



1993-94

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# Manufacturing Industry

## Western Australia

Statistics



**MANUFACTURING INDUSTRY  
WESTERN AUSTRALIA  
1993-94**

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**AUSTRALIAN BUREAU OF STATISTICS**

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INQUIRIES	<ul style="list-style-type: none"> <li>▪ <i>for further information about statistics in this publication and the availability of related unpublished statistics, contact John Ridley on Sydney (02) 9268 4541 or any other ABS office.</i></li> <li>▪ <i>for information about other ABS statistics and services, please refer to the back page of this publication.</i></li> </ul>
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## INTRODUCTION

### ABOUT THIS ISSUE

This publication contains detailed industry statistics compiled from a census of manufacturing establishments (see paragraph 7 of the Explanatory Notes) conducted in respect of 1993–94, with some comparative statistics for earlier years. It expands and updates the information which was published in *Manufacturing Industry, Australia, 1993–94, Preliminary* (8201.0), which was released on 13 December 1995 and *Manufacturing Industry, Australia, 1993–94* (8221.0), which was released on 18 October 1996.

The 1993–94 manufacturing census sought information on employment, wages and salaries and turnover for all manufacturing establishments. In addition to data for these items, this publication contains (in table 3) data on gross product at factor cost (average 1989–90 prices).

As part of the 1993–94 manufacturing collection, a sample of approximately 18,000 establishments was asked to supply additional information on commodities produced and sold. Commodities information from this sample will be published in *Manufacturing Production, Australia: Principal Commodities Produced, 1993–94* (8365.0), to be released later in 1996.

Australian and New Zealand  
Standard Industrial Classification  
(ANZSIC)

This publication continues to use the Australian and New Zealand Standard Industrial Classification (ANZSIC), which replaced the Australian Standard Industrial Classification (ASIC) used prior to the 1992–93 reference year. Manufacturing collections dating back to the 1989–90 reference year have been coded to industry using ANZSIC and, therefore, all time series comparisons in this publication are made on a consistent ANZSIC basis. ASIC-based data are not available from 1992–93.

Data as contained in  
this publication

As was foreshadowed in the previous issue of this publication, all data in this publication have been adjusted to allow for lags in processing new businesses to the ABS business register, and omission of some businesses from the business register. More information on these adjustments can be found in paragraphs 15 to 17 of the Explanatory Notes.

The industry code for 18,000 of the establishments included in the 1993–94 collection has been determined on an objective industry coding basis, compared to the more subjective industry coding which has occurred in each of the three previous manufacturing collections. More information on this subject can be found in paragraph 18 of the Explanatory Notes.

For the above reasons, comparison of industry class (especially) level data for 1993–94 with data for 1992–93 and earlier years as previously published should be undertaken with caution.

### UNPUBLISHED DATA

A considerable amount of data from the annual manufacturing collection is available in unpublished form. More detailed information to satisfy individual user requirements may be available on request. Further details can be obtained by referring to the *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (8205.0) or by contacting the NSW Office of the ABS — see page iii for contact details.

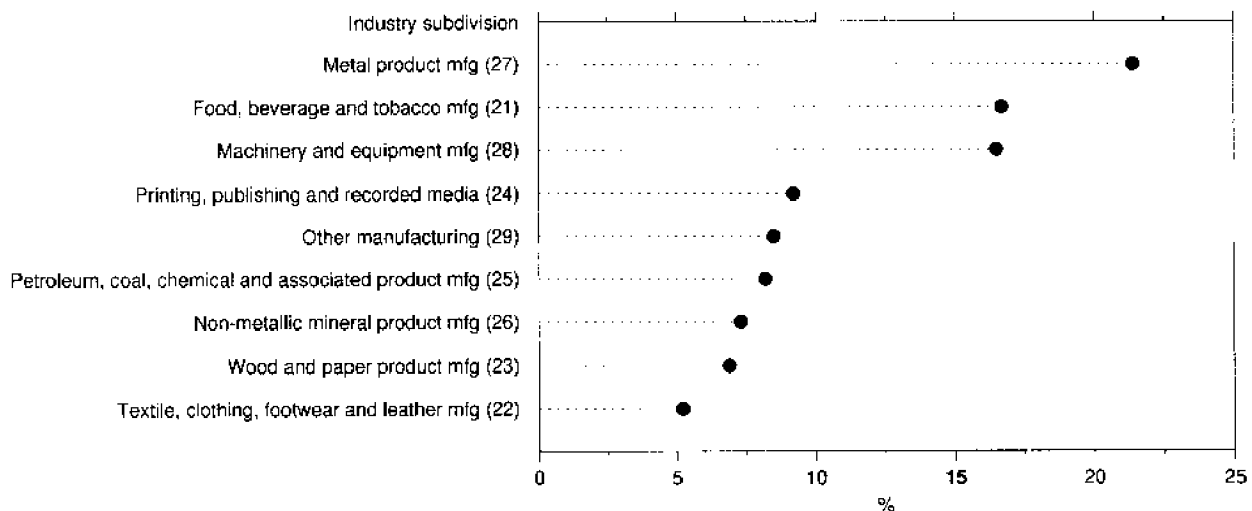
## SUMMARY OF FINDINGS

**Overview** Turnover for the year 1993–94 by manufacturing establishments operating in Western Australia was \$13,778m. This represents a 2.0% increase, in current price terms, from the \$13,511m turnover recorded for the year 1992–93. In constant price terms (1989–90 prices), manufacturing gross product at factor cost increased by 3.7% in 1993–94 from 1992–93. Manufacturing employment at the end of June 1994 was 65,400, a marginal 0.5% higher than 12 months earlier. This increase followed an increase of 1.9% in the 12 months to the end of June 1993.

### MANUFACTURING ESTABLISHMENT DATA

**Employment** (Tables 1 and 2) The 1993–94 manufacturing census recorded 65,400 persons employed at the end of June 1994. Once again, Metal product manufacturing (21.4%), Food, beverage and tobacco manufacturing (16.7%) and Machinery and equipment manufacturing (16.5%) were the major contributors to employment at the end of June 1994. Textile, clothing, footwear and leather manufacturing (5.2%) and Wood and paper product manufacturing (6.9%) remain the smallest contributors.

#### DISTRIBUTION OF EMPLOYMENT BY INDUSTRY SUBDIVISION, WA, JUNE 1994



Manufacturing employment increased by 0.5% between June 1993 and June 1994. Five of the nine industry subdivisions recorded increases in the level of employment over this period. Printing, publishing and recorded media (up 8.8% from 5,500 persons to 6,000 persons), Other manufacturing (up 6.2% from 5,200 persons to 5,600 persons) and Textile, clothing, footwear and leather manufacturing (up 5.5% from 3,200 persons to 3,400 persons) recorded the largest percentage increases. Of the three industry subdivisions to record a decrease in employment, the two largest in percentage terms were Food, beverage and tobacco manufacturing (down 5.6% from 11,600 persons to 10,900 persons) and Metal product manufacturing (down 2.5% from 14,400 persons to 14,000 persons). Employment in Non-metallic mineral product manufacturing remained unchanged (at 4,800 persons).

The percentage contribution by Western Australia to total Australian manufacturing employment at the end of June 1994 was 7.2%. This represents an increase of 0.1 percentage points on the total contribution reported at the end of June 1993. The percentage contribution to total manufacturing employment by the other States and Territories at the end of June 1994 was: New South Wales 33.7%, Victoria 31.4%, Queensland 15.2%, South Australia 9.5%, Tasmania 2.4%, the Australian Capital Territory 0.5% and the Northern Territory 0.3%.

The Western Australian industry subdivisions which made a significant contribution to total Australian manufacturing employment at the end of June 1994 for that industry subdivision were Non-metallic mineral product manufacturing (12.5%), Other manufacturing (10.3%) and Metal product manufacturing (9.6%).

*Longer term trends  
(June 1990 to June 1994)*

Employment in the Western Australian manufacturing industry decreased by 5,800 persons (down 8.1% from 71,200 persons to 65,400 persons) over the period June 1990 to June 1994. All industry subdivisions but one recorded decreases over this period, with Food, beverage and tobacco manufacturing (down 14.0% from 12,700 persons to 10,900 persons), Machinery and equipment manufacturing (down 11.8% from 12,200 persons to 10,800 persons) and Textile, clothing, footwear and leather manufacturing (down 8.8% from 3,700 persons to 3,400 persons) recording the largest percentage decreases. Employment in Non-metallic mineral product manufacturing remained unchanged (at

Between June 1990 and June 1994, the decrease in employment in Western Australia was the third smallest in absolute terms amongst the States and Territories. The largest decrease in both absolute and percentage terms was recorded by Victoria, where employment decreased by 72,600 persons (down 20.3% from 358,700 persons to 286,000 persons). The other decreases were recorded by Tasmania (down 20.1% from 27,000 persons to 21,600 persons), South Australia (down 15.0% from 101,400 persons to 86,200 persons), New South Wales (down 13.6% from 354,900 persons to 306,800 persons) and the Northern Territory (down 8.8% from 3,200 persons to 2,900 persons). Employment in Queensland remained unchanged at 138,500 persons. During this period, the only increase in employment amongst the States and Territories was recorded by the Australian Capital Territory (up 7.5% from 3,900 persons to 4,200 persons).

The percentage contribution by Western Australia to Australian manufacturing employment has increased since June 1990 by 0.5 percentage points to 7.2%. Queensland also increased its percentage share of employment over this period (up 2.1 percentage points to 15.2%), as did New South Wales (up 0.1 percentage points to 33.7%). The percentage contribution by Victoria has declined since June 1990 (decreasing by 2.5 percentage points to 31.4%), as has Tasmania (down 0.2 percentage points to 2.4%). South Australia and both Territories showed little or no change over this period.

*Turnover  
(Tables 1 and 2)*

Turnover for the year 1993-94 by manufacturing establishments operating in Western Australia was \$13,777.6m. This represents a 2.0% increase, in current price terms, from \$13,510.9m turnover recorded for the year 1992-93. Metal product manufacturing remains the subdivision with the largest contribution to turnover in the manufacturing industry.

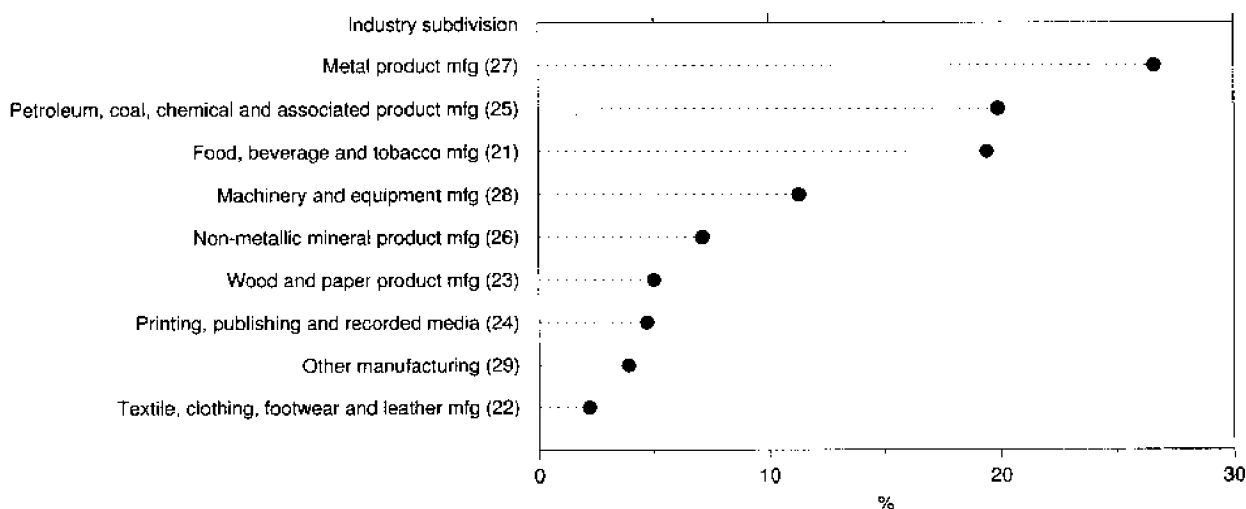


The industry subdivisions contributing the largest proportions to total turnover and the most notable industry groups or classes within those as a percentage of total turnover were:

- Metal product manufacturing (26.6%), where the industry group Basic non-ferrous metal manufacturing (ANZSIC group 272 at 17.0%) and the industry class Structural steel fabricating (ANZSIC class 2741 at 2.7%) were the most substantial.
- Petroleum, coal, chemical and associated product manufacturing (19.9%), where (of the industry classes available for publication) Inorganic industrial chemical manufacturing n.e.c. (ANZSIC class 2535 at 3.0%) was the most substantial.
- Food, beverage and tobacco manufacturing (19.4%), where the industry classes Meat processing (ANZSIC class 2111 at 3.4%) and Seafood processing (ANZSIC class 2173 at 3.0%) were the most substantial.
- Machinery and equipment manufacturing (11.3%), where the industry classes Shipbuilding (ANZSIC class 2821 at 1.9%) and Mining and construction machinery manufacturing (ANZSIC class 2862 at 1.6%) were the most substantial.

Industry classes making a notable contribution to total turnover and not included in the subdivisions listed above included Newspaper printing or publishing (ANZSIC class 2421 at 2.5%), Printing (ANZSIC class 2412 at 1.5%) and Wooden furniture and upholstered seat manufacturing (ANZSIC class 2921 at 1.5%).

#### DISTRIBUTION OF TURNOVER BY INDUSTRY SUBDIVISION, WA, 1993-94



The percentage contribution by Western Australia to total Australian manufacturing turnover in 1993-94 was 7.5%. This represents a decrease of 0.3 percentage points on the contribution reported in 1992-93. The percentage contribution to turnover by the other States and Territories in 1993-94 was: New South Wales 34.1%, Victoria 32.0%, Queensland 14.4%, South Australia 9.1%, Tasmania 2.2%, the Northern Territory 0.4% and the Australian Capital Territory 0.3%.

The Western Australian industry subdivisions which made a significant contribution to total Australian manufacturing turnover in 1993-94 for that industry subdivision were Non-metallic mineral product manufacturing (11.4%) and Metal product manufacturing (10.9%).

*Longer term trends  
(1989-90 to 1993-94)*

Turnover for the manufacturing industry in Western Australia increased, in current price terms, by 2.6% over the period 1989-90 to 1993-94. Eight industry subdivisions recorded increases and one recorded a decrease. The largest percentage increases, in current price terms, were recorded in Wood and paper product manufacturing (up 17.0% from \$591.2m to \$691.6m), Machinery and equipment manufacturing (up 15.8% from \$1,339.8m to \$1,551.9m) and Non-metallic mineral product manufacturing (up 14.9% from \$856.5m to \$983.7m). The only decrease was recorded in Metal product manufacturing (down 16.4% from \$4,382.2m to \$3,664.6m).

Three of the States decreased their share of Australian turnover between 1989-90 and 1993-94. Western Australia decreased its contribution by 0.4 percentage points (to 7.5% of Australian turnover), as did Victoria (down 0.8 percentage points to 32.0%) and Tasmania (down 0.2 percentage points to 2.2%). The three States to record an increase were New South Wales (up 0.7 percentage points to 34.1%), Queensland (up 0.5 percentage points to 14.4%) and South Australia (up 0.2 percentage points to 9.1%). The Northern Territory (at 0.4%) and the Australian Capital Territory (at 0.3%) maintained their share of Australian turnover over the period.

Ratio of wages and salaries to turnover (Tables 1 and 2)

In 1993-94, the ratio of wages and salaries to turnover for Western Australia's manufacturing industry was 0.14; that is, on average, 14 cents in wages and salaries is paid for each \$1.00 of turnover. This ratio has remained unchanged for all years from 1989-90 to 1993-94.

The wages and salaries to turnover ratio decreased in five of the nine industry subdivisions between 1989-90 and 1993-94, remained unchanged in two industry subdivisions and rose in the remaining two industry subdivisions. The largest falls were recorded by Machinery and equipment manufacturing (down from 0.24 to 0.19) and Textile, clothing, footwear and leather manufacturing (0.28 to 0.26). The ratio remained unchanged for Petroleum, coal, chemical and associated product manufacturing (0.07) and Non-metallic mineral product manufacturing (0.16). The largest increase was recorded by Metal product manufacturing (up from 0.10 to 0.13).

Of the industries available for publication, the largest ratios of wages and salaries to turnover in 1993-94 were recorded in Men's and boys' wear manufacturing (ANZSIC class 2241)(0.43) and Telecommunication, broadcasting and transceiving equipment manufacturing (ANZSIC class 2842)(0.37). Of the industries available for publication, the smallest ratios of wages and salaries to turnover were recorded in Seafood processing (ANZSIC class 2173) (0.06), Prepared animal and bird feed manufacturing (ANZSIC class 2174) (0.06), Beer and malt manufacturing (ANZSIC class 2182)(0.08) and Shipbuilding (ANZSIC class 2821)(0.08).

Turnover per person employed  
(Tables 1 and 2)

Petroleum, coal, chemical and associated product manufacturing comprised a substantially larger share of turnover than of employment, which resulted in this subdivision recording a substantially higher value of turnover per person employed (\$512,800) than other subdivisions in the manufacturing industry. Textile, clothing, footwear and leather manufacturing recorded the lowest value for this ratio (\$87,300). Turnover per person employed for total manufacturing in 1993-94 was \$210,800, which is 1.4% higher than the figure recorded 12 months earlier. 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.

Gross product at factor cost  
(average 1989-90 prices)  
(Table 3)

Constant price estimates of gross product at factor cost are the most accurate measure of the relative growth or decline of the manufacturing industry, as they discount the impact of price changes. In constant price terms, manufacturing gross product at factor cost in Western Australia increased by 3.7% from \$4,841m in 1992-93 to \$5,021m in 1993-94.

Seven of the nine industry subdivisions recorded an increase in constant price estimates of gross product at factor cost over the period 1992-93 to 1993-94. The largest percentage increase was recorded by Machinery and equipment manufacturing (up 16.2%), followed by Non-metallic mineral product manufacturing (up 14.8%), Other manufacturing (up 14.0%) and Textile, clothing, footwear and leather manufacturing (up 13.7%). The subdivisions that recorded a decrease were Food, beverage and tobacco manufacturing (down 1.7%) and Metal product manufacturing (down 1.2%).

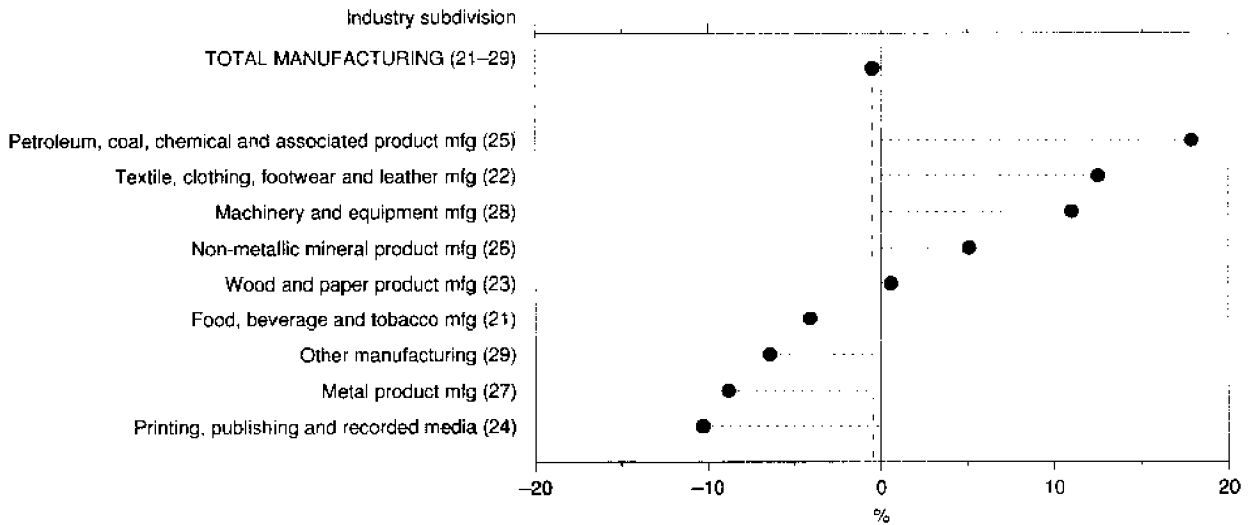
Longer term trends  
(1989-90 to 1993-94)

Over the period 1989-90 to 1993-94, manufacturing gross product in constant price terms decreased by 0.5%. Over this five year period, four industry subdivisions recorded a decrease with the other five industry subdivisions recording increases.

The largest percentage decreases were recorded by Printing, publishing and recorded media (down 10.3%) and Metal product manufacturing (down 8.8%). The largest percentage increases were recorded by Petroleum, coal, chemical and associated product manufacturing (up 17.9%), Textile, clothing, footwear and leather manufacturing (up 12.5%) and Machinery and equipment manufacturing (up 11.0%).

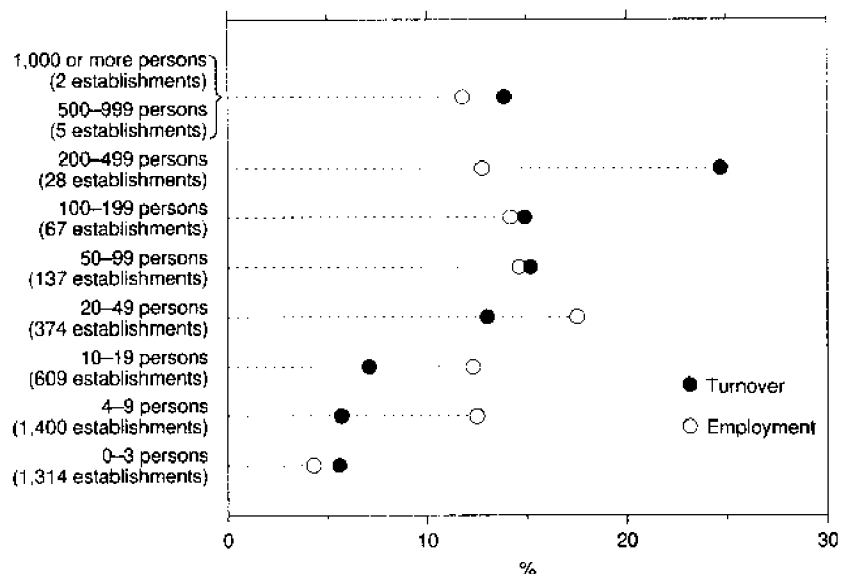
Over the period 1989-90 to 1993-94, there was an increase in gross product per person employed of 8.4%. Seven of the industry subdivisions recorded increases over this five year period. The largest percentage increases were recorded by Petroleum, coal, chemical and associated product manufacturing (up 26.3%), Machinery and equipment manufacturing (up 25.8%) and Textile, clothing, footwear and leather manufacturing (up 23.4%). The decreases were recorded by Printing, publishing and recorded media (down 6.0%) and Metal product manufacturing (down 2.9%).

PERCENTAGE CHANGE IN GROSS PRODUCT AT FACTOR COST (AVERAGE 1989-90 PRICES) BY INDUSTRY SUBDIVISION, WA, 1989-90 TO 1993-94



Employment size (Table 4) Of the 3,936 manufacturing establishments operating in Western Australia at 30 June 1994, 102 were large establishments (employing 100 or more persons). While making up only 2.6% of all establishments, they accounted for 38.8% of employment at the end of June 1994 and 53.5% of manufacturing turnover for 1993-94. Although establishments employing 0-19 persons comprised 84.4% of manufacturing establishments in Western Australia at 30 June 1994, they accounted for only 29.1% of employment and 18.3% of turnover. There were 7 manufacturing establishments employing 500 or more persons at the end of June 1994. They employed 11.8% of all persons working in the manufacturing industry in Western Australia and contributed 13.9% of all manufacturing turnover.

DISTRIBUTION OF MANUFACTURING TURNOVER AND EMPLOYMENT BY EMPLOYMENT SIZE, WA, 1993-94

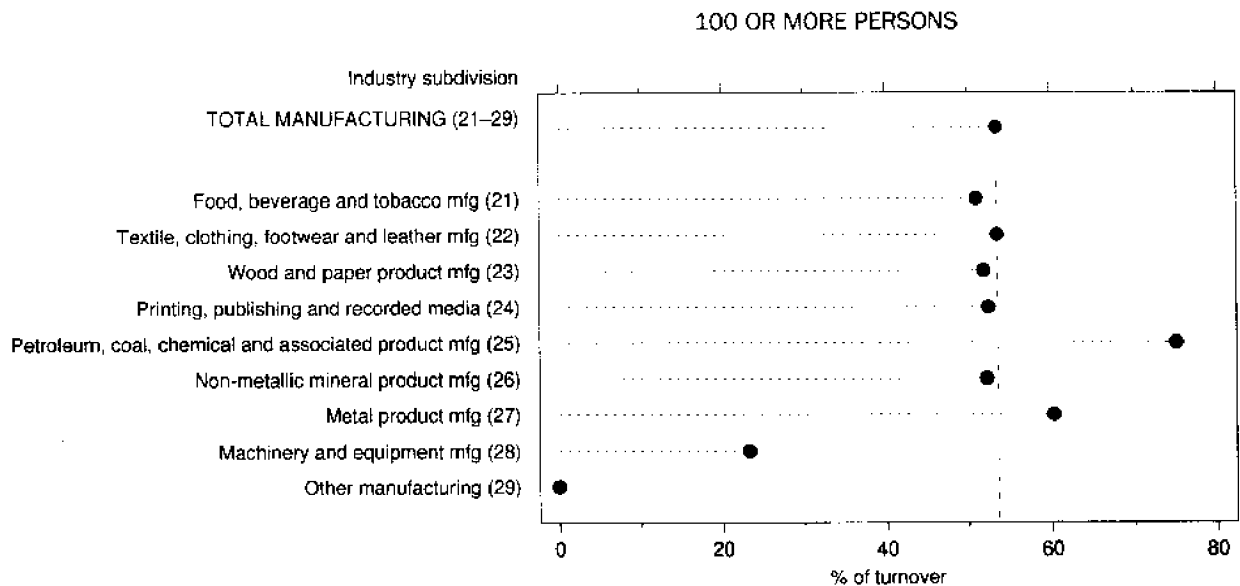
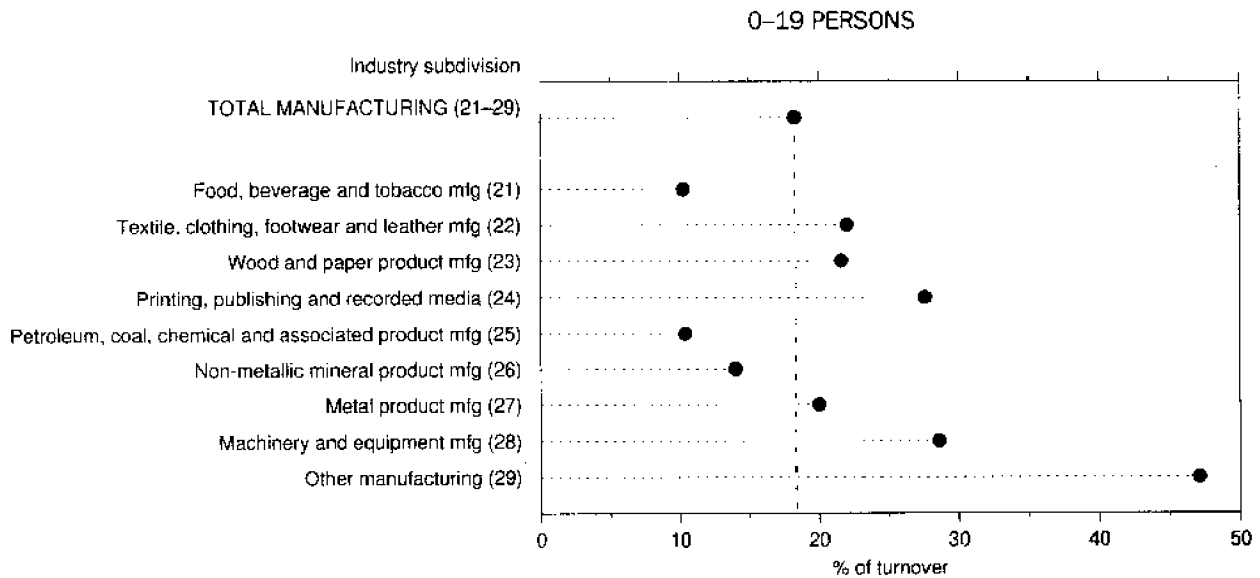


For 1993-94, the percentage distribution of turnover by employment size for the manufacturing industry was:

0-19 persons	—	18.3%
20-99 persons	—	28.2%
100 or more persons	—	53.5%

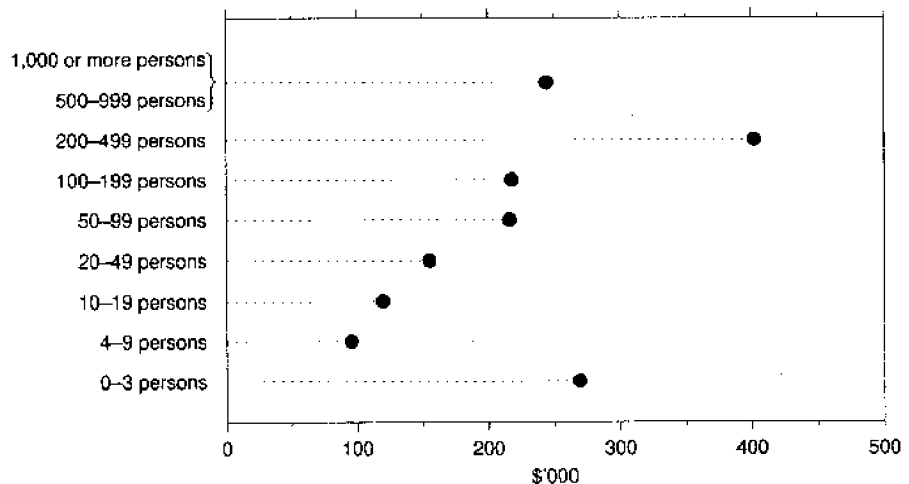
For seven of the nine industry subdivisions, more than 50% of turnover was contributed by large establishments (employing 100 or more persons). The industries where large establishments contributed most to turnover were Petroleum, coal, chemical and associated product manufacturing (75.1%) and Metal product manufacturing (60.3%). Small establishments (employing 0-19 persons) made relatively significant contributions to turnover for Other manufacturing (47.1%), Machinery and equipment manufacturing (28.6%) and Printing, publishing and recorded media (27.6%).

DISTRIBUTION OF TURNOVER BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION  
WA, 1993-94



Whilst establishments employing 0–3 persons recorded a relatively high ratio of turnover per person employed at the end of June 1994 (\$269,200), small establishments (i.e. those employing 0–19 persons) displayed a much lower overall ratio of turnover per person employed at the end of June 1994 (\$131,400) than establishments in the larger size categories. Large establishments (employing 100 or more persons) recorded an average turnover per person employed of \$286,700, with establishments employing 200–499 persons having a ratio of \$401,900. It should be remembered that the data include all manufacturing industries and that different patterns may emerge through analysis of individual industries.

TURNOVER PER PERSON EMPLOYED BY EMPLOYMENT SIZE, WA, 1993–94



#### MANUFACTURING LOCATION DATA

Regional manufacturing activity (Table 5)

As in previous years, Perth Statistical Division continued to dominate manufacturing activity in Western Australia in 1993–94. It contributed 80.5% of all locations at 30 June 1994, 77.3% of employment at the end of June 1994 and 71.0% of turnover for 1993–94. The only other statistical division to contribute significantly was South West (14.9% of employment and 20.0% of turnover).

The Perth Statistical Division was also the leading contributor in eight of the nine industry subdivisions. The South West Statistical Division was the leading contributor in Metal product manufacturing, with 4,675 persons employed and \$1,765.7m in turnover.

Of the seven remaining statistical divisions, a common feature was that a single industry subdivision generally dominated total manufacturing in that area. An analysis of the percentage contribution to turnover for these statistical divisions (and for which the data are available for publication) shows that Food, beverage and tobacco manufacturing contributed more than 50 per cent of total turnover in three of these regions and was the largest contributor in another. Of these, the statistical divisions that had the highest percentage contribution by Food, beverage and tobacco manufacturing for their region were Central (85.8%), Lower Great Southern (69.0%) and Midlands (59.4%).

## 1

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION, WA  
1989-90 TO 1993-94<sup>2</sup>

Industry subdivision			Establish- ments at 30 June <sup>3</sup>	Employ- ment at end of June <sup>4</sup>	Wages and salaries <sup>5,6</sup>	Turnover <sup>6</sup>	Ratio of wages and salaries to turnover <sup>6</sup>	Turnover per person employed <sup>6,7</sup>
ANZSIC code	Description		No.	'000	\$m	\$m	Ratio	\$'000
21	Food, beverage and tobacco mfg	1993-94	351	10.9	312.5	2 673.8	0.12	244.3
		1992-93	385	11.6	327.6	2 621.4	0.12	226.0
		1991-92	368	11.6	316.5	2 606.4	0.12	224.9
		1990-91	364	12.5	311.3	2 556.3	0.12	204.6
		1989-90	382	12.7	303.1	2 408.6	0.13	189.3
22	Textile, clothing, footwear and leather mfg	1993-94	228	3.4	78.2	296.7	0.26	87.3
		1992-93	206	3.2	70.4	269.9	0.26	83.7
		1991-92	212	3.2	70.4	261.4	0.27	82.2
		1990-91	209	3.4	72.6	269.9	0.27	79.4
		1989-90	210	3.7	73.2	264.6	0.28	71.0
23	Wood and paper product mfg	1993-94	319	4.5	126.5	691.6	0.18	152.8
		1992-93	323	4.6	117.4	641.5	0.18	140.8
		1991-92	315	4.2	105.4	590.8	0.18	141.6
		1990-91	322	4.3	110.0	582.8	0.19	135.3
		1989-90	325	4.8	112.7	591.2	0.19	123.8
24	Printing, publishing and recorded media	1993-94	403	6.0	169.4	645.0	0.26	107.4
		1992-93	385	5.5	151.9	603.9	0.25	109.5
		1991-92	382	5.7	145.9	584.3	0.25	101.7
		1990-91	365	6.1	151.2	576.4	0.26	94.5
		1989-90	374	6.3	150.9	595.1	0.25	94.6
25	Petroleum, coal, chemical and associated product mfg	1993-94	241	5.3	195.2	2 738.7	0.07	512.8
		1992-93	222	5.2	185.6	2 742.2	0.07	523.6
		1991-92	242	5.5	184.8	2 803.9	0.07	510.0
		1990-91	231	5.5	186.7	2 699.6	0.07	488.1
		1989-90	221	5.7	176.9	2 469.5	0.07	431.4
26	Non-metallic mineral product mfg	1993-94	212	4.8	153.7	983.7	0.16	205.3
		1992-93	210	4.8	135.6	889.5	0.15	186.0
		1991-92	216	4.7	137.4	775.4	0.18	165.7
		1990-91	193	4.3	132.3	720.5	0.18	166.8
		1989-90	195	4.8	139.1	856.5	0.16	180.1
27	Metal product mfg	1993-94	679	14.0	487.8	3 664.6	0.13	261.6
		1992-93	706	14.4	493.8	3 899.7	0.13	271.6
		1991-92	674	13.7	465.4	3 579.8	0.13	261.9
		1990-91	648	14.0	445.3	4 221.0	0.11	301.4
		1989-90	651	14.9	453.4	4 382.2	0.10	294.0

For footnotes see end of table.

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION, WA  
1989-90 TO 1993-94<sup>2</sup>—continued

Industry subdivision			Establish- ments at 30 June <sup>3</sup>	Employ- ment at end of June <sup>4</sup>	Wages and salaries <sup>5,6</sup>	Turnover <sup>6</sup>	Ratio of wages and salaries to turnover <sup>6</sup>	Turnover per person employed <sup>6,7</sup>
ANZSIC code	Description		No.	'000	\$m	\$m	Ratio	\$'000
28	Machinery and equipment mfg	1993-94	879	10.8	298.2	1 551.9	0.19	143.9
		1992-93	873	10.5	282.9	1 380.3	0.20	131.3
		1991-92	872	10.1	280.7	1 209.2	0.23	120.0
		1990-91	828	10.4	281.2	1 172.4	0.24	112.2
		1989-90	838	12.2	315.7	1 339.8	0.24	109.6
29	Other manufacturing	1993-94	624	5.6	116.5	531.6	0.22	95.6
		1992-93	585	5.2	107.4	462.3	0.23	88.3
		1991-92	615	5.2	105.2	439.2	0.24	84.7
		1990-91	602	5.1	104.7	432.8	0.24	84.4
		1989-90	612	6.0	118.4	521.9	0.23	86.7
<b>21-29</b>	<b>Total manufacturing</b>	<b>1993-94</b>	<b>3 936</b>	<b>65.4</b>	<b>1 938.1</b>	<b>13 777.6</b>	<b>0.14</b>	<b>210.8</b>
		<b>1992-93</b>	<b>3 896</b>	<b>65.0</b>	<b>1 872.5</b>	<b>13 510.9</b>	<b>0.14</b>	<b>207.8</b>
		<b>1991-92</b>	<b>3 896</b>	<b>63.8</b>	<b>1 811.6</b>	<b>12 850.4</b>	<b>0.14</b>	<b>201.4</b>
		<b>1990-91</b>	<b>3 761</b>	<b>65.7</b>	<b>1 795.2</b>	<b>13 231.6</b>	<b>0.14</b>	<b>201.3</b>
		<b>1989-90</b>	<b>3 808</b>	<b>71.2</b>	<b>1 843.4</b>	<b>13 429.4</b>	<b>0.14</b>	<b>188.7</b>

<sup>1</sup> See paragraph 7 of the Explanatory Notes.

<sup>2</sup> For factors affecting comparability of data over the time periods shown, see paragraphs 14 to 19 of the Explanatory Notes.

<sup>3</sup> See paragraphs 4 to 10 of the Explanatory Notes.

<sup>4</sup> Includes working proprietors.

<sup>5</sup> Excludes the drawings of working proprietors.

<sup>6</sup> Value data are at current prices and, therefore, do not discount the impact of price changes.

<sup>7</sup> Turnover divided by the number of persons employed at the end of June. Includes working proprietors.



Industry class		Establish- ments at 30 June <sup>2</sup>	Employ- ment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
<b>FOOD, BEVERAGE AND TOBACCO MFG</b>							
Meat and meat product mfg							
2111	Meat processing	46	2 259	77.7	466.3	0.17	206.4
2112	Poultry processing	10	625	n.p.	n.p.	n.p.	n.p.
2113	Bacon, ham and smallgood mfg	17	810	n.p.	n.p.	n.p.	n.p.
211	<i>Total</i>	73	3 694	109.4	758.7	0.14	205.4
Dairy product mfg							
2121	Milk and cream processing	3	167	n.p.	n.p.	n.p.	n.p.
2122	Ice cream mfg	4	195	6.4	69.9	0.09	358.2
2129	Dairy product mfg n.e.c.	9	191	n.p.	n.p.	n.p.	n.p.
212	<i>Total</i>	17	553	27.7	317.3	0.09	573.8
213	<i>Fruit and vegetable processing</i>	7	298	n.p.	n.p.	n.p.	n.p.
214	<i>Oil and fat mfg</i>	3	122	n.p.	n.p.	n.p.	n.p.
Flour mill and cereal food mfg							
2151	Flour mill product mfg	6	217	6.1	70.0	0.09	322.6
2152	Cereal food and baking mix mfg	11	198	4.6	41.6	0.11	210.1
215	<i>Total</i>	17	416	10.7	111.6	0.10	268.3
Bakery product mfg							
2161	Bread mfg	52	1 183	32.4	118.2	0.27	99.9
2162	Cake and pastry mfg	28	n.p.	n.p.	n.p.	n.p.	n.p.
2163	Biscuit mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.
216	<i>Total</i>	82	1 843	46.5	168.4	0.28	91.4
Other food mfg							
2171	Sugar mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.
2172	Confectionery mfg	6	45	0.9	4.5	0.21	99.5
2173	Seafood processing	31	1 346	23.6	417.2	0.06	309.9
2174	Prepared animal and bird feed mfg	29	341	8.0	128.9	0.06	377.9
2179	Food mfg n.e.c.	42	n.p.	n.p.	n.p.	n.p.	n.p.
217	<i>Total</i>	109	2 486	59.1	736.9	0.08	296.4
Beverage and malt mfg							
2181	Soft drink, cordial and syrup mfg	8	667	21.2	207.7	0.10	311.3
2182	Beer and malt mfg	5	357	18.0	224.8	0.08	629.8
2183	Wine mfg	30	507	9.5	55.4	0.17	109.3
2184	Spirit mfg	—	—	—	—	—	—
218	<i>Total</i>	43	1 531	48.7	487.9	0.10	318.7
219	<i>Tobacco product mfg</i>	—	—	—	—	—	—
<b>21</b>	<b>Total food, beverage and tobacco mfg</b>	<b>351</b>	<b>10 943</b>	<b>312.5</b>	<b>2 673.8</b>	<b>0.12</b>	<b>244.3</b>

For footnotes see end of table.

Industry class		Establish- ments at 30 June <sup>2</sup>	Employ- ment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG							
Textile fibre, yarn and woven fabric mfg							
2211	Wool scouring	4	197	6.2	18.3	0.34	92.7
2212	Synthetic fibre textile mfg	6	114	n.p.	n.p.	n.p.	n.p.
2213	Cotton textile mfg	5	n.p.	n.p.	n.p.	n.p.	n.p.
2214	Wool textile mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.
2215	Textile finishing	1	n.p.	n.p.	n.p.	n.p.	n.p.
221	Total	17	730	n.p.	n.p.	n.p.	n.p.
Textile product mfg							
2221	Made-up textile product mfg	46	1 080	26.1	103.3	0.25	95.7
2222	Textile floor covering mfg	6	24	n.p.	n.p.	n.p.	n.p.
2223	Rope, cordage and twine mfg	4	18	n.p.	n.p.	n.p.	n.p.
2229	Textile product mfg n.e.c.	12	70	1.4	5.4	0.25	76.5
222	Total	68	1 193	28.4	112.1	0.25	93.9
Knitting mills							
2231	Hosiery mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.
2232	Cardigan and pullover mfg	5	86	n.p.	n.p.	n.p.	n.p.
2239	Knitting mill product mfg n.e.c.	7	54	n.p.	n.p.	n.p.	n.p.
223	Total	13	n.p.	n.p.	n.p.	n.p.	n.p.
Clothing mfg							
2241	Men's and boys' wear mfg	18	277	4.7	11.1	0.43	40.2
2242	Women's and girls' wear mfg	38	219	3.6	13.4	0.27	61.1
2243	Sleepwear, underwear and infant clothing mfg	5	61	n.p.	n.p.	n.p.	n.p.
2249	Clothing mfg n.e.c.	34	231	n.p.	n.p.	n.p.	n.p.
224	Total	94	788	13.5	41.5	0.32	52.6
225	Footwear mfg	11	n.p.	n.p.	n.p.	n.p.	n.p.
Leather and leather product mfg							
2261	Leather tanning and fur dressing	14	227	5.7	39.8	0.14	175.2
2262	Leather and leather substitute product mfg	9	94	1.7	7.4	0.24	78.4
226	Total	24	321	7.5	47.1	0.16	146.9
22	Total textile, clothing, footwear and leather mfg	228	3 401	78.2	296.7	0.26	87.3

For footnotes see end of table.

## 2

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
WA, 1993-94—continued

Industry class		Establishments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
WOOD AND PAPER PRODUCT MFG							
Log sawmilling and timber dressing							
2311	Log sawmilling	42	997	28.5	107.0	0.27	107.3
2312	Wood chipping	3	n.p.	n.p.	n.p.	n.p.	n.p.
2313	Timber resawing and dressing	9	570	14.3	82.2	0.17	144.3
231	<i>Total</i>	54	n.p.	n.p.	n.p.	n.p.	n.p.
Other wood product mfg							
2321	Plywood and veneer mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.
2322	Fabricated wood mfg	9	603	n.p.	n.p.	n.p.	n.p.
2323	Wooden structural component mfg	155	892	17.6	87.5	0.20	98.1
2329	Wood product mfg n.e.c.	90	n.p.	n.p.	n.p.	n.p.	n.p.
232	<i>Total</i>	254	2 365	59.7	307.3	0.19	129.9
Paper and paper product mfg							
2331	Pulp, paper and paperboard mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.
2332	Solid paperboard container mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.
2333	Corrugated paperboard container mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.
2334	Paper bag and sack mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.
2339	Paper product mfg n.e.c.	3	n.p.	n.p.	n.p.	n.p.	n.p.
233	<i>Total</i>	10	n.p.	n.p.	n.p.	n.p.	n.p.
<b>23</b>	<b>Total wood and paper product mfg</b>	<b>319</b>	<b>4 527</b>	<b>126.5</b>	<b>691.6</b>	<b>0.18</b>	<b>152.8</b>
PRINTING, PUBLISHING AND RECORDED MEDIA							
Printing and services to printing							
2411	Paper stationery mfg	31	523	14.0	39.5	0.35	75.5
2412	Printing	192	1 969	47.8	201.3	0.24	102.2
2413	Services to printing	63	n.p.	n.p.	n.p.	n.p.	n.p.
241	<i>Total</i>	286	n.p.	n.p.	n.p.	n.p.	n.p.
Publishing							
2421	Newspaper printing or publishing	52	2 756	88.1	340.5	0.26	123.5
2422	Other periodical publishing	30	177	4.1	16.3	0.25	92.1
2423	Book and other publishing	25	104	2.0	7.8	0.25	75.3
242	<i>Total</i>	108	3 037	94.1	364.6	0.26	120.1
243	Recorded media manufacturing and publishing	9	n.p.	n.p.	n.p.	n.p.	n.p.
<b>24</b>	<b>Total printing, publishing and recorded media</b>	<b>403</b>	<b>6 004</b>	<b>169.4</b>	<b>645.0</b>	<b>0.26</b>	<b>107.4</b>

For footnotes see end of table.

Industry class		Establish- ments at 30 June <sup>2</sup>	Employ- ment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG							
251	Petroleum refining	3	n.p.	n.p.	n.p.	n.p.	n.p.
252	Petroleum and coal product mfg n.e.c.	6	55.0	1.8	18.2	0.10	330.9
Basic chemical mfg							
2531	Fertiliser mfg	13	498	n.p.	n.p.	n.p.	n.p.
2532	Industrial gas mfg	3	n.p.	n.p.	n.p.	n.p.	n.p.
2533	Synthetic resin mfg	3	n.p.	n.p.	n.p.	n.p.	n.p.
2534	Organic industrial chemical mfg n.e.c.	—	—	—	—	—	—
2535	Inorganic industrial chemical mfg n.e.c.	16	996	43.9	413.7	0.11	415.4
253	Total	35	1 605	69.8	682.1	0.10	425.0
Other chemical product mfg							
2541	Explosive mfg	3	n.p.	n.p.	n.p.	n.p.	n.p.
2542	Paint mfg	16	329	n.p.	n.p.	n.p.	n.p.
2543	Medicinal and pharmaceutical product mfg	9	344	n.p.	n.p.	n.p.	n.p.
2544	Pesticide mfg	3	71	n.p.	n.p.	n.p.	n.p.
2545	Soap and other detergent mfg	15	142	3.9	19.8	0.19	139.7
2546	Cosmetic and toiletry preparation mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.
2547	Ink mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.
2549	Chemical product mfg n.e.c.	16	117	4.3	27.2	0.16	232.1
254	Total	66	n.p.	n.p.	n.p.	n.p.	n.p.
Rubber product mfg							
2551	Rubber tyre mfg	6	140	3.3	17.4	0.19	124.1
2559	Rubber product mfg n.e.c.	18	217	7.2	30.0	0.24	138.2
255	Total	24	357	10.4	47.4	0.22	132.7
Plastic product mfg							
2561	Plastic blow moulded product mfg	4	139	n.p.	n.p.	n.p.	n.p.
2562	Plastic extruded product mfg	8	n.p.	n.p.	n.p.	n.p.	n.p.
2563	Plastic bag and film mfg	8	n.p.	n.p.	n.p.	n.p.	n.p.
2564	Plastic product, rigid fibre reinforced, mfg	14	116	2.4	18.1	0.13	156.1
2565	Plastic foam product mfg	5	n.p.	n.p.	n.p.	n.p.	n.p.
2566	Plastic injection moulded product mfg	67	594	14.2	68.4	0.21	115.2
256	Total	107	1 620	45.5	268.0	0.17	165.5
<b>25</b>	<b>Total petroleum, coal, chemical and associated product mfg</b>	<b>241</b>	<b>5 341</b>	<b>195.2</b>	<b>2 738.7</b>	<b>0.07</b>	<b>512.8</b>

For footnotes see end of table.

## 2

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
WA, 1993-94--continued

Industry class		Establish- ments at 30 June <sup>2</sup>	Employ- ment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
<b>NON-METALLIC MINERAL PRODUCT MFG</b>							
261	Glass and glass product mfg	35	439	13.4	54.9	0.24	125.0
Ceramic mfg							
2621	Clay brick mfg	11	1 257	n.p.	n.p.	n.p.	n.p.
2622	Ceramic product mfg	7	63	1.9	11.8	0.16	188.0
2623	Ceramic tile and pipe mfg	5	119	n.p.	n.p.	n.p.	n.p.
2629	Ceramic product mfg n.e.c.	21	223	4.8	13.3	0.36	59.8
262	Total	44	1 662	52.1	253.3	0.21	152.4
Cement, lime, plaster and concrete product mfg							
2631	Cement and lime mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.
2632	Plaster product mfg	14	n.p.	n.p.	n.p.	n.p.	n.p.
2633	Concrete slurry mfg	24	449	15.6	163.4	0.10	364.0
2634	Concrete pipe and box culvert mfg	10	179	7.8	38.7	0.20	216.2
2635	Concrete product mfg n.e.c.	51	1 014	32.7	188.0	0.17	185.5
263	Total	101	2 263	75.2	538.0	0.14	237.7
264	Non-metallic mineral product mfg n.e.c.	32	428	13.0	137.6	0.09	321.5
<b>26</b>	<b>Total non-metallic mineral product mfg</b>	<b>212</b>	<b>4 792</b>	<b>153.7</b>	<b>983.7</b>	<b>0.16</b>	<b>205.3</b>
<b>METAL PRODUCT MFG</b>							
Iron and steel mfg							
2711	Basic iron and steel mfg	15	375	11.7	131.8	0.09	351.5
2712	Iron and steel casting and forging	20	695	n.p.	n.p.	n.p.	n.p.
2713	Steel pipe and tube mfg	7	98	n.p.	n.p.	n.p.	n.p.
271	Total	41	1 168	36.6	234.8	0.16	201.0
Basic non-ferrous metal mfg							
2721	Alumina production	5	n.p.	n.p.	n.p.	n.p.	n.p.
2722	Aluminium smelting	—	—	—	—	—	—
2723	Copper, silver, lead and zinc smelting, refining	—	—	—	—	—	—
2729	Basic non-ferrous metal mfg n.e.c.	6	n.p.	n.p.	n.p.	n.p.	n.p.
272	Total	11	4 918	240.9	2 342.2	0.10	476.3

For footnotes see end of table.

Industry class		Establish- ments at 30 June <sup>2</sup>	Employ- ment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
Non-ferrous basic metal product mfg							
2731	Aluminium rolling, drawing, extruding	1	n.p.	n.p.	n.p.	n.p.	n.p.
2732	Non-ferrous metal rolling, drawing, extruding n.e.c.	3	n.p.	n.p.	n.p.	n.p.	n.p.
2733	Non-ferrous metal casting	2	n.p.	n.p.	n.p.	n.p.	n.p.
273	<i>Total</i>	7	n.p.	n.p.	n.p.	n.p.	n.p.
Structural metal product mfg							
2741	Structural steel fabricating	132	2 250	68.7	366.3	0.19	162.8
2742	Architectural aluminium product mfg	91	1 169	28.7	157.6	0.18	134.8
2749	Structural metal product mfg n.e.c.	53	429	10.1	55.9	0.18	130.3
274	<i>Total</i>	276	3 848	107.6	579.8	0.19	150.7
Sheet metal product mfg							
2751	Metal container mfg	9	n.p.	n.p.	n.p.	n.p.	n.p.
2759	Sheet metal product mfg n.e.c.	96	1 294	32.0	156.0	0.21	120.5
275	<i>Total</i>	105	n.p.	n.p.	n.p.	n.p.	n.p.
Fabricated metal product mfg							
2761	Hand tool and general hardware mfg	9	61	1.4	3.9	0.36	64.0
2762	Spring and wire product mfg	28	470	12.4	83.3	0.15	177.3
2763	Nut, bolt, screw and rivet mfg	13	62	1.2	4.7	0.25	75.5
2764	Metal coating and finishing	60	600	15.6	49.6	0.31	82.7
2765	Non-ferrous pipe fitting mfg	5	109	2.6	12.9	0.20	118.8
2769	Fabricated metal product mfg n.e.c.	123	1 074	25.2	102.2	0.25	95.2
276	<i>Total</i>	238	2 377	58.3	256.7	0.23	108.0
<b>27</b>	<b>Total metal product mfg</b>	<b>679</b>	<b>14 009</b>	<b>487.8</b>	<b>3 664.6</b>	<b>0.13</b>	<b>261.6</b>
MACHINERY AND EQUIPMENT MFG							
Motor vehicle and part mfg							
2811	Motor vehicle mfg	2	n.p.	n.p.	n.p.	n.p.	n.p.
2812	Motor vehicle body mfg	44	579	12.1	70.6	0.17	122.0
2813	Automotive electrical and instrument mfg	3	n.p.	n.p.	n.p.	n.p.	n.p.
2819	Automotive component mfg n.e.c.	92	825	19.5	79.5	0.24	96.3
281	<i>Total</i>	141	1 555	34.7	159.1	0.22	102.3

For footnotes see end of table.

Industry class		Establish- ments at 30 June <sup>2</sup>	Employ- ment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
Other transport equipment mfg							
2821	Shipbuilding	17	631	20.5	257.4	0.08	407.9
2822	Boatbuilding	68	n.p.	n.p.	n.p.	n.p.	n.p.
2823	Railway equipment mfg	5	n.p.	n.p.	n.p.	n.p.	n.p.
2824	Aircraft mfg	22	295	11.1	34.1	0.32	115.6
2829	Transport equipment mfg n.e.c.	3	55	n.p.	n.p.	n.p.	n.p.
282	<i>Total</i>	116	1 701	52.9	398.0	0.13	234.0
Photographic and scientific equipment mfg							
2831	Photographic and optical good mfg	9	77	1.9	10.6	0.18	137.8
2832	Medical and surgical equipment mfg	73	277	5.8	16.2	0.36	58.4
2839	Professional and scientific equipment mfg n.e.c.	14	84	2.1	15.0	0.14	178.7
283	<i>Total</i>	95	438	9.8	41.8	0.23	95.4
Electronic equipment mfg							
2841	Computer and business machine mfg	11	166	4.7	37.5	0.12	225.9
2842	Telecommunication, broadcasting and transceiving equipment mfg	13	268	11.9	32.1	0.37	119.8
2849	Electronic equipment mfg n.e.c.	51	619	16.5	88.3	0.19	142.7
284	<i>Total</i>	75	1 053	33.1	157.9	0.21	150.0
Electrical equipment and appliance mfg							
2851	Household appliance mfg	33	492	12.5	86.2	0.15	175.2
2852	Electric cable and wire mfg	5	n.p.	n.p.	n.p.	n.p.	n.p.
2853	Battery mfg	1	n.p.	n.p.	n.p.	n.p.	n.p.
2854	Electric light and sign mfg	15	124	2.5	9.9	0.26	79.9
2859	Electrical equipment mfg n.e.c.	52	668	19.2	93.5	0.21	139.9
285	<i>Total</i>	107	1 331	35.0	199.3	0.18	149.7

For footnotes see end of table.

Industry class		Establish- ments at 30 June <sup>2</sup>	Employ- ment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
Industrial machinery and equipment mfg							
2861	Agricultural machinery mfg	51	512	12.2	61.0	0.20	119.0
2862	Mining and construction machinery mfg	56	1 316	40.4	215.7	0.19	163.9
2863	Food processing machinery mfg	5	31	0.8	2.3	0.33	74.9
2864	Machine tool and part mfg	37	206	4.9	15.1	0.32	73.1
2865	Lifting and material handling equipment mfg	37	830	25.1	90.7	0.28	109.3
2866	Pump and compressor mfg	16	247	4.8	25.3	0.19	102.3
2867	Commercial space heating and cooling equipment mfg	7	292	9.2	62.2	0.15	213.1
2869	Industrial machinery and equipment mfg n.e.c.	135	1 277	35.5	123.6	0.29	96.8
286	<i>Total</i>	345	4 710	132.8	595.9	0.22	126.5
<b>28</b>	<b>Total machinery and equipment mfg</b>	<b>879</b>	<b>10 788</b>	<b>298.2</b>	<b>1 551.9</b>	<b>0.19</b>	<b>143.9</b>
OTHER MANUFACTURING							
Prefabricated building mfg							
2911	Prefabricated metal building mfg	24	n.p.	n.p.	n.p.	n.p.	n.p.
2919	Prefabricated building mfg n.e.c.	3	n.p.	n.p.	n.p.	n.p.	n.p.
291	<i>Total</i>	27	394	8.1	75.2	0.11	190.7
Furniture mfg							
2921	Wooden furniture and upholstered seat mfg	376	2 728	52.0	211.5	0.25	77.5
2922	Sheet metal furniture mfg	20	284	6.5	26.1	0.25	91.8
2923	Mattress mfg (except rubber)	8	337	8.3	49.6	0.17	147.2
2929	Furniture mfg n.e.c.	59	725	17.0	77.7	0.22	107.2
292	<i>Total</i>	462	4 074	83.8	364.9	0.23	89.6
Miscellaneous manufacturing							
2941	Jewellery and silverware mfg	26	n.p.	n.p.	n.p.	n.p.	n.p.
2942	Toy and sporting good mfg	28	n.p.	n.p.	n.p.	n.p.	n.p.
2949	Manufacturing n.e.c.	80	746	17.3	62.9	0.27	84.4
294	<i>Total</i>	134	1 091	24.7	91.6	0.27	83.9
<b>29</b>	<b>Total other manufacturing</b>	<b>624</b>	<b>5 559</b>	<b>116.5</b>	<b>531.6</b>	<b>0.22</b>	<b>95.6</b>
<b>21-29</b>	<b>TOTAL MANUFACTURING</b>	<b>3 938</b>	<b>65 365</b>	<b>1 933.1</b>	<b>13 777.6</b>	<b>0.14</b>	<b>210.8</b>

<sup>1</sup> See paragraph 7 of the Explanatory Notes.<sup>2</sup> See paragraphs 4 to 10 of the Explanatory Notes.<sup>3</sup> Includes working proprietors.<sup>4</sup> Excludes the drawings of working proprietors.<sup>5</sup> Turnover divided by the number of persons employed at the end of June. Includes working proprietors.



## 3

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: PERCENTAGE CHANGE IN GROSS PRODUCT AT FACTOR COST (AVERAGE 1989-90 PRICES)<sup>2</sup> BY INDUSTRY SUBDIVISION  
WA, 1989-90 TO 1993-94<sup>3</sup>

Industry subdivision ANZSIC code	Description	1989-90 to 1993-94					
		1989-90 to 1990-91	1990-91 to 1991-92	1991-92 to 1992-93	1992-93 to 1993-94	Percentage movement	Change in gross product per person employed <sup>4, 5</sup>
21	Food, beverage and tobacco mfg	3.0	-0.5	-4.8	-1.7	-4.1	11.5
22	Textile, clothing, footwear and leather mfg	0.3	-3.5	2.2	13.7	12.5	23.4
23	Wood and paper product mfg	-7.8	-1.9	8.6	2.5	0.6	6.2
24	Printing, publishing and recorded media	-8.0	-3.9	-0.8	2.4	-10.3	-6.0
25	Petroleum, coal, chemical and associated product mfg	5.6	1.8	3.9	5.6	17.9	26.3
26	Non-metallic mineral product mfg	-22.7	4.7	13.0	14.8	5.1	4.3
27	Metal product mfg	-4.0	-3.4	-0.5	-1.2	-8.8	-2.9
28	Machinery and equipment mfg	-12.4	2.2	6.7	16.2	11.0	25.8
29	Other manufacturing	-20.8	-0.1	3.9	14.0	-6.4	1.4
<b>21-29</b>	<b>Total manufacturing</b>	<b>-4.6</b>	<b>-1.0</b>	<b>1.6</b>	<b>3.7</b>	<b>-0.5</b>	<b>8.4</b>

<sup>1</sup> See paragraph 7 of the Explanatory Notes.

<sup>2</sup> See paragraphs 21 to 23 of the Explanatory Notes.

<sup>3</sup> For factors affecting comparability of data over the time periods shown, see paragraphs 14 to 19 of the Explanatory Notes.

<sup>4</sup> Based on employment at the end of June of the reference year. Includes working proprietors.

<sup>5</sup> The basis for the calculation of this data item in this issue of the publication differs from that used in the 1992-93 issue of the publication. See paragraph 20 of the Explanatory Notes.

Employment size group	Establishments at 30 June <sup>2</sup>		Employment at end of June <sup>3</sup>		Wages and salaries <sup>4, 5</sup>		Turnover <sup>5</sup>	
	Number	Proportion	Number	Proportion	Amount	Proportion	Amount	Proportion
	No.	%	No.	%	\$m	%	\$m	%
FOOD, BEVERAGE AND TOBACCO MFG								
0-3 persons	63	17.9	140	1.3	3.0	1.1	43.0	1.7
4-9 persons	109	31.1	649	5.9	11.6	4.0	79.1	3.1
10-19 persons	64	18.2	851	7.8	15.6	5.4	137.0	5.4
20-49 persons	61	17.4	1 936	17.7	54.3	18.8	358.8	14.2
50-99 persons	26	7.4	1 866	17.1	48.2	16.7	615.8	24.4
<i>Total less than 100 persons</i>	<i>324</i>	<i>92.3</i>	<i>5 441</i>	<i>49.7</i>	<i>132.8</i>	<i>46.1</i>	<i>1 233.7</i>	<i>48.9</i>
100-199 persons	15	4.3	2 045	18.7	61.2	21.2	590.4	23.4
200-499 persons	12	3.4	3 456	31.6	94.2	32.7	698.5	27.7
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>27</i>	<i>7.7</i>	<i>5 501</i>	<i>50.3</i>	<i>155.5</i>	<i>53.9</i>	<i>1 288.8</i>	<i>51.1</i>
<b>Total</b>	<b>351</b>	<b>100.0</b>	<b>10 943</b>	<b>100.0</b>	<b>288.2</b>	<b>100.0</b>	<b>2 522.5</b>	<b>100.0</b>
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG								
0-3 persons	91	39.9	191	5.6	2.4	3.1	13.7	4.7
4-9 persons	87	38.2	492	14.5	7.2	9.3	31.7	10.8
10-19 persons	23	10.1	310	9.1	6.3	8.1	19.4	6.6
20-49 persons	16	7.0	498	14.6	11.1	14.4	40.4	13.7
50-99 persons	5	2.2	379	11.1	9.8	12.6	31.6	10.7
<i>Total less than 100 persons</i>	<i>222</i>	<i>97.4</i>	<i>1 871</i>	<i>55.0</i>	<i>36.8</i>	<i>47.5</i>	<i>136.8</i>	<i>46.5</i>
100-199 persons	4	1.8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
200-499 persons	1	0.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500-999 persons	1	0.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>6</i>	<i>2.6</i>	<i>1 530</i>	<i>45.0</i>	<i>40.7</i>	<i>52.5</i>	<i>157.1</i>	<i>53.5</i>
<b>Total</b>	<b>228</b>	<b>100.0</b>	<b>3 401</b>	<b>100.0</b>	<b>77.5</b>	<b>100.0</b>	<b>293.9</b>	<b>100.0</b>

For footnotes see end of table.

## 4

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION  
WA, 1993-94—continued

Employment size group	Establishments at 30 June <sup>2</sup>		Employment at end of June <sup>3</sup>		Wages and salaries <sup>4, 5</sup>		Turnover <sup>6</sup>	
	Number	Proportion	Number	Proportion	Amount	Proportion	Amount	Proportion
	No.	%	No.	%	\$m	%	\$m	%
<b>WOOD AND PAPER PRODUCT MFG</b>								
0-3 persons	128	40.1	275	6.1	4.4	3.5	20.0	2.9
4-9 persons	125	39.2	719	15.9	13.4	10.6	62.1	9.0
10-19 persons	36	11.3	482	10.6	10.8	8.6	66.6	9.7
20-49 persons	18	5.6	509	11.2	14.6	11.6	135.9	19.7
50-99 persons	3	0.9	206	4.6	7.5	5.9	47.3	6.9
<i>Total less than 100 persons</i>	309	96.9	2 191	48.4	50.6	40.1	331.9	48.1
100-199 persons	6	1.9	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
200-499 persons	3	0.9	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500-999 persons	1	0.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	10	3.1	2 336	51.6	75.6	59.9	358.2	51.9
<b>Total</b>	<b>319</b>	<b>100.0</b>	<b>4 527</b>	<b>100.0</b>	<b>126.2</b>	<b>100.0</b>	<b>690.1</b>	<b>100.0</b>
<b>PRINTING, PUBLISHING AND RECORDED MEDIA</b>								
0-3 persons	137	34.0	290	4.8	5.4	3.2	23.5	3.7
4-9 persons	153	38.0	927	15.4	19.5	11.5	86.2	13.4
10-19 persons	67	16.6	871	14.5	20.9	12.3	68.1	10.6
20-49 persons	32	7.9	927	15.4	28.1	16.6	85.2	13.2
50-99 persons	7	1.7	443	7.4	13.3	7.8	44.2	6.8
<i>Total less than 100 persons</i>	396	98.3	3 457	57.6	87.2	51.5	307.2	47.6
100-199 persons	4	1.0	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
200-499 persons	1	0.2	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.
1 000 or more persons	1	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	7	1.7	2 547	42.4	82.2	48.5	337.5	52.4
<b>Total</b>	<b>403</b>	<b>100.0</b>	<b>6 004</b>	<b>100.0</b>	<b>169.4</b>	<b>100.0</b>	<b>644.7</b>	<b>100.0</b>

For footnotes see end of table.

## 4

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION  
WA, 1993-94—continued

Employment size group	Establishments at 30 June <sup>2</sup>		Employment at end of June <sup>3</sup>		Wages and salaries <sup>4, 5</sup>		Turnover <sup>5</sup>	
	Number	Proportion	Number	Proportion	Amount	Proportion	Amount	Proportion
	No.	%	No.	%	\$m	%	\$m	%
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG								
0-3 persons	86	35.7	185	3.5	3.6	1.8	158.1	5.8
4-9 persons	66	27.4	387	7.2	8.3	4.3	45.3	1.7
10-19 persons	37	15.4	499	9.3	14.7	7.5	80.1	2.9
20-49 persons	34	14.1	1 006	18.8	30.0	15.4	247.6	9.0
50-99 persons	8	3.3	556	10.4	18.8	9.7	150.9	5.5
<i>Total less than 100 persons</i>	<i>230</i>	<i>95.4</i>	<i>2 634</i>	<i>49.3</i>	<i>75.4</i>	<i>38.6</i>	<i>682.0</i>	<i>24.9</i>
100-199 persons	5	2.1	628	11.8	24.4	12.5	243.6	8.9
200-499 persons	6	2.5	2 080	38.9	95.3	48.8	1 812.5	66.2
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>11</i>	<i>4.6</i>	<i>2 708</i>	<i>50.7</i>	<i>119.6</i>	<i>61.4</i>	<i>2 056.1</i>	<i>75.1</i>
<b>Total</b>	<b>241</b>	<b>100.0</b>	<b>5 341</b>	<b>100.0</b>	<b>195.0</b>	<b>100.0</b>	<b>2 738.1</b>	<b>100.0</b>
NON-METALLIC MINERAL PRODUCT MFG								
0-3 persons	65	30.7	138	2.9	2.9	1.9	23.0	2.3
4-9 persons	69	32.5	422	8.8	8.7	5.7	51.5	5.2
10-19 persons	38	17.9	506	10.6	11.6	7.6	63.1	6.4
20-49 persons	20	9.4	622	13.0	18.3	11.9	127.7	13.0
50-99 persons	10	4.7	732	15.3	28.5	18.6	204.7	20.8
<i>Total less than 100 persons</i>	<i>202</i>	<i>95.3</i>	<i>2 420</i>	<i>50.5</i>	<i>70.1</i>	<i>45.6</i>	<i>470.0</i>	<i>47.8</i>
100-199 persons	8	3.8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
200-499 persons	1	0.5	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500-999 persons	1	0.5	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>10</i>	<i>4.7</i>	<i>2 372</i>	<i>49.5</i>	<i>83.5</i>	<i>54.4</i>	<i>513.5</i>	<i>52.2</i>
<b>Total</b>	<b>212</b>	<b>100.0</b>	<b>4 792</b>	<b>100.0</b>	<b>153.5</b>	<b>100.0</b>	<b>983.4</b>	<b>100.0</b>

For footnotes see end of table.

**4** MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION  
WA, 1993-94—continued

Employment size group	Establishments at 30 June <sup>2</sup>		Employment at end of June <sup>3</sup>		Wages and salaries <sup>4, 5</sup>		Turnover <sup>5</sup>	
	Number	Proportion	Number	Proportion	Amount	Proportion	Amount	Proportion
	No.	%	No.	%	\$m	%	\$m	%
<b>METAL PRODUCT MFG</b>								
0-3 persons	181	26.7	388	2.8	6.5	1.3	378.2	10.3
4-9 persons	262	38.6	1 532	10.9	33.2	6.8	149.9	4.1
10-19 persons	120	17.7	1 589	11.3	40.0	8.2	204.6	5.6
20-49 persons	70	10.3	2 142	15.3	64.0	13.1	333.5	9.1
50-99 persons	31	4.6	2 185	15.6	68.9	14.1	389.3	10.6
<i>Total less than 100 persons</i>	<i>664</i>	<i>97.8</i>	<i>7 836</i>	<i>55.9</i>	<i>212.6</i>	<i>43.6</i>	<i>1 455.5</i>	<i>39.7</i>
100-199 persons	11	1.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
200-499 persons	2	0.3	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.
1 000 or more persons	1	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	<i>15</i>	<i>2.2</i>	<i>6 173</i>	<i>44.1</i>	<i>274.9</i>	<i>56.4</i>	<i>2 208.4</i>	<i>60.3</i>
<b>Total</b>	<b>679</b>	<b>100.0</b>	<b>14 009</b>	<b>100.0</b>	<b>487.4</b>	<b>100.0</b>	<b>3 664.0</b>	<b>100.0</b>
<b>MACHINERY AND EQUIPMENT MFG</b>								
0-3 persons	334	38.0	697	6.5	12.7	4.2	60.9	3.9
4-9 persons	285	32.4	1 611	14.9	31.9	10.7	156.9	10.1
10-19 persons	133	15.1	1 765	16.4	44.2	14.8	225.7	14.5
20-49 persons	82	9.3	2 553	23.7	71.8	24.1	318.5	20.5
50-99 persons	28	3.2	1 941	18.0	69.0	23.1	430.0	27.7
<i>Total less than 100 persons</i>	<i>862</i>	<i>98.1</i>	<i>8 567</i>	<i>79.4</i>	<i>229.6</i>	<i>77.0</i>	<i>1 191.9</i>	<i>76.8</i>
100-199 persons	14	1.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
200-499 persons	2	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>16</i>	<i>1.8</i>	<i>2 221</i>	<i>20.6</i>	<i>68.6</i>	<i>23.0</i>	<i>359.9</i>	<i>23.2</i>
<b>Total</b>	<b>879</b>	<b>100.0</b>	<b>10 788</b>	<b>100.0</b>	<b>298.2</b>	<b>100.0</b>	<b>1 551.8</b>	<b>100.0</b>

For footnotes see end of table.

## 4

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION  
WA, 1993-94—continued

Employment size group	Establishments at 30 June <sup>2</sup>		Employment at end of June <sup>3</sup>		Wages and salaries <sup>4,5</sup>		Turnover <sup>5</sup>	
	Number	Proportion	Number	Proportion	Amount	Proportion	Amount	Proportion
	No.	%	No.	%	\$m	%	\$m	%
<b>OTHER MANUFACTURING</b>								
0-3 persons	229	36.7	515	9.3	7.5	6.5	38.7	7.3
4-9 persons	243	38.9	1 404	25.3	24.8	21.4	112.4	21.2
10-19 persons	92	14.7	1 169	21.0	25.4	21.9	98.7	18.6
20-49 persons	41	6.6	1 231	22.1	29.3	25.2	128.2	24.2
50-99 persons	18	2.9	1 240	22.3	29.1	25.1	151.8	28.7
<i>Total less than 100 persons</i>	<b>624</b>	<b>100.0</b>	<b>5 559</b>	<b>100.0</b>	<b>116.1</b>	<b>100.0</b>	<b>529.8</b>	<b>100.0</b>
100-199 persons	—	—	—	—	—	—	—	—
200-499 persons	—	—	—	—	—	—	—	—
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	—	—	—	—	—	—	—	—
<b>Total</b>	<b>624</b>	<b>100.0</b>	<b>5 559</b>	<b>100.0</b>	<b>116.1</b>	<b>100.0</b>	<b>529.8</b>	<b>100.0</b>
<b>TOTAL MANUFACTURING</b>								
0-3 persons	1 314	33.4	2 820	4.3	48.3	2.5	759.2	5.6
4-9 persons	1 400	35.6	8 144	12.5	158.6	8.3	775.1	5.7
10-19 persons	609	15.5	8 040	12.3	189.5	9.9	963.2	7.1
20-49 persons	374	9.5	11 425	17.5	321.6	16.8	1 775.8	13.0
50-99 persons	137	3.5	9 548	14.6	293.0	15.3	2 065.5	15.2
<i>Total less than 100 persons</i>	<b>3 833</b>	<b>97.4</b>	<b>39 977</b>	<b>61.2</b>	<b>1 011.1</b>	<b>52.9</b>	<b>6 338.8</b>	<b>46.5</b>
100-199 persons	67	1.7	9 293	14.2	292.0	15.3	2 024.5	14.9
200-499 persons	28	0.7	8 369	12.8	283.4	14.8	3 363.5	24.7
500-999 persons	5	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1 000 or more persons	2	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	<b>102</b>	<b>2.6</b>	<b>25 388</b>	<b>38.8</b>	<b>900.5</b>	<b>47.1</b>	<b>7 279.6</b>	<b>53.5</b>
<b>Total</b>	<b>3 936</b>	<b>100.0</b>	<b>65 365</b>	<b>100.0</b>	<b>1 911.6</b>	<b>100.0</b>	<b>13 618.5</b>	<b>100.0</b>

<sup>1</sup> See paragraph 7 of the Explanatory Notes.

<sup>2</sup> See paragraphs 4 to 10 of the Explanatory Notes.

<sup>3</sup> Includes working proprietors.

<sup>4</sup> Excludes the drawings of working proprietors.

<sup>5</sup> Figures may be slightly less than those presented in other tables, because they exclude those manufacturing establishments which operated during 1993-94 but were not operating at 30 June 1994. See paragraph 24 of the Explanatory Notes.

**5** MANUFACTURING LOCATIONS<sup>1</sup>: SUMMARY OF OPERATIONS IN STATISTICAL DIVISIONS BY INDUSTRY SUBDIVISION  
WA, 1993-94

Industry subdivision		Locations at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover
ANZSIC code	Description	No.	No.	\$m	\$m
<b>PERTH STATISTICAL DIVISION</b>					
21	Food, beverage and tobacco mfg	228	7 077	208.6	1 723.8
22	Textile, clothing, footwear and leather mfg	194	2 951	68.3	259.9
23	Wood and paper product mfg	234	2 602	71.3	375.5
24	Printing, publishing and recorded media	354	5 400	153.0	603.8
25	Petroleum, coal, chemical and associated product mfg	221	4 672	168.7	2 505.5
26	Non-metallic mineral product mfg	171	4 148	137.5	898.4
27	Metal product mfg	558	8 454	240.3	1 485.5
28	Machinery and equipment mfg	771	9 614	268.7	1 450.4
29	Other manufacturing	541	5 079	108.3	496.7
<b>21-29</b>	<b>Total manufacturing</b>	<b>3 272</b>	<b>49 999</b>	<b>1 424.9</b>	<b>9 799.4</b>
<b>SOUTH WEST STATISTICAL DIVISION</b>					
21	Food, beverage and tobacco mfg	48	1 522	38.1	324.9
22	Textile, clothing, footwear and leather mfg	10	39	0.3	1.5
23	Wood and paper product mfg	61	1 725	51.3	299.9
24	Printing, publishing and recorded media	27	246	7.4	17.5
25	Petroleum, coal, chemical and associated product mfg	18	569	23.4	260.5
26	Non-metallic mineral product mfg	37	218	4.6	32.9
27	Metal product mfg	49	4 675	219.3	1 765.7
28	Machinery and equipment mfg	49	394	11.1	37.0
29	Other manufacturing	40	233	4.5	19.4
<b>21-29</b>	<b>Total manufacturing</b>	<b>339</b>	<b>9 621</b>	<b>360.0</b>	<b>2 759.3</b>
<b>LOWER GREAT SOUTHERN STATISTICAL DIVISION</b>					
21	Food, beverage and tobacco mfg	16	744	23.0	189.5
22	Textile, clothing, footwear and leather mfg	9	312	n.p.	n.p.
23	Wood and paper product mfg	17	55	1.0	4.8
24	Printing, publishing and recorded media	5	82	2.2	5.0
25	Petroleum, coal, chemical and associated product mfg	3	37	n.p.	n.p.
26	Non-metallic mineral product mfg	6	53	1.2	4.2
27	Metal product mfg	12	62	n.p.	n.p.
28	Machinery and equipment mfg	17	131	2.4	10.2
29	Other manufacturing	16	53	0.9	4.2
<b>21-29</b>	<b>Total manufacturing</b>	<b>102</b>	<b>1 530</b>	<b>41.3</b>	<b>274.9</b>

For footnotes see end of table.

Industry subdivision		Locations at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover
ANZSIC code	Description	No.	No.	\$m	\$m
UPPER GREAT SOUTHERN STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	4	38	0.9	7.3
22	Textile, clothing, footwear and leather mfg	—	—	—	—
23	Wood and paper product mfg	10	43	0.7	3.8
24	Printing, publishing and recorded media	2	n.p.	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	1	n.p.	n.p.	n.p.
26	Non-metallic mineral product mfg	4	19	0.2	1.3
27	Metal product mfg	3	19	n.p.	n.p.
28	Machinery and equipment mfg	11	51	0.7	2.8
29	Other manufacturing	1	n.p.	n.p.	n.p.
<b>21-29</b>	<b>Total manufacturing</b>	<b>37</b>	<b>205</b>	<b>3.6</b>	<b>18.9</b>
MIDLANDS STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	18	205	4.2	51.4
22	Textile, clothing, footwear and leather mfg	6	33	n.p.	n.p.
23	Wood and paper product mfg	2	n.p.	n.p.	n.p.
24	Printing, publishing and recorded media	3	17	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	1	n.p.	n.p.	n.p.
26	Non-metallic mineral product mfg	9	50	0.9	3.8
27	Metal product mfg	12	131	n.p.	n.p.
28	Machinery and equipment mfg	17	91	2.0	8.9
29	Other manufacturing	10	72	0.8	3.6
<b>21-29</b>	<b>Total manufacturing</b>	<b>78</b>	<b>609</b>	<b>12.5</b>	<b>86.4</b>
SOUTH EASTERN STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	9	86	n.p.	n.p.
22	Textile, clothing, footwear and leather mfg	2	n.p.	n.p.	n.p.
23	Wood and paper product mfg	3	12	0.2	0.9
24	Printing, publishing and recorded media	9	101	2.8	8.4
25	Petroleum, coal, chemical and associated product mfg	2	n.p.	n.p.	n.p.
26	Non-metallic mineral product mfg	9	n.p.	n.p.	n.p.
27	Metal product mfg	22	402	n.p.	n.p.
28	Machinery and equipment mfg	17	165	3.5	15.5
29	Other manufacturing	5	20	0.3	1.3
<b>21-29</b>	<b>Total manufacturing</b>	<b>78</b>	<b>879</b>	<b>29.6</b>	<b>439.7</b>

For footnotes see end of table.



Industry subdivision		Locations at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover
ANZSIC code	Description	No.	No.	\$m	\$m
CENTRAL STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	25	791	16.6	253.7
22	Textile, clothing, footwear and leather mfg	1	n.p.	n.p.	n.p.
23	Wood and paper product mfg	8	23	0.4	1.4
24	Printing, publishing and recorded media	7	82	2.1	5.0
25	Petroleum, coal, chemical and associated product mfg	3	n.p.	n.p.	n.p.
26	Non-metallic mineral product mfg	12	93	2.8	15.7
27	Metal product mfg	14	79	n.p.	n.p.
28	Machinery and equipment mfg	13	130	3.0	10.9
29	Other manufacturing	6	25	0.4	1.5
<b>21-29</b>	<b>Total manufacturing</b>	<b>90</b>	<b>1 239</b>	<b>27.1</b>	<b>295.8</b>
PILBARA STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	5	113	n.p.	n.p.
22	Textile, clothing, footwear and leather mfg	1	n.p.	n.p.	n.p.
23	Wood and paper product mfg	1	n.p.	n.p.	n.p.
24	Printing, publishing and recorded media	6	18	0.4	1.2
25	Petroleum, coal, chemical and associated product mfg	3	24	n.p.	n.p.
26	Non-metallic mineral product mfg	7	39	1.1	12.8
27	Metal product mfg	10	95	n.p.	n.p.
28	Machinery and equipment mfg	5	41	1.0	3.2
29	Other manufacturing	2	n.p.	n.p.	n.p.
<b>21-29</b>	<b>Total manufacturing</b>	<b>41</b>	<b>355</b>	<b>13.0</b>	<b>87.5</b>
KIMBERLEY STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	5	149	n.p.	n.p.
22	Textile, clothing, footwear and leather mfg	1	n.p.	n.p.	n.p.
23	Wood and paper product mfg	—	—	—	—
24	Printing, publishing and recorded media	3	n.p.	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	—	—	—	—
26	Non-metallic mineral product mfg	2	n.p.	n.p.	n.p.
27	Metal product mfg	8	30	n.p.	n.p.
28	Machinery and equipment mfg	5	18	0.3	0.7
29	Other manufacturing	3	11	0.1	0.6
<b>21-29</b>	<b>Total manufacturing</b>	<b>29</b>	<b>257</b>	<b>6.2</b>	<b>47.2</b>

For footnotes see end of table.

## 5

MANUFACTURING LOCATIONS<sup>1</sup>: SUMMARY OF OPERATIONS IN STATISTICAL DIVISIONS BY INDUSTRY SUBDIVISION  
WA, 1993-94—continued

Industry subdivision		Locations at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover
ANZSIC code	Description	No.	No.	\$m	\$m
WESTERN AUSTRALIA EXCLUDING PERTH STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	131	3 648	95.5	930.8
22	Textile, clothing, footwear and leather mfg	31	413	9.2	35.1
23	Wood and paper product mfg	102	1 872	53.8	312.2
24	Printing, publishing and recorded media	63	593	16.2	40.4
25	Petroleum, coal, chemical and associated product mfg	32	682	27.5	304.1
26	Non-metallic mineral product mfg	86	545	13.6	92.1
27	Metal product mfg	131	5 494	246.1	2 174.0
28	Machinery and equipment mfg	135	1 022	24.0	89.3
29	Other manufacturing	84	429	7.3	31.7
<b>21-29</b>	<b>Total manufacturing</b>	<b>794</b>	<b>14 696</b>	<b>493.2</b>	<b>4 009.7</b>

## WESTERN AUSTRALIA

21	Food, beverage and tobacco mfg	359	10 725	304.2	2 654.6
22	Textile, clothing, footwear and leather mfg	225	3 364	77.5	295.0
23	Wood and paper product mfg	336	4 474	125.1	687.7
24	Printing, publishing and recorded media	417	5 993	169.2	644.2
25	Petroleum, coal, chemical and associated product mfg	253	5 354	196.2	2 809.6
26	Non-metallic mineral product mfg	257	4 693	151.1	990.5
27	Metal product mfg	689	13 948	486.4	3 659.5
28	Machinery and equipment mfg	906	10 636	292.8	1 539.7
29	Other manufacturing	625	5 508	115.6	528.4
<b>21-29</b>	<b>Total manufacturing</b>	<b>4 066</b>	<b>64 695</b>	<b>1 918.1</b>	<b>13 809.2</b>

<sup>1</sup> See paragraph 10 of the Explanatory Notes.<sup>2</sup> See paragraphs 25 to 27 of the Explanatory Notes.<sup>3</sup> Includes working proprietors.<sup>4</sup> Excludes the drawings of working proprietors.

## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication presents final statistics for Western Australia compiled from a census of manufacturing establishments for 1993–94, with some comparative statistics relating to preceding years.

**2** The manufacturing collection is conducted on an annual basis. For the 1993–94 collection, businesses were requested to provide data on employment, wages and salaries and turnover for each manufacturing establishment. A sample of approximately 18,000 establishments was asked to supply additional information on commodities produced and sold. Commodities information from this sample will be published in *Manufacturing Production, Australia: Principal Commodities Produced, 1993–94* (8365.0), to be released later in 1996.

**3** Manufacturing, as specified in Division C of the *Australian and New Zealand Standard Industrial Classification* (ANZSIC), 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 main unit for which statistics are reported in the 1993–94 manufacturing collection 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.

**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 fully 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** A small number of manufacturing establishments engage, in a significant way, in a variety of activities which are normally carried out by different industries. For example, a predominantly manufacturing establishment may also undertake significant amounts of wholesaling. Similarly, a manufacturing establishment may produce significant volumes of a variety of goods which are normally produced by different establishments in different manufacturing industries. In such cases, the original establishment is 'split' into a separate establishment for each significant activity which belongs to a separate industry. For the 1993–94 manufacturing collection, 'significant' was defined as \$6.6 million or more.

**9** The statistics in this publication exclude some very small manufacturers. Those excluded are manufacturers not employing staff at 30 June 1994 (such as sole proprietorships or family partnerships) which had not registered as group employers with the Australian Taxation Office. Though a substantial number, these businesses would contribute only marginally to aggregate data were they to be included. In addition, the ABS attempts to obtain data for those businesses which ceased operation during the year, but it is not possible to obtain data for all of them.

#### STANDARD UNITS

**10** For the definition of the standard units now in use, see the Glossary.

#### RELIABILITY OF ESTIMATES

**11** The 1992-93 data contained in this publication are based on information obtained from samples of manufacturers and are, therefore, subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all manufacturers in the population. One measure of the likely difference is given by the standard error, which indicates the extent to which an estimate might have varied by chance because the data were obtained from only a sample of units. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if the data had been obtained from all units, and about 19 chances in 20 that the difference will be less than two standard errors.

**12** The standard error can also be expressed as a percentage of the estimate, and this is known as the relative standard error. The relative standard errors for the 1992-93 data presented in this publication are 3% or less. For further information, see the 1992-93 issue of this publication.

**13** The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by businesses and errors made in collection and processing of the data. Inaccuracies of this kind are referred to as non-sampling error and they may occur in any collection, whether it be a full count or only a sample. Every effort is made to reduce non-sampling error to a minimum by careful design of forms, editing of data and efficient operating procedures.

#### COMPARABILITY WITH PREVIOUS STATISTICS

**14** As explained above, the standard units definitions were revised for the 1988-89 census and the new definitions were fully implemented on the ABS central business register in time for the 1990-91 census for units classified to the manufacturing industry.

**15** There have been some revisions to the series in this publication due to adjustments to allow for lags in processing new businesses to the ABS business register, and the omission of some businesses from the business register. First, adjustments have been made to allow for new businesses which had commenced operations but for which details had not been processed on to the ABS business register in time for inclusion in the annual manufacturing industry collection. The magnitude of these adjustments varies slightly over time, and so estimates of movement from one period to the next can be affected. Adjustments of this type will continue to be applied in future periods. Second, adjustments have been made for businesses which had been in existence for several years, but, for various reasons revealed by recent investigations, were not previously added to the ABS business register. The ABS is remedying these omissions, but they had led to results being understated by small amounts which increased over the period 1992 to 1994.

**16** The majority of businesses affected by these lags and omissions and to which both types of adjustments apply are small. Although these adjustments have resulted in counts of manufacturers in Western Australia at 30 June 1994 being adjusted upward by 9%, the effect on 1993-94 turnover is much less at 1%. The effect on employment is an adjustment of 3%. Most industries were affected to a similar degree.

**17** The time series statistics presented in this publication have been similarly affected and the industry subdivision data for years prior to 1993-94 have been accordingly adjusted. Adjustment factors for the more detailed manufacturing industries for each of the years 1989-90 to 1992-93 (inclusive) can be made available on request. At the same time, some revisions have been made to the underlying data previously published, as a result of further processing and/or additional information becoming available.

**18** As explained above, about 18,000 establishments included in the 1993-94 collection were asked additional information on commodities produced and sold. The availability of this fine level commodity/activity data for these 18,000 units has enabled ABS survey processing staff to better identify those establishments which were actually in the scope of the manufacturing collection and those which should not be included in the manufacturing collection, because (for example) they were actually wholesalers or retailers. These fine level commodity/activity data have also enabled an objective industry code to be determined for these units, compared to the more subjective industry coding which has occurred in each of the three previous manufacturing collections. The industry code for the units not included in the commodity sample has continued to be a subjectively determined code.

**19** The 1993-94 data contained in this publication include data relating to those manufacturers not employing staff at 30 June 1994 (such as sole proprietorships or family partnerships) which had registered as group employers with the Australian Taxation Office. Data in respect of these 'non-employers' were excluded from the scope of the manufacturing collection for the 1988-89 to 1992-93 (inclusive) reference years. However, the inclusion of these types of businesses has only had a marginal effect on statistical aggregates (except for the number of establishments, where the effect has been slightly more significant).

GROSS PRODUCT AT FACTOR  
COST

**20** The basis for the calculation of the data used in table 3 of this publication for the data item 'Percentage change in gross product per person employed' is different to that used in the 1992-93 issue of this publication. The employment data now used are 'Employment at the end of June', whereas in the 1992-93 issue the conceptually more precise data item 'Average employment over the year' was used. For some industries, the values obtained by using these different methods may differ significantly and, therefore, care should be exercised when making inter-year comparisons. (The reason for making this change is that the detailed data necessary to calculate 'Average employment over the year' were not obtained by the 1993-94 collection.)

**21** Table 3 presents data by industry subdivision for the period 1989-90 to 1993-94 (inclusive) related to constant price estimates of gross product at factor cost. The meaning and measurement of production at constant prices and the limitations and qualifications of the estimates are discussed in detail in *Australian National Accounts: Concepts, Sources and Methods* (5216.0).

**22** The basic approach in compiling these data involves extrapolating a base year estimate of gross product (described below) by a measure of output at constant prices. Constant price turnover is used as the output indicator with which to extrapolate the base year gross product. To obtain constant price estimates of turnover, current price estimates at the ANZSIC class level are deflated by components of the price indices contained in *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (6412.0).

**23** The base year gross product is estimated for each ANZSIC class using 1989-90 manufacturing census data for value added and adjusted value added. Value added is calculated using turnover, plus the increase (or less the decrease) in the value of stocks, less purchases, transfers in and selected expenses. Adjusted value added is defined as value added less land tax, rates and payroll tax, insurance premiums (other than for workers' compensation) and other business expenses. To conform to the national accounting concept of gross product at factor cost, further adjustments would be necessary using information from other than manufacturing census sources e.g. by the addition of workers' compensation paid less premiums received. However, due to data limitations, these further adjustments can only be made at the ANZSIC subdivision level and are not taken into account in this publication. (This is because the ANZSIC subdivision data contained in this publication are derived from the data calculated at the ANZSIC class level.) The base year gross product values used in this publication are derived by taking establishment based estimates of adjusted value added and applying a stock valuation adjustment. (See Section 8 of *Australian National Accounts: Concepts, Sources and Methods* (5216.0) for an explanation of how this adjustment is undertaken.)

EMPLOYMENT SIZE DATA

**24** Summary of operations data at the industry subdivision level classified by employment size are presented in table 4. The statistics in this table relate only to those manufacturing establishments operating at 30 June 1994. As such, the figures presented may be slightly less than those presented in the other tables from the manufacturing collection. These other tables include data for those manufacturing establishments which operated at any time during 1993-94.

## STATISTICAL DIVISION DATA

**25** The location data presented in table 5 are based on additional data collected in the 1993–94 census. The extra data requested were the activity carried out at the location, the number of persons employed and the address of the location.

**26** 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 pro-rating wages and salaries and turnover based on the reported employment.

**27** As indicated in paragraph 7, a manufacturing establishment covers all activities of the establishment, including any non-manufacturing activities. In table 5, 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 5 may be less than those shown in tables 1, 2 and 4 (for establishment data). However, it is also possible for the State totals in table 5 to be greater than those shown in tables 1, 2 and 4, as a result of individual locations of establishments being allocated a different industry classification to that of the 'parent' establishment.

## USE OF ANZSIC

**28** The 1992–93 manufacturing survey introduced the Australian and New Zealand Standard Industrial Classification (ANZSIC) into the annual manufacturing collection. This classification replaced the Australian Standard Industrial Classification (ASIC) previously used. All time series statistics contained in this publication are ANZSIC-based. Corresponding ANZSIC-based data for years prior to 1989–90 are not available, except for constant prices data (see paragraph 34). Similarly, ASIC-based data are not available from 1992–93.

## INFORMATION PAPER

**29** The *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (8205.0) outlines the vast amount of data available about the manufacturing industry in both published and unpublished form available from the annual manufacturing collection and other ABS collections.

## RELATED PUBLICATIONS

**30** A series of publications (8221.1 to 8221.6) will be produced for each State. These are being progressively released.

**31** Users may also wish to refer to the following publications:

- *Environment Protection Expenditure, Australia, 1992–93 and 1993–94* (4603.0), to be released early in 1997.
- *Labour Force, Australia* (6203.0).
- *Indexes of Industrial Production, Australia* (8125.0), issued quarterly.
- *Business Operations and Industry Performance, Australia, 1993–94* (8140.0), released on 6 September 1995.
- *Manufacturing Industry, Australia, Preliminary, 1994–95* (8201.0), released on 23 August 1996.

- *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (8205.0), released on 21 March 1996.
- *Manufacturing Industry, Australia, 1993-94* (8221.0), released on 18 October 1996.
- *Manufacturing Production, Australia: Principal Commodities Produced, 1993-94* (8365.0), to be released later in 1996.

**MONTHLY COMMODITY DATA**

**32** The monthly publication *Manufacturing Production, Australia* (8301.0) includes data for 61 major commodities.

**BACK DATA AND UNPUBLISHED STATISTICS**

**33** A range of manufacturing industry statistics publications is available for previous years. As well, a considerable amount of data from the annual manufacturing collection exists in unpublished form. More detailed information to satisfy individual user requirements may be available on request. A charge is made for providing such information. The Information Paper referred to above provides more details.

**34** In particular, constant prices data on an ANZSIC basis are available back to 1984-85. However, constant price estimates on a true ANZSIC basis are only available from 1989-90. Nevertheless, an exercise has been undertaken to convert estimates for earlier years onto an ANZSIC basis using the relationships that applied between ASIC and ANZSIC in the years 1990-91 and 1991-92. These estimates are available at both the Australian and State and Territory levels back to 1984-85. It should be noted that the relationships that applied in 1990-91 and 1991-92 are less likely to apply the earlier the reference year. Also, annual constant price estimates of gross product at factor cost for the period 1989-90 to 1993-94 (inclusive) by ANZSIC class are available as unpublished data. All of these data can be purchased from the ABS in Canberra by contacting Paul Curran on (06) 252 6801.

**ROUNDING**

**35** Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. Due to data being adjusted for lags in processing new businesses to the ABS business register and the omission of some businesses from the business register (see paragraph 15 above), this 'rounding rule' also applies to the count of establishments.

**36** Proportions, ratios and other calculated figures shown in this publication have been calculated using unrounded estimates and may be different from, but are more accurate than, calculations based on the rounded estimates.

**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
—	nil or rounded to zero



## GLOSSARY

<b>ABS</b>	Australian Bureau of Statistics
<b>Adjusted value added</b>	Value added less land tax, rates and payroll tax, insurance premiums (other than for workers' compensation) and other business expenses (e.g. cleaning, legal, office supplies and accounting). Referred to as 'Industry gross product' in some related publications.
<b>ANZSIC</b>	Australian and New Zealand Standard Industrial Classification
<b>ASIC</b>	Australian Standard Industrial Classification
<b>Capital work done for own use</b>	The value of work done by the employees or proprietors of an establishment for the business' own use, or for rental or lease. This item includes the value of the cost of the materials and the wages and salaries involved.
<b>Change in stocks</b>	The value of total closing stocks minus total opening stocks.
<b>Closing stocks</b>	The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the end of the financial year.
<b>Employment at end of June</b>	The number of working proprietors, working partners, permanent, part-time, temporary and casual employees, and managerial and executive employees working for an establishment during the last pay period in June each year. Employees absent on paid or prepaid leave are included, as are employees on workers' compensation who continue to be paid through the payroll system. Non-salaried directors, self-employed persons such as consultants, contractors and persons paid solely by commission without a retainer, and volunteer workers are excluded.
<b>Enterprise group</b>	A unit covering all the operations in Australia of one or more legal entities under common ownership and/or control. It covers all the operations in Australia of legal entities which are related in terms of the current Corporations Law (as amended by the Corporations Legislation Amendment Act 1991). These may be legal entities such as trusts and partnerships as well as companies. Majority ownership is not required for control to be exercised.
<b>Establishment</b>	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.
<b>Establishments at 30 June</b>	The number of establishments in operation at 30 June in the year of a given reference period.

<b>Gross Domestic Product (GDP)</b>	Gross domestic product (also referred to as gross domestic product at market prices) is the total market value of goods and services produced in Australia within a given period after deduction of the cost of goods and services used up in the process of production, but before deducting allowances for the consumption of fixed capital. Thus, gross domestic product, as here defined, is 'at market prices'. It is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services.																		
<b>Gross product at factor cost</b>	Gross product at factor cost is that part of the cost of producing the gross domestic product which consists of gross payments to factors of production (labour, land, capital and enterprise). It represents the value added by these factors in the process of production and is equivalent to gross domestic product less indirect taxes plus subsidies.																		
<b>Gross product per person employed</b>	Gross product at factor cost of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.																		
<b>Industry class</b>	Within ANZSIC, there is a structure comprising four levels ranging from industry division (broadest level) to the industry class (finest level). At the industry class level, the activities are narrowly defined and recognised by a four digit code e.g. industry class 2331 for Pulp, paper and paperboard manufacturing. Usually, an activity is primarily confined to one class. However, some activities may be primary to more than one class.																		
<b>Industry group</b>	This is the intermediate level within the manufacturing industry division of ANZSIC and is recognised by a three digit code e.g. industry group 233 for Paper and paper product manufacturing. It gives more detail than the industry subdivision and is created in a way that groups like industry classes together.																		
<b>Industry subdivision</b>	This is the broadest level category within the manufacturing industry division of ANZSIC and is recognised by a two digit code e.g. industry subdivision 23 for Wood and paper product manufacturing. Industry subdivisions are built up from industry groups which, in turn, are built up from industry classes. The following table gives the manufacturing industry subdivision codes and their descriptions:																		
	<table border="0"> <tr><td>21</td><td>Food, beverage and tobacco mfg</td></tr> <tr><td>22</td><td>Textile, clothing, footwear and leather mfg</td></tr> <tr><td>23</td><td>Wood and paper product mfg</td></tr> <tr><td>24</td><td>Printing, publishing and recorded media</td></tr> <tr><td>25</td><td>Petroleum, coal, chemical and associated product mfg</td></tr> <tr><td>26</td><td>Non-metallic mineral product mfg</td></tr> <tr><td>27</td><td>Metal product mfg</td></tr> <tr><td>28</td><td>Machinery and equipment mfg</td></tr> <tr><td>29</td><td>Other manufacturing</td></tr> </table>	21	Food, beverage and tobacco mfg	22	Textile, clothing, footwear and leather mfg	23	Wood and paper product mfg	24	Printing, publishing and recorded media	25	Petroleum, coal, chemical and associated product mfg	26	Non-metallic mineral product mfg	27	Metal product mfg	28	Machinery and equipment mfg	29	Other manufacturing
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<b>Location</b>	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.																		
<b>Locations at 30 June</b>	The number of locations in operation at 30 June in the year of a given reference period.																		

<b>Management unit</b>	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>Manufacturing establishment</b>	An establishment predominantly engaged in manufacturing activities. The data collected for such establishments 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.
<b>Manufacturing location</b>	A location predominantly engaged in manufacturing activities.
<b>Opening stocks</b>	The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the beginning of the financial year.
<b>Own account capital work</b>	The value of work done by the employees or proprietors of an establishment for the business' own use, or for rental or lease. This item includes the value of the cost of the materials and the wages and salaries involved.
<b>Purchases, transfers in and selected expenses</b>	Purchases of materials, components, containers, packaging, fuels, electricity and water, and of goods for resale, plus transfers in of goods from other establishments of the same business for further processing, assembly, installation or resale, plus contract, subcontract and commission expenses (including sales commission payments), repair and maintenance expenses, outward freight and cartage expenses, motor vehicle running expenses, and rent, leasing and hiring expenses. Transfers in are valued, for statistical purposes, at prices commensurate with the prices which would have been paid if the establishments concerned had been under separate ownership i.e. at commercial selling price.
<b>Rent, leasing and hiring income</b>	Includes royalties from mineral leases and income from operating leases, but excludes income from finance leases and payments received under hire purchase arrangements.
<b>Sales and transfers out</b>	Includes sales of goods produced by the establishment (or for it on commission) and of goods not produced by the establishment, sales or transfers to related businesses, progress payments billed on engineering and construction projects, and delivery charges. Also included are transfers out to other establishments of the same business. Transfers out are valued, for statistical purposes, at prices commensurate with the prices which would have been paid if the establishments concerned had been under separate ownership i.e. at commercial selling price. It excludes export freight charges, sales of fixed tangible assets, and sales tax, excise and duties received (on behalf of the Government).
<b>Total government subsidies</b>	Includes revenue received from government bodies in the form of bounties, subsidies and export grants. It also includes payments for Jobstart and subsidies for apprenticeship schemes. Excludes capital grants payments.

**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 income from outside the establishment (such as commission income, repair and service income, and rent, leasing and hiring income), plus capital work done by an establishment's own employees for the business' 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.

**Turnover per person employed** Turnover of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.

**Value added** Turnover, plus the increase (or less the decrease) in the value of stocks, less purchases, transfers in and selected expenses.

**Wages and salaries** The gross wages and salaries of all employees of the establishment. The item includes severance, termination and redundancy payments, but excludes reimbursements or allowances to employees for travel, entertainment, etc. The drawings of working proprietors are also excluded.

**Wages and salaries to turnover ratio** The wages and salaries paid by manufacturing establishments which operated during the year ended 30 June as a proportion of the turnover of manufacturing establishments which operated during the same year.



