

REGULATING GOVERNMENT AND PRIVATE BUS SERVICES
IN SYDNEY

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ABSTRACT

Government buses in the inner city have been losing substantial sums despite buoyant patronage. Private services in outer areas achieve profitability through school student conveyancing but routes are not readily adaptable to changing circumstances and provide variable levels of service. Reorganisation is required but avoiding problems associated with complete deregulation.

A more research oriented approach is being introduced in which private bus industry performance is evaluated against levels of service provided by acknowledged industry leaders. Additional research is improving understanding of operator costs and types of service required by customers. This provides an informed base upon which to establish the type of service which should be provided.

Government bus operations are being reshaped on commercial lines with the onus on managers identifying loss making activities. Government must then decide where support should be continued. Research is under way on identifying congestion related externalities as one factor. Social obligations may be treated in much the same way as with private operators.

However, this revised approach to bus service administration cannot succeed without a more flexible system of route licensing. A contract system is proposed giving preference to existing operators but with termination provisions where adequate services are not provided.

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INTRODUCTION

The last forty years has witnessed a gradual decline in public transport throughout the western world. In Australian suburban areas and low density CBDs buses now only meet a residual transport need. In general, fares are unable to provide sufficient revenue to operate what remaining customers regard as an acceptable frequency. Characteristically a declining spiral of service and patronage levels sets in. Where public transport remains very important, for instance for peak hour journeys to the Sydney CBD, demand is highly concentrated into short periods. In these circumstances many vehicles only make one revenue earning trip each way and operating costs are naturally high. When government fare control forbids price rationing, operators can find themselves facing buoyant peak hour demand when even a fully laden vehicle in the peak direction is a loss making proposition. The situation has not been assisted by subsidy leakage into inefficient work practices and has led to blowouts in public transport expenditure.

These well understood circumstances underpin the present spate of interest in public transport deregulation which has been embraced so enthusiastically in the United Kingdom and New Zealand. While such drastic surgery would obviously reduce costs in Sydney, for example through withdrawal of support and elimination of inefficiencies in government bus operation, it would bid fair to create at least as many problems as it solved. Temporal cross subsidisation would be at risk, as would all lightly patronised routes. In addition, fares would either have to be increased substantially on peakhour commuter runs or supply restricted to a level more sustainable throughout the day. Any combination of these strategies would tend to lead to automobile substitution and attendant increases in traffic congestion. At the same time, requirements for social services could lead to extensive contract payments, as has occurred in Britain. Deregulation could also destroy the system's cohesiveness and stability, upon which a great deal of patronage depends. In addition there is the issue of how deregulation would relate to the current policy of free school bus transport.

Nor, contrary to some belief, does deregulation necessarily reduce the amount of administration and governmental involvement. If social services are likely to be continued it is necessary to know what is being provided commercially, to develop criteria to assess what additional service is required on social grounds, to ensure that, once contracted, such additional service is provided in a satisfactory manner and to be prepared for the inevitable arguments that will occur over fair and unfair competition and over social service undermining what would otherwise be successful commercial ventures.

Faced with these very real concerns it is not surprising that New South Wales is investigating a package of means that seek to reap the benefits of greater cost efficiency and responsiveness in public transport provision, whilst avoiding the very real problems that may emerge from deregulation. This paper outlines the approaches currently being adopted and the type of overall research effort required to establish service levels.

PREVIOUS SITUATION

Prior to mid 1988 public transport administration in New South Wales might best be described as traditional. It comprised both government transport operations and private operator regulation. These are considered in turn.

Government buses operate mainly in Sydney, where a fleet of approximately 1460 single deckers serve the inner suburban areas. The system is the direct successor of the previous government tramways. Under the auspices of the Urban Transit Authority, until 16th January, 1989, the system was charged with efficient, adequate and economic operation but not with commercial behaviour. The organisation was administered along excessively bureaucratic lines with separate branches for operations, engineering, planning, personnel, finance and general secretarial services. These responsibilities were only brought together at the very highest level of the organisation, making integrated control of particular operating units, such as a bus depot, impossible. Virtually no information was available on costs and revenues at a disaggregated level for services, depots or maintenance, thereby preventing cost effective planning. In addition, fares and service levels were vetted in camera by government, making the task of improving cost recovery very difficult and largely unwanted as long as government was prepared to foot the bill.

This is not to imply that no progress was being made to improve efficiency. Indeed the revenue supplement, or loss, paid to Urban Transit fell, in constant 1980-81 terms, between 1980-81 and 1987-88 from nearly \$61 million per annum to \$45 million. However, in the same time, payments by government for generous concessions to pensioners rose, again in constant 1980-81 terms, from under \$19 million to just over \$37 million. Contributions to leasing charges rose by \$3.5 million in the same period. (Urban Transit Authority 1981-88). The net effect was an increase in government payments between 1980-81 and 1987-88 of just under \$6 million in 1980-81 prices. For this sum a substantial increase in pensioner travel was purchased and overall the Sydney system improved its relative financial performance at a time when many systems were worsening. This, in part, reflected substantial investment in new buses and improved operational management. However, it reflected also a buoyant, generally well heeled, inner suburban clientele living in conditions of seriously suppressed car demand. Viewed in this light the ability to only contain government contributions, while carrying the great bulk of pensioner concession rides at marginal cost in off peak periods, was less impressive and suggested scope for improvement.

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In particular, government bus achievements have to be compared with the private bus operators in outer Sydney who, in general, charged roughly equivalent fares but apparently achieved reasonable profitability. Much has been made of this by the New South Wales Bus and Coach Association (undated) and, as demonstrated by their consultants, operating costs are certainly lower. While, in part, this reflects different working environments and award conditions it also reflects superior efficiency which current government initiatives are seeking to emulate. On a less satisfactory note private bus profitability was also bought, in many instances, by running considerably less services, particularly at non-core times, and by obtaining administrative protection from competition within established "territories". This, in turn, guaranteed revenue from highly profitable school children conveyancing.

Administration of private bus services in Sydney has been governed since the early nineteen-thirties by legislation originally enacted to protect government fixed infrastructure tram and train routes from low cost competition by private bus operators. It is arguable that protection of this nature may be in the overall public interest. Irrespective of the merits of this, and the deregulation debate revisited, administrative practice quickly broadened to protect all private operator service "rights" from the threat of any competition by rival operators and the concept of "territories" was born. Responsibility for the cumbersome licensing procedures that accompanied this was vested, until 1988, with the public vehicles section of the Department of Motor Transport. This body treated service licensing as an essentially administrative function and did little to foster improvements to the overall public transport system.

Instead, this relatively recent administrative responsibility rested between 1981 and early 1989 with the Development and Coordination Branch of the Urban Transit Authority which, apart from service development functions associated with its own buses and ferries, also had responsibility for the coordination and development of all forms of public transport in the metropolitan area. While very limited in staff and statutory power, the group responsible for private bus development did make substantial progress in route rationalisation and timetable printing. The general tack adopted was to offer schedule development assistance, within which negotiations would take place with respect to improved levels of service before a timetable was finalised. In addition, a number of cross-regional "Red Arrow" services were introduced. These involved the cooperation of two operators in providing services between major district centres cutting across established "territorial" boundaries.

However, problems remained with this administrative arrangement. In part these reflected a division of responsibility between two bodies with differing perspectives. The problem was compounded by the ambiguous position of the private bus service development function within the government bus operating authority. On the one hand it could rightfully be said that one set of rules applied to government operations and another to private services. Yet the judge of one worked for the other which was widely regarded in the private bus industry as an inefficient operator faced with different operating rules and conditions. If government operation was to be revitalised by movement towards a commercially orientated private sector model it was apparent that the overall government development and coordination function would have to be hived from it.

CURRENT INITIATIVES

The changes now taking place in the regulation of bus services in Sydney are well in train administratively but have a considerable way to go before the new processes envisaged are brought into full operation. The changes involve both statutory and administrative measures which are being introduced progressively. These initially involved the amalgamation of previous Department of Motor Transport public vehicle functions with the planning functions of the Urban Transit Authority. On proclamation of the Transport Administration Act on 16th January, 1989 all these functions were taken over by the Ministry of Transport with the Secretary taking on all public vehicle service licensing functions, including those relating to government operating authorities. The implications of this are examined first. This is followed by an examination of the new order as it applies to government bus services.

The clear intention is to create a level playing field in which all operators, both government and private, are treated in the same way. The manner of treatment involves a retreat from unnecessarily restrictive detail and practice associated with previous legislation and development of means whereby contemporary service requirements can be met by an adaptive administrative system which is planning rather than regulatory led.

Administratively this is being facilitated by the strengthening of the existing regional offices of the Ministry of Transport to include a number of transport planning staff. Apart from providing assistance with detailed aspects of local area bus access these staff have the responsibility of developing an overall view of appropriate service levels and route structures within the metropolitan area. This acknowledges that it is impossible to improve services in a rationale manner if there is no clear understanding both of basic service requirements and operating costs.

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Four approaches to developing this understanding are being developed and may generally be categorised into work on service levels, operating costs, network structures and consumer choice. Each require both detailed interpretation at the local level, together with the preparation of overall conceptual constructs using consultants and head office policy researchers. They each provide areas of research where further studies would be of value in refining service provision in Sydney at the present time.

Levels of service is a topic which is frequently raised but about which there exists surprisingly little conceptual understanding. The review by Ampt Applied Research and Colston Budd Wardrop and Hunt (1989) illustrated that much practical application has been based on dogmatic assertion about such matters as hourly service levels and distance to bus stops. Consequently an attempt was made to examine actual trip needs. However it quickly became apparent that, in a large urban context, sufficient population requiring public transport still existed to justify service levels in excess of the few trips a day needed to avoid a degree of absolute hardship. Interest thus shifted to the concept of appropriate levels of service which were defined as that quantity of service kilometres supplied to an area of given population by a competent operator acting in commercial self interest.

The approach adopted to date is to measure this service level for two control areas in western Sydney which offer an extensive range of services at all times and are widely regarded by the private industry as examples of good commercial practice. The indices so obtained are then compared with services operated in other areas to determine both overall performance and performance within different time slots. Allowance is made for proximity to railway lines affecting overall patronage and the technique can be refined to reflect population density and demographic structure. The approach provides an aggregate means by which different parts of the city or different operators can be targetted for attention in terms of a normative set of criteria which can be employed as a starting point for discussions on service improvement. The method avoids the familiar circular problem of lack of ridership through absence of services being used by the licensed route operator as justification for not improving services.

However, the levels of service study per se is a relatively crude tool which acts as a surrogate for reasonable financial data on operating costs and revenues. This is a crucial issue for many states, including New South Wales, because of the magnitude of payments for school student conveyancing. The research path here, in common with that which has been pursued in other states, is to combine with the private industry in employing consultants to derive an agreed cost structure based on work undertaken previously for the Bus and Coach Association (Travers Morgan, 1987). This will enhance the administration's ability to discuss the cost and revenue implications of service proposals with a local operator and help ensure that government protection of a route licence does not serve to protect an inefficient operator providing a low level of service.

The remaining two research elements are more concerned with the needs of the customer and involve network development and consumer choice. Existing route services tend to have been established for a long time and link residential areas to the traditional local centre, generally the railhead. While this pattern provides access to locations with a good range of support services it does not necessarily follow, under the existing system, that operators will be constantly looking for route service refinements. As long as "territories" remain safe, and income is more to do with school children conveyance and charters than route service, there is the potential for considerable inertia. Research is needed, therefore, into appropriate service patterns for particular groups of clientele. This can take the form of on bus surveying and more wide ranging consultation with the local community and is of particular importance when service changes are contemplated. For instance, there has been much discussion in Sydney on the need for more cross regional, and particularly express, services in the western suburbs, although operators have treated such proposals with considerable caution. However, no research to date has been undertaken into how many potential passengers exist and what their requirements would be. Clearly issues such as these admit to no straightforward answer and may be more to do with long term behavioral change than with measurable short term flows. Nevertheless, if service planning is to be proactive, a considerably enhanced understanding of likely customer response in both the short and long term is a necessity.

Related to this is the need to improve understanding of the overall service package and this was the aim of the attitude survey of bus users commissioned by the Minister for Transport in 1988 (Transport Research Centre and Ampt Applied Research, 1989). For a considerable period arguments have raged over the relative importance of memory timetables, of bus shelters, express services, cloth seating, telephone information services and so on. Nevertheless, no customer appraisal had been undertaken in Sydney and service provision in the bus industry had continued to be engineer led and equipment orientated rather than attuned to customer preferences. As noted in the findings of the attitude study the approach adopted provides not only an improved general understanding but a means to examine particular services. Perhaps of more importance, it exemplifies a particular mind set which is fundamental both to maximising revenue under competitive, bottom line orientated conditions and in optimising the use of social support revenue between a number of competing ends.

GOVERNMENT BUS SERVICES

Many of the approaches outlined above will, in future, apply to government bus operations also. Subsequent to the Transport Authorities Act, 1988 the reconstituted State Transit Authority, is charged with operating commercially and is grasping the opportunity enthusiastically. Increasingly strong requirements for the preparation of business plans and capital works appraisal will assist this process as will appointment of all senior staff on performance based, fixed term contracts.

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As noted previously the Authority was operated until recently as a number of independent functional branches. This is now changing and the new organisation is centred around five businesses of which three represent area based bus companies in Sydney and one in Newcastle. These units amalgamated previously separate branch activities such as operations and engineering at the area level into one unit with bottom line responsibility and the promise of considerable autonomy as regards service development, maintenance and operational procedures.

Of particular significance will be the manner in which these units set about identifying commercial fares and services. The efficiency drive was precipitated by government comment on the substantial losses being incurred. Some of these can clearly be attributed to slack work practices and, for instance, the spare bus ratio is decreasing rapidly with tighter control. In a manner similar to British Rail heavy investment in new equipment is slashing maintenance costs promising substantial savings in the closure of overhaul facilities. However, losses cannot be completely eradicated through productivity savings. Periodical fares are very low for extensive travel in peak periods and there are plenty of services running at frequent headways with very low patronage. In particular local services, such as those connecting with ferries on the lower north shore, fall into this category. It would seem to be only a matter of time before the Board identifies these loss making activities explicitly and puts a price tag on them for government retention. This will raise questions as to what is their social worth and what is the most economic manner of providing them. Further questions will centre around required fare increases to fully recover the costs of otherwise underutilised peak hour capacity or alternatively the development of a deliberate strategy of underservicing at such times.

While contrasted, these sets of issues are interrelated in so far as government payments should theoretically be distributed between them so as to maximise net social benefit. In peak conditions this is related to the role of public transport in relieving traffic congestion and studies are already underway to quantify the positive externalities involved (Transport Research Centre, 1989). While it is clear that a substantial part of the benefit derived from revenue support takes the form of consumer surplus, significant reductions in congestion have been identified also, despite relatively small peak hour elasticities between modes. Modelling exercises of this nature are clearly open to criticism of parameter estimates, for instance in respect to speed-flow, and the validity of generalised estimates to particular routes. Nevertheless, the exercise serves to open up the debate by making more explicit the rather amorphous assumptions behind the previous political willingness to accept loss making CBD orientated public transport systems as a necessary piece of their support infrastructure. Potential extensions of this type of work might compare the value of public transport support in these circumstances to the cost of creating additional road capacity and examining the influence of the public transport system on the maintenance of central area land values. The latter approach has potential as a lever into the argument for supporting transit development through capturing a share of related property value increases.

With respect to social service obligations, similar approaches are needed to those being developed for areas of private bus operation. On the one hand it will be possible to adopt an aggregate levels of service approach to ascertain how many kilometres of bus operation a particular population is receiving, and should expect to receive. However, adaptation of this model would require caution in the manner in which it treats such variables as differing densities, car ownership and propensities to travel. In addition, it will be possible to develop bus costing models based on agreed allocation of overheads so as to ascertain the real costs of continuing a particular level of service. There is the clear inference in such approaches that where the existing government operation is not able or prepared to offer a required service at what appears a reasonable price then the contract will be tendered elsewhere. Of course this introduces the corollary that competitive government services would be in a better position to expand, either through winning services elsewhere or in increasing intensity of operations in existing areas.

THE WAY FORWARD

The view expounded in the foregoing is that appropriate levels of service can be delivered in a cost efficient manner by means of a service licencing system in which the regulator is in possession of a comprehensive data base regarding operating costs and the levels of patronage and service one might expect to achieve in areas of various socio-economic attributes. However, it is unlikely that everything can be achieved by good will and knowledge alone as long as operators cling to the notion of territories and all route licencing applications are appellable. It is precisely this system that has prevented route rationalisation in areas of changing circumstances and unrealistic existing service patterns.

What is required is legislative amendment that will provide for security of tenure for operators meeting accepted industry standards for the area, whilst incorporating realistic provision both for the withdrawal of unsatisfactory operators and for amendment of service networks where the existing system is inappropriate. These ends may well be best served by a contract system in which the level of service is specified and the existing operator in the area is given first choice of accepting the contract for a fixed period of years. This should be long enough to give reasonable investment security, but short enough to permit change in a reasonable period of time. Within this contract structure the operator would be protected from competition, but in return would have to meet stipulated service requirements or face losing the right to operate. Fares would also be controlled, but would reflect the industry agreed formula such that any proven continued revenue shortfall could be identified and either subsidised or level of service reduced accordingly. Contracts could be let for particular routes or, in appropriate circumstances, for areas where a number of operators might usefully combine to operate a new route structure. This, in turn, could either be stipulated or negotiated depending on circumstances.

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What is being developed in New South Wales is an approach to bus service provision that seeks to avoid the perceived shortcomings of substantial deregulation, whilst introducing sufficient flexibility and competitiveness to cope economically and sensitively with changing conditions. The approach is more informed and research orientated than previously and this paper has sought to overview where research directions lay and show how they fit into the overall scenario. Time will tell whether the hybrid animal produced will have the vigour to thrive in the climate of the nineteen-nineties.

REFERENCES

- Ampt Applied Research and Colston Budd Wardrop and Hunt (1989) Public Transport Service Levels : Stage II Report.
- Bus and Coach Association of New South Wales (undated) The \$90 million case for private buses.
- Transport Research Centre, Macquarie University (1989) The Externality Benefits of Public Transport Subsidies.
- Transport Research Centre, Macquarie University and Ampt Applied Research (1989) Attitudes and Preferences Towards Buses in New South Wales.
- Travers Morgan (1987) Costs of School Bus Operations (Draft) Report.
- Urban Transit Authority of New South Wales (1980-81 to 1987-88) Annual Reports.