## SURVEY OF LEAVERS FROM SCHOOLS, UNIVERSITIES OR OTHER EDUCATIONAL INSTITUTIONS FEBRUARY 1973

In February 1973 a survey, based on the quarterly population survey sample (a two-thirds of one per cent sample of households), was conducted throughout Australia in order to obtain information about persons aged 15 to 24 years who had attended full time at a school, university or other educational institution at some time during 1972. This survey continued the series of surveys which have been carried out in February of each year from 1964.
2. The main survey questions were designed to distinguish among persons who had attended full time at a school, university or other educational institution at some time in the previous year, those who were intending to return to full-time education and those who were not returning to full-time education, the latter being described in this publication as "leavers".
3.

It should be noted that comparability with surveys prior to the February 1972 survey has been affected by a change in the classification of trainee teachers (see page 2, paragraph 12); comparability with all earlier surveys has been affected by a change in the basis of industry classification (see page 3, paragraph 14).

Summary of results
4.

Of the $2,238,000$ persons aged 15 to 24 years covered by the survey, 744,700 , or 33.3 per cent had attended an educational institution full time in 1972. For those born in Australia the percentage was 34.9 per cent, and for the rest 27.5 per cent.
5.

Of the 744,700 persons aged from 15 to 24 years who had attended full time at a school, university, etc., at some time during 1972, 526,200 (70.7 per cent) had returned or intended to return to full-time education in 1973.
6. Of those returning to full-time education, 54,500 had attended school in 1972 and were intending to enter a university, college of advanced education, technical college or other post-school educational institution on a full-time basis in 1973. This represents 24.9 per cent of the total number of persons $(219,300)$ leaving school. It does not include persons, mostly entering the labour force, who were intending to continue their studies on a part-time basis.
7. Of the 218,500 persons who were not returning to full-time education ("leavers"), 205,000 ( 93.8 per cent) were in the labour force in February 1973, 178,700 (81.8 per cent) being employed. Those unemployed numbered 26,300, or 12.0 per cent of the total "leavers". Of the 29,000 "leavers" born outside Australia ( 13.2 per cent of the total number of "leavers"), 27,000 ( 93.4 per cent) were in the labour force in February 1973, 24,400 ( 84.2 per cent) being employed.
8.
. The industries in which the "leavers" were mainly employed in February 1973 were retail trade $(37,100)$, manufacturing $(35,400)$ and community services $(27,600)$. Over half of the employed males were entering tradesmen, production-process worker or labourer occupations, while nearly two-thirds of the females were employed in clerical, etc. or professional, technical, etc. occupations.

## EXPLANATORY NOTES

## Population coverage

9. The sample used in the survey covers the six States, the Northern Territory and the Australian Capital Territory. The estimates relate to all persons in the age group 15 to 24 years, except members of the permanent armed forces, national servicemen enlisted in the Regular Army Supplement and certain diplomatic personnel customarily excluded from census and estimated populations.
10. 

Certain categories of persons covered by the survey were not asked the survey questions. These comprised persons who were patients in hospitals and sanatoria, or inmates of gaols, reformatories, etc., and for whom, for the purpose of the survey, the institution was regarded as their dwelling, and persons reported as permanently unable to work. An estimate of the total number of such persons is shown in Table 1.

## Classification of the labour force

11. The labour force category to which a person is assigned depends on his actual activity (i.e. whether working, looking for work, etc.) during a specified week, known as "survey week", which is the week immediately preceding that in which the interview takes place. The principal categories are the employed and unemployed, which together comprise the labour force, and the remainder, who are not in the labour force. Details of the classification are as follows:
(i) The labour force comprises all persons who, during survey week, were employed or unemployed as defined in (ii) and (iii) below.
(ii) Employed persons comprise all those who, during survey week,
(a) did any work for pay, profit, commission or payment in kind, in a job or business, or on a farm (including employees, employers and selfemployed persons), or
(b) worked fifteen hours or more without pay in a family business (or farm), or
(c) had a job, business or farm, but were not at work because of illness, accident, leave, holiday, production hold-up due to bad weather, plant breakdown, etc., or because they were on strike.

A person who had a job but was temporarily laid off by his employer for the whole week without pay is excluded, and is classified in the tables as unemployed. A person who did some work during the week, however, before he either lost his job or was laid off, is classified as employed. A person who held more than one job is counted only once, in the job at which he worked most hours during survey week.
(iii) Unemployed persons comprise all those who, during survey week, did no work at all, and who either
(a) did not have a job or business and were actively looking for work (including those who stated that they would have looked for work if they had not been temporarily ill or believed no work was available, or had not already made definite arrangements to start work in a new job after survey week), or
(b) were laid off from their jobs without pay for the whole week.

A person who either lost his job or was laid off during survey week, but did some work at his job during that week, is classified as employed.
(iv) Persons not in the labour force are all those who, during survey week, were not in the categories "employed" or "unemployed" as defined. This category therefore includes persons without a job, business or farm who were not actively looking for work, and who, during survey week, were either keeping house (unpaid), attending an educational institution (e.g. school or university), retired or voluntarily idle, permanently unable to work or inmates of institutions. A person who worked less than fifteen hours without pay in a family business during survey week is also classified as not in the labour force.

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At the 1971 population census, trainee teachers (enrolled at government teachers colleges and in some cases enrolled also at other institutions) were for the first time classified as not in the labour force, and since then they have also been excluded from labour force estimates derived from the population survey. Thus, in the present survey and in the February 1972 survey, trainee teachers have been included in the category "attended full time at a school, university, etc. in the previous year"; for this reason most of the estimates in this bulletin are not comparable with corresponding estimates in issues prior to 1972. It is estimated that about seven thousand male and about seventeen thousand female trainee teachers may have been included in the estimates of full-time students for the first time in August 1971.

## Labour force characteristics of "leavers"

13. 

All persons covered by the survey were asked questions about their occupational status and those in the labour force were further questioned about their occupation and industry. Employment status is shown in Table 6 for "leavers", but not for persons returning to full-time education. Although many of these latter persons were in the labour force at the time of the survey, their numbers would not give a useful indication of the extent of vacation employment because "survey week" (see paragraph 11) extended from the first to the fourth week in February. Hence, between the first and last survey weeks, the level of vacation jobholding would have decreased substantially.

## Change in the classification of industry

14. 

Prior to this survey, estimates of "leavers" by industry were classified in accordance with the 1966 Population Census Classification of Industries. The basis of industry classification now used in these surveys is the Australian Standard Industrial Classification.

NOTE. Any discrepancies between totals and sums of components in tables are due to rounding.

TABLE 1. - PERSONS AGED 15 TO 24 YEARS (a), BY ATTENDANCE OR NON-ATTENDANCE FULL TIME AT A SCHOOL, UNVERSITY, ETC., IN THE PREVIOUS YEAR

| February | Attended school, university, etc. full time in the previous year |  |  |  | Did not attend school, university etc. full time in the previous year (b) ('000) | $\qquad$ <br> In hospitals, etc. (c) ('000) | Total persons aged 15 to 24 years$\qquad$ ('000) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Returning to fulltime education |  | Not returning to full-time education ("leavers') ('000) |  |  |  |  |
|  | ('000) | Per cent of total |  | $\begin{gathered} \text { Total } \\ \text { ('000) } \\ \hline \end{gathered}$ |  |  |  |
| MALES |  |  |  |  |  |  |  |
| 1969 | 226.8 | 70.5 | 95.0 | 321.8 | 709.0 | 8.5 | 1,039.3 |
| 1970 | 232.4 | 71.0 | 95.1 | 327.5 | 733.9 | 9.5 | 1,070.9 |
| 1971 | 247.9 | 70.6 | 103.3 | 351.2 | 741.8 | 11.6 | 1,104.6 |
| 1972 | 262.8 | 72.2 | 101.2 | 364.0 | 744.6 | 11.6 | 1,120.1 |
| 1973 | 281.0 | 71.0 | 114.8 | 395.9 | 719.2 | 15.6 | 1,130.7 |
| FEMALES |  |  |  |  |  |  |  |
| 1969 | 178.4 | 65.6 | 93.4 | 271.7 | 746.1 | 7.4 | 1,025.2 |
| 1970 | 180.6 | 66.3 | 91.7 | 272.3 | 777.6 | 4.6 | 1,054.5 |
| 1971 | 194.0 | $\underline{65.9}$ | 100.5 | 294.5 | 784.0 | 5.5 | 1,084.0 |
| 1972 | 225.4 | 71.0 | 92.0 | $\overline{317.3}$ | 774.1 | 7.0 | 1,098.4 |
| 1973 | 245.2 | 70.3 | 103.7 | 348.9 | 750.2 | 8.3 | 1,107.3 |
| PERSONS |  |  |  |  |  |  |  |
| 1969 | 405.2 | 68.3 | 188.3 | 593.5 | 1,455.1 | 15.8 | 2,064.5 |
| 1970 | 413.0 | 68.9 | 186.8 | 599.8 | 1,511.5 | 14.0 | 2,125.4 |
| 1971 | 441.9 | 68.4 | 203.8 | 645.6 | 1.525 .8 | 17.1 | 2.188 .6 |
| 1972 | 488.2 | 71.7 | 193.1 | 681.3 | 1,518.7 | 18.6 | 2,218.5 |
| 1973 | 526.2 | 70.7 | 218.5 | 744.7 | 1,469.4 | 23.9 | 2,238.0 |

(a) At the time of the survey. (b) Excludes some patients in hospitals and sanatoria and some inmates of gaols, reformatories, etc., at the time of the survey, and persons permanently unable to work. (c) Estimated numbers of persons within the scope of the survey for whom the hospital, sanatorium, gaol, reformatory, etc., was regarded as their dwelling and persons who were reported as permanenily unable to work. Particulars of attendance at schools, etc., were not obtained in respect of such persons.

NOTE. See page 2, paragraph 12, regarding discontinuity of the series.

TABLE 2. - "LEAVERS" (a) BY TIME OF LEAVING AND BY STATE, FEBRUARY 1973
('000)

|  | Persons aged 15.19 years |  |  | Persons aged 15-24 years |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Persons | Males | Females | Persons |
| Time of leaving - |  |  |  |  |  |  |
| January-June 1972 | 11.1 | 11.9 | 23.0 | 12.5 | 13.6 | 26.2 |
| July-October 1972 | 11.3 | 12.6 | 23.9 | 13.8 | 13.2 | 27.0 |
| November 1972 | 42.1 | 35.9 | 78.0 | 49.2 | 43.6 | 92.9 |
| December (b) 1972 | 33.1 | 28.2 | 61.3 | 39.3 | 33.2 | 72.5 |
| Total | 97.6 | 88.5 | 186.2 | 114.8 | 103.7 | 218.5 |
| State - |  |  |  |  |  |  |
| New South Wales | 35.6 | 33.0 | 68.6 | 41.9 | 39.3 | 81.2 |
| Victoria | 26.6 | 19.0 | 45.6 | 30.8 | 22.7 | 53.4 |
| Queensland | 14.8 | 15.3 | 30.1 | 16.9 | 17.0 | 33.9 |
| South Australia | 8.6 | 10.0 | 18.6 | 10.5 | 11.8 | 22.3 |
| Western Australia | 7.9 | 7.2 | 15.1 | 9.4 | 8.0 | 17.4 |
| Tasmania | * | * | 6.0 | * | * | 6.8 |
| Australia (c) | 97.6 | 88.5 | 186.2 | 114.8 | 103.7 | 218.5 |

[^0][^1]TABLE 3. - PERSONS AGED 15 TO 24 YEARS IN FEBRUARY 1973 WHO ATTENDED FULL TIME AT A SCHOOL, UNIVERSITY, ETC., IN 1972, BY TYPE OF INSTITUTION ATTENDED AND WHETHER OR NOT RETURNING TO FULL-TIME EDUCATION IN 1973
(000)

|  | Institution attended full time in 1972 |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | School | University | College of Advanced Education (a) | Technical College | Other |  |
| MALES |  |  |  |  |  |  |
| Returning to full-time education in 1973 |  |  |  |  |  |  |
| At same type of institution (b) | 195.7 | 30.1 | 16.5 | * | * | 281.0 |
| At different type of institution (b) | 26.1 | 38.2 | 16.3 | * | * | 252.4 |
| Not returning to full-time education in 1973 ("leavers") | 26.1 |  | * | * | * | 28.6 |
|  | 92.9 | 11.5 | 8.0 | * | * | 114.8 |
| Total | 314.7 | 51.6 | 24.5 | * | * | 395.9 |
| FEMALES |  |  |  |  |  |  |
| Returning to full-time education in 1973 |  |  |  |  |  |  |
| At same type of institution (b) | 175.4 | 23.2 | 16.5 | * | * | 245.2 |
| At different type of institution (b) | 175.4 | 22. | 16.5 | * | * | 216.0 |
| Not returning to full-time education in 1973 ("leavers") | 28.4 |  |  | * | * | 29.2 |
|  | 72.0 | 7.3 | 8.4 | 9.3 | 6.7 | 103.7 |
| Total | 275.8 | 30.3 | 24.9 | 10.4 | 7.5 | 348.9 |
| PERSONS |  |  |  |  |  |  |
| Returning to full-time education in 1973 |  |  |  |  |  |  |
| At same type of institution (b) | 425.6 371.2 | 63.1 60.4 | 33.0 32.8 | * | * | 526.2 |
| At different type of institution (b) | 54.5 | 60.4 | 32.8 | * | * |  |
| Not returning to full-time education In 1973 ("leavers") | 164.8 | 18.8 | 16.4 | 10 | 78 | 57.8 |
| Total | 590.5 | 81.9 | 49.4 | 14.0 | 9.0 | 744.7 |

(a) Includes teacher training colleges. See page 2, paragraph 12 . (b) As the survey was conducted in February 1973 the estimates shown will partly reflect expectations as to the institution to be attended.

* Less than 4.000. See page 8, paragraph 5.

TABLE 4. - PERSONS (a) AGED 15 TO 24 YEARS IN FEBRUARY 1973, BY AGE, BIRTHPLACE ANE ATTENDANCE OR NON-ATTENDANCE FULL TIME AT A SCHOOL, UNIVERSITY, ETC., IN THE PREVIOUS YEAR.
('000)

| Institution attended full time in 1972 | Males |  |  | Females |  |  | Persons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Aged } \\ 15 \text { to } 19 \\ \text { years } \end{gathered}$ | $\begin{gathered} \text { Aged } \\ 20 \text { to } 24 \\ \text { years } \end{gathered}$ | Total | Aged 15 to 19 years | $\begin{gathered} \text { Aged } \\ 20 \text { to } 24 \\ \text { years } \end{gathered}$ | Total | $\begin{aligned} & \text { Aged } \\ & 15 \text { to } 19 \\ & \text { years } \end{aligned}$ | Aged 20 to 24 years | Total |
| BORN IN AUSTRALIA |  |  |  |  |  |  |  |  |  |
| School | 267.5 | 4.7 | 272.2 | 235.9 | 5.6 | 241.5 | 503.4 | 10.2 | 513.6 |
| University | 13.1 | 28.0 | 41.1 | 10.2 | 15.2 | 25.4 | 23.3 | 43.2 | 66.5 |
| College of Advanced Education (b) | 7.9 | 11.6 | 19.5 | 11.8 | 10.7 | 22.4 | 19.6 | 22.3 | 41.9 |
| Other | * | * | * | 13.4 | * | 15.1 | 15.5 | 22.3 | 18.7 |
| Did not attend | 205.5 | 382.9 | 588.4 | 212.9 | 393.7 | 606.5 | 418.4 | 776.5 | 1,194.9 |
| Total | 496.0 | 428.7 | 924.8 | 484.2 | 426.8 | 911.0 | 980.2 | 855.5 | 1,835.7 |
| BORN OUTSIDE AUSTRALIA |  |  |  |  |  |  |  |  |  |
| School | 40.2 | * | 42.6 | 30.9 | * | 34.3 | 71.1 | 5.8 | 76.8 |
| University | * | 7.5 | 10.4 | * | 4.6 | 4.9 | * | 12.0 | 15.4 |
| Other | * | 4.5 | 6.5 | * | * | 5.2 | 5.5 | 6.2 | 11.8 |
| Did not attend | 32.0 | 98.8 | 130.8 | 40.5 | 103.1 | 143.7 | 72.5 | 201.9 | 274.5 |
| Total | 77.1 | 113.2 | 190.3 | 75.3 | 112.8 | 188.1 | 152.4 | 226.0 | 378.4 |

(a) Excluding some natients in hospitals and sanatoria and some inmates of gaols, reformatories, etc., and persons permanently unable to work. (b) Includes teacher training colleges.

- Less than 4,000. See page 8, paragraph 5.

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TABLE 5. - "LEAVERS" (a) BY AGE, FEBRUARY 1973
( $\mathbf{C O O}$ )

| Age at time of leaving (years) | Attended school in 1972 |  |  | Attended any educational institution (b) in 1972 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Persons | Males | Females | Persons |
| 14 | * | * | 6.4 | * | * | 6.4 |
| 15 | 31.7 | 28.9 | 60.6 | 31.7 | 30.2 | 61.9 |
| 16 | 28.5 | 21.3 | 49.8 | 28.8 | 26.0 | 54.8 |
| 17 | 17.6 | 12.8 | 30.4 | 19.1 | 19.5 | 38.6 |
| 18 | 9.7 | 4.5 | 14.2 | 11.5 | 6.6 | 18.2 |
| 19 and over | * | * | * | 20.9 | 17.9 | 38.7 |
| Total | 92.9 | 72.0 | 164.8 | 114.8 | 103.7 | 218.5 |

(a) See note (a) to Table 2. (b) Includes schools.

- Less than 4,000. See page 8, paragraph 5 .

TABLE 6. - "LEAVERS" (a) BY STATE, EMPLOYMENT STATUS AND BIRTHPLACE, FEBRUARY 1973

| State | Employment status |  |  |  | Total "leevers" |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employed (b) ('000) | Unemployed ('000) | Total in the labour force ('000) | Not in the labour force ('000) | Number <br> ('000) | Participation rate (c) (per cent) |
| MALES |  |  |  |  |  |  |
| New South Wales | 35.9 | 4.1 | 40.0 | * | 41.9 | 95.5 |
| Victoria | 24.9 | 4.7 | 29.6 | * | 30.8 | 96.2 |
| Queensland | 14.0 | * | 15.8 | * | 16.9 | 93.7 |
| South Australia | 9.5 | * | 10.0 | * | 10.5 | 95.0 |
| Western Australia | 7.5 | * | 9.0 | * | 9.4 | 95.8 |
| Tasmania | * | * | . | * | * | 9. |
| Australia (d) | 95.9 | 13.4 | 109.3 | 5.6 | 114.8 | 95.2 |
| Born in Australia | 81.5 | 12.6 | 94.1 | 4.9 | 99.0 | 95.1 |
| Born outside Australia | 14.4 | * | 15.2 | , | 15.9 | 95.7 |
| FEMALES |  |  |  |  |  |  |
| New South Wales | 31.3 | 4.0 | 35.3 | 4.0 | 39.3 | 89.8 |
| Victoria | 19.1 | * | 21.6 | 4.0 | 22.7 | 95.5 |
| Queensland | 13.5 | * | 16.1 | * | 17.0 | 94.8 |
| South Australia | 10.0 | * | 11.2 | * | 11.8 | 95.1 |
| Western Australia | 5.8 | * | 7.1 | * | 8.0 | 89.1 |
| Tasmania | . | * | . | * | 8.0 | ${ }^{\text {* }}$ |
| Australia (d) | 82.8 | 12.9 | 95.7 | 8.0 | 103.7 | 92.3 |
| Born in Australia | 72.8 | 11.0 | 83.9 | 6.7 | 90.6 | 92.6 |
| Born outside Australia | 10.0 | . | 11.8 | . | 13.1 | 90.5 |
| PERSONS |  |  |  |  |  |  |
| New South Wales | 67.2 | 8.1 | 75.3 | 5.9 | 81.2 | 92.8 |
| Victoria | 44.0 | 7.3 | 51.2 | - | 53.4 | 95.9 |
| Queensland | 27.5 | 4.4 | 31.9 | * | 33.9 | 94.3 |
| South Australia | 19.5 | , | 21.2 | * | 22.3 | 95.1 |
| Western Australia | 13.2 | * | 16.1 | * | 17.4 | 92.7 |
| Tasmania | 5.0 | * | 6.1 | * | 6.8 | 88.7 |
| Australia (d) | 178.7 | 26.3 | 205.0 | 13.5 | 218.5 | 93.8 |
| Born in Australia | 154.3 | 23.7 | 178.0 | 11.6 | 189.6 | 93.9 |
| Born outside Australia | 24.4 | * | 27.0 | 11. | 29.0 | 93.4 |

(a) See note (a) to Table 2. (b) Includes wage and salary earners, employers, self-employed persons and unpaid family helpers. (c) "Leavers" in the labour force as a percentage of total "leavers". (d) Includes the Northern Territory and the Australian Capital Territory.

* Less than or based on a figure less than 4,000. See page 8, paragraph 5.


## TABLE 7. - "LEAVERS" (a) WHO WERE EMPLOYED (b), BY INDUSTRY AND OCCUPATION, FEBRUARY 1973 <br> (C00)

| Industry division or sub-division (c) | Males | Females | Persons | Occupation group | Males | Females | Persons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agriculture, forestry, fishing and hunting | 7.4 | * | 8.4 | Professional, technical and related workers | 12.2 |  |  |
| Manufacturing - | 7.4 |  | 8.4 | Clerical, administrative | 12.2 | 16.8 | 29.0 |
| Food, beverages and tobacco | 4.3 | * | 5.8 | workers (f) | 13.5 | 38.1 | 51.6 |
| Metal products | 5.2 | * | 7.0 | Sales workers | 8.5 | 11.9 | 20.3 |
| Other manufacturing | 15.9 | 6.7 | 22.7 | Farmers, fishermen, timber- | 8.5 | 11.9 | 20.3 |
| Total manu facturing | 25.4 | 10.0 | 35.4 | getters, etc. | 7.0 | * | 8.4 |
| Construction | 11.1 | * | 11.3 | Transport and communication | 7.0 | - | 8.4 |
| Wholesale and retail trade Wholesale trade | 5.4 | 4.2 | 9.6 | workers | * | * | * |
| Retail trade | 17.5 | 4.2 19.6 | 9.6 37.1 | Tradesmen, production-process |  |  |  |
| Total wholesale and retail trade | 22.9 | 19.6 | 46.1 | Metal and electrical workers <br> Building workers | 18.1 | * | 18.4 |
| Transport, storage and communication | 4.3 | 23.8 | 6.3 | Other tradesmen, etc. | 11.0 19.5 | 49 | 11.0 |
| Finance, insurance, real estate and business services | 7.7 | 15.0 | 22.8 | Total tradesmen, productionprocess workers and labourers | 19.5 48.6 | 4.9 5.2 | 24.4 53.8 |
| Community services (d) | 8.4 | 19.1 | 27.6 | Service, sport and recreation |  |  | 53.8 |
| Entertainment, recreation, restaurants, hotels and personal services | * | 7.8 | 10.7 | workers | * | 8.4 | 11.9 |
| Other (e) | 5.7 | 7.8 | 9.5 |  |  |  |  |
| Total | 95.9 | 82.8 | 178.7 | Total | 95.9 | 82.8 | 178.7 |

(a) See note (a) to Table 2. (b) Includes wage and salary earners, employers, self-employed persons and unpaid family helpers. (c) Based on the Australian Standard Industrial Classification (see page 3, paragraph 14). (d) Comprises health; education; libraries; etc.; welfare and religious institutions; and other community services. (e) Comprises electricity, gas, water and public administration. (f) Includes administrative, executive and managerial workers.

* Less than 4,000. See page 8, paragraph 5.


## TECHNICAL NOTE

## Estimation procedure

Estimates derived from the quarterly population survey are obtained by using a ratio estimation procedure. This procedure ensures that survey estimates conform to the independently estimated distribution of the population by age and sex, rather than the age and sex distribution within the sample itself.

## Redesign and reselection of the sample

2. The design of the sample on which the labour force survey is based has been thoroughly investigated and a more efficient sampling plan has been devised. Data obtained in the 1971 Census of Population and Housing have been used to reselect the sample in accordance with the improved design.
3. Before the redesign, a one per cent sample throughout Australia was used. About 40,000 private dwellings (houses, flats, etc.) as well as a sample of other dwellings (hotels, motels, etc.) were included. In the new sample the proportion of the population included varies from State to State, but, in aggregate, about two-thirds of one per cent of the population of Australia is included. The new sample consists of about 27,000 private dwellings as well as a sample of other dwellings.

## Reliability of the estimates

4. Since the estimates in this bulletin are based on a sample, they may differ from the figures that would have been obtained from a complete census using the same questionnaires and procedures. One measure of the likely difference is given by the standard error, which indicates the extent to which an estimate might have varied by chance because only a sample, and not the whole population, was enumerated. There are about two chances in three that a sample estimate will differ by less than one standard error from the figures that would have been obtained from a comparable complete enumeration, and about nineteen chances in twenty that the difference will be less than two standard errors. A table of standard errors which is intended to be of general application is given below.

STANDARD ERRORS OF ESTIMATES

| Size of estimate (persons) | Approximate standard error of estimate |  | Size of estimate (persons) | Approximate standard error of estimate |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Persons | Per cent of estimate |  | Persons | Per cent of estimate |
| 4,000 | 750 | 19 | 100,000 | 3,000 | 3 |
| 5,000 | 850 | 17 | 200,000 | 4,000 | 2 |
| 10,000 | 1,100 | 11 | 500,000 | 5,000 | 1 |
| 20,000 | 1,400 | 7 | 1,000,000 | 5,500 | 0.6 |
| 50,000 | 2,000 | 4 | 2,000,000 | 8,000 | 0.4 |

5. In the tables in this bulletin only estimates of 4,000 or over have been shown, as smaller estimates would be subject to such high standard errors (relative to the size of the estimate) as to detract seriously from their value for most reasonable uses. Although, in some cases, figures for these small components can be derived by subtraction, they should not be regarded as reliable.
6. The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon both the size of the percentage and the size of the denominator. Percentages calculated from figures in this bulletin have generally somewhat lower standard errors (proportionally) than have the estimates which form the numerators of the percentages, particularly where the percentages are large.
7. The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by interviewers and respondents. Inaccuracies of this kind are referred to as the non-sampling error, and they may occur in any enumeration, whether it be a full count or only a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers and efficient operating procedures.

## J. P. O'NEILL <br> Commonwealth Statistician

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Canberra, A.C.T. 2600
NOTE. Inquiries concerning these statistics may be made in Canberra by telephoning Mr I. Neville on 639111 extension 2347 or, in each State capital, by telephoning the office of the Bureau of Census and Statistics.


[^0]:    (a) Persons aged 15 to 24 years inclusive at the time of the survey who had attended school, university, etc., full time during the previous year and who were not returning to full-time education. See also notes (b) and (c) to Table 1 . (b) Includes a small number of persons who left school, university etc., in January or February 1973. (c) Includes the Northern Territory and the Australian Capital Territory.

[^1]:    * Less than 4,000. See page 8, paragraph 5

