

THE PRIVATE SECTOR AND PUBLIC TRANSPORT :
EFFICIENCY, COST AND COMPETITION

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ABSTRACT: *It is now accepted that private operation of public transport is an option which produces financial savings and operational advantages. The problem is now how to best utilise private operators so as to maximise these benefits, in the context of the monopolistic integrated public transport operations of today.*

Current developments in the United Kingdom and the United States are addressing this issue in a practical way, and are reshaping perceptions of how public transport services should be provided.

The paper looks at these developments, and early results, and suggests how competition could be used to improve efficiency and reduce costs, in the Australian urban bus operating environment.

1. INTRODUCTION - CHANGE IN PERCEPTIONS

For some years the accepted wisdom in the public transport community has been that to best meet users' perceptions of a good public transport system, ie. safety, comfort, accessibility, reliability, and cost and operational efficiency, what was required was one which:-

- * Presented a unified system
 - integrated in the sense of one ticketing system covering the whole network
 - co-ordinated in the sense that where connections are required they are available conveniently and quickly
- * Achieved economies of scale
 - it being assumed that large operations were inherently more efficient than small, and could therefore provide a better standard of service, more efficiently.
- * Avoided service duplication
 - with the aim of maximising efficiency.

"The long range goal of system integration is to incorporate all components of urban transportation into a single co-ordinated planning and operations program that can make the most efficient use of available transport resources, to ensure urban mobility within a wide range of modal options to better serve the users" (Remak in Gray & Hoel, 1979)

Much effort has been spent in pursuing these goals over the last two decades - consolidation of operators, integration of fare systems, through routing, co-ordination of timetables, and maintenance of low fare levels. Obviously these goals have affected the perceptions of the role of private for-profit operators in a total system, and the relationship between public ownership and control, and private operators.

"Of the several organisational alternatives, mergers appear to be the most effective in achieving a high degree of transit integration. A single authority is able to function more efficiently and with greater flexibility than are associations of essentially independent public and private transit operators". (Remak, *ibid*)

These goals may have been appropriate to the conditions of the 70's when they were first articulated, based on experience of the public transport market of the 50's and 60's. What is happening now is that these accepted aims are being questioned and more importantly challenged in the operational arena, because what has developed from the pursuit of these goals is expensive in terms of subsidy and inappropriate to many of the markets which public transport is now expected to satisfy, and will be expected to serve in the last years of the 20th century.

Formally or not, consciously or not, the following are major issues which are now being addressed:-

- Who will finance, operate and own the mean of transport.
- Will the operation and control of urban passenger transport be fragmented or centralised.
(Johnson & Pikarsky, in Löwe, 1985)

Historically, at least since the 1930's, development has been away from a free market system in which separate for-profit operators provide service, which as they see it best satisfies the market, to publically owned and/or operated monopolies. Thus in Australia since the 1930's private operator routes and fares have been controlled. In Perth and Adelaide private operators were consolidated into the public monopoly operation. In Melbourne they are now contracted to the public monopoly thus becoming an effective part of it, and in Sydney changes to revenue reimbursement practices, and threats to private operator routes, demonstrate that the process is continuing in this country.

By contrast, what is happening overseas is that the old goals of integration and co-ordination are being revalued, and the standards upon which efficiency is assessed are being changed. Australia is behind in this trend, but the huge increases in operating subsidies necessary to maintain our monopoly system are gradually leading to a reassessment of these old goals here too.

Consolidation of ownership and operation have hidden costs:-

- Cost of physical co-ordination in the provision of supervision and other arrangements.
- Cost of communication and providing information within the organisation.
- Cost of reduction of flexibility to react to changes in markets.
- Cost of stultified initiative.
- High labour costs/low labour productivity resulting from monopoly labour bargaining power.
- Cost of inappropriate operation. Not all traffic is regional and there are important local markets, which a monopoly can find difficult to identify.

Consolidation refocuses the provision of service from serving people to serving the system.

"Consolidation has contributed to the reduction of a once vibrant all-be-it chaotic industry, to a lumbering moribund giant which has little relevance to the way we live today.
(Johnson & Pikarsky, *ibid*)

This comment should not be taken to apply only to public operators.

Coupled with this revaluation of how service is provided is a reconsideration of who should finance the operation and the provision of assets, and by how much. There is continuing political support for the maintenance of some public financing, because it is realised there is a level of public benefit derived from a transit system. But it is now realised that this benefit does not justify the scale of subsidy provided in the past. Thus there is more consideration of the relationship between who pays and who benefits from the system (in the widest possible sense), including passengers who benefit from an increase in mobility, those who benefit from a reduction in congestion, those who benefit from the increase in saleability of development sites, and those who benefit from an increase in the sources of "transport-satisfied" staff.

2. DEVELOPMENT IN THE UNITED KINGDOM

Background

The background to the changes in the U.K. were falling ridership, increasing fares and subsidies, "good reason to suspect wide spread inefficiency" (Palmer 1987) and a complex system of cross subsidisation between routes. The government decided that the cure was to be found in competition, and in support pointed to the results of deregulation in long distance coaching in the U.K. which produced a better quality of service and lower fares, and had opened up a new commuter market into London. Secondly it believed that deregulation of air services in the United States had generated new service patterns, wider choices, and overall lower costs and fares. Thirdly it was believed that the trial areas in England had demonstrated there were opportunities for change in the provision of local bus service, even in the presence of large public monopolies.

Some options were rejected including "franchising". Franchising involves competition "for a market rather than within the market" (Kilvington, 1986). In other words competition for an area or group of services, not competition on the route itself. It was thought that the major role in producing an efficient route network within a franchise area would fall to the transport planner and there would be no opening for an entrepreneur.

It was decided that the advantages claimed for a franchise solution, i.e. the ability to produce a comprehensive timetable, networking advantages, co-ordinated services and ticketing systems, straight forward marketing, and service stability; were outweighed by the anticipated benefits of competition.

There are four pillars on which implementation of deregulation is intended to rest. Firstly controls were retained and stiffened in safety related areas. Subsidies are available for socially needed services, and arrangements can be made for concession fares.

Secondly, as far as possible, size of operation was to be equated so that competition would be fair. It was felt that if a large organisation, particularly the National Bus Company, was able to dominate local markets and stamp on any competitors which remained, the market place would be inhibited from the start.

Thirdly the transition was to be managed to produce a compromise between the need to tender for subsidised services, the need to allow operators to quickly modify their businesses, and the need to reduce the risks of major service disruptions on the day deregulation was introduced.

Lastly there would be rules for the market place and these were generally in the areas of safety, and registration of service, that local authorities would know which services the market would provide, so that others could be provided by subsidy - this is intended to produce a measure of stability and control of reliability in the transition phase. Rules regarding excessive congestion are supposed to control problems on busy routes over busy streets. Legislation already in place against restrictive practices was extended to apply in the public transport area to provide defence against predatory pricing or other conduct designed to extinguish competition by the excessive use of market power, and other potentially restrictive practices generally related to the provision of integrated and co-ordinated services.

It should be noted that these latter points are all areas in which the franchise solution claims to have an advantage, but the stance was taken that they must be proved to be an advantage to the customer.

While it was generally agreed that some action had to be taken to improve the efficiency of urban bus services within the United Kingdom, there were criticisms and they include:-

- The time allowed for the introduction of the policy was not sufficient for such a major transition and a phased approach would better allow both operators and passengers to adjust to the new arrangements.
- Within the conurbations, where efforts had been aimed toward developing integrated and co-ordinated systems, the policy could be potentially totally destructive.

- Popular routes and areas from which good patronage would be derived would be overserved and areas of low demand and therefore commercially unattractive would be neglected.

"The net effect of all these changes may well be that all those gloomy predictions of route withdrawals in rural areas are likely to come true. On the other hand passengers on profitable main services can look forward to more buses and lower fares. Overall, once again, consumers are likely to gain - but it will be at the expense of a poor lookout for some" (Kilvington, 1986)

The final decision was the deregulation policy would apply outside the London area from the 26th October, 1986.

Results To Date

"There is no precedent anywhere for what is happening to (the English) bus and coach industry. But if deregulation works (there) it is fair to spread far". (Bus Business 1986)

Some have anticipated similar development in the bus industry as happened in coaching after the 1980 deregulation, which ultimately favoured established larger operators and the major area of competition was in the intermodal area between coach and rail.

"What has become clear is that established operators can possess great strength. They are already known in the market and they should know the market, and as it has turned out their staffs become very responsive when faced with external threats" (Bus Business 1987)

While it is too early to come to any definite conclusions, some observations on development can already be valuable.

It appears that to date potential small and mid-sized new entrants are generally unwilling to make the big step into commercial operation and if they do, find it difficult to withstand the high cost of establishing themselves except by operating on the most profitable existing routes.

A fresh start and a new operator can provide scope to improve operational efficiency and vehicle usage. But in improving the overall efficiency of an operation, cross subsidies not between routes, but between classes of users, (eg. between full fare and concession passengers), and the provision of ancillary services such as timetables and route information is likely to suffer.

There has been some limited but interesting examples of competition, for instance one route pre-deregulation had an hourly service seven days a week. Now the service has two buses an hour, achieved by diverting another service off a quiet road, where the patronage was less. However the last bus operates at 1800 hours and there is now no Sunday service. The major operator provides a timetable with this information. What is not contained in that timetable and is therefore difficult to find out, is that another operator provides the service on the same route after 1800 hours and on Sunday.

As a further illustration "it was claimed that an inspector employed by Blackpool Transport Service Ltd. had received hospital treatment after a bus belonging to ... Easyway Bus had deliberately been driven at him, knocking him out of the way in the town's Talbot Road bus station. The Easyway bus then pushed a Blackpool transport services van parked in the bus stand out of the bus station before reversing back onto the stand. It was said Easyway maintained that Blackpool Transport had illegally run early and massively duplicated service, and had stored buses on stands for long periods in order to extract traffic from Easyway ... it subsequently came to the commissioner's attention that the following day (an Easyway traffic assistant) was removed from the bus station by the police on four occasions after lying down in front of vehicles".
(Bus Business, December 1986)

Passengers in the West Midland PTE area which has maintained about 90% of its pre-deregulation network with commercial and tendered services, now have the problem of understanding what services are provided as in some cases two or even three companies may be operating a route at different times of the day or week, and West Midlands Travelcards will not be accepted by all operators on these services.

It has been noted that bus stop "ownership" has meant that new entrants are not able to display timetables and route numbers on existing bus stops. The end result is confusing for the public and commercially advantaged incumbent operators owners of the stop, because of an established past monopoly.

"In theory the urban area passenger is supposed to gain from lower fares if cross subsidy is cut out, but as yet there seems to have been little evidence of this. Instead the forms for competition so far evident appear to have been largely predatory in nature with attempts to swamp the normal level of service by much larger numbers of vehicles than would be needed to carry all the passengers likely to appear. I must confess that I used to regard the phrase "wasteful competition" with some mistrust ... but the gross overprovision of empty seats clearly is wasteful and will in due course have to be paid for by one means or another" (Townsin, in Coaching Journal, February 1987)

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"The normal remedies (for rationalising service) available in the 20's, the buying out of the smaller operator by the larger, or the conclusion of area agreements and/or joint operation are not possible, or are difficult as they are seen as being "anti-competitive", a fight to the finish approach seems to be mandatory". (Townsin, 1987)

One report states that commercial competition since deregulation has been limited with a maximum 10% of routes in any one authority area being affected. The number of operators providing commercial service has remained fairly static, and little commercial innovation has taken place. Fare levels have remained static although there has been a trend towards withdrawing student concessions.

"The tendering process for non-commercial routes has appeared to reduce the cost of revenue support by about 30% but on the other hand there are significant additional costs to be born by county councils such as publicity and administration". (Association of County Councils, reported in Bus Business, January 1987)

It was expected that at the end of the 3 months standstill period after deregulation (after 26th January) there would be many deregistrations of commercially unsuccessful services. At this stage it appears that "more than 90% of existing services continued unchanged, and additional routes registered mean an increase in overall services nationally." "What is certain is that critics of deregulation are now relying on detail rather than disaster for their argument. A crumbling edge of vehicle quality and publicity, a lack of through ticketing and particular individual operator shortcomings are now most often cited as the drawbacks of government policy" (Bus Business, February 1987). Relatively small subsidies have been required to fill in gaps caused by deregistration of previously registered commercial service and the surrender of tenders has not greatly altered the stated savings of £40 million per annum from the initial tenders nationally.

However it has also been suggested that the full shakeout has not yet happened, many operators having registered what are in fact non-commercial services in order to obtain market share, and have been prepared to accept less than adequate return. Cross subsidisation has therefore been maintained in these instances, and the next few months will indicate whether competition will eliminate these remnants.

Development In London

In contrast to the rest of the United Kingdom, London Regional Transport is moving ahead on what is effectively an area franchise system and plans that 20% of its bus mileage will be operated by competitively tendered contractors by March 1988, and in addition many routes previously operated by London Country Buses will be operated by successor companies on a cost contract basis. It is notable that with one exception, successful tenderers for former London Transport routes where conventional buses are to be used, have tendered on the basis of secondhand and not new vehicles. London Buses in its most recent successful tender will refurbish double deck buses now used as training vehicles and will offer existing staff new employment terms including longer hours and lower wages.

Minibuses

The minibus experiment which began in Exeter in fact predates deregulation. The main aim is on appropriate routes to maintain the number of passenger seats per hour but at a higher operational frequency. As a result some services after conversion to minibus operation have doubled the number of passengers carried. This increase in patronage appears to be related to frequency increase, and the unexplained perception that minibuses are seen to be an up market means of transport while conventional buses are seen as distinctly down market. This, despite early design problems including less than convenient access including inappropriate floor and step heights, and narrow doorways, the position of the door in relation to the driver's position, and the need to provide wider seats and aisles. From early analysis it appears that the increase in productivity is more related to reduced round trip times as a result of shorter and/or fewer stops, and better manoeuvrability, than any cost aspects such as lower wages, purchasing and capital costs.

The replacement of conventional service by minibuses giving the same hourly seat capacity has been calculated to increase total cost by 70% for a 200% increase in service miles. This requires an 80% increase in passengers to maintain the same profitability.

Other advantages include greater access and penetration into housing estates, the additional convenience of hail and ride operation, and an increase in vehicle speed. Against these are set disadvantages of poor boarding access and poor in-vehicle space. (Turner & White, quoted in Bus Business March 1987)

3. DEVELOPMENT IN THE UNITED STATES

A similar reappraisal of the financing and provision of public transport is occurring in the United States, because of changing economic, demographic and fiscal conditions. It is not just concern with increasing costs which has caused the rethink, although they have dramatised the situation and lent urgency to remedies. There is also an understanding that the market for traditional transit is changing and that fixed route operation on set schedules are not necessarily appropriate when destinations are no longer sharply focused on the CBD.

"Trip origins and destinations are widely dispersed. The largest residential and shopping centres are often found in the suburbs and travel patterns resemble Brownian Motion - they appear random in nature and are taking place in every direction at once". (UMTA, 1985) Not long ago "federal transportation policies (promoted) system integration in this country, not only in transit services, but of all urban transportation resources". (Remak, *ibid*)

Several basic principles inherent in this statement are now being questioned. The first is the relevance of a single agency carrying out the functions of sponsoring (planning, financing and arranging) and providing (operating and delivering) public transport service, there is a trend towards considering existing transit agencies as only one amongst several potential suppliers of service. Elected officials are starting to think of themselves as prudent purchasers of service in a competitive market. In Minneapolis/St. Paul a "special legislative study commission" has concluded that it is inherently wrong for a single agency both to provide transit service and to have a policy making role that gives it the power to freeze out or discourage competition". (UMTA, 1985)

A second principle being reappraised is the proposal that one organisation should be the only provider for transit service for an entire area. As previously noted there is evidence that centrally run region wide systems "are not necessarily the most efficient and ... may suffer from diseconomies of scale". (UMTA, 1985)

"It is proposed that what economies are gained through large scale operating efficiencies are lost because of heavy overheads, rigid overstuffed organisation, formalised labour management relations, huge employee pension commitments, and large fleets of expensive equipment". (UMTA, 1985)

It is also seen that community based transit will improve the responsiveness, accountability and quality of service in the local area, as small scale providers can be more flexible in adapting to changes in the local demand.

On the other hand decentralised service delivery does pose problems of unco-ordinated operation, potentially leading to a "crazy quilt" system which does not meet the needs of regional travellers and in fact may damage the CBD.

"The importance of competition is being recognised. The structure of public transit is fatally flawed in that it is non-competitive. Without structural change that incorporates competition, transit costs will continue to escalate. Transit must obtain the cost controlling incentives inherent in a competitive environment". (Cox, 1987)

The U.S. approach is fundamentally different from that being taken in the U.K., in that it is intended to maintain the benefits of co-ordinated and integrated services, and thus the trend is towards competition for cost contracts for specific areas or services related to particular market segments, thus the importance of the planner in the overall scheme of things is preserved, and the potential for entrepreneurial initiative by the contractor is reduced.

"There is a role for private industry to play providing public transport services in any urban area. This role is a vital one and should increase over the next few years. Private industry has erroneously been pushed aside in the provision of public transport services in many of our urban areas. It is in the best interest of urban areas to increase the role of the private sector in providing these services. Increased utilisation of the private sector should ameliorate labour problems, operating deficits and other issues, which are often better handled by the private sector than the public sector. For the short run there will most likely be emphasis placed upon the private sector being more fully integrated into the public transportation field ... with the increase of operating deficits that are occurring many local communities are making critical review of the process in which public transportation services are now being provided. It is generally to the benefit of urban areas the consumer, private industry and local governments to provide for better integration of private industry into the provision of public transport services. (Hethington, in Gray & Hoel 1979, P493)

Much work is being done to ensure that in any evaluation of competitive bids comparisons are "apples with apples", and the Urban Mass Transit Administration has commissioned accountants to produce a manual to provide guidelines and ensure that in any comparison fully allocated costs are included. (Price Waterhouse, 1986)

"The purpose of comparisons between public and private operations, and between different private operators is not to produce winners but to produce a specified level of service at minimum cost". (Cox, 1987)

It is essential that any analysis of competitive tenders is done in a totally objective fashion, and there is much concern that agencies which are also operators will be unable to do this. "There is the potential of conflict of interest even unintended and it will take vigilance on the part of the public sector and the private sector to ensure that the interests of the riders and tax payers are served". (Cox, 1987)

Innovative Capital Finance Involving The Private Sector

Because the private sector often benefits from the provision of public transport services it is now looked to to provide some finance offset against these benefits. Development fees related to the cost of providing additional service to new subdivisions, special benefit assessments related to areas deriving benefits from specific improvements, transit impact fees related to the cost of additional service required by a development are all initiatives in place in American States.

Other initiatives are being taken in the provision of capital equipment financing, geared to attract private and vendor financing for expensive capital equipment required to operate transit systems.

Significant efforts are also being made to involve all groups wanting to see improvement in downtown and other transportation networks, including local government, transit providers, Chambers of Commerce, business organisations and individual businesses. The aim is to implement a creative range of incentives and services that will decrease congestion and improve mobility in the area concerned. Private sector involvement is a pre-requisite for the success of this strategy, and typically includes the following:-

- Clarification and identification of problems and potential solutions.
- Assisting the public sector with decision making, lobbying and packaging of projects.
- Playing a direct role in implementation.
- Providing financial support.
- Providing monitoring services and feedback.

4. CONCLUSION

A considerable weight of evidence¹ and personal experience, supports the proposition that competition provides a positive incentive towards increases in efficiency, innovation, and containment or reduction in costs. Competition provides a vibrant business environment, and it is unfortunate that many Australian urban transport operators have forsaken this environment for a more comfortable institutionalised lifestyle.

How can competition be used to rejuvenate urban bus operations in Australia?

To answer this question, and in having regard to current overseas experience, we first have to answer four important questions.

- What degree of co-ordination and integration do we need in our urban transit operations to best meet the requirements of our passengers and the wider community?
- To what level are we prepared to subsidise the services?
- In what way can we ensure that the cost of providing a specific service is minimised?
- In what way can we best encourage entrepreneurial initiative and innovation?

I believe the integrated and co-ordinated system operating in most Australian cities is an essential aspect of urban transport operation, and therefore the deregulated approach being taken in the U.K. is not appropriate, as it is not consistent in its present form with a unified system, from the passengers point of view. I therefore believe that competition within the market at route level is not appropriate.

However fair competition for the market, or for market segments, is appropriate, and there are two potential approaches.

Competitive Integration

A system of competitive integration has been suggested which entails a central authority being responsible for monitoring the provision of transport services and encouraging the provision of all services provided commercially. It would then arrange the provision of non-commercial yet necessary services and, through ticketing and co-ordination requirements, encourage the appropriate mode use and interchange.

¹ For instance see W.J. Tyson "Some reflections on optimal size and management of bus operations" UITP Review 4/1986.

Non-commercial services would be provided by tender or by modification of commercial service routes, and there would be a right to modify commercially registered services if they were seen as being detrimental either to the needs of the community or to the viability of other services. There would be a right to impose some form of uniform ticketing.

Under this system the authority would cease to be a transport operator and its main role would be to monitor the provision of public transport and only provide such services where the commercial market was not responding to public demand. (Powell, 1987)

This suggestion has two major disadvantages. Firstly under any imposed form of uniform ticketing it is very difficult to ensure that all operators are fairly rewarded for their traffic. Secondly the moment commercial decisions are interfered with they cease to be totally commercial, and the process by which the commercial network was manipulated would rapidly degenerate into a regulated and controlled system under subsidy, similar to that operating in Victoria prior to the introduction of contracts.

Franchised Operation

I believe the best possible solution to the dilemma is competitive bidding for franchises to operate loosely defined services within a given area and within co-ordination parameters and an integrated ticketing system.

Contracts thus derived would have to be cost based because the fare schedule is determined externally, but initiative would be fostered by a passenger related incentive.

The operator is free to develop appropriate services within defined parameters to service the franchise area.

Negative incentives would be included in the contract conditions to ensure adherence to required standards of operation.

Thus some cross subsidy between services in the franchise area would therefore continue and the benefits of co-ordinated services and an integrated ticketing system would still be available. This path falls between the directions of the deregulation in the U.K. and the tendering for specific and highly specified operations in the U.S.

Pre-requisites include:-

- Elimination of the operating responsibilities of central authorities - so that comparison of bids is totally objective. Experience of London Regional Transport is appropriate here as it has rescinded a number of contracts awarded to its own subsidiary, London Buses, after a review which "has shown that London Buses full costs of operation of the routes concerned are not being covered by the present contract prices". (Bus Business, April 1987)
- The maintenance of a group of similar sized competitive operators so that a reasonable cost of operation for a given standard of service can be fairly assessed.
- Basic service standards to be provided, such as:-
 - * service reliability
 - * timetable coverage
 - * average fleet age
 - * minimum timetable frequenciesare clearly established and apply across the board to all operators.
- To obtain maximum benefit all the actors in the urban bus scene should be included in the process.

Because the solutions proposed by individual operators will differ in significant detail, although remaining within the general parameters required, this system does not lend itself to a minimum price approach, but requires assessment of the relativities between each operator's suggestions. Thus the final outcome will not be totally decided by price, but include the assessment of other factors including the standard of service proposed.

Final selection of the successful contractor will therefore be by negotiation.

Finally potential funding sources for infrastructure development outside the traditional government area have not been sufficiently canvassed in Australia. Past reliance on government provision of public transport facilities and infrastructure should be assessed in the light of developments in the U.S. which will reduce urban transport demand on already scarce public funding and provide the advantage of involving private sector initiatives in the funding of new projects.

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