

and Lansdowne Streets, more than 30,000 industrial workers are employed. Major groups of industry occur in South and Port Melbourne and factories are scattered freely through North Melbourne, Carlton, Fitzroy, Collingwood and Richmond. In some of these areas industry has insinuated itself into previously residential districts and the worker has been compelled to find his home further afield.

Another area of major industrial concentration is in the western district in the municipalities of Footscray, Sunshine and Williamstown. The country here has been more favourable to industrial than residential expansion, and as a result there are more jobs available than can be filled from residents of these districts, so that workers are drawn from other parts of the metropolitan area, many from considerable distances. Although the northern suburbs of Brunswick, Coburg and Preston have also seen considerable industrial expansion, there is nevertheless a considerable preponderance of workers over available jobs, and a notable proportion find their employment in the central district. In recent years industry has tended to move to the eastern parts of Preston and Northcote, and this trend has been encouraged in the planning scheme by zoning in this locality a substantial industrial area.

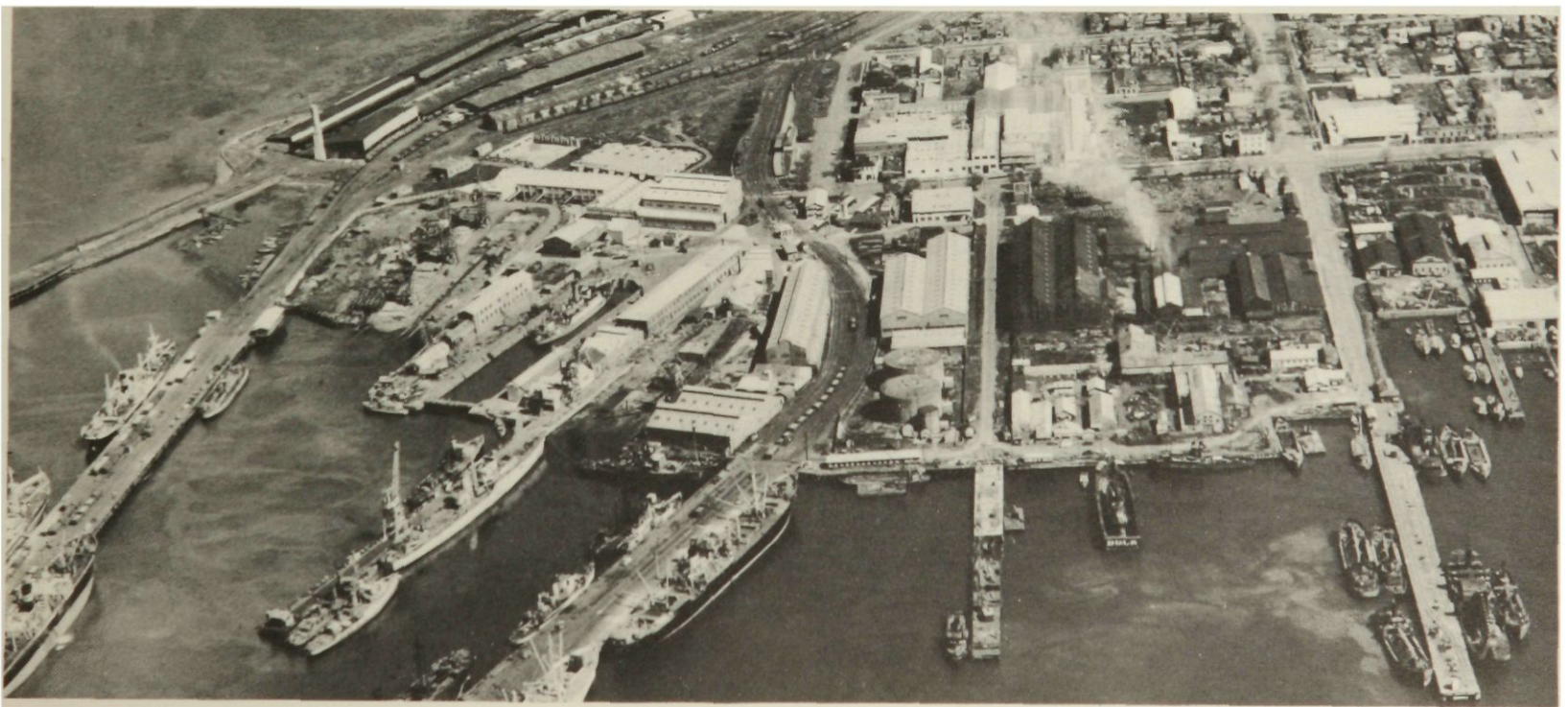
Today, 86 per cent. of all industrial employment is located in the central, western and northern districts. In the post-war years, however, there have been notable movements of industry to the outer eastern and southern districts, particularly in the municipalities of Nunawading, Dandenong, Oakleigh and Moorabbin. In contrast to the pattern of industrial development, the marked popularity of the eastern

and south-eastern suburbs for residential purposes has already been referred to. These opposing trends have created an unbalanced distribution of places of residence and employment which has resulted in the worker being compelled to do much unnecessary travelling to and from work.

The planning scheme endeavours to rectify, as far as is practicable, this adverse feature of metropolitan development by distributing new industrial areas throughout the outer suburbs so that workers will have the opportunity of seeking employment within reasonable travelling distance of their homes. Such a distribution of places of employment by encouraging decentralisation of industry within the urban area will assist in the solution of other metropolitan problems.

Naturally, the existing pattern of development will not permit of an ideal solution. Another factor which enters into the question is the large area at Fishermen's Bend which is still undeveloped. Because of its proximity to the city, to the deep water port, and to riverside berths, this area is undoubtedly well located and valuable for industry, but the development of the whole area for industrial purposes creates a concentration which has its disadvantages, particularly as regards civil defence. In 1929 the Town Planning Commission proposed that a big proportion of this area should be reserved for residential purposes, still leaving a substantial fringe of industry along the waterfront. This was a very wise suggestion, appropriate to the needs of the area and of the community. Unfortunately the Commission's advice went unheeded and industrial development has now proceeded so far that the land which could now be made available for residential purposes is so inadequate and so badly

*"Shipbuilding . . . tied to the water front"*





located that it is unsuitable for the purpose. The whole of the area north of Williamstown Road not required for the needs of the deep water port has therefore been zoned for industry. This has unavoidably resulted in an unduly large proportion of industry being provided for within the central district, but despite this, the zoning provisions of the scheme will bring about a much better distribution than at present, as will be seen from the comparative figures of Table 2. This will benefit both the worker and the industrialist.

Table 2

PERCENTAGE OF TOTAL INDUSTRIAL  
EMPLOYMENT IN STATISTICAL DISTRICTS

<i>District</i>	<i>1947</i>	<i>Estimated Future</i>
Central	60	37.0
Western	15	15.5
Northern	11	14.5
Eastern	4	7.0
Southern	10	26.0
Metropolitan Area	100	100

In Appendix II is given for the various metropolitan municipalities the total areas zoned for industrial purposes in the planning scheme compared with the areas now actively used for this purpose.

Map 8 shows the principal areas now used for industry, the additional areas zoned for that purpose, the estimated numbers of industrial workers which it can be expected will, at full urban development, live within various areas served by the main lines of public transport, and the number of industrial jobs likely to be available in the various industrial zones within those areas. It is realised that all workers will not work close to their homes, and there is no attempt to bring this about. All that can be done is to give as many of them as possible the opportunity of doing so.

Map 8 shows that in the outer suburbs of the west, east and south the opportunities for local employment balance the need, but that in the central district there is an estimated excess of 104,000 industrial jobs over resident industrial workers. It is estimated that not more than about 70,000 of these workers will be able to live within forty minutes' travelling time of the city centre, and that the rest will have to come from further afield. There appears to be no practicable way of now avoiding this preponderance of industrial jobs over resident workers in the inner areas, which is due principally to the large amount of industry already located there and to the provision which has been made for future industrial areas at Fishermen's Bend already referred to.

It is apparent, therefore, that improved means of public transport will be necessary between the outer suburbs, particularly those to the north and north-east, and the industrial areas of the inner suburbs, particularly Port and South Melbourne.

## INDUSTRIAL ZONING

Certain physical features of industry can affect the lives of residents, even though they may not be employed in industrial pursuits. No one likes to live alongside a factory because most industries create conditions which extend beyond their immediate vicinity and can spoil a residential neighbourhood. The nuisance caused can vary within wide limits. Some industries, such as modern factories engaged in small scale textile production, have little effect on their environment, and by suitable architectural and garden treatment can add to the general attractiveness of the neighbourhood. Subject to proper regulation, they can be conducted close to residential areas within a minimum of insulating space between. Other industries which produce noise, smoke and fumes require a greater degree of insulation, and offensive and hazardous trades must be carefully located at considerable distances from residential areas.

To meet the varying needs, the planning scheme provides for the following industrial zones:

*Service Industrial Zones:* These are small areas adjacent to shopping centres in which can be located those small industries which provide services for the locality and frequently sell directly to the public. They include such industries as woodyards, garages and service stations, bakeries, printers, small joinery works, and the like. Small light industries of very limited size will also be permitted. Zoning special areas for such industries ensures that they are located conveniently for the public, that adequate space is reserved for their needs, and that they do not, as now frequently happens, break up the continuity of otherwise good shopping areas. Such grouping is advantageous both to customer and trader alike.

*Light Industrial Zones:* These are designed to accommodate those industries which can be located close to residential zones without impairing living conditions. These light industrial zones have been divided into two classes — "A" and "B". In both classes the industries permitted to occupy them are those which do not cause noise, dust or fumes, and which do not impose undue demands on the public utility and transport services. In the Class "A" zones the size of the industry is limited. In the Class "B" zones there is no such limit. The reason for this is to give greater flexibility in locating large industries of this type which, because of their size, are normally classed as general industry.

*General Industrial Zones:* These will accommodate the general type of industry, other than offensive or dangerous



