

The Survival of Melbourne's Trams

Melbourne trams have become an icon for the capital city of Victoria. But back in the 1950's and 1960's, the same political and commercial pressures that removed trams from the streets of every other Australian city were at work in Melbourne as well. So how did Melbourne keep its trams?

There is no simple answer to this straightforward question, but there is a number of factors which, if taken together, gives a persuasive account of the survival of Melbourne's trams. I will discuss each of the following factors in turn and then consider their relative importance:

1. Modal Decision
2. The Motor Lobby
3. Cable Operation
4. Buses as Adjunct to Trams
5. Departmental Autonomy
6. Capital Management

1. Modal Decision

Perhaps the simplest answer to the question of why Melbourne kept its trams is that no-one in authority ever decided to get rid of them. It has been suggested to me (by John Beckhaus) that the decision to dismantle Australia's largest urban tramway undertaking in Sydney was made as early as 1924. The example of Paris, which decided to replace its city tramways with an underground railway in 1924 (Dunbar, 1967), was apparently of considerable interest to the Commissioner of Railways in New South Wales. The construction of Sydney's underground city rail loop in the early 1930's, and the reported decision to dismantle Sydney's huge tramway system in 1937 in favour of motor buses, are probably not disconnected. Sydneys tramways were government owned and operated from their inception and were administratively conjoined first with the railways and then, after 1932, with a substantial portion of the road transport bureaucracy. There is no doubt that the rail and road interests in these hybrid administrations prevailed.

Melbourne on the other hand possessed an independent tramway authority which, in the critical years of tramway abandonments (roughly 1933-1973), possessed strong, continuous leadership, particularly in the difficult 1950's and 1960's when most other Australian urban tram systems were abandoned. There was some evidence of a trend favouring buses as a replacement for trams in Melbourne before World War II, but a decision to close the tramways was never contemplated by the Melbourne and Metropolitan Tramways Board. But an answer in terms of bureaucratic decision-making simply begs the further question: Why did Melbourne not decide to get rid of its trams?

2. The Motor Lobby

The most obvious reasons why trams survived in Melbourne relate to the geography of the city. Melbourne's flat topography, wide streets and simple grid layout mean that one of the major objections of the motorised anti-tram lobby, the argument that trams obstructed motor traffic, had much less force than in Sydney's steep, labyrinthine, overgrown alleys and laneways (Fiddian, 1993). The argument of the motor lobby has some substance when the two largest urban tramways in Australia are compared. However, other Australian cities shared Melbourne's generous planned layout and still got rid of their trams. Spacious Adelaide contains the only other remnant urban tramway in Australia. But the Glenelg route was originally

converted from a railway and has its own segregated right of way. A simple account in terms of the wishes of the strident motor lobby will not do.

Other commonly volunteered reasons for tram survival include vague remarks about Melbourne's residents with their stronger European influences and more traditional outlook. The wet climate is also mentioned as being favourable to trams. Certainly, tram systems in chilly northern Europe and Canada have fared much better than their counterparts in modern bus-oriented Britain and America. However, since the man given much credit for saving Melbourne's trams was from Queensland (where trams very nearly survived in semi-tropical Brisbane), these arguments can only be seen as mildly persuasive.

3. Cable Operation

Melbourne's Cable Trams - Historical Background

Prior to the practical application of electric power to streetcar technology by Sprague in America in 1882, promoters of street tramways had the choice of horses, steam engines or underground cables as sources of motive power. The horse tram was a well established form of urban transport but was slow and relatively expensive for busy routes. Sydney opted for steam traction when the government tramway system was inaugurated in 1879. Conversion to electric operation occurred slowly and well after the technology developed by Sprague was adopted by other Australian cities. The quaint four-wheeled steam-powered tramway locomotives of the Sydney system continued to belch their fumes in Sydney's streets until 4 July 1937 (McCarthy & Chinn, 1968). By contrast, Melbourne's privately developed trams were powered by cables running in conduits under the streets of the city. Large stationary steam engines on the outskirts of the city were used to keep the continuous loops of cable moving at a constant speed. The tram driver or 'gripman' operated a clutch which projected down into the underground cable conduit through a slot in the road surface between the tramway rails. By releasing or engaging the clutch, the tram driver could either actuate separate brakes and bring the tram to a halt, or move off smartly regardless of the gradient of the track. This last feature is one reason why the famous cable cars of San Francisco remain in operation on that city's hilly streets to this day. Melbourne's cable tramway system cost twice as much to install per mile as Sydney's steam system. However, operating costs were lower for the cable system, and inner city streets were free of the noise and fumes of steam engines.

The Last Cable Tram in Melbourne

The last of Melbourne's cable tram routes was worn out and overdue for replacement in the late 1930's. Unlike Sydney, where the last steam-powered tram locomotive operated on a marginal outer urban route, Melbourne's last cable trams survived in the central city. The Chairman of the Melbourne and Metropolitan Tramways Board of the time, a Mr Bell, had overseen the conversion of a number of cable tram routes. In 1935, the North Melbourne and Brunswick cable tram had been converted to electric operation whereas the West Melbourne and Rathdown Street routes had been converted to bus operation. In the following year, a decision was made to convert the Burke Street, Clifton Hill and Nicholson Street cable system to electric trams. This was justified in terms of providing a "unified system", according to the 1936 Annual Report of the Melbourne and Metropolitan Tramways Board. The Report declared that all "other means of transport" had been considered, but that electric trams were the preferred solution. But by 1939, Mr Bell had been overseas and the Board's Annual Report of that year featured photographs of shiny new buses and modern bus depots. The decision to replace the last cable tram route with diesel buses was announced in that year's Annual Report on the grounds that buses gave "flexibility for developmental purposes".

Decision to Replace the Last Cable tram with Buses

The 1939 decision in favour of buses was somewhat anomalous. The central Burke Street, Clifton Hill and Nicholson Street route was hardly a developmental route. Furthermore, the Melbourne and Metropolitan Tramways Board had a good deal of experience of buses, having operated them since 1925. The Board had consistently reported a poorer rate of return on the buses compared with electric trams. For example in 1930, the operating ratio or the percentage of working expenses (including cost of power but excluding interest charges) to total revenue was as follows:

Electric Tram: 66%
Cable Tram: 82%
Bus: 108%

In other words, the buses ran at a considerable loss in 1930. One of the reasons for this state of affairs can be discerned from traffic figures for the following few years as the depression of the early 1930's resulted in a dramatic reduction in passenger numbers. Bus operations were employed as an adjunct to tram operations and bore the brunt of traffic reduction as the following statistics taken from the Board's Annual Reports show:

| Year | Total Tram Passengers | Total Govt Bus Passengers |
|------|-----------------------|---------------------------|
| 1930 | 197,978,645 | 3,742,702 |
| 1931 | 173,854,203 | 1,224,949 |
| 1932 | 161,917,696 | 5,376 |
| 1933 | 163,687,870 | 7,075 |
| 1934 | 166,447,236 | 6,938 |
| 1935 | 172,846,701 | 8,128 |
| 1936 | 172,991,695 | 4,315,044 |
| 1937 | 178,505,695 | 6,231,747 |
| 1938 | 175,564,110 | 9,211,974 |
| 1939 | 182,094,974 | 11,911,439 |

By 1939, the financial performance of the buses had improved considerably, partly because buses were beginning to take over more substantial routes rather than simply serving as a minor adjunct to tramway operations. The 1939 Annual Report showed the following operating ratio for the three modes:

Electric Tram: 63%
Cable Tram: 80%
Bus: 76%

The Board's decision to replace the last cable tram route with buses was temporarily deferred following the outbreak of war as a fuel conservation measure. But the worn out cable trams had to be replaced by double-decked diesel buses on 26 October 1940. Operation of the replacement bus service was reviewed in 1943 and it was announced in the Annual Report of that year that electric trams would replace the bus service as soon as it was practicable to do so on the grounds of economy.

Decision to Replace the Last Cable Tram with Electric Trams

The 1943 decision to renew the tramway was made at a time when the wisdom of investments in trams was being seriously questioned. Public transport operators around Australia (particularly the privately owned ones) were hailing the diesel bus as the economical answer to

urban public transport. The operational flexibility of the diesel bus was found to be particularly valuable in chaotic wartime conditions. In 1949, after observing urban transport trends on an overseas trip, the Premier of Victoria requested that the Board review its decision. The Board repeated its opinion that trams were superior to buses and provided the following justification in terms of the ratio of operating expenses and fixed charges to total revenue:

Electric Trams: 95%
Buses: 132%

The Last Cable Tram - a Retrospective View

On 1 October 1949, the chairman of the Melbourne and Metropolitan Tramways Board, Mr Bell, retired after fourteen years and was succeeded by the former deputy chairman of the Brisbane Tramways Board, R.J.H. Risson. A retrospective account of the last cable tramway appeared on page 12 of the 1955 Annual Report:

"Melbourne's last cable trams ran in October, 1940, on the Bourke Street-Northcote and Bourke Street-East Brunswick routes. They ceased then, worn out. They were replaced at the time by motor buses, partly of necessity, because new tramway construction was not practicable during the War, and partly as a trial of motor buses on a heavily loaded route."

"Experience showed them both less efficient and more expensive than trams. A census of the passengers on the route showed an over-whelming majority in favour of trams. All the municipalities through which the route passed expressed a preference for trams. The Board therefore decided to convert the routes to electric tramways when practicable."

This crisp summary of events rather glosses over the 1939 decision to replace the cable trams with buses and the reported 'popularity' of the replacement bus service in the 1940 Annual Report. On the other hand, the 'popularity' of any wartime transport service is probably more due to necessity rather than any favourable regard on the part of the travelling public. Nevertheless, a census of passengers modal preferences is certainly noteworthy in Australian transport history. As the profitability of public transport services slumped in the 1930's and collapsed into uncontrolled deficits in the 1950's, public transport managers were only interested in economy of operation. Modal preferences of passengers were either ignored or countered in the popular press with accounts of the pleasures of modern bus travel.

The temporary replacement of a central city tram route with buses in the 1940's is unique in Australia and was an important factor in the retention of trams in Melbourne. Financial comparisons of bus and tram performance in other Australian cities tended to justify erosion of tram services on peripheral and marginal routes. As tram services shrank towards the city centre, and urban populations declined, tram services became less and less competitive with buses. Because Melbourne assessed the relative performance of buses and trams on a busy central city route, the high fixed cost of tram operations was overshadowed by lower running costs. Another less obvious feature of the replacement of the cable system was that the central city track system of the Melbourne tramway network was renewed in the 1930's. Removing the underground cable conduit was so disruptive to the street that the opportunity was usually taken to replace the rails when cable trams were discontinued. Consequently, the central tram routes of Melbourne were re-railed at the same time that most other Australian cities were beginning to face the financial consequences of inadequate capital reserves to replace worn out tramway track. While it was technically feasible to run electric trams on cable tram track, in fact very little evidence of Melbourne's cable tram heritage remained in the streets. Only some of the large cable winding power house buildings survived. The last cable route in Melbourne was re-opened as an electric tramway on 26 June 1955.

4. Buses as Adjunct to Trams

The role of buses as an adjunct to tramway operations in Melbourne in the 1930's has already been mentioned. However, this secondary use of buses is peculiar to Melbourne and distinguishes it from Sydney. By the time buses were acquired by the government for public transport services in Sydney, a decision to replace trams with buses was only a few years away.

Sydney's Public Transport and the Depression

Sydney obtained its first buses cheaply by buying them second hand during the depression. Operations commenced on 25 December 1932, replacing three tram services. The first six months of bus services was reported on in the 1934 Annual Report of the Commissioner for Road Transport and Tramways (prior to 22 March 1932, the Metropolitan Transport Trust).

| | |
|-------------------------|--------------------------------|
| Earnings | 50,866 |
| Working Expenses | 48,609 (includes depreciation) |
| Bus Miles | 835,283 |
| Passengers | 2,625,486 |
| Revenue/Mile | 14.61d |
| Cost/Mile | 13.96d (includes depreciation) |
| Buses in Daily Use | 66 |
| Ratio, Expenses/Revenue | 96% (includes depreciation) |

The Commissioner's Annual Report for 1935 boasted even better financial results for a bus fleet already three times the size of the Melbourne Tramways Board fleet. The ratio of working expenses to revenue was now claimed to be as low as 79%. Return on mean capital since inauguration of buses in 1932, taking into account depreciation and interest was over 15% - a very good result by international standards (Fenelon, 1932). The tramway operations on the other hand faced a financial crisis. Unlike Melbourne, government public transport services in Sydney suffered massive financial deficits during the depression, incurring losses of £538,495 in 1931 and £290,139 in 1932. The crisis can be attributed in part to the fact that the capital account for the tramway system had been allowed to accumulate on the assumption that passenger traffic and revenues would inevitably increase year after year. To quote the Commissioner's 1934 Annual Report:

"Obsolescence has never previously been taken into account in the New South Wales undertakings, but the trend of transport developments in recent times has emphasised the very urgent necessity of making provision each year for such an item."

In case the reader was unaware of the 'trend of transport developments in recent times', the following somewhat defensive remark clarified the point:

"I do not subscribe to the view that trams are obsolete."

But a few paragraphs later...

"I contend moreover, that our metropolitan system requires to be supplemented to an ever increasing extent by trackless trolleys (trolley buses) and motor omnibuses."

The absence of any account being made for depreciation prior to 1934 meant that the tramways operation was burdened with interest payments on an amount of capital (£7,713,641 in 1934) which no longer reflected the value of the trams, tram tracks and overhead wiring.

Furthermore, the opening of the Sydney underground rail loop was estimated to have depreciated the value of tramway assets by a further £500,000, as well as having a lasting effect on revenues.

Solution for Sydney's Tramway Capital Crisis

Transport coordination legislation passed in the early 1930's provided a tempting solution to the dilemma of the bloated tramway capital account. The interest burden of the tramways assets could be sloughed off by the simple expedient of closing down the tramways and replacing them with bus services. A retrospective account of the decision to close down Sydney's tramways appeared in the 1955 Annual Report of the Commissioner for Government Transport, who took over responsibility for trams and buses in Sydney and Newcastle in 1952:

"In 1937 the Department decided upon a plan which had as its objective the gradual replacement of trams by buses. This plan was deferred during the war years of 1939-45."

The objectives of the plan, after "consideration of financial aspects" included improvements in service to the public and improvements in traffic conditions. Before tramway assets were finally abandoned, the plan acknowledged that good business practice required that the "utmost use" be extracted from them.

While no mention of this plan appeared in the Annual Report of the Commissioner in 1937, or any other year before 1955, the trends of bus and tram operations in Sydney were quite clear, and in distinct contrast to Melbourne. Sydney's trams were being slowly phased out. The decision of the 1937 Commissioner (shortly before he resigned under dubious circumstances) to purchase 250 new trams was cancelled and the order cut back to 100 in 1948. As soon as tramway rail wore out (usually after a few decades), the high cost of replacement tramway track favoured substitution by diesel buses operating freely on public roads. Sydney's bus fleet grew steadily during the 1940's and 1950's and its trams slowly withered away. The relative economy of buses over trams was occasionally reiterated in the Commissioner's Annual Reports. For example, as late as 1959, the cost per passenger mile of buses was given in that year's Annual Report as 4.16d, trams 5.11d, and total savings for complete tram replacement, £500,000 per year. Two photographs, one showing George Street congested with trams and the other, showing a handful of cars with a few buses at the kerb reinforced the point. Remission of the total tramways capital account by Treasury soon followed the demise of Sydney's trams. By 1961, the all-bus public transport services of the Department of Government Transport made a fresh start. The Commissioner boasted in the 1961 Annual Report:

"History was made during the year when on 25 February 1961, the last of the remaining tramway services in New South Wales were converted to bus operation."

"Extensive economies and savings from conversion of tram services to bus operation and service adjustments were achieved..."

In the way of all tram to bus conversions, one suspects the economies and savings could substantially be attributed to service adjustments. An explanation of the solution to the most pressing budgetary problem came later in the Report:

"...the balance sheet now represents the financial position of the omnibus services."

The problem of the tramways capital account was solved.

Were Sydney's Buses Cheaper?

The best years to compare the performance of Sydney and Melbourne government public transport services are probably 1938/1939. Both cities had recovered from the effects of the depression and neither had implemented a decision on preferred modes. Sydney's new trolley buses are included but the eight mile remnant of Melbourne's cable system is not.

| | Sydney | Melbourne |
|--------------------------------|----------------|-------------|
| Number of trams | 1491 | 670 |
| Tram route miles | 119 miles | 119 miles |
| Number of passengers | 244,367,666 | 161,267,858 |
| Tram miles | 27,340,204 | 20,528,365 |
| Revenue | £2,687,964 | £1,979,556 |
| Working expenses | £2,340,880 | £1,247,685 |
| Operating profit | £347,084 | £731,871 |
| Earnings per tram mile | 23.6d | 23.0d |
| Working cost per tram mile | 20.5d | 14.6d |
| Operating ratio | 87% | 63% |
| Interest on capital debt | £330,000 (est) | £200,727 |
| Capital expended on lines open | £6,651,205 | £7,703,846 |
| Number of buses | 263 | 113 |
| Bus route miles | 325.5 | 48.6 |
| Number of passengers | 50,096,064 | 11,911,439 |
| Bus Miles | 9,966,963 | 2,164,930 |
| Revenue | £708,898 | £128,481 |
| Working expenses | £561,640 | £98,263 |
| Operating profit | £147,258 | £30,218 |
| Earnings per bus mile | 17.1d | 14.2d |
| Working cost per bus mile | 13.5d* | 10.9d |
| Operating ratio | 79%* | 76% |
| Interest on capital debt | £9,676 | £13,895 |
| Capital debt | £298,140 | £277,905 |
| Depreciation | £119,974 | |
| Net Profit | £17,026 | |

(Note: Sydney bus figures are for 1938. Figures marked with an asterisk are recalculated to exclude depreciation, figures marked (est) are estimates based on a division of the reported annual net profit)

The three significant differences between tram operations in 1939 in Sydney and Melbourne are the much lower working costs, lower capital debt and higher capital expenditure in Melbourne. (The capital debt for the tramways in Melbourne - probably about £4m- was considerably less than the capital expended on lines open.) These three are not directly related because interest payments and depreciation were not included in tramway working expenses at that time. On the other hand, lower working expenses probably reflect better maintenance and timely renewal of assets, just as lower interest payments reflect better management of the capital account. It is tempting to conclude that Melbourne's tramways were better managed in the 1930's than those in Sydney. Certainly the financial discipline required for successful tram operations is evident in Melbourne. Trams with their high fixed costs and large capital requirements could only be economical compared with buses in the long term and on busy routes.

Bus operations in Melbourne in 1939 evidence a relatively intense service on a small route mileage. Both working expenses and revenues are correspondingly low. The operating ratio is slightly ahead of Sydney. Capital expenditure is much higher in Melbourne for the level of service offered. The bus fleet continued to grow in Sydney during and after the war whereas Melbourne's fleet peaked in the 1940s and then declined gradually.

Separate statistics for trams and buses in Sydney were not recorded in the annual reports for a decade after 1939. The financial consequences of using the buses as feeders to tram termini introduced in Sydney in October 1942 as a fuel saving measure are not easily established. No doubt these arrangements would have made tram operations much more profitable than the feeder buses. Otherwise, the 1939 statistics support claimed economies of converting Sydney's tram operations to buses. This is not because Sydney's bus operations were particularly cheap. Sydney's trams were just too expensive to run (they had consistently been so: since 1881 the operating ratio averaged 84%) , and the state of the capital account made things even worse.

5. Departmental Autonomy

Melbourne's Tramways Board was established in 1919, taking over a number of private operations including the Prahran & Malvern, Hawthorn, Coburg, Footscray and the Fitzroy, Northcote & Preston Tramways. The Board then proceeded to construct an equal route mileage of electric tramways in the next two decades and progressively converted the original cable lines to electric operation during the same period. Maximum route mileage was achieved in 1956 but has only declined slightly since then. The network tended to focus on the eastern suburbs of Melbourne where the railway network was not particularly dense, but a number of nearly parallel rail and tram routes existed in areas close to the city centre. Melbourne's two city railway stations were located on the south east extremity of the city block. An underground rail loop was only completed in 1985.

Sydney's government trams were, by contrast, operated for some years as part of the railways department. The tram network developed with, and offered intensive services to, the eastern suburbs. Extensions were justified by reference to public amenity rather than profitability (eg: R. Mills, the Bronte Beach extension). The eastern suburbs were not served by railways at all, until well after the trams were removed. Very few suburban areas in Sydney had competing rail and tram services. On the other hand, the underground rail loop, as has already been mentioned, was perceived as a considerable threat to the profitability of tram services in the city centre.

In 1932, Sydney's tramways operations fell under the responsibility of the Commissioner of Road Transport and Tramways. While the road transport responsibility of the Commissioner was limited to vehicle licensing, the inappropriateness of the combined responsibilities became particularly obvious early in the 1950's. An independent Superintendent of Motor Transport (within the Department of Transport and Highways) was established in 1952 thus separating the spectacular growth of motor traffic from the equally spectacular growth in public transport deficits. The new Commissioner of Government Transport reported the following passenger figures for the Sydney metropolitan area:

| | Trams | Buses |
|------|-------------|-------------|
| 1939 | 295,735,000 | 57,510,000 |
| 1940 | 285,760,000 | 68,421,000 |
| 1941 | 297,936,000 | 85,914,000 |
| 1942 | 344,393,000 | 102,519,000 |
| 1943 | 367,335,000 | 98,929,000 |
| 1944 | 396,125,000 | 100,573,000 |

| | | |
|------|-------------|-------------|
| 1945 | 399,996,000 | 105,273,000 |
| 1946 | 394,752,000 | 108,189,000 |
| 1947 | 382,748,000 | 113,044,000 |
| 1948 | 350,490,000 | 124,774,000 |
| 1949 | 300,449,000 | 153,654,000 |
| 1950 | 270,415,000 | 170,823,000 |
| 1951 | 253,170,000 | 166,566,000 |
| 1952 | 219,808,000 | 168,157,000 |

The post-war decline in Sydney's tram passengers alongside steady growth in bus passengers is quite evident from these figures. It would be very easy to blame administration by the traditionally tram-hostile railways department for an unprofitable tram route system, then blame the association with the road transport industry for an untimely change to all-bus operations. A closer examination of Sydney's tram history would be needed to draw such a conclusion. Other tramway systems were collapsing elsewhere after World War II under more favourable administrative systems than that found in Sydney. By way of comparison, Melbourne's tramway operator enjoyed relative autonomy, being able to compete with the railways for the best traffic, and to make an independent judgement about the relative merits of trams and buses.

Melbourne's Tramways and Robert Risson.

The relative independence of Melbourne's public transport operator was well demonstrated during the term of office of the most prominent of the chairmen of the Melbourne and Metropolitan Tramways Board. Major (later Sir) Robert Risson, C.B., C.B.E., D.S.O., E.D., B.E., M.I.C.E., M.I.E.Aust., M.Inst.T., F.A.I.M. was a former military officer, engineer and deputy chairman of Brisbane's Tramway Board when he was appointed on 1 October 1949 to head the Melbourne Tramways Board. Instead of succumbing to the fossilised management and accounting practices that bedevilled tramway operations, Risson adopted a vigorous campaign to lobby the Victorian government for a better deal for trams. His first objective in 1956 was to overturn the road maintenance provisions which dated back to the days of horsedrawn trams and the British Tramways Act of 1870. Payments from treasury to cover concessional fares, and cancellation of contributions to various local and administrative authorities were his next objective in 1958, together with the introduction of the curious right-hand turn rules for motorists in central Melbourne, which gave trams priority and continue to astonish interstate drivers to this day. Safety zones for trams were introduced in 1961, but the Board was "surprised and disappointed" in the same year when a proposal for Board inspectors to fine errant motorists was turned down by State Parliament. One minor loss (when other tram operators were giving in quietly to the roads lobby) did not discourage Risson. In 1962, the Annual Report contained an extended essay attacking freeway building and advocating the construction of underground tramways. No doubt this advocacy was well intentioned, although it is perhaps just as well for the trams that the railways were put out of sight under the streets instead. The presence of trams in Melbourne's city streets is undoubtedly an important part of their popularity, with commuters and tourists alike.

By the mid 1960's in spite of the best efforts of Chairman Risson and the Board, cumulative deficits threatened tramway operations with insolvency. In 1967, Risson estimated that a calculation of the social benefits of public transport combined with a full compensation for a lingering road maintenance payment shortfall would transform the near one million dollar deficit into a profit. In the following year, it was claimed that nearly half the Board's deficit was due to congestion of city streets. The figures were given thus:

| | |
|---|--------------------|
| Fleet and wages costs due to congestion | \$ 625,000 |
| Fares loss due to congestion | \$ 90,000 |
| Fare concessions and road maintenance shortfall | <u>\$2,348,000</u> |
| Total shortfall from Treasury | <u>\$3,063,000</u> |

1968 overall deficit after interest and depreciation \$1,543,817

In 1970, the deputy chairman of the Board since 1965, F.R Kirby took over from Risson. The long-standing fight for full compensation for road maintenance ("an iniquitous carryover from the days of horse-drawn trams") by the Board finally paid off, and Treasury increased its financial support for concessionary fares. In 1973 the first increase in passenger numbers in twenty years was reported. The oil price crisis had finally brought some relief to three decades of public transport gloom.

6. Capital Management

The demise of urban tramways in the 1950's and 1960's was inextricably linked to the question of the relative economy of bus operations and tram operations. Tramway accounting was traditionally based on railway accounting. There were no fixed rules for excluding minor capital improvements from working expenses, although any capital works of a major kind tended to be attributed to the capital account. The capital account was intended to reflect the value of the fixed tramway assets. A steady growth in a tramway's capital account assumed steady interest rates, continuous growth in traffic and consistent maintenance of the permanent way (tramway track). The depression of the early 1930's saw an end to this comfortable existence. At the same time, trams suddenly faced competition with motor buses which had low capital requirements and short working lives. Buses were also operationally flexible, used public rights of way and fitted in with other motorised traffic. With buses came depreciation accounting, because a bus operator avoided ownership of valuable permanent trackways or electricity generating equipment. After twenty years or so, a bus operation was little more than worthless scrap. Tramway accountants juggled with the huge capital debt of the tramways and new-fangled depreciation at the same time that operations managers juggled with the huge passenger-carrying capacity of a tramway and the operational flexibility of the bus. A simple comparison of the relative operating economy of buses and trams was impossible. A feeder bus from a new low-density suburb to an outer tram terminus would give a poor bus result and a good tram result. A suburbs to city bus bypassing a tramway built in an area of urban slum clearance could completely eclipse tram performance. A comparison between the two largest public transport operators in Australia in the 1930's comes close to the best possible comparison between bus and tram performance. But there are many complicating factors.

Sydney's tram operations had been owned and operated by the government for fifty years by the time of the Great Depression. Tram services had been largely restricted to a relatively recently developed and well-off eastern suburban area not served by the railways. The capital account was bloated and substantial deficits resulted from declining passenger traffic and the depression. Bus operations begun in the depression replaced marginal tram routes, which were loaded with accumulated capital debt and deferred maintenance but offered guaranteed passenger loadings, thus ensuring good financial results for the new bus services. Increasing motor car ownership in the affluent eastern suburbs and progressive replacement of marginal tram routes with buses meant that Sydney's trams faced financial ignominy and eventual abandonment.

Melbourne's trams had only been in government hands for ten years at the time of the depression and the tramways capital account was not excessively burdened with debt. Buses had

been operated since 1925 and were used as an adjunct to tramway operations rather than in competition or as a replacement for trams. Bus operations in Melbourne were consequently less profitable than tram operations. The most significant test of the relative economic performance of buses and trams was carried out during the second World War in central Melbourne, when a worn out cable route was temporarily served by diesel double-deck buses. Trams were found to be cheaper to run, in spite of the high fixed costs involved.

There is some evidence that Sydney's transport commissioners made the wrong economic decision in favouring buses over trams in the 1940's and 1950's, particularly on the basis of Melbourne's trams. Possibly the perceived advantages to an operator of buses in a motorised city overwhelmed the possibility of a real comparison between bus and tram operating economies. Certainly, the urban tram is returning to Sydney in 1996 with new light-rail (the tram re-invented). A double track route from Central Station, down Market Street and along the former Darling Harbour goods railway is being built to the new Casino. Once the proposed route down Pitt Street through the pedestrian mall to Circular Quay is built, Sydney will have accepted the tram back into its proper place in the city streets.

Summary

It became fashionable in economic history in the 1970's to perform counterfactual thought experiments (e.g. O'Brien, 1983), in order to establish what might have happened if some important event or invention had never seen the light of day. In the case of Melbourne's trams, is it possible to imagine that they would have survived if Melbourne had adopted steam trams like Sydney, or if R.J.H. Risson had become chairman in 1949 in Brisbane instead? If Victorian Railways had responsibility for Melbourne's tramway development in the 1920's, or if the tramways had been put into the hands of private bus companies immediately after the second world war, would Melbourne now be full of diesel buses? Perhaps the claimed economy of trams on the last cable route in Melbourne was no more than deceptive accountancy. My belief is that all these possibilities are extremely unlikely. Melbourne's trams survived a series of close encounters with termination, in spite of the apparent confidence of the Melbourne and Metropolitan Tramways Board and its successors. If any one of the above counterfactual premises were true, tram enthusiasts would still be making a pilgrimage to Glenelg to ride on Australia's last urban tramway.

Notes

All references and quotes from Annual Reports in the text are from the following:

NSW

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