



VICTORIA

1991-92  
**Manufacturing Industry  
Victoria**

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**MANUFACTURING INDUSTRY  
VICTORIA  
1991-92**

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**INQUIRIES**

- for further information about statistics in this publication and the availability of related unpublished statistics, contact Mark Wise on Sydney (02) 268 4541 or any other ABS office.
- for information about other ABS statistics and services please refer to the back page of this publication.

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## INTRODUCTION

This publication contains detailed industry statistics compiled from a census of manufacturing establishments conducted in respect of 1991–92 and some comparative statistics for earlier years. It provides more detailed information on manufacturing in Victoria than was published in the previous publications from this census—*Manufacturing Industry, Australia, 1991–92. Preliminary* (8201.0), which was released on 25 May 1993 and *Manufacturing Industry, Australia, 1991–92* (8221.0), which was released on 21 February 1994.

The 1990–91 census data presented in this publication generally differ from those published in the 1990–91 issue of this publication. This is due to further processing of that year's data. All time series statistics presented in this publication show these revised data. Further details about the extent of these revisions can be obtained by contacting ABS NSW—see previous page for contact details.

For the 1991–92 manufacturing census, information on only employment, wages and salaries paid and turnover were collected. However, as with the 1990–91 census, the 1991–92 census also included some questions related to environmental protection by manufacturers. The environmental protection issues covered in 1991–92 were different to those covered in 1990–91. These data are presented in Table 6. Information at the ASIC class level showing both current and capital expenditure on environmental protection are presented in Table 7. This expands on the information collected in 1990–91.

This publication has also brought together data from sources other than the manufacturing census to provide a more complete picture of the manufacturing industry, as follows:

- Census of Population and Housing (1991) data are presented in Tables 2 and 3. This includes information on the characteristics of persons employed in the manufacturing industry.
- A concordance between the ASIC and ANZSIC industry classifications is presented in Table 9. For a detailed explanation of this concordance, see the introduction to Table 9.

The standard units definitions employed in the system of integrated economic censuses have undergone revisions, which were first reflected in the 1988–89 manufacturing census results. In the 1988–89 census, the revisions were partially in place on the ABS central business register. By the 1989–90 census, the revised units definitions were in place for all large businesses. The 1990–91 and 1991–92 census results reflect the full implementation of the revised units definitions.

### **Unpublished data**

A considerable amount of data from the manufacturing census exists in unpublished form. More detailed information to satisfy individual user requirements may be available on request. Further details can be obtained by contacting ABS NSW—see previous page for contact details.

## SUMMARY OF FINDINGS

### Overview

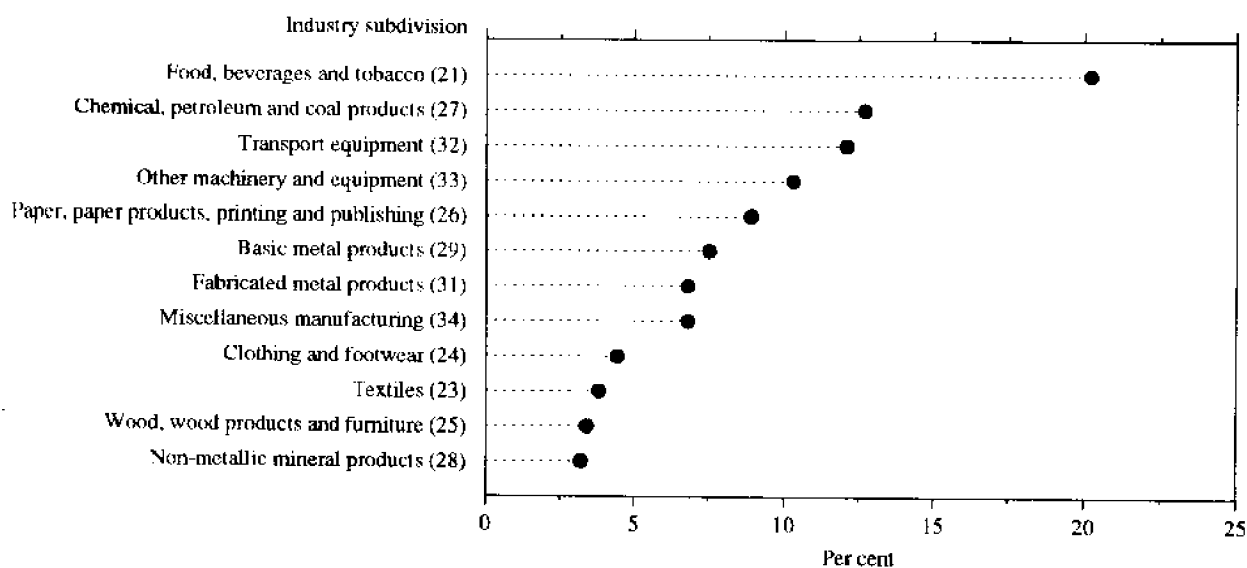
Turnover for the year 1991–92 by manufacturing establishments operating in Victoria was \$52,694.9 million. This represents a 3.5 per cent decrease, in current price terms, from the \$54,613.3 million in turnover recorded for the year 1990–91. Since the ABS began collecting integrated economic statistics (in respect of 1968–69), this is the first time that turnover at current prices for the manufacturing industry in Victoria has fallen compared to the previous year. Manufacturing employment at the end of June 1992 was 296,108, some 6.8 per cent lower than 12 months earlier. Since the ABS began collecting integrated economic statistics, this is also the first time that Victorian manufacturing employment has fallen below 300,000 persons.

### Turnover (Tables 1 and 4)

The chart below ranks industry subdivisions from the largest to the smallest contributor for 1991–92 manufacturing turnover. Food, beverages and tobacco continues to be the largest contributor with 20.2 per cent of total turnover. Chemical, petroleum and coal products (12.7%) is now the second largest contributor, ahead of Transport equipment (12.1%). Non-metallic mineral products (3.2%) and Wood, wood products and furniture (3.4%) continue to be the smallest contributors to total turnover.

Turnover of manufacturing establishments decreased, in current price terms, by 3.5 per cent between 1990–91 and 1991–92. Nine industry subdivisions recorded decreases and three recorded increases. Miscellaneous manufacturing (up 3.8%—from \$3,439.2m to \$3,568.3m), Food, beverages and tobacco (up 1.6%—from \$10,503.7m to \$10,670.4m) and Textiles (up 0.5%—from \$1,967.7m to \$1,978.3m) recorded increases. The largest percentage decreases were recorded by Transport equipment (down 12.6%—from \$7,296.5m to \$6,373.7m) and Non-metallic mineral products (down 10.1%—from \$1,867.9m to \$1,679.4m).

DISTRIBUTION OF TURNOVER, VICTORIA, 1991–92



The percentage contribution by Victoria to total Australian manufacturing turnover in 1991–92 was 31.6 per cent. This represents a decrease of 0.5 percentage points on the contribution reported in 1990–91. The percentage contribution to turnover by the other States and Territories in 1991–92 was: New South Wales 34.7 per cent; Queensland 13.7 per cent; South Australia 9.3 per cent; Western Australia 7.7 per cent; Tasmania 2.4 per cent; the Northern Territory 0.4 per cent; and the Australian Capital Territory 0.3 per cent.

### Longer term trends (1988–89 to 1991–92)

Turnover for the manufacturing industry in Victoria increased by 1.3 per cent over the period 1988–89 to 1991–92 in current price terms. While analyses of turnover data over the longer term in current prices are affected by movements in prices and quantities produced, some indications of relative growth across manufacturing industries can still be produced. Four industry subdivisions recorded increases and eight recorded decreases. Chemical, petroleum and coal products (up 51.8%—from \$4,401.7m to \$6,682.0m)(see paragraph 30 of the Explanatory Notes for comparability of these data over time) and Food, beverages and tobacco (up 9.5%—from \$9,747.4m to \$10,670.4m) showed the largest percentage growth in turnover over the period. The largest percentage decreases were recorded in Clothing and

footwear (down 16.0%—from \$2,766.4m to \$2,322.6m) and Transport equipment (down 15.3%—from \$7,527.2m to \$6,373.7m).

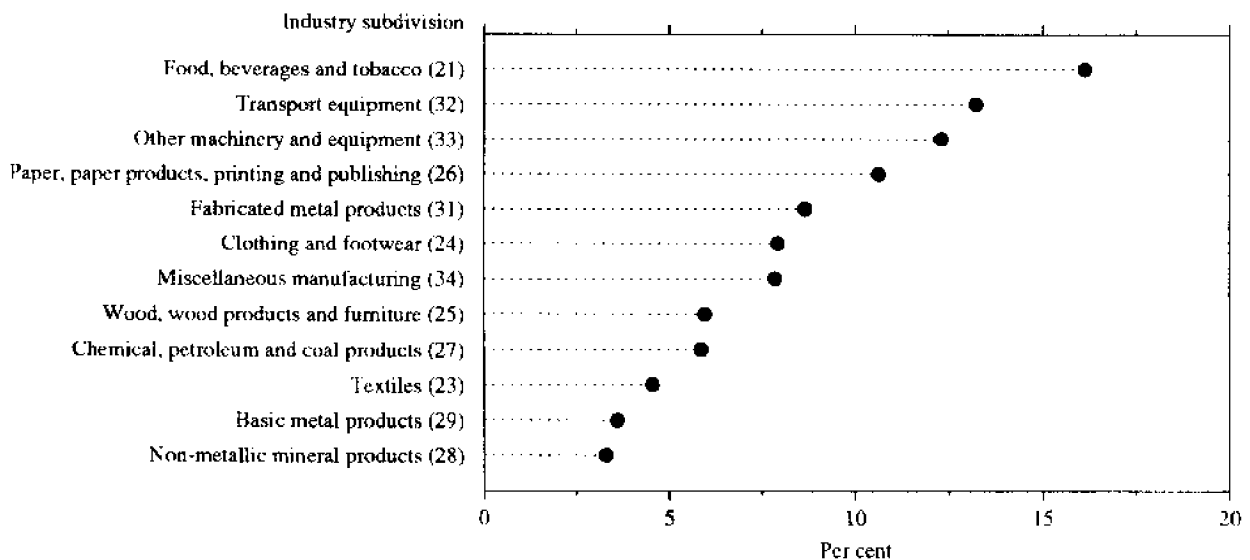
The percentage contribution by Victoria to total Australian turnover has decreased since 1988–89, decreasing 2.4 percentage points to 31.6 per cent. The only other State to decrease its percentage share was Tasmania (down 0.2 percentage points to 2.4%). The States to increase their percentage share of turnover were: Western Australia (up 0.8 percentage points to 7.7%); South Australia (up 0.7 percentage points to 9.3%); New South Wales (up 0.6 percentage points to 34.7%); and Queensland (up 0.5 percentage points to 13.7%). Both the Northern Territory (0.4%) and the Australian Capital Territory (0.3%) held their percentage share.

#### Employment (Tables 1 and 4)

Employment was more evenly distributed across industry subdivisions than was turnover, with Food, beverages and tobacco (16.1%) and Transport equipment (13.3%) once again being the major contributors to employment in the manufacturing industry. Non-metallic mineral products (3.3%) and Basic metal products (3.6%) remain the smallest contributors to employment in the manufacturing industry.

Manufacturing employment decreased by 6.8 per cent between June 1991 and June 1992. All 12 industry subdivisions recorded decreases in the level of employment over this period. Clothing and footwear (down 12.9%—from 26,906 persons to 23,423 persons) and Transport equipment (down 12.7%—from 44,967 persons to 39,247 persons) recorded the largest percentage decreases.

DISTRIBUTION OF EMPLOYMENT, VICTORIA, 1991–92



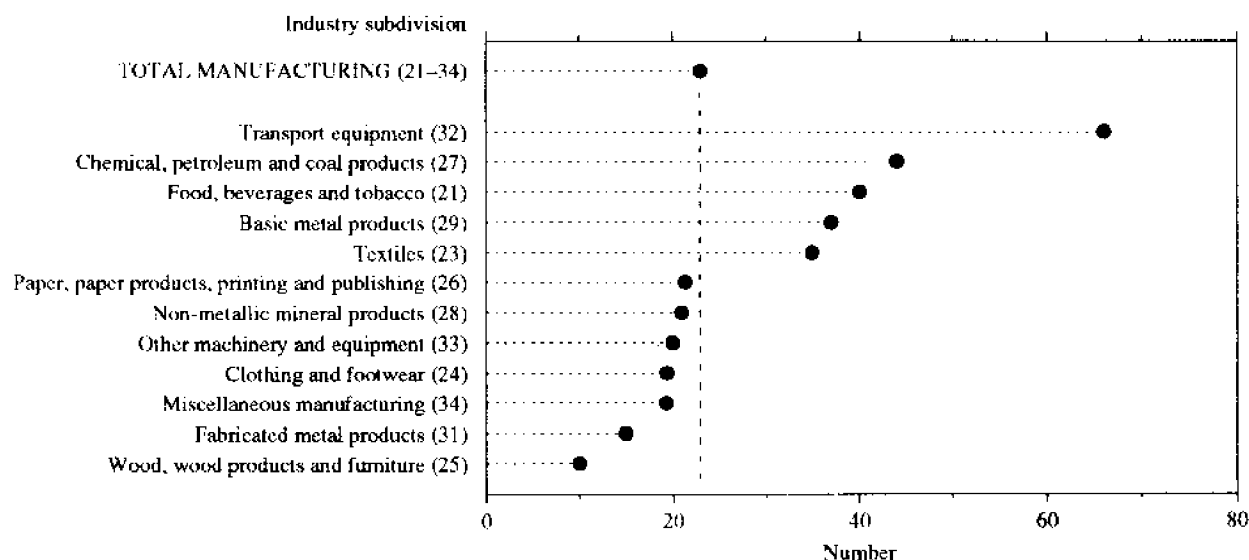
The percentage contribution by Victoria to total Australian manufacturing employment at the end of June 1992 was 32.7 per cent. This represents a decrease of 0.3 percentage points on the total contribution reported at the end of June 1991. The percentage contribution to total manufacturing employment by the other States and Territories at the end of June 1992 was: New South Wales 34.1 per cent; Queensland 13.5 per cent; South Australia 9.5 per cent; Western Australia 6.9 per cent; Tasmania 2.6 per cent; the Australian Capital Territory 0.4 per cent; and the Northern Territory 0.3 per cent.

On average, each manufacturing establishment in Victoria employed 23 persons at the end of June 1992, which continues the steady decline evident since June 1989 (when the average was 29 persons employed per establishment). The average fell by 2 persons over the period June 1991 to June 1992. Over the same period, however, the ratio of turnover per person employed has grown considerably. In 1988–89, the average turnover per person employed for all manufacturing establishments was \$139,000. By 1991–92, this had risen to \$178,000, a growth of 28.1 per cent. This is well above the 1.3 per cent increase in turnover and suggests significant productivity growth.

As the chart on the following page shows, the number of persons employed per establishment varied greatly across industry subdivisions, ranging from 10 persons for Wood, wood products and furniture to an average of 66 persons for Transport equipment.



PERSONS EMPLOYED PER ESTABLISHMENT, VICTORIA, 1991-92



Chemical, petroleum and coal products and Basic metal products comprised substantially larger shares of turnover than of employment, which resulted in these subdivisions recording substantially higher values of turnover per person employed than other subdivisions in the manufacturing industry (\$385,700 and \$370,200 respectively). Clothing and footwear recorded the lowest value for this ratio (\$99,200). Turnover per person employed for total manufacturing in 1991-92 was \$178,000. Various factors affect the magnitude of turnover per person employed. In general, industries which are labour intensive will record lower values of turnover per person employed than will those industries which are capital intensive. This ratio may also be influenced by commodity prices.

*Longer term trends (June 1989 to June 1992)*

Employment in the Victorian manufacturing industry decreased by 78,201 persons (down 20.9%—from 374,309 persons to 296,108 persons) over the period June 1989 to June 1992. All industry subdivisions recorded decreases over this period, with Clothing and footwear (down 39.6%—from 38,756 persons to 23,423 persons), Transport equipment (down 25.3%—from 52,545 persons to 39,247 persons) and Wood, wood products and furniture (down 24.4%—from 23,335 persons to 17,643 persons) recording the largest percentage decreases.

All States and Territories recorded decreases in manufacturing employment between June 1989 and June 1992. The largest decrease in both absolute and percentage terms was recorded by Victoria. The decreases recorded by the other States and Territories were: South Australia (down 17.7%—from 105,063 persons to 86,461 persons); the Northern Territory (down 16.8%—from 3,392 persons to 2,821 persons); New South Wales (down 16.6%—from 370,436 persons to 309,124 persons); Western Australia (down 16.1%—from 74,500 persons to 62,475 persons); Tasmania (down 14.6%—from 27,532 persons to 23,511 persons); Queensland (down 11.0%—from 137,479 persons to 122,424 persons); and the Australian Capital Territory (down 10.0%—from 4,099 persons to 3,691 persons).

The percentage contribution by Victoria to Australian manufacturing employment has declined since June 1989, decreasing by 1.5 percentage points to 32.7 per cent. South Australia (down 0.1 percentage points to 9.5%) also decreased its percentage share of employment over this period. States to show increases in their percentage share of employment over this period were: Queensland (up 1.0 percentage points to 13.5%); New South Wales (up 0.3 percentage points to 34.1%); Western Australia (up 0.1 percentage points to 6.9%); and Tasmania (up 0.1 percentage points to 2.6%). The Australian Capital Territory (0.4%) and the Northern Territory (0.3%) all held their percentage share of employment over this period.

**1991 Census of Population and Housing (Tables 2 and 3)**

The 1991 Census of Population and Housing provides additional information to the manufacturing census on the characteristics of persons employed in the manufacturing industry. It shows that employment at August 1991 among manufacturing sole proprietors and partnerships not employing others was 15,337. (Note: These persons are excluded from the scope of the manufacturing census—see paragraph 9 of the Explanatory Notes.) The population census also recorded 281,505 'other' persons employed in the manufacturing industry in Victoria at August 1991. (Note: Whilst these population census figures are conceptually similar to the data collected in the manufacturing census, there are many reasons why the data do not agree—see paragraphs 33 to 36 of the Explanatory Notes.)

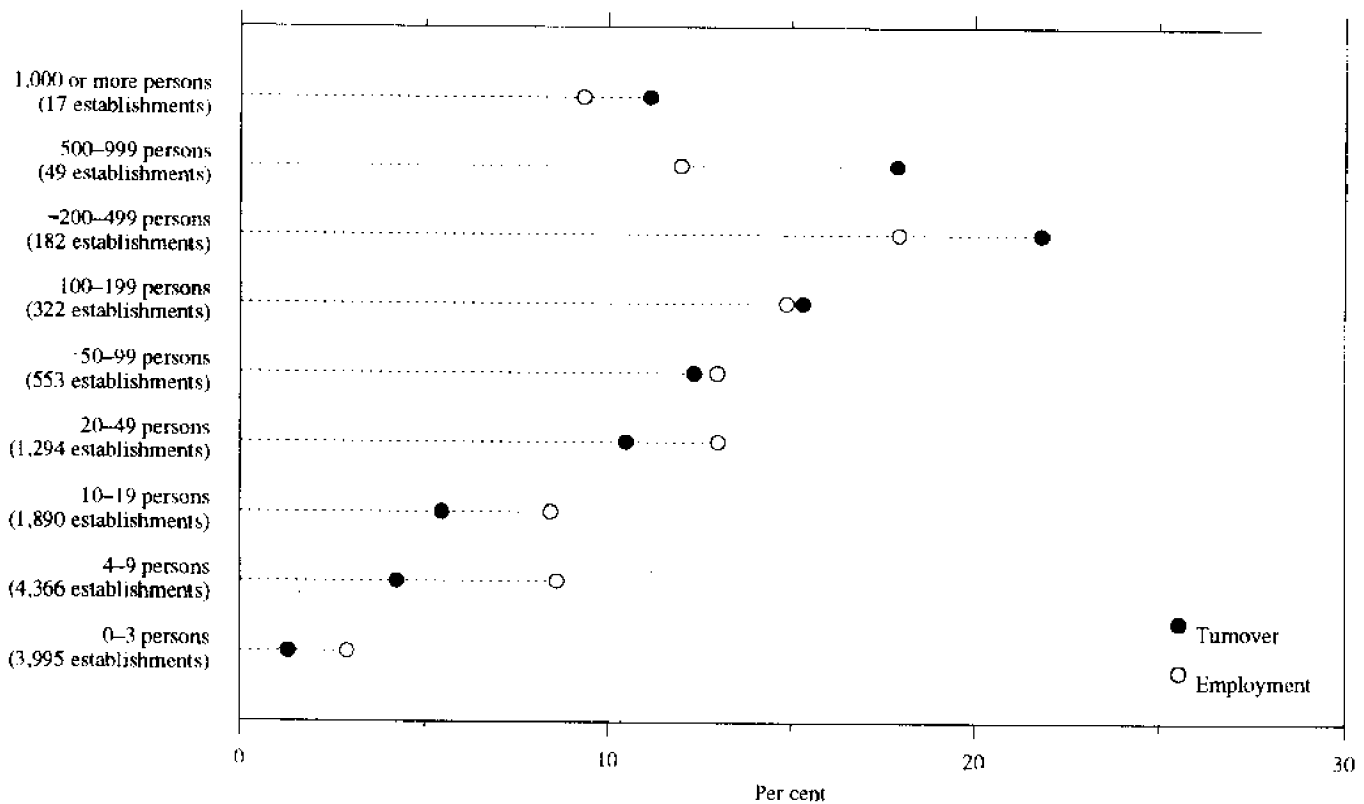
A breakdown of the age composition of persons employed in the manufacturing industry shows that it has a similar distribution as for all industries combined. However, there are relatively fewer young people working in manufacturing (16.4% aged 15–24 years compared with 19.2% for all industries) and slightly higher proportions of persons employed aged 25–34 years (28.0% compared with 27.1%) and 35–54 years (45.7% compared with 44.2%). The age distribution across the manufacturing industry subdivisions is more variable, but still broadly consistent with the average for all manufacturing industry. The major variations to this pattern were the younger employment recorded in Wood, wood products and furniture (where 24.4% of persons employed were in the age group 15–24 years, with 38.2% in the age group 35–54 years) and Chemical, petroleum and coal products (where the corresponding percentages were 11.0% and 49.3% respectively) where the average age of persons employed was much higher.

The proportion of those employed in the manufacturing industry who were male was 69.7 per cent, whilst females made up 30.3 per cent. These are substantial differences from the average for all industries (males—56.9%; females—43.1%), showing the significance of male employment in the manufacturing industry. The highest concentration of male employment in the manufacturing industry was in Basic metal products, where 87.3 per cent of persons employed were male. The highest incidence of female employment in the manufacturing industry was in Clothing and footwear, where 70.2 per cent of persons employed were female.

### Employment size (Table 5)

Of the 12,668 manufacturing establishments operating at 30 June 1992, 570 were large establishments (employing 100 or more persons). While comprising only 4.5 per cent of all establishments, they accounted for 65.4 per cent of manufacturing turnover for 1991–92 and 54.1 per cent of employment at the end of June 1992. Although establishments employing 0–19 persons comprised 80.9 per cent of manufacturing establishments in Victoria at 30 June 1992, they accounted for only 11.3 per cent of turnover and 19.9 per cent of employment. There were 17 manufacturing establishments employing 1,000 or more persons at the end of June 1992. They employed 9.3 per cent of all persons working in the manufacturing industry in Victoria and contributed 11.4 per cent of all manufacturing turnover.

DISTRIBUTION OF MANUFACTURING TURNOVER AND EMPLOYMENT BY EMPLOYMENT SIZE  
VICTORIA, 1991–92

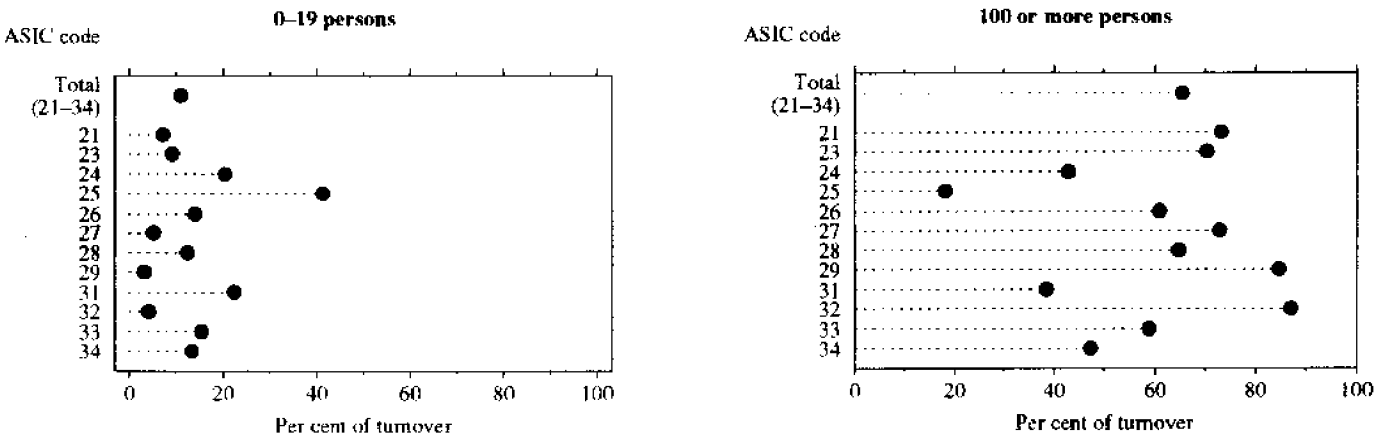


For 1991-92, the percentage distribution of turnover by employment size for the manufacturing industry was:

0-19 persons	11.3 per cent
20-49 persons	10.7 per cent
50-99 persons	12.6 per cent
100 or more persons	65.4 per cent

For eight of the 12 industry subdivisions, more than 50 per cent of turnover was contributed by large establishments (employing 100 or more persons). The industries where large establishments contributed most to turnover were the Transport equipment (86.9%) and Basic metal products (84.6%) industries. Small establishments (employing 0-19 persons) made relatively significant contributions to turnover for Wood, wood products and furniture (41.4%) and Fabricated metal products (22.4%).

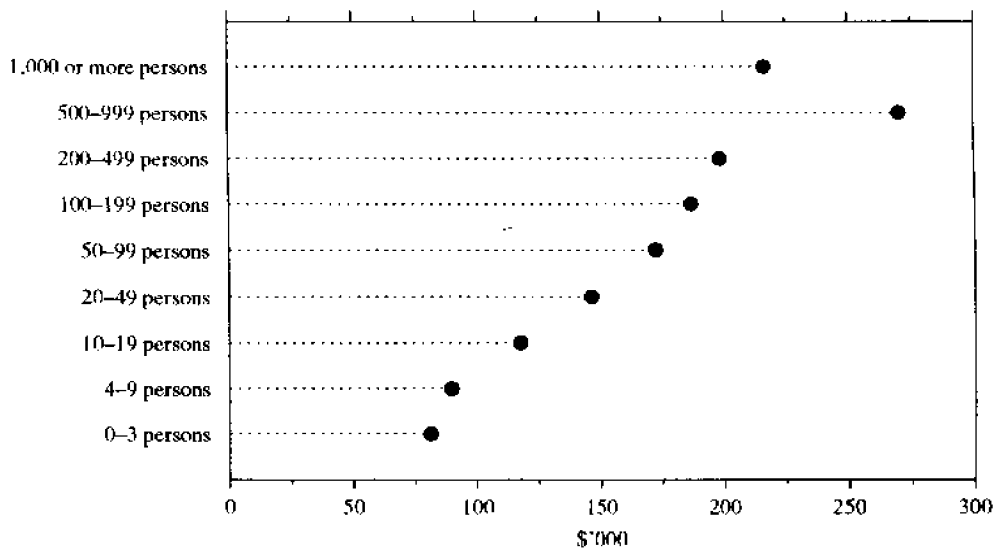
DISTRIBUTION OF TURNOVER BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION (a), VICTORIA, 1991-92



(a) Refer to graphs on pages 1 to 3 for ASIC subdivision descriptions.

Small establishments (employing 0-19 persons) displayed a much lower ratio of average turnover per person employed at the end of June 1992 (\$100,100) than establishments in the larger size categories. Large establishments (employing 100 or more persons) recorded an average turnover per person employed at the end of June 1992 of \$214,200, with establishments employing between 500 and 999 persons having a ratio of \$270,300. It should be remembered that the data include all manufacturing industries and that somewhat different patterns may emerge through analysis of individual industries.

TURNOVER PER PERSON EMPLOYED BY EMPLOYMENT SIZE, VICTORIA, 1991-92



### **Environmental protection (Tables 6 and 7)**

*General issues associated with environmental impact assessments or audits, return of containers or packaging, and marketing or production of goods or services relating to the environment.*

The 1991-92 manufacturing census included questions related to environmental protection. The following three questions were asked of all manufacturers:

- During 1991-92, did this business conduct any environmental impact assessments (for proposed new production) or any environmental audits (on existing production processes)?
- Does this business permit and/or encourage the return of its own packaging (e.g. returnable bottles, cardboard boxes, polystyrene, etc.)?
- Does this business market or produce any goods or services for monitoring, maintaining or improving the environment?

In determining the proportion of the manufacturing industry for which these environmental issues are applicable, two measures have been calculated. The first is the proportion of establishments undertaking these activities to the total number of manufacturing establishments. The second measure is the proportion of total manufacturing turnover contributed by those establishments that reported a positive response to the environmental issues. For two of the three environmental issues raised, the percentage contribution to total turnover was higher than the proportion of total establishments for all industry subdivisions. This indicates that larger establishments generally make up a relatively higher proportion of manufacturing establishments involved in these environmental protection activities.

In all, 6 per cent of manufacturing establishments in Victoria reported conducting environmental impact assessments or audits in 1991-92. These establishments contributed 41 per cent of total manufacturing turnover, reflecting the substantially higher incidence of environmental impact assessments or audits being conducted by larger establishments. The highest proportion of establishments which conducted environmental impact assessments or audits occurred in Chemical, petroleum and coal products where 15 per cent of all establishments conducted these studies. Other industry subdivisions with a relatively high incidence of the conduct of these studies were: Food, beverages and tobacco (11%); Textiles (11%); and Transport equipment (10%). The lowest incidence of the conduct of environmental impact assessments or audits occurred in: Clothing and footwear (2%); Non-metallic mineral products (2%); and Wood, wood products and furniture (3%).

In terms of the proportion of total turnover covered by establishments conducting environmental impact assessments or audits, Transport equipment with 64 per cent was, by far, the highest, followed by Textiles (47%) and Chemical, petroleum and coal products (47%). The smallest contributions were recorded in Non-metallic mineral products (10%) and Clothing and footwear (15%).

Overall, 23 per cent of all manufacturing establishments permitted and/or encouraged the return of their own containers or packaging. Those establishments contributed 42 per cent of total manufacturing turnover. The highest incidence of the return of containers or packaging was reported in Chemical, petroleum and coal products, where 40 per cent of all establishments did so. Whilst the incidence of the return of containers or packaging was only 24 per cent of establishments in Transport equipment, those establishments were likely to be the larger ones, contributing 61 per cent of turnover, the highest of any industry subdivision. Similarly, the 25 per cent of establishments in Basic metal products which allowed the return of containers or packaging contributed 60 per cent of the industry's turnover.

Only 6 per cent of all manufacturing establishments reported that they were engaged in the marketing or production of goods or services for monitoring, maintaining or improving the environment. Those establishments contributed 5 per cent of total manufacturing turnover. The results show that the size of the businesses marketing or producing environmental goods or services varied depending on the industry subdivision. The incidence of larger businesses marketing or producing goods or services to monitor, maintain or improve the environment was high in Paper, paper products, printing and publishing (with the 11% of manufacturing establishments marketing or producing these goods or services contributing 18% of the industry's turnover) and Non-metallic mineral products (with the 7% of manufacturing establishments marketing or producing these goods or services contributing 14% of the industry's turnover). The incidence of smaller businesses undertaking these activities was high in Chemical, petroleum and coal products, where the 16 per cent of all establishments involved contributed only 6 per cent of the industry's turnover.

### *Expenditure on Environmental Protection*

All manufacturers (with the exception of single establishment businesses with less than four persons employed) were also asked to provide information on their total current and capital expenditure related to environmental protection.

In selected industries, the following breakdowns were also requested:

- Current expenditure on environmental protection in respect of:
  - (i) Government and council fees, charges and taxes relating to pollution abatement and control;
  - (ii) Purchased services (e.g. payments to non-government contractors to remove and dispose of wastes); and
  - (iii) Other current expenditure on environmental protection.
- Current expenditure on environmental protection in respect of:
  - (i) Research and development carried out by individual businesses; and
  - (ii) Research and development carried out for individual businesses by other businesses.
- Current expenditure on environmental protection in respect of:
  - (i) Expenditure incurred on environmental impact assessments (for proposed new production);
  - (ii) Expenditure incurred on environmental audits (for existing production processes); and
  - (iii) Expenditure incurred on energy audits.
- Capital expenditure by individual businesses for new plant, machinery or equipment designed to abate or control water, hazardous and non-hazardous solid wastes, air, noise and other pollutants through:
  - (i) end-of-line techniques; and
  - (ii) change-in-production processes.

In 1991–92, total current expenditure by manufacturing establishments in Victoria on environmental protection was \$165.0m. This amounts to 0.3 per cent of the total manufacturing industry turnover for the year. Of the total current expenditure, 37.8 per cent was spent by manufacturers in just one industry subdivision—Chemical, petroleum and coal products (\$62.4m).

At the ASIC class level, the highest amount of current expenditure on environmental protection in 1991–92 was the \$21.2m spent by the Organic industrial chemicals n.e.c. (ASIC class 2754) industry, followed by the \$13.3m spent by the Pharmaceutical and veterinary products (ASIC class 2763) industry and the \$10.0m spent by the Synthetic resins and rubber (ASIC class 2753) industry. However, these amounts were very small relative to total turnover in each industry (7.9%, 1.7% and 0.9% respectively). For those classes available for publication, this ratio was highest in Organic industrial chemicals n.e.c. (7.9%). In by far the majority of the remaining industries, less than 1.0 per cent of total turnover for that industry was spent on ongoing environmental protection.

In 1991–92, reported total capital expenditure to abate pollution in Victoria was \$90.2m. Of this total expenditure, 61.7 per cent was spent by manufacturers in three industry subdivisions—Chemical, petroleum and coal products (\$21.9m), Basic metal products (\$18.2m) and Food, beverages and tobacco (\$15.1m).

At the ASIC class level, the largest amount of capital expenditure to abate pollution in 1991–92 for those classes available for publication occurred in the Iron and steel basic products (ASIC class 2941) industry, where \$6.6m was spent. Other industries with a relatively large capital expenditure on pollution abatement were: Motor vehicles (ASIC class 3231) (\$6.4m); Cheese (ASIC class 2123) (\$5.1m); and Synthetic resins and rubber (ASIC class 2753) (\$5.1m).

Further information on the environmental protection issues covered in the 1991–92 manufacturing census will be published in *Cost of Environment Protection, Australia, 1991–92* (4603.0).

### **Regional manufacturing activity (Table 8)**

The Melbourne Statistical Division continued to dominate manufacturing activity in Victoria in 1991–92. It contributed 81.4 per cent of all locations at 30 June 1992, 80.4 per cent of employment at the end of June 1992 and 75.9 per cent of turnover for 1991–92. The only other statistical division to contribute significantly was Barwon (5.3% of employment and 8.9% of turnover).

The Melbourne Statistical Division was also the leading contributor, by far, in all 12 industry subdivisions. For each subdivision, the Melbourne Statistical Division contributed more to employment, wages and salaries paid and turnover than did the rest of the State combined. The industry subdivision which contributed the most to Melbourne Statistical Division's turnover was Food, beverages and tobacco.

For the 10 remaining statistical divisions, a common feature was that a single industry subdivision generally dominated total manufacturing in that area. In nine of them (Barwon Statistical Division was the exception), the Food, beverages and tobacco industry subdivision contributed more than 35 per cent of total manufacturing turnover in the

statistical division. Of these, the statistical divisions that had the highest percentage contribution by Food, beverages and tobacco for their region were Mallee (84.6%) and Goulburn (70.6%).

An analysis of data from 1988–89 to 1991–92 shows that there has been a small change in the distribution of manufacturing activity between Melbourne Statistical Division and the Balance of Victoria. Melbourne Statistical Division's share of employment decreased by 0.3 percentage points to 80.4 per cent and its share of turnover fell by 3.3 percentage points to 75.9 per cent.

#### Australian and New Zealand Standard Industrial Classification (ANZSIC) (Table 9)

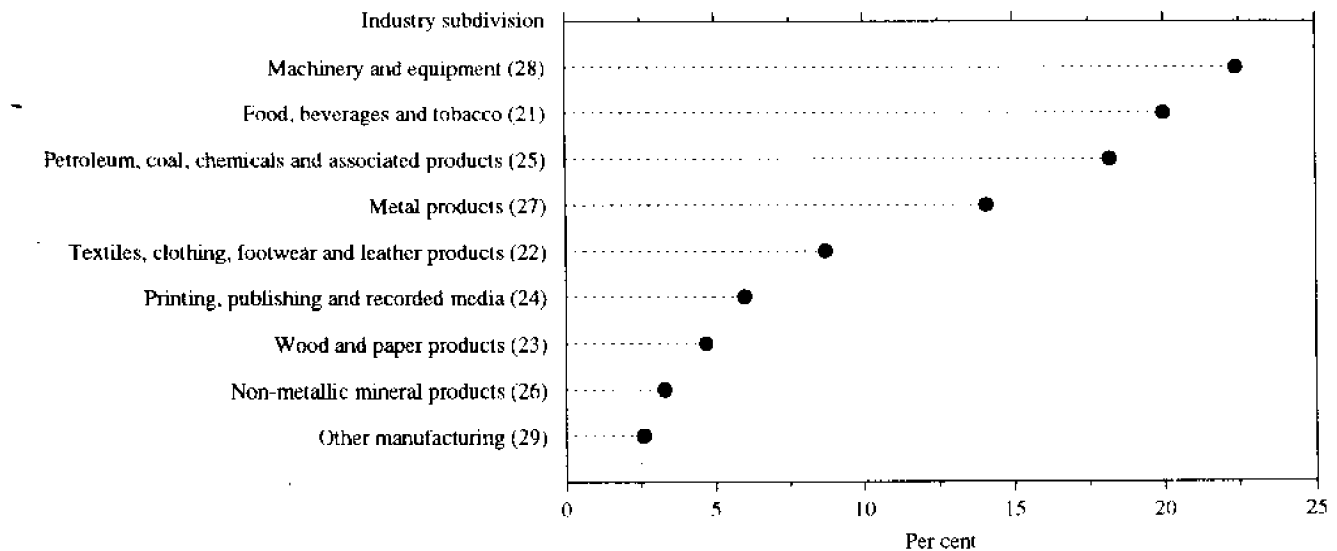
As explained in the introduction to Table 9, a new industry classification called the Australian and New Zealand Standard Industrial Classification (ANZSIC) is being introduced to replace the ASIC currently in use. Table 9 presents a concordance of data between those two industry classifications in respect of the 1991–92 reference year.

At the total manufacturing level, there is very little difference in the figures reported for Victoria under the two industry classifications. Under ANZSIC, there are 2.4 per cent fewer establishments in the manufacturing industry, 1.3 per cent fewer persons employed and 0.5 per cent less turnover than under ASIC. This is because, on balance, there are more establishments classified to industries other than manufacturing under ANZSIC than under ASIC.

The major differences between the two classifications becomes apparent in examining turnover at the industry subdivision level. As the chart below shows, under ANZSIC there are three large industry subdivisions, one intermediate sized industry subdivision and five industry subdivisions of a substantially smaller size. Under ASIC (for which there were 12 industry subdivisions), there was a more even distribution of turnover (as the chart on page 1 shows).

The chart below ranks ANZSIC industry subdivisions from the largest to the smallest contributor for 1991–92 manufacturing turnover. With the introduction of this new industry classification, Machinery and equipment is now the largest contributor to Victorian manufacturing industry turnover with 22.4 per cent of the total turnover. Food, beverages and tobacco (20.0%) is now the second largest contributor. These were followed by Petroleum, coal, chemicals and associated products (18.2%) and Metal products (14.1%). The remaining five industry subdivisions each contributed less than 9 per cent to total turnover, with Other manufacturing (2.6%) being the smallest.

**DISTRIBUTION OF TURNOVER, ANZSIC SUBDIVISIONS, VICTORIA, 1991–92**



Detailed tabulations of data included in this publication, classified according to ANZSIC, are available on request. The contact officer for these data is Mark Wise on Sydney (02) 268 4541.

TABLE 1. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION, VICTORIA  
1988-89 TO 1991-92 (b)

Industry subdivision		Establishments at 30 June (c) (No.)	Employment at end of June (d) (000)	Wages and salaries (e)(f) (\$m)	Turnover (f) (\$m)	Persons employed per establishment (No.)	Turnover per person employed (f) (\$'000)	
ASIC code	Description							
21	Food, beverages and tobacco	1991-92	1,198	47.8	1,376.8	10,670.4	40	223.2
		1990-91 (g)	1,160	48.8	1,325.5	10,503.7	42	215.4
		1989-90	1,273	49.8	1,229.8	10,098.4	39	202.9
		1988-89	1,308	52.8	1,200.2	9,747.4	40	184.6
23	Textiles	1991-92	380	13.4	379.0	1,978.3	35	147.2
		1990-91 (g)	387	14.3	382.4	1,967.7	37	137.4
		1989-90	376	15.5	391.3	2,008.8	41	129.8
		1988-89	370	17.6	401.5	2,119.3	47	120.6
24	Clothing and footwear	1991-92	1,205	23.4	552.9	2,322.6	19	99.2
		1990-91 (g)	1,145	26.9	604.9	2,470.2	23	91.8
		1989-90	1,279	33.4	687.4	2,635.8	26	79.0
		1988-89	1,292	38.8	716.7	2,766.4	30	71.4
25	Wood, wood products and furniture	1991-92	1,856	17.6	417.2	1,787.6	10	101.3
		1990-91 (g)	1,920	19.3	462.8	1,944.9	10	101.0
		1989-90	2,063	22.6	520.9	2,139.1	11	94.7
		1988-89	1,957	23.3	459.4	2,062.0	12	88.4
26	Paper, paper products, printing and publishing	1991-92	1,471	31.5	1,033.4	4,693.2	21	149.1
		1990-91 (g)	1,457	33.1	1,061.3	4,729.9	23	143.1
		1989-90	1,499	35.7	1,031.7	4,642.7	24	130.2
		1988-89	1,420	38.2	996.2	4,791.7	27	125.3
27	Chemical, petroleum and coal products	1991-92	396	17.3	658.2	6,682.0	44	385.7
		1990-91 (g)	371	17.8	657.5	6,828.9	48	382.8
		1989-90	379	18.4	636.7	r5,981.5	49	r325.0
		1988-89	387	19.2	588.5	4,401.7	50	229.4
28	Non-metallic mineral products	1991-92	464	9.7	328.7	1,679.4	21	172.3
		1990-91 (g)	464	10.7	354.6	1,867.9	23	175.0
		1989-90	550	11.5	362.9	2,086.8	21	181.2
		1988-89	500	11.8	329.0	1,969.8	24	167.4
29	Basic metal products	1991-92	288	10.7	394.7	3,948.9	37	370.2
		1990-91 (g)	270	11.4	427.8	4,085.4	42	358.1
		1989-90	273	12.3	414.4	3,915.8	45	318.7
		1988-89	275	13.1	391.0	3,930.5	48	299.8
31	Fabricated metal products	1991-92	1,749	25.7	734.3	3,570.3	15	139.2
		1990-91 (g)	1,810	28.2	808.9	3,797.1	16	134.7
		1989-90	1,920	33.7	877.4	4,144.2	18	123.0
		1988-89	1,758	33.8	789.7	3,754.0	19	111.2
32	Transport equipment	1991-92	598	39.2	1,211.5	6,373.7	66	162.4
		1990-91 (g)	578	45.0	1,506.1	7,296.5	78	162.3
		1989-90	596	51.0	1,425.1	7,934.7	86	155.5
		1988-89	572	52.5	1,313.3	7,527.2	92	143.3
33	Other machinery and equipment	1991-92	1,860	36.5	1,136.2	5,420.1	20	148.6
		1990-91 (g)	1,816	39.0	1,216.7	5,681.9	21	145.8
		1989-90	1,881	42.5	1,157.7	5,366.6	23	126.4
		1988-89	1,799	46.4	1,155.2	5,608.1	26	120.9
34	Miscellaneous manufacturing	1991-92	1,203	23.2	704.2	3,568.3	19	153.8
		1990-91 (g)	1,195	23.3	702.6	3,439.2	19	147.7
		1989-90	1,273	24.7	644.8	3,353.2	19	135.9
		1988-89	1,281	26.8	629.1	3,342.1	21	124.5
21-34	Total manufacturing	1991-92	12,668	296.1	8,927.1	52,694.9	23	178.0
		1990-91 (g)	12,573	317.6	9,511.2	54,613.3	25	171.9
		1989-90	13,362	350.9	9,380.2	r54,307.6	26	r154.8
		1988-89	12,919	374.3	8,969.8	52,020.2	29	139.0

(a) See paragraph 31 of the Explanatory Notes. (b) For comparability of data over the time periods shown, see paragraphs 27 to 30 of the Explanatory Notes. (c) See paragraphs 4 to 10 and 28 of the Explanatory Notes. (d) Includes working proprietors. (e) Excludes the drawings of working proprietors. (f) Value data are at current prices and, therefore, do not discount the impact of price changes. (g) Data presented for 1990-91 have undergone extensive revision due to further processing of that year's data and, therefore, generally differ from those previously published.

**TABLE 2. MANUFACTURING EMPLOYMENT INCLUDING SOLE PROPRIETORS AND PARTNERSHIPS NOT EMPLOYING OTHERS BY INDUSTRY SUBDIVISION, VICTORIA, 1991**

<i>Industry subdivision</i>		<i>Manufacturing employment, August 1991 (a)</i>		
		<i>Sole proprietors and partnerships not employing others (No.)</i>	<i>Total other (b) (No.)</i>	<i>Manufacturing census employment at end of June 1991 (b) (No.)</i>
<i>ASIC code</i>	<i>Description</i>			
21	Food, beverages and tobacco	1,081	40,497	48,753
23	Textiles	521	12,954	14,326
24	Clothing and footwear	2,525	24,024	26,906
25	Wood, wood products and furniture	1,972	16,936	19,264
26	Paper, paper products, printing and publishing	1,547	30,917	33,051
27	Chemical, petroleum and coal products	338	16,169	17,839
28	Non-metallic mineral products	902	9,593	10,673
29	Basic metal products	173	9,840	11,407
31	Fabricated metal products	1,233	22,977	28,191
32	Transport equipment	639	35,528	44,967
33	Other machinery and equipment	1,355	35,327	38,979
34	Miscellaneous manufacturing	1,563	19,873	23,291
..	Manufacturing undefined (c)	1,488	6,870	..
<b>21-34</b>	<b>Total manufacturing</b>	<b>15,337</b>	<b>281,505</b>	<b>317,647</b>

(a) Source: 1991 Census of Population and Housing. (b) Includes working proprietors with employees. For an explanation of the differences between 'Total other' and 'Manufacturing census employment at end of June 1991', see paragraphs 18, 19 and 33 to 36 of the Explanatory Notes. (c) Those persons who indicated that they were employed in the manufacturing industry but the description given was insufficient to enable them to be attributed to a specific industry subdivision.

**TABLE 3. DEMOGRAPHIC CHARACTERISTICS OF PERSONS EMPLOYED BY INDUSTRY SUBDIVISION VICTORIA, AUGUST 1991 (Per cent)**

<i>Industry</i>		<i>Proportion of industry</i>					
		<i>Sex</i>		<i>Age group (years)</i>			
<i>ASIC code</i>	<i>Description</i>	<i>Males</i>	<i>Females</i>	<i>15-24</i>	<i>25-34</i>	<i>35-54</i>	<i>55 and over</i>
<b>MANUFACTURING—</b>							
21	Food, beverages and tobacco	67.1	33.0	19.0	28.1	43.6	9.3
23	Textiles	61.2	38.8	14.2	25.5	48.5	11.7
24	Clothing and footwear	29.8	70.2	13.8	26.3	50.2	9.7
25	Wood, wood products and furniture	80.7	19.3	24.4	27.7	38.2	9.7
26	Paper, paper products, printing and publishing	65.4	34.6	18.0	28.1	44.4	9.5
27	Chemical, petroleum and coal products	73.0	27.0	11.0	31.0	49.3	8.8
28	Non-metallic mineral products	82.4	17.6	12.2	28.1	47.4	12.3
29	Basic metal products	87.3	12.7	13.6	29.7	47.2	9.5
31	Fabricated metal products	79.9	20.1	17.2	26.3	44.6	11.9
32	Transport equipment	80.2	19.8	15.6	28.8	46.6	9.0
33	Other machinery and equipment	73.9	26.1	15.5	28.6	45.6	10.2
34	Miscellaneous manufacturing	70.4	29.6	15.2	28.6	46.5	9.7
..	Manufacturing undefined (a)	75.6	24.4	16.7	27.0	45.3	11.0
<b>21-34</b>	<b>Total manufacturing</b>	<b>69.7</b>	<b>30.3</b>	<b>16.4</b>	<b>28.0</b>	<b>45.7</b>	<b>9.9</b>
<b>01-99</b>	<b>ALL INDUSTRIES</b>	<b>56.9</b>	<b>43.1</b>	<b>19.2</b>	<b>27.1</b>	<b>44.2</b>	<b>9.6</b>

Source: 1991 Census of Population and Housing.

(a) Those persons who indicated that they were employed in the manufacturing industry but the description given was insufficient to enable them to be attributed to a specific industry subdivision.



TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
VICTORIA, 1991-92

Industry class		Establishments at 30 June (b) (No.)	Employment at end of June (c) (No.)	Wages and salaries (d) (\$m)	Turnover (\$m)	Persons employed per establishment (No.)	Turnover per person employed (\$'000)
ASIC code	Description						
FOOD, BEVERAGES AND TOBACCO—							
Meat products—							
2115	Meat (except smallgoods or poultry)	90	5,180	148.4	1,127.9	58	217.7
2116	Poultry	31	1,959	41.0	272.3	63	139.0
2117	Bacon, ham and smallgoods n.e.c.	33	1,852	53.5	295.1	56	159.3
211	Total	154	8,991	242.9	1,695.2	58	188.5
Milk products—							
2121	Liquid milk and cream	17	1,999	57.6	720.3	118	360.3
2122	Butter	11	1,230	38.1	541.0	112	439.8
2123	Cheese	27	2,967	76.0	641.4	110	216.2
2124	Ice cream and frozen confections	8	576	19.5	165.9	72	287.9
2125	Milk products n.e.c.	7	812	26.3	284.3	116	350.1
212	Total	70	7,584	217.5	2,352.9	108	310.2
Fruit and vegetable products—							
2131	Fruit products	33	1,560	57.8	530.9	47	340.3
2132	Vegetable products	27	2,291	77.6	561.0	85	244.9
213	Total	60	3,851	135.4	1,092.0	64	283.6
214	Margarine and oils and fats n.e.c.	10	n.p.	n.p.	n.p.	n.p.	n.p.
Flour mill and cereal food products—							
2151	Flour mill products	6	493	n.p.	n.p.	82	n.p.
2152	Starch, gluten and starch sugars	4	160	n.p.	n.p.	40	n.p.
2153	Cereal foods and baking mixes	20	1,679	53.4	357.7	84	213.1
215	Total	30	2,332	75.7	552.3	78	236.8
Bread, cakes and biscuits—							
2161	Bread	441	6,233	123.0	481.3	14	77.2
2162	Cakes and pastries	124	2,611	n.p.	n.p.	21	n.p.
2163	Biscuits	17	1,575	n.p.	n.p.	93	n.p.
216	Total	582	10,419	226.9	943.4	18	90.5
Other food products—							
2171	Raw sugar	—	—	—	—	—	—
2173	Confectionery and cocoa products	47	3,836	126.3	629.0	82	164.0
2174	Processed seafoods	17	436	9.6	85.5	26	196.0
2175	Prepared animal and bird foods	44	1,777	54.2	565.5	40	318.2
2176	Food products n.e.c.	83	3,066	86.1	762.7	37	248.8
217	Total	191	9,115	276.2	2,042.8	48	224.1
Beverages and malt—							
2185	Soft drinks, cordials and syrups	23	1,329	n.p.	n.p.	58	n.p.
2186	Beer	3	1,305	n.p.	n.p.	435	n.p.
2187	Malt	9	n.p.	n.p.	n.p.	n.p.	n.p.
2188	Wine and brandy	64	1,280	31.9	280.2	20	218.9
2189	Alcoholic beverages n.e.c.	1	n.p.	n.p.	n.p.	n.p.	n.p.
218	Total	100	4,136	145.5	1,420.6	41	343.5
219	Tobacco products	1	n.p.	n.p.	n.p.	n.p.	n.p.
21	Total food, beverages and tobacco	1,198	47,797	1,376.8	10,670.4	40	223.2

For footnotes see end of table.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
VICTORIA, 1991-92—continued

Industry class		Establishments	Employment	Wages and	Turnover	Persons	Turnover
ASIC code	Description	at 30 June (b) (No.)	at end of June (c) (No.)	salaries (d) (\$m)			
<b>TEXTILES—</b>							
Textile fibres, yarns and woven fabrics—							
2341	Cotton ginning	—	—	—	—	—	—
2342	Wool scouring and top making	14	510	17.2	73.6	36	144.3
2343	Man-made fibres and yarns	9	1,027	37.0	131.8	114	128.4
2344	Man-made fibre broadwoven fabrics	21	1,575	45.8	221.9	75	140.9
2345	Cotton yarns and broadwoven fabrics	21	1,149	30.6	122.4	55	106.5
2346	Worsted yarns and broadwoven fabrics	8	856	20.5	120.9	107	141.3
2347	Woolen yarns and broadwoven fabrics	12	1,113	29.0	132.7	93	119.2
2348	Narrow woven and elastic textiles	15	661	18.3	102.3	44	154.7
2349	Textile finishing	43	1,313	39.9	165.9	31	126.4
234	<i>Total</i>	143	8,204	238.1	1,071.5	57	130.6
Other textile products—							
2351	Household textiles	37	692	n.p.	n.p.	19	n.p.
2352	Textile floor coverings	49	2,379	68.8	509.0	49	214.0
2353	Felt and felt products	3	181	n.p.	n.p.	60	n.p.
2354	Canvas and associated products n.e.c.	98	718	14.3	64.2	7	89.5
2355	Rope, cordage and twine	9	380	13.2	58.3	42	153.3
2356	Textile products n.e.c.	41	890	22.7	151.0	22	169.6
235	<i>Total</i>	237	5,240	140.9	906.8	22	173.1
23	<b>Total textiles</b>	380	13,444	379.0	1,978.3	35	147.2
<b>CLOTHING AND FOOTWEAR—</b>							
Knitting mills—							
2441	Hosiery	28	1,957	n.p.	n.p.	70	n.p.
2442	Cardigans and pullovers	64	1,124	n.p.	n.p.	18	n.p.
2443	Knitted goods n.e.c.	69	1,810	53.0	302.1	26	166.9
244	<i>Total</i>	161	4,891	130.8	591.8	30	121.0
Clothing—							
2451	Men's trousers and shorts; work clothing	48	1,257	27.8	117.4	26	93.4
2452	Men's suits and coats; waterproof clothing	41	n.p.	n.p.	n.p.	n.p.	n.p.
2453	Women's outerwear n.e.c.	314	4,008	83.2	431.6	13	107.7
2454	Foundation garments	6	n.p.	n.p.	n.p.	n.p.	n.p.
2455	Underwear and infants' clothing n.e.c.	69	3,093	79.6	284.1	45	91.9
2456	Headwear and clothing n.e.c.	454	4,097	80.0	368.8	9	90.0
245	<i>Total</i>	932	15,045	334.3	1,404.7	16	93.4
246	<i>Footwear</i>	112	3,487	87.8	326.0	31	93.5
24	<b>Total clothing and footwear</b>	1,205	23,423	552.9	2,322.6	19	99.2
<b>WOOD, WOOD PRODUCTS AND FURNITURE—</b>							
Wood and wood products—							
2531	Log sawmilling	113	1,432	34.4	171.9	13	120.1
2532	Resawn and dressed timber	30	1,027	29.7	137.4	34	133.8
2533	Veneers and manufactured boards of wood	31	912	27.1	151.2	29	165.8
2534	Wooden doors	12	186	4.6	25.9	16	139.1
2535	Wooden structural fittings and joinery n.e.c.	400	3,350	79.8	316.5	8	94.5
2536	Wooden containers	43	n.p.	n.p.	n.p.	n.p.	n.p.
2537	Hardwood woodchips	2	n.p.	n.p.	n.p.	n.p.	n.p.
2538	Wood products n.e.c.	180	1,043	21.5	76.4	6	73.3
253	<i>Total</i>	811	8,342	206.2	925.1	10	110.9
Furniture and mattresses—							
2541	Furniture (except sheet metal)	1,006	8,225	181.8	726.1	8	88.3
2542	Mattresses (except rubber)	39	1,076	29.2	136.4	28	126.8
254	<i>Total</i>	1,045	9,301	211.0	862.5	9	92.7
25	<b>Total wood, wood products and furniture</b>	1,856	17,643	417.2	1,787.6	10	101.3

For footnotes see end of table.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
VICTORIA, 1991-92—continued

Industry class		Establishments at 30 June	Employment at end of June	Wages and salaries	Turnover	Persons employed per establishment	Turnover per person employed
ASIC code	Description	(b) (No.)	(c) (No.)	(d) (\$m)	(\$m)	(No.)	(\$'000)
<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING—</b>							
Paper and paper products—							
2631	Pulp, paper and paperboard	31	1,847	88.7	606.4	60	328.3
2632	Paper bags (including textile bags)	15	599	17.9	136.0	40	227.1
2633	Solid fibreboard containers	15	598	16.6	78.2	40	130.7
2634	Corrugated fibreboard containers	12	1,800	66.9	393.3	150	218.5
2635	Paper products n.e.c.	39	1,646	60.2	362.1	42	220.0
263	<i>Total</i>	<i>112</i>	<i>6,490</i>	<i>250.3</i>	<i>1,576.0</i>	<i>58</i>	<i>242.8</i>
Printing and allied industries—							
2641	Publishing	183	2,171	68.8	418.9	12	193.0
2642	Printing and publishing	155	6,711	229.7	718.7	43	107.1
2643	Paper stationery	107	3,447	97.5	522.3	32	151.5
2644	Printing and bookbinding	677	10,311	316.2	1,240.5	15	120.3
2645	Printing trade services n.e.c.	237	2,354	70.9	216.8	10	92.1
264	<i>Total</i>	<i>1,359</i>	<i>24,994</i>	<i>783.1</i>	<i>3,117.2</i>	<i>18</i>	<i>124.7</i>
26	<i>Total paper, paper products, printing and publishing</i>	<i>1,471</i>	<i>31,484</i>	<i>1,033.4</i>	<i>4,693.2</i>	<i>21</i>	<i>149.1</i>
<b>CHEMICAL, PETROLEUM AND COAL PRODUCTS—</b>							
Basic chemicals—							
2751	Chemical fertilisers	19	417	14.4	150.6	22	361.2
2752	Industrial gases	2	n.p.	n.p.	n.p.	n.p.	n.p.
2753	Synthetic resins and rubber	44	2,979	138.0	1,171.1	68	393.1
2754	Organic industrial chemicals n.e.c.	30	563	20.4	271.5	19	482.2
2755	Inorganic industrial chemicals n.e.c.	32	770	27.2	234.9	24	305.1
275	<i>Total</i>	<i>127</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
Other chemical products—							
2761	Ammunition, explosives and fireworks	8	1,382	53.3	165.3	173	119.6
2762	Paints	41	1,820	55.1	514.1	44	282.5
2763	Pharmaceutical and veterinary products	37	3,528	124.2	804.7	95	228.1
2764	Pesticides	7	n.p.	n.p.	n.p.	n.p.	n.p.
2765	Soap and other detergents	66	1,458	47.2	345.8	22	237.2
2766	Cosmetics and toilet preparations	25	497	14.2	99.6	20	200.5
2767	Inks	14	n.p.	n.p.	n.p.	n.p.	n.p.
2768	Chemical products n.e.c.	48	1,069	37.9	249.4	22	233.3
276	<i>Total</i>	<i>246</i>	<i>10,578</i>	<i>357.2</i>	<i>2,424.5</i>	<i>43</i>	<i>229.2</i>
277	<i>Petroleum refining</i>	<i>13</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>	<i>n.p.</i>
278	<i>Petroleum and coal products n.e.c.</i>	<i>10</i>	<i>186</i>	<i>5.8</i>	<i>36.5</i>	<i>19</i>	<i>196.0</i>
27	<i>Total chemical, petroleum and coal products</i>	<i>396</i>	<i>17,326</i>	<i>658.2</i>	<i>6,682.0</i>	<i>44</i>	<i>385.7</i>

For footnotes see end of table.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
VICTORIA, 1991-92—continued

Industry class		Establishments at 30 June	Employment at end of June	Wages and salaries	Turnover	Persons employed per establishment	Turnover per person employed
ASIC code	Description	(No.)	(No.)	(\$m)	(\$m)	(No.)	(\$'000)
<b>NON-METALLIC MINERAL PRODUCTS—</b>							
285	Glass and glass products	57	1,976	80.3	357.2	35	180.8
<b>Clay products and refractories—</b>							
2861	Clay bricks	19	862	29.4	118.3	45	137.3
2862	Refractories	6	51	1.3	3.7	9	73.1
2863	Ceramic tiles and pipes	27	1,066	34.2	99.8	39	93.6
2864	Ceramic goods n.e.c.	68	823	21.6	80.4	12	97.7
286	Total	120	2,802	86.5	302.3	23	107.9
<b>Cement and concrete products—</b>							
2871	Cement	3	n.p.	n.p.	n.p.	n.p.	n.p.
2872	Ready mixed concrete	63	804	25.3	261.1	13	324.8
2873	Concrete pipes and box culverts	14	n.p.	n.p.	n.p.	n.p.	n.p.
2874	Concrete products n.e.c.	111	1,542	41.2	202.4	14	131.3
287	Total	191	3,047	101.4	641.1	16	210.4
<b>Other non-metallic mineral products—</b>							
2881	Plaster products and expanded minerals	16	527	15.3	128.3	33	243.5
2882	Stone products	50	333	8.4	35.1	7	105.5
2883	Glass wool and mineral wool products	13	750	28.0	151.2	58	201.7
2884	Non-metallic mineral products n.e.c.	17	312	8.9	64.1	18	205.5
288	Total	96	1,922	60.6	378.8	20	197.1
28	Total non-metallic mineral products	464	9,747	328.7	1,679.4	21	172.3
<b>BASIC METAL PRODUCTS—</b>							
<b>Basic iron and steel—</b>							
2941	Iron and steel basic products	101	3,806	136.2	1,718.3	38	451.5
2942	Iron casting	29	1,384	39.9	153.5	48	110.9
2943	Steel casting	33	624	19.3	68.4	19	109.7
2944	Iron and steel forging	14	142	5.2	16.0	10	112.4
2945	Steel pipes and tubes	17	475	15.7	86.3	28	181.7
294	Total	194	6,431	216.3	2,042.5	33	317.6
<b>Basic non-ferrous metals—</b>							
2951	Copper smelting, refining	—	—	—	—	—	—
2952	Silver, lead, zinc smelting, refining	6	n.p.	n.p.	n.p.	n.p.	n.p.
2953	Alumina	—	—	—	—	—	—
2954	Aluminium smelting	4	1,652	n.p.	n.p.	413	n.p.
2955	Nickel smelting, refining	—	—	—	—	—	—
2956	Non-ferrous metals n.e.c. smelting, refining	2	n.p.	n.p.	n.p.	n.p.	n.p.
2957	Secondary recovery and alloying of non-ferrous metals n.e.c.	22	491	n.p.	n.p.	22	n.p.
295	Total	34	2,205	n.p.	n.p.	65	n.p.
<b>Non-ferrous metal basic products—</b>							
2961	Aluminium rolling, drawing, extruding	11	961	39.7	379.4	87	394.8
2962	Non-ferrous metals n.e.c. rolling, drawing, extruding	14	563	n.p.	n.p.	40	n.p.
2963	Non-ferrous metal casting	35	507	15.8	62.6	14	123.5
296	Total	60	2,031	n.p.	n.p.	34	n.p.
29	Total basic metal products	288	10,667	394.7	3,948.9	37	370.2

For footnotes see end of table.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
VICTORIA, 1991-92—continued

Industry class		Establishments at 30 June	Employment at end of June	Wages and salaries	Turnover	Persons employed per establishment	Turnover per person employed
ASIC code	Description	(b) (No.)	(c) (No.)	(d) (\$m)	(\$m)	(No.)	(\$'000)
<b>FABRICATED METAL PRODUCTS—</b>							
<b>Structural metal products—</b>							
3141	Fabricated structural steel	269	3,144	86.9	483.7	12	153.8
3142	Architectural aluminium products	175	1,988	60.1	261.1	11	131.3
3143	Architectural metal products n.e.c.	96	1,015	26.8	144.1	11	142.0
314	<i>Total</i>	540	6,147	173.8	888.9	11	144.6
<b>Sheet metal products—</b>							
3151	Metal containers	35	2,024	68.8	567.0	58	280.1
3152	Sheet metal furniture	42	778	22.2	74.5	19	95.8
3153	Sheet metal products n.e.c.	277	4,407	132.5	656.2	16	148.9
315	<i>Total</i>	354	7,209	223.5	1,297.7	20	180.0
<b>Other fabricated metal products—</b>							
3161	Cutlery and hand tools n.e.c.	111	1,263	29.4	106.7	11	84.4
3162	Springs and wire products	92	1,927	51.5	273.3	21	141.8
3163	Nuts, bolts, screws and rivets	42	1,367	47.7	265.2	33	194.0
3164	Metal coating and finishing	168	1,453	36.1	130.0	9	89.5
3165	Non-ferrous steam, gas and water fittings	27	1,344	38.0	134.7	50	100.2
3166	Boiler and plate work	40	400	12.0	44.8	10	111.9
3167	Metal blinds and awnings	27	219	4.6	25.1	8	114.5
3168	Fabricated metal products n.e.c.	348	4,325	117.5	404.1	12	93.4
316	<i>Total</i>	855	12,298	336.9	1,383.7	14	112.5
31	<b>Total fabricated metal products</b>	<b>1,749</b>	<b>25,654</b>	<b>734.3</b>	<b>3,570.3</b>	<b>15</b>	<b>139.2</b>
<b>TRANSPORT EQUIPMENT—</b>							
<b>Motor vehicles and parts—</b>							
3231	Motor vehicles	40	15,183	420.1	3,582.5	380	236.0
3232	Motor vehicle bodies, trailers, caravans	114	1,510	36.7	188.8	13	125.1
3233	Motor vehicle instruments and electrical equipment n.e.c.	27	3,890	122.2	566.2	144	145.6
3234	Motor vehicle parts n.e.c.	268	9,703	278.9	1,033.2	36	106.5
323	<i>Total</i>	449	30,286	857.9	5,370.8	67	177.3
<b>Other transport equipment—</b>							
3241	Ships	10	1,041	n.p.	n.p.	104	n.p.
3242	Boats	58	568	14.5	51.5	10	90.7
3243	Railway rolling stock and locomotives	3	401	n.p.	n.p.	134	n.p.
3244	Aircraft	53	6,710	280.4	475.2	127	70.8
3245	Transport equipment n.e.c.	25	241	n.p.	n.p.	10	n.p.
324	<i>Total</i>	149	8,961	353.6	1,003.0	60	111.9
32	<b>Total transport equipment</b>	<b>598</b>	<b>39,247</b>	<b>1,211.5</b>	<b>6,373.7</b>	<b>66</b>	<b>162.4</b>

For footnotes see end of table.

TABLE 4. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
VICTORIA, 1991-92—continued

Industry class		Establishments at 30 June (b)	Employment at end of June (c)	Wages and salaries (d)	Turnover (\$m)	Persons employed per establishment (No.)	Turnover per person employed (\$'000)
ASIC code	Description	(No.)	(No.)	(\$m)			
<b>OTHER MACHINERY AND EQUIPMENT—</b>							
<b>Photographic, professional and scientific equipment—</b>							
3341	Photographic and optical goods	25	1,063	41.7	316.8	43	298.0
3342	Photographic film processing	169	1,351	28.1	105.5	8	78.1
3343	Measuring, professional and scientific equipment n.e.c.	88	1,812	62.1	216.3	21	119.4
334	<i>Total</i>	282	4,226	131.9	638.6	15	151.1
<b>Appliances and electrical equipment—</b>							
3351	Radio and TV receivers; audio equipment	22	329	8.6	57.1	15	173.4
3352	Electronic equipment n.e.c.	203	6,647	240.4	1,369.8	33	206.1
3353	Refrigerators and household appliances	93	4,127	107.6	655.8	44	158.9
3354	Water heating systems	20	n.p.	n.p.	n.p.	n.p.	n.p.
3355	Electric and telephone cable and wire	18	1,505	50.1	373.0	84	247.9
3356	Batteries	2	n.p.	n.p.	n.p.	n.p.	n.p.
3357	Electrical machinery and equipment n.e.c.	240	4,755	146.9	597.4	20	125.6
335	<i>Total</i>	598	17,847	564.8	3,108.9	30	174.2
<b>Industrial machinery and equipment—</b>							
3361	Agricultural machinery	94	839	17.1	65.4	9	78.0
3362	Construction machinery	18	247	7.2	40.7	14	164.7
3363	Materials handling equipment	89	1,300	39.9	150.4	15	115.7
3364	Wood and metal working machinery	89	940	26.8	96.7	11	102.8
3365	Pumps and compressors	31	1,310	35.7	210.2	42	160.5
3366	Commercial space heating and cooling equipment	21	779	24.8	110.7	37	142.2
3367	Dies, saw blades and machine tool accessories	172	2,505	76.5	217.9	15	87.0
3368	Food processing machinery	44	687	20.0	82.3	16	119.8
3369	Industrial machinery and equipment n.e.c.	422	5,789	191.5	698.2	14	120.6
336	<i>Total</i>	980	14,396	439.4	1,672.6	15	116.2
33	<i>Total other machinery and equipment</i>	1,860	36,469	1,136.2	5,420.1	20	148.6
<b>MISCELLANEOUS MANUFACTURING—</b>							
<b>Leather and leather products—</b>							
3451	Leather tanning and fur dressing	34	902	26.3	193.3	27	214.4
3452	Leather and leather substitute goods n.e.c.	44	439	9.3	37.7	10	85.9
345	<i>Total</i>	78	1,341	35.5	231.0	17	172.3
<b>Rubber products—</b>							
3461	Rubber tyres, tubes, belts, hose and sheets	35	2,948	132.5	534.7	84	181.4
3462	Rubber products n.e.c.	42	1,452	37.6	186.8	35	128.7
346	<i>Total</i>	77	4,400	170.2	721.5	57	164.0
<b>Plastic and related products—</b>							
3471	Flexible packaging and abrasive papers	71	3,463	116.4	735.9	49	212.5
3472	Rigid plastic sheeting	7	n.p.	n.p.	n.p.	n.p.	n.p.
3473	Hard surface floor coverings n.e.c.	4	n.p.	n.p.	n.p.	n.p.	n.p.
3474	Plastic products n.e.c.	406	9,689	282.3	1,431.6	24	147.8
347	<i>Total</i>	488	13,701	417.0	2,264.7	28	165.3
<b>Other manufacturing—</b>							
3481	Ophthalmic articles	22	95	2.1	7.9	4	83.6
3482	Jewellery and silverware	123	913	18.7	108.4	7	118.7
3483	Brooms and brushes	12	116	2.6	12.7	10	109.8
3484	Signs and advertising displays	255	1,598	36.6	123.5	6	77.3
3485	Sporting equipment	42	441	10.1	50.1	11	113.5
3486	Writing and marking equipment	12	54	1.0	3.4	5	63.3
3487	Manufacturing n.e.c.	94	548	10.4	45.1	6	82.2
348	<i>Total</i>	560	3,765	81.5	351.1	7	93.3
34	<i>Total miscellaneous manufacturing</i>	1,203	23,207	704.2	3,568.3	19	153.8
21-34	<b>TOTAL MANUFACTURING</b>	12,668	296,108	8,927.1	52,694.9	23	178.0

(a) See paragraph 31 of the Explanatory Notes. (b) See paragraphs 4 to 10 of the Explanatory Notes. (c) Includes working proprietors. (d) Excludes the drawings of working proprietors.

TABLE 5. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, VICTORIA, 1991-92

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d) (e)		Turnover (e)	
	Number	Proportion (Per cent)	Number	Proportion (Per cent)	(\$m)	Proportion (Per cent)	(\$m)	Proportion (Per cent)
<b>FOOD, BEVERAGES AND TOBACCO</b>								
0 - 3 persons	202	16.9	488	1.0	6.9	0.5	45.4	0.4
4 - 9 persons	432	36.1	2,581	5.4	40.1	2.9	233.9	2.2
10 - 19 persons	237	19.8	3,172	6.6	62.5	4.6	497.3	4.7
20 - 49 persons	147	12.3	4,251	8.9	100.3	7.3	851.9	8.0
50 - 99 persons	82	6.8	5,535	11.6	155.7	11.3	1,227.2	11.5
Total less than 100 persons	1,100	91.8	16,027	33.5	365.6	26.6	2,855.7	26.8
100 - 199 persons	43	3.6	5,911	12.4	171.5	12.5	1,791.1	16.8
200 - 499 persons	38	3.2	11,557	24.2	358.5	26.1	2,631.6	24.7
500 - 999 persons	13	1.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	4	0.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total 100 or more persons	98	8.2	31,770	66.5	1,008.3	73.4	7,799.0	73.2
<b>Total</b>	<b>1,198</b>	<b>100.0</b>	<b>47,797</b>	<b>100.0</b>	<b>1,373.8</b>	<b>100.0</b>	<b>10,654.8</b>	<b>100.0</b>
<b>TEXTILES</b>								
0 - 3 persons	81	21.3	175	1.3	2.7	0.7	18.3	0.9
4 - 9 persons	135	35.5	807	6.0	16.1	4.3	86.3	4.4
10 - 19 persons	49	12.9	648	4.8	13.8	3.7	73.9	3.8
20 - 49 persons	47	12.4	1,371	10.2	35.4	9.5	189.3	9.6
50 - 99 persons	22	5.8	1,634	12.2	45.3	12.1	214.0	10.9
Total less than 100 persons	334	87.9	4,635	34.5	113.3	30.3	581.8	29.6
100 - 199 persons	35	9.2	4,820	35.8	138.2	38.0	825.7	42.1
200 - 499 persons	8	2.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500 - 999 persons	3	0.8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	46	12.1	8,809	65.5	261.0	69.7	1,380.6	70.3
<b>Total</b>	<b>380</b>	<b>100.0</b>	<b>13,444</b>	<b>100.0</b>	<b>374.3</b>	<b>100.0</b>	<b>1,962.4</b>	<b>100.0</b>
<b>CLOTHING AND FOOTWEAR</b>								
0 - 3 persons	367	30.5	794	3.4	10.1	1.9	56.8	2.5
4 - 9 persons	399	33.1	2,314	9.9	39.4	7.3	191.7	8.4
10 - 19 persons	187	15.5	2,476	10.6	49.3	9.2	219.7	9.6
20 - 49 persons	150	12.4	4,449	19.0	98.8	18.4	470.9	20.6
50 - 99 persons	52	4.3	3,475	14.8	86.1	16.0	369.6	16.2
Total less than 100 persons	1,155	95.9	13,508	57.7	283.7	52.7	1,308.8	57.2
100 - 199 persons	31	2.6	4,144	17.7	101.2	18.8	393.2	17.2
200 - 499 persons	17	1.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500 - 999 persons	2	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	50	4.1	9,915	42.3	254.2	47.3	977.9	42.8
<b>Total</b>	<b>1,205</b>	<b>100.0</b>	<b>23,423</b>	<b>100.0</b>	<b>537.9</b>	<b>100.0</b>	<b>2,286.6</b>	<b>100.0</b>
<b>WOOD, WOOD PRODUCTS AND FURNITURE</b>								
0 - 3 persons	671	36.2	1,454	8.2	23.1	5.6	108.7	6.1
4 - 9 persons	729	39.3	4,205	23.8	82.0	19.9	315.5	17.8
10 - 19 persons	267	14.4	3,502	19.8	77.9	18.9	307.7	17.4
20 - 49 persons	147	7.9	4,081	23.1	100.7	24.4	476.1	26.9
50 - 99 persons	30	1.6	1,914	10.8	50.0	12.1	240.0	13.6
Total less than 100 persons	1,844	99.4	15,156	85.9	333.7	80.8	1,448.0	81.9
100 - 199 persons	6	0.3	942	5.3	29.5	7.1	117.2	6.6
200 - 499 persons	6	0.3	1,545	8.8	50.0	12.1	203.7	11.5
500 - 999 persons	—	—	—	—	—	—	—	—
1000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	12	0.6	2,487	14.1	79.5	19.2	320.9	18.1
<b>Total</b>	<b>1,856</b>	<b>100.0</b>	<b>17,643</b>	<b>100.0</b>	<b>413.3</b>	<b>100.0</b>	<b>1,768.9</b>	<b>100.0</b>

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, VICTORIA, 1991-92—continued

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d) (e)		Turnover (e)	
	Number	Proportion (Per cent)	Number	Proportion (Per cent)	(\$m)	Proportion (Per cent)	(\$m)	Proportion (Per cent)
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING								
0 - 3 persons	455	30.9	964	3.1	17.6	1.7	76.2	1.6
4 - 9 persons	520	35.4	3,000	9.5	65.9	6.4	254.8	5.5
10 - 19 persons	231	15.7	3,033	9.6	76.2	7.4	321.8	6.9
20 - 49 persons	151	10.3	4,431	14.1	125.7	12.3	558.0	12.0
50 - 99 persons	64	4.4	4,461	14.2	138.7	13.5	608.4	13.1
Total less than 100 persons	1,421	96.6	15,889	50.5	424.1	41.4	1,819.2	39.1
100 - 199 persons	27	1.8	3,813	12.1	125.5	12.2	583.9	12.5
200 - 499 persons	15	1.0	4,299	13.7	173.4	16.9	937.6	20.1
500 - 999 persons	6	0.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	2	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total 100 or more persons	50	3.4	15,595	49.5	601.4	58.6	2,836.7	60.9
<b>Total</b>	<b>1,471</b>	<b>100.0</b>	<b>31,484</b>	<b>100.0</b>	<b>1,025.5</b>	<b>100.0</b>	<b>4,655.9</b>	<b>100.0</b>
CHEMICAL, PETROLEUM AND COAL PRODUCTS								
0 - 3 persons	87	22.0	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
4 - 9 persons	107	27.0	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
10 - 19 persons	66	16.7	889	5.1	24.3	3.7	275.6	4.1
20 - 49 persons	55	13.9	1,761	10.2	60.8	9.3	637.0	9.6
50 - 99 persons	40	10.1	2,718	15.7	106.0	16.2	769.6	11.5
Total less than 100 persons	355	89.6	6,176	35.6	210.0	32.0	1,806.1	27.1
100 - 199 persons	18	4.5	2,275	13.1	87.0	13.3	660.2	9.9
200 - 499 persons	19	4.8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500 - 999 persons	3	0.8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	1	0.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total 100 or more persons	41	10.4	11,150	64.4	445.9	68.0	4,859.8	72.9
<b>Total</b>	<b>396</b>	<b>100.0</b>	<b>17,326</b>	<b>100.0</b>	<b>655.9</b>	<b>100.0</b>	<b>6,665.9</b>	<b>100.0</b>
NON-METALLIC MINERAL PRODUCTS								
0 - 3 persons	190	40.9	414	4.2	7.2	2.2	48.1	2.9
4 - 9 persons	143	30.8	844	8.7	17.5	5.3	90.5	5.4
10 - 19 persons	47	10.1	593	6.1	16.5	5.0	67.6	4.0
20 - 49 persons	38	8.2	1,096	11.2	33.8	10.3	192.2	11.5
50 - 99 persons	17	3.7	1,154	11.8	36.8	11.2	192.1	11.5
Total less than 100 persons	435	93.8	4,101	42.1	111.8	34.1	590.5	35.3
100 - 199 persons	19	4.1	2,573	26.4	85.3	26.0	498.7	29.8
200 - 499 persons	9	1.9	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500 - 999 persons	1	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	29	6.3	5,646	57.9	215.9	65.9	1,083.3	64.7
<b>Total</b>	<b>464</b>	<b>100.0</b>	<b>9,747</b>	<b>100.0</b>	<b>327.6</b>	<b>100.0</b>	<b>1,673.8</b>	<b>100.0</b>
BASIC METAL PRODUCTS								
0 - 3 persons	84	29.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
4 - 9 persons	91	31.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
10 - 19 persons	36	12.5	478	4.5	12.3	3.1	58.7	1.5
20 - 49 persons	37	12.8	1,159	10.9	36.6	9.3	211.4	5.4
50 - 99 persons	16	5.6	1,015	9.5	33.6	8.5	270.0	6.8
Total less than 100 persons	264	91.7	3,379	31.7	98.3	24.9	607.4	15.4
100 - 199 persons	15	5.2	2,262	21.2	72.1	18.3	581.6	14.7
200 - 499 persons	6	2.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500 - 999 persons	2	0.7	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	1	0.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total 100 or more persons	24	8.3	7,288	68.3	296.0	75.1	3,340.0	84.6
<b>Total</b>	<b>288</b>	<b>100.0</b>	<b>10,667</b>	<b>100.0</b>	<b>394.3</b>	<b>100.0</b>	<b>3,947.4</b>	<b>100.0</b>

For footnotes see end of table.



TABLE 5. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, VICTORIA, 1991-92—continued

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d) (e)		Turnover (e)	
	Number	Proportion (Per cent)	Number	Proportion (Per cent)	(\$m)	Proportion (Per cent)	(\$m)	Proportion (Per cent)
<b>FABRICATED METAL PRODUCTS</b>								
0 - 3 persons	596	34.1	1,250	4.9	21.7	3.0	92.3	2.6
4 - 9 persons	636	36.4	3,731	14.5	85.2	11.7	343.6	9.7
10 - 19 persons	260	14.9	3,434	13.4	88.7	12.2	360.0	10.1
20 - 49 persons	150	8.6	4,475	17.4	120.0	16.5	520.5	14.7
50 - 99 persons	62	3.5	4,539	17.7	143.5	19.8	873.2	24.6
Total less than 100 persons	1,704	97.4	17,429	67.9	459.2	63.3	2,189.6	61.6
100 - 199 persons	33	1.9	4,357	17.0	137.9	19.0	710.5	20.0
200 - 499 persons	11	0.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500 - 999 persons	1	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	45	2.6	8,225	32.1	266.4	36.7	1,362.1	38.4
<b>Total</b>	<b>1,749</b>	<b>100.0</b>	<b>25,654</b>	<b>100.0</b>	<b>725.6</b>	<b>100.0</b>	<b>3,551.6</b>	<b>100.0</b>
<b>TRANSPORT EQUIPMENT</b>								
0 - 3 persons	163	27.3	362	0.9	6.8	0.6	42.4	0.7
4 - 9 persons	197	32.9	1,137	2.9	25.0	2.1	110.0	1.7
10 - 19 persons	86	14.4	1,144	2.9	27.2	2.3	107.2	1.7
20 - 49 persons	63	10.5	1,996	5.1	52.1	4.3	246.4	3.9
50 - 99 persons	30	5.0	2,242	5.7	66.9	5.6	319.5	5.1
Total less than 100 persons	539	90.1	6,881	17.5	177.9	14.8	825.6	13.1
100 - 199 persons	24	4.0	3,249	8.3	95.7	8.0	572.2	9.1
200 - 499 persons	15	2.5	4,845	12.3	146.4	12.2	458.6	7.3
500 - 999 persons	12	2.0	8,706	22.2	298.0	24.9	1,697.8	26.9
1000 or more persons	8	1.3	15,566	39.7	481.1	40.1	2,761.5	43.7
Total 100 or more persons	59	9.9	32,366	82.5	1,021.1	85.2	5,490.0	86.9
<b>Total</b>	<b>598</b>	<b>100.0</b>	<b>39,247</b>	<b>100.0</b>	<b>1,199.1</b>	<b>100.0</b>	<b>6,315.6</b>	<b>100.0</b>
<b>OTHER MACHINERY AND EQUIPMENT</b>								
0 - 3 persons	661	35.5	1,418	3.9	25.8	2.3	111.0	2.0
4 - 9 persons	600	32.3	3,495	9.6	80.2	7.1	302.6	5.6
10 - 19 persons	279	15.0	3,662	10.0	101.1	8.9	420.7	7.8
20 - 49 persons	172	9.2	5,285	14.5	156.7	13.8	630.7	11.6
50 - 99 persons	76	4.1	5,162	14.2	168.1	14.8	762.6	14.1
Total less than 100 persons	1,788	96.1	19,022	52.2	531.8	46.9	2,227.6	41.1
100 - 199 persons	45	2.4	6,287	17.2	211.9	18.7	911.0	16.8
200 - 499 persons	22	1.2	6,537	17.9	219.1	19.3	1,232.8	22.8
500 - 999 persons	4	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	1	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total 100 or more persons	72	3.9	17,447	47.8	603.1	53.1	3,187.5	58.9
<b>Total</b>	<b>1,860</b>	<b>100.0</b>	<b>36,469</b>	<b>100.0</b>	<b>1,134.9</b>	<b>100.0</b>	<b>5,415.1</b>	<b>100.0</b>
<b>MISCELLANEOUS MANUFACTURING</b>								
0 - 3 persons	438	36.4	945	4.1	14.8	2.1	66.3	1.9
4 - 9 persons	377	31.3	2,161	9.3	44.3	6.3	191.3	5.4
10 - 19 persons	145	12.0	1,917	8.3	47.7	6.8	222.2	6.2
20 - 49 persons	137	11.4	4,102	17.7	117.0	16.6	634.1	17.8
50 - 99 persons	62	5.1	4,557	19.6	134.3	19.1	767.8	21.6
Total less than 100 persons	1,159	96.3	13,682	59.0	358.0	50.9	1,881.8	52.8
100 - 199 persons	26	2.2	3,404	14.7	104.8	14.9	566.8	15.9
200 - 499 persons	16	1.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500 - 999 persons	2	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	44	3.7	9,525	41.0	345.5	49.1	1,679.9	47.2
<b>Total</b>	<b>1,203</b>	<b>100.0</b>	<b>23,207</b>	<b>100.0</b>	<b>703.5</b>	<b>100.0</b>	<b>3,561.7</b>	<b>100.0</b>

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS (a): SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY  
SUBDIVISION, VICTORIA, 1991-92—continued

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d) (e)		Turnover (e)	
	Number	Proportion (Per cent)	Number	Proportion (Per cent)	(\$m)	Proportion (Per cent)	(\$m)	Proportion (Per cent)
TOTAL MANUFACTURING								
0 - 3 persons	3,995	31.5	8,615	2.9	143.2	1.6	698.2	1.3
4 - 9 persons	4,366	34.5	25,459	8.6	524.0	5.9	2,278.9	4.3
10 - 19 persons	1,890	14.9	24,948	8.4	597.4	6.7	2,932.5	5.6
20 - 49 persons	1,294	10.2	38,457	13.0	1,037.9	11.7	5,618.6	10.7
50 - 99 persons	553	4.4	38,406	13.0	1,165.0	13.1	6,613.9	12.6
Total less than 100 persons	12,098	95.5	135,885	45.9	3,467.4	39.1	18,142.1	34.6
100 - 199 persons	322	2.5	44,037	14.9	1,365.1	15.4	8,212.0	15.7
200 - 499 persons	182	1.4	53,091	17.9	1,804.8	20.4	10,536.4	20.1
500 - 999 persons	49	0.4	35,487	12.0	1,281.8	14.5	9,591.4	18.3
1000 or more persons	17	0.1	27,608	9.3	946.5	10.7	5,977.9	11.4
Total 100 or more persons	570	4.5	160,223	54.1	5,398.3	60.9	34,317.7	65.4
<b>Total</b>	<b>12,668</b>	<b>100.0</b>	<b>296,108</b>	<b>100.0</b>	<b>8,865.6</b>	<b>100.0</b>	<b>52,459.8</b>	<b>100.0</b>

(a) See paragraphs 31, 32 and 37 of the Explanatory Notes. (b) See paragraphs 4 to 10 of the Explanatory Notes. (c) Includes working proprietors. (d) Excludes the drawings of working proprietors. (e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1991-92 but were not operating at 30 June 1992. See paragraph 37 of the Explanatory Notes.

TABLE 6. MANUFACTURING ESTABLISHMENTS (a): ENVIRONMENTAL PROTECTION ISSUES (b), SUMMARY STATISTICS BY INDUSTRY SUBDIVISION  
VICTORIA, 1991-92

Industry subdivision (c) ASIC code	Description	Establishments that conducted environmental impact assessments or environmental audits		Establishments that encouraged the return of their own containers or packaging		Establishments engaged in the marketing or production of goods or services for monitoring, maintaining or improving the environment	
		Number	Proportion of total establishments (Per cent) (d)	Number	Proportion of total establishments (Per cent) (d)	Number	Proportion of total establishments (Per cent) (d)
21	Food, beverages and tobacco	129	11	46	21	25	2
23	Textiles	42	11	47	29	14	4
24	Clothing and footwear	30	2	15	18	9	1
25	Wood, wood products and furniture	58	3	17	15	36	2
26	Paper, paper products, printing and publishing	73	5	39	31	171	11
27	Chemical, petroleum and coal products	60	15	47	40	66	16
28	Non-metallic mineral products	11	2	10	27	33	7
29	Basic metal products	23	8	46	25	19	6
31	Fabricated metal products	91	5	37	23	106	6
32	Transport equipment	58	10	64	24	37	6
33	Other machinery and equipment	100	5	36	22	176	9
34	Miscellaneous manufacturing	55	5	22	29	93	8
<b>21-34</b>	<b>Total manufacturing</b>	<b>730</b>	<b>6</b>	<b>41</b>	<b>23</b>	<b>3,007</b>	<b>6</b>

(a) See paragraph 31 of the Explanatory Notes. (b) See paragraph 38 of the Explanatory Notes. Establishments which did not respond to the environmental protection issues are treated as not participating in the relevant issue. (c) Data are also available on request by ASIC class. (d) Proportion of total establishments which operated at any time during 1991-92. (e) See paragraph 24 of the Explanatory Notes.

Note: The 1991-92 manufacturing census included a number of questions related to environmental protection. The following three questions were asked of all manufacturers:

- During 1991-92, did this business conduct any environmental impact assessments (for proposed new production) or any environmental audits (on existing production processes)?
- Does this business permit and/or encourage the return of its own containers or packaging (eg returnable bottles, cardboard boxes, polystyrene, etc)?
- Does this business market or produce any goods or services for monitoring, maintaining or improving the environment?

TABLE 7. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)  
BY INDUSTRY CLASS, VICTORIA, 1991-92

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution (\$'000)
		(\$'000)	Proportion of total turnover (c) (Per cent)	
ASIC code	Description			
<b>FOOD, BEVERAGES AND TOBACCO—</b>				
<b>Meat products—</b>				
2115	Meat (except smallgoods or poultry)	3,356	0.3	1,421
2116	Poultry	736	0.3	109
2117	Bacon, ham and smallgoods n.e.c.	580	0.2	87
211	Total	4,672	0.3	1,617
<b>Milk products—</b>				
2121	Liquid milk and cream	781	0.1	n.p.
2122	Butter	263	0.1	2,459
2123	Cheese	786	0.1	5,084
2124	Ice cream and frozen confections	n.p.	n.p.	—
2125	Milk products n.e.c.	n.p.	n.p.	n.p.
212	Total	2,245	0.1	8,233
<b>Fruit and vegetable products—</b>				
2131	Fruit products	1,653	0.3	837
2132	Vegetable products	783	0.1	220
213	Total	2,436	0.2	1,057
214	Margarine and oils and fats n.e.c.	n.p.	n.p.	n.p.
<b>Flour mill and cereal food products—</b>				
2151	Flour mill products	n.p.	n.p.	n.p.
2152	Starch, gluten and starch sugars	n.p.	n.p.	—
2153	Cereal foods and baking mixes	536	0.2	n.p.
215	Total	868	0.2	124
<b>Bread, cakes and biscuits—</b>				
2161	Bread	568	0.1	22
2162	Cakes and pastries	244	n.p.	n.p.
2163	Biscuits	57	n.p.	n.p.
216	Total	869	0.1	206
<b>Other food products—</b>				
2177	Raw sugar	—	—	—
2173	Confectionery and cocoa products	787	0.1	1,169
2174	Processed seafoods	99	0.1	123
2175	Prepared animal and bird foods	531	0.1	661
2176	Food products n.e.c.	2,050	0.3	497
217	Total	3,467	0.2	2,450
<b>Beverages and malt—</b>				
2185	Soft drinks, cordials and syrups	372	n.p.	799
2186	Beer	n.p.	n.p.	n.p.
2187	Malt	n.p.	n.p.	n.p.
2188	Wine and brandy	139	0.1	159
2189	Alcoholic beverages n.e.c.	n.p.	n.p.	n.p.
218	Total	1,248	0.1	1,230
219	Tobacco products	n.p.	n.p.	n.p.
21	Total food, beverages and tobacco	16,507	0.2	15,055

For footnotes see end of table.

TABLE 7. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)  
BY INDUSTRY CLASS, VICTORIA, 1991-92—continued

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution
ASFC code	Description	(\$'000)	Proportion of total turnover (c) (Per cent)	(\$'000)
<b>TEXTILES—</b>				
Textile fibres, yarns and woven fabrics—				
2341	Cotton ginning	—	—	—
2342	Wool scouring and top making	2,743	3.9	667
2343	Man-made fibres and yarns	408	0.3	n.p.
2344	Man-made fibre broadwoven fabrics	938	0.4	n.p.
2345	Cotton yarns and broadwoven fabrics	529	0.4	86
2346	Worsted yarns and broadwoven fabrics	127	0.1	n.p.
2347	Woollen yarns and broadwoven fabrics	167	0.1	n.p.
2348	Narrow woven and elastic textiles	51	0.1	n.p.
2349	Textile finishing	314	0.2	189
234	<i>Total</i>	5,277	0.5	1,335
Other textile products—				
2351	Household textiles	n.p.	n.p.	n.p.
2352	Textile floor coverings	687	0.1	33
2353	Felt and felt products	n.p.	n.p.	n.p.
2354	Canvas and associated products n.e.c.	45	0.1	n.p.
2355	Rope, cordage and twine	73	0.1	n.p.
2356	Textile products n.e.c.	90	0.1	n.p.
235	<i>Total</i>	1,190	0.1	546
23	<i>Total textiles</i>	6,467	0.3	1,881
<b>CLOTHING AND FOOTWEAR—</b>				
Knitting mills—				
2441	Hosiery	232	n.p.	n.p.
2442	Cardigans and pullovers	41	n.p.	n.p.
2443	Knitted goods n.e.c.	346	0.1	—
244	<i>Total</i>	619	0.1	27
Clothing—				
2451	Men's trousers and shorts; work clothing	32	—	n.p.
2452	Men's suits and coats; waterproof clothing	n.p.	n.p.	n.p.
2453	Women's outerwear n.e.c.	108	—	n.p.
2454	Foundation garments	n.p.	n.p.	n.p.
2455	Underwear and infants' clothing n.e.c.	118	—	370
2456	Headwear and clothing n.e.c.	177	0.1	136
245	<i>Total</i>	500	—	531
246	<i>Footwear</i>	208	0.1	48
24	<i>Total clothing and footwear</i>	1,327	0.1	606
<b>WOOD, WOOD PRODUCTS AND FURNITURE—</b>				
Wood and wood products—				
2531	Log sawmilling	447	0.3	286
2532	Resawn and dressed timber	445	0.4	48
2533	Veneers and manufactured boards of wood	421	0.3	358
2534	Wooden doors	78	0.3	n.p.
2535	Wooden structural fittings and joinery n.e.c.	560	0.2	169
2536	Wooden containers	n.p.	n.p.	n.p.
2537	Hardwood woodchips	n.p.	n.p.	n.p.
2538	Wood products n.e.c.	105	0.2	43
253	<i>Total</i>	2,241	0.3	972
Furniture and mattresses—				
2541	Furniture (except sheet metal)	1,170	0.2	n.p.
2542	Mattresses (except rubber)	126	0.1	n.p.
254	<i>Total</i>	1,296	0.2	576
25	<i>Total wood, wood products and furniture</i>	3,537	0.2	1,548

For footnotes see end of table.

TABLE 7. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)  
BY INDUSTRY CLASS, VICTORIA, 1991-92—continued

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution (\$'000)
		(\$'000)	Proportion of total turnover (c) (Per cent)	
ASIC code	Description			
<b>PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING—</b>				
Paper and paper products—				
2631	Pulp, paper and paperboard	9,825	1.6	4,821
2632	Paper bags (including textile bags)	115	0.1	—
2633	Solid fibreboard containers	30	—	n.p.
2634	Corrugated fibreboard containers	4,732	1.2	n.p.
2635	Paper products n.e.c.	1,887	0.5	1,873
263	Total	16,589	1.1	7,575
Printing and allied industries—				
2641	Publishing	93	—	n.p.
2642	Printing and publishing	673	0.1	n.p.
2643	Paper stationery	548	0.1	137
2644	Printing and bookbinding	1,101	0.1	836
2645	Printing trade services n.e.c.	386	0.2	115
264	Total	2,801	0.1	1,142
26	Total paper, paper products, printing and publishing	19,390	0.4	8,717
<b>CHEMICAL, PETROLEUM AND COAL PRODUCTS—</b>				
Basic chemicals—				
2751	Chemical fertilisers	70	0.1	81
2752	Industrial gases	n.p.	n.p.	n.p.
2753	Synthetic resins and rubber	9,977	0.9	5,054
2754	Organic industrial chemicals n.e.c.	21,216	7.9	1,178
2755	Inorganic industrial chemicals n.e.c.	1,715	0.7	724
275	Total	n.p.	n.p.	n.p.
Other chemical products—				
2761	Ammunition, explosives and fireworks	1,583	1.0	n.p.
2762	Paints	2,661	0.5	1,654
2763	Pharmaceutical and veterinary products	13,313	1.7	344
2764	Pesticides	n.p.	n.p.	n.p.
2765	Soap and other detergents	952	0.3	302
2766	Cosmetics and toilet preparations	232	0.3	288
2767	Inks	n.p.	n.p.	n.p.
2768	Chemical products n.e.c.	1,133	0.5	456
276	Total	22,149	0.9	3,719
277	Petroleum refining	n.p.	n.p.	n.p.
278	Petroleum and coal products n.e.c.	165	0.5	n.p.
27	Total chemical, petroleum and coal products	62,400	0.9	21,859

For footnotes see end of table.

TABLE 7. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)  
BY INDUSTRY CLASS, VICTORIA, 1991-92—continued

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution (\$'000)
		(\$'000)	Proportion of total turnover (c) (Per cent)	
ASIC code	Description			
<b>NON-METALLIC MINERAL PRODUCTS—</b>				
285	Glass and glass products	789	0.2	578
Clay products and refractories—				
2861	Clay bricks	49	0.1	—
2862	Refractories	n.p.	n.p.	—
2863	Ceramic tiles and pipes	n.p.	n.p.	n.p.
2864	Ceramic goods n.e.c.	354	0.5	n.p.
286	Total	804	0.3	146
Cement and concrete products—				
2871	Cement	n.p.	n.p.	n.p.
2872	Ready mixed concrete	898	0.4	468
2873	Concrete pipes and box culverts	n.p.	n.p.	n.p.
2874	Concrete products n.e.c.	462	0.2	n.p.
287	Total	3,319	0.5	1,047
Other non-metallic mineral products—				
2881	Plaster products and expanded minerals	720	0.6	373
2882	Stone products	116	0.4	n.p.
2883	Glass wool and mineral wool products	595	0.4	n.p.
2884	Non-metallic mineral products n.e.c.	74	0.1	—
288	Total	1,505	0.4	800
28	<b>Total non-metallic mineral products</b>	<b>6,417</b>	<b>0.4</b>	<b>2,571</b>
<b>BASIC METAL PRODUCTS—</b>				
Basic iron and steel—				
2941	Iron and steel basic products	5,442	0.3	6,609
2942	Iron casting	649	0.5	43
2943	Steel casting	331	0.5	n.p.
2944	Iron and steel forging	17	0.1	—
2945	Steel pipes and tubes	314	0.5	n.p.
294	Total	6,753	0.3	6,775
Basic non-ferrous metals—				
2951	Copper smelting, refining	—	—	—
2952	Silver, lead, zinc smelting, refining	n.p.	n.p.	n.p.
2953	Alumina	—	—	—
2954	Aluminium smelting	n.p.	n.p.	n.p.
2955	Nickel smelting, refining	—	—	—
2956	Non-ferrous metals n.e.c. smelting, refining	n.p.	n.p.	n.p.
2957	Secondary recovery and alloying of non-ferrous metals n.e.c.	1,938	n.p.	380
295	Total	9,038	n.p.	10,965
Non-ferrous metal basic products—				
2961	Aluminium rolling, drawing, extruding	396	0.1	n.p.
2962	Non-ferrous metals n.e.c. rolling, drawing, extruding	95	n.p.	n.p.
2963	Non-ferrous metal casting	105	0.2	261
296	Total	596	n.p.	474
29	<b>Total basic metal products</b>	<b>16,387</b>	<b>0.4</b>	<b>18,214</b>

For footnotes see end of table.

TABLE 7. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)  
BY INDUSTRY CLASS, VICTORIA, 1991-92—continued

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution (\$'000)
		(\$'000)	Proportion of total turnover (c) (Per cent)	
ASIC code	Description			
<b>FABRICATED METAL PRODUCTS—</b>				
<b>Structural metal products—</b>				
3141	Fabricated structural steel	565	0.1	145
3142	Architectural aluminium products	201	0.1	74
3143	Architectural metal products n.e.c.	185	0.1	57
314	<i>Total</i>	951	0.1	276
<b>Sheet metal products—</b>				
3151	Metal containers	917	0.2	885
3152	Sheet metal furniture	65	0.1	19
3153	Sheet metal products n.e.c.	700	0.1	455
315	<i>Total</i>	1,682	0.1	1,359
<b>Other fabricated metal products—</b>				
3161	Cutlery and hand tools n.e.c.	232	0.2	218
3162	Springs and wire products	311	0.1	50
3163	Nuts, bolts, screws and rivets	472	0.2	197
3164	Metal coating and finishing	980	0.8	290
3165	Non-ferrous steam, gas and water fittings	242	0.2	n.p.
3166	Boiler and plate work	37	0.1	n.p.
3167	Metal blinds and awnings	20	0.1	—
3168	Fabricated metal products n.e.c.	758	0.2	111
316	<i>Total</i>	3,052	0.2	959
31	<b>Total fabricated metal products</b>	<b>5,685</b>	<b>0.2</b>	<b>2,594</b>
<b>TRANSPORT EQUIPMENT—</b>				
<b>Motor vehicles and parts—</b>				
3231	Motor vehicles	3,311	0.1	6,424
3232	Motor vehicle bodies, trailers, caravans	179	0.1	15
3233	Motor vehicle instruments and electrical equipment n.e.c.	1,036	0.2	626
3234	Motor vehicle parts n.e.c.	1,922	0.2	622
323	<i>Total</i>	6,448	0.1	7,687
<b>Other transport equipment—</b>				
3241	Ships	243	n.p.	n.p.
3242	Boats	75	0.2	29
3243	Railway rolling stock and locomotives	n.p.	n.p.	n.p.
3244	Aircraft	634	0.1	206
3245	Transport equipment n.e.c.	n.p.	n.p.	n.p.
324	<i>Total</i>	1,086	0.1	311
32	<b>Total transport equipment</b>	<b>7,534</b>	<b>0.1</b>	<b>7,998</b>

For footnotes see end of table.



TABLE 7. MANUFACTURING ESTABLISHMENTS (a): EXPENDITURE ON ENVIRONMENTAL PROTECTION (b)  
BY INDUSTRY CLASS, VICTORIA, 1991-92—continued

Industry class		Current expenditure on environmental protection		Capital expenditure to abate pollution
ASIC code	Description	(\$'000)	Proportion of total turnover (c) (Per cent)	(\$'000)
<b>OTHER MACHINERY AND EQUIPMENT—</b>				
Photographic, professional and scientific equipment—				
3341	Photographic and optical goods	2,286	0.7	1,718
3342	Photographic film processing	134	0.2	108
3343	Measuring, professional and scientific equipment n.e.c.	379	0.2	213
334	<i>Total</i>	2,799	0.5	2,039
Appliances and electrical equipment—				
3351	Radio and TV receivers; audio equipment	108	0.2	n.p.
3352	Electronic equipment n.e.c.	568	—	345
3353	Refrigerators and household appliances	648	0.1	204
3354	Water heating systems	n.p.	n.p.	n.p.
3355	Electric and telephone cable and wire	233	0.1	111
3356	Batteries	n.p.	n.p.	n.p.
3357	Electrical machinery and equipment n.e.c.	894	0.2	561
335	<i>Total</i>	2,504	0.1	1,301
Industrial machinery and equipment—				
3361	Agricultural machinery	79	0.1	17
3362	Construction machinery	87	0.2	n.p.
3363	Materials handling equipment	202	0.2	n.p.
3364	Wood and metal working machinery	355	0.4	38
3365	Pumps and compressors	113	0.1	—
3366	Commercial space heating and cooling equipment	135	0.1	35
3367	Dies, saw blades and machine tool accessories	406	0.2	14
3368	Food processing machinery	106	0.2	—
3369	Industrial machinery and equipment n.e.c.	1,347	0.2	265
336	<i>Total</i>	2,830	0.2	410
33	<i>Total other machinery and equipment</i>	8,133	0.2	3,750
<b>MISCELLANEOUS MANUFACTURING—</b>				
Leather and leather products—				
3451	Leather tanning and fur dressing	3,098	1.7	1,143
3452	Leather and leather substitute goods n.e.c.	15	0.1	—
345	<i>Total</i>	3,113	1.5	1,143
Rubber products—				
3461	Rubber tyres, tubes, belts, hose and sheets	1,818	0.3	n.p.
3462	Rubber products n.e.c.	314	0.2	n.p.
346	<i>Total</i>	2,132	0.3	362
Plastic and related products—				
3471	Flexible packaging and abrasive papers	1,570	0.2	913
3472	Rigid plastic sheeting	n.p.	n.p.	n.p.
3473	Hard surface floor coverings n.e.c.	n.p.	n.p.	n.p.
3474	Plastic products n.e.c.	3,359	0.2	2,137
347	<i>Total</i>	5,493	0.2	3,147
Other manufacturing—				
3481	Ophthalmic articles	n.p.	n.p.	n.p.
3482	Jewellery and silverware	n.p.	n.p.	314
3483	Brooms and brushes	42	0.4	n.p.
3484	Signs and advertising displays	215	0.2	78
3485	Sporting equipment	23	0.1	n.p.
3486	Writing and marking equipment	9	0.4	n.p.
3487	Manufacturing n.e.c.	56	0.2	297
348	<i>Total</i>	522	0.2	722
34	<i>Total miscellaneous manufacturing</i>	11,260	0.3	5,374
21-34	<b>TOTAL MANUFACTURING</b>	165,044	0.3	90,167

(a) Data in this table exclude expenditure by single establishment businesses with less than four persons employed. (b) See paragraph 39 of the Explanatory Notes. Establishments which did not respond to the questions are treated as having nil expenditure. (c) See paragraph 24 of the Explanatory Notes.

TABLE 8. MANUFACTURING LOCATIONS (a): SUMMARY OF OPERATIONS IN STATISTICAL DIVISIONS  
BY INDUSTRY SUBDIVISION, VICTORIA, 1991-92

Industry subdivision		Locations at 30 June	Employment at end of June	Wages and salaries	Turnover
ASIC Code	Description	(a) (No.)	(b) (No.)	(c) (\$m)	(\$m)
<b>MELBOURNE STATISTICAL DIVISION</b>					
21	Food, beverages and tobacco	765	28,156	818.9	6,095.2
23	Textiles	329	8,925	259.8	1,426.8
24	Clothing and footwear	1,172	20,456	490.2	2,088.4
25	Wood, wood products and furniture	1,454	13,546	321.0	1,342.7
26	Paper, paper products, printing and publishing	1,314	27,096	897.2	4,104.9
27	Chemical, petroleum and coal products	357	15,447	576.2	4,259.3
28	Non-metallic mineral products	314	7,389	248.6	1,301.7
29	Basic metal products	233	7,200	247.0	2,192.7
31	Fabricated metal products	1,494	21,934	640.7	3,060.5
32	Transport equipment	502	33,392	1,049.9	5,783.2
33	Other machinery and equipment	1,632	32,512	1,033.7	4,885.2
34	Miscellaneous manufacturing	1,071	21,800	671.8	3,418.1
<b>21-34</b>	<b>Total manufacturing</b>	<b>10,637</b>	<b>237,853</b>	<b>7,254.8</b>	<b>39,958.6</b>
<b>BARWON STATISTICAL DIVISION</b>					
21	Food, beverages and tobacco	48	1,547	36.0	263.4
23	Textiles	20	1,729	50.8	262.0
24	Clothing and footwear	24	926	19.3	82.5
25	Wood, wood products and furniture	92	745	16.1	63.5
26	Paper, paper products, printing and publishing	28	593	14.5	39.1
27	Chemical, petroleum and coal products	23	1,327	n.p.	n.p.
28	Non-metallic mineral products	32	917	43.8	207.8
29	Basic metal products	17	1,849	n.p.	n.p.
31	Fabricated metal products	64	695	14.2	87.7
32	Transport equipment	24	4,237	116.3	442.9
33	Other machinery and equipment	39	702	17.5	68.0
34	Miscellaneous manufacturing	36	281	5.9	22.7
<b>21-34</b>	<b>Total manufacturing</b>	<b>447</b>	<b>15,548</b>	<b>488.9</b>	<b>4,676.3</b>
<b>WESTERN DISTRICT STATISTICAL DIVISION</b>					
21	Food, beverages and tobacco	42	2,560	64.0	631.3
23	Textiles	2	n.p.	n.p.	n.p.
24	Clothing and footwear	5	n.p.	n.p.	n.p.
25	Wood, wood products and furniture	30	264	5.9	35.4
26	Paper, paper products, printing and publishing	14	247	n.p.	n.p.
27	Chemical, petroleum and coal products	4	140	n.p.	n.p.
28	Non-metallic mineral products	10	35	0.6	2.5
29	Basic metal products	3	815	n.p.	n.p.
31	Fabricated metal products	23	274	7.7	25.5
32	Transport equipment	7	38	n.p.	n.p.
33	Other machinery and equipment	14	347	n.p.	n.p.
34	Miscellaneous manufacturing	9	34	0.7	2.7
<b>21-34</b>	<b>Total manufacturing</b>	<b>163</b>	<b>5,405</b>	<b>149.7</b>	<b>1,668.5</b>
<b>CENTRAL HIGHLANDS STATISTICAL DIVISION</b>					
21	Food, beverages and tobacco	43	2,126	64.2	370.7
23	Textiles	7	283	7.3	23.0
24	Clothing and footwear	9	249	n.p.	n.p.
25	Wood, wood products and furniture	58	743	20.4	98.3
26	Paper, paper products, printing and publishing	16	278	8.6	18.0
27	Chemical, petroleum and coal products	3	115	n.p.	n.p.
28	Non-metallic mineral products	32	516	15.4	64.8
29	Basic metal products	13	301	8.3	28.1
31	Fabricated metal products	42	351	7.6	27.0
32	Transport equipment	11	840	24.3	94.4
33	Other machinery and equipment	37	784	20.0	86.2
34	Miscellaneous manufacturing	22	85	1.8	7.6
<b>21-34</b>	<b>Total manufacturing</b>	<b>293</b>	<b>6,671</b>	<b>185.0</b>	<b>866.3</b>

For footnotes see end of table.

**TABLE 8. MANUFACTURING LOCATIONS (a): SUMMARY OF OPERATIONS IN STATISTICAL DIVISIONS  
BY INDUSTRY SUBDIVISION, VICTORIA, 1991-92—continued**

<i>Industry subdivision</i>		<i>Locations at 30 June</i>	<i>Employment at end of June</i>	<i>Wages and salaries</i>	<i>Turnover</i>
<i>ASIC Code</i>	<i>Description</i>	<i>(a) (No.)</i>	<i>(b) (No.)</i>	<i>(c) (\$m)</i>	<i>(No.) (\$m)</i>
<b>WIMMERA STATISTICAL DIVISION</b>					
21	Food, beverages and tobacco	26	508	11.7	63.1
23	Textiles	2	n.p.	n.p.	n.p.
24	Clothing and footwear	4	221	n.p.	n.p.
25	Wood, wood products and furniture	15	79	1.4	5.5
26	Paper, paper products, printing and publishing	7	79	n.p.	n.p.
27	Chemical, petroleum and coal products	—	—	—	—
28	Non-metallic mineral products	7	65	1.3	5.5
29	Basic metal products	1	n.p.	n.p.	n.p.
31	Fabricated metal products	14	63	1.1	6.9
32	Transport equipment	3	10	n.p.	n.p.
33	Other machinery and equipment	11	57	1.0	3.8
34	Miscellaneous manufacturing	10	142	n.p.	n.p.
<b>21-34</b>	<b>Total manufacturing</b>	<b>100</b>	<b>1,443</b>	<b>31.4</b>	<b>135.5</b>
<b>MALLEE STATISTICAL DIVISION</b>					
21	Food, beverages and tobacco	43	892	24.2	321.2
23	Textiles	3	20	0.3	2.5
24	Clothing and footwear	—	—	—	—
25	Wood, wood products and furniture	20	93	2.1	9.1
26	Paper, paper products, printing and publishing	14	184	4.1	9.8
27	Chemical, petroleum and coal products	3	n.p.	n.p.	n.p.
28	Non-metallic mineral products	7	58	1.1	5.2
29	Basic metal products	1	n.p.	n.p.	n.p.
31	Fabricated metal products	9	56	1.3	4.5
32	Transport equipment	11	59	1.0	3.8
33	Other machinery and equipment	15	141	2.7	11.5
34	Miscellaneous manufacturing	8	54	1.5	8.7
<b>21-34</b>	<b>Total manufacturing</b>	<b>134</b>	<b>1,580</b>	<b>38.8</b>	<b>379.6</b>
<b>LODDON-CAMPASPE STATISTICAL DIVISION</b>					
21	Food, beverages and tobacco	80	2,920	76.6	643.8
23	Textiles	11	682	11.3	33.7
24	Clothing and footwear	10	640	13.8	43.4
25	Wood, wood products and furniture	59	261	4.5	17.6
26	Paper, paper products, printing and publishing	40	583	14.5	56.2
27	Chemical, petroleum and coal products	9	46	1.0	11.4
28	Non-metallic mineral products	30	284	6.4	30.3
29	Basic metal products	8	102	2.9	8.6
31	Fabricated metal products	38	786	21.4	65.2
32	Transport equipment	20	499	14.0	37.9
33	Other machinery and equipment	38	864	22.5	88.1
34	Miscellaneous manufacturing	18	331	7.1	25.7
<b>21-34</b>	<b>Total manufacturing</b>	<b>361</b>	<b>7,998</b>	<b>196.2</b>	<b>1,061.9</b>
<b>GOULBURN STATISTICAL DIVISION</b>					
21	Food, beverages and tobacco	68	3,419	114.7	927.6
23	Textiles	8	253	8.2	32.2
24	Clothing and footwear	11	228	4.7	22.9
25	Wood, wood products and furniture	52	481	10.6	66.8
26	Paper, paper products, printing and publishing	35	585	n.p.	n.p.
27	Chemical, petroleum and coal products	5	88	n.p.	n.p.
28	Non-metallic mineral products	25	118	2.2	9.5
29	Basic metal products	5	70	1.5	3.0
31	Fabricated metal products	39	375	9.8	114.8
32	Transport equipment	14	149	3.0	14.7
33	Other machinery and equipment	46	312	7.5	30.0
34	Miscellaneous manufacturing	23	111	2.5	10.9
<b>21-34</b>	<b>Total manufacturing</b>	<b>331</b>	<b>6,189</b>	<b>182.2</b>	<b>1,313.5</b>

For footnotes see end of table.

TABLE 8. MANUFACTURING LOCATIONS (a): SUMMARY OF OPERATIONS IN STATISTICAL DIVISIONS  
BY INDUSTRY SUBDIVISION, VICTORIA, 1991-92—continued

Industry subdivision		Locations	Employment at	Wages and	
ASIC	Description	at 30 June	end of June	salaries	Turnover
Code		(a)	(b)	(c)	(d)
		(No.)	(No.)	(\$m)	(\$m)
OVENS-MURRAY STATISTICAL DIVISION					
21	Food, beverages and tobacco	42	3,493	107.6	766.3
23	Textiles	4	771	n.p.	n.p.
24	Clothing and footwear	8	135	3.0	11.5
25	Wood, wood products and furniture	31	288	6.8	26.1
26	Paper, paper products, printing and publishing	15	472	13.3	71.5
27	Chemical, petroleum and coal products	3	62	n.p.	n.p.
28	Non-metallic mineral products	17	144	3.3	21.0
29	Basic metal products	7	181	n.p.	n.p.
31	Fabricated metal products	25	278	7.4	96.9
32	Transport equipment	5	17	0.2	1.2
33	Other machinery and equipment	19	481	n.p.	n.p.
34	Miscellaneous manufacturing	9	141	n.p.	n.p.
<b>21-34</b>	<b>Total manufacturing</b>	<b>185</b>	<b>6,463</b>	<b>191.0</b>	<b>1,394.0</b>
EAST GIPPSLAND STATISTICAL DIVISION					
21	Food, beverages and tobacco	24	504	14.3	149.2
23	Textiles	2	n.p.	n.p.	n.p.
24	Clothing and footwear	2	n.p.	n.p.	n.p.
25	Wood, wood products and furniture	50	585	14.0	71.5
26	Paper, paper products, printing and publishing	6	89	1.6	4.3
27	Chemical, petroleum and coal products	—	—	—	—
28	Non-metallic mineral products	12	54	0.8	3.6
29	Basic metal products	2	n.p.	n.p.	n.p.
31	Fabricated metal products	19	268	7.9	19.5
32	Transport equipment	6	24	0.4	1.6
33	Other machinery and equipment	10	72	1.8	6.6
34	Miscellaneous manufacturing	7	120	n.p.	n.p.
<b>21-34</b>	<b>Total manufacturing</b>	<b>140</b>	<b>1,766</b>	<b>45.2</b>	<b>279.2</b>
GIPPSLAND STATISTICAL DIVISION					
21	Food, beverages and tobacco	50	1,419	37.7	391.3
23	Textiles	7	307	8.6	33.2
24	Clothing and footwear	6	157	3.9	13.1
25	Wood, wood products and furniture	51	560	13.6	53.6
26	Paper, paper products, printing and publishing	23	1,313	n.p.	n.p.
27	Chemical, petroleum and coal products	6	120	n.p.	n.p.
28	Non-metallic mineral products	22	126	4.3	26.3
29	Basic metal products	4	66	n.p.	n.p.
31	Fabricated metal products	43	559	14.9	60.9
32	Transport equipment	14	72	1.2	4.6
33	Other machinery and equipment	29	162	3.5	11.4
34	Miscellaneous manufacturing	17	120	2.3	10.0
<b>21-34</b>	<b>Total manufacturing</b>	<b>272</b>	<b>4,981</b>	<b>152.3</b>	<b>942.6</b>
VICTORIA EXCLUDING MELBOURNE STATISTICAL DIVISION					
21	Food, beverages and tobacco	466	19,388	551.0	4,528.0
23	Textiles	66	4,516	119.1	551.3
24	Clothing and footwear	79	2,926	61.9	230.0
25	Wood, wood products and furniture	458	4,099	95.4	447.5
26	Paper, paper products, printing and publishing	198	4,423	136.1	592.7
27	Chemical, petroleum and coal products	56	1,912	82.1	2,435.5
28	Non-metallic mineral products	194	2,317	79.1	376.5
29	Basic metal products	61	3,472	147.8	1,756.5
31	Fabricated metal products	316	3,705	93.4	509.0
32	Transport equipment	115	5,945	161.5	604.9
33	Other machinery and equipment	258	3,922	101.5	534.1
34	Miscellaneous manufacturing	159	1,419	31.9	151.5
<b>21-34</b>	<b>Total manufacturing</b>	<b>2,426</b>	<b>58,044</b>	<b>1,660.6</b>	<b>12,717.5</b>

For footnotes see end of table.

TABLE 8. MANUFACTURING LOCATIONS (a): SUMMARY OF OPERATIONS IN STATISTICAL DIVISIONS  
BY INDUSTRY SUBDIVISION, VICTORIA, 1991-92—continued

<i>Industry subdivision</i>		<i>Locations at 30 June</i>	<i>Employment at end of June</i>	<i>Wages and salaries</i>	<i>Turnover</i>
<i>ASIC Code</i>	<i>Description</i>	<i>(a) (No.)</i>	<i>(b) (No.)</i>	<i>(c) (\$m)</i>	<i>(\$m)</i>
VICTORIA					
21	Food, beverages and tobacco	1,231	47,544	1,369.9	10,623.2
23	Textiles	395	13,441	378.9	1,978.1
24	Clothing and footwear	1,251	23,382	552.1	2,318.4
25	Wood, wood products and furniture	1,912	17,645	416.4	1,790.2
26	Paper, paper products, printing and publishing	1,512	31,519	1,033.3	4,697.6
27	Chemical, petroleum and coal products	413	17,359	658.2	6,694.8
28	Non-metallic mineral products	508	9,706	327.7	1,678.1
29	Basic metal products	294	10,672	394.8	3,949.2
31	Fabricated metal products	1,810	25,639	734.0	3,569.4
32	Transport equipment	617	39,337	1,211.3	6,388.1
33	Other machinery and equipment	1,890	36,434	1,135.2	5,419.3
34	Miscellaneous manufacturing	1,230	23,219	703.6	3,569.6
<b>21-34</b>	<b>Total manufacturing</b>	<b>13,063</b>	<b>295,897</b>	<b>8,915.5</b>	<b>52,676.1</b>

(a) See paragraphs 10 and 40 to 42 of the Explanatory Notes. (b) Includes working proprietors. (c) Excludes the drawings of working proprietors.

## INTRODUCTION OF THE ANZSIC INDUSTRY CLASSIFICATION INTO MANUFACTURING STATISTICS

The Australian and New Zealand Standard Industrial Classification (ANZSIC) has been developed for use in both Australia and New Zealand for the production and analysis of industrial statistics. ANZSIC replaces the Australian Standard Industrial Classification (ASIC) previously used. The data in Table 9 present a concordance between the outgoing ASIC and the ANZSIC for data collected in respect of the 1991-92 reference year. Data presented in Tables 1 to 8 of this publication are ASIC-based.

The ASIC classification was first released in 1969 and underwent an extensive revision in 1978 and a partial revision in 1983. In 1985, a major review of the ASIC commenced. The principal objectives were to improve the alignment of the ASIC with the International Standard Industrial Classification (ISIC), to achieve a better balance across the classification by giving more attention to the services sector (including segments relating to culture, entertainment and other recreational industries), and to take into account the effects of technological changes and changes in structure of the industry generally since the previous edition.

A succession of economic agreements between Australia and New Zealand have operated since 1922. The most recent of these (the Australia - New Zealand Closer Economic Relations Trade Agreement (CER)) became effective from 1 January 1983. This has resulted in joint working relationships being set up to harmonise statistics wherever possible. This ultimately resulted in the ANZSIC being developed and adopted as the standard industry classification in both countries.

The major change between ASIC and ANZSIC for the manufacturing division is that the number of industry subdivisions has decreased from twelve to nine. In very broad terms, the three industry subdivisions (or parts thereof) under ASIC that have been merged in ANZSIC are:

- Textiles and Clothing and footwear have been combined to form the Textiles, clothing, footwear and leather industry subdivision.
- Basic metal products and Fabricated metal products have been combined to form the Metal products industry subdivision.
- Transport equipment has been combined with Other machinery and equipment to form the Machinery and equipment industry subdivision .

There have been further changes at the industry group and industry class levels, which were made to address changes in technology and structure in the manufacturing industry.

In addition, a small number of activities which were classified to the manufacturing industry under ASIC have been classified to non-manufacturing industries under ANZSIC. The reverse has also occurred.

From the 1992-93 reference year onwards, the manufacturing industry publications 8201.0 and 8221.0 to 8221.7 will be ANZSIC-based. Manufacturing collections dating back to the 1989-90 reference year have been coded using both classifications to assist in time series analysis in future years. In the meantime, these data are available as unpublished data. There is also a range of ANZSIC-based data (in addition to the following concordance) which is available as unpublished data from the 1991-92 manufacturing census.

TABLE 9. MANUFACTURING ESTABLISHMENTS (a): ASIC-ANZSIC CONCORDANCE (b) BY INDUSTRY SUBDIVISION, VICTORIA, 1991-92

Industry subdivision ASIC code	Description	ANZSIC subdivision description and code										Total manufacturing 21-29	Non-manufacturing (under ANZSIC)	Total ASIC		
		Food, beverages and tobacco 21	Textiles, clothing, footwear and leather products 22	Wood and paper products 23	Printing, publishing and recorded media 24	Petroleum, coal, chemicals and associated products 25	Non-metallic mineral products 26	Metal products 27	Machinery and equipment 28	Other manufacturing 29	Total manufacturing 21-29					
ESTABLISHMENTS AT 30 JUNE (c) (No.)																
21	Food, beverages and tobacco	928	—	—	—	3	—	—	—	—	—	—	—	931	267	1,198
23	Textiles	—	380	—	—	—	—	—	—	—	—	—	—	380	—	380
24	Clothing and footwear	—	1,205	—	—	—	—	—	—	—	—	—	—	1,205	—	1,205
25	Wood, wood products and furniture	—	2	793	—	—	—	—	—	—	1,061	—	—	1,856	—	1,856
26	Paper, paper products, printing and publishing	—	2	110	1,359	—	—	—	—	—	—	—	—	1,471	—	1,471
27	Chemical, petroleum and coal products	—	—	—	—	395	—	—	—	—	—	—	—	396	—	396
28	Non-metallic mineral products	—	—	—	—	—	—	464	—	—	—	—	—	464	—	464
29	Basic metal products	—	—	—	—	—	—	—	—	288	—	—	—	288	—	288
31	Fabricated metal products	—	—	—	—	—	—	—	—	1,654	—	—	—	1,749	—	1,749
32	Transport equipment	—	—	—	—	—	—	—	—	—	95	—	—	98	—	98
33	Other machinery and equipment	—	—	—	4	—	—	—	—	—	2	—	—	1,691	169	1,860
34	Miscellaneous manufacturing	—	81	—	—	547	—	6	—	—	—	40	516	1,190	13	1,203
21-34	Total manufacturing	928	1,670	903	1,363	945	470	1,943	2,323	1,674	1,674	2,323	1,674	12,219	449	12,668
	Non-manufacturing (under ASIC)	13	—	—	—	—	—	—	133	—	—	—	—	146	—	—
	Total ANZSIC	941	1,670	903	1,363	945	470	1,943	2,456	1,674	1,674	2,456	1,674	12,365	449	12,814
EMPLOYMENT AT END OF JUNE (d) ('000)																
21	Food, beverages and tobacco	44.7	—	—	—	—	—	—	—	—	—	—	—	44.7	3.1	47.8
23	Textiles	—	13.4	—	—	—	—	—	—	—	—	—	—	13.4	—	13.4
24	Clothing and footwear	—	23.4	—	—	—	—	—	—	—	—	—	—	23.4	—	23.4
25	Wood, wood products and furniture	—	0.1	8.2	—	—	—	—	—	—	9.3	—	—	17.6	—	17.6
26	Paper, paper products, printing and publishing	—	—	6.5	25.0	—	—	—	—	—	—	—	—	31.5	—	31.5
27	Chemical, petroleum and coal products	—	—	—	—	16.7	—	0.6	—	—	—	—	—	17.3	—	17.3
28	Non-metallic mineral products	—	—	—	—	—	9.7	—	—	—	—	—	—	9.7	—	9.7
29	Basic metal products	—	—	—	—	—	—	10.7	—	—	—	—	—	10.7	—	10.7
31	Fabricated metal products	—	—	—	—	—	—	24.2	—	—	1.4	—	—	25.7	—	25.7
32	Transport equipment	—	—	—	—	—	—	—	39.2	—	—	—	—	39.2	—	39.2
33	Other machinery and equipment	—	—	—	0.1	—	—	—	35.1	—	—	—	—	35.1	1.4	36.5
34	Miscellaneous manufacturing	—	1.4	—	—	17.8	0.2	—	0.4	—	3.5	—	—	23.2	—	23.2
21-34	Total manufacturing	44.7	38.4	14.7	25.1	34.5	9.9	35.5	74.7	14.2	14.2	74.7	14.2	291.6	4.5	296.1
	Non-manufacturing (under ASIC)	0.1	—	—	—	—	—	—	0.5	—	—	—	—	0.6	—	—
	Total ANZSIC	44.8	38.4	14.7	25.1	34.5	9.9	35.5	75.2	14.2	14.2	75.2	14.2	292.2	4.5	296.7

For footnotes see end of table.

TABLE 9. MANUFACTURING ESTABLISHMENTS (a): ASIC-ANZSIC CONCORDANCE (b) BY INDUSTRY SUBDIVISION, VICTORIA, 1991-92—continued

Industry subdivision ASIC code	Description	ANZSIC subdivision description and code										Total manufacturing 21-29	Non-manufacturing (under ANZSIC)	Total ASIC		
		Food, beverages and tobacco 21	Textiles, clothing, footwear and leather products 22	Wood and paper products 23	Printing, publishing and recorded media 24	Petroleum, coal, chemicals and associated products 25	Non-metallic mineral products 26	Metal products 27	Machinery and equipment 28	Other manufacturing 29						
WAGES AND SALARIES (c) (\$m)																
21	Food, beverages and tobacco	1,320.3	—	—	—	0.4	—	—	—	—	—	—	—	1,320.7	56.1	1,376.8
23	Textiles	—	379.0	—	—	—	—	—	—	—	—	—	—	379.0	—	379.0
24	Clothing and footwear	—	552.9	—	—	—	—	—	—	—	—	—	—	552.9	—	552.9
25	Wood, wood products and furniture	—	4.2	202.4	—	—	—	—	—	—	—	—	210.6	417.2	—	417.2
26	Paper, paper products, printing and publishing	—	0.1	250.3	783.1	—	—	—	—	—	—	—	—	1,033.4	—	1,033.4
27	Chemical, petroleum and coal products	—	—	—	—	638.6	—	19.7	—	—	—	—	—	658.2	—	658.2
28	Non-metallic mineral products	—	—	—	—	—	328.7	—	—	—	—	—	—	328.7	—	328.7
29	Basic metal products	—	—	—	—	—	—	394.7	—	—	—	—	—	394.7	—	394.7
31	Fabricated metal products	—	—	—	—	—	—	694.2	—	—	—	—	40.1	734.3	—	734.3
32	Transport equipment	—	—	—	—	—	—	—	—	—	—	—	0.6	1,211.5	—	1,211.5
33	Other machinery and equipment	—	—	—	1.6	—	—	—	—	—	—	—	—	1,108.0	28.1	1,136.2
34	Miscellaneous manufacturing	—	36.1	—	—	578.7	4.8	—	—	—	—	11.3	72.8	703.7	0.5	704.2
21-34	Total manufacturing (under ASIC)	1,320.3	972.3	452.6	784.7	1,217.6	333.5	1,108.5	2,328.7	324.1	—	8.5	324.1	8,842.4	84.7	8,927.1
	Non-manufacturing (under ASIC)	2.2	—	—	—	—	—	—	—	—	—	—	—	10.7	—	10.7
	Total ANZSIC	1,322.5	972.3	452.6	784.7	1,217.6	333.5	1,108.5	2,337.3	324.1	—	8.5	324.1	8,853.2	84.7	8,937.9
TURNOVER (\$m)																
21	Food, beverages and tobacco	10,452.1	—	—	—	2.9	—	—	—	—	—	—	—	10,455.0	215.4	10,670.4
23	Textiles	—	1,978.3	—	—	—	—	—	—	—	—	—	—	1,978.3	—	1,978.3
24	Clothing and footwear	—	2,322.6	—	—	—	—	—	—	—	—	—	—	2,322.6	—	2,322.6
25	Wood, wood products and furniture	—	22.3	909.4	—	—	—	—	—	—	—	—	856.0	1,787.6	—	1,787.6
26	Paper, paper products, printing and publishing	—	0.3	1,575.7	3,117.2	—	—	—	—	—	—	—	—	4,693.2	—	4,693.2
27	Chemical, petroleum and coal products	—	—	—	—	6,615.5	—	66.5	—	—	—	—	—	6,682.0	—	6,682.0
28	Non-metallic mineral products	—	—	—	—	—	1,679.4	—	—	—	—	—	—	1,679.4	—	1,679.4
29	Basic metal products	—	—	—	—	—	—	3,948.9	—	—	—	—	—	3,948.9	—	3,948.9
31	Fabricated metal products	—	—	—	—	—	—	3,394.9	—	—	—	—	175.4	3,570.3	—	3,570.3
32	Transport equipment	—	—	—	—	—	—	—	6,369.0	—	—	—	4.7	6,373.7	—	6,373.7
33	Other machinery and equipment	—	—	—	15.2	—	—	—	5,299.5	—	—	—	—	5,314.7	105.5	5,420.1
34	Miscellaneous manufacturing	—	237.4	—	—	2,927.8	35.6	—	38.7	—	—	—	327.2	3,566.8	1.6	3,568.3
21-34	Total manufacturing (under ASIC)	10,452.1	4,560.9	2,485.0	3,132.4	9,546.3	1,715.0	7,410.3	11,707.2	1,363.4	—	22.1	1,363.4	52,372.5	322.4	52,694.9
	Non-manufacturing (under ASIC)	23.2	—	—	—	—	—	—	—	—	—	—	—	45.3	—	45.3
	Total ANZSIC	10,475.3	4,560.9	2,485.0	3,132.4	9,546.3	1,715.0	7,410.3	11,729.3	1,363.4	—	22.1	1,363.4	52,417.8	322.4	52,740.2

(a) See paragraph 31 of the Explanatory Notes. (b) See paragraph 43 of the Explanatory Notes. (c) See paragraphs 4 to 10 of the Explanatory Notes. (d) Includes working proprietors. (e) Excludes the drawings of working proprietors.



## EXPLANATORY NOTES

### Introduction

This publication presents final statistics compiled from a census of manufacturing establishments for 1991-92, with some comparative statistics relating to preceding years. In this respect it should be noted that there have been extensive revisions to the data from the 1990-91 census, due to further processing of that year's data subsequent to the release of the previous issue of this publication.

2. For the 1991-92 manufacturing census, businesses were requested to provide data on only employment, wages and salaries paid, turnover and issues relating to environmental protection.

3. Manufacturing, as specified in Division C of the *Australian Standard Industrial Classification* (ASIC), broadly relates to the physical or chemical transformation of materials or components into new products, whether the work is performed by power-driven machines or by hand.

### Scope and coverage

4. The unit for which statistics are reported in the manufacturing census is the establishment. Prior to the 1988-89 census, this unit covered, in general, all the operations carried on under the ownership of one enterprise (business) at a single physical location.

5. The standard units definitions were revised for the 1988-89 census, with the establishment now being generally delineated on the basis of availability of accounting data rather than in terms of a location (refer to paragraph 10).

6. These new definitions were progressively implemented on the ABS central business register as reporting arrangements with individual businesses were finalised. The new management unit and establishment definitions were implemented on the ABS central business register in time for the 1990-91 census for those units classified to the manufacturing industry.

7. A manufacturing establishment is one predominantly engaged in manufacturing activities, but the data collected for it cover all activities of the establishment (including non-manufacturing activities). Conversely, there are some establishments predominantly engaged in non-manufacturing activities which also undertake limited manufacturing activities and which are excluded.

8. Some of those establishments predominantly engaged in one activity are 'split' into two or more establishments, when the secondary activity exceeds a specific value. (For 1991-92, this value was \$6.6 million in terms of sales and transfers out of goods and services.) These separate establishments are then classified to the industry appropriate to their activity.

9. In general, data contained in this publication relate to all manufacturing establishments which operated in Victoria during the year ended 30 June 1992, except for sole proprietorships or family partnerships not employing staff at 30 June 1992. Information about these businesses was collected in the 1991 Census of Population and Housing, with summary employment information presented in Table 2 of this publication. As these data indicate, these businesses contribute only

marginally to statistical aggregates (other than number of establishments). In addition, the ABS attempts to obtain data for employing businesses which either commenced or ceased operation during the year, but it is not possible to obtain data for all of them.

### Unit definitions

10. The standard units now in use are:

(a) *Management unit.* The management unit is the highest-level unit within a business, having regard to industry homogeneity, for which accounts are maintained; in nearly all cases, it coincides with the legal entity owning the business (that is, company, partnership, trust, sole operator, etc). In the case of large diversified businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business'. A division or line of business is recognised where separate and comprehensive accounts are compiled for it.

(b) *Establishment.* The establishment is the smallest accounting unit of a business, within a State or Territory, controlling its productive activities and maintaining a specified range of detailed data enabling value added to be calculated. In general, an establishment covers all operations at a physical location, but may consist of a group of locations provided they are within the same State or Territory. The majority of establishments operate at one location only.

(c) *Location.* A location is a physical unit of the establishment. It consists usually of an unbroken physical area or site, occupied by an establishment, at which, or from which, the establishment engages in productive activity on a relatively permanent basis. An establishment can consist of one or more locations. In specified circumstances, non-contiguous sites occupied by the same establishment can be combined to form a location.

### Data item definitions

11. *Establishments at 30 June.* The number of establishments in operation at 30 June.

12. *Locations at 30 June.* The number of locations in operation at 30 June.

13. *Employment at end of June.* The number of working proprietors and the number of employees on the payroll for the last pay period ending in June. (Sole proprietors and partnerships not employing others are excluded.)

14. *Wages and salaries.* The gross wages and salaries of all employees of the establishment. The drawings of working proprietors are excluded.

15. *Turnover* (see Note below). Sales (exclusive of excise and sales tax) of goods whether produced by the establishment or not, plus transfers out of goods to other establishments of the same business, plus bounties and subsidies on production, plus all other operating revenue from outside the business (such as commission revenue, repair and service revenue, and rent, leasing and hiring

revenue), plus capital work done for own use, or for rental or lease. Receipts from interest, royalties, dividends and the sale of fixed tangible assets are excluded.

Note: Transfers to other establishments of the same business referred to in the definition of turnover are valued, for statistical purposes, at prices commensurate with the prices which would have been received if the establishments concerned had been under separate ownership, that is, at commercial selling price. A significant proportion of the commodities manufactured by some industries is manufactured on commission for non-manufacturing businesses from materials owned and supplied by those businesses. As a consequence, the turnover figures do not reflect the gross value of those commodities but only the commission earned relating to them.

16. *Persons employed per establishment.* Employment at the last pay period ending in June divided by the number of establishments in operation at 30 June of the same year.

17. *Turnover per person employed.* Turnover of manufacturing establishments which operated during the year ended 30 June divided by the total number of persons employed at the last pay period ending in June of the same year.

18. *Manufacturing employment, August 1991.* These statistics are from the 1991 Census of Population and Housing and represent those persons who were classified as being employed in the manufacturing industry. 'Sole proprietors and partnerships not employing others' were those persons that indicated that they were employed in the manufacturing industry in this category but they did not have any salaried employees. The 'Total other' employed were those persons who worked for employing units (ie total employment excluding sole proprietors and partnerships not employing others).

19. *Manufacturing census employment at end of June 1991.* The number of working proprietors and the number of employees on manufacturing establishments' payrolls for the last pay period ending in June 1991. (Sole proprietors and partnerships not employing others are excluded). These data are from the 1990-91 manufacturing census.

20. *Demographic characteristics of persons employed, August 1991.* The source of these data is the 1991 Census of Population and Housing. The statistics presented show (in percentage terms) the sex and age characteristics of persons employed in the manufacturing industry and for all industries.

21. *Establishments that conducted environmental impact assessments or environmental audits.* Establishments that either conducted their own environmental impact assessments or environmental audits (including energy audits) or contracted others to do so.

22. *Establishments that encouraged the return of their own containers or packaging.* Establishments that encouraged and/or permitted the return of containers or packaging used in the marketing or distribution of their product.

23. *Establishments engaged in the marketing or production of goods or services for monitoring, maintaining or improving the environment.* Establishments involved in marketing or producing goods or services specifically for monitoring, maintaining or improving the environment.

24. *Proportion of total turnover.* The percentage of total manufacturing industry turnover attributed to establishments that gave positive responses to questions on environmental protection issues (for Table 6). The percentage of total reported turnover (excluding single establishment businesses with less than four persons employed) of establishments that had current expenditure on environmental protection (for Table 7).

25. *Current expenditure on environmental protection.* Expenditure on waste management plus other operational or maintenance costs incurred in protection of the environment from pollution. Included are such expenses as government and council fees, charges and taxes relating to pollution abatement and control, charges to remove and dispose of wastes arising from an establishment's production processes, research and development expenditure on pollution abatement and control, and expenditure on environmental impact assessments and environmental audits.

26. *Capital expenditure to abate pollution.* Expenditure on new plant, machinery or equipment designed to abate or control air, water, solid waste, noise or other pollutants by using either end-of-line techniques or change-in-production processes.

#### Comparability with previous statistics

27. As explained above, the standard units definitions were revised for the 1988-89 census and the new definitions have been implemented on the ABS central business register for units classified to the manufacturing industry.

28. For a detailed explanation of the various factors which affected the count of 'Number of manufacturing establishments' in the years to 1989-90, see the Appendix to the 1989-90 issue of this publication. Also, as indicated in paragraph 34 of the Explanatory Notes to that issue, there was a fairly constant level of undercoverage on the ABS central business register for the years from 1982. Coverage factors to convert previous years' data (with the exception of number of establishments) to a comparable basis with 1989-90 data are shown in Table 7 of the 1989-90 issue of this publication.

29. The combining of railway workshop locations (primary to ASIC class 3243) with rail transport locations (primary to ASIC class 5200) to form establishments primary to Division G: Transport and Storage (that is, out of scope of this collection) has affected time series statistics for subdivision 32 presented in this publication. The effect of this change was not present for this census.

30. Prior to the 1989-90 census, most commodities produced in the petroleum refining industry (ASIC class 2770) were manufactured on commission for non-manufacturing businesses from materials owned and supplied by those businesses. In these cases, manufacturing turnover reflected only the value of

commission earned by manufacturing establishments involved (not the gross value of the commodities produced). In 1989-90 and again in 1990-91 (but to a lesser extent), some businesses changed their accounting practices to report gross value of commodities produced. The effect of this change was not present for this census.

31. As with the 1990-91 issue, this publication no longer makes the distinction in tables presented between those single establishment businesses with less than four persons employed and all other establishments. All time series statistics included in this publication now reflect this change (except where indicated).

32. For users still interested in the dissection between establishments employing less than four persons and establishments employing four or more persons, attention is drawn to Table 5 and the employment size category 0 - 3 persons. This new category includes all establishments employing less than four persons. In most cases, data in this new employment size category equates to the 'old' category of less than four persons employed (the major exception being Subdivision 28). A detailed break up of the differences can be made available on request.

#### **Comparability of manufacturing and population census data**

33. There are variations between the conceptually similar population census 'Total other' and manufacturing census employment figures presented in Table 2. These variations occur because of differences in the reference periods and collection methods used.

34. The manufacturing census estimates relate to employment in the last pay period ending in June 1991. The population census estimates relate to employment during the week ended 6 August 1991.

35. The population census was conducted through self-enumeration from individual households. The manufacturing census was collected through mail forms sent to all manufacturing establishments (except for single establishment businesses not employing staff) as recorded on the ABS central business register and which operated in Australia during the year ended 30 June 1991.

36. In the processing of the population census, there were cases where the industry of employment was not stated by the householder or where it could not be classified from the response provided. In these cases, a not classified code was allocated, which accounted for 7.2 per cent of total employment (across all industries). In the manufacturing census, all businesses (and, thereby, their total employment) were industry coded.

#### **Employment size data**

37. Summary of operations data at the industry subdivision level classified by employment size are presented in Table 5. These statistics relate to only those manufacturing establishments operating at 30 June 1992. As such, the figures presented in Table 5 may be slightly less than those presented in the other manufacturing census tables. These other tables include data for those manufacturing establishments which operated at any time during 1991-92.

#### **Environmental statistics**

38. A summary of environmental protection issues data at the industry subdivision level are presented in Table 6. All manufacturing establishments were asked to provide a 'yes' or 'no' answer as to whether they participated in the environment-related activities set out. The statistics presented relate to those establishments which responded 'yes' to the relevant issues. Establishments which did not respond were treated as if they had responded 'no'.

39. Data contained in Table 7 relate to current and capital expenditure on environmental protection in the year ended 30 June 1992. Data were not collected from those single establishment businesses with less than four persons employed. Establishments which did not respond were treated as if they had no current or capital expenditure on environmental protection.

#### **Statistical division data**

40. The location data presented in Table 8 are based on additional data collected in the 1991-92 census. The extra data requested were the activity carried out at the location, the number of persons employed and the address of the location.

41. Employment data shown in this table are based on reported employment, but in the case of wages and salaries and turnover data they do not reflect reported data in all cases. This is because in those circumstances where an establishment operates at more than one location, the data have been synthesised to derive location-level wages and salaries and turnover data. (However, it should be noted that most establishments operate at only the one location.) The location-level synthesised data were derived by using the location data collected on activity and employment, and then prorating wages and salaries and turnover based on the reported employment.

42. As indicated in paragraph 7, a manufacturing establishment covers all activities of the establishment, including any non-manufacturing activities. In Table 8, the non-manufacturing locations of manufacturing establishments have been excluded. For this reason, the State totals (for location data, other than the number of locations) in Table 8 may be less than those shown in Tables 1, 4, 5 and 9 (for establishment data). However, it is also possible for the State totals in Table 8 to be greater than those shown in Tables 1, 4, 5 and 9, as a result of individual locations of establishments being allocated a different industry classification to that of the 'parent' establishment.

#### **Introduction of ANZSIC**

43. The Australian and New Zealand Standard Industrial Classification (ANZSIC) is to be fully introduced into the manufacturing statistics collection from the 1992-93 collection. This classification replaces the Australian Standard Industrial Classification currently in use. An ASIC/ANZSIC concordance of data from the 1991-92 census is presented in Table 9 as a forerunner to what users can expect in future collections. For a more detailed explanation, users attention is drawn to the introduction to Table 9 and to the *Australian and New Zealand Standard Industrial Classification, 1993* (1292.0).

### Related publications

44. Users may also wish to refer to the following publications:

*Cost of Environmental Protection, Australia, 1991-92* (4603.0), to be released later in 1994.

*Manufacturing Technology Statistics, Australia, 31 December 1991* (8123.0), released on 22 February 1993.

*Quarterly Indexes of Industrial Production, Australia* (8125.0).

*Business Operations and Industry Performance, Australia, 1991-92* (8140.0), released on 31 August 1993.

*Business Operations and Industry Performance, Australia, 1992-93* (8140.0), released on 22 June 1994.

*Manufacturing Industry, Australia, 1992-93, Preliminary* (8201.0), released on 25 August 1994.

*Manufacturing Industry, Australia, 1991-92* (8221.0), released on 21 February 1994.

*Manufacturing Production, Australia: Principal Commodities Produced, 1989-90* (8365.0), released on 4 February 1994.

### Monthly and quarterly commodity data

45. A number of publications are produced each month or quarter showing monthly details of the quantity

produced of an extensive range of the more important commodities manufactured in Australia (some 600 in all). These publications include *Production Statistics, Australia, Preliminary* (8301.0) and a series of ten publications each relating to a particular range of products (8357.0 to 8369.0).

### Back data and unpublished statistics

46. A range of manufacturing industry statistics publications is available for previous years. As well, a considerable amount of data from the manufacturing census exists in unpublished form. More detailed information to satisfy individual user requirements may be available on request. A charge would normally be made for providing such information.

### Symbols and other usages

ANZSIC	Australian and New Zealand Standard Industrial Classification
ASIC	Australian Standard Industrial Classification
n.e.c.	not elsewhere classified
n.p.	not available for publication but included in totals where applicable
..	not applicable
r	figure or series revised since previous issue
—	nil or rounded to zero

47. Where figures have been rounded, discrepancies may occur between totals and the sums of the component items.

## Unpublished data from the Manufacturing Census

A considerable amount of data from the manufacturing census exists in unpublished form. More detailed information to satisfy individual user requirements may be available on request.

Some examples of the information available include:

**Industry concentration statistics** : are published at the 2 digit ASIC level for Australia and are available at more detailed levels on request.

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Further details can be obtained by contacting the Manufacturing Publishing and Consultancy Area in ABS NSW on (02) 268 4245.

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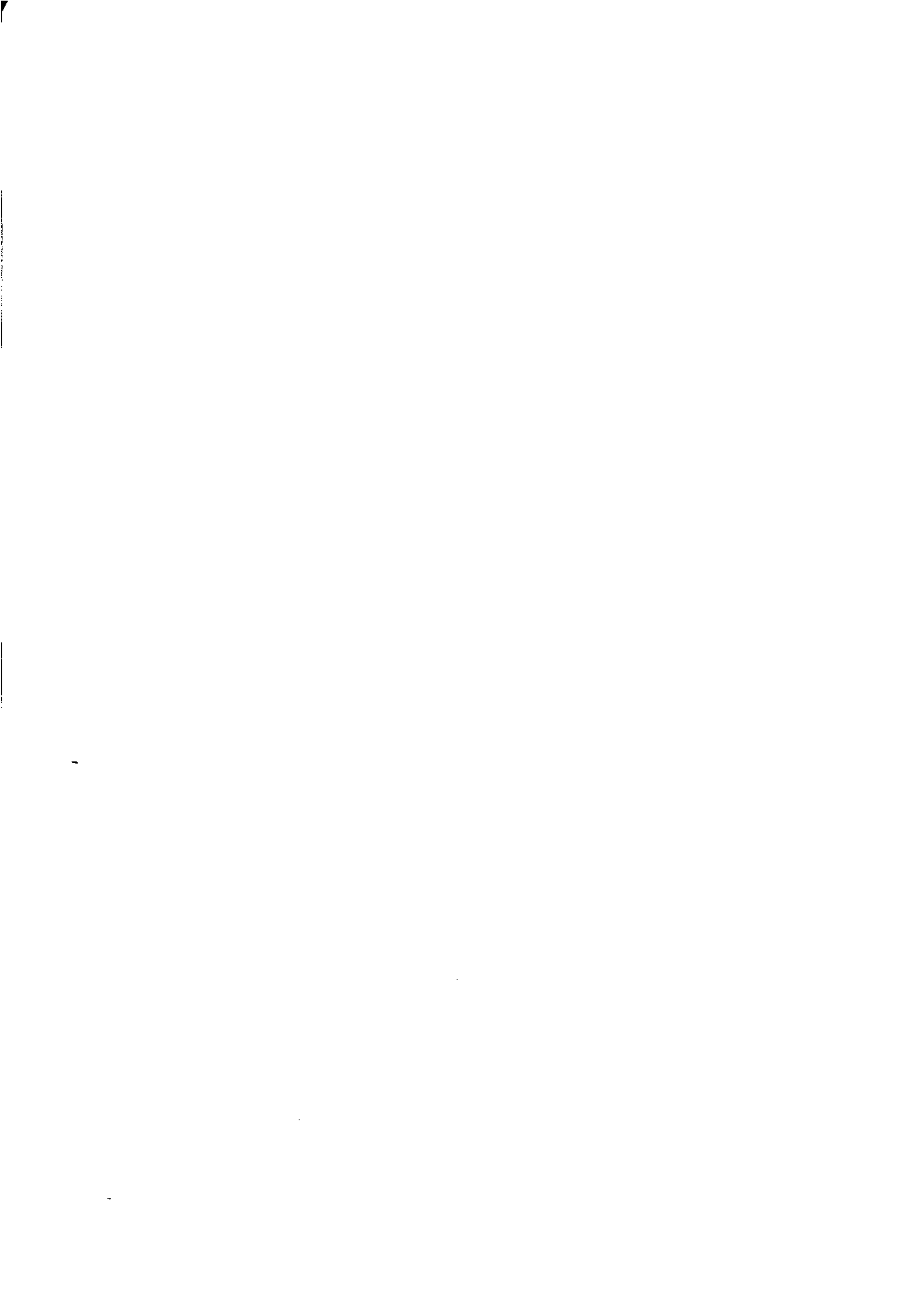
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