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ABSTRACT:

This paper outlines research work relating to the privately owned bus industry in Australia, and in particular to its urban route services. Although the private bus industry plays a major role in the nation's total public transport task, knowledge of the industry is fragmented and very limited.

The paper first summarises the present scope and role of the industry. It outlines the industry's cost levels and structures and compares them with Government owned services. It then examines how the viability of private bus operators is best assessed and provides evidence on the present viability of route operations. The prospects for the industry are reviewed in the light of Government attitudes and policies and of trends in cost levels, subsidies and viability.

#### INTRODUCTION

The privately owned bus industry in Australia plays a major role in the nation's public transport task. Yet relatively little detailed information is available about the scope of the industry, the trends it has been experiencing and the future problems and prospects it faces. Private buses account for more passenger journeys per year than all Australia's railway systems together. If the industry had an equivalent amount of planning and research effort devoted to it as is given to the railways, you may imagine that its situation would be extensively documented by now.

In the last 5 years, Travers Morgan has undertaken a number of research studies into various aspects of the private bus industry, and particularly its urban route services, their operations and economics. In the 1979 ATRF the author presented a paper which examined the cost levels and structure of private bus services in urban areas of Australia and drew conclusions on the relative economics of private and publicly-owned bus services (Wallis 1979). Since that paper was prepared, Travers Morgan has been involved in further studies into the private bus industry, and this paper outlines some of the findings of this recent work, particularly relating to NSW and Victoria (which together account for some 80% of total Australian private bus travel).

The next section summarises the scope and role of the private bus industry throughout Australia, a subject on which surprisingly little systematic data has previously been collected. The third section discusses the industry's cost levels and structures, by comparison with Government-owned services, updating the findings of my earlier paper. The fourth section examines how the viability of private bus operations is best assessed and reports some data on the present viability of the industry. The fifth section reviews the prospects for the industry, in the light of Government policies and of trends in cost levels, viability and subsidies. A brief summary concludes the paper.

#### SCOPE AND ROLE OF THE INDUSTRY

#### The Private Bus Industry

What do we mean when we talk about the "private bus industry"? In essence, the industry comprises privately-owned companies whose principal function is to operate buses for hire, fare or reward. This definition excludes buses licensed to schools, clubs, hotels etc which are generally used only by members of the institution concerned. Buses owned by State and Local Governments are of course also excluded.

#### Overall Size of the Industry

The following statistics provide a broad summary of the magnitude of the private bus industry in Australia:

Number of buses 13,600 Number of operators 3,400

Annual distance operated 400 million bus kilometres

Annual passenger journeys 400 million

These are our best, inevitably rather approximate estimates, generally based on 1980/81 data (Australian Bus and Coach Association, 1982) Owing to the great fragmentation of the industry, there were considerable difficulties in deriving even these basic estimates.

#### The Nature of Private Bus Businesses

The private bus industry consists principally of small companies. Over 50% of operators own fewer than 5 buses, with over 90% owning fewer than 10 buses. There are only about 10 operators in Australia who own over 50 buses.

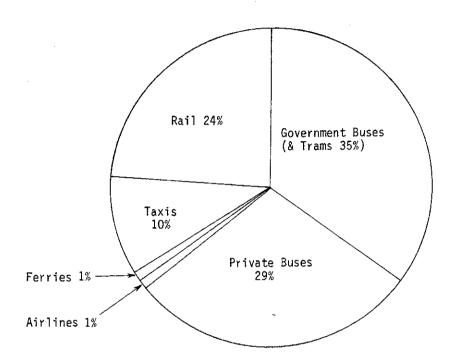
The industry employs some 20,000 people directly - an average of about 1.4 per bus. Part-time employment comprises only a very small fraction of this total. There is also considerable employment indirectly dependent on the industry, in areas such as bus manufacture and sales, bus maintenance and parts manufacture. No detailed figures are available, but this indirect employment is believed to be approaching the total direct employment.

#### Contribution to the Overall Public Transport Task

Estimates have been made of the total annual public transport passenger rides made on each mode for a recent year. The annual total is about 1,500 million rides, broken down by mode as shown in Figure 1. (There is a dearth of reliable passenger data for taxi and private bus modes in particular. Passenger kilometre data, which might give a more useful comparison of the tasks of each mode, are even more difficult to obtain)..

Figure 1 shows the major role of private bus services, when compared either to Government bus or to rail passenger services. The approximately 13,600 private buses in Australia may be compared to about 5,100 Government buses (and about 750 trams). Even on urban route services, the overall number of private buses is only slightly fewer than the number of Government buses (Wallis, 1979). NSW and Victoria together

# FIGURE 1: AUSTRALIAN PUBLIC TRANSPORT PASSENGER MARKET (Proportions of total annual passenger journeys, by mode)



Source: As derived by Travers Morgan from various published and unpublished data (Australian Bus and Coach Association, 1982)

account for over 60% of all Australia's private buses. In these two States, the private industry provides the majority of urban route (bus and tram) services.

#### The Markets Served

Government-operated services are virtually confined to the major cities, whereas private services are much more widely distributed throughout Australia. The services provided by the private sector are split (as measured by bus kilometres) approximately one-half route services, one-third school services and the remainder tour and charter services.

The largest market sector is for route services, with which this paper is mainly concerned. However a large number of small operators, particularly in country areas, do not provide route services. Many other operators run several types of services, using one set of vehicles, staff and equipment. This "jointness" of operations is a fundamental characteristic of the private bus industry and is one of the factors contributing to its relatively high efficiency (see later).

There are 800-900 route bus operators in Australia, of which nearly 500, owning over 4,000 buses, operate in urban centres (with populations over 10,000). Of Australia's 68 such urban centres, only 13 were provided with Government bus services (1975), while the remaining 55 are solely dependent on privately operated services (Wallis, 1979).

#### COST ASPECTS

## Private Operator Cost Levels

Analyses carried out in the past, by ourselves and others, have confirmed wide variations between operators in both their average cost levels and the composition of their costs by individual items. Many of these variations arise from the differing nature and balance of operations of different companies, e.g. the types of buses used, the types of service provided, the road conditions encountered, the intensity of bus utilisation, etc. Further variations may arise from the different levels of efficiency of operators.

Thus to derive average or 'typical' cost levels for the industry, analysis of financial returns from a substantial number of operators is desirable. The only State in which such analysis is done on a regular basis is Victoria, by the Transport Regulation Board, although there is usually considerable delay before these statistics are published (Transport Regulation Board, Victoria, 1982).

Table 1 provides results from two recent Travers Morgan studies on average cost levels for private route operators in NSW and Victoria. Two features of these results stand out: the considerable variations in average costs, and the apparently higher costs in NSW (Sydney metropolitan route operators) than in Victoria. Both these features probably arise from the many possible causes of variations mentioned above.

There are no uniform accounting methods which are followed by all (or even many) private operators. Thus any analyses of operator costs by item are fraught with difficulties of consistency. However Table 2 provides some such analyses, on a more or less consistent basis, for Victorian route operators.

These analyses generally accord with those given in the earlier paper (Wallis, 1979), although reflecting some increase in the proportion of expenditure relating to fuel and oil over the last few years: this is now about 12% of total costs. Wages, salaries and associated labour on-costs comprise 50%-60% of total costs, a rather lower proportion than is typical for Government bus operators (about 70%).

### Comparison with Government Operator Costs

The relative cost levels of private and public bus operations in urban areas, and the reasons for the differences, were discussed at length in my earlier paper. More recent research has largely confirmed the earlier conclusions and is summarised as follows.

Figure 2 shows average costs per kilometre over a 10 year period for private and public bus operators in the Sydney and Melbourne metropolitan areas (this extends Figure 1 of the earlier paper). The data indicate that there has been no substantial change in the public: private cost relativities over the last few years.

It may be claimed that the average costs per kilometre used here do not provide a reliable guide to the relative costs which would be incurred if different operators were to run the same service. Currently urban private operators provide services predominantly in outer parts of the metropolitan areas, experiencing less severe traffic conditions and higher speeds, and thus lower costs per kilometre, than generally experienced by public operators.

Further analyses have been carried out to reflect the likely effects of the different operating conditions. For instance, public and private cost levels in the Sydney metroplitan area in 1980/81 were compared by adjusting UTA cost levels to represent a situation with:

- no conductors or on-street ticket sellers;
- the same annual bus utilisation as private operators;
- the same average bus speed as private operators.

TABLE 1: AVERAGE COST LEVELS - URBAN ROUTE OPERATORS (1980/81)

State	9 Operators	Average Cost(4) \$/km	Cost Range(4) \$/km	No. of Operators	No of Peak Buses	Annual Kilometres
NSW	Metro Route(1)	1.16	096-1.59	10	222	9.1 m
Vic	Metro Route(2)	0.91	062~135	55	732	45.5 m
Vic	Urban Route(2)(3	) 0.94	0.66~1.21	8	108	8.0 m

Source: Travers Morgan 1982a. Source: Travers Morgan 1982b.

Urban refers to operators in Geelong, Ballarat and Bendigo.
"Cost" refers to total operating costs, as included in operator's Profit and Loss accounts (i.e. including book depreciation, interest and leasing charges).

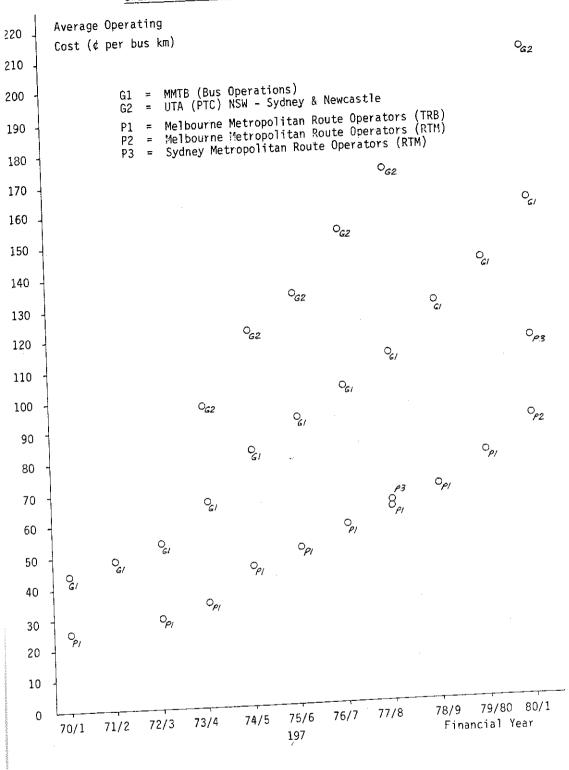
TABLE 2: AVERAGE COST ANALYSIS BY ITEM - VICTORIAN ROUTE OPERATORS

	% of Total Operating Costs			
Cost Item	Metropolitan Route(1) 1979/80	Metropolitan Route(2) 1980/81	Urban Route(2) 1980/81	
Driver wages	41.4	37.9	338	
Fuel & Oil	116	11.9	134	
Tyres & Tubes	1.,9	19	2,.3	
Maintenance - Parts & outside work	7.4	8.1	75	
Maintenance - Labour	6.1	54	5.9	
Fixed Vehicle Costs(3)	3.4	35	1.8	
Depreciation on Buses	4.8	50	63	
Fees and Salaries	)	82	87	
Labour on-costs	) 234	40	39	
Leasing, Rent & Interest Payments	)	4.4	5.2	
Other Administration Costs		9.7	11.2	
Total	1000	100.0	100.0	
(	\$0.80/km)		50.94/km)	

Notes: (1) (2) (3)

Source: Transport Regulation Board, Victoria. Source: Travers Morgan 1982b. Includes insurances, licences and registration.

# PRIVATE BUS ROUTE SERVICES FIGURE 2: AVERAGE OPERATING COSTS PER KM FOR PUBLIC AND PRIVATE BUS OPERATIONS (VICTORIA AND NSW)



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The effect of these adjustments was to increase the average private bus cost per kilometre from some 53% of UTA metropolitan basic costs to about 66% of the UTA 'adjusted' costs. In other words the major part of the cost differences can not be explained by these factors.

In 1980/81 average costs of Melbourne private route operators were 57% of Melbourne and Metropolitan Tramways Board bus costs.

My earlier conclusion appears to remain valid that "on average, the unit costs for private operators in Australian urban areas are only between one-half and two-thirds of those of public operators in providing a similar service" (Wallis, 1979).

The factors causing cost increases in the private bus industry in the last few years have included a relative increase in fuel costs, and various modifications to private operator Award conditions to bring them more into line with those of public bus operators. However, it appears that the net effects of these changes on the relative costs has been slight.

#### **CURRENT VIABILITY ASPECTS**

#### Meaning of Viability

The private bus industry will only survive in the long run if it is sufficiently attractive to retain the investments of its existing proprietors and/or to attract new investors and entrepreneurs. In normal situations there are gradual changes in the ownership of the industry, resulting from expansion/contraction of services, operators buying or selling particular assets and licences being transferred. In the past, certain substantial sections of the industry have become unviable, primarily as a result of Government actions (holding down fares) and have been taken over by the public sector, e.g. the takeovers of services in Perth and Adelaide. At present, it also appears that sections of the industry are in a particular state of uncertainty and unrest as a result of Government actions and possible future actions - particularly in the Sydney and Melbourne metropolitan areas.

To understand the forces at work in the industry, it is important to understand what determines financial viability, how the viability of its member companies may be measured, and how viable these companies are firstly, what do we mean by "viability" in the context of a private bus company?

In essence, the long term viability of a company or of the industry as a whole is reflected by its ability to attract and retain investment. As a generalisation, and making due allowance for human factors, it will only do this if the return on these investments is

at least comparable with the return which could be gained from alternative investments. Thus the best measure of viability is the net return earned on the labour input and the capital assets tied up in the industry.

In practice, the industry will not collapse overnight if returns reduce substantially or even become negative. Many operators will remain in the industry, accepting low rewards for effort and investment, not investing in new vehicles etc - partly in hope of an improvement in their situation, partly often through reluctance to break long family traditions in the business. However, in the long run adequate returns will be necessary if the industry is not to wither away. Sentiment will not prevent old buses wearing out or help to buy new ones.

As in other industries, the annual Profit and Loss accounts and Balance Sheet of an operator give a very imprecise guide to its long term viability, for several reasons:

- i) The assets are recorded in "historic cost" terms which typically bear no relation to the current (re-sale or replacement) value of these assets. The discrepancy tends to be particularly acute in the valuation of buses and "goodwill" (see below).
- ii) The allowance for capital replacement (i.e. depreciation) does not realistically reflect the actual annual erosion (or conversely the holding gains) of the capital assets of the company.
- Bus leasing charges are paid and recorded over a much shorter period (typically 5-6 years) than the physical life of the bus (say 15 years).
- iv) The proprietor's rewards, in their many and varied forms, are not always immediately obvious from the Annual Accounts.

For all these reasons, neither the result recorded by the annual Profit and Loss accounts, nor the net cash flow position at the end of the year, give a fair guide to the amount of return earned. Similarly the assets recorded in the Balance Sheet are not a true reflection of the real assets tied up in the business, on which the rate of return should be calculated. It should of course be said that these limitations are equally applicable to most small businesses. The following paragraphs outline how the basic information from an operator's Profit and Loss accounts and Balance Sheet should be adjusted to provide a realistic long run estimate of the returns being earned.

#### Estimation of Return for Bus Operators

The operation of buses should provide a return on capital assets employed. Also, in circumstances in which the proprietor provides

management or staff services to the enterprise which are not already accounted for in the expenses of the enterprise, it should provide a return on such labour. The method developed is concerned with estimating the economic returns on bus operations, covering returns on actual capital assets and proprietors' labour.

Broadly, the rate of return on capital in any year is the ratio of net revenue to the value of capital assets employed: net revenue represents the difference between the revenues earned and the costs of utilising the assets (i.e. operating costs).

The methods developed first require a clear definition of the boundaries of the business for assessment purposes, to include all inter-dependent trading entities, but to exclude items not relevant to bus operations. Then the following items are derived, starting from the company's standard accounts data.

- Adjusted revenue (R): excludes from accounts any revenue not related to bus operations.
- ii) Adjusted expenses (E): excludes from accounts:
  - expenses not related to bus operations;
  - bus depreciation;
  - bus leasing charges;
  - interest payments on capital assets.
- iii) Various claims (C): these represent initial claims on the 'gross' return, representing the difference between adjusted revenue and expenses. Principal items are:
  - imputed rental on depot land and buildings (where owned
    - by the operator):
  - reasonable allowance for proprietor's labour;
  - allowance for return on goodwill (if appropriate).
- iv) Adjusted tangible assets (A): derived from Balance Sheet by subtraction of intangible and independent assets and replacement of historic value of buses by current written down value.

Further details of the methods are given in the study report (Travers Morgan, 1982a).

Then the rate of return earned (before tax etc) is calculated as:

$$r = (R - E - C) / A$$

This return (r) has to compensate for any diminution of the asset base over the year, before being comparable with other investments where the capital remained intact. In addition, it should be sufficient to represent a 'reasonable' rate of interest on the total asset base, making due allowance for the risks of investment in the company.

Changes in the money value of the adjusted asset base (principally the value of buses) are likely due to the combined effects of inflation and of depreciation of buses through ageing and use. If the net value diminishes, in money terms, then a higher rate of return would be expected to compensate for this; or conversely if the value increases. The net change in value needs to be calculated individually for each operator. In a typical case it is of the order of a 5% p.a. diminution at current inflation and depreciation rates. Thus to achieve an 'adjusted' rate of return of 15% on a constant capital base would require an unadjusted return (r) of about 20%.

Having worked out his actual return, how can an operator judge if it is "reasonable"? On assets other than land and buildings, the only objective benchmark for determining a "reasonable" rate of return is the rate which could be obtained if the company were sold and the funds invested in the money market (the capital base then remaining intact in money terms). At the time of writing money market rates are about 13% - 15%. It is reasonable to regard this as a minimum target rate, for two reasons.

Firstly, investment in a bus company is subject to greater risk than in the money market. Running a bus company requires particular specialist skills and entrepreneurial inputs, which are not required for investment in the money market. Secondly, the replacement of many of the existing capital assets will need to be financed by loan or lease, generally at rates above those in the money market.

Thus, the target return on assets for a typical operator should be sufficient to allow for:

- diminution of bus asset value, say 5% p.a.; plus
  - money market interest rates, say 13% 15% p.a.; plus
- due allowance for risk.

Thus a net return of some 20% on the adjusted asset base should be regarded as a reasonable minimum target.

It should be noted that this method assesses the returns being made on the actual assets of an operator, and compares these with 'reasonable' returns. It is not concerned with whether more (or fewer) assets are needed to maintain the operation in the long term. For instance, an operator with an old, run-down fleet would have a relatively low asset base. He might earn a net return of, say 30% p.a., on this asset base, but still not earn sufficient to replace his fleet. The additional question of what is an appropriate level of assets for a bus company has also been addressed, but is not reported here.

It should also be reiterated that the above method gives no guide to an operator's short-term cash flow position. An operator may be earning a net return of 30%, but have a negative cash flow position (and go bankrupt) because of the way his buses are being financed.

#### The Assessment of Viability in Practice - NSW

At the time of writing, the methods just outlined to estimate the return earned by private bus operators have been applied on a relatively widespread basis only in NSW. For reasons of confidentiality it is not possible to report the detailed findings here.

However, it is worth noting that the methods have been applied reasonably easily by operators, with assistance from an accountant in some cases. Those operators who have been associated with the methods find that both the actual application of the methods and the results obtained give them useful insights into the financial position of their companies.

#### Assessment of Victorian Operators

In 1981/82 Travers Morgan undertook a study for the Bus Proprietors' Association, Victoria into the Victorian Government bus fares subsidy scheme for metropolitan and urban route services and its effects on the operators involved.

The principle of the subsidy scheme is that subsidy payments should meet the difference between the 'standard' costs and typical revenues on route services, with a reasonable allowance for proprietors' income, return on investment, etc. Subsidy payments are based on the number of bus hours operated on route services, with allowance for dead running and with various adjustments for hours operated when driver penalty rates are paid. A separate allowance for depreciation is provided, and a profit ceiling is imposed to limit the profit on route services to a maximum 20% of 'standard' costs.

The study included a critique of the subsidy scheme, and identified various inconsistencies and weaknesses in its structure. However, we are concerned here primarily with the overall viability of the operators under the scheme rather than with the scheme's detailed structure.

The study's assessment was primarily directed at an examination of profitability as reflected in the operators' 1980/81 Profit and Loss accounts. The following conclusions were reached;

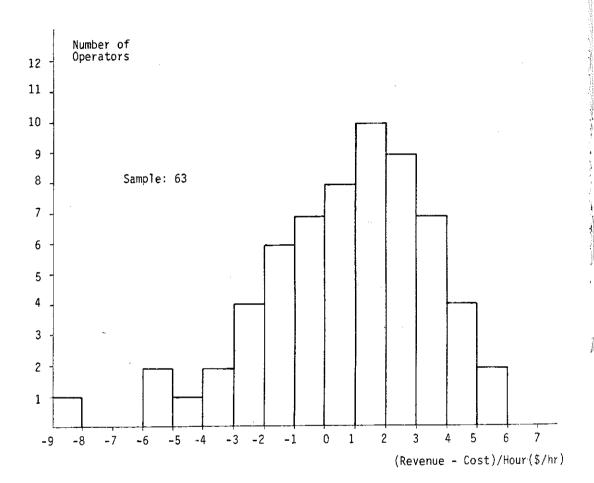
- Total subsidy payments under the scheme were \$14.2 million in 1980/81.
- ii) These payments comprised an average 37% of route revenue in 1980/81. Other Government reimbursements (principally for pensioner concessions) meant that about half the operators' revenue was contributed by Government. Since that time, the introduction of the Travel Card system has further reduced the proportion of revenue under the direct control of the operator.

- iii) While a 'standard' revenue rate per hour was assumed in developing the subsidy scheme, in practice there is a wide variation in revenue earnings: these varied between \$6 per bus hour and \$29 per bus hour (excluding subsidy) for different operators.
- iv) With the subsidy payments, the average 'profitability' (as measured by the Profit and Loss accounts) was about \$1 per bus hour, approximately 5% of total costs.
- v) There was considerable variation in 'profitability' on route services between operators, from a loss of about \$9 per bus hour to a profit of \$6 per bus hour (Figure 3). 23 of the 63 operators analysed showed a loss on route services: of the 40 showing a profit, 32 achieved over \$1 per hour but only 13 achieved over \$3 per bus hour.
- vi) In the 1974-80 period examined, operators were replacing their buses at less than half the rate required to maintain a reasonable average age (eight years).
- vii) To permit operators to earn sufficient income to replace buses at a reasonable rate, an extra sum of more than \$1 per hour would be needed, additional to the allowances in the Profit and Loss accounts. Thus an operator needs to make a 'profit' of over \$1 per hour before earning any return on the assets employed. Only 50% of the operators surveyed were achieving this minimum level.

In summary, the financial position of the operators was found to be far from healthy. Only half were earning sufficient from route service revenues and subsidies to be able to finance the upgrading of their bus fleets at a reasonable rate, let alone to secure any returns on the assets employed. Only a small minority of operators were earning as much as a 10% return on their assets on route services, after allowing for bus replacement. We also found that there is in general little scope for route services being cross-subsidised by other (school and charter) services, as the financial position of these other services is not substantially better.

Some recent analyses of the same operators' results for 1981/82 showed that profitability had deteriorated appreciably from the levels described above. Unfortunately no directly comparable analyses are available of the industry's financial position for years prior to 1980/81 to enable the longer term trend in profitability to be assessed with confidence. However, the low rate of bus replacement since 1974 strongly supports other views that the industry's viability has been generally reducing over the period, a period of increasingly high interest rates. This is despite the fact that the subsidy scheme for route operators, originally introduced in 1974, aimed to improve the viability of the industry.

FIGURE 3: DISTRIBUTION OF REVENUE MINUS COST PER ROUTE HOUR, 1980-81: VICTORIAN METROPOLITAN/URBAN ROUTE OPERATORS



#### TRENDS AND PROSPECTS

An earlier study of the private bus industry for the Commonwealth Department of Transport painted a fairly bleak picture and was very pessimistic about its viability in the medium term (Rendel and Partners, 1975). If all its expectations had come to pass, a dramatic cutback would probably have occurred by now in the number of private bus services operating in urban areas. In Adelaide and earlier in Perth the majority of the private urban route services have been taken over by public operators - in each case with substantial increases in Government subsidy being required. Elsewhere, there have been some cutbacks in services over the last 5-10 years, particularly at evenings and weekends.

The evidence does seem to indicate that the financial position of private route operators has deteriorated over the last 5-10 years, certainly in the main urban areas of NSW and Victoria. In general, profitability appears to have been reducing and a large number of private operators have been either unable or unwilling to invest in new buses - a situation contrasting strongly with the fleet upgrading of the public operators in this period. However, a completely gloomy picture should not be presented: private bus companies do appear to be quite resilient to adverse financial circumstances, at least in the short term.

In Victoria, it appears operator profit margins have been eroded over the last few years, despite the relatively rapid increase in the contribution of subsidy to the total earnings of route operators. amendments to the subsidy scheme for metropolitan and urban route operations appear to have had only modest effects on these trends. Moves towards a formalised contract scheme for metropolitan route services have been under discussion for some time, with both the present and previous State Governments. I understand that the present Government intends to retain private bus route services in the metropolitan area, under the aegis of the new Metropolitan Transit Authority; and that a substantial upgrading and expansion of bus services in outer metropolitan areas has been under consideration. Thus the future role of the private sector in providing route services in Melbourne appears quite bright. However, at the time of writing, it is not known to the author whether services will in fact be expanded and, what is crucial to the industry, what contractual and financial arrangements will be reached between Government and the operators.

The situation of private operators in NSW in general, and in the Sydney metropolitan area in particular, appears less promising. In the last year or so, four separate moves by the State Government have caused difficulties for the NSW industry, and have tended to reduce its viability:

 Reductions in the rate of reimbursement for carriage of schoolchildren in the metropolitan area.

- ii) Renegotiation of rates for school contract services, chiefly in country and smaller urban areas - usually resulting in rates not keeping up with cost increases or general inflation.
- iii) The introduction of 'Standard Fares and Sections' for metropolitan area route services. This is an attempt by Government to rationalise the previous situation where private bus routes had a very wide variety of section lengths and fare scales per section as a result of historical circumstances. While the net financial effect of the change may well be more or less neutral (as was intended), some operators will gain and others may lose substantially. We believe no detailed assessment of the effects on individual operators has been undertaken.
- iv) Delays in approving fare increases in a situation of rapid cost increases (relating principally to Award rates and fuel prices)

While these moves will, in aggregate, result in savings in expenditure either for Government or for users (at least in the short term), they have put many sections of the industry under great pressure and are resulting in previously modest returns on assets being reduced further. The pressures have been increased by calls from the public bus operator's union (ATMOEA) for Government to take over metropolitan route services operated by the private sector. Such calls are supported by certain other groups on the basis that a take-over would result in more frequent services at lower fares. The private bus operators' association (Bus and Coach Association NSW) has responded with a campaign to stress its members' lower costs, more friendly service and better value for taxpayers' money.

Certainly, in parts of the Sydney metropolitan area's western suburbs, there appears a strong case for improving bus services and if required allocating Government funds to do so. The present situation, in which the Government subsidises eastern suburbs/city bus services by some \$100 million p.a. and western suburbs (private) services are self-financing, hardly seems equitable, no matter how the term is defined. The issue should be how services are most efficiently improved and how any subsidies are best allocated, or reallocated.

The evidence earlier in this paper has confirmed that private operators can generally provide services for about 60% of the costs for a public operator to provide an equivalent service - this represents a more efficient use of resources, irrespective of who pays the costs. My 1979 paper showed the financial case for increasing the size of the private sector in provision of urban route services. But what if private route services were in fact to be taken over by the public sector?

Broadly, I estimate that if privately-operated route services in the Sydney and Melbourne metropolitan areas were to be replaced by Government buses, the increase in operating costs would be between \$50 million and \$100 million per year (apart from any compensation payments made). This estimate assumes equivalent services are provided and the existing private bus fares are charged. If in fact services were increased, and perhaps fares reduced, then the additional call on Government funds would be that much greater and could easily be double these figures.

This does not seem a good use of taxpayers' funds. Given the social service role of public transport, particularly in urban areas, it seems reasonable that Government should wish to set appropriate fares and bus service levels. However, this can be achieved by appropriate regulatory powers, whether the services are provided by the public or the private sector. There appears no economic case for a take-over of private sector services.

If the private sector is to provide the services, then appropriate financial arrangements need to be made - providing fair returns and an incentive to efficiency for the private operators, along with good service for users and good value for money for Government. Appropriate arrangements will be more difficult to determine than the traditional "open-ended" subsidy payable to public operators, but this should be possible to resolve satisfactorily. The issue of appropriate subsidy or contract arrangements has not been discussed in this paper.

#### CONCLUSIONS

This paper has discussed the past problems, present situation and future prospects of the private bus industry and particularly its urban area route services. It has shown the importance of the industry to the overall public transport task in Australia.

It summarises improved methods developed to assess the viability of the industry's member companies. It indicates the poor viability of urban route service operators in NSW and Victoria and suggests this viability has been decreasing for some years. Operators in both States are currently in situations of considerable uncertainty due to actual or threatened Government actions.

The paper has confirmed my earlier conclusions that private operator costs to provide a given service are typically about 50% - 70% of those of a public operator. The costs of Government take-over of private route services would thus be very substantial. There appears no economic case for such a move.

The policy directions which appear appropriate are to make the best possible use of the entrepreneurial and management skills of private

operators in maintaining their own operations. Appropriate financial and administrative arrangements need to be developed between Government and private operators - whether involving contracts, subsidy schemes or specific reimbursements. These arrangements should ensure:

- equitable fares and service levels between areas provided with private services and those with Government services;
- fair returns for the labour and capital inputs of private operators;
- iii) private operators retain incentives to efficiency; and
- iv) taxpayers receive good value for any public funds involved.

#### **ACKNOWLEDGEMENTS**

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