

REPORT BY HECTOR H. BELL JNR., OF THE MELBOURNE
AND METROPOLITAN TRAMWAYS BOARD, ON THE STREET PASSENGER
TRANSPORT SYSTEM OF GEELONG URBAN AREA.

The present system governing the control of Street Passenger Transport of the Urban District of Geelong can be classified as under :-

1. (a) The existing tramway services operated by the State Electricity Commission.
- (b) Privately operated regular omnibus services under licence from the Geelong City Council, under the Motor Omnibus Act, 1928.
- (c) Omnibus services operating to the North Shore industries, under licence from the Geelong City Council, under the Motor Omnibus Act, 1928.
- (d) Taxi services under licence from the Geelong City Council.
- (e) Private Hire services under licence from the Geelong City Council.

In order that you may be fully conversant with the existing Street Passenger Transport facilities, and the Authorities governing their operations, I have outlined below a brief history of same.

2. TRAMWAYS.

The initial tramway at Geelong was authorised on the 10th November, 1909, at the request of the then Town of Geelong and the Boroughs of Geelong West, Newtown and Chilwell. The first tramways opened for traffic were those of the Newtown and West Geelong routes on the 14th March, 1912. The successive routes were opened as follows :-

South Geelong (to Barwon Bridge)	-	11/12/1913.
East Geelong	-	12/10/1922.
Chilwell	-	30/ 9/1927.
Belmont	-	16/12/1927.
North Geelong	-	6/ 6/1928.
Eastern Park	-	10/ 9/1930.
Eastern Beach	-	19/10/1940.

The Councils of the abovementioned municipalities entered into an agreement with - or delegated their powers of operating the tramways to - the Melbourne Electric Supply Company Limited, which also had the authority to supply electricity in those municipalities.

When the State Electricity Commission of Victoria was constituted in 1922, Parliament provided that the Commission could take over any lighting undertakings, and also any tramways operated in conjunction therewith. The Act stipulated that this could only be done with the consent of the Governor-in-Council, and subject to sanction by Parliament.

In 1927, the Government gave the assurance that whatever system of control was decided upon for the electric tramways, these facilities would continue for the public use.

In 1928, the Commission stated that it was prepared to undertake the future operation of the tramways, subject to the approval of Parliament, and subject to the municipalities entering into an agreement along similar lines to that existing between the Melbourne Electric Supply Company and the municipalities.

The agreement which was entered into in 1929 has no particular time of expiry, but remains in force while the tramway system is operated by the Commission. It generally governs the relations between the Councils and the Commission in such matters as maintenance, tram speeds, tramway by-laws, payments to Councils in lieu of rates, obligations of Councils

to restrict competition with trams, losses on tramways to be a charge against electricity supply revenue, and Councils to bear losses on tramway's works sponsored by it.

In agreeing to accept the statutory duties of a tramway authority, the Commission stressed the fact that it did not regard the responsibility as coming within its functions, and asked for reasonable legislation designed to protect it against loss on electricity supply resulting from tramway operation.

In December, 1929, Act No. 3845 was passed appointing the Electricity Commission as the Tramway Authority. Amongst other things, it protected the tramways from competition by providing that no licence to operate motor omnibus traffic in any area served by any tramway shall be granted by the licensing authority without the consent of the Commission.

In the practical application of the legislative provisions for protecting tramway revenue against bus competition, the Commission has adopted the general principle that the tramway should serve the area within a quarter of a mile of the tram track. Consequently, it has not withheld its consent to any proposed bus route which would operate throughout its length more than the quarter mile distance from the tramway route, or to any proposed bus service which, where it came within the quarter mile distance, did not pick up passengers on the inward trip, or set down passengers on the outward trip.

Although the Commission has controlled the tramways since the 1st September, 1930, it has never exercised the authority conferred by Act No. 3845, which gave it the power, subject to the consent of the Governor-in-Council, to operate motor omnibuses, electric rail-less trolley omnibuses or other buses within its area.

The Act also made it mandatory for the Commission to run workmen's trams and/or buses at such times and such fares as are prescribed.

3. DATA PERTAINING TO THE EXISTING TRAMWAY SYSTEM.

The following is a summary of the Commission's undertaking as at the 30th. June, 1948.

- (a) Population served - 41,000.
- (b) Miles of single track - 7.06 miles.
- (c) Route miles - 11.03 miles.
- (d) Trams in operation: 21 - 4-wheel.
6 - 8-wheel vehicles.
(Age: 23 years to 40 years).
- (e) Passengers carried - Estimated 1948 - 6,609,400.
(1937 - 3,622,000.)
- (f) Number of passengers per tram mile - 10.07.
- (g) Passenger journeys per head of population served - - 160.
- (h) Number of trams used in traffic :- AM. - 14.
PM. - 19.
Peak Periods - 25..
- (i) Tram mileage - 656,178.
- (j) Tram density on each route :-

<u>ROUTES.</u>	<u>A.M.</u>	<u>P.M.</u>	<u>PEAK PERIODS.</u>	<u>PASSENGERS CARRIED. (ESTIMATED)</u>
Belmont	2	3	4	1,097,200
Chilwell	2	2	3	880,100
East	2	2	3	987,000
Eastern Park	1	2	2	336,600
Newtown	2	3	3	787,000
North	2	3	6	1,190,500
West	3	4	4	<u>1,331,000</u> <u>6,609,400</u>

- (k) Number of personnel :-

Motormen, Conductors and Inspectors	-	99
Other employees	-	<u>40</u>
Total	-	<u>139</u>

4. FINANCIAL ANALYSIS.

The Gross Capital Expenditure of the Undertaking is shown as £106,022- at 30/ 6/1948, which was written down from £202,896- on 30/ 6/1939.

Depreciation and Loan Provision will, with interest, be sufficient to write out the amounts in the Tramways Capital Account on the 30th June, 1950.

The Traffic Receipts for the Financial Year 30/ 6/1948 amounted to £61,165-, together with other receipts of £368-, making a total of £61,533-.

The Operating Expenditure was £87,457-, thus showing a Balance of Operating Expenses over that of Revenue of £25,924-.

Traffic Receipts per tram mile	-	22.3714d.
Operating Expenses per tram mile including Electricity Cost and Standing Charges	-	31.9878d.

For further details, see graphs attached.

The foregoing financial analysis clearly indicates that the Geelong Tramway System is not an economic proposition and must be considered as a financial burden upon such an efficient undertaking as the State Electricity Commission.

The condition of the Permanent Way is poor, the track alignment and rail surfaces are irregular, and these factors combined with that of the obsolete rolling stock are responsible for the uncomfortable ride provided for passengers by this service.

As the majority of the tracks, special work, and rolling stock have had a life of at least 20 years, it is reasonable to assume that the reconstruction of the tracks and the replacement of the rolling stock is essential.

The fact that the Capital value of the Undertaking will be completely written off by June, 1950, emphasises the point that major reconstruction of the tracks and the replace-

ment of rolling stock would be necessary in order to re-habilitate the system and provide the travelling public with a service to which they are entitled. The estimated cost of this work would be in the vicinity of £450,000-.

5. GEELONG SUBURBAN OMNIBUS ROUTES.

How made up

The Councils are the Licensing Authorities under the Motor Omnibus Act, 1928 - Nos. 3742 and 3851.

Under Division 1, Section 25 (q) (c), the Council of the City of Geelong was authorised the Licensing Authority.

The third section of the Act defines the district as the Municipal District of the City of Geelong and vicinity, within a distance of 8 miles from the boundary of the said municipal district.

The areas defined include the following municipalities: City of Geelong, City of West Geelong, City of Newtown and Chilwell, Shire of Corio, Shire of South Barwon, Shire of Bannockburn, Shire of Bellarine and the Shire of Barrarbool.

The total area of these municipalities is 98.33 square miles, and the total population is 49,284.

The Council gazetted their first By-Law, No. 102, for the purpose of licensing motor omnibuses, and set forth the routes, fares, time tables, stands, maximum number to be carried, fees, etc., which had been approved by the State Electricity Commission.

Seven (7) bus routes were gazetted at that date. The total number of suburban bus routes gazetted to date is eight (8), which are as under :-

- (1) { City of Geelong to St. Albans.
 " " " Breakwater.
 " " " East Geelong.
- (2) City of Geelong to West Geelong.
- (3) City of Geelong to West Geelong.

- (4) { City of Geelong to Manifold Heights.
" " " Herne Hill.
- (5) City of Geelong to Chilwell.
- (6) City of Geelong to Newtown.
- (7) { City of Geelong to Norlane.
" " " Northshore.
- (8) City of Geelong to Highton.

The above are operated by six (6) private operators who have maintained a good service in accordance with the Council's requirements.

6. MOTOR OMNIBUS ROUTES OPERATING TO THE NORTH SHORE INDUSTRIES.

From 1934 to 1936, the Council found it necessary to provide additional routes for industrial traffic and therefore gazetted By-Law No. 107, prescribing routes from 8 to 24. It was during this period that difficulties arose in allocating these industrial routes, especially when peak loading problems had to be considered.

In 1937, additional routes were prescribed under By-Law No. 110, whereas today there are no less than 51 routes authorised to 9 private operators, details of which are as follow :-

1. Belmont to Ford Works	}	Ford's Transport - 5 buses
2. St. Albans " "		
3. East Geelong " "		
4. Chilwell to " "		
5. East Geelong " "		
6. West Geelong to Ford Works	}	J.M. Wise - 10 buses.
7. East Geelong " " "		
8. West Geelong " " "		
9. Newtown " " "		
10. West Geelong " " "		
11. " " " " "		
12. Belmont to Ford Works	}	E. & A. Bender - 8 buses.
13. Chilwell " " "		
14. Herne Hill " " "		
15. Newtown " " "		
16. West Geelong " " "		
17. Newtown " " "		
18. Newtown to Ford Works		
19. Chilwell " " "		
20. " " "		
21. " " "		

22.	City	to Ford Works	}	
23.	Belmont	" " "	}	
24.	South Geelong	" " "	}	N. J. McHarry - 4 buses.
25.	East Geelong	" " "	}	
26.	City to Ford Works			I. J. Cook - 1 bus.
27.	Highton to Ford Works.			H. L. Drew - 2 buses.
28.	East Geelong to Ford Works		}	
29.	" " " " "		}	M. J. Kenny - 2 buses.
30.	Port Arlington to Ford Works			G. Woolnough - 1 bus.

Total Number of Buses to Fords = 37.

1.	West Geelong to Harvester Works	}	
2.	City " " "	}	
3.	" " " "	}	
4.	Herne Hill " " "	}	E. & A. Bender -
5.	West Geelong " " "	}	11 buses.
6.	Belmont " " "	}	
7.	City " " "	}	
8.	West Geelong " " "	}	
9.	East Geelong to Harvester Works	}	
10.	" " " " "	}	
11.	" " " " "	}	J. M. Wise - 11 buses.
12.	West Geelong " " "	}	
13.	East Geelong " " "	}	
14.	Newtown " " "	}	E. & A. Bender -
15.	Belmont " " "	}	6 buses.

Total Number of Buses to Harvester Works = 28.

1.	East Geelong to Phosphate Works	}	
2.	West Geelong " " "	}	E. & A. Bender -
3.	" " " " "	}	4 buses.
4.	" " " " "	}	
5.	Newtown to Cresco Works	}	E. & A. Bender -
6.	City " " "	}	2 buses.

During the war period, the transport position became acute, due mainly to the following factors :-

- (a) The increased number of personnel employed in the North Shore industries on war contracts.
- (b) Petrol restrictions limiting the use of private cars and motor bicycles.
- (c) The difficulty of private operators obtaining additional vehicles.

The Victorian Railways and the State Electricity Commission had failed to improve their transport facilities, and it became incumbent upon private operators to bear the burden of moving passengers to and from the North Shore industries.

As an emergency measure, the Directorate of Emergency Road Transport authorised five (5) semi-trailer buses to be operated by the Ford Company. At the conclusion of the war, regulations were again issued to permit of these vehicles being registered under the Motor Omnibus Act, and they are still in service.

It will be seen that of the sixty (60) buses licensed by the Council, only fourteen (14) are utilised for service on the regular suburban routes, while forty-six (46) are essentially used by private operators to cater for the industrial routes. This involves the running of buses to serve approximately 2,500 passengers on journeys to and from their places of employment for AM. and PM. only. With the exception of Special Charter work, authorised by the Transport Board, these buses are idle for the remainder of the day.

It is therefore reasonable to assume that even with the recently increased fares, the services provided under these conditions could not be operated at any great profit, and it has been the operators' endeavour to overload the buses in order to carry as many paying passengers as possible. Some of the buses utilised are of an inferior type, and it has been ascertained that a number of them are subject to frequent mechanical breakdowns with consequent hazard to those travelling in old and dilapidated buses; in addition, some are very dirty and unkept in appearance.

By contrast, others are in a state of excellent mechanical condition and perfect cleanliness, being a credit to the proprietors, and an example to other operators.

The Council may be criticised for having licensed these inferior buses, but if the matter is considered carefully, it will be seen that the Council is endeavouring to provide a service to industries, and therefore has no option but to license the only available vehicles.

With the expansion of the existing industries and new factories being established in this area, the time is not far distant when the operator will be called upon to provide additional services, and the companies are concerned that adequate transport will not be available to cater for the increased number of employees in the near future.

The International Harvester Company anticipates an increase of employees from the present figure of 825 to approximately 1,385 as soon as manpower is available.

The Ford Motor Company estimates that their present personnel of 2,080 will be increased to 2,580 during 1949. In addition, the smaller industries predict proportional increases of their employees.

Two main factors contribute to the present unsatisfactory operation of the existing transport, namely -

- (a) The existing system of routing the buses to provide the majority of passengers with almost a taxi service to their place of residence.
- (b) The majority of employees in this area commence work at 7.30 am. and finish at 4.15 pm. This prevents the buses being operated for more than one trip to and from industries.

Application by Employees for Additional Transport.

Following upon the recent announcement of fare increases on private buses to these industries, the employees of the International Harvester Company demanded that an additional ten (10) buses be provided for transport to the works. They complained of overcrowding of the buses, and suggested that the crush loading be limited to 15%. They also emphasised the dangerous condition of some of the buses in operation.

As a result of the employees' demand and the operators' application to the Company for a subsidy should extra buses be operated, several conferences were held at which the City Council's Traffic Committee, bus operators and representatives of the industries were present.

At the invitation of the Council's Traffic Committee, I attended these conferences, and when my opinion was sought I had no hesitation in suggesting that additional buses would not be required if the companies adopted the staggering of hours of their employees, and that the number of routes at present prescribed be re-arranged and reduced.

In order that those concerned, including representatives of the employees, would have the opportunity of viewing the system operated by the Tramways Board in supplying transport for employees to and from the industries at Fishermen's Bend, I arranged for them to visit Melbourne on the 10th December. Approximately 7,500 employees are transported to industries in this area with less vehicles than those used to move 2,000 to the North Shore industries.

The representatives of the parties concerned were fully convinced that this method, if introduced at Geelong, would temporarily solve the situation.

At a conference held on the 20th December with the Geelong City Traffic Committee, representatives of the Ford Company, International Harvester Works, and the bus Operators, it was agreed to give a ninety (90) days trial, commencing on the 12th January, 1949, with respect to the carriage of passengers to the Northern Industries.

The following conditions were agreed to :-

- (a) Industries concerned to stagger their hours of operation.
- (b) A 30% maximum overload permitted.
- (c) Operators to issue their own weekly tickets.
- (d) No interchange of tickets between operators.
- (e) The Council to reduce the existing industrial bus routes from fifty-eight (58) to approximately sixteen (16).

I am convinced that this proposal will operate successfully until such time as the General Scheme for the entire transport system becomes effective.

7. TAXI AND PRIVATE HIRE CAR SERVICE.

The City Council is the Licensing Authority for fifty (50) taxis and thirty (30) private hire cars, in accordance with the Council's By-Law No.122, made under provisions of the Carriage Act, 1928, with respect to :-

- (a) Licensing, regulating and limiting the number of Hackney Carriages plying, kept or let out for hire, within the City of Geelong and eight miles from the corporate limits of the said City.
- (b) Application for licences and the terms and conditions thereof, and the refusal, suspension or cancellation of such licences.
- (c) Constructional requirements.
- (d) The conduct of owners, drivers and passengers.
- (e) Hiring agreements.
- (f) Lost or forgotten property left or found in Hackney Carriages.
- (g) Stands for Hackney Carriages.
- (h) Recording instruments fitted to Hackney Carriages.
- (i) The fares to be charged for hirers and passengers.
- (j) Repealing and consolidating the By-Laws of the City of Geelong relating to Hackney Carriages.

From my observations, it would appear that the above service is operated and controlled in a very efficient manner.

It will be fully realised from the following statement of receipts and expenditure that the Council receives small compensation for the work as the Licensing Authority.

STATEMENT FOR 12 MONTHS.

<u>RECEIPTS.</u>	<u>EXPENDITURE.</u>
To Licenses - £409. 0. 0.	By Administration - £150. 0. 0.
	Maintenance of Signs and Road Markings - £20. 0. 0.
	Credit Balance - £239. 0. 0.
	£409. 0. 0.
£409. 0. 0.	

		<u>Mileages.</u>	<u>Apportionment of Balance.</u>
Geelong	-	224,803	£75.10. 0.
Geelong West	-	253,739	£85. 4. 3.
Corio	-	150,766	£50.13. 3.
Newtown and Chilwell	-	62,438	£20.19. 0.
South Barwon	-	19,689	£6.13. 6.
		<hr/> 711,435 <hr/>	<hr/> £239. 0. 0. <hr/>

8. THE FUNCTIONS OF A STREET TRANSPORT AUTHORITY.

I consider that street transport should be operated by the State, being in the same category as water and electricity. There is not room for two authorities charged with the same responsibility.

As the Electricity Commission is vested with the powers to operate and control all street passenger transport in the urban area of Geelong, it was unfortunate for the future development of the passenger transport in this area that the Commission agreed to the Council being the Licensing Authority for omnibuses and taxis.

This dual control is partly responsible for the unnecessary duplication of the services so evident at the present time. It must be remembered that the functions of a street transport authority are dissimilar to those of a State wide control of commercial vehicles with long distance transport of passengers included.

Street transportation in a large city is a highly specialised business demanding an organisation of experts and trained staff to ensure a safe and dependable service suiting the varying needs of heavy pick-up and set-down passenger traffic, with morning and evening rushes that impose a severe tax on the equipment and staff.

In contrast with this class of service, traffic in the country is generally long distanced in character, while the areas served are sparsely populated. Such transport facilities include not only passengers but the use of commercial vehicles for carrying merchandise, etc. In fact, the latter is proving the more important of the two, and in my opinion, it is undesirable to burden city transport problems with the machinery designed for the purpose of solving the rail and road problems of the entire State.

In this connection, I consider the present function of the Road Transport Board to control all transport outside the Geelong Urban Area is in the best interests of the community.

9. TOWN PLANNING, POPULATION DENSITY AND TRAFFIC SURVEY

The development of adequate transportation facilities and traffic control measures requires an exact knowledge of the problems to be overcome. An intelligent collection of facts relating to town planning, traffic survey, population density, passenger loading, etc., is necessary to provide this knowledge, and had such been available, would have been a valuable contribution to the various data collected by me for the purpose of this report.

However, I learned from Mr. Ian McDonald, the City Surveyor, that Messrs. Laird, Buchan and Collins, Architects, have been appointed as Town Planners for the City of Geelong, and from an interview I had with Mr. Collins of this firm at which we discussed street passenger transport in relation to their proposed scheme, I found that this firm has in the course of preparation, statistics relative to population density and traffic survey, etc., in this area, which would be available in the near future.

This information will be necessary for the ultimate re-planning of the passenger transport system of Greater Geelong.

10. RELATIVE VALUES OF PASSENGER VEHICLES.

For the purpose of this report, I have assumed that the existing obsolete trams will be replaced either by trolley buses or diesel omnibuses, and have set out below the relative merits of these vehicles :-

Trolley Buses.

It can be fully appreciated that while the trolley bus provides a comfortable and silent ride and utilises local power, it has certain disadvantages when compared with the diesel omnibus.

The advantages of the diesel omnibus are briefly summarised below :-

- (a) Flexibility of service can be more readily provided by the omnibus.
- (b) A more regular service can be maintained, in as much as a breakdown of an omnibus affects the vehicle only, whereas a power failure will affect the entire service of trolley buses.
- (c) New services for extensions can be provided more readily and economically with omnibuses than with trolley buses.
- (d) More effective dispersal of crowds from sporting grounds, beaches, etc., is possible, due to the practicability of running direct services to the various suburbs.

11. THE STATE GOVERNMENT'S POLICY FOR DE-CENTRALISATION OF INDUSTRY.

It is the State Government's responsibility to ensure adequate and efficient transport as an encouragement to the progress and foundation of new industries in this city.

Geelong, being the largest provincial city in the State, with its fine harbour, modern port facilities, good road and rail communications, offers the essential requirements for the establishment and growth of industries.

In the furtherance of the policy of de-centralisation, the State Government should be prepared to establish and finance an efficient system of transport for this community.

In the following, a plan is propounded which I consider to be a solution of the passenger traffic requirements for Geelong City and its environs, and is relative and adaptable to the Town Planning Scheme for both the Urban and Regional development of this area.

RECOMMENDATIONS.

(1) As the present system of transporting employees to the North Shore industries by buses has proved unsatisfactory, uneconomical and wasteful, I consider that every effort should be made to implement a railway service operating from North to South Geelong.

As will be seen on the accompanying plan, the existing rail tracks and platforms are adjacent to the larger industries, and with suitable rolling stock, a satisfactory suburban service could be provided for the employees working in this area.

(2) That the existing obsolete tramway system be replaced by a diesel omnibus service. This new service to be provided after the re-planning of the present bus and tram routes in accordance with the future development of the Geelong Urban area, and to operate in conjunction with the Geelong suburban rail service.

(3) If the State Electricity Commission is unable to establish and control a completely new system of passenger transport, the Government will be forced to transfer the powers conferred on the Commission to some other authority.

Without creating a new controlling body, a feasible solution would be to extend the powers of the Melbourne and Metropolitan Tramways Board to embrace the street passenger transport system of the Urban area of Geelong. This Board has the facilities to install and operate any such subsidiary system.

The latter is my personal suggestion and does not emanate from my Board.

- (4) In the future re-planning of the passenger transport routes, consideration should be given to the private operators who pioneered the existing bus routes and have rendered and maintained an efficient service.
- (5) Two additional highways to the North Shore area should be constructed to relieve the congestion of heavy industrial traffic on the Melbourne Road.
(For the position of these roads, refer to attached plan).
- (6) Consideration to be given to the re-planning of the existing bus and tram terminals at the Geelong railway station, in order to provide adequate parking spaces for buses and facilities for passengers awaiting transport.

In conclusion, I wish to record my appreciation of the courtesy, kindness, and assistance accorded me by the following :-

The Mayor Geelong; His Worship Cr. F.E. Richardson.

Cr. B.E. Purnell and members of the Traffic Committee.

The Town Clerk, Mr. L.L. Walter.

The City Surveyor, Mr. Ian McDonald.

Mr. D. Collis, Traffic Superintendent.

The Staff of the Geelong City Council.

Mr. W.H. Connolly, Engineer and Manager, and his Staff in the Electricity Supply Department of the State Electricity Commission.

Mr. F.P. Mountjoy, Chairman, Transport Regulation Board.

Mr. H.P. Blakiston

Mr. L.L. Birch

Mr. P.C. Everist

} of the Geelong Chamber of
} Commerce and Manufacture

Mr. Collins, of Messrs. Laird, Buchan and Collins, Architects.

Mr. Rogers, " " " " " "

The Executive and Staff of the Ford Motor Company.

The Executive and Staff of the International Harvester Coy.

Private Bus Operators

and numerous others to whom I am indebted in respect to my investigations.

.....