

LEES

MELBOURNE AND METROPOLITAN TRAMWAYS BOARD

ENGINEERING DEPARTMENT

PASSENGER MOVEMENTS BY PUBLIC TRANSPORT FOR THE
CENTRAL CITY BUSINESS AREA BASED ON RESULTS OF
1964 MELBOURNE METROPOLITAN TRANSPORTATION STUDY.

NOVEMBER 1965.

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Passenger Movements by Public Transport for the Central City Business Area based on results of 1964 Melbourne Metropolitan Transportation Survey.

A study of the results of the 1964 Melbourne Metropolitan Transportation Survey indicated that over ¼ million people enter or leave the Central City Business Area each day by public transport, as follows -

| | | | | |
|---------------|-----|---------|----------------|---------|
| Railways | 48% | 254,000 | passengers/day | 261,836 |
| Trams | 43% | 227,000 | " | " |
| MMTB Buses | 7% | 35,000 | " | " |
| Private Buses | 2% | 10,000 | " | " |

The major inlets are -

| | | | | |
|---|---------|----------------|---|--|
| Flinders St. & Princess Bridge Railway Station. | 108,000 | passengers/day | | |
| Swanston St. South end including Batman Avenue | 37,000 | " | " | |
| Elizabeth St. North end | 23,000 | " | " | |
| Spencer St. Railway Station | 18,000 | " | " | |
| Collins St. East end | 14,000 | " | " | |
| Bourke St. East end | 13,000 | " | " | |
| Flinders St. East end | 9,000 | " | " | |
| Swanston St. North end | 8,000 | " | " | |

In addition over 80,000 used public transport within the central area, mostly by tram, as follows -

| | | | | |
|---------------|--------|----------------|---|--|
| Collins St. | 22,000 | passengers/day | | |
| Bourke St. | 21,000 | " | " | |
| Swanston St. | 14,000 | " | " | |
| Elizabeth St. | 13,000 | " | " | |
| Flinders St. | 7,000 | " | " | |

1. Introduction

The purpose of this report is to present in a comprehensive form data obtained from the Melbourne Metropolitan Transportation Survey of May, June, July and August, 1964, for the central city business area which may be relevant to the planning of underground tram routes. The stops on each route were arranged into groups and the data was made available in the form of passengers "on" and "off" per hour for each such group of stops on each tram and bus route.

These results are suitable for comparing various routes as it may be assumed that variables which affect the loading on any particular route are significantly constant over the period of the above survey. - variable such as economic and social conditions and climate. It is a presentation of the public transport pattern in uniform perspective.

It would also be reasonable to assume that employment within the central city business area is approximately similar to that of the survey of employment carried out by the City of Melbourne of the Central City Business Area - 1961/2.

It may also be used to gauge trends in public transport patronage by later counts on similar selected groups of stops on selected routes.

2. Railway Passengers

The railway passengers entering and leaving are summarised on table I, while the movements are plotted as passengers per hour on the graphs in appendix 2 for the various barriers or gateways. The passengers per day are also indicated on a map in appendix 1. The data for these quantities was made available on a 5 minute interval basis.

3. M.M.T.B. Passengers

The M.M.T.B. passenger movements are summarised on table II for each route based on a cordon as follows -

West of Spencer Street from Normanby Road to Lonsdale Street, to Peel Street north of Franklin Street, to north of Victoria Street from Elizabeth Street, to east of Spring St., to Flinders Street, to St. Kilda Road south of Alexandra Avenue, to Claredon Street south of Normanby Road.

3.1 The number "on" or the number "off" are the total numbers who boarded or alighted during the passage of the tram or bus from one side of the cordon to the other or to or from a terminating point within the cordon.

3.2 The total number carried for a particular route -

= number "entering" + number "on" also
= number "off" + number "departing"

3.3 The number of city section passengers for a particular route -

= number "on" - number "departing"
= number "off" - number "entering"

This assumes that the number of through passengers may be ignored.

3.4 The numbers of passengers "on" and "off" for selected groups of stops and the numbers passing a point between such groups per hour are indicated on the graphs in appendix 3. All stops are included in the selected groups such that the passengers leaving one group enter the next group.

The above results summarised on a passengers per day basis are indicated on maps appendix 1 for both the tram and bus routes.

4. Comments

1. These results as set out in table III illustrate the importance of the tramway system to the Central City Business Area in that 43% of those who enter by public transport do so by tram as compared with 48% by rail.

2. The trams distribute the passengers over many parts of the Central City Business Area whereas the railways deliver over 40% at one railway station.

3. In addition to the above passengers a further 78,000 passengers are transported within this area which is over $\frac{1}{4}$ of the

number brought in by public transport.

4. The railways patronage has two pronounced peaks in that over 25% of the passengers enter and leave within the following half hours 0825 to 0855 hrs. in the morning peak and 1700 to 1730 in the evening peak. There is no significant increase in patronage at the middle of the day.

The ratio of peak patronage to mean is much more favourable for the tramways system where the number for any one hour is less than 25% of the total in all cases except Batman Avenue terminus and the La Trobe Street route.

5. Conclusion

Though the purpose of this report is to the presentation of data rather than conclusions the following are evident.

1. Flinders Street Railway Station and the St. Kilda Road tram routes are at present the most important considerations in regard to underground tram routes.

2. The next most important consideration appears to be the Elizabeth Street outlet.

3. City section travellers for both Swanston Streets and Elizabeth Streets are of the same order. The location of the underground railway station on the north side could well be the deciding factor in locating the north south underground tram route.

4. Collins Street and Bourke Street appear to be of equal importance and though the best streets for city section travellers their overall patronage is much less than either Swanston or Elizabeth Streets.

The location of the underground station at the eastern end could well be the deciding factor in locating the east west underground tram route.

5. Development potential is greatest to the north - docks limit development to the west and gardens to the south and east. The underground railway is likely to have a big influence on this.

CENTRAL CITY BUSINESS AREA VICTORIAN RAILWAYS PASSENGERS

NOTE: COUNTRY PASSENGERS NOT INCLUDED IN SPENCER STREET COUNTS.

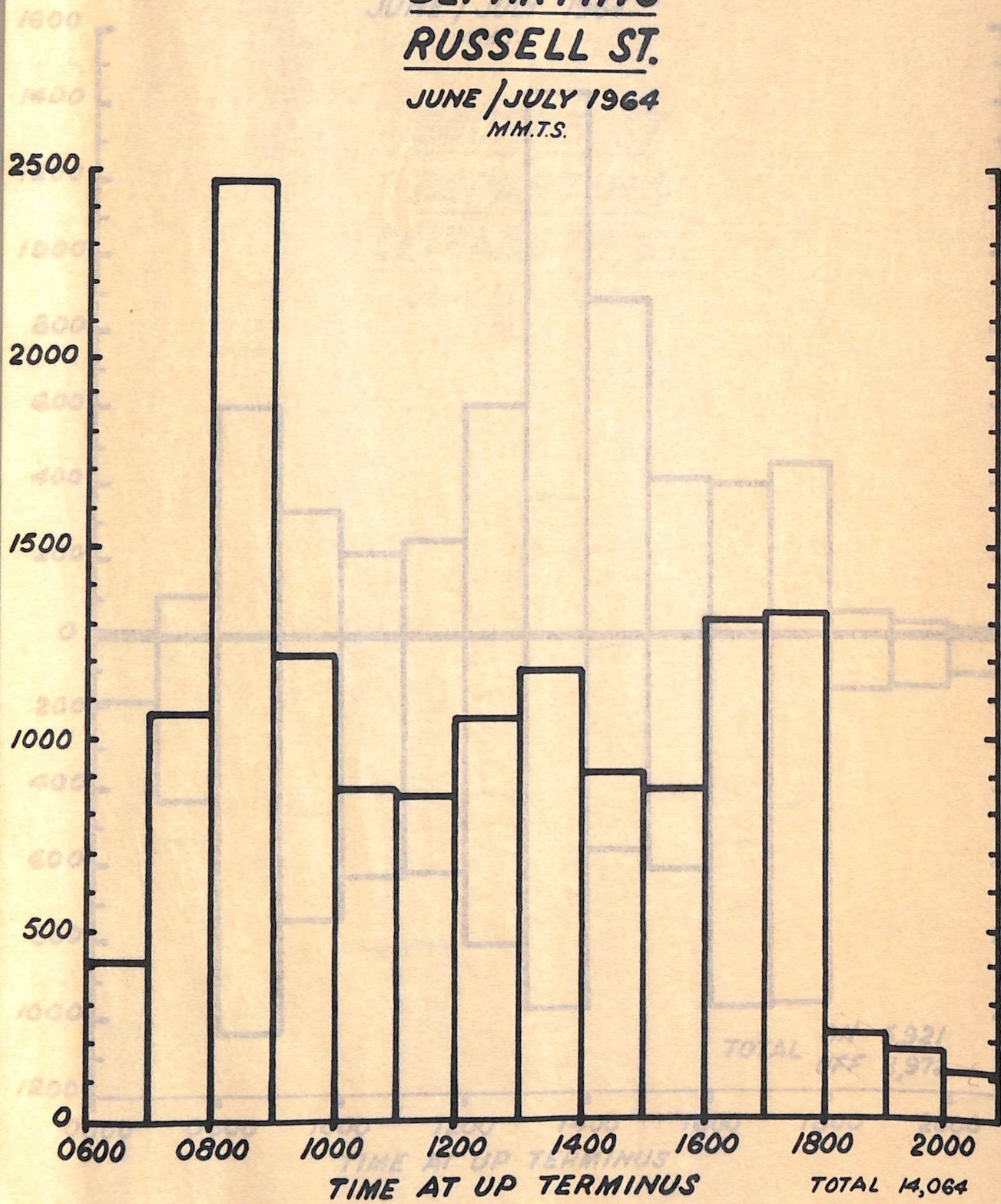
MAY 1964
(REF. M.M.T.S 1964)

| STATION ENTRANCE | TOTAL INTO CITY | TOTAL OUT OF CITY | 0800 - 0900 HRS. INTO CITY | 0825 - 0855 HRS. ⁺ INTO CITY | 1700 - 1800 HRS. OUT OF CITY | 1700 - 1730 HRS. ⁺ OUT OF CITY |
|--------------------------------------|-----------------|-------------------|-------------------------------|--|---------------------------------|--|
| <u>FLINDERS ST. STATION</u> | | | | | | |
| ELIZABETH ST. | 26,658 | 32,248 | 14,328 | 8,864 | 16,457 | 11,704 |
| CENTRE STREET | 2,784 | 1,868 | 1,436 | 970 | 950 | 756 |
| " SUBWAY | 17,903 | 19,079 | 10,265 | 6,756 | 8,190 | 5,021 |
| SWANSTON ST. MAIN | 30,813 | 40,755 | 9,836 | 6,494 | 13,684 | 8,605 |
| " " SOUTH | 15,775 | 5,391 | 7,182 | 4,478 | 3,072 | 2,369 |
| <u>PRINCES BRIDGE STATION</u> | | | | | | |
| MAIN ENTRANCE | 13,304 | 15,644 | 4,913 | 2,458 | 5,713 | 3,807 |
| RUSSELL ST. | 1,256 | 85 | 698 | 392 | — | — |
| TOTAL | 108,493 | 115,070 | 48,658 | 30,412 | 48,066 | 32,262 |
| <u>SPENCER ST. STATION</u> | | | | | | |
| SUBURBAN ENTRANCE | 17,660 | 12,912 | 7,669 | 5,114 * | 6,428 | 5,563 |
| TOTAL | 126,153 | 127,982 | 56,327 | 35,526 | 54,494 | 37,825 |

NOTE : * 0810 TO 0840 HRS.
+ BUSIEST HALF HOUR

UP
BOURKE ST.
UP
SWANSTON ST. TO ELIZABETH ST.
BOURKE ST.
DEPARTING
RUSSELL ST.

JUNE / JULY 1964
M.M.T.S.



UP
BOURKE ST.
SWANSTON ST. TO ELIZABETH ST.
INCLUSIVE

JUNE / JULY 1964
 M.M.T.S.

