Table 100

DISTRIBUTION OF CENTRAL CITY WORKERS BY TYPE OF OCCUPATION

Workers			Occupations					
Sub- division	Approx. Number	c of	Approximate Number of Workers in each Subdivision in Stated Occupation					
		Total	Office	Retail	Wholesale	Industry	Mis- cellaneous	
A	4.800	3.0	210	850		3,540	200	
В	5,500	3.4	1.320	420	110	2,440	1,210	
C	11.000	6.7	4.200	505	3.850	2,315	130	
D	15,000	9.2	6.740	1.150	2,410	4,185	515	
E	18,750	11.5	4.945	9,140	400	3,020	1,245	
F	6.250	3.8	620	1,295	515	3,030	790	
G	15,000	9.2	7.520	575	4,000	2,190	715	
Н	33,500	20.4	26,120	2,485	1,760	1,765	1,370	
I	28,500	17.4	11.320	7,715	2,580	5,470	1,415	
J	14.590	8.9	3,610	1,290	980	8,025	685	
K	4,300	2.6	3,580			320	400	
L	6,310	3.9	5,050	100	420	740		
Total	163,500	100	75,235	25,525	17,025	37,040	8,675	

159,500 travel to work from other parts of the metropolitan area. The general location of their places of residence is shown in map 78 and the distribution of their work places in relation to their places of residence is shown in Table 101 which should be read in conjunction with map 76 showing the various central area subdivisions used for the purpose of this survey.

The main points of interest are:

- (a) The relatively small number of central area workers residing in the western suburbs (3%) and the large proportion in the southern suburbs (43%).
- (b) More than half the workers living in the northern suburbs work west of Elizabeth Street.
- (c) More than one-third of the workers living in the southern suburbs work north of Bourke Street.
- (d) More than half the workers living in the eastern suburbs work west of Elizabeth Street.

Thus it will be seen that a large number of workers have to pass through the more congested parts of the central area to reach their work.

Means of Travel of Central City Workers: Table 102 shows the means used by central area workers in travelling to and from work.

The number who travel to work by private cars is conveyed in approximately 15,900 cars, that is an average of 1.25 persons to each car. The survey also showed that 17.5% more cars would be used by central city workers to travel to work if adequate car parking facilities were available at reasonable cost. It is significant that the percentage (12.6%) of central area workers travelling to work by private car is substantially less than the percentage (16.3%) of all metropolitan workers who so travel to work. This is due to several

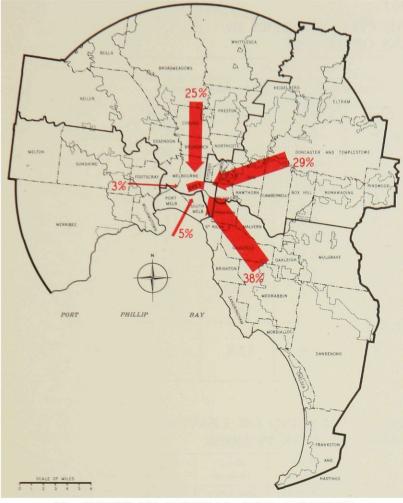
factors, including better means of public transport, car parking difficulties in the central area, traffic congestion at peak periods, and the high proportion of female employment in the central area.

The distribution of city work places in relation to means of travel is shown in Table 103 which should be read in conjunction with map 79.

Table 101

DISTRIBUTION OF CENTRAL AREA WORK PLACES
IN RELATION TO THE RESIDENTIAL LOCATION
OF WAGE EARNERS

Work Place			Residential Location					
Central Area Sub-	Wage Earners	% of Total	Percentage of Workers in each Subdivision who reside in the specified locations					
division			West	East	South			
A	4,710	3.0	3.8	32.7	33.7	29.8		
В	5,460	3.4	3.3	28.7	16.8	51.2		
C	10,650	6.7	3.3	27.7	17.1	51.9		
D	14,650	9.2	2.6	35.9	19.7	41.8		
E	18,300	11.5	3.4	34.0	27.5	35.1		
F	6,000	3.8	2.7	31.2	27.5	38.6		
G	14,650	9.2	2.6	17.0	29.3	51.1		
H	32,640	20.4	1.3	17.5	34.4	46.8		
I	27,700	17.4	2.9	23.4	27.2	46.5		
J	14,150	8.9	2.9	19.7	31.2	46.2		
K	4,290	2.6	2.1	33.4	33.2	31.3		
L	6,300	3.9	5.7	30.5	26.4	37.4		
Whole								
Central								
Area	159,500	100	3.0	25.0	29.0	43.0		



78 ORIGIN OF CENTRAL AREA WORKERS

Significant features shown by these figures are:

- (a) 60% of all city workers who travel to work by rail are employed south of Little Collins Street and west of King Street, that is in the areas adjoining the Flinders Street and Spencer Street Stations.
- (b) More than half of all workers who travel to work by tram are employed north of Little Collins Street and east of King Street.
- (c) Nearly 39% of all city workers who travel to work by car work west of Queen Street and 35% between Queen and Russell Streets.

The walking times from city stations to various parts of the central business area are shown in map 65. The origin of motor vehicles used by central area workers between places of residence and work is shown on map 80. It will be seen that the proportion coming from each of the four general directions is somewhat similar to the proportion of city workers living in each direction. The main difference is in the southern suburbs where a higher proportion travel to work by car from suburbs south of St. Kilda and Prahran and a lower proportion from South Melbourne and Port Melbourne.

More than half the central city workers who travel to work by car have their destination west of Elizabeth Street and most of these come from southern suburbs.

Table 102
MEANS OF TRAVEL OF CENTRAL CITY WORKERS

Means of Travel	Approximate Number of Persons	Percentage of Total	
Railway	70,500	44.2	
Tramway	57,000	35.8	
Bus	8,500	5.4	
Private Car	20,000	12.6	
Otherwise	3,500	2.0	
Total	159,500	100	

Hours of Commencing and Leaving Work

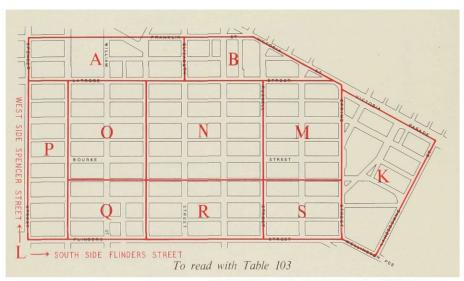
The rate at which central area workers commence and cease work is shown on diagram 81, the high peaks being due to the large number of people who work from 9 a.m. to 5 p.m. For comparative purposes, the rate at which passengers flow through the barriers of Flinders Street station and the estimated rate of arrival and departure of tram and bus passengers at city boundaries are shown.

The comparison for peak periods of quarter, half and one hour duration is extended in Table 104 to all means of transport.

A study of this comparison indicates that any staggering of working hours involving alterations of less than one hour would not appreciably affect the number of trams and trains needed to move these workers, but it would probably give great convenience to travellers because at the present time the combined capacity of trams and trains provides for only about 50% of the total number of workers arriving at and leaving work in the peak quarter hour.

## Central Area Shoppers

Number of Shoppers: About 46,000 people come into the city to shop on an average week-day and about 88,000 on a Saturday morning. The proportion coming from each general direction is shown in map 82. An interesting feature is the high proportion who come from the northern suburbs.



79 STATISTICAL SUBDIVISION OF CENTRAL AREA

Table 103

DISTRIBUTION OF CENTRAL CITY WORKERS IN RELATION TO MEANS OF TRAVEL

Work Place			Means of Travel					
Central Area Sub- division	Wage Earners	% of Total	Percentage of total persons who travel by each means to each subdivision					
			Rail	Tram	Bus	Car	Other	
A	4,710	3.0	2.0	3.0	6.3	3.7	9.7	
В	5,460	3.4	3.0	3.8		4.9	6.6	
M	8,130	5.1	3.9	5.2	6.4	8.7	3.3	
N	36,180	22.7	21.2	26.6	22.4	16.9	22.4	
O	17,350	10.9	7.8	12.9	15.2	14.6	6.5	
P	10,200	6.4	7.1	5.5	6.3	5.4	13.1	
Q	19,100	12.0	13.7	9.2	14.7	13,6	6.3	
R	36,920	23.1	25.7	21.7	16.5	22.2	16.3	
S	10,860	6.8	7.2	6.7	5.0	6.4	6.4	
K	4,290	2.7	2.2	2.9	7.2	2.0	3.1	
L	6,300	3.9	6.2	2.5		1.6	6.3	
Whole Central Area	159,500	100	44.2	35.8	5.4	12.6	2.0	

Table 104

RELATION BETWEEN CITY WORKERS COMMENCING OR LEAVING WORK AND PERSONS TRAVELLING AT PEAK PERIODS

	Item	Peak 1/4-hour	Peak ½-hour	Peak hour
Morning / Peak	Number of persons commencing work Number of train travellers passing through	57,300	95,800	122,650
	city stations Estimated number of tram and 'bus	15,750	29,600	46,700
	travellers arriving at city boundaries Estimated number of workers arriving at	12,980	24,750	41,330
	city by car Estimated number of workers arriving by	4,090	7,710	12,600
	other means	830	1,570	2,560
	Total arrivals to city	33,650	63,450	103,190
	% of workers carried by all transport			
	facilities	59%	66%	84%
	Item	Peak ½-hour	Peak ½-hour	Peak hour
Evening Peak	Number of persons leaving work Number of train travellers passing through	61,200	77,400	123,000
	city stations Estimated number of train travellers	15,800	28,600	51,860
	leaving city boundaries Estimated number of workers leaving	12,850	24,160	44,400
	city by car Estimated number of workers leaving	4,080	7,500	13,700
	by other means	830	1,520	2,790
	Total departures from city	33,560	61,780	112,750
	% of workers carried by all transport facilities	55%	80%	92%