

ROAD PASSENGER SERVICE OPERATORS' ASSOCIATION.

Statement of evidence to be submitted by Mr. A.J. Deacon, President.

EXISTING SYSTEM:- Tramway Service on the following routes - North Geelong, Belmont, Geelong West, Newtown, Chilwell, Geelong East, Eastern Park and Beach. These services are operated by the State Electricity Commission under special Legislation.

Motor Buses on the following routes - Lara, Norlane, Geelong West, Newtown, Chilwell, Herne Hill, Highton, Belmont and Geelong East. These services are operated by private enterprise.

ORGANISATION AND EQUIPMENT :- Trams, mainly old types up to 35 years old, various capacities. Areas now served have extended greatly beyond all existing termini; mainly single line and loop tracks, short sections of double track.

MOTOR BUSES:- Various types and capacities - some vehicles of modern diesel design with large capacity - majority petrol buses with average seating capacity of about 33. Areas served are contiguous to trams.

DEVELOPMENT OF GEELONG AND DISTRICT:- Rapid and extensive development is occurring in all sections - most noticeable is at Norlane where industrial and residential activities are pronounced. West, East and Belmont areas are developing extensively on a residential basis.

PROBLEMS ARISING AS A RESULT OF THE RESIDENTIAL AND INDUSTRIAL EXPANSION:

- (a) Should the present tramway system be retained and developed to assist in meeting the demand for transport and would such a system be the most efficient.
- (b) Can any such development be condoned on economic grounds.
- (c) Is the existing road system adequate to contain a modern double line or "parked" tramway system and is it adequate for present and future transport needs.
- (d) Is the existing operating Authority logical under modern conditions.
- (e) Can the existing Bus services be expanded to cater for the increased demand and are buses satisfactory for the purpose.
- (f) Are the existing Bus operators sufficiently capitalised or capable of obtaining necessary additional capital to meet an increased demand.
- (g) Is multiple ownership of bus services desirable in handling the transport requirements of a fast developing city.
- (h) Is it possible to obtain the co-operation of all responsible authorities and agreement to a road construction programme which would enable transport to function speedily, safely and with the maximum economy.
- (i) Is it desirable for the Transport Regulation Board to set up a local advisory Committee comprising all interests to assist in the planning of future development and to obtain the co-operation of employers and employees to institute staggered hours in industry.
- (j) Can the railway system be organised to assist the peak movements, particularly from North Shore areas.

COMMENT:

- (a) The Tramway system could not be developed to meet the expansion in Geelong district without heavy capital expenditure. Technical problems would also exist

in providing any extension, particularly at North Shore where the bridge over the railway is understood to be inadequate for tram tracks. Tramway extensions involve new tracks, overhead gear and sub-stations but, to what point should such extensions reach, when development is occurring with the rapidity at present being witnessed.

The conditions now existing in Geelong, and future growth which is envisaged, is not uncommon in modern times.

In many parts of the world it has been necessary to face up to the problem which has arisen when urban development goes beyond the point served by fixed rail systems.

At this stage it may be relevant to examine what has happened or is happening in other countries, and I propose to refer to passages from the report of Mr. H.H. Bell, ex-Chairman of the Melbourne and Metropolitan Tramways Board on his overseas tour in 1938.

In referring to "Problems of Street Transport" Mr. Bell instanced the difficulties which had beset transport operators in England following the first world war and he stated "Under the direct and urgent stimulus of War the motor bus had been brought to a high level of efficiency. To many of the smaller tramway undertakings, the acquisition of buses made possible the continuance of a transport service which would otherwise have been impossible". It is felt that history is now repeating itself in Geelong. He states further "After visiting the principal systems in England, I was confirmed in my opinion that while trams have been superceded in many of the smaller cities by petrol, crude oil and trolley buses, they will be retained in many of the larger cities for trunk lines carrying heavy densities of traffic for many years to come, and while they obviously do, particularly in the narrow streets which in many cities prevail, cause congestion to other traffic yet they move the masses more expeditiously and economically than any other form of traction. There is no doubt that the ideal conditions for operating a tramway system are where roads are wide enough to set apart a portion of them exclusively for trams, with separate roads for motor vehicles and other traffic.

From the passengers' point of view the "parked" tramway has definite advantages in that they can board and alight in safety, the riding is smoother and quieter and higher speeds can be attained. From the operators standpoint the cost of construction and maintenance is considerably less.

Although as I have mentioned, there is still a place for the tramcar in the larger cities of the United Kingdom, on established routes carrying heavy traffic, yet in many of those cities considerable mileage of tramway has been abandoned and in some complete abandonment is projected as the lines were out. "

Complete replacement of trams with buses, allowing extensions to be taken over by the buses, or the gradual replacement of trams entirely has occurred or is taking place in Leeds, Birmingham, Bradford, Sheffield, Manchester and in Paris. He also stated that in Canada 20 cities had completely substituted buses for trams, 13 partial substitution and in 7 proposals were on foot to convert wholly or partially to buses or trolley buses. He found that similar actions were taking place in the United States. A further interesting statement is "I could not help being influenced by the remarkable progress made by the diesel bus particularly in England, not only in the smaller cities, where they have replaced trams, but in many large cities also, where they have, except for densely populated routes, displaced trams. Referring to some of the housing schemes in Great Britain,

Mr. Bell indicated that they had become small towns and the necessity for people to travel to and from their work for distances up to $6\frac{1}{2}$ to 7 miles had saddled the transport system with heavy morning and evening peaks. Two examples were quoted:- 73 vehicles required up to 9.00 a.m. - after that hour until the evening peak - 13 buses. Between 7 and 9 a.m., 112 buses taxed to capacity, after that until 4.30 p.m., but 26 buses are required. With but a few exceptions, all these housing estates in Britian have been given diesel bus transport, as it is this vehicle alone which can keep the losses on such unprofitable services within reasonable preparations.

The lesson to be learnt here is that before authorising housing schemes, those charged with the provision of transport should be consulted.

"When I asked the operating Manager, London Passenger Transport Board, Mr. Geary, for his opinion on trolley buses and motor buses, he replied that the answer depended upon the particular problem involved. So far as London was concerned, where there was an established route carrying a definite traffic and no intentions of changing the route on conversion, then he thought the trolleu bus, as it has no fumes, had a greater carrying capacity and was easier for the tram operator to learn to drive. On a route such as Bourke Street, he expressed the opinion that from the utility point of view, the diesel bus gave the greater facility. Where you have a city growing, with suburbs springing up in the outer areas, you want a developing vehicle. It would be absurd to have one type of vehicle for the city service and another type for the developing service. You must consider a public utility vehicle that you can use every day and for all sections of the services."

Mr. Pilcher, General Manager, Manchester Corporation Transport Department states:- "The crude oil bus is more mobile and more adaptable in congested streets than the trolley bus. For this reason, I am of the opinion that the motor bus is the more suitable vehicle for operation in the centre of a city".

Mr. Bell stated that he was thoroughly in accord with this opinion. Finally Mr. Bell's conclusions are as follows where they may be considered to relate to Geelong's problems.

1. That for mass transportation in large cities (and this applies particularly in the United States) the modern tram, swift, comparatively silent, well lit, comfortably sprung and seated, will continue for many years to remain the backbone of the various transportation systems. Trams will, however, continue to decrease and eventually disappear entirely in the smaller cities where the diesel bus with its much lower capital cost, is the logical choice.

2. That the development of the outer suburban areas of cities' can best be fostered by the provision of an adequate transport service by some form of bus. The type of bus to be employed is a matter for the decision of the Authority concerned. Local consideration ought to govern the choice of vehicle, but strict regard must be paid to its suitability for connection with any adjoining form of transport.

3. That the small trolley bus boom appears to have spent its force in England. Outside London, the only cities which extended their trolley bus services during the last year are Newcastle, Bournemouth, Bradford and Huddersfield. One or two places abandoned the use of such vehicles while others decided not to extend their use further. 24 municipal transport systems operate trolley buses - none exclusively - and in each case all have superseded trams. Generally speaking, the chief factor in the choice of trolley buses for trams has been the ownership by the undertaking of its own electric power supply.

The findings of Mr. Bell were made in 1938, 15 years ago, and in the intervening period great changes have taken place in transport technique and equipment. Whilst the development of the motor bus in the period 1918-38 was remarkable, that development has continued over the past decade and a half. But before elaborating on that aspect, it is interesting to follow the transition of transport undertakings in other parts of the world during the period following World War II.

Mr. James Ames, O.B.E., M.Inst., who is Chairman Scottish Omnibus Group, in a lecture delivered in London on December 8th., 1952, stated:- "It appears to me necessary to place the function of the road transport industry in its proper perspective as certain movements are discernable which indicate the need for a revision of hitherto accepted ideas regarding the sphere or province of road passenger transport in the economic life of our country.

There will be little argument as to the advantages to be obtained for road passenger transport for short to medium distances, where at reasonable fares, the provision of frequent and flexible door-to-door services conveniently and efficiently meet the public need. Features in the development of these services in the past 30 years have, on the one hand, been the increase in the operation of town services necessitated by the widespread policy of building housing estates on the outskirts of town, and, on the other hand, greatly extended rural services to provide facilities for scattered communities.

Each has presented contrasting problems in economic operation.

In regard to the mainly urban services, I do not propose to recapitulate the bus versus tram controversy except to say that the virtual elimination of the tram in many cities including London, appears to confirm the view held by many and which I share to the full that the flow of traffic, including public service vehicles through populous centres, undoubtedly benefits through the removal of trams. This has to be seen to be believed and can be accomplished without any loss of efficiency in handling the class and volume of traffic for which tramways were in the past best suited.

Further developments of these services are inevitable if we are to take full advantage of the improvement in the design, comfort and safety of the vehicles which are already available and the improved operational technique. "

Another statement made by Mr. C.T. Brunner, Chairman, Institute of Transport, at the inaugural meeting of the Irish section in Dublin, March 12th., 1953, is as follows:- "Forms of transport, such as mechanised road transport and air, which, because they are relatively recent origin, have a rapid rate of technical improvement, nor unnaturally look for an expanding sphere of activity, partly at the expense, at any rate, proportionately, of the older forms of transport. Co-ordination, if it means anything, must imply an ordinary process under which forms of transport with a high rate of technical progress expand, whilst those with a low rate of progress correspondingly contract their sphere of usefulness. "

In the July issue of the Transport Journal, a British publication, the following information relating to trams appeared:-

"Further tramway abandonment at Sunderland.

Sunderland Corporation Transport Department is to scrap another 20 trams when its short term policy of substituting buses for trams takes effect on the Circle route on the 1st. November. This will reduce Sunderland's tram fleet to only 30 out of an original total of 100 and these will operate on what will then be the only remaining tram route - from Durham Road to Seaburn. Trams will finally be abandoned in Sunderland next year when the Corporation will face a total expenditure for road reinstatement of £261,813 (\$523,626). "

"Birmingham's Last Tram.

The last two trams to run over the Birmingham lines left the Miller Street Depot on Saturday 4th. July, with the second last car - No. 616 - the official "last car". The two trams proceeded to the city terminus, then went on to the outer terminus of the Eddington route before returning to the Depot".

Most of the existing tramway system in Geelong is of the single line and loop track which necessarily limits its capacity and is undoubtedly out of date, inefficient and uneconomical. This can be substantiated when it is realised that the total number of trams operating in the highest peak, that is, between 5.00 and 6.00 p.m., is 17. Although I understand that the total number of trams in Geelong is 32, I am not aware whether the track limits the capacity to 17 or whether the traffic does not require more than that number to handle it.

As has already been stated, Geelong has grown beyond its tram tracks. Many of the streets where the trams now operate are too narrow for "parked tramways" and in most of them the traffic density is increasing to such an extent that a double track would accentuate congestion and slow down traffic movements.

This is the identical situation which has been faced by many of the cities overseas and they decided against, in fact it was an economic impossibility to modernise the system.

The disadvantages of the tramway system could not be better summarised than as stated by Mr. Fraser, the present City Engineer, City of Melbourne, in his report after his visit overseas in 1950.

Mr. Fraser states:--

TRAMWAYS:

"There is a world wide decline in the use of street trams for public transport. In all the cities of the United States of America which have trams, there is an annual decrease in the mileage of track. Until 1922, in Greater London, trams carried a larger number of passengers than either buses or railways; however, in 1923 the use of buses overtook that of trams and thereafter buses carried more and more passengers. It is anticipated that, by 1953, there will be no trams left in London. They have been abolished in Manchester, and a programme has commenced in Liverpool to abolish all tramways over the next 10 years. The cities are not needlessly scrapping their tramways, but as they are worn out, they are replaced by buses or underground railways. Often I was told that Melbourne must be the only large city with a programme to extend its tramways.

In discussion with transport authorities, the following disadvantages of street trams were emphasised:--

(a) Trams have restricted mobility - their movement is not flexible.

(b) The necessity for passengers to cross the road to board the tram. The safety zone is not the answer to this problem. With modern traffic conditions it is barbaric to compel all persons to cross heavy streams of vehicular traffic to board public transport.

(c) Trams do definitely hinder other traffic. The difficulty of passing trams and the obligation to stop behind stationary trams do cause congestion, irritation and accidents.

(d) The difficulty of extending or diverting a tram route to meet the changing needs of a growing population or decentralisation.

(e) Trams cannot run express or adopt skip-stop schedules.

(f) Trams are a disadvantage in times of war. They are immobile and cannot move with the movements of population. The trams, tracks, overhead wires, transformer stations and power houses are vulnerable targets. A bomb on any of them can jeopardise the whole system. In London, during the war, the bus services were maintained at a high level of efficiency under almost all conditions, and did double service as ambulances at night.

(g) The necessity to make a left hand turn from the centre of the road.

(h) In many cities the cost of track maintenance has made trams the most expensive form of public transport.

(i) The many accidents caused to persons waiting on the roads, motorists driving into safety zones, and indirect accidents by reason of compulsory stops behind trams and the irritation and congestion caused by vehicles having to follow trams. There has been a decided reduction in accidents on roads where trams have been abolished".

The Parliamentary Secretary to the Ministry of Transport, London, recently stated in public that he "was hopeful that we should make our roads more accident free when we had done away with the greatest monstrosity of modern time - the trams". The Chairman of the New York City Board of transportation stated that, although the tramcar is still the surface vehicle capable of handling the largest number of people, it is fatally handicapped by its restrictions to an unsightly and expensive track and overhead system, its hindrance to other street traffic resulting from its inflexible path, and its initial and operating costs. The trolley bus has been much improved, but its handicaps remain while its pro-eminence in capacity is being challenged by the now larger buses".

From all reports available the transport organisation provided for new town development is by motor bus. It has been stated that for the first time since horse propulsion, roads and streets and traffic circulation can be planned to suit present and future needs.

With the background and experience of transport evolution in Great Britain and America it is possible to apply our consideration to Geelong.

As a result of a thorough examination of the problems here, it is obvious that identical conditions apply to those experienced elsewhere.

The tramway system in Geelong should not be expanded and developed; it should naturally suffer the same fate as similar undertakings abroad.

Whilst it is not considered that the existing tram system is capable of development, nor would it be the most efficient, it would also be impossible to suggest a heavy capital outlay, amounting to many thousands of pounds, on a system which is now incurring heavy losses. All evidence available indicates that trams, apart from densely populated routes, are an unacceptable proposition and if a suitable alternative is available, public monies should not be used to enlarge a very doubtful asset.

Rolling stock is obsolete, tracks are in poor condition, and generally speaking the tram system does not measure up to anything like the requirements of a modern, efficient transport undertaking.

It would be appropriate to say that when a nationalised undertaking is not giving service, denationalise it - cut the losses. Finally, it is extremely doubtful whether service could be provided efficiently, even if heavy commitments were undertaken, because of factors outside the control of the undertaking, such as roads, traffic density, and heavy operating costs.

The system of transport organisation for Geelong and district must therefore be based upon (a) the existing road facilities and (b) future developments in road facilities.

The main requirements to be obtained in any traffic area are (a) safety; (b) freedom of traffic flow, whilst the main requirements of a transport service are (i) safety; (ii) efficiency; (iii) sufficiency; (iiii) economy.

Whilst not attempting to usurp the function of the road authorities, it is suggested that the existing roads are inadequate for "parked tramways" and existing traffic demands. Geelong, like Melbourne, is commencing to feel the effects of rapid growth without arterial roads necessary to meet and cater for such expansion. With the industrial expansion of the North Shore, the single arterial road, the Prince's Highway, will be insufficient. The position could be alleviated by the construction of another road on the Prince's Highway on the Melbourne side of the Corio Railway crossing to serve the Shell refinery, International Harvester Co., Hyland's, Cresco, and other industries - this road to connect with the Melbourne road near Pilkington's. Another road to serve the western area should be constructed from the rear of the Ocean Child Hotel. This aspect, in detail, is one, however, for practical investigation by the appropriate authorities.

In an attempt to determine what the future organisation of passenger transport services in the Geelong area is to be, the first consideration must be given to the road system. I contend that this is the most important feature regardless of whether the transport system is to be by fixed rail or bus. Too many of our roads to-day are completely inadequate to cater for the traffic now offering without regard to increases consequent upon natural development. Roads must be constructed to service a dual purpose (a) to cater for present and future traffic demands and (b) to serve areas and so divert traffic through various channels and thus avoid bottlenecks, traffic congestion and ensure road safety and avoid the economic loss thereby created.

The planning of roads to meet traffic needs should also have regard to the requirements of pedestrians and pedal cyclists and road construction should be such as to segregate this traffic from other motor traffic. In addition, the road development should be a kind which would allow "through" traffic to be segregated from local traffic.

To endeavour to provide a suitable and satisfactory transport system without provision for a proper system of road development would only be playing with the problem.

Transport is an art of its own, and it cannot be expected that an Authority charged with the provisions of one major public service can be expert in the application of its activities to another major public service, which is entirely unrelated and requires specialised attention and techniques.

It can be stated that the traffic at present handled by trams could be catered for by buses quite adequately, efficiently and safely. In addition, the conversion of the trams to buses would enable a freer flow of traffic, greater flexibility and generally provide all of the advantages attributed to this particular system.

There does not appear to be any doubt that upon all of the facts the Geelong tramway system presents an unanswerable case for conversion to buses. The next problem is the organisation and control necessary if it is to scrap the trams. As the State Electricity Commission is not a transport operating organisation, it would be inadvisable to suggest that, having scrapped the trams, they should then reorganise themselves to operate trams.

No other public authority exists in Geelong but there are existing well organised private road passenger operators capable of expanding to take over the areas now operated by trams. It is considered that very little additional plant would be required and capital should be available for the purpose.

It is proposed that the operation of buses in lieu of trams should be placed on the private operators under the control of the Transport Regulation Board.

Ideally, one organisation should perform the function of providing the services. This would reduce the capital outlay, overhead costs and allow greater mobility for the fleet of vehicles in operation. I would suggest the the Board should investigate this possibility.

I have so far dealt with the aspect of transport in Geelong where it relates to tramway operations, but one of the greatest problems is the traffic to industry in North Shore. Here again, the congregation of industry provides a terrific burden for any operating organisation to satisfactorily handle the peak traffic. This can be assisted to some extent in this area by additional roads as set out earlier in my evidence and until the road pattern is improved, congestion and dissatisfaction will always exist. Until such time as the road aspect does receive attention, industry located in this area could assist by staggering hours.

Difficulties at peak periods will continue, however, and these must be accepted as a serious operating problem. This responsibility is accepted but all concerned, and especially the public, should be under no delusion as to the increased operating costs accruing from the often extensive provision of vehicles and staff to cover very limited periods of operation. I do not think we should be satisfied to accept this as an unavoidable burden on the industry or despite discouraging results in the past cannot some further efforts be made to enlist the co-operation of the other industries to mutual advantage by staggering hours or some other expedient aimed at spreading the peak traffic.

The existing peaks on industry now served by buses are from 4.00 p.m. to 5.00 p.m. whilst the heaviest period for the tram is from 5.00 p.m. to 6.00 p.m. In the morning, the industry peak is between 7.00 a.m. and 8.00 a.m. and trams between 8.00 and 9.00 a.m.

This fact would enable greater economy of operation by buses being able to transfer from industry peaks to the commercial or shopping peaks and again illustrates the flexibility and greater mobility to be achieved from bus operation.

Beyond Geelong along the coast, we have Queenscliff, Point Lonsdale, Ocean Grove, Barwon River and Torquay. All of these places are developing rapidly and because of their close proximity to Geelong, many people whose work is in Geelong and district are now taking up residence.

Because of the comparatively short distances, ranging from 14 to 19 miles, they are within comfortable access from Geelong and it is easy to visualise them in another decade or so, being in a relative position to Geelong as are Mordialloc, Frankston and other places in Melbourne.

These areas are at present served by buses but here again the road system is fast becoming inadequate for the traffic demands. As these services carry many people to North Shore industries today, they will be called upon to carry many more in the future. To avoid the problem now besetting Melbourne, road development should be directed towards providing a ring road around the heart of Geelong, thus eliminating bottlenecks and facilitating the free flow of traffic. Outer districts like Highton, Belmont, Geelong West, Herne Hill, St. Albans and parts of Chilwell are now served by buses, but the routes traversed are not entirely satisfactory, having been designed in most cases to obviate duplication of the tramway system.

One does hear of complaints regarding the services to these areas but I feel sure that they are created because operating problems under the existing system are not understood by the public.

All of the foregoing comments are submitted to the Board after a close and detailed study of transport trends and evolution throughout the world. The Road Passenger Industry is desirous of assisting the various Authorities in their attempt to find some solution for the transport problems of the community. It is contended that it is not possible to make inflexible rules which would have general application as each area has its own problems peculiar to its layout and general development.

Geelong is a typical example where an individual study is necessary and our recommendations are:-

(a) The existing tramway system should be progressively abolished. It is suggested that to ease the position in relation to employment, track maintenance and general casts, a plan be prepared to discontinue the trams over a period of say, three years. This would enable the State Electricity Commission to apportion abolition costs to each year instead of bearing the full cost in one hit. Existing employees could either be progressively absorbed into other avenues of employment with the S. E. C. or with such other industries as they may elect. Normal wastage in employees would not require to be replaced.

(b) That private bus operators be authorised to absorb the routes discontinued and re-routing of services be effected as experience determines to be necessary.

(c) Investigate the possibility of integration of private services with a view to providing a uniform standard of service and operating practices, more economic utilisation of plant and labour, reduction of overhead costs and higher standard of operating techniques and organisation.

(d) Greater co-operation between authorities responsible for housing, industry, and business location and transport services to enable development to take place in such a manner that the transport services can be planned to meet such development.

(e) Road passenger services will undoubtedly be radial in character and replanning of routes should be approached with the idea of routing services through the city proper to avoid city congestion and a freer flow of traffic.

(f) The Transport Regulation Board and the Geelong City Council take the initiative in calling a conference of the Authorities concerned with road construction with a view to preparing and putting into operation a practical plan for road development to meet community and transport needs, both present & future.

(g) In order to provide for the better control, organisation and development of passenger transport in Geelong and district, an Advisory Committee be formed to act in conjunction with the Geelong Urban District Transport Committee and the Transport Regulation Board. This Advisory Committee to consist of representatives of Ratepayers, Industry, Trade and Commerce and Transport (both employer and employee with a total of not more than ten (10) in number.

(h) The possibility of the railway system providing any assistance for peak traffic movements at North Shore is unknown, but it would appear to be a doubtful proposition from the point of economy where only two trains per day would be required with loading only one way.