ISSUED WITH THE COMPLIMENTS OF

THE MELBOURNE & METROPOLITAN TRAMWAYS BOARD

THE DEVELOPMENT OF MELBOURNE'S TRAMS

In the middle of the 19th century Melbourne was more a collection of scattered settlements than a city.

THE FORMATIVE YEARS

Attempts were made in 1860 to introduce horse tramways, but were not successful. Horse-buses were running about this time, but did not become regularised until 1869. The Melbourne Omnibus Company was founded then and became the main operator. It wanted to install tramways, and planned its buildings to this end many years before the first tram ran. It was re-organised as the Melbourne Tramway and Omnibus Company. State Parliament eventually passed the Tramways Act in 1884, and a number of municipalities availed themselves of its provisions and created the Melbourne Tramways Trust. This Trust decided to construct a cable tramway system and lease it to the M.T. and O. Co. for it to operate. The Trust built the tracks and engine houses, and the company the car sheds and rolling stock.

FIRST CABLE TRAM

The first cable tram ran from Spencer Street to Richmond on October 27, 1885, for test and instruction purposes, and the line was officially opened for traffic on November 11, 1885. The first 20 cable trams (one grip car and one four-wheel trailer car) were imported from U.S.A., while subsequent units were built locally.

Other routes were steadily constructed to North Fitzroy, Victoria Bridge, Clifton Hill, Nicholson Street, Brunswick, Collingwood, Brighton Road, Prahran, North Carlton, Toorak, North Melbourne, West Melbourne, South Melbourne, and between St. Kilda Beach and Windsor, the latter being opened on October 27, 1891. At this point, the cable tramway system had reached its maximum extent of trackage, with 43¾ route miles of double track, and approximately 350 sets of grip cars and trailers.

The Trust also constructed, for operation by the company, horse tramways to Kew, Hawthorn, and the zoo, amounting to 3¾ miles of double track. Additional rolling stock continued to be constructed, to the same design.

Each route had its own set of cars, painted in distinctive colours and suitably lettered with their destination. Depots were generally at the outer terminii of the routes, and engine houses about the mid-way point. The former housed the trams when not in use and provided the place where routine maintenance was carried out. The latter housed large and powerful machinery which provided the power to move the heavy cable, often referred to as the "rope". Underneath each tram track was formed a tunnel, in which the rope ran over pulleys. This was engaged by a mechanism known as a grip, which descended from the grip car. By operating levers on the grip, the driver, called the gripman, could clamp the jaws of the grip on to the rope when he wanted to accelerate and travel, and release the rope when he wanted to stop, which was then achieved by applying the brakes.

The complete operation of engine houses, rope, grip, crossings and shunts is relatively complicated, and space precludes setting down full details. The whole construction was on a massive and impressive scale, which is proved by carrying road traffic far heavier than could have been envisaged in 1885, even until today, without the narrow opening of the slot in the road surface being affected to any extent.

OTHER TRAMWAYS

It is believed that the first tramway to operate in Melbourne ran for one mile north from Fairfield Station, being opened in January, 1885. It was apparently installed in connection with land sales, and probably only operated at weekends. Little is known about it, and it appears to have ceased operations in the early 1890's.

A 1½-mile double track horseline ran from the Brunswick cable tram terminus to North Coburg from late 1887 to 1916.

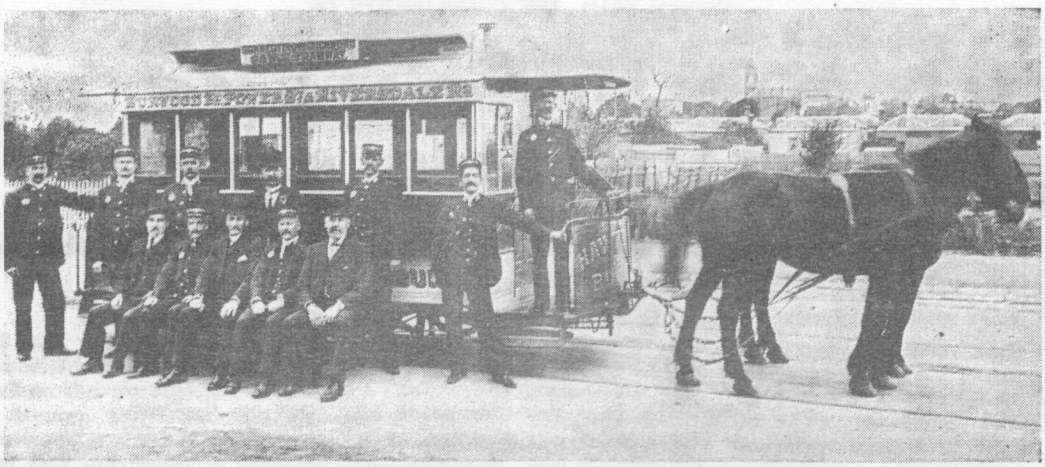
Another company built some 4¼ miles of single track horse tramway from Elsternwick Railway Station along Glenhuntly Road to Glenhuntly Railway Station, with a branch to Caulfield Railway Station. It was opened in April, 1889, and appears to have ceased in the early 1890's.

A single track horse tramway was built from Sandringham to Beaumaris, along the coast, and then inland to Cheltenham Railway Station. It was some 6½ miles long, and opened in April, 1889. It carried heavy beach traffic, and had ceased running by about 1914.

A private company opened a cable tramway between the M.T.O. terminus at Clifton Hill and Northcote on February 18, 1890. It ceased running twice while being sold or in receivership, and was eventually taken over by the Northcote City Council. It was 2½ miles long.

AUSTRALIA'S FIRST ELECTRIC TRAM

The first electric tramway in Australia — and claimed to be the first in the Southern Hemisphere — opened on October 14, 1889, between Box Hill and Doncaster. It ran through open



An early horse drawn tram. Notices read: "Connecting with Richmond Cable Tramway", and Burwood Road, Power Street and Riversdale Road." (Tramway Museum Society photo).

country along what is now Station Street and Tram Road, and was mainly a holiday attraction to the heights of Doncaster. It was 2¼ miles long, and had two small tramcars. After many financial difficulties — during which it was leased at 1/- per year — it finally closed on January 6, 1896. A tablet commemorates this pioneer line adjacent to the former Box Hill terminus.

STEAM TRAM

The only steam tramway about Melbourne to carry passengers was a contractor's line between Cheltenham Railway Station and the Melbourne Home and Hospital for the Aged, a distance of about 1 mile. It was used about 1908.

ELECTRIC TRACTION ERA

The first permanent electric tram route in Melbourne was opened by the Victorian Railways on May 5, 1906, from St. Kilda Railway Station to Middle Brighton, to the railway gauge of 5 ft. 3 in. (All tramways mentioned previously were built to 4 ft. 8½ in. gauge, except the steam tram.) This line was soon extended to Brighton Beach, a distance of 5 miles 12 chains. It was closed between 1957 and 1959. The V.R. also ran a 4 ft. 8½ in. gauge electric tramway from Sandringham to Black Rock between 1919 and 1956, with an extension to Beaumaris from 1926 to 1931.

The North Melbourne Electric Tramway and Lighting Company Ltd. was granted a franchise to construct tramways from Flemington Bridge to Essendon and Maribyrnong River, and a power house to supply electricity to the public. Services commenced on October 11, 1906. The original depot is now the shed housing tracks 13 to 18 at Essendon Depot.

The first municipal venture into electric tramways was opened on May 30, 1910, when the Prahran and Malvern Tramways Trust opened two routes along High Street, Prahran, extending to Malvern, with 13 trams to operate the 4¼ miles of route. The "P.&M." quickly became the most successful of the electric tramways in Melbourne, and soon had a network of routes in the eastern and southern suburbs. By 1919 it had 97 trams running over 35½ miles of route, with 9 more trams building or ordered. Its trams comprised medium-size four-wheel units and larger bogie cars — the latter being the first such in Victoria.

The next Trust was the Hawthorn Tramways Trust, which built routes to Burwood and Wattle Park from Batman Avenue, and a branch to Hawthorn Bridge, in 1916. It soon had 32 trams operating over 11.1 miles of route.

The Melbourne, Brunswick and Coburg Tramways Trust followed a few weeks later with 18 single track trams to operate from Swanston Street (corner of Queensberry Street) to East Coburg and North Coburg, just over 7 miles of route.

The Fitzroy, Preston and Northcote Tramways Trust constructed nearly six miles of route from North Fitzroy to East and West Preston, but did not complete and operate same.

The Footscray Tramways Trust was the last such set up, and built three routes radiating from the railway station to Ballarat Road, Russell Street and Williamstown Road. Almost 4½ route miles were involved, but were not completed and opened by the Trust.

FORMATION OF THE M. & M.T.B.

The main street transport operator was the cable tram system of the M.T.O. Company, whose lease from the M.T.T. expired on June 30, 1916.

State Parliament had become a little concerned at the development of several isolated systems of differing motive power under the then existing legislation, and was considering a single body to unify all concerned.

While pondering the problem, Parliament created the Mel-

bourne Tramways Board to take over and operate the cable tramways, from July 1, 1916. This body acted until the Melbourne and Metropolitan Tramways Board was created on November 1, 1919.

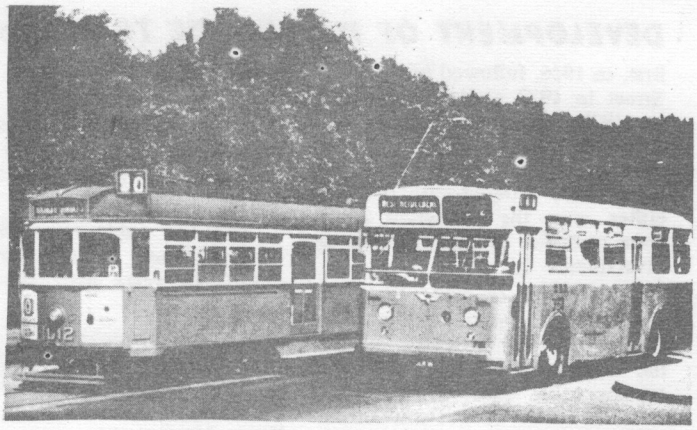
The Board took over the main cable tram system, and the Northcote line and five electric Trusts on February 2. 1920. The Essendon company was purchased on August 1, 1922. The Board took over some 450 cable tram sets and over 46 miles of track, plus 186 electric trams — of 21 different types! — and approximately 70¾ miles of route.

Apart from a varied collection of electric trams, the Board also had to integrate many different working conditions for employees. It was instructed to prepare a plan for the overall development of Melbourne's tramways; this being duly produced it decided that the cable tramway system could not economically be extended or retained or rebuilt, and that it should be mostly converted to electric trams.

ROLLING STOCK

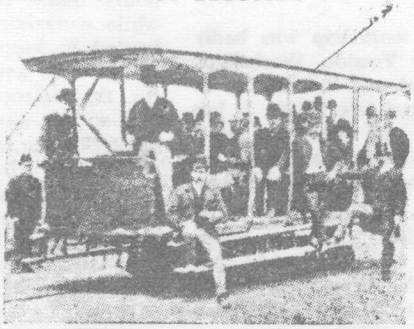
Rolling stock was in short supply, and some 150 cable tram sets were built by the time construction ceased about 1924, while 36 medium-sized electric trams were built to a modified existing design pending finalisation of a new design (which would become the standard Melbourne electric tramcar). The first of the latter appeared in December, 1923, and 200 were subsequently built, classed W. Another 30, classed W1, followed, with a modified centre portion, while a further 180, classed W2, then appeared, with the centre portion slightly different to the first cars. Thus, 410 large bogie trams were built in less than eight years, some by contractor, but mostly by the Board's own workshops. The first two types were converted to the latter design by the mid-1930's.

Many of the trams just mentioned were required for the conversion of the cable tramways to electric traction. The Swanston Street group of routes were treated

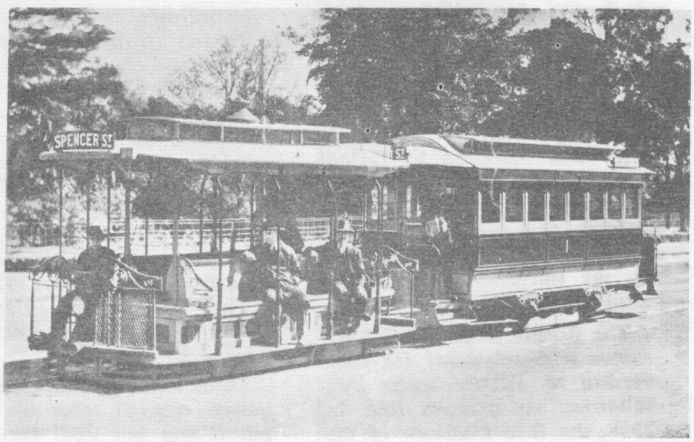


LATEST TRAM (S.W.7) and BUS (A.E.C. REGAL MARK VI)

AUSTRALIA'S FIRST ELECTRIC TRAM



Box Hill-Doncaster Electric Tramway
The first car at Box Hill. 1889



MELBOURNE'S POPULAR CABLE TRAM.
No.1 Car and Dummy ran over 1,000,000 miles from 1885 to 1940 - now in Melbourne Museum.

DEVELOPMENT OF MELBOURNE TRAMS (cont.)

first, in 1926, followed by Flinders Street in 1927 and Collins Street in 1929. The existing electric tramway routes in the various suburbs to the north, east and south were brought into the city either over the converted cable tram routes or by new trackage or diversions.

The Northcote cable line was through-routed into the city from Clifton Hill by modifications to the equipment so that all main system cable sets could operate over its route. New electric tram depots were built at Glenhuntly, South Melbourne and Camberwell, and additional sheds provided at Malvern, Hawthorn, Coburg and Preston.

A central workshop was badly needed, and Preston Workshops were designed and constructed in the middle and late 1920's. It has always been the best and most modern tramway workshops in Australia since its construction.

In order to provide public transport to developing housing areas, new electric tramways were constructed to West Coburg and South Melbourne, while many extensions were made to existing routes.

The depression period saw a lull in activity, most of which was concentrated in developing a better type of tramcar. The result was the W5 class, which was built in connection with the Elizabeth Street cable conversion in 1935, and which involved the construction of Brunswick Depot. After 120 W5-type trams were built, the design was modified to include power-operated sliding doors, and subsequently improved seating, windows and ceiling. 200 such cars were built up to 1956. 1936 saw the introduction of Sunday morning and "All Night" trams.

The Bourke Street cable tram routes were scheduled for conversion to electric trams but, following an overseas tour in 1938, the then Chaiman of the Board, Mr. H. H. Bell, Snr., persuaded his fellow members that diesel buses should be given a trial, as he was most impressed with them.

LAST CABLE TRAM

A fleet of double and single deck buses were purchased, but due to the war the cable trams were kept running as long as possible.

The last cable tram ran on the evening of October 26, 1940, 55 years after the first trial run.

The war brought heavy traffic to the trams and buses, and some tramway extensions were built to Essendon Aerodrome and in the West Maribyrnong area. Manpower and materials were in short supply, and many problems resulted. Traffic crews worked long hours under difficult conditions while workshop and depot staffs battled to keep trams and buses on the road and to produce items for the defence forces. By the end of the war, it had been decided that the experiment of buses on the heavy Bourke Street routes was not successful, and that they should be converted to electric trams as soon as possible. However, due to post-war shortages, this did not eventuate until 1955-56. Meanwhile, arrangements had been concluded to import the bogies and electrical equipment from U.S.A. of the most modern form of tramcar developed in the world.

Accordingly, a body was built at Preston Workshops, fitted with the imported equipment, and commissioned in July, 1950. It had been hoped to standardise on this equipment, but later trams only included the use of resilient wheels, plus double helical gears and sound-proofing in the body. The hitherto isolated routes at Footscray were linked to the main tramway system in May, 1954, and the bus service from Footscray Railway Station to Moonee Ponds replaced by trams.

Many miles of tram tracks required renewal after the war, but it was not until the early 1950's that manpower and materials availability allowed this to be done in earnest. Long lengths have been done, both before and after the Bourke Street conversion work, and most of the track is now in good to excellent order.

Carbon insert sliding shoes were introduced into Bourke Street in 1955, and proving successful, it was decided to convert the rest of the system, the work being carried out late in 1961. Thus the familiar trolley wheels ceased to sit atop the pole to collect current from the overhead wires. As the number of private motor cars increased quite steadily, so the number of passengers carried by trams and buses decreased.

BUSES AT NIGHT

Frequency of services were reduced in the middle 1950's, while the "All Night" trams were replaced by buses in 1956-57, running on fewer routes on longer headways. Since 1960, further modifications have been made to timetables to try and bring operating expenses into line with revenue. Several Sunday tram services have been replaced by one-man-operated buses, while the Point Ormond shuttle tram to Elsternwick Railway Station was withdrawn on October 22, 1960, and replaced by an extension of the Clifton Hill to Point Ormond bus. The small two-man-operated trams on the three local routes from Footscray Station were replaced by one-man-operated buses on March 10, 1962. On July 1, 1961, the Board purchased the services operated by private buses in the Doncaster - Warrandyte - Ringwood area. In May, 1962, the Board announced preliminary plans to place trams underground in Swanston and Bourke Streets, City, and remove tracks from the surface in these two thoroughfares and in Collins and Elizabeth Streets. Detailed planning has yet to take place, and it will be quite some time before any work can be undertaken.

At June 30th, 1964, the M.M.T.B. operated 712 trams over 133 miles of route, and 232 buses over 122 miles of route. A total of 4837 persons are employed in the industry.

(With acknowledgements to Mr. K. S. Kings).