

MELBOURNE AND METROPOLITAN TRAMWAYS BOARD.

19th July, 1934.

REPORT

CHAIRMAN

Adverting to the representations made to the Board by the President and members of the Automobile Club of Victoria on the 12th July in respect to the electrification of the Elizabeth Street cable line:

It was very pleasing to hear the President of the Automobile Club pay such a tribute to the Board's electric tramway system, and state that he has travelled in many parts of the world, and, if the Melbourne system was not the best, then at least it was equal to the best electric system in any part of the world.

The Deputation's case was -

(1) that they did not pose as experts, and did not pretend to be experts in connection with this matter. They were,

however, vitally interested in safety on the road, and, *claimed that* from their point of view, the conversion of Elizabeth Street would decrease that safety and make the street one of the most dangerous in the City. Safety on the road was the paramount point of the Deputation.

(2) that checks taken by the Club on the 22nd and 23rd June showed that the total traffic observed going north was 1,844 vehicles and 180 trams, while going south

which prohibits motorists passing stationary trams, would be in the order of 1.7 sq. feet, and of a motor car of 45 sq. ft. On effectively care for the safety of passengers and the public the basis of the road space used, this is decidedly in favour of the tram passenger. This is a busy street, and is one

which, under all conditions of traffic, an orderly movement through

1. GROWTH OF TRAFFIC.

at the slower rate of speed than that which is observed by many

The Automobile Club, in looking to the future, motorists, will make for the greatest safety, the safety which will apparently forgets the rights of hundreds and thousands of tramway increase when the municipalities definitely decide to adopt "no passengers who find it difficult to make their voices heard. The parking" rules. It is the parked vehicle which prevents the

Board speaks for these passengers. They have a prior right which orderly movement of traffic through the street by compelling vehicles has prevailed for over forty years and should not be surrendered to swerve, and it is principally in swerving that accidents occur.

or subservient to the motor interests.

To further increase safety, it will be necessary to

Drastic "no parking" regulations will have to be have major and minor streets, with the right of movement to traffic applied to the City streets to increase the safety and at the same in the major street. Traffic approaching main streets must slow

time to provide for the increasing use of motor vehicles referred to down to a walking pace to make the turn or to cross. It is in

by the Deputation. The main City streets are at present being used these directions that safety will be increased.

as garages. In Bourke Street, Elizabeth Street, Flinders Street and

2. SPACE OCCUPIED BY TRAMS AND CARS.

Collins Street, the width of the roadway is decreased by some

With respect to the checks taken by the Automobile

20 to 25% by the parking which now obtains on each side, and, at peak Club: These are based on vehicles, and not on the convenience or

periods, a single line of vehicles only can get through in addition number of persons concerned. On the days of the checks taken by the

to the trams. The effect of this or even of a single vehicle in Automobile Club on the 22nd and 23rd June, the Board carried 37,074

a main traffic stream standing at the kerb, can be seen on any and 28,763 passengers respectively. At peak periods, the time

evening in the peak periods. The approaching traffic may be in when the road surface is used to its capacity both by trams and

double column, and then is forced into single line movement, with motor vehicles, the average road space occupied by a tram passenger

cars cutting in to the danger of themselves, pedestrians and other

users of the road generally.

increased the demand for facilities on these northern lines. This is in the order of 1.7 sq. feet, and of a motor car of 43 sq. ft. On This also applies to show and race days at Flemington and Moonee Valley. the basis of the road space used, this is decidedly in favour of the The electrification of Elizabeth Street will make it possible to render tram passenger. greater service to the public in this connection.

3. GROWTH OF TRAFFIC.

Twenty to twenty-five per cent more buses would be required

The Automobile Club, in looking to the future, ~~and claiming the~~ *are inarticulate* passengers than would be necessary for apparently forgets the rights of hundreds and thousands of tramway with the use of trams, thus increasing congestion in the centre of the passengers who find it difficult to make their voices heard. The City and the operating costs.

Board speaks for these passengers. They have a prior right which

On the occasion of football matches at the Carlton Grounds, *made* has prevailed for over forty years and should not be surrendered 20 additional trams are put into service over and above the number or subservient to the motor interests.

used for the daily peaks. These are, at present, surplus on the

Drastic "no parking" regulations will have to be cable lines. Under electrification, they would be drawn from other applied to the City streets to increase the safety and at the same sections of the service, the reserves and rolling stock being pooled. time to provide for the increasing use of motor vehicles referred to 20 buses, an additional 25 buses would have to be acquired to meet by the Deputation. The main City streets are at present being used for ~~the purpose of~~ *days during the year.* as garages. In Bourke Street, Elizabeth Street, Flinders Street and Collins Street, the ~~width~~ width of the roadway is decreased By some 20 to 25% by the parking which now obtains on each side, and, at peak ~~increased if the spaces for football specials are included.~~

periods, a single line of vehicles only can get through in addition ~~Substantially more roads are required for buses.~~ In this to the trams. The effect of this or even of a single vehicle in ~~congestion, but municipalities have not organically contemplated 10 to 12 ton vehicles.~~ Vehicles of this description operating 18 hours a evening in the peak periods. The approaching traffic may be in ~~day with a short breakaway/soon make their presence felt, and~~ double column, and then is forced into single line movement, with ~~road work would have to be undertaken by the municipalities.~~ cars cutting in to the danger of themselves, pedestrians and other users of the road generally.

has increased the demand for facilities on these northern lines.

This also applies to show and race days at Flemington and Moonee Valley.

The electrification of Elizabeth Street will make it possible to render greater service to the public in this connection.

Twenty to twenty-five per cent more buses would be required for the peak load movement of passengers than would be necessary ~~for~~ with the use of trams, thus increasing congestion in the centre of the City and the operating costs.

On the occasion of football matches at the Carlton Grounds, 20 additional trams are put into service over and above the number used for the daily peaks. These are, at present, surplus on the cable lines. Under electrification, they would be drawn from other sections of the service, the reserves and rolling stock being pooled. With buses, an additional 25 buses would have to be acquired to meet the demands of this traffic which obtainsdays during the year.

With the trolley bus, there would be a tax of £3. 7. 6. per seat; For the fleet of 50 buses, £10,462, which would be further increased if the spares for football specials are included.

Substantially built roads are required for buses. In this connection, our municipalities have not apparently contemplated 10 to 12 ton vehicles. Vehicles of this description operating 18 hours a day with a short headway/^{would damage to the roadway would soon} ~~soon make their presence felt,~~ ^{become manifest} and substantial ^{repair} road ~~work~~ would have to be undertaken by the municipalities. ^{concerned}

method of improving the movement of vehicles with safety through the City will be by routing, one way traffic and line progression in definite traffic lanes in the congested areas. If no definite lanes or marks are provided on the road, the tendency of the motor car is to wander over the entire surface and block the free movement of others. This has been the experience in Great Britain, and on some country roads, lanes are now being marked out to keep the motorists within the bounds of ordinance. A system of lanes does not mean that vehicles should not overtake one another. They would, however, prevent the waste of road space which now obtains. Straddling the lanes and blocking the road would be stopped.

Tramways assist in marking a well-defined traffic lane through the City, whilst parked tramways, where the width of the road will permit, Victoria Street to the Sarah Sands, would provide continuous refuge for pedestrians crossing the road and for tram passengers waiting to board trams or alight therefrom.

The danger to tramway passengers in the City is not as great as appears to be the case. In the City proper, the trams stop on the near-side of the intersection. These stops correspond with the cross flow of traffic, and tramway passengers as well as pedestrians make the crossing at the appropriate time, with no interference to the cross traffic.

In places like Brunswick, the municipal By-law

the world. At the busiest junction, at the Elephant and Castle, 450 trams cross every hour. The Embankment is used by 175 trams each way per hour. Twice a day, in the rush hours, the trams deal with 500,000 people, and the daily average revenue is £18,000.

Within the last five years, on the L.C.C. system (now part of the undertaking of the London Passenger Transport Board) alone, £1,500,000 has been spent on new rolling stock and power plant and the enlargement of the Kingsway Tunnel so as to make it usable by the large double-deck trams.

Recently the Transport Board decided to ask Parliament for power to convert the tramways in the outer suburban areas, such as Uxbridge in the north-west, Canons Park in the north, Enfield in the north-east, and Sutton in the south, to trolley buses. More than 70 local authorities and other persons and companies have lodged notices opposing the Bill.

BELFAST.

In January last, the Belfast Corporation resolved to equip the entire system with new trams.

GLASGOW.

During the last four years, Glasgow has carried through an extensive programme of tram remodelling, and in addition has placed in service 68 trams of a new type. Electric heating in winter is now the general practice. Extensions have been made since the war to include the housing schemes.

Recently a Select Committee of both Houses of Parliament dealt with the application for power to run trolley buses. The preamble of the Bill was approved only so far as it relates to tramway routes. Power to run trolley buses on new routes was refused.

Motor buses have been a source of great loss to the Transport

While some routes in the centre of Paris were abandoned, it was found necessary last year (1931) to rebuild 21 miles of track.

trams.

LIVERPOOL.

A new type of tram, embodying the latest ideas on seats, the use of light alloys so as to reduce weight, etc., has been put into traffic, and a new depot and workshop has been erected at a cost of £300,000.

In Liverpool also the buses have proved a heavy drag on the undertaking, losses up to £80,000 yearly having been sustained.

MANCHESTER.

The Manchester Transport Department comprises trams and oil and petrol buses.

Since the war, the tram routes have been extended so as to include the housing scheme and Altrincham and Sale Moor. Owing to the high cost of operation, due to the poor off-peak traffic and the running of express bus services, the Altrincham route was converted to bus operation three years ago.

The General Manager (Mr. Pilcher) has led the way in the development of the high compression ignition engine, and his policy of scrapping petrol buses for heavy-oil buses has been approved by the Corporation.

HUDDERSFIELD.

In 1931, the Huddersfield Corporation decided to replace all old cars by the new type at a cost of £2,486 each.

EDINBURGH.

Since the war, the entire system has been converted from cable to electricity, while since the conversion various extensions have been made to the west, south-west and south. An improved type of tram has likewise been placed in service.

PARIS.

While some routes in the centre of Paris were abandoned, it was found necessary last year (1933) to rebuild 21 miles of track.

Last year (1933) 100 new trams were built, and a three-year programme of extensions, totalling 40 miles, was started.

EXPERT OPINIONS.

31st May, 1931.

Herr Ernest Reuter, Chairman of the Berlin Transportation Company:—

"I am convinced that the electric car will remain the chief vehicle in the movement of mass transportation . . . We have no intention of substituting buses for electric cars in our congested centres. . . We believe that the electric car does this work best."

31st May, 1931.

Herr E. Grothwell, Chairman of the German Transport Commission, after an official visit of inspection and investigation to London and New York:—

"Our Commission is unanimous in its report that neither in London nor New York has the buses demonstrated their ability to handle what we call mass transportation."

26th June, 1932.

Mr. A.C. Baker, General Manager of the Birmingham Corporation Transport Department:—

"The modern tramcar is equal to any other type of road transport for comfort and speed, and where there is a reasonable density of traffic they will remain for many years to come."

27th July, 1932.

The President of the Canadian Transit Association
(Mr. K.B. Thornton):—

"The electric tramcar remains the backbone of mass transportation."

28th October, 1933.

Mr. Lachlan Mackinnon, General Manager of the Glasgow Corporation Transport Department:—

"For all-round economy and efficiency for public service, the electric tramway system will hold its own for many years to come."

M. D. L.

THE MOTORISTS DEFENCE LEAGUE

Temple Court (2nd Floor)
Collins Street,
MELBOURNE.

13th August, 1934.

A. Cameron Esq.,
Chairman,

Melbourne and Metropolitan Tramways Board,
673 Bourke Street,
MELBOURNE.

Dear Sir,

BRUNSWICK ELECTRIFICATION

It is the hope of the Motorists Defence League that the Tramways Board will reconsider installing electric trams on the Brunswick route.

A Member of the above Executive Council (Mr. H. Lewis) who is himself deeply interested in Transport, while on a recent tour abroad collected such information as will undoubtedly be of great interest to you, and which we commend to your earnest consideration.

He had the opportunity of personally collecting information concerning the installation of Trolley Buses at Wolverhampton, England, after the removal of electric trams. The Trolley Buses had been in operation for several months when he was on a visit there, and he read a report by the Chief of Police, who stated that after the installation of Trolley Buses, the speed of traffic had increased by 25% and the street accidents had been reduced by 75%. It was also found that the cost of operation was below that of electric trams.

Other statements by authorities who have installed Trolley Buses definitely prove an increase in passengers; the average appears to be about 20%. This is due to the greater convenience provided, as people are encouraged to make short journeys, because they do not have to face other traffic in crossing to enter an electric tram.

Some misapprehension exists concerning the effect of trolley buses and motor omnibuses upon existing street and surfaces. The opinion has been formed mostly on the recollection of the use of solid tyred vehicles operating on macadamised roads, but the universal adoption of pneumatic tyres of large cross section and low pressure, has so reduced the stresses

upon street surfaces that it is very doubtful whether any road re-construction would be necessary to carry either trolley buses or motor omnibuses on any of the metropolitan main streets of Melbourne.

It must be remembered that a great portion of the Sydney Road running through Brunswick to the City has a solidly constructed concrete section now carrying trams, and it was pitiful to see, during the change over from cable to electric traction within the City, the fine concrete base being broken up by pneumatic drills and re-laid, with the object of getting rid of the tramway tunnel and the existing cable tram rails.

This severe wastage would be unnecessary if trolley buses or motor omnibuses were used. Furthermore, the existing tram tunnel could be utilised for the further laying of electric cables, gas, mains and so on.

If electric trams are installed, then undoubtedly the whole of Sydney Road, through Brunswick and Moreland, will have to be reconstructed, because there is ample evidence of the bad effect upon the adjacent road surface when electric trams are in operation. A very striking example of this is St.Kilda Street, Brighton. Therefore, road reconstruction will not be avoided, but rather become essential if electric trams are utilised, whereas if trolley buses were used, the complete reconstruction of the road (if any reconstruction is necessary) will be only on certain parts, as a considerable distance of it is already sufficiently well constructed to carry such traffic.

Calculating the cost of installing trolley buses, it would appear that the entire road could be reconstructed and trolley buses installed for somewhere about £250,000, against £500,000 needed for conversion to electric trams. This would then leave the Tramway Board £250,000 which could be utilised for converting South and Port Melbourne to trolley buses or motor omnibuses, and a through service could be run; the buses, after passing the end of Elizabeth Street, could continue on to the Port Melbourne and South Melbourne termini, relieving a good deal of turning of vehicles at the end of Elizabeth Street, but even if all the Trolley Buses had to be turned at the end of Elizabeth Street, no difficulty would arise, for the reason, that the Trolley buses recently supplied to Sydney, have a turning circle of 53 feet to the off side and 59 feet to the near side. This is for a vehicle carrying 63 passengers. By continuing the service to the Beach front, the people of Brunswick and Coburg would have a direct route to the seaside.

It seems a pity to expend half a million sterling on one tram route in laying down a transport system which is, without question, obsolete. During the conversion, the whole of the traffic will have to be handled by motor omnibuses, proving again that the mobile transport vehicle can definitely handle large volumes of traffic.

The installation of trolley buses would therefore not only reduce the capital cost of the transport system, but would add to the speed of traffic, with a heavy reduction in accidents, and what is equally important, rid a large residential and industrial area of noise. Very little of a Trolley Bus or a Motor Bus need be imported, so that the capital cost would be mostly Australian production.

Yours faithfully,

(Sgd.) G. C. WALKEDEN

Secretary.