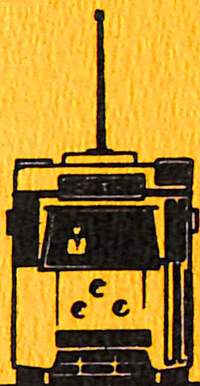


# MELBOURNE—DONCASTER & TEMPLESTOWE

## Public Transport Proposals

Submission to the  
Parliamentary Public Works Committee

August 1974



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INDEX OF FIGURES.

FIGURE NUMBER		PAGE
1.	Proposed High Standard Bus Route.	10
2.	Bus Feeder Routes.	11
3.	Proposed Light Railway Route.	12
4.	Area of Influence.	16
5.	Three-Section Articulated Tram Operating in Dusseldorf, Germany.	25
6.	Two-Section Articulated Tram with Articulated Trailer Operating as a Light Railway : Munich Germany.	27
7.	Busway : Typical Cross Sections.	36
8.	Possible Treatment for CBD Loop.	38
9.	Three-Section Articulated Tram Operating in Exclusive Right-of-Way Established by Means of Barrier Kerbs : Amsterdam, Holland.	39
10.	Light Railway : Typical Cross Sections.	43
11.	Possible Treatment at Doncaster Shoppingtown.	44
12.	Modal Interchange : Hamburg, Germany.	45
13.	Passenger Shelter at the same Interchange Facility.	47
14.	Proposed At-Grade Treatment at Doncaster Road.	51

INDEX OF TABLES.

TABLE NUMBER		PAGE
6.1	MTC Projected Railway Patronage.	53
6.2	Trip Origin, Inbound Rail Trips A.M. Peak Period.	55
6.3	Trip Destination, Inbound Rail Trips, A.M. Peak Period.	55
6.4	Estimated Average Travel Time, Doncaster-CBD, Peak Period, Main Mode : Railway	58
6.5	Estimated Average Travel Time, Doncaster-CBD, Peak Period, Main Mode : Express Busway.	59
6.6	Estimated Average Travel Time, Doncaster-CBD, Peak Period, Main Mode : Light Railway.	60
6.7	Overall Travel Times (Peak Period) For Alternative Schemes.	61
9.1	Base Case Modes of Travel, 1985.	72

1. INTRODUCTION.

On 9th April, 1974, the Terms of Reference of the Parliamentary Public Works Committee Eastern Railway Inquiry were extended as follows :

Having regard to -

- (a) the future development of the eastern suburbs of Melbourne as far as can be foreseen at present;
- (b) the Committee's present deliberations on the point at which the eastern railway should terminate;
- (c) the very high cost of building the eastern railway;
- (d) the low priority for construction of the eastern railway given by the Railway Board,

the Committee is requested to extend its present Inquiry in order to report on -

- (a) the desirability and practicability of establishing some other form of public transport system, including a publicly operated high-speed road-bus service, operating on any of the following alternative routes :
  - i) from the central business district and along the median strip of the Eastern Freeway to Bulleen Road;
  - ii) as in i) and thence along the recommended railway route to Balwyn Road;
  - iii) as in i) and ii) and thence along the recommended railway route to Doncaster Road; and
  - iv) as in i), ii) and iii) and thence along the recommended railway route to Black burn Road.
- (b) the most suitable route for each of these transport systems from the central business district to the western end of the median strip of the Eastern Freeway;

- (c) the estimated cost of each alternative studied;
- (d) which route and mode of transport the Committee considers most appropriate to meet future developments (not excluding railways);
- (e) any other matters relevant to the Inquiry.

When considering these extended terms of reference, it must be remembered that the various forms of public transport possible have different operational characteristics and it is not appropriate that any alternative system be operated over a route identical with that of the railway Scheme I - which is largely in tunnel beyond Balwyn Road. It would be possible to approximately follow the alignment on the surface but this would involve very steep grades and would require the demolition of a large number of houses.

If "on street" forms of public transport are being considered, it is important that the route chosen allow their particular advantages to be fully utilized in the light of the requirements of the area to be served.

When preparing this submission the terms of reference have therefore been broadly interpreted so that the proposals investigated provide a public transport service to the same general area as that served by the railway proposal.

In this report, two public transport systems, which would provide passenger collection and distribution services in the Doncaster and Templestowe area and in the Central Business District and use the median of the Eastern Freeway as part of a high speed route connecting these areas, have been studied in detail. Other possible schemes and route variations are listed and discussed in Chapter 4.

Both schemes provide for the construction of a high-speed public transport route from the Central Business District and along the median strip of the Eastern Freeway to Bulleen Road and thence along the recommended railway route to Balwyn Road and thence along the proposed railway route to Doncaster Road. Establishment of public transport right-of-way over this full section, and on some main roads in Doncaster would be required to avoid the reduced standard of service and high operating costs which would otherwise occur as a result of road traffic.

The schemes investigated in depth are :

### Scheme A.

A high speed road bus service operating from the Central Business District via Nicholson Street and Alexandra Parade to the Eastern Freeway and thence generally along the railway route to Doncaster. The bus system would then diverge into a series of feeder routes serving the Doncaster and Templestowe Area. Figures 1 and 2 show the routes of this bus system. The feeder route system shown has not been the subject of full operations planning and some detail changes could be expected.

The scheme provides for construction of reserved bus lanes in Nicholson Street and Alexandra Parade and in some main streets in Doncaster.

Peak period passengers would be able to travel directly, without vehicle interchange and the service would be convenient, frequent and rapid.

### Scheme B.

A light railway service using large articulated vehicles operating over a similar route to Scheme A at least as far as the intersection of Doncaster Road and Tram Road. This scheme also includes the provision of an integrated system of feeder buses and the construction of some bus lanes in Doncaster. Figure 3 shows the light railway route which forms part of this system. The feeder bus routes would be similar to those shown in Figure 2. Three modern modal interchange facilities form an integral part of the scheme.

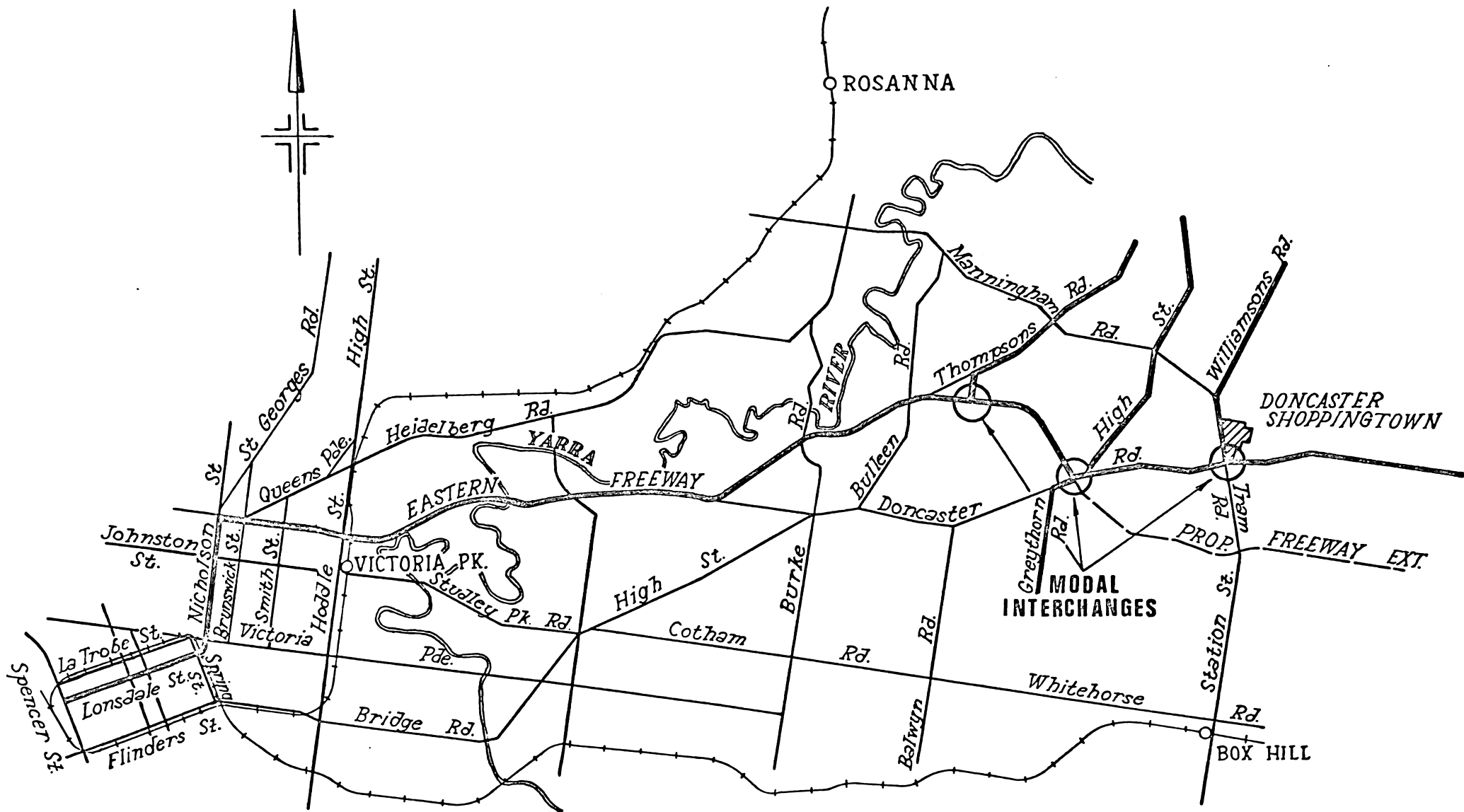
Either scheme would provide a high standard of public transport service and would attract a similar patronage to the proposed railway Scheme I. However, because of the large number of vehicles required, the bus scheme could increase congestion and have an adverse environmental impact on Lonsdale Street.

The service would be very much better than the Board is currently able to provide in this area, while operating under existing traffic conditions.

Major improvements would be achieved in travel time, service frequency, vehicle comfort and reliability. In addition these proposals have been designed to provide fully seated travel in Scheme A, and for full seat provision in the light railway part of Scheme B.

Before either scheme could be implemented, further detailed investigation and design would need to be carried out and discussions with Councils and authorities would be necessary. It would be desirable that prompt action be taken regarding necessary land acquisition and in the co-ordination of construction work with the Freeway works currently being undertaken.

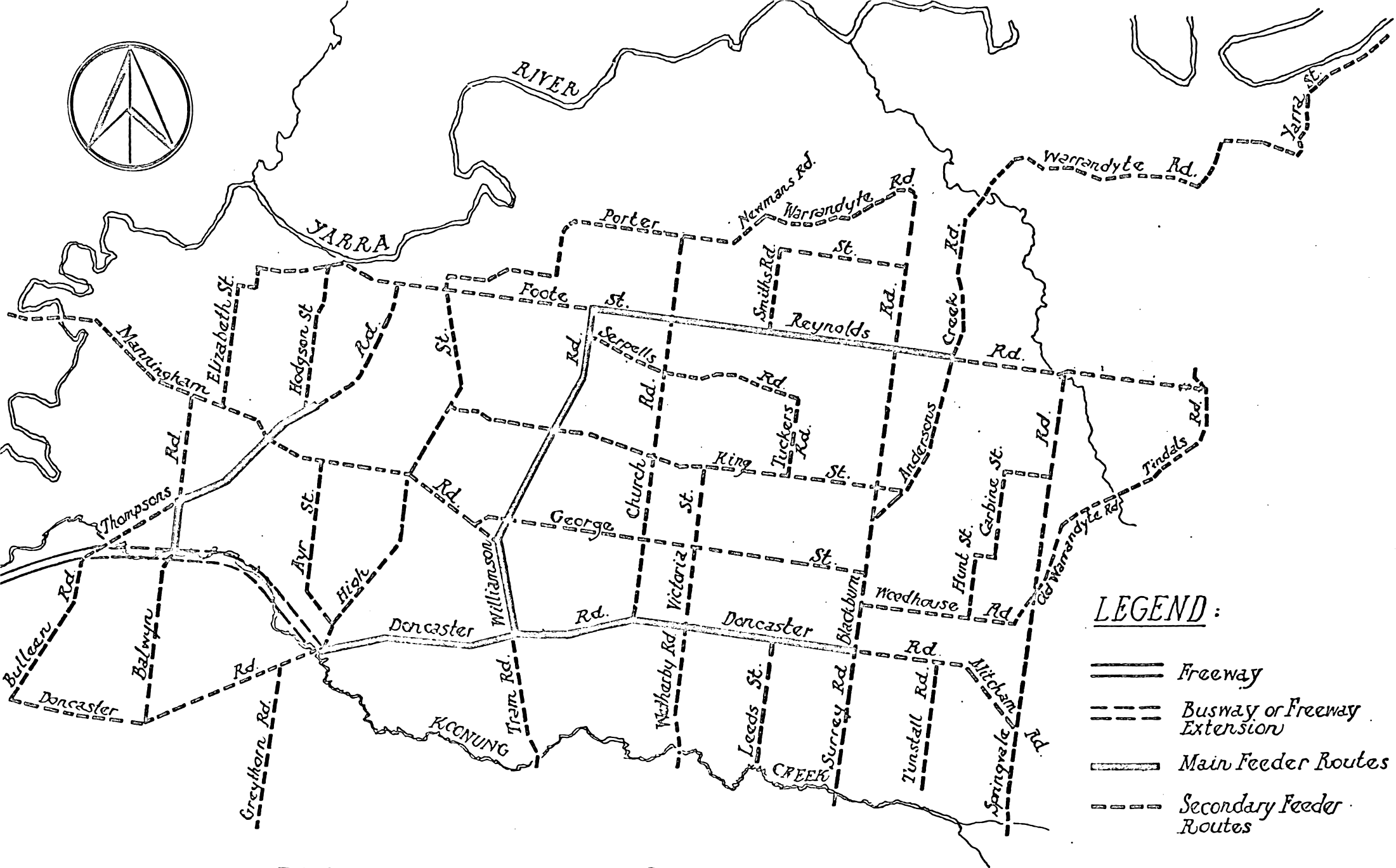




PROPOSED HIGH STANDARD BUS ROUTE

Scale 0 1 2 3 4 Kilometres

Fig.1



**BUS FEEDER ROUTES**

**LEGEND :**





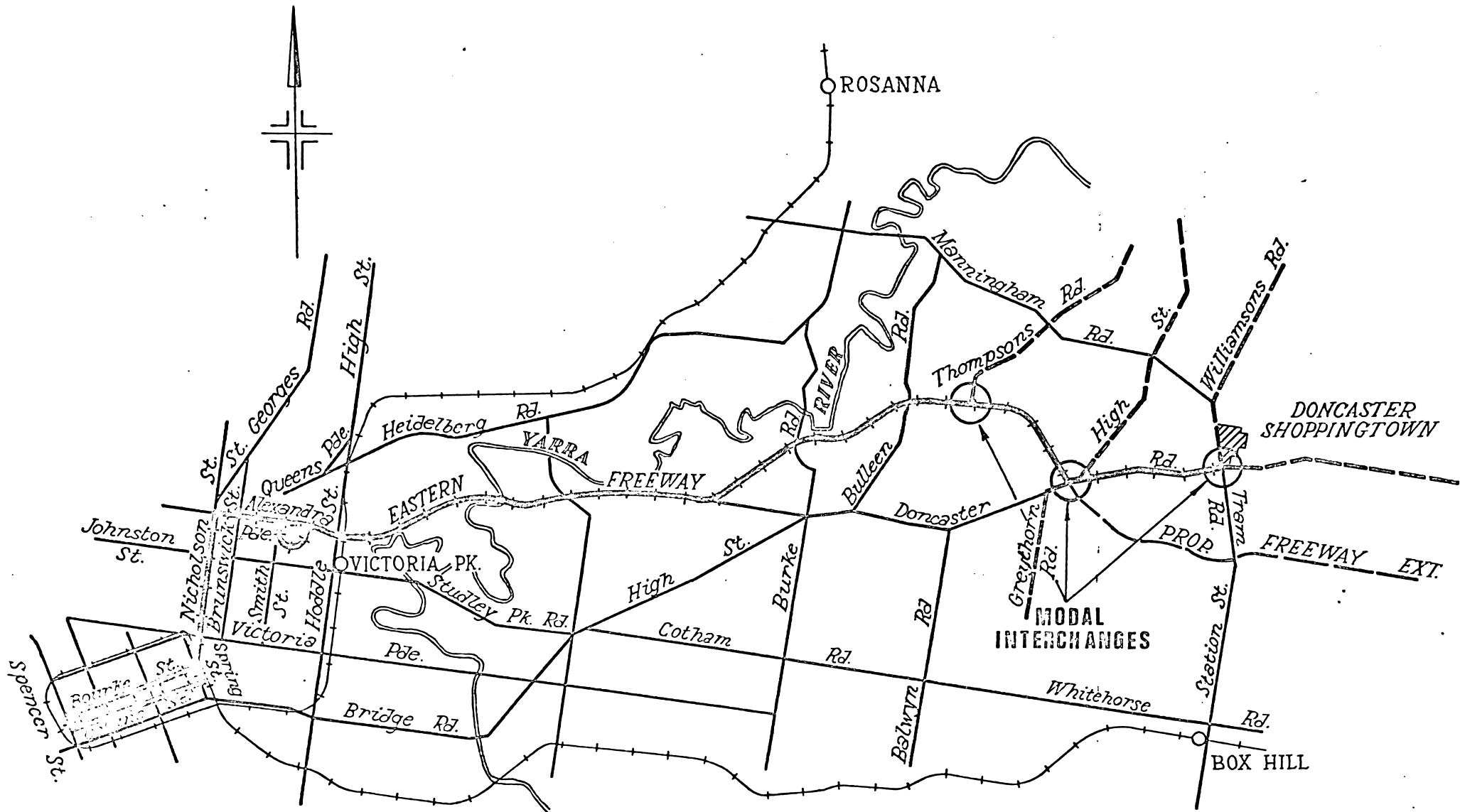
-  Freeway
-  Busway or Freeway Extension
-  Main Feeder Routes
-  Secondary Feeder Routes

Fig 2



PROPOSED LIGHT RAILWAY ROUTE

Scale 0 1 2 3 4 Kilometres

 Light Railway  
 Feeder Buses

Fig. 3

## 2. SUMMARY.

The area which would be served by the transport systems investigated extends from North Balwyn to Warrandyte and lies generally between the Yarra River and the Koonung Creek. By 1985 approximately 137,000 people will live in this area.

### Scheme A: High Standard bus system.

The bus operation proposed would comprise collection-distribution services, which would travel along a reserved busway in the Freeway median. Reserved right-of-way would be provided between the Freeway and the CBD.

All buses would provide through travel to the Central Business District at peak periods. The scheme has been designed to provide fully seated travel.

The capital cost of the facilities required, excluding vehicles, has been estimated to be \$16 million. By 1985, 184 buses would be required at an estimated total cost of \$7.4 million.

### Scheme B: Light railway.

This proposal would involve the provision of a light railway to operate from the central area to the vicinity of the Doncaster Road and Tram Road intersection, combined with an integrated bus distribution system. The main trunk route would be via Nicholson Street, Alexandra Parade, the Eastern Freeway and Doncaster Road. Within the CBD, the vehicles would operate on both Bourke Street and Collins Street.

The light railway would be operated with articulated vehicles seating approximately 100 passengers. Full seat provision would be made on these vehicles.

The capital cost of the facilities required, excluding vehicles, has been estimated to be \$18 million. Forty-eight articulated trams and fifty buses would be required by 1985 at an estimated total cost of \$16.4 million.

Comparison of Schemes.

On the basis of estimated total trip times, including walking and waiting, it would seem that the patronage of both schemes would be similar to that predicted by the MTC for the Scheme I railway proposal.

The total annual operating costs for the systems investigated, when fully operational, have been estimated to be :

	Bus System (Scheme A) per annum	Light Railway (Scheme B) per annum
Capital costs (interest charge at 8% p. a.)	\$ 1,280,000	\$ 1,440,000
Vehicle replacement costs	430,000	584,000
Vehicle running costs	4,100,000	3,200,000
	\$ 5,810,000	\$ 5,224,000

At current fare levels and operating costs, it has been estimated that revenue would meet 97% of direct operating costs of the light railway (excluding capital charges), but only 75% of the direct costs of busway operation.

The social benefit-cost ratios of the schemes have been calculated to be :

High standard bus system (Scheme A)	1.4
Light railway (Scheme B)	1.6

While these benefit-cost ratios indicate that either proposal would be a worthwhile public investment, the return to the community is greater in the case of the light railway.