## CATALOGUE No.

 <br> \section*{\title{THE LABOUR FORCE
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THE LABOUR FORCE
}}

SEPTEMBER 1967

The Canadian labour force was estimated at $7,730,000$ in the week ended September 16 , 1967. This total included 7,511,000 persons employed for all or part of the week and 219,000 persons unemployed for the whole week. Between August and September, the labour force decreased by 371,000 , the employed having decreased by 343,000 and the unemployed by 28,000 . These movements were associated with the return to school of students who had been in the labour market during the summer vacation. The labour force was 214,000 higher than in September 1966; the employed increased by 200,000 from a year earlier and the number of unemployed was $14,(0) 0$ higher.

Of the total decrease in employment from

August, 273,000 was in nonagricultural industries and 70,000 in agriculture. Compared with September 1966, employment was higher by 168,000 in nonagricultural industries and by 32,000 in agriculture. Men accounted for 287,000 of the employment decrease between August and September and women for 56,000 . Employ= ment was higher than in September 1966 by 122,000 for men and by 78,000 for women.

L゙xpressed as a percentage of the labour force, the unemployment rate in September was 2.8, compared with 3.0 in August this year and With 2.7 in September last year. Seasonally adjusted, the September 1967 unemployment rate was 4.1.


## 3rd Quarter 1967

The Labour Force Survey provides information about the occupation and industry attachments of members of the labour force. For the employed, current occupation and industry are reported. The unemployed are identified with the industries in which they last worked and the occupations which they last followed. From these data, unemployment rates for broad occupation and industry groups are calculated by expressing the number unemployed as a percentage
of the labour force classified in tach gethup. In addition, percentage distributions have been made according to occupation and industry groups. Unemployment rates and percentage distributions for the third quarter of 1967, with comparative data for the first two quarters of 1967 and the two last quarters of 1966, are shown in the followling tables - In Table 1 by occupation group, and in Table 2 by industry group.


| Industry group | Percentage distribution of the unemployed (quarterly averages) |  |  |  |  | Unemployment rates(1) <br> (quarterly averages) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1967 |  |  | 1966 |  | 1967 |  |  | 1966 |  |
|  | 3rd quar. | 2nd quar. | $18 t$ quar. | 4th quar. | 3 rd quar. | 3rd quar. | 2nd quat. | $18 t$ quar. | 4th <br> quar. | 3rd quar. |
| All industries | 100 | 100 | 100 | 100 | 100 | 3.1 | 4.2 | 5.3 | 3.1 | 2.9 |
| Primary industries (6) | 7 | 10 | 11 | 9 | 8 | 1.8 | 3.9 | 6.5 | 2.9 | 2.1 |
| Manufacturing | 24 | 22 | 23 | 25 | 23 | 3.2 | 3.8 | 5.0 | 3.2 | 2.8 |
| ```Construction Transportation and other utilities(7)``` | 15 | 18 | 23 | 18 | 12 | 6.5 | 10.6 | 17.5 | 8.0 | 4.8 |
|  | 7 | 8 | 12 | 9 | 7 | 2.4 | 3.9 | 6.7 | 3.3 | 2.4 |
| Trade | 11 | 10 | 11 | 11 | 12 | 2.1 | 2.6 | 3.6 | 2.0 | 2.1 |
| Service(8) | 20 | 19 | 15 | 20 | 19 | 2.0 | 2.3 | 2.3 | 1.9 | 1.8 |
| Never worked( 5) | 17 | 14 | 5 | 7 | 17 | N/A | N/A | N/A | $\mathrm{N} / \mathrm{A}$ | N/A |
| Total unemployed(000's) | 250 | 320 | 392 | 233 | 226 |  |  |  |  |  |

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## Technical Notes

## Scope of Labour Force Survey

The statistics contained in this report are based on information obtained through a sample survey of houscholds. Interviews are carried out in nearly 35,000 households chosen by area sampling methods across the country. Percentages of total households selected for the sample were as follows: Aclantic region, 1.6 p.c.; Quebec, 0.5 p.c.; Ontario, $0.5 \mathrm{p} . \mathrm{c} . ;$ Prairie region, $0.8 \mathrm{p} . \mathrm{c}$. ; British Columbia, 0.7 p.c. The Labour Force Survey, started in November 1945, was taken at quar terly 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 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.

## Labour Force Statistics

Contents of the Tables - 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.

Canada, Employed (page 6). Tables 4 to 6 contain further detail on employment.

Canada, Unemployed (page 7). Table 7 contains further detail on unemployment.

Regions, Labour Force (page 7). Table 8 contains labour force data for the regions.
Supplementary Data - 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.

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:
6. Population 14 years oi age a:id over and lahour force: by sex.
Total employed, total unemplayed, and total persons i:ot in labour furce.

## Definitions and Explanations

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 \%ork and seeking work.

Unemployed - The unemplayed includes all persons who, through the reference week:
(a) were without work and seeking work, i.e., did no 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 as 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.

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.

| $\frac{\text { Table } 1}{\text { Summary }}$ | $\begin{aligned} & \text { S.D. } \\ & \text { (1) } \end{aligned}$ | 1967 |  | 1966 |  | 1965 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Sept. 16 | $\begin{gathered} \text { August } \\ 19 \end{gathered}$ | Sept. 17 | $\begin{gathered} \text { August } \\ 20 \end{gathered}$ | Sept $18$ | August <br> 21 |
| Total |  |  |  |  |  |  |  |
| Population 14 years of age and over(2) |  | 13,963 | 13,931 | 13,555 | 13,524 | 13,200 | 13,174 |
| Labour force | 8 | 7,730 | 8,101 | 7,516 | 7,805 | 7,159 | 7,490 |
| Emp loyed | a | 7,511 | 7,854 | 7,311 | 7,577 | 6,983 | 7,279 |
| Agriculture | d | 635 | 705 | 603 | 649 | 625 | 734 |
| Non-agriculture | a | 6,876 | 7,149 | 6,708 | 6,928 | 6,358 | 6,545 |
| Unemployed | d | 219 | 247 | 205 | 228 | 176 | 211 |
| Not in the labour force | a | 6,233 | 5,830 | 6,039 | 5,719 | 6,041 | 5,684 |
| Participation rate (3) | a | 55.4 | 58.2 | 55.4 | 57.7 | 54.2 | 56.9 |
| Unemployment rate (4) |  |  |  |  |  |  |  |
| Seasonally adjusted |  | 4.1 | 4.1 | 3.9 r | 3.9 | 3.6 | 3.8 |
| Men |  |  |  |  |  |  |  |
| Population 14 years of age and over(2) |  | 6,921 | 6,905 | 6,719 | 6,703 | 6,542 | 6,529 |
| Labour force | a | 5,335 | 5,652 | 5,204 | 5,477 | 5,075 | 5,344 |
| Employed | a | 5,183 | 5,470 | 5,061 | 5,315 | 4,945 | 5,182 |
| Agriculture | d | 532 | 596 | 510 | 563 | 537 | 625 |
| Non-agriculture | a | 4,651 | 4,874 | 4,551 | 4,752 | 4,408 | 4,557 |
| Unemployed | d | 152 | 182 | 143 | 162 | 130 | 162 |
| Not in the labour force | b | 1,586 | 1,253 | 1,515 | 1,226 | 1,467 | 1,185 |
| Participation rate (3) | a | 77.1 | 81.9 | 77.5 | 81.7 | 77.6 | 81.9 |
| Unemployment rate (4) | d | 2.8 | 3.2 | 2.7 | 3.0 | 2.6 | 3.0 |
| Women |  |  |  |  |  |  |  |
| Population 14 years of age and over(2) |  | 7,042 | 7,026 | 6,836 | 6,821 | 6,658 | 6,645 |
| Labour force | b | 2,395 | 2,449 | 2,312 | 2,328 | 2,084 | 2,146 |
| Employed | b | 2,328 | 2,384 | 2,250 | 2,262 | 2,038 | 2,097 |
| Agriculture | e | 103 | 109 | 93 | 86 | 88 | 109 |
| Non-agriculture | b | 2,225 | 2,275 | 2,157 | 2,176 | 1,950 | 1,988 |
| Unemployed | e | 67 | 65 | 62 | 66 | 46 | 49 |
| Not in the labour force | a | 4,647 | 4,577 | 4,524 | 4,493 | 4,574 | 4,499 |
| Participation rate (3) | b | 34.0 | 34.9 | 33.8 | 34.1 | 31.3 | 32.3 |
| Unemployment rate (4) | e | 2.8 | 2.7 | 2.7 | 2.8 | 2.2 | 2.3 |

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

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.

| Table 2 <br> Annual averages, 1946-1966 | S.D. | 1966 | 1965 | 1964 | 1963 | 1962 | 1961 | 1960 | 1959 | 1958 | 1957 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Population 14 years of age and over (2) |  | 13,475 | 13,128 | 12,817 | 12,536 | 12,280 | 12,053 | 11,831 | 11,605 | 11,388 | 11,123 |
| Labour force | a | 7,420 | 7,141 | 6,933 | 6,748 | 6,615 | 6,521 | 6,411 | 6,242 | 6,137 | 6,008 |
| Employed | a | 7,152 | 6,862 | 6,609 | 6,375 | 6,225 | 6,055 | 5,965 | 5,870 | 5,706 | 5,731 |
| Agriculture | d | 544 | 594 | 630 | 649 | 660 | 681 | 683 | 700 | 718 | 748 |
| Non-agriculture | a | 6,609 | 6,268 | 5,979 | 5,726 | 5,565 | 5,374 | 5,282 | 5,170. | 4,988 | 4,983 |
| Unemployed | d | 267 | 280 | 324 | 374 | 390 | 466 | 446 | 372 | 432 | 278 |
| Not in the labour force | a | 6,055 | 5,986 | 5,884 | 5,787 | 5,665 | 5,531 | 5,420 | 5,363 | 5,250 | 5,115 |
| Participation rate(3) | a | 55.1 | 54.4 | 54.1 | 53.8 | 53.9 | 54.1 | 54.2 | 53.8 | 53.9 | 54.0 |
| Unemployment rate (4) | d | 3.6 | 3.9 | 4.71 | 5.5 | 5.9 | 7.1 | 7.01 | 6.01 | 7.01 | 4.6 |
|  | 1956 | 1955 | 1954 | 1953 | 1952 | 1951 | 1950 | 1949 | 1948 | 1947 | 1946 |
| Population 14 years of age and over (2) | 10,807 | 10,597 | 10,391 | 10,164 | 9,956 | 9,732 | 9,615 | 9,268 | 9,141 | 9,007 | 8,779 |
| Labour force | 5,782 | 5,610 | 5,493 | 5,397 | 5,324 | 5,223 | 5,163 | 5,055 | 4,988 | 4,942 | 4,829 |
| Employed | 5,585 | 5,364 | 5,243 | 5,235 | 5,169 | 5,097 | 4,976 | 4,913 | 4,875 | 4,832 | 4,666 |
| Agriculture | 777 | 819 | 878 | 858 | 891 | 939 | 1,018 | 1,077 | 1,096 | 1,122 | 1,186 |
| Nor-agriculture | 4,808 | 4,546 | 4,365 | 4,377 | 4,278 | 4,158 | 3,958 | 3,837 | 3,779 | 3,711 | 3,480 |
| Unemployed | 197 | 245 | 250 | 162 | 155 | 126 | 186 | 141 | 114 | 110 | 163 |
| Not in the labour force | 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) | 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) | 3.4 | 4.4 | 44.6 | 3.0 | 2.9 | 2.4 | 3.6 | 2.8 | 2.3 | 2.2 | 3.4 |


|  | Total | 14-19 <br> years <br> all <br> persons | 20-64 years |  |  |  | 65 years and over all persons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Men |  | Women |  |  |
|  |  |  | Married | Other | Married | Other |  |
| Population 14 years of age and over(2) | 13,963 | 2,312 | 3,999 a | $1,058 \mathrm{~b}$ | 4,084 a | 1,032 c | 1,478 |
| Labour force | 7.730 a | 772 c | 3,857 a | 885 c | 1,265 c | 728 c | 223 d |
| Employed | 7,511 a | $714 c$ | 3,786 a | 843 c | 1,247 c | 704 c | 217 d |
| Unemployed | 219 d | 58 e | 71 e | 42 e | 18 f | 24 E | 68 |
| Not in the labour force | 6,233 a | 1,540 b | 142 d | 173 d | 2,819 b | 304 d | 1,255 a |
| Participation rate (3) = 1967, Sept. 16 | $\begin{aligned} & 55.4 a \\ & 58.2 \end{aligned}$ | $\begin{aligned} & 33.4 c \\ & 49.1 \end{aligned}$ | $\begin{aligned} & 96.4 \mathrm{a} \\ & 96.8 \end{aligned}$ | $\begin{aligned} & 83.6 a \\ & 89.5 \end{aligned}$ | $\begin{aligned} & 31.0 \mathrm{c} \\ & 30.0 \end{aligned}$ | $\begin{aligned} & 70.5 \text { b } \\ & 70.9 \end{aligned}$ | $\begin{aligned} & 15.1 \mathrm{~d} \\ & 14.6 \end{aligned}$ |
| Unemployment rate (4) - 1967, Sept. 16 | 2.8 d | 7.5 e | 1.8 e | 4.7 e | 1.4 f | 3.3 £ | 2.78 |
| Aug. 19 | 3.0 | 6.5 | 2.1 | 5.0 | 1.6 | 2.5 | 3.3 |

$(1)(2)(3)(4)$ 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.

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.


| $\frac{\text { Table } 5}{\text { Industry }}$ | $\begin{aligned} & \text { S.D. } \\ & \text { (1) } \end{aligned}$ | 1967 |  | 1966 |  | 1965 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average July/Sept. | Average June/Aug. | Average July/Sept. | Average June/Aug. | Average July/Sept. | Average June/Aug |
| Total employed | a | 7,735 | 7,754 | 7,477 | 7,474 | 7,171 | 7,193 |
| Agriculture | d | 674 | 664 | 636 | 626 | 688 | 696 |
| Other primary industries | d | 244 | 243 | 240 | 244 | 280 | 261 |
| Manufacturing | $c$ | 1,798 | 1,810 | 1,810 | 1,802 | 1,688 | 1,687 |
| Construction | $c$ | 531 | 521 | 559 | 562 | 537 | 530 |
| Transportation and other utilities | c | 686 | 689 | 648 | 641 | 637 | 656 |
| Irade | c | 1,262 | 1,265 | 1,197 | 1,204 | 1, 159 | 1,173 |
| Finance, insurance, real estate | c | 316 | 317 | 306 | 307 | 289 | 288 |
| Community, personal, other services | c | 1,756 | 1,770 | I, 645 | 1,640 | 1,463 | 1,473 |
| Public administration | c | 468 | 475 | 436 | 448 | 430 | 429 |

Note: From October 1962 to February 1966, the three-month averages in this table have been based on one-third of the records enumerated each month for the Labour Force Survey. Beginning with the threemonth averages for January to March 1966, all of the records have been coded by industry each month and the averages are based on the full monthly surveys. Monthly estimates of employment by industry and occupation are available on request in the Special Tables series mentioned on page 3, "Other Data Available".

| Table 6 <br> Class of worker, agriculture <br> and non-agriculture, and sex <br> Week ended September 16, 1967 | Total | Paid <br> workers | Own <br> account <br> workers | Employers | Unpaid <br> family <br> workers |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Total employed | $7,511 \mathrm{a}$ | $6,370 \mathrm{a}$ | 564 c | 364 c | 213 d |
| Agriculture | 635 d | 111 e | 304 d | 66 e | 154 e |
| Non-agriculture | $6,876 \mathrm{a}$ | $6,259 \mathrm{a}$ | 260 d | 298 d | 59 e |
| Men | $5,183 \mathrm{a}$ | $4,275 \mathrm{a}$ | 488 c | 333 c | 87 e |
| Agriculture | 532 d | 94 e | 297 d | 63 f | 78 e |
| Non-agriculture | $4,651 \mathrm{a}$ | $4,181 \mathrm{a}$ | 191 d | 270 d | 9 g |
| Women | $2,328 \mathrm{~b}$ | $2,095 \mathrm{~b}$ | 76 e | 31 e | 126 d |
| Agriculture | 103 e | 17 f | 7 g | 3 g | 76 e |
| Non-agriculture | $2,225 \mathrm{~b}$ | $2,078 \mathrm{~b}$ | 69 e | 28 e | 50 e |

(1) "S.D." = Standard deviation. For explanation, see "Rellability of Estimates", page 8.
(2) Economic reasons for not working 35 hours or more include short time, layoff for part of the weak and termination or start of employment during the week.
(3) 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.

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
(Estimales in thousands)


| Regional distributions Week ended September 16, 1967 | Canada | Atlantic region | Quebec | Ontario | Prairie region | Br Itish Columbia |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Population $\begin{gathered}14 \text { years of age and over } \\ \text { Men } \\ \text { Women }\end{gathered}$ | $\begin{array}{r} 13,963 \\ 6,921 \\ 7,042 \end{array}$ | $\begin{array}{r} 1,315 \\ 651 \\ 664 \end{array}$ | $\begin{aligned} & 4,026 \\ & 1,986 \\ & 2,040 \end{aligned}$ | $\begin{aligned} & 4,961 \\ & 2,447 \\ & 2,514 \end{aligned}$ | $\begin{aligned} & 2,281 \\ & 1,152 \\ & 1,129 \end{aligned}$ | $\begin{array}{r} 1,380 \\ 685 \\ 695 \end{array}$ |
| Labour force | $7,730 \mathrm{a}$ 5,335 | 646 b 457 b | $2,208 \mathrm{~b}$ $1,536 \mathrm{a}$ | 2,827 a | $1,282 \mathrm{~b}$ 901 a | 767 b 525 b |
| Women | 2,395 b | 189 c | 672 c | 911 c | 381 c | 242 d |
| Employed | 7,511 a | 622 b | 2,124 b | 2,763 b | 1,262 b | 740 b |
| Men | 5,183 a | 438 b | 1,476 b | 1,874 a | 888 b | 507 b |
| Women | 2,328 b | 184 c | 648 c | 889 c | 374 c | 233 d |
| Agriculture | 635 d | 33 e | 131 e | 164 e | 283 d | 24 f |
| Non-agriculture | 6,876 a | 589 c | 1,993 b | 2,599 b | 979 c | 716 c |
| Paid workers | 6,370 a | 536 c | 1,835 b | 2,432 b | 914 b | 653 c |
| Men | 4,275 a | 373 b | 1,253 b | 1,611 b | 598 b | 440 c |
| Women | 2,095 b | 163 d | 582 c | 821 c | 316 c | 213 d |
| Unemployed | 219 d | 24 e |  | 64 e | 20 13 | 27 e 18 |
| Women | 67 e | 5 f | 24 f | 22 f | 7 g | 98 |
| Not in the labour force | 6,233 a | 669 b | 1,818 b | 2,134 b | 999 b | 613 c |
| Men | 1,586 b | 194 c | 450 c | 531 c | 251 c | 160 c |
| Women | 4,647 a | 475 b | 1,368 b | 1,603 b | 748 b | 453 c |
| Employed - 1967, September 16 | 7,511 a | 622 b | 2,124 b | 2,763 b | 1,262 b | 740 b |
| August 19 | 7,854 | 645 | 2,237 | 2,903 | 1,309 | 760 |
| 1966, September 17 | 7,311 | 615 | 2,062 | 2,675 | 1,262 | 697 |
| August 20 | 7,577 | 638 | 2,129 | 2,794 | 1,292 | 724 |
| 1965, September 18 | 6,983 | 598 | 1,961 | 2,551 | 1,224 | 649 |
| August 21 | 7,279 | 621 | 2,010 | 2,683 | 1,282 | 683 |
| Unemployed - 1967, September 16 | 219 d | 24 e | 84 e | 64 e | 20 e | 27 |
| August 19 | 247 | 26 | 86 | 86 | 19 | 30 |
| 1966, September 17 | 205 | 27 | 75 | 58 | 16 | 29 |
| August 20 | 228 | 26 | 83 | 75 | 17 | 27 |
| 1965, September 18 | 176 | 23 | 69 | 47 | 18 | 19 |
| August 21 | 211 | 27 | 85 | 57 | 18 | 24 |

(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.

## Rellability of Estimatus

## (a) Sampling Error

The estimates in this report are based on a sample of households. Somewhat different figures might have been obtained if a complete census had been taken using the same questionnaires, enumerators, supervisors, processing, etc. as those actually used in the Labour Porce 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 ercor (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 rellable than other estimates of comparable size.

## (b) Non-s ampling Errors

Errors, which are not related to sampling, may occur at almost every phase of a survey operation. Enumerators may misunderstand instructions, respondents may make errors in answerlng 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 bslance out over a large number of observations but systematically occuring errors will contribute to blases. Non-sampling errors can be reduced by a careful de sign of questionnaires, intensive training and supervision of enumerators and a thorough control of the processing operation. In general, the more personal and more subjective inw quiries are subject to larger errors. Also, data referring to persons with less stable labour force status will bave 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 standard deviation, can however be estimated from sample data itself. The atandard deviation of an estimate is a statibtical measure of its sampling error. It also partially measures the effect of 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 $21 / 2$ times as large.

The standard deviations of the estimates, expressed as a per cent of the eatimates, are indicated by letters. The letter "a" indicates that the standard deviation is smaller
than $0.5 \%$ of the estimato, the is:ter "u," inditates 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 | Fer cent 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 | $10.1 \%-15.0 \%$ |
| g | $15.1 \%-$ |

The actual standard deviation of an estimate is not the same each month. Since the stsindard deviations of the current estimates are not available at the time when this repart is published, the alphabetic indicatora are based on the average standard deviations during the last yest. 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 manths up to a year apart may also be indicated using the table bove. For most characteristics published in this re* port 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 lecter "c", $\mathrm{i}_{\mathrm{c}} \mathrm{c}$. 1 t was between $1.1 \%$ and $2.5 \%$. The difference between the May and June eatimates $(112,000)$ would, therefore, have a standard deviation which would likely be smallor 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 8 few weeks after the publication of this report and can be obtained on request. Beginming with 1966, an annua report on the standard deviations during the laat year will be released.


[^0]:    (1) The unemployed in an occupation group or an industry group as a percentage of the labour force in that group.
    (2) Includes managerial, professional and technical, clerical, sales, and communication occupatiais
    (3) Includes farming, fishing, trapping, logging, and mining occupations.
    (4) Includes labourers and unskilled workers not farming, fishing, logging, or wining.
    (5) Comprises unemployed persons who never had a full-time civilian job lasting two weeks or mare-
    (6) Includes agriculture, forestry, fishing and trapping, and mines, quarries, oil wells.
    (7) Includes transportation, storage, communication, and electric power, gas and water utilitias
    (8) Includes community, business and personal service, public administration, and finance, insitaise, fasi asist.

    Note: The statistics in these tables are based on the 1961 Census Classification of Occupations and the labu standait luiustrial Classification.

