

COMMERCIALLY VIABLE BUS SERVICES ARE ENCOURAGED BY LEGISLATION IN N.S.W., AUSTRALIA

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SUMMARY

Under the federal system of Government in Australia, the various State Governments have total responsibility for the provision of passenger transport within the State borders. In New South Wales, which is the most populous State, a new State Government was elected in 1988 which had, as one of its aims, the restructuring of the bus transport system.

The new Government investigated the "deregulation" system, that had been introduced in the United Kingdom, as well as the system of competitive tendering for bus operating contracts, that had been introduced in the United Kingdom, as well as the system of competitive tendering for bus operating contracts, that had been introduced in the United States. However, there were two factors that caused concern with introducing either of these systems in NSW.

The first was that NSW had a set of commercially viable private bus operators, serving approximately half of the metropolitan area of Sydney, who received no form of direct Government subsidy. The Government did not wish to destroy the economic viability of that private industry.

The second was that the Government desired a bus system where there were no direct subsidies payable for bus services. Yet under both the U.K. deregulated system and the U.S. contracted system there was still a requirement for some form of direct Government subsidy.

Therefore, NSW proceeded to develop an alternative system for the commercial operation of bus services where no form of direct subsidy was required.

1. MODELS AVAILABLE FOR PROVISION OF URBAN BUS TRANSPORT

In New South Wales, Australia, it is recognized that there are four basic models applicable to the provision of urban bus services, namely:

- (a) Monopoly;
- (b) Deregulation;
- (c) Competitive operating contracts; and
- (d) Competitive franchise contracts

The "**Monopoly**" model is where one organization (usually the State) owns and controls all the urban bus transport in an area, both the operating side and the supply side. Due to the lack of competition in this model, experience in Australia has shown that it leads to gross inefficiencies, from the point of view of both productive efficiency and allocative efficiency, with a consequent drain on taxpayer funds.

The "**Deregulation**" model is where all facets of urban bus transport (operations and planning) are open to market forces and any regulations restricting open competition are only based on safety-related grounds.

Under deregulation, there is still a need for some extent of taxpayer support for public transport. This is due to the lack of cross-subsidy between peak and off-peak services under de-regulation, where competitive forces reduce fare pricing to the extent that there is no longer the ability to cross-subsidize the more expensive-to-operate non-peak services. As most Governments require the retention of these non-peak services on social-welfare grounds, taxpayer funds are used to contract out these particular journeys.

Under the model of "**Competitive operating Contracts**", the operating side of urban bus transport is subject to competitive tendering and is usually privatized as a result. However, the planning side remains in the public sector and is not subject to any competitive forces. Experience in Australia has shown that most productive inefficiencies relating to urban public transport are due to the planning process, with its lack of competitive forces. Consequently, there is still a need for some extent of taxpayer support for public transport, under the model of competitive operating contracts.

Under the model of "**Competitive franchise contracts**", the aim is to eliminate any form of direct taxpayer support for urban passenger transport (other than user-based subsidies), while still achieving competitive forces in both the operating and planning areas. Each contractor has a franchised region or route of a size of approximately 50 buses. There are minimum service standards set which require the operator to provide a certain level of non-peak services, which must be cross-subsidized by the peak services. As a result, there is no requirement for direct taxpayer funding. In fact, experience to date in NSW indicates that all urban areas will be provided with non-subsidized commercial bus services.

It should be noted that the term "user-based subsidies" related to the situation where the Government nominates that certain members of the community (e.g. pensioners) will be granted fare concessions. Consequently, the Government reimburses the operator for the part of the fare foregone, based on the number of journeys made. This compares to direct subsidies which are not based on social welfare fare reimbursements.

Under the pure application of the "competitive franchise contracts" model, competitive tenders would be called for each franchised region or route, which would be judged on service standards rather than price. The contracts would be for a fixed term, long enough to take account of the high level of capital investment required, and would be subject to some degree of competitive tendering at the expiry of the contract term. Competition would also exist between franchised areas, where operators strive to exceed the minimum standards, as described in Chapter 5 of this paper.

The introduction of any new model for the provision of urban public transport in a particular city must take account of the existing transport systems in that city as well as the history of providing transport in the area, in order to be securely based. This was the case in NSW, where the pure "competitive franchise contracts" model was adapted to suit the unique situation that existed in Sydney. This adaptation is explained in Chapter 3 of this paper.

However, in order to comprehend the reasons behind the introduction of this particular model in NSW, it is necessary to briefly describe the history of urban bus services in NSW:

2. HISTORY OF NEW SOUTH WALES BUS SERVICES

Prior to 1930, private buses in N.S.W. competed openly with trams and trains. In 1930 and 1932, Legislation was introduced which basically prohibited such competition. Consequently, the only bus routes remaining were those which fed to the tram or train routes.

Later in the 1930's, the Government Tram Operator commenced new bus routes which supplemented tram routes with the result that, by the Second World War, nearly all the buses operating within the area serviced by the tram network were Government-owned.

Up to the 1950's, the Government-owned bus services were relatively self-supporting. They operated in the then densely-populated inner suburbs around Sydney and Newcastle (about a 20 km radius from the city center). On the other hand, the remaining private bus services, which fed the trains or trams from the less densely-populated outer suburbs and cities, were only showing marginal levels of profits, at best.

In the late 1950's and early 1960's, the Government replaced its tram services with Government-owned bus services, on the grounds of economic savings. However, the replacement bus services were not measured for profitability or viability, but instead were measured by the savings achieved compared to trams. Consequently, Government bus services were introduced which, by their structure, were inefficient and unprofitable. However, as long as they were less costly than the tram services they replaced, they were deemed to be worthwhile. Consequently, the cost of operation of Government-owned buses increased substantially, since the inefficient work practices that applied to the tram-replacement buses soon spread to all other Government-owned bus services.

At the same time, from the 1960's onwards, residential expansion commenced to take place in the outer suburbs, serviced by private bus operators. Each private operator received a license (or franchise) to operate a particular route or group of routes. Each license granted the holder immunity from competition.

During these years of outer-suburban private bus industry growth, various governments indicated that consideration was being given to the replacement of these private buses by Government-owned buses. However they were unable to proceed at any stage, owing to the financial difficulties that would have been created by the replacement of non-subsidized private services with Government-services which, by that period, required sizeable taxpayer support.

During the 1970's, the Government progressively relaxed the eligibility for free school bus travel within N.S.W., which resulted in a substantial increase in bus patronage by school pupils. The end result of this progressive relaxation is that today, in N.S.W., all pupils living in excess of approximately 1.6 km (radius) from the school (approximately 60% of the total number of pupils) are eligible for free travel.

The substantial patronage increase, resulting from this liberal free-school-travel policy, was greatest in the outer suburbs which were serviced by private buses, since this was where the majority of "young families" resided in the 1970's and 1980's.

While this school pupil patronage and revenue explosion assisted private bus operators, it also created immense capital funding problems, because of the number of additional buses that had to be rapidly bought for only peak-period utilization. However, the private bus operator's association, the Bus and Coach Association of NSW (BCA), resisted any suggestions of Government assistance towards capital funding (e.g. subsidies), as

was being adopted in some other States of Australia, in spite of occasional urging by Government.

BCA (NSW) always argued strongly against any form of subsidy for buses. It reluctantly accepted re-imbursment of fares for certain classes of passengers (e.g. re-imbursment of child's fare when travelling to and from school; or re-imbursment of half fare for pensioners). However, there was strong and successful resistance to any form of subsidy for the bus service itself. Even school buses in the urban areas are not on a contract or charter basis (i.e. payment per bus) but are on the basis of re-imbursment for the route fares involved. Bus operators wanted to ensure that private route bus services never progressed in the direction of the Government bus services in N.S.W., where normal cost-benefit measurements had been eliminated because of subsidy distortions.

However, in some cases, especially in the fringe semi-rural suburbs, a degree of cross-subsidy has existed between the Government-funded school bus services and the route or stage-carriage services. In those fringe suburbs, the current level of route service would be reduced if the free school travel scheme was materially downgraded. On the other hand, in the more densely populated suburbs where school travel only occurs over short distances, the route or stage-carriage services actually cross-subsidize the school services.

Similarly, NSW private bus companies have not requested or received any subsidies for the unprofitable weekend and late-night services, which attract penalty wage rates, in spite of occasional urging by the Government. Rather, in return for being granted a franchised catchment area or set of routes, the unprofitable off-peak services are cross-subsidized by the profitable peak services within the franchised area.

In the early 1980's, there was considerable criticism of the private bus industry because of the lack of cross-regional bus services which could traverse the catchment area boundaries. In fact, it was being suggested in some quarters that this was an inherent deficiency in the private bus franchised system and could only be solved by nationalization of private bus services. A number of private bus operators therefore banded together to form new cross-regional routes. These new cross-regional routes, which traversed franchised boundaries on a pre-determined share basis, satisfied the nominated demand and effectively silenced much of the criticism of the private bus industry.

However, in 1985, following pressure from the Government bus drivers' union, the Labor Government at its annual policy-making conference decided that the Government bus employees should share in the public transport growth in the outer suburbs by proposing the transfer of some privately-owned bus

routes to the public sector. (By 1985, as is currently the case, approximately 50% of the buses in metropolitan Sydney were privately owned).

BCA's concern about this policy decision led to the employment of transport consultants (Travers Morgan 1985), who identified that the cost of operation of publicly-owned buses was double that of privately-owned buses and who identified that, for every publicly-owned bus on the road there were 4.7 employees, whereas for every privately-owned bus on the road there were 1.4 employees.

In response to this threat of partial nationalization, the bus industry embarked on an extensive public relations campaign, aimed at convincing the public and the Parliamentarians of the financial ramifications of such a move. This campaign included the release of a most effective booklet entitled "The \$90M Case for Private Buses" (BCA 1986). A couple of the more effective statements contained in that booklet include: "If the Government bus subsidy were given to private operators in Sydney, Newcastle and Wollongong they could provide totally free bus services, operating 24 hours per day, 7 days a week"; and "A total private bus system in N.S.W. would save taxpayers \$90 million a year, without any decrease in service levels".

As a result of this public relations campaign, implementation of the June 1985 nationalization decision was deferred until the elections in 1988 when there was a change in Government in N.S.W. This resulted in any form of nationalization being deleted from the agenda.

3. THE OPTIONS AVAILABLE IN 1988

Like most new Governments in the World today, the incoming N.S.W. Government was faced with increasing social welfare demands and a likely decrease in the availability of funds. Therefore, in a priority list of social welfare needs, transport could not out-rank such areas as health, education and law-protection. Consequently, the Government saw a need to reduce expenditure on transport yet, at the same time, to increase service levels.

To achieve this, the Government-operated network had to become more efficient. The choice was whether to proceed down the British path or de-regulation, whether to accept the franchised system that existed in the N.S.W. private bus industry, or whether to choose a contracted system as existed in London under London Regional Transport.

Under the contracted system, only the operating side would be subject to competitive forces while the

planning side (which usually remains in the public sector) is not subject to any competitive forces. The new Government as well as the private bus industry both believed that competition should be encouraged in all facets of bus services, including planning.

Furthermore, in the research carried out by Travers Morgan (1985) the difference in cost of services between the public and private sector was most pronounced in the administration area. The actual driver's wage component of the cost difference was relatively small. Consequently, the use of contracting did not address the area in the public sector where the greatest savings in taxpayer funds could be made.

There were two major concerns about adopting deregulation along the British lines. The first related to the presence of a viable private bus industry operating in the outer suburbs on a franchised-area basis. There was concern about destroying this successful franchised private sector system in order to achieve (at that stage) an untried system.

The second concern regarding de-regulation related to the lack of cross-subsidy between peak and off-peak services, which results in the Government having to contract-out and subsidize these non-peak services. In the outer suburbs, where the private sector was providing these off-peak services without taxpayer subsidy, this would have resulted in an increase in Government funding, which was not an option available.

Furthermore, reports from Britain indicated that deregulation had produced patronage declines, whereas the retention of franchises in London had produced patronage increases (Peter R. White, 1991).

Nevertheless, even though the contracted system and the de-regulated system had been ruled out for the reasons outlined above, the Government was still not happy with the franchised system that previously operated in the outer areas of Sydney. It lacked any real performance standards, it was not subject to any significant competitive pressures and it required a costly level of regulation.

However, it was believed that these problems with the franchised system could be overcome by introducing the model of "competitive franchise contracts" (as described above), suitably modified to take into account factors that specifically related to NSW.

The main factors that caused a modification to the pure model of competitive franchise contracts were as follows:

- (a) The private bus industry had undergone a period of severe uncertainty, due to the previous Government's nationalization proposals. It was believed that, by introducing competitive tendering to all existing commercial bus businesses, it could lead to a further lack of confidence resulting in existing operators leaving the industry. Therefore, in order to preserve and build on the existing commercial private bus network, the initial contracts were awarded to existing operators, subject to the operators agreeing to the minimum performance standards.
- (b) The publicly-owned bus operation was still in existence and was being gradually made commercial over a period of 5 years, with a gradual withdrawal of subsidies. Any competitive tendering for existing services, prior to the establishment of a level playing field between the public and the private sector, could have produced distorted results.

As a result, the Passenger Transport Act, 1990, was introduced which incorporated the model of competitive franchise contracts. The Act sets the framework for non-subsidized bus services, the major provisions of which are to:

- (a) De-regulate all bus services where passengers travel over 40 kilometers;
- (b) For urban bus services and those other services where passengers travel less than 40 kilometers, issue performance-based contracts on a franchise basis, with competition between franchise areas.
- (c) Over a 5-year period, gradually convert the Government-owned bus services into a series of corporatized or privatized entities that can achieve the standards of the private sector and can operate under identical non-subsidized ground rules.

The following paragraphs briefly describe the major components of the new Passenger Transport Act.

4. PASSENGER TRANSPORT ACT 1990

In order to register buses, a prospective operator must be accredited. Operator accreditation is not a barrier to entry into the bus industry. Rather it is a means of ensuring any operator is capable of meeting minimum safety and maintenance standards.

Operator accreditation is the only pre-requisite for partaking in the de-regulated segment of the bus industry, namely:

- bus and coach hirings;
- bus route services over 40 km;
- courtesy buses, etc.

However, if an accredited operator wishes to partake in regular route bus services of less than 40 km, then it is necessary to enter into a performance-based contract.

The more densely populated parts of N.S.W. have been divided up into regions (or in some cases lines of route) and contracts are issued for the franchise to operate exclusively in that region or on that route. However, any cross-regional routes operating into the franchised region which are provided by a third party are specifically shown on the contract and are exempted from the exclusive rights.

The size of each franchise region is controlled so that:

- (a) It is not so small that there is insufficient peak patronage and revenue from which to cross-subsidize off-peak night and/or weekend services. Broadly, this usually results in a lower limit of about 10 buses.
- (b) It is not so large that, should there be the need to re-tender the contract due to lack of performance or other reasons, there could be only a restricted number of bidders with the capital resources to tender for the service. Broadly, this usually results in an upper limit of about 80 buses.
- (c) It is permissible for one accredited operator to be the contractor for two or more franchised regions.

The Government nominates a pre-determined level of user-based subsidies where some people in the community (e.g. pensioners, certain school children, etc.) have part or all of their fares paid by the Government.

Once revenue from these user-based subsidies is taken into account, the contracts are classified as either "commercial" or "non-commercial". A commercial contract is one that is self-supporting at pre-determined levels of service and fares.

Existing operators in a franchise area who meet the size requirements outlined are offered the first opportunity to accept a commercial contract, which lasts for 5 years.

If the existing operator is not able to accept the contract on a commercial (self-funding basis), at the pre-determined levels of service and fares, then tenders are called from outside parties to operate the franchised area on a commercial basis.

If no operator is willing to provide the service, then the Government must declare whether the service is required on social-welfare or public-interest grounds. If so, tenders are called (on a rate per bus) for the provision of the level of service that the Government declares is necessary. Such non-commercial contracts are issued for shorter time periods so that the market can be regularly tested to ascertain whether a new operator is willing to operate the service on a commercial (self-supporting) basis.

If services are required in a new area, or if an existing operator fails to meet the required performance standards, then tenders are called for the operation by outside parties of the franchised area on a commercial basis.

The evaluation of tenders called for commercial contracts is not based on price. Rather, it is based on the extent to which the prospective tenderer is willing to exceed the prescribed minimum service standards (e.g. service frequencies, fares, fleet age, etc).

During the life of a commercial contract, the Government can vary the boundaries of a region or can institute new cross-regional services if they are considered to be in the "public interest". The concept of public interest has been quantified for the purposes of contract variation, as outlined in Section 6.

At the end of the 5-year commercial contract term, the holder has reasonable expectation of renewal if he has met the performance standards and if he has shown a degree of innovation in his service provision which has resulted in his standards not being substantially below the industry average.

There are four main service standards, namely fares, frequency levels, fleet standard and operational performance. The threshold for each of these standards is set at the average achieved by commercial operators. Operators are encouraged to provide service standard levels that are better than the threshold. As this occurs, the average improves and consequently the threshold improves over time. In this manner, there should be constantly improving levels of service standards. The concepts of averages and service standards are outlined below.

5. SERVICE STANDARDS - FARES

The Act stipulates that a commercial contract must fix a scale of maximum fares which is set at the "average level of fares for the time being prevailing in the industry for comparable (commercial) services".

For the purpose of this clause of the Act, services have been divided into city-urban, country-town-urban and non-urban. Three maximum fare scales based on standard section lengths have been calculated (using the current averages for commercially viable services) within each of these three area.

Operators are encouraged in their contracts to provide marketing-based discounts to promote travel at times when service provision is less costly to provide. Consequently, this has an effect on the "average levels of fares for the time being prevailing" with the result that, over time, there should be fare reductions based on the

achievements of the more efficient and more marketing-oriented contractors.

6. SERVICE STANDARDS - FREQUENCY LEVELS

Under the previous legislation, the majority of private bus operators carried out their obligation to provide cross-subsidized night and weekend services. However, there were loop-holes in the previous legislation that allowed a minority of private operators to avoid providing these off-peak services.

Consequently, one of the corner-stones of the new legislation was to quantify a commercially viable level of timetable frequencies, especially at nights and weekends. As a result, a "Minimum Service Levels" model was constructed to meet this requirement. The "Minimum Service Levels" model was also constructed to quantify the "public interest" requirements under the Act for additional service provision.

The Act states that "in fixing the scale for a service to be carried on under a commercial contract, regard should be had to the average service levels for the time being prevailing in the industry with respect to communities which have similar population densities and which are in other respects comparable".

For the purpose of this clause of the Act, services have been divided into city-urban, city-urban-fringe, country-town-urban and village-to-town. Four minimum service level models have been developed, using the current averages for commercially viable services, within each of these four area classifications. Full details of these models are contained in documents entitled "Minimum Service Levels, Urban Areas, November 1990" and "Minimum Service Levels, Non-urban Areas, April 1991".

Operators are encouraged to provide service frequencies in excess of the minimum standards set in the model. They are also obliged to provide service frequencies in excess of the minimum, when demand on their particular route exceeds the supply stipulated under the minimum standard. This has a growth effect on the "average service levels for the time being prevailing", with the result that, over time there should be constant growth in the minimum threshold levels due to the actual growth in frequency provision by the industry leaders.

The "Minimum Service Levels" model is based on the concept of "patronage potential". The patronage potential of a region or route is based on the population residing within the catchment area, discounted for car ownership, discounted if within 400 meters of competing transport services, and discounted if within walking distance (1.5 kilometers) of the city center destination or the rail interchange station. Population density is then taken into account by measuring the net patronage potential per route kilometer.

Each contract region or line of route is then given a grading, based on the patronage potential and population density of the area. Within each grading, the average service frequency of existing commercial bus services has been calculated during different time periods (e.g. peak-hour, shopping off-peak, nights, Saturdays, Sundays, etc.).

The average frequency levels, which form the minimum standard, represent the frequency of opportunities to egress from the residential area to the city center, and/or rail interchange, and/or regional shopping center and/or other nominated significant patronage generator.

The minimum service levels model also stipulates the requirements for designing bus routes, once again based on current averages. For instance, in the urban areas of large cities, 95% of residents must reside within 400 meters of a full-time bus route and within 800 meters of a route that operates late at night and on Sundays. In the more rural areas, 85% of residents must reside within 400 meters of a bus route. Operators are required to amend their routes to satisfy these criteria.

The net result is that, in the cities of Sydney, Newcastle and Wollongong, 95% of all residents live within 400 meters of a full-time bus route that is totally self-supporting through the fare box.

As stated previously, the Government can vary the boundaries of a region or can institute new cross-regional services if they are considered to be in the "public interest". The "Minimum Service Levels" model quantifies public interest as being where the "patronage potential" for the required service is in excess of the threshold set by the Minimum Service Levels model.

7. SERVICE STANDARDS - FLEET DESIGN

As with the other service standards, fleet age is based on the average age for the time being prevailing in the industry. All operators of commercial and non-commercial contracts must comply with the fleet age requirements, averaged over the whole fleet (as distinct from applying to individual buses).

Operators with an average fleet-age better than the industry-average age are showing no inclination to defer their fleet replacement schedules. However, operators with fleets older than the industry-average age are forced to accelerate their fleet replacement schedules. Consequently, the industry-average age is a moving threshold which will deliver an increasingly more modern fleet over time.

The Government has the power to stipulate improved standards on new buses, especially relating to the needs of partially disabled passengers. The industry-average fleet age concept ensures that these new bus improvements are progressively spread throughout the entire bus fleet.

8. SERVICE STANDARDS - PERFORMANCE

Each contract stipulates appropriate standards in punctuality, driver-training, timetable and information displays, customer inquiries, etc.

The procedure adopted to ensure adherence to these performance standards is one of self-regulation. The operator is obliged to keep records of his monitoring of performance and of remedial action taken, where required. Any breaches of performance standards reported to the Regulatory Authority are checked against the monitoring records and remedial action records, which must be retained by the contractor.

As a result of this reliance on self-regulation, the NSW Department of Transport (the regulatory authority) has already reduced its staff levels by over 30%.

9. CONSEQUENCES OF THE NEW ACT

For the first time, concepts such as "minimum timetable frequencies required" and "public interest requirements for new services" have been quantified.

Due to the concept of minimum service standards being based on current industry-average standards, there is a constant improvement in standards due to an increasing average.

Competitive tendering for existing bus services has been postponed in NSW for 5 years, due to the need to strengthen the current private bus industry. However, competitive tendering has been implemented for all new services. Furthermore, competition has been developed. Competition has been developed between franchised areas by means of:

- (a) Tendering for new services, where tenders are evaluated on service standards;
- (b) Tendering for services which do not meet the service standards, especially those where the standards fall well below the industry average (i.e. the minimum standard).
- (c) The requirement that all contractors progressively lift their standards to at least the industry average.

The public-sector bus services have approximately two years remaining of the transition period. After that, they can no longer rely on direct subsidy because any "non-commercial" services must first be tendered out to outside parties in an attempt to provide a self-funding "commercial" service. Hence, the public-sector operations are rapidly shedding excess costs.

Having received a 5 year contract, with expectation of renewal if service standards are met, operators have the security of tenure which enables long-term fleet investment programs to be undertaken.

10. REFERENCES

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