>Regions, Labour Force</u> (page 7). Table 8 contains labour force data for the regions.

<u>Supplementary Data</u> - From time to time, additional data on particular aspects of the labour force or its components will be obtained. Such material, as it becomes available, will be either included in this report or released in separate reports.

Other Data Available - In addition to the published statistics, there is a considerable amount of data which can be obtained on request. Following is a list of material available.

Labour Force - The civilian labour force is composed of that portion of the civilian noninstitutional population 14 years of age and over who, during the reference week, were employed or unemployed.

Employed - The employed includes all persons who, during the reference week:

- (a) did any work for pay or profit;
- (b) did any work which contributed to the running of a farm or business operated by a related member of the household; or
- (c) had a job, but were not at work, because of bad weather, illness, industrial dispute, or vacation, or because they were taking time off for other reasons.

Persons who had jobs but did not work during the reference week and who also looked for work are included in the unemployed as persons without work and seeking work.

<u>Unemployed</u> - The unemployed includes all persons who, through the reference week: reserves, inmates of institutions and members of the armed forces. These excluded categories amount to about three per cent of the total population 14 years of age and over.

Estimates derived from a sample survey are subject to sampling and non-sampling errors. Aspects of this subject in relation to the Labour Force Survey are reviewed under "Reliability of Estimates" on page 8.

 For a comprehensive description of the design of the Labour Force Survey, see Dominion Bureau of Statistics, <u>Canadian Labour Force</u> <u>Survey - Methodology</u>, <u>Catalogue No. 71-504</u>, Ottawa, 1965.

### Labour Force Statistics

## For Canada only:

- 1. Age and sex distributions.
- 2. Marital status and sex distributions.
- 3. Employed -
  - (a) Reasons for working less than full-time.
    (b) Hours worked by sex for total employed, agriculture and non-agriculture, and for paid workers, non-agriculture.
  - (c) Industry and occupation groups, by sex for total employed and for paid workers.
- 4. Persons not in the labour force by category.

# For regions:

5. Labour force: by age; by sex, agricultural and nonagricultural.

Employed: by age.

For individual provinces of Atlantic and Prairie regions:

 Population 14 years of age and over and labour force: by sex. Total employed, total unemployed, and total persons not in labour force.

## Definitions and Explanations

- (a) were without work and seeking work, i.e., did not work during the reference week and were looking for work; or would have been looking for work except that they were temporarily ill, were on indefinite or prolonged layoff, or believed no suitable work was available in the community; or
- (b) were temporarily laid off for the full week, i.e., were waiting to be called back to a job from which they had been laid off for less than 30 days.

Not in the Labour Force - Those not in the labour force include all civilians 14 years of age and over (exclusive of institutional population) who are not classified at employed or unemployed. This category includes those: going to school; keeping house; too old or otherwise unable to work; and voluntarily idle or retired. Housewives, students and others who worked part-time are classified as employed. If they looked for work they are classified as unemployed.

# Canada, Labour Force

(Estimates in thousands)

Note: Due to the introduction of revised weighting factors in March 1965, small adjustments have been made to estimates published before that time. See the March 1965 edition of this report, page 8.

		19	69	19	68	196	7
<u>Table 1</u> Summary	S.D. (1)	Nov. 15	0ct. 18	Nov. 16	0ct. 19	Nov. 11	0ct. 14
Total							
Population 14 years of age and over(2		14,778	14,748	14,407	14,378	14,026	13,997
Labour force	а	8,115	8,142	8,015	7,995	7,698	7,691
Employed	a	7,761	7,828	7,677	7,707	7,409	7,437
Agriculture	d	491	548	523	577	535	603
Non-agriculture	a	7,270	7,280	7,154	7,130	6,874	6,834
Unemployed	d	354	314	338	288	289	254
Not in the labour force	a	6,663	6,606	6,392	6,383	6,328	6,306
Participation rate (3)	a	54.9	55.2	55.6	55.6	54.9	54.9
Unemployment rate (4)							
Actual	d	4.4	3.9	4.2	3.6	3.8	3.3
Seasonally adjusted		5.1	5.3	4.9	5.0	4.4	4.6
Men							
Population 14 years of age and over	2)	7,324	7,309	7,142	7,127	6,952	6,938
Labour force	a	5,502	5,510	5,433	5,443	5,283	5,305
Employed	a	5,243	5,292	5,174	5,238	5,060	5,117
Agriculture	d	429	467	451	489	470	515
Non-agriculture	a	4,814	4,825	4,723	4,749	4,590	4,602
Unemployed	d	259	218	259	205	223	188
Not in the labour force	b	1,822	1,799	1,709	1,684	1,669	1,633
Participation rate (3)		75.1	75.4	76.1	76.4	76.0	76.5
Unemployment rate (4)	d	4.7	4.0	4.8	3.8	4.2	3.5
Women							
Population 14 years of age and over(	2)	7,454	7,439	7,265	7,251	7,074	7,059
Labour force	b	2,613	2,632	2,582	2,552	2,415	2,386
Employed	b	2,518	2,536	2,503	2,469	2,349	2,320
Agriculture	e	62	81	72	88	65	88
Non-agriculture	b	2,456	2,455	2,431	2,381	2,284	2,232
Unemployed	e	95	96	79	83	66	66
Not in the labour force	a	4,841	4,807	4,683	4,699	4,659	4,673
		25.1		25 5		34.1	33.8
Participation rate (3)	b	35.1	35.4	35.5	35.2	34.1	
Unemployment rate (4)	e	3.6	3.6	3.1	3.3	2.7	2.8

(1) "S.D." = Standard deviation. For explanation, see "Reliability of Estimates", page 8.

(2) Excludes inmates of institutions, members of the armed services, Indians living on reserves and residents of the Yukon and Northwest Territories.

(3) The labour force as a percentage of the population 14 years of age and over.

(4) The unemployed as a percentage of the labour force.

Note: With the exception of Tables 2 and 5, all statistics refer to a specific week, the last day of which is indicated.

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(Estimates in thousands)

Note: Due to the introduction of revised weighting factors in March 1965, small adjustments have been made to estimates published before that time. See the March 1965 edition of this report, page 8.

	7 1											
Table 2 Annual averages, 1946-1968	S.D. (1)	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958
Population 14 years												
of age and over (2)		14,264	13,874	13,475	13,128	12,817	12,536	12,280	12,053	11,831	11,605	11,388
Labour force	a	7,919	7,694	7,420	7,141	6.933	6.748	6,615	6,521	6 411	6.242	6.137
Employed	a	7.537	7,379	7,152	6,862		6,375	6,225				5,706
Agriculture	d	546	559	544	594	630	649		681		700	718
Non-agriculture	a	6,992	6,820	6,609	6,268	-	5,726	5,565	5,374	0 + 0		4,988
Unemployed	d	382	315	267	280	324	374	390	466		372	432
Not in the labour								100				
force	8	6,344	6,179	6,055	5,986	5,884	5,787	5,665	5,531	5,420	5,363	5,250
Participation rate(3)	a	55.5	55.5	55.1	54.4	54.1	53.8	53.9	54.1	54.2	53.8	53.9
Unemployment rate (4)	d	4.8	4.1	3.6	3.9	4.7	5.5	5.9	7.1	7.0	6.0	7.0
	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946
Population 14 years												
of age and over (2)	11,123	10,807	10,597	10,391	10,164	9,956	9,732	9,615	9,268	9,141	9,007	8,779
Labour force	6.008	5,782	5,610	5.493	5,397	5,324	5,223	5,163	5,055	4,988	4.942	4,829
Employed	5.731							4,976	4,913	4.875		4,666
Agriculture	748						939	1,018	1.077	1,096	1,122	1,186
Non-agriculture	4,983	4,808	4,546	4,365	4,377	4,278	4,158	3,958	3,837	3,779	3,711	3,480
Unemployed	278	197	245	250	162	155	126	186	141	114	110	163
Not in the labour		-										
force	5,115	5,025	4,987	4,898	4,767	4,632	4,509	4,453	4,213	4,153	4,065	3,950
Participation rate(3)	54.0	53.5	52.9	52.9	53.1	53.5	53.7	53.7	54.5	54.6	54.9	55.0
Unemployment rate (4)	4.6	3.4	4.4	4.6	3.0	2.9	2.4	3.6	2.8	2.3	2.2	3.4

		1/ 10		20-64	years		65 years
<u>Table 3</u> Age, sex, and marital status Week ended November 15, 1969	Total	14-19 years all	Men		Wom	and over all	
week ended wovember 13, 1909		persons	Married	Other	Married	Other	persons
Population 14 years of age and over(2)	14,778	2,449	4,203 a	1,158 Ъ	4,286 a	1,132 c	1,550
Labour force	8,115 a	769 c	4,013 a	913 c	1,457 c	764 c	199 d
Employed	7,761 a	694 c	3,879 a	842 c	1,420 c	736 c	190 d
Unemployed	354 d	75 e	134 d	71 e	37 f	28 f	9 g
Not in the labour force	6,663 a	1,680 Ъ	<b>190</b> d	245 d	2,829 b	368 d	1,351 a
Participation rate (3) - 1969, Nov. 1	5 54.9 a	31.4 c	95.5 a		34.0 c	67.5 b	12.8 d
Oct. 1		31.7	95.5	79.8	34.2	68.4	13.6
Unemployment rate (4) - 1969, Nov. 1	5 4.4 d	9.8 e	3.3 d	7.8 e	2.5 f	3.7 f	4.5 g
Oct. 1		9.3	2.4	7.7	2.5	3.9	3.8

(1)(2)(3)(4) See footnotes on opposite page.

Note: a) The alphabetic symbol following each estimate in table 3 indicates its standard deviation. For explanation, see "Reliability of Estimates", page 8.

b) Newfoundland included in estimates only from 1950.

# Canada, Employed

(Estimates in thousands)

Note: Due to the introduction of revised weighting factors in March 1965, small adjustments have been made to estimates published before that time. See the March 1965 edition of this report, page 8.

		19	69	1968		1967	
<u>Table 4</u> Summary	S.D. (1)	Nov. 15(2)	0ct. 18(2)	Nov. 16(2)	Oct. 19(2)	Nov. 11(2)	0ct. 14(2)
Total employed Agriculture Non-agriculture	a d a	7,761 491 7,270	7,828 548 7,280	7,677 523 7,154	7,707 577 7,130	7,409 535 6,874	7,437 603 6,834
Employed, non-agriculture	a	7,270	7,280	7,154	7,130	6,874	6,834
Usually work 35 hours or more	a	6,383	6,431	6,295	6,340	6,151	6,161
At work 35 hours or more	a	4,706	3,450	4,732	3,508	5,586	3,473
At work less than 35 hours, or not at work Due to economic reasons(3) Due to other reasons(4)	c e c	1,677 76 1,601	2,981 83 2,898	1,563 79 1,484	2,832 69 2,763	565 76 489	2,688 73 2,615
Usually work less than 35 hours	c	887	849	859	790	723	673

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		19	69	19	68	1967	
Table 5 Industry	S.D. (1)	Nov. 15	0ct. 18	Nov. 16	0ct. 19	Nov. 11	Oct. 14
Total employed	a	7,761	7,828	7,677	7,707	7,409	7,437
Agriculture	d	491	548	523	577	535	603
Other primary industries	d	215	208	225	225	224	228
Manufacturing	c	1,796	1,829	1,782	1,769	1,738	1,731
Construction	c	489	505	500	520	493	494
Transportation and other utilities	c	670	685	639	665	658	658
Trade	с	1,323	1,280	1,313	1,272	1,240	1,222
Finance, insurance, real estate	d	354	365	335	327	318	315
Community, personal, other services.	c	1,970	1,961	1,882	1,885	1,763	1,741
Public administration	с	453	447	478	467	440	445

Note: Since late 1962, statistics in Table 5 have been published on a 3-month average basis. However since January 1966, it has been possible to provide monthly estimates of the employed by industry. Accordingly, beginning with the February 1968 report, the statistics in Table 5 refer to the monthly reference periods. Industry estimates on the 3-month average basis are available on request from the Special Surveys Division.

<u>Table 6</u> Class of worker, agriculture and non-agriculture, and sex Week ended November 15, 1969	Total	Paid workers	Own account workers	Employers	Unpaid family workers
Total employed	7,761 a	6,724 a	533 c	326 c	178 d
Agriculture	491 d	75 e	268 d	37 f	111 e
Non-agriculture	7,270 a	6,649 a	265 d	289 d	67 e
Men	5,243 a	4,413 a	457 c	298 c	75 d
Agriculture	429 d	65 e	264 d	36 f	64 e
Non-agriculture	4,814 a	4,348 a	193 d	262 d	11 f
Women	2,518 b	2,311 Ъ	76 e	28 e	103 d
Agriculture	62 e	10 f	4 g	1 g	47 e
Non-agriculture	2,456 b	2,301 b	72 e	27 e	56 e

(1) "S.D." = Standard deviation. For explanation, see "Reliability of Estimates" page 8. (2) In the reference weeks of October 1967, 1968 and 1969, and of November 1967, 1968 and 1969, unusually large numbers worked fewer than 35 hours due to Thanksgiving Day and Remembrance Day holidays. Since Remembrance Day fell on a Saturday in 1967, its effect on number of hours worked in the November 1967 reference week was very much less than in 1968 or 1969. (3) Economic reasons for not working 35 hours or more include short time, layoff for part of the week and termination or start of employment during the week. (4) Other reasons for not working 35 hours or more include illness, bad weather, industrial dispute, vacation, and reasons such as a statutory holiday in the week. Note: The alphabetic symbol following each estimate in table 6 indicates its standard deviation.

For explanation, see "Reliability of Estimates", page 8.

Canada, Unemployed

and

Note: Due to the introduction of revised weighting factors in March 1965, small adjustments have been made to estimates published before that time. See the March 1965 edition of this report, page 8.

Regions, Labour Force (Estimates in thousands)

The second se		1969		1968		1967	
<u>Table 7</u> Unemployed	S.D. (1)	Nov. 15	0ct. 18	Nov. 16	Oct. 19	Nov. 11	0ct. 14
Total unemployed	d	354	314	338	288	289	254
Without work and seeking work	d	331	298	318	275	267	232
Seeking full-time work	d	306	275	298	256	-253	219
Seeking part-time work	f	25	23	20	19	14	13
On temporary layoff up to 30 days	f	23	16	20	13	22	22
Without work and seeking work	+ d	331	298	318	275	267	232
Seeking under 1 month	d	111	98	118	95	106	91
Seeking 1-3 months	d	132	112	112	96	100	77
Seeking 4-6 months	e	41	42	44	39	33	35
Seeking more than 6 months	e	47	46	44	45	28	29

<u>Table 8</u> Regional distributions Week ended November 15, 1969	Canada	Atlantic region	Quebec	Ontario	Prairie region	British Columbia
Population 14 years of age and over	14,778	1,371	4,234	5,286	2,392	1,495
Men	7,324	679	2,089	2,608	1,205	743
Women	7,454	692	2,145	2,678	1,187	752
Labour force	8,115 a	646 b	2,274 b	3,007 a	1,333 b	855 b
Men	5,502 a	444 b	1,568 a	2,006 a	911 a	573 b
Women	2,613 b	202 c	706 c	1,001 c	422 c	282 d
Employed	7,761 a	606 b	2,131 b	2,925 a	1,292 b	807 b
Men	5,243 a	412 b	1,461 b	1,948 a	883 b	539 b
Women	2,518 b	194 c	670 c	977 c	409 c	268 d
Agriculture	491 d	24 e	94 e	131 e	220 d	22 f
Non-agriculture	7,270 a	582 b	2,037 b	2,794 b	1,072 c	785 c
Paid workers	6,724 a	537 c	1,866 b	2,609 b	986 b	726 c
Men	4,413 a	360 c	1,258 b	1,693 b	626 b	476 b
Women	2,311 b	177 c	608 c	916 c	360 c	250 d
Unemployed	354 d	40 e	143 e	82 e	41 e	48 e
Men	259 d	32 e	107 e	58 e	28 e	34 e
Women	95 e	8 f	36 f	24 e	13 g	14 f
Not in the labour force	6,663 a	725 b	1,960 b	2,279 b	1,059 b	640 c
Men	1,822 b	235 c	521 c	602 c	294 c	170 c
Women	4,841 a	490 b	1,439 b	1,677 b	765 b	470 c
Employed 1969 November 15	7,761 a	606 b	2,131 b	2,925 a	1,292 b	807 b
October 18	7,828	625	2,155	2,929	1,310	809
1968 November 16	7,677	602	2,100	2,905	1,309	761
October 19	7,707	616	2,128	2,886	1,320	757
1967 November 11	7,409	613	2,081	2,748	1,230	737
October 14	7,437	626	2,085	2,743	1,242	741
Unemployed 1969 November 15	354 d	40 e	143 e	82 e	41 e	48 e
October 18	314	34	135	73	32	40
1968 November 16	338	40	134	82	35	<b>47</b>
October 19	288	34	113	75	24	42
1967 November 11	289	36	101	77	32	43
October 14	254	27	96	72	19	40

(1) "S.D." = Standard deviation. For explanation, see "Reliability of Estimates", page 8.
 Note: The alphabetic symbol following each estimate in table 8 indicates its standard deviation. For explanation, see "Reliability of Estimates", page 8.



## Reliability of stimates

#### (a) Sampling Error

The estimates in this report are based on a <u>sample</u> of households. Somewhat different figures might have been obtained if a complete census had been taken using the same questionnaires, interviewers, supervisors, processing, etc. as those actually used in the Labour Force Survey. This difference is called the sampling error of the estimates. In the design and processing of the Labour Force Survey extensive efforts have been made to minimize the sampling error. The sampling error (expressed as a per cent of the estimate it refers to) is not the same for all estimates; of two estimates the larger one will likely have a smaller per cent sampling error and of two estimates of the same size the one referring to a characteristic more evenly distributed across the country will tend to have a smaller per cent sampling variability. Also, estimates relating to age and sex are usually more reliable than other estimates of comparable size.

## (b) Non-sampling Errors

Errors, which are not related to sampling, may occur at almost every phase of a survey operation. Interviewers may misunderstand instructions, respondents may make errors in answering questions, the answers may be incorrectly entered on the questionnaires and errors may be introduced in the processing and tabulations of the data. All these errors are called non-sampling errors. Some of the non-sampling errors will usually balance out over a large number of observations but systematically occuring errors will contribute to biases. Non-sampling errors can be reduced by a careful design of questionnaires, intensive training and supervision of interviewers and a thorough control of the processing operation. In general, the more personal and more subjective inquiries are subject to larger errors. Also, data referring to persons with less stable labour force status will have relatively large non-sampling errors.

### (c) Alphabetic Indicators of Standard Deviation

The sampling error, as described under (a) is not known. A quantity, called the <u>standard deviation</u>, can however be estimated from sample data itself. The standard deviation of an estimate is a <u>statistical measure</u> of its sampling error. It also partially measures the effect on non-sampling errors, but does not reflect any systematic biases in the data. The chances are about 68 out of 100 that the difference between a sample estimate and the corresponding census figure would be less than the standard deviation. The chances are about 95 out of 100 that the difference would be less than twice the standard deviation and about 99 out of 100 that it would be less than 2 1/2 times as large.

The standard deviations of the estimates, expressed as a per cent of the estimates, are indicated by letters. The letter "a" indicates that the standard deviation is smaller than 0.5% of the estimate, the letter "b" indicates that the standard deviation is between 0.6% and 1.0% of the estimate and so on as shown in the table below.

Alphabetic designation of per cent standard deviations

Alphabetic indicator	Per cent standard deviation
8	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% - 15.0%
g	15.1% -

The actual standard deviation of an estimate is not the same each month. Since the standard deviations of the current estimates are not available at the time when this report is published, the alphabetic indicators are based on the average standard deviations during the last year. They should, therefore, be interpreted only as indications of the order of magnitude of the standard deviations.

# (d) Standard Deviation of Month-to-Month Changes

A rough upper limit for the standard deviation of the difference (change) between two estimates referring to two months up to a year apart may also be indicated using the table above. For most characteristics published in this report the standard deviation of the difference between two estimates is likely to be somewhat smaller than the standard deviation of the smaller of the two estimates or in the immediately preceding range.

For example, suppose that a hypothetical estimate in May and June was 513,000 and 625,000 respectively and the per cent standard deviation of both estimates was indicated by the letter "c", i.e. it was between 1.1% and 2.5%. The difference between the May and June estimates (112,000) would, therefore, have a standard deviation which would likely be smaller than 2.5% of 513,000, i.e. it would likely be smaller than 12,800.

### (e) Current Estimates of Standard Deviations

Standard deviations are computed monthly for several estimates and month-to-month changes. These are available usually in a few weeks after the publication of this report and can be obtained on request. Beginning with 1966, an annual report on the standard deviations during the last year will be released.

Table 2	Family units with one or more persons unemployed								
<u>Table 3</u> By size of family unit, Canada	Table		Size of	family unit					
	Total units	2 - 3 persons	4 - 5 persons	6 - 7 persons	8 or more				
Total (in thousands)									
October 18, 1969	253	97	82	44	30				
July 19, 1969	288	93	109	51	35				
April 19, 1969	353	129	115	65	44				
January 18, 1969	384	147	124	70	43				
October 19, 1968	244	97	72	43	32				

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(1) See footnote page 2.

Family Units(1)