

80 ORIGIN OF CENTRAL AREA WORKERS TRAVELLING TO WORK BY CAR

Means of Travel by Central Area Shoppers: The means of travel of city shoppers during the average week-day is shown in Table 105.

Assuming the same proportion of persons to cars as for worker traffic, the number of cars used by central area shoppers on an average week-day is of the order of 2,000.

CENTRAL AREA ROAD TRAFFIC

In 1947 a comprehensive survey of traffic movements, involving the origin and destination of vehicles, was made at the boundaries of the central area. At that time the total number of vehicles crossing the boundaries was 186,000. As discussed in Chapter 13, this total is estimated to have increased to 298,000 in 1951. The survey showed that approximately half the traffic crossing the boundaries was generated by central area activities and the remaining half was passing through the central area largely because of the lack of convenient by-pass routes.

An analysis has been made of the traffic generated by central area activities. By grouping city blocks with a predominant use as shown by the floor space survey and Gallup survey, it was possible, by trial and error, to allot relative

Table 105MEANS OF TRAVEL OF CENTRAL CITY SHOPPERS
(Week Days)

Means of Travel	Approximate Number of Shoppers	Percentage of Total Shoppers 35.5	
Rail	16,200		
Tram	21,600	47.3	
Bus	4,800	10.5	
Private Car	2,600	5.7	
Otherwise	500	1.0	

values for traffic generation to each type of city floor use to give a good correlation between expected and actual numbers of vehicles that parked in each area. The results adjusted to 1951 traffic for each type of floor use are shown in Table 106.

These results indicate the relative importance, from the point of view of traffic generation, of different types of city uses. They point particularly to industry and to a lesser extent warehousing as activities responsible for heavy traffic. As a good deal of these activities could be equally well carried out in nearby suburbs an obvious solution for alleviating future city traffic congestion is presented.

The estimated distribution of the inward morning peak traffic in 1947 and 1951 is shown in map 83. The marked change in the proportion using Princes Bridge is due to the fact that even in 1947 the capacity of this approach had been reached at peak periods. The capacity of Princes Bridge itself is restricted by the traffic crossing Swanston Street, particularly at Flinders Street.

FUTURE CENTRAL AREA NEEDS

It seems clear that the natural trend of development in the central city area is for there to be an intensively used



81 RATE AT WHICH WORKERS LEAVE CITY





82 ORIGIN OF CENTRAL AREA SHOPPERS Week days

inner business district comprised mainly of shops and offices, adjoining which, in some instances intermingling with them, will be places of public assembly such as cinemas, theatres, churches and hotels. Surrounding this inner core and again in some instances penetrating into it, will be firstly, the wholesale trading areas and then the areas used for industry and storage. The order of importance with regard to the use of central area space follows this same pattern. How much space will Melbourne need to provide for these functions in the future?

The demand for office space will continue to grow as the city grows larger and will account for the greatest proportion of central area floor space. The needs for shopping will be affected by the increasing difficulties arising from traffic congestion and car parking. It is reasonable to assume that as in America, these factors will tend to divert a proportion of central area shopping to suburban centres. Residential hotels and places of public assembly also will require more and more central area space as the population grows. As the demands of all these activities on the available space increase, such functions as warehousing and industry, which do not need a location in the central business area, may be forced to move out.

Table 106 TRAFFIC GENERATION IN CENTRAL BUSINESS AREA

Floor Space Use	Employment per 1,000 sq. feet	Approximate number of vehicles per day on city boundaries		
		per Employee	per 1,000 sq. ft. of space	
Offices	5.8	0.5	3.1	
Retail Sales	3.4	1.1	3.6	
Warehouses	2.5	1.5	3.8	
Industry	5.2	1.7	9.1	

With these general considerations in mind, the estimate of future floor space requirements in the area bounded by Flinders, Spencer, Latrobe and Spring Streets, as shown in Table 107, has been made as a general guide for planning purposes.

To provide this 64,000,000 square feet of floor space would mean that in the area referred to the average floor space index would have to be about 3.5 as compared with 2.0 at present.

On this basis it is estimated that within the central business area as bounded by Flinders, Spencer, Latrobe and Lansdowne Streets, as previously defined, there would be about 300,000 workers of whom about 175,000 would be office workers. This, however, does not allow for any reduction of the number which could occur as the result of decentralisation of central area activities.

The detailed investigations of central area road traffic point to the need for more river crossings to give additional means of entrance from and out to southern suburbs, for suitable by-pass roads, and decentralisation of activities for which a central area location is not necessary.

Table 107

ESTIMATED FUTURE FLOOR SPACE REQUIREMENTS IN CENTRAL AREA

(Area bounded by Flinders, Spencer, Latrobe, Spring Streets)

Use	Present Floor Space		Estimated Future Floor Space required for population of 2,500,000	
	Square feet	%	Square feet	%
Offices	11,242,042	30.5	25,000,000	39.1
Retail	6,978,951	19.0	11,000,000	17.2
Warehousing	6,566,367	17.8	9,000,000	14.0
Industry	5,722,510	15.6	6,000,000	9.4
Residential	3,226,177	8.8	8,000,000	12.5
Others (theatres, churches, halls,				
vacant space)	3,054,650	8.3	5,000,000	7.8
Total	36,790,697	100	64,000,000	100



83 APPROXIMATE DISTRIBUTION OF INWARD MORNING PEAK TRAFFIC



Shops in Bourke Street

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Financial and business offices in Collins Street



Old buildings in Little Bourke Street



An old storage warehouse in King Street.



Medical and professional chambers at the eastern end of Collins Street