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<b>PAPER TITLE</b>	<b>Competitive Tendering for Bus Services: The Improved Adelaide Model</b>	
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**ABSTRACT:**

In 1994 the Government of South Australia initiated a process to contract out scheduled bus services in metropolitan Adelaide. The services, which currently involve use of about 760 buses that carry 47 million passengers per year in a service area of 880 square kilometres, had been operated by a Government organisation. Services were contracted out primarily on an areas basis, with ten area and four route contracts. By 1996 two contracts had been awarded to a private operator and three to the Government operator following two rounds of competitive tendering. Remaining services were provided by the Government operator through negotiated contracts.

A review of the bus contracting system was undertaken in 1998, and features of the system modified, including a reduction in the number of contracts to six area and one route contract. All seven contracts were subsequently competitively tendered and won by private operators: the new contracts commenced in April 2000. The refinements to the 'Adelaide Model' secured greater interest from industry and keener pricing, which resulted in substantial cost savings.

In developing the revised model, particular attention was paid to supplier market considerations. This included the division of responsibilities for service planning between the tendering authority and operators, and incentive structures to align operator objectives with Government goals in relation to service level, service quality and patronage. A number of other aspects of the former model were also revised. The paper also summarises the impacts of the overall competitive tendering process on costs, services and patronage. It draws out lessons learned that may be applicable to other authorities contemplating competitive tendering of public transport services.

**REFERENCE:**

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## 1. INTRODUCTION

Private bus services in Adelaide, South Australia, were taken over by the Government during the period 1973-75, and subsequently consolidated with other public transport modes into a single Government-owned agency in 1978. This agency regulated and operated all public transport services until 1995. Since then all the bus services (approximately 760 buses) have been competitively tendered and are now operated by private sector operators:

- Stage 1 tendering (1995-97) – involving tendering out about half the bus services in two rounds of tendering; and
- Stage 2 tendering (1999-2000) – involved tendering out all the services, including re-tendering of those previously tendered in Stage 1.

The 'Adelaide model' of competitive tendering and contracting (CTC) has attracted significant interest at previous Thredbo series conferences, perhaps particularly because of its attempt (in a heavily-subsidised market) to offer responsibilities and incentives to contract operators to improve services and thus help to achieve Government patronage-related objectives for public transport. Aspects of the Stage 1 model and CTC process have been described in two previous Thredbo papers: Gargett & Wallis (1995) and Radbone (1997).

This paper brings the story up to date. It first provides an overview of the initial Adelaide model and of the Stage 1 CTC process and its results. Its focus is then on review of the lessons learnt from Stage 1, the development of significantly modified CTC procedures, and the application of these in Stage 2. It then assesses the impacts to date of the overall CTC program, but again with a main emphasis on the recent Stage 2 impacts. It concludes with a summary of what has been learnt from the Adelaide CTC experience, in part with a view to providing insights to others who may be considering tendering and contracting of bus services.

## 2. PUBLIC TRANSPORT IN ADELAIDE

Adelaide, the capital city of South Australia, is a low-density city with a population of 1.1 million people living in a metropolitan area some 80 km north-south and an average of about 15 km east-west. Population growth is very low (0.4%), car ownership is high (0.53 cars/person), and the road system is relatively uncongested. Travel by public transport declined substantially, from 240 journeys per capita in 1950 to 90 journeys per capita in 1970 and 42 at present. Bus services currently account for about 80% of public transport trips, carrying about 47 million passengers per annum using a fleet of about 760 buses in a service area of 880 square kilometres. Public transport's market share is about 20% of travel to the central business district, and about 5% for all passenger trips in Adelaide.

A feature of Adelaide's public transport system is the 12 km Northeast O-Bahn, the largest full-scale operational guided busway in the world. The system carries 20,000 passengers per weekday on the busway, with about 108 buses being used for services on the busway and in its service area (Bray and Scafton 2000).

Until 1995, all public transport services in Adelaide were operated by the State Transport Authority (STA), a Government organisation. This organisation had been formed in 1975 to take over bus and tram services from the Government-owned Municipal Tramways Trust, suburban train services from the Government-owned South Australian Railways, and bus services from a number of private companies then operating in the suburban area of Adelaide.

Adelaide's public transport services are heavily subsidised. The multi-modal integrated fare system has been modified over time and is now not far removed from being a flat-fare structure, with a lower fare for short distance travel and during the inter-peak period. The average fare per journey is currently about \$1.15<sup>1</sup>, and farebox revenue in 1997/98 was about 28% of public transport operating costs, and 18% of the total cost of providing public transport, including the opportunity cost of capital (Bray and Wallis 1999).

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<sup>1</sup> All figures in this paper are Australian dollars. In June 2001, \$A1.00 was equivalent to about 4.9 NoK, 0.62 Euro, and US\$0.52.

### 3. STAGE 1 TENDERING AND CONTRACTING: THE ORIGINAL MODEL

#### 3.1 Passenger Transport Policy and Legislative Context

The new (liberal) State Government elected in December 1993 introduced major reforms in passenger transport policy, through the Passenger Transport Act 1994. This legislation:

- created the Passenger Transport Board (PTB) to fund, plan, commission and regulate passenger transport in South Australia;
- converted the former STA into a new statutory operating body, TransAdelaide (TA), relieved of policy functions but not corporatised (which has happened since);
- required all regular land passenger services (ie. to a fixed route or timetable) in the State, covering bus, tram and train, to be operated under service contracts with the PTB; and
- required continuation of a common, multi-modal fare structure across the Adelaide metropolitan area.

The former STA was thus abolished and its activities divided between the PTB and TA. Over time, all Government assets used by private contractors (including the Northeast O-Bahn, bus depots, and buses) have been transferred to Transport SA, a Government department whose primary function is to provide and manage the road system in South Australia, but which had appropriate skills in asset management.

The Government's policy was to progressively introduce **competitive tendering** for the provision of public transport services, starting with bus services. Other features of significance in the Act were:

- maximum term of five years for any service contract;
- maximum limit of 100 vehicles for any single contract; and
- phase-in provision to guarantee TA the opportunity to control at least 50% of services in the period up to March 1997.

These latter two provisions resulted from political compromises designed to provide some short-term protection for TA, to minimise the danger of any one operator gaining a monopoly position, and to give smaller operators the chance to compete for the provision of services.

#### 3.2 The Original Competitive Tendering and Contracting Model

The PTB developed a CTC model and process for bus services that would achieve the Government's stated policy objectives and be consistent with the new Act. Key issues that had to be addressed, in part unique to the Adelaide situation, included:

- how to best achieve the transition from a Government-owned monopoly to a market with competing private sector providers;
- how to create a CTC environment and process that would support the development of a contestable supplier market (which had not previously existed in Adelaide) and would ensure its ongoing existence;
- how to encourage greater innovation in the provision of services, and to reverse the ongoing decline in patronage; while preserving features of the previous Government monopoly/integrated system which were seen as desirable (eg integrated fares and ticketing system, centralised passenger information); and
- policies regarding future ownership and use of bus system assets owned by the Government (with a replacement value of \$440 million).

An earlier Thredbo series paper (Gargett and Wallis 1995) provides a full description of the development of alternative CTC models, in particular characterised by the manner of service specification and the formula for funding, and their evaluation against Government's policy objectives. On the basis of this evaluation, a preferred CTC model and process was selected. Table 1 (at the end of this paper) sets out the main aspects of this model and process. Key features on which further comment is warranted are as follows:

**(i) Area-based contracts**

Adelaide was divided into 10 areas (see Figure 1a), within each of which the contractor had exclusive operating rights (with the exception of certain 'lines of route' for longer-distance services running through from other areas). In addition, there were 4 separate route-based contracts. No 'deregulated' services were permitted to operate on a commercial basis (although it is doubtful that commercial services could exist in Adelaide, given its low fare regime, low parking charges, high car ownership and relative lack of congestion).

**(ii) Range of contract sizes**

Operational efficiency considerations (including the limited number of depots available, the desirability of minimising dead running and the desirability of not dividing up existing routes) tended to favour larger rather than smaller contracts, but the legislation limited any single contract to 100 buses. On the other hand, the desire to encourage bids from smaller, local operators suggested some smaller contracts should be specified. In the event, the contracts ranged in size from 10 to 94 peak buses.

**(iii) Contract duration and renewal**

It was originally intended that all bus services would be tendered out over a two year period, through four tender rounds at 6-monthly intervals, with the duration of these contracts progressively increasing through the four rounds from 2.5 years to 4.5 years. When these initial contracts expired, services were to be re-tendered all for 5 years, through annual tender rounds (or through negotiation if appropriate). In this way, an annual tendering cycle would be established for the longer term. This was consistent with the legislative requirement that no contracts be longer than five years, and would allow for contract renewal by negotiation for a further five years in cases of satisfactory performance (PTB 1995). In the event, this intended program has now been substantially modified (see Section 4).

**(iv) Service development – roles and responsibilities**

One of the Government's primary objectives for the passenger transport reforms was to "*encourage innovation and achieve service improvements, particularly improved frequencies,....better night and weekend services and more equitable access to services*" (PTB 1995). From the work on appraisal of alternative CTC models, it was concluded that operators should be in the best position to determine service requirements (having regard to costs) at the local, tactical level; and so they should be given the primary role in detailed service planning within the constraint of minimum service guidelines: "*operators should be given the maximum opportunity and incentives to be innovative and responsive in the provision of services, in accordance with the community's needs while at least meeting minimum service standards*" (PTB 1995).

Thus the system adopted for service specification and development was, in summary:

- a set of prescribed minimum service standards, both metropolitan-wide and specific to each contract area (generally based on previous levels of service);
- tender bids were required to be based on at least these minimum service standards, with additional points being awarded in tender evaluation for bids offering service enhancements;
- the contracted operator had primary responsibility for developing proposals for service enhancements and variations;
- proposals for service changes were subject to approval by PTB; and
- it was expected that contractors would finance service innovation from savings in the cost of service provision and revenue from additional patronage (as now described).

**(v) Funding basis**

To encourage operators to be innovative and to develop the market to better meet community needs and other Government's transport objectives, a funding basis was required which would provide financial (and other) incentives to operators. However, there were also concerns about the budgetary risks associated with a system of operator payments relating to passengers carried.

The funding basis adopted was that operator payments would comprise two components:

- a fixed (monthly) sum, which was the basis of the tender price bid; and

- a patronage-related amount, calculated according to the change in patronage from the base year, at a rate of \$0.50 per passenger boarding plus \$0.10 per passenger kilometre (total of \$1.50 for a typical 10 km trip). This 'incentive' component was typically around 50% of contract payments.

Given the integrated multi-modal ticketing system, and the large proportion of fare revenue collected from off-bus sales, all fare revenue was returned to PTB and was not a component of operator funding.

There was extensive debate on the structure and level of the payment formula prior to selection of the above basis. Issues included:

- whether all variable payments should be patronage-related or whether part should be service-related (eg per bus kilometre);
- whether variable payments should differ by time period (peak v off-peak), by type of service and/or by passenger type (adult v child);
- how variable payments should vary with trip length (ie. 'flagfall' and 'distance' relativities); and
- the absolute rates of payment.

The basis finally adopted was deliberately kept relatively simple. In line with the philosophy of giving the operator prime responsibility to develop the services in order to increase patronage, it was decided that variable payments should be entirely patronage-related; ie. the operator would be rewarded only for attracting extra passengers, not for providing extra services: PTB would not be concerned with how these passengers were attracted (ie. payment for outcomes, not outputs).

#### (vi) Asset ownership and use

Hitherto, the entire Adelaide bus fleet (mostly 40-45 seat rigid city buses, but with a significant number of articulated buses) and all seven bus depots had been owned by Government. It was decided that tender bids should be based on operators leasing the Government bus fleet and depots for the period of the contract (although with non-conforming tenders allowing bidders to put forward alternative proposals). This leasing approach was seen as reducing barriers to entry and increasing the level of competition. It was considered preferable to other options: sale of buses and/or depots to operators was regarded as unattractive to operators (given the relatively short contract duration) and to Government (as it would result in additional barriers to entry at the time of re-tendering); while encouraging operators to provide their own buses and/or depots was likely to leave the Government with substantial unusable assets, which would need to be written down. However, the potential down-side of requiring use of the Government fleet was that it would reduce the scope for bidders to offer innovative styles of service, for example using mini-buses or 'taxi-buses'.

#### (vii) System integration policies

An important Government objective for passenger transport reform was to "*maintain an integrated passenger transport system, comprising service coordination, integrated ticketing and centralised service information*" (PTB 1995). In formulating the CTC model, this objective was met as follows:

- **Service coordination.** The minimum service standards included criteria for route and timetable coordination between modes, routes and operators, to preserve the integrated nature of the system. Conditions were also established to provide for bus services that crossed contract boundaries.
- **Integrated fares and ticketing.** The previous integrated (multi-modal) fares and ticketing system was retained: bidders were not offered any flexibility in this regard. Off-bus ticket sales continued to be the responsibility of PTB. Operators were required to lease on-bus electronic ticketing equipment from PTB, to minimise fare evasion, and to reconcile and pay to PTB all revenue collected.
- **Passenger information.** Passenger information remained primarily a PTB responsibility. PTB managed the centralised information sources (telephone service and information kiosks); while operators were made responsible for preparation of timetable leaflets, within a PTB approved format.

- **Other integration aspects.** As well as the above, other aspects of the contracts were designed to retain the market perception of an integrated, seamless metropolitan-wide system. One such aspect was the preference for use of Government-owned buses (refer above) – although operators were allowed to paint them in their own livery; another was the setting of uniform standards for bus stops, shelters etc.

### 3.3 The Tendering and Evaluation Process

#### 3.3.1 Tendering Process

The tender process was open to all interested parties, without an initial 'expression of interest' stage. Tenderers were required to submit conforming tenders, which complied with all requirements of the Request for Tender (RFT) specification, including the lease of the Government buses and depots. Tenderers could also submit non-conforming (alternative) tenders, which did not need to comply with certain requirements.

Approximately 9 months was allowed between the call for tenders and the start of services: 2 months for submission of tenders; 4 months for tender evaluation and negotiation; and a further 3 months for the successful tenderer to prepare to operate the services.

#### 3.3.2 Tender Evaluation Process

The overall objective of the tender evaluation process was to select the tender offering best 'value for money' to Government, not necessarily the lowest contracted cost. The tender evaluation process was undertaken through a Tender Evaluation Committee, with an independent chairperson and including some experts external to PTB.

The tender evaluation process included:

- check of tenders for compliance with stated requirements;
- detailed evaluation of complying tenders (see below);
- normal commercial checks on financial status of tenderers;
- assessment of tenderers' previous performance in terms of service delivery;
- calculation of total budget costs to Government associated with each tender (including any resultant 'whole of Government' costs);
- comparison of tender bid prices against 'best practice' cost benchmarks;
- scoring of tenders against all evaluation criteria, and making trade-offs between 'quality' and 'price' criteria (see below);
- assessment of broader Government implications of any tender bids (eg economic development proposals, environmental impacts); and
- preparation of a detailed tender evaluation report.

#### 3.3.3 Tender Evaluation Criteria

Four broad categories of criteria were used in the main tender evaluation:

- service quality (eg proposed service frequency, vehicle standards, etc);
- competency (eg previous performance record);
- demonstrated financial capacity of tenderer; and
- base tender price quoted.

For all except the price criteria, a range of essential minimum requirements were defined: a tender was disqualified if these were not met. For qualifying tenders, 'quality' points were given for scores above the minimum requirement. These were then weighted, according to pre-determined weightings for each criterion, and a weighted total derived. This weighted quality total was then translated into an equivalent price adjustment, according to a predetermined scale, and a 'quality-adjusted price' was derived. Subject to consideration of any broader implications of the tenders, the tender with the lowest 'quality-adjusted' price would be selected.

### 3.3.4 Treatment of TransAdelaide Tenders

TA, the incumbent Government operator, was allowed to bid for contracts, but was required to meet a set of tender rules designed to ensure that competition was on a fair basis. These included:

- tender prices were to fully reflect the costs incurred by TA in fulfilling individual service contracts;
- only those costs which were agreed between the PTB, TA and Treasury could be omitted from the tender price; and
- all bids were to be treated on an equal basis by the PTB during the tender evaluation.

### 3.4 The Tender Results

Stage 1 involved two separate rounds of competitive tendering, covering 43% of bus patronage:

- **Round 1** (late 1995): two separate contracts (covering about 165 buses). One contract attracted 5 bidders, the other 4 bidders.
- **Round 2** (mid 1996): three separate contracts (covering about 190 buses). Each contract attracted only 3 bidders (two of which already operated bus services in Adelaide).

Of the five contracts, three were awarded to TA, and two to Serco (which had not previously operated any bus contracts in Australia, although it is a substantial company both in Australia and internationally).

### 3.5 Stage 1 Outcomes

The transition to the new contracts selected on the basis of CTC, which in some cases involved new operators, was relatively smooth. Radbone (1997) concluded that the contracting of bus services through the first two rounds of CTC was "a modest success" – although "perhaps more impressive results could have been achieved if a bolder model was adopted". He noted that the Government had retained control of fares and ticketing, had not allowed competition on the road, had retained control over routes and timetables where these affected integration of the network, and that contracting had been achieved at little political cost. Some improvements in service levels and in service quality were achieved, although not all of these can be directly attributable to the CTC reforms.

The Minister for Transport and Urban Planning reported that competitive tendering had resulted in a net annual saving of \$14.9 million (Parliament of South Australia 1998a). This saving essentially reflects the lower operating costs resulting from the CTC process. Radbone (1997) noted that most of the saving was associated with the fewer staff, greater productivity and lower pay rates of the private sector operators relative to the previous monopoly Government operation.

### 3.6 A Pause in the Competitive Tendering Program

The original plan had been to subject all Adelaide's bus services to CTC by the end of 1997. However, following the first two rounds of tendering, in 1996 the Government announced a pause in the CTC program. As an interim measure, the Government negotiated terms on a non-competitive basis for the remaining eight bus contracts to continue to be provided by TA (one other contract, for a joint venture involving TA and a private company, had been negotiated in 1995).

Factors that contributed to the 'pause' decision appear to have included (Radbone 1997):

- TA had secured a variety of workplace agreements with its staff to achieve savings;
- there were concerns for the TA workforce if the continuation of the CTC process were to result in further loss of work (and potentially substantial transition and redundancy costs to Government);
- contracting-out in other areas of the State Government's services had proved controversial, and there may have been a wish to avoid any further controversy in the lead-up to the state election; and
- a condition of the Passenger Transport Act was that it be reviewed in 1998, and a delay would allow CTC to be resumed in the context of any changes in the Act.

## 4. STAGE 2 TENDERING AND CONTRACTING: THE IMPROVED MODEL

### 4.1 CTC Review and Market Research

Two activities were instrumental in refining the Stage 1 CTC model: a technical review of the CTC process and the review of the Passenger Transport Act. The technical review initially considered the principles and policies underlying CTC, and concluded that there was a need for the CTC system to focus on enhancing the efficiency and effectiveness of the public transport system by:

- encouraging a competitive supplier market of tenderers to achieve an acceptable quality of service at efficient cost, in terms of the number, quality and prices of tenders;
- encouraging innovation and service enhancement to better meet the needs of current and potential users, both during the preparation of tenders and during contracts;
- ensuring that the CTC process was carried out fairly, effectively and expeditiously, in terms of:
  - probity
  - securing the confidence of potential and actual tenderers
  - minimising administration costs; and
- ensuring that the CTC system design, tender evaluation, and contracts reflect the goals set for the development and operation of the public transport system, in particular to achieve:
  - a balance between the cost and quality of services
  - a balance between the obligations and attractiveness of the CTC system to potential contractors
  - an integrated public transport system
  - a balance between certainty regarding service provision and innovation.

There was a view that the Stage 1 CTC process had only limited success in relation to the first two of these points, and that the review of the process needed to address these matters. Revision of the process was aided by market research of existing contractors and potential future tenderers (a total of about 15 bus operators plus several other interested parties) to investigate in particular: factors which had influenced their past decisions on bidding in Adelaide and/or would influence their future bidding decisions; factors which had and/or would influence them in tender pricing; and their comments on certain key issues relating to the future CTC system and processes.

There was a clear consensus on most, but not all, issues canvassed, with the weight of views expressed on key issues being:

- **Contract duration.** Contract periods in the range 7 – 12 years (including any renewal period) were preferred on the basis that they would encourage investment, service development, innovation, and keen contract pricing. The short contract periods adopted for the initial CTC stage were a major factor discouraging operators from bidding.
- **Contract size.** Minimum contract sizes in the range 50 – 100 buses were preferred. Contract areas should be determined having regard primarily to logical route structures, depot availability, and operational efficiency considerations.
- **Vehicles.** Operators considered vehicles an important part of the service package for customers and believed a high standard of vehicles was important. Many were happy to lease Government vehicles, provided these were of reasonable standards. Others were keen to be able to introduce their own vehicles, assuming adequate length of contract.
- **Depots.** The lack of suitable depots could potentially be a major constraint on competition. Given the lead time required for depot development, operators saw it as important that depot facilities should be made available at least for the start of the contract. Assuming a reasonable length of contract, operators would subsequently be prepared to purchase existing depot facilities and/or develop new facilities. All operators regarded depot sharing as highly undesirable. Comments were made that the TA depots tended to be over-capitalised and the larger depots were too large. The optimum depot size depot was considered to be about 60 - 80 buses.

- **Market share limits.** To ensure a continuing competitive market, operators indicated that would be relaxed about some form of limitation on the maximum market share of any one operator, provided that this was specified in advance.
- **Service development.** Operators generally looked for considerable flexibility in service development and innovation, while recognising the role of Government in setting minimum service levels etc. The Stage 1 CTC system was perceived as limiting this flexibility. This was puzzling, as the system did not directly constrain contractors, other than by PTB rejection of proposals. It seems there was a general concern about changing established services. More critically, it appears that there may have been a mismatch of perceptions regarding the meaning of service development and innovation: operators may have viewed it as being additional services to be financed by Government, whereas the Government envisaged new services occurring as operators reallocated resources from under-performing services in response to the passenger-related funding formula. The short contract period was also seen as a constraint to innovation.
- **Funding formula.** The views about the funding formula used were mixed, but the Stage 1 formula appeared to have reasonable acceptance.
- **Bonds, guarantees, insurance.** The requirements for performance levels, guarantees and insurance were seen as excessive, and had a substantial effect in discouraging potential bidders, and/or increasing bid prices.
- **Tendering requirements.** The previous Adelaide tender documentation and process was seen as very complex and onerous. This was a major factor in discouraging potential bidders. The charge for tender documents also caused some resentment.
- **PTB-operator relationships.** The PTB attitude was generally seen as unduly legalistic and indicative of a 'master-servant' relationship. Operators were strongly in favour of a 'partnership' approach.
- **Rate of tendering.** Operators expressed some preference (but not very strong) for a 'big bang' approach to be adopted on the resumption of CTC, ie. to contract out all the current negotiated contract services simultaneously in preference to a phased approach over several years.

Most of the operators interviewed expressed themselves as 'very interested' in bidding in future tendering rounds in Adelaide, provided that the system was appropriately designed. In summary, key changes they sought were:

- simplified tendering process and tender documentation;
- reduced requirements re bonds and guarantees;
- adoption of a 'partnership' approach by PTB;
- longer contract duration (with clear expectation of rollover);
- ability to introduce own buses (or upgrading of the Government fleet); and
- improved scope for, and less constraint on, innovation and service development.

Taking these views into account, the review then identified and appraised the following strategic issues relating to the CTC process:

- importance of a competitive supplier market;
- contract relationships and obligations;
- reduction of risks faced by tenderers in bid pricing;
- Government budgetary issues and uncertainties;
- ensuring competitive neutrality in the tendering/evaluation process between TA and private operators; and
- contractor incentives and payment structures.

The review examined each component of the CTC system under three broad groupings (contract specification; tendering and tender evaluation; and contract management), and made recommendations for modifications where judged necessary. The effect of these recommendations is reflected in the revised CTC system, which is described in following sections.

The technical review was complemented by an independent review of the Passenger Transport Act (Halliday and Coleman 1998). This review focussed more on institutional issues, but also addressed issues related to the practice of CTC, and noted:

- the limit of 100 buses in any individual contract was of questionable value, did not necessarily improve competition or efficiency, and required compromises in service provision, for example splitting of services previously linked through the CBD;
- a view that the contracts were excessively prescriptive and too short, and thus did not allow contractors sufficient flexibility and time to introduce innovative services;
- a view that the link between contract payments and patronage (with an average of about half of contract payments linked to patronage) did not encourage innovation and service integration; and
- views that the complexity, prescriptive nature and sheer volume of tender/contract documentation was an inhibition to potential bidders and a deterrent to innovation.

Others expressed similar and additional concerns, including:

- the limited number of bids for contracts, which could have reduced the keenness of price competition, innovation etc, and which was believed to be the result of factors such as the prescriptive nature of the tendering procedures and the contracts themselves, and the relatively short duration of contracts;
- the tender evaluation process was tightly constrained by the scoring and weighting system, which may be seen as preventing judgement excessively influencing evaluation results on the one hand or of being a mathematical process that could not adequately reflect desirable trade-offs between various criteria;
- the need for improvements in contract management processes and the adoption of a 'partnering' (rather than adversarial) approach between PTB and the operators; and
- the adverse impacts of loss of contracts on TA and its staff.

The Government appeared satisfied with the outcomes of these reviews, and in late 1998 announced that it would amend the Passenger Transport Act and resume competitive tendering of bus services.

## 4.2 Legislative Amendments

The Passenger Transport Act was amended in December 1998 to remove the constraint of 100 buses on the maximum size of individual contracts. In its place, Parliament (Parliament of SA 1998b) required the PTB to take into account four principles in awarding contracts:

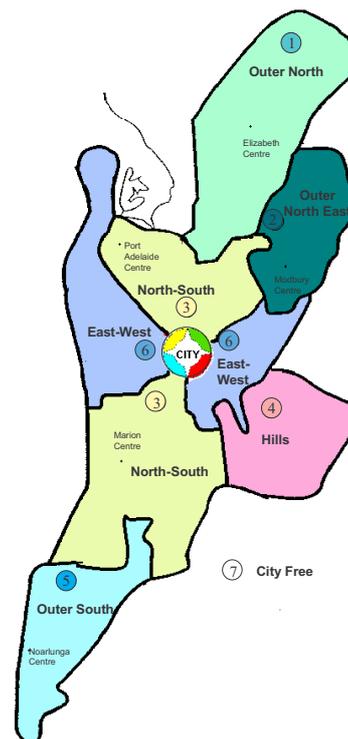
- (i) service contracts should not be awarded to allow a single operator to obtain a monopoly, or market share that was close to a monopoly, in the provision of regular public passenger transport services in metropolitan Adelaide;
- (ii) sustainable competition in the provision of regular passenger services should be developed and maintained;
- (iii) the integration of passenger transport services should be encouraged and enhanced; and
- (iv) service contracts should support the efficient operation of passenger transport services and promote innovation in the provision of services to meet the needs of customers.

In addition, the PTB was required to submit a report to the Minister of Transport within 14 days of awarding a service contract describing features of the contract and how these principles were applied in awarding the contract. The Minister was then to submit the report to both Houses of Parliament. (Note that the Passenger Transport Act does not permit the Minister to direct the PTB to grant or refuse a service contract).

Figure 1a: Stage 1 Contract Areas



Figure 1b: Stage 2 Contract Areas



### 4.3 Key Features of the Improved CTC Model

The refined CTC model responded to the change in legislation and other issues that had been identified in the reviews. Table 1 summarises the main provisions of the CTC Stage 2 model, highlighting the changes from Stage 1. The following provides further description and comments on key features of the revised model.

#### Contract Timetable, Duration and Phasing

- All metropolitan Adelaide bus services were to be subject to CTC in a single tender round (the 'big bang' approach), with new contracts to commence operations in April 2000.
- Existing contracts were varied by negotiation to expire in April 2000, the time of commencement of the new contracts (this did not occur with the Hills contract, which was won by the incumbent operator and commenced by agreement in May 2000).
- Contracts were to be for an initial period of 5 years, with the possibility of renewal for a further 5 years subject to satisfactory performance and agreement on price.

#### Contract Numbers and Design

- The number of contracts reduced from 14 to 7 (6 area and 1 route – see Figures 1a and 1b), including two 'butterfly' contact areas to permit through-linking of services through the CBD.

#### Tendering Process

- Adoption of a two-stage selection process, with an initial Registration of Interest (then current contractors were automatically registered), followed by a Request for Proposals from qualified bidders.
- 'Proposals' were invited rather than 'Tenders'. The distinction was intended to allow greater flexibility for participants; to avoid the implication that cost was the primary selection criterion; reinforce an expectation of innovation in service provision over the duration of the contracts; allow respondents to present their capabilities and proposals for service improvements and

infrastructure provision; and to allow a broader range of factors to be more effectively taken into account in evaluation of submissions.

- TA was permitted to bid, subject to adherence to defined tender rules.
- Simpler tender and contract documentation, clearer tendering requirements, and provision of all information on CD-ROM.
- No charge to selected bidders for tender/contract documents.
- All qualified bidders were required to submit a conforming proposal for any one or all of the seven contract areas, and had the option of submitting proposals for combinations of contract areas (being advised of the competition principles indicated in the revised Passenger Transport Act) and alternative proposals as they may have identified. For simplicity, 'combined' and 'alternate' proposals only had to contain documentation for those aspects that differed from the relevant single conforming proposal.
- Conforming proposals were to be based on operation of then-current services for the first year of the contract. This was to allow contractors to become familiar with their areas prior to making changes (and by association, to reduce the advantage of incumbent operators who could be expected to already be familiar with their services), and to facilitate comparison of proposals.
- Tenderers were required to also bid variable unit cost rates (per revenue kilometre and peak bus – in the event, the latter did not make an appreciable difference, and was not used in contracts) to apply in case of service adjustments.

### **Service Specification and Service Development**

- Service planning and development was to involve a 'partnership' approach between operators and PTB. Operators were to take prime responsibility for initiating service changes, including annual service reviews, with proposed changes still subject to PTB approval as in Stage 1. However, PTB was to provide more information on passenger demand (eg derived from the ticketing system database) to contractors, in part to encourage operators to reallocate resources from under-performing services. PTB had the right to direct changes in services (with contract payments varied according to the variable unit costs). Relative to Stage 1, the Stage 2 contracts have greater PTB involvement in service planning, with consequently less need for detailed service standards.
- Compared with Stage 1, PTB now has a larger role in marketing the public transport system as a whole (including publication of all bus timetables), with operators focussing on local marketing.

### **Contract Payment Basis**

- The variable payment rate that is linked to changes (+/-) in patronage was reduced, from an average of around half the average gross cost/passenger to around one quarter of average costs/passenger. This change was made because appraisal had indicated that the previous patronage rate was high relative to the degree of influence that operators had over patronage, with the high rate making operators risk averse to redeploying resources given uncertain patronage effects.
- An input-related variable payment rate (per revenue bus km) was introduced for agreed service changes.
- Penalties for early and late running and for missed services were increased substantially.
- Operators were insulated from patronage decline during the first year of the contract (but paid an incentive for patronage rises). Patronage in the first year will be the base for assessing future incentive payments.
- The new combined input/output-related payments for service changes reduced the risks in service enhancement and innovation for operators (while still retaining patronage-related incentives). It better reflected that service changes are a combined decision between the operator and PTB, and that the operator's efforts are only one of many factors influencing patronage outcomes.

### Contract Administration

- As for service planning, the revised model places a stronger emphasis on 'partnering' between PTB and the operators to achieve desired outcomes. PTB now provides more information to operators on patronage demand on services (including exception reporting for low demand services), is establishing a centralised database on bus runs, and is considering demonstrating an automatic bus location and scheduling system. In general, there has been a culture change in contract management compared with the former model.

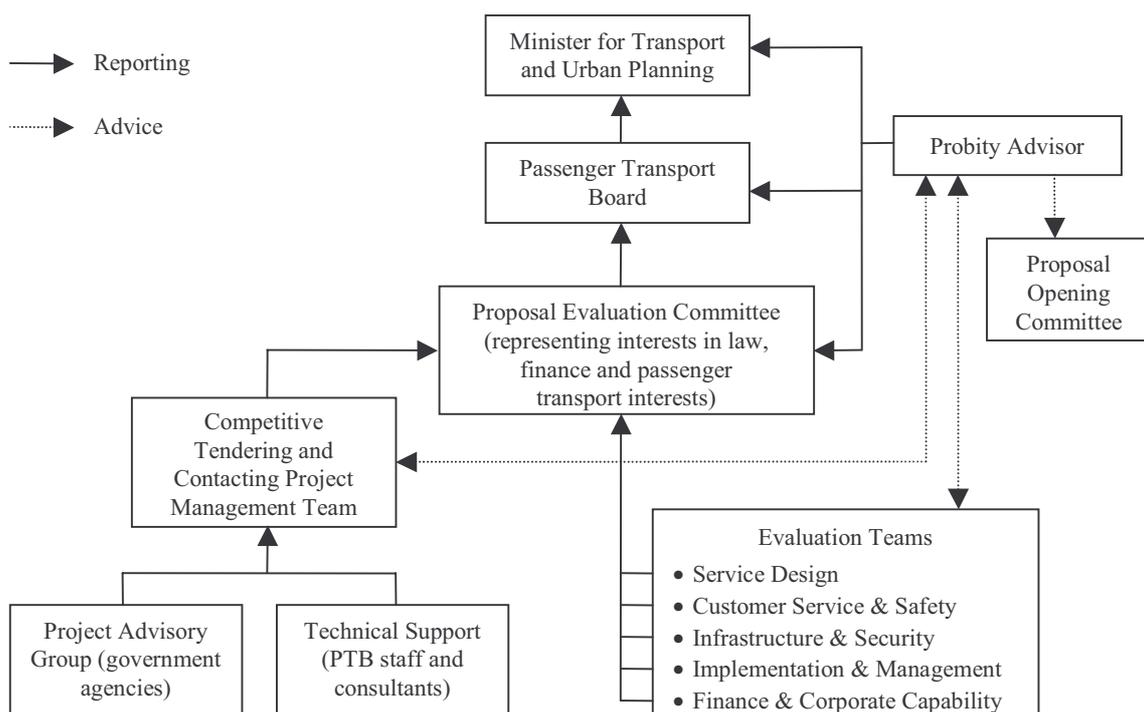
## 4.4 Assessment of Proposals

A Proposal Evaluation Committee (PEC) was central to the organisational structure (see Figure 2). The PEC was responsible for developing the overall assessment plan, determining assessment factors, integrating the evaluation of proposals, and recommending a preferred contractor for each contract area to the Board of the PTB which was responsible for making the decision on the parties with whom the PTB would enter negotiations. The Board also approved the evaluation criteria and weightings prior to receipt of proposals.

The PEC consisted of two PTB staff and three other members who between them had skills covering finance, social equity, legal and transport experience. The PEC in turn had access to assistance and advice from: the Project Team that had developed the competitive tendering and contracting process, which in turn had access to a broader range of technical, legal and administrative resources; an independent Probity Adviser, whose role was to ensure fairness and equal opportunity for all parties; and Evaluation Teams, which primarily comprised PTB staff (with some involvement of consultants and representatives from other Government agencies) and who undertook detailed assessment of proposals.

Five Evaluation Teams were established, each responsible for assessing specific aspects of proposals (service design, customer service, infrastructure and security, implementation and management, and finance and corporate capability). Each team examined all proposals, but received and considered only the parts of the proposals that were pertinent to their areas of responsibility. This structure was central to the efficient and effective assessment of proposals. The process of opening proposals, screening the proposals for compliance with key requirements, and allocating sections of proposals to each Team was undertaken by the Proposal Opening Committee.

Figure 2: Organisation Chart for Proposal Assessment



Specific activities of each Evaluation Team included: (i) establishing, on the basis of evaluation criteria described in the Request for Proposal, assessment factors and the assessment process, which was approved by the PEC prior to opening of Proposals; (ii) assessing each proposal for each contract area on the basis of the assessment factors and process, including documentation of strengths, weaknesses, risks and contractual issues; (iii) forming an initial view of the appropriate score (with five grades between Excellent and Unacceptable), and subsequently reviewing the score to ensure consistency in the scoring between all proposals; and (iv) preparing a report to the PEC, including a ranking of proposals for each contract area.

Formal means were established to ensure that relevant material was provided to the Evaluation Teams, and that the evaluation process was secure and untainted. The PEC was responsible for using the work and advice of the Teams to undertake an overall value-for-money assessment that integrated quality and price attributes of proposals.

The revised assessment process was a little less 'mathematically' oriented than the tender evaluations used in Stage 1 in that it used a numerically-based approach only in the early stages of the evaluation, and presented a more detailed and formal documentation of the strengths and weaknesses of proposals. The reduction in the quantitative nature of the process may be seen weakening the rigour of the evaluation, but was judged to have enabled the evaluation to proceed in a more focussed and staged manner, to provide a richer assessment of proposals, and to have allowed a sounder recognition of the attributes of proposals and trade-offs between the attributes.

#### 4.5 The Tender Results

Expressions of Interest were submitted by 24 operators, with the three incumbent operators routinely registered. All were invited to submit Proposals, which were due in September 1999. 87 separate Proposals (including alternative and combined Proposals) were received for the 7 contracts from 16 companies and consortia from Australia and overseas. Excluding alternative and combined Proposals, there were generally between about 6 and 8 proposals for each of the contracts. This much increased level of interest compared with the Stage 1 tender rounds (Round 2 in particular) was one initial indicator of success of the revised system.

The successful tenderers, announced in January 2000, were:

- Serco (North-South, Outer North, and Outer North-East contract areas), accounting for 395 buses and 53% of bus patronage;
- Torrens Transit (East-West contract area and City Free service), accounting for 255 buses and 36% of patronage;
- Australian Transit Enterprises - ATE (Outer South contract area), accounting for 82 buses and 8% of patronage; and
- Transitplus (Hills contract area), accounting for 33 buses and 3% of patronage.

It is worth noting that:

- despite proposals being received from a number of international bus operators, all contracts were awarded to companies either already operating in Adelaide (Serco) or Australian-owned companies with interstate bus operations (Torrens Transit and Transitplus, which was a joint venture of ATE and TA); and
- TA was unsuccessful in winning any contracts in its own right. Its bus business was wound up shortly thereafter, other than its shareholding in Transitplus.

The Stage 2 price bids were, in general, much more 'competitive' than those received in the Stage 1 tenders, with a number of price bids close to efficient cost benchmarks established prior to opening the proposals. A number of the proposals that were price competitive also ranked highly in terms of quality aspects. This was a further key indicator of the greater success of the revised system in attracting interest from capable and motivated operators.

The new contracts started in April 2000 (except the Hills contract which commenced in May 2000).

## 5. IMPACT ASSESSMENT

This section of the paper attempts a summary and appraisal of the main impacts of the implementation of CTC for the Adelaide bus system – in terms of gross costs (and subsidy levels), operational issues, service quality, service development, patronage and the contract management process. Where possible, it examines trends over the last 10 years, covering the period from before Stage 1 CTC to that after implementation of Stage 2 CTC. As noted by Radbone (1997) this is not an easy task, given the data deficiencies and the paucity of systematic monitoring. The appraisal covers the impacts of the Stage 1 and the Stage 2 CTC, and separates these where possible. While it would be reasonable to claim that most of the impacts identified were a result of CTC, we would not attempt to claim that CTC was the only way, or necessarily the best way, of achieving them – that would need to be the subject of another paper.

### 5.1 Cost Impacts

#### 5.1.1 Operations/Contract Costs

The gross cost of providing public transport services in Adelaide has been estimated for the years since 1992<sup>1</sup>, covering the period over which contracting has occurred and several earlier years to provide a baseline for comparison. An attempt has been made to determine the costs on an equivalent basis by adjusting for the major exogenous factors of general price inflation (adjusted to March 2001 prices) and changes in fuel prices (adjusted to the price of fuel in March 2001). The results are shown in Figures 3 and 4. The analysis separates bus routes that were competitively tendered in Stage 1 (rounds 1 and 2) from those tendered for the first time in Stage 2.

The data shows:

- Little change in costs in the early 1990s, followed more dramatic cost reductions in the lead-up to CTC Stage 1; these are judged to be the result of budgetary constraints and anticipation of the tendering process.
- The total cost of providing bus services fell sharply in 1997 as the first two rounds of tendering took effect (including the effect of competitive tendered contracts and negotiated contracts for which prices were based in large measure on the successful tender prices).
- The total cost of providing bus services rose between 1997 and 1999, largely because of a 4.5 percent increase in the quantity of bus service provided.
- The cost fell marginally in 2000 (with most contracts under Stage 2 CTC commencing in mid-April 2000), and has fallen further in 2001, reflecting the effect of the saving over a full year. It is estimated that the annual cost of providing the services that were re-tendered fell by 5%, and the cost of providing the services subject to competitive tendering for the first time fell by about 20%. The total annual saving from Stage 2 tendering is estimated at about \$24 million (15%).

Looking over the full period of competitive tendering (between 1994 and 2001), the annual cost of providing bus services is estimated to have fallen by \$60 million (a 33% saving). Total bus-kilometres rose by 8% during this period, resulting in the cost per bus-kilometre declining by 38%.

The costs described above include a portion of PTB administration costs. Public accounts suggest that the cost of policy, contract management, service planning, passenger information and marketing functions relating to bus services in Adelaide is about \$7.5 million (Auditor General 2000), which is around 6% of the total cost of the services. This figure will have been boosted by the cost of the recent round of tendering, but may remain at a similar level given the greater involvement that PTB now has in supporting operators.

While bus costs have decline substantially, the average cost of providing tram and train services has changed little in real terms in this period. As a result, the difference between the higher cost of carrying passengers by rail compared with road-based public transport has risen (Bray and Wallis 1999). There remains comparable scope for technical efficiency gains for train and tram services as has been achieved with buses.

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<sup>1</sup> Years are expressed in terms of the financial year ending in June of the year indicated.

Figure 3: Total Annual Cost of Bus Services in Adelaide (\$ million)

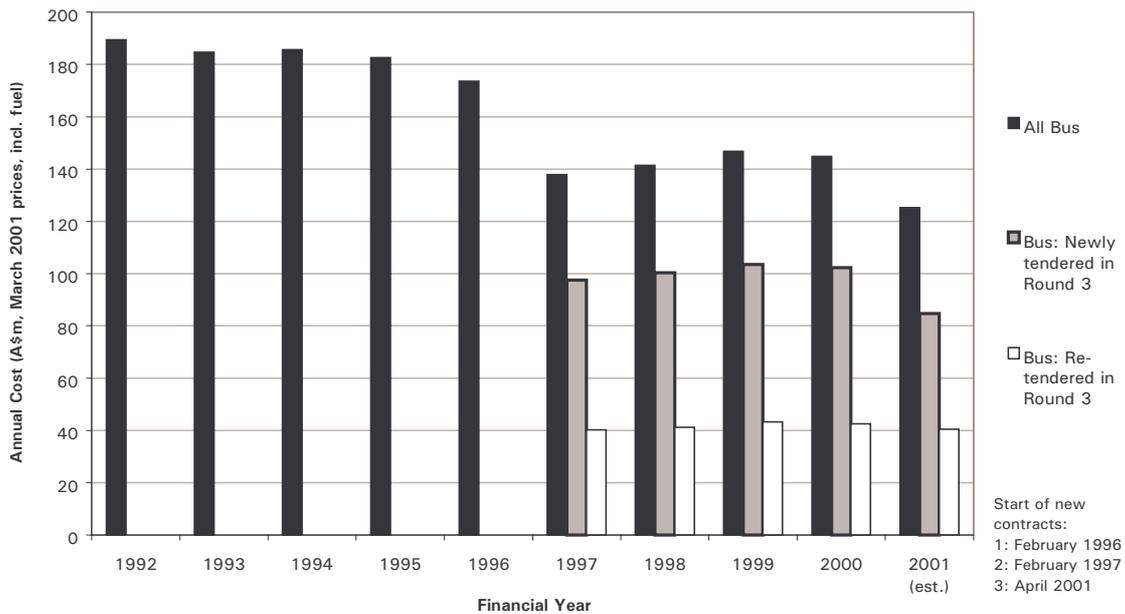
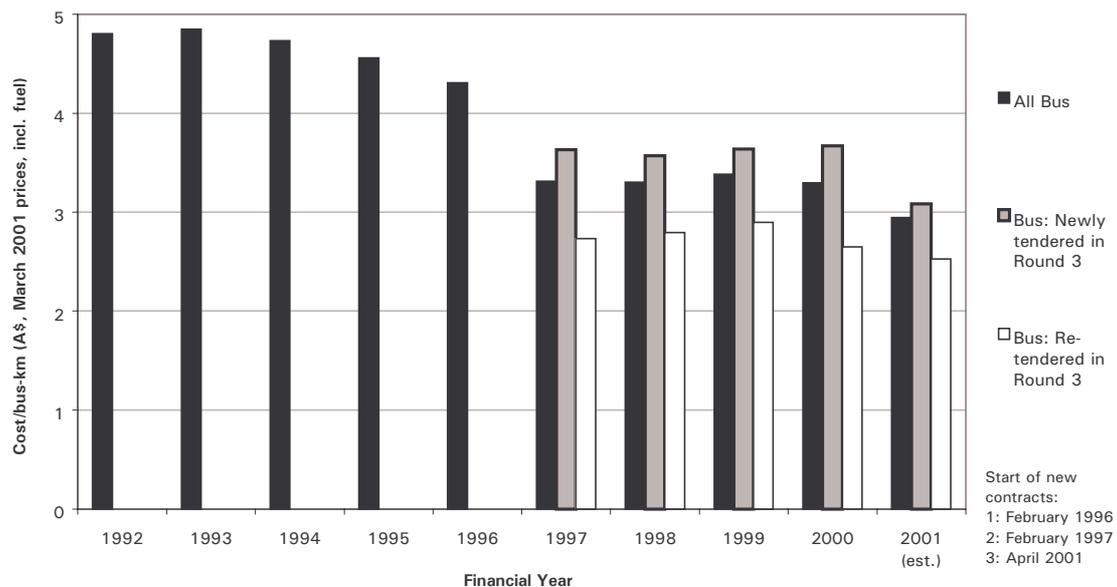


Figure 4: Average Cost of Bus Services (\$/bus-kilometre)



Cost comparisons over time inevitably face different circumstances that make the comparisons difficult. One such change that has not been taken into account in the above analysis is the different treatment of the cost of providing buses and depots that has occurred over time, with buses and depots now fully charged at a 'commercial' rate, including the opportunity cost of capital. The impact of such effects is not expected to change the general conclusions of the above analysis (and may well strengthen them).

### 5.1.2 Transition Costs

In announcing the successful tenders, the Government indicated a saving of "at least \$7 million a year (\$70 million plus over 10 years) will be cut from the taxpayer-funded operating subsidy after taking account of the whole of Government costs" (Minister for Transport and Urban Planning 2000).

There have been substantial transition costs associated with the scaling down and, in Stage 2, winding up of TA's bus operations. These included: (i) redundancy payments to TA staff; (ii) 'transition' payments to TA staff who transferred to one of the new private operators; and (iii) 'redeployment'

costs for TA staff retained in public sector employment. In addition, more generous payments were made during Stage 2, including incentive payments to staff to encourage their support during the period between announcement of the new operators in January 2000 and commencement of the new contracts in April 2000, and permitting staff taking packages to immediately commence working for one of the new contractors (staff were previously prevented from taking up such employment if they received a package).

It is estimated that transition payments between 1994 and 1996 for Stage 1 CTC was about \$37 million (derived from Radbone 1997). Allowing for some subsequent, though diminishing costs, this suggests a payback period of about a year based on the savings achieved. Detailed information on transition costs during Stage 2 is not available. However, the cost of separation packages and incentive payments for TA rose from \$5.8 million in the 1999 financial year to \$37.8 million in the following year, ie the year in which TA ceased providing bus services (Auditor General 2000). This amount will diminish in subsequent years, but would appear likely to result in the transition cost for Stage 2 being higher relative to the saving achieved in the cost of providing bus services. This reflects the more generous compensation packages offered to TA employees during Stage 2 and the higher cost involved in closing down TA's bus operations.

The cost of the Stage 2 transition is not indicated by simply subtracting the publicly announced net saving (of \$7 million per annum) from the annual saving of \$24 million estimated above because of methodological differences. Even so, it seems possible that the actual average annual saving could be greater than that announced.

## 5.2 Operational Impacts

### 5.2.1 CBD Through-linking of Services

Prior to the introduction of CTC, many routes ran through the CBD. In Stage 1, largely because of the constraint of the 100 bus limit for any single contract, many of these routes were divided into two parts, in different contract areas. This resulted in additional operating resources (including around 30 peak buses) and hence higher contract prices, extra buses travelling through and parking in the CBD, and disruptions to through city passenger journeys. It had little to recommend it.

The removal of the 100 bus limit in Stage 2 permitted two large 'butterfly' contract areas (one north-south and the other east-west – see Figure 1b) to be implemented, which enabled through running to be reinstated. This largely solved the problems that arose in Stage 1, and has been one contributor to the further cost savings that have arisen from Stage 2.

### 5.2.2 Bus Utilisation

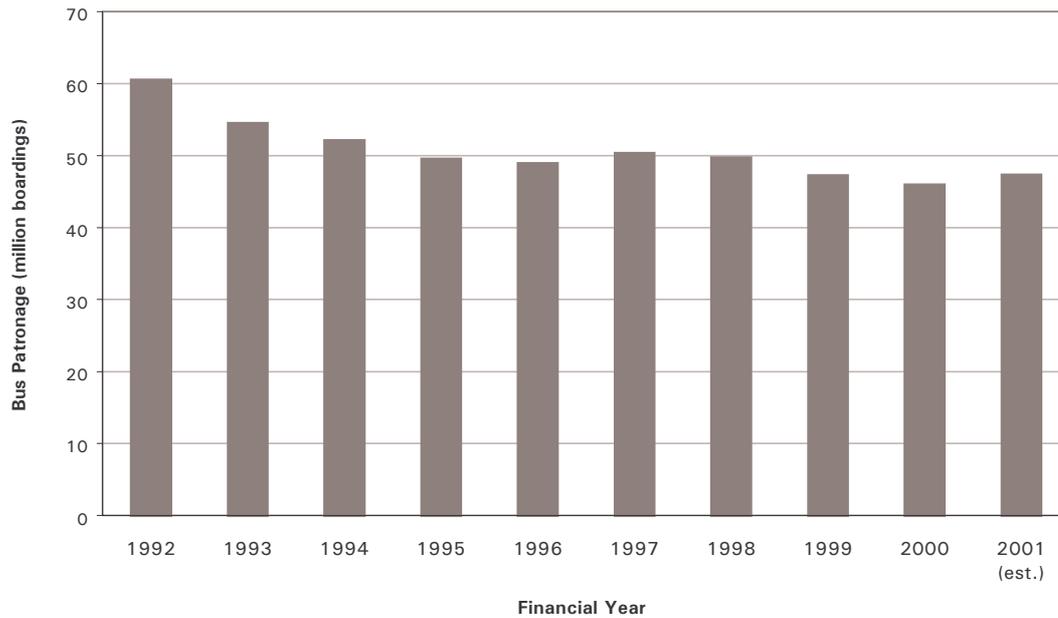
Under the Stage 1 contracts, operators paid an annual lease charge for the use of the Government buses, the cost of which was paid as part of their overall contract payment (with operators paying TSA, the asset owner in turn for the use of assets). This method has changed in Stage 2, with the PTB now paying TSA directly for the cost of buses (and depots also). This change occurred primarily because a newly introduced Goods and Services Tax would have required a series of transitions that resulted in no net tax being paid, but with administrative and financial costs nonetheless. One difficulty arising is that it tends to increase total bus requirements: operators are likely to schedule services to minimise driver costs, rather than some combination of driver and bus costs. This issue should be addressed in any review of the Stage 2 system.

## 5.3 Bus and Depot Ownership

The decision to make buses and depot facilities available to new contractors, at least at the start of the contract appears to have been successful in both CTC stages. A number of contractors are now introducing additional smaller depots, financing the cost of the additional depots through reduced dead running and leasing of spare capacity at the Government depots. At some stage, the Government may need to consider if it should sell some (or all) of its depot capacity, which could have implications for future re-tendering of bus services.

A number of options exist for the treatment of buses. While some Stage 2 proposals offered to supply buses, the outcome was that all contractors continued to use Government buses. However, the

Figure 5: Bus Patronage (1992-2001)



system remains open to the provision of buses by contractors. In the extreme, the Government could withdraw from the provision of buses, and sell its current fleet to contractors or third parties. Given the very limited bus leasing market that currently exists in Australia, there would be a need to ensure that buses used by an incumbent operator that failed to win a new contract be available to an incoming contractor to avoid access to buses becoming a significant deterrent to potential bidders in future CTC rounds.

#### 5.4 Employment Levels and Conditions

At the time the new contracts were announced, it was expected that total employment for the provision of bus services would fall by 17% to an expected 1,140 employees (Minister for Transport and Urban Planning 2000). Data is not available to confirm the actual change in staffing levels, nor on the movement of employees from TA to the new operators. All staff that transferred to the new operators were to be employed under conditions in industrial awards or workplace agreements.

As the revenue to bus operators is related in part to patronage, there is a clear incentive and need for bus drivers to present a positive image to customers. As patronage has risen, there is a broad consensus that bus drivers are friendlier, and there have been no significant industrial disputes, it may be concluded that drivers' attitudes are reasonably positive.

An issue that is yet to be resolved with contracting is 'transmission of business'. This issue, which emerged from an industrial court dealing with a case in a separate sector at about the time of the Stage 2 CTC process, suggested that employees of a business that shifted from the public to the private sector workers were entitled to a continuation of their previous employment conditions.

#### 5.5 Service Planning and Development

It is apparent from the earlier discussion (Section 4.1 etc) that the Stage 1 contracts had only very limited success in achieving improved services. This disappointing outcome appears to have resulted from: insufficient incentive (and too much risk) in the payment formula; the short contract duration; and what were seen as rather bureaucratic procedures.

The Stage 2 contracts have (within their first 12 months) resulted in greater success in this area. Service enhancements to date have included general frequency improvements, improvements to evening and weekend services, route extensions, and reallocation of bus trips from poorly patronised to better patronised times. Some of these enhancements have been funded by reallocation of operating resources, and others by additional PTB funding consistent with the payment formula.

The greatest success in this regard in Stage 2 appears to be due to a combination of longer contracts, more generous funding by PTB (through reinvestment of some of the savings associated with the Stage 2 contract prices), the less bureaucratic 'partnership' approach being adopted, and the more pro-active approach to service development being taken by one of the new operators. It appears that success in this area requires pro-active, skilled service planners (who are generally in short supply) as well as adequate incentives and procedures.

## 5.6 Service Quality/Customer Satisfaction

A major survey of passenger views conducted in March 2001 indicated that 40% felt that services had improved during the preceding year, 15% judged there to have been no change, and 9% thought services had become worse. Tram services were generally seen to have changed the least, and improvements were slightly more evident for train than bus. The latter may reflect a substantial increase in staffing on trains, facilitated by financial savings from the Stage 2 CTC of bus services.

## 5.7 Patronage Impacts

There has been a long term decline in public transport patronage in Adelaide that continued until the mid-1990s, with patronage declining by 2.5% per annum in the decade to 1995. Patronage was relatively stable through the mid-1990s, fell in 1999 when fares rose substantially in real terms, and has been rising through the current financial year (see Figure 5). It is likely that the substantial rise in fuel prices that began in the first quarter of 2000 will have contributed to the recent rise in patronage. It is evident that the long term decline in bus patronage up to 1995 has slowed markedly. While it is not clear to what extent competitive tendering has contributed to this outcome, the early signs from Stage 2 are positive.

## 6. CONCLUSIONS

The Adelaide experience provides clear evidence of the effectiveness of competitive tendering in reducing the gross costs (and public subsidy levels) of providing a given level of public transport service. This has occurred in the context of the opening up to competition of services previously provided by a Government operator in a monopoly environment, not subject to either actual competition or the threat of it.

The cost savings have been achieved with no deterioration in service quality. Indeed the indications are that service quality can be enhanced, the service better oriented to customer needs, and hence patronage increased.

In Adelaide, the unit cost savings associated with the whole CTC process (since 1994) are estimated at 38% of the previous gross cost of providing services. This is consistent with evidence from a number of other similar experiences internationally where savings in the order of 30% have been reported; and it is consistent with previous studies of cost differences between TA (and other public operators) and efficient private operators in Australia.

However, one of the main lessons of the Adelaide experience is that the success of CTC is not guaranteed. It is dependent on 'getting it right' in terms of system design. Two key principles have emerged as being crucial in this regard:

- The importance of designing the CTC system consistent with government objectives for the public transport system as a whole, while recognising that CTC cannot achieve all objectives for public transport. Its main contribution is likely to be first to technical efficiency objectives and secondly to allocative efficiency objectives.
- The importance of encouraging a competitive supplier market, ie sufficient potential suppliers that are likely to submit bids of high quality at competitive (efficient) prices. The prerequisite to achieving this is understanding the motivations and factors that influence potential suppliers.

In Adelaide, arguably, insufficient attention was paid to this second principle in the Stage 1 CTC. The result was relatively few bids, in some cases not very keenly priced. Stage 2 involved an extensive review of the whole CTC process, including market research among potential suppliers, followed by system redesign giving greater weight to supplier market considerations. The success of the Stage 2

changes is exemplified by the number and quality of the bids received, the further substantial cost savings achieved, and the positive indications to date in terms of service enhancements, service quality and patronage trends.

Particularly important features of the Stage 2 CTC system that influenced the supplier market response and the overall success of the process included, in our judgement:

- contract duration;
- contract size;
- 'big bang' approach;
- tighter specification of initial requirements, especially in relation to service levels;
- sharing of risk and responsibilities in relation to service development and service changes (and the associated funding formula);
- simpler, more clearly presented, RFP and contract documentation;
- less onerous contract provisions (eg guarantees); and
- adoption of a 'partnering' approach.

It is hoped that many of the lessons learned in Adelaide will be of use to other authorities implementing or contemplating CTC for public transport services.

## ACKNOWLEDGEMENTS

The Authors assisted the Passenger Transport Board (PTB) with a review of the first two rounds of competitive tendering, formulation of the revised tendering arrangements, and assessment of proposals. They are grateful to the PTB for its assistance and cooperation in preparing this paper, which necessarily draws on unpublished material. The analyses and the views expressed in the paper are, however, those of the authors.

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<b>TABLE 1: SUMMARY OF TENDERING &amp; CONTRACTING PROCEDURES (Stage 1 &amp; Stage 2)</b>		
<b>Aspects</b>	<b>Stage 1 Contracts</b>	<b>Stage 2 Contracts</b>
<b>A. Contract Scope</b>		
1. No. of contracts	• 14	• 7
2. Contract geographic type	• 10 area contracts (with some 'lines of route'), 4 route contracts.	• 6 area contracts (with some 'lines of route'), 1 route contract (free CBD service).
3. Individual contract sizes	• Area contracts 11-94 peak buses; route contracts 10-24 peak buses.	• Area contracts 30-200 peak buses (only one contract <70); route contract 10 peak buses.
4. Contract areas linked through the CBD	• Generally not through-linked (required additional operating resources).	• Larger contract areas defined such that CBD through-linking restored (reduces CBD bus movements, saves c. 30 buses)
5. Contract size and market share limitations	<ul style="list-style-type: none"> <li>• Original legislation contained a provision on the minimum market share allocated to TA, but only for a transition period.</li> <li>• Original legislation set a maximum size of 100 buses for any single contract.</li> </ul>	<ul style="list-style-type: none"> <li>• Amended legislation removed the 100 buses limit on any contract; but introduced principles relating to development of sustainable competition; prevention of monopoly by a single operator; encouragement of service integration; and encouragement of service innovation and efficiency in service provision.</li> </ul>
<b>B. Tendering and Contracts</b>		
1. Number of tendering rounds	• 2 rounds of competitive tendering (1995, 1996), for 5 contracts covering 43% of total services. Contracts negotiated with TA for remaining services.	• Single round of competitive tendering (1999), covering all bus services.
2. Tender assessment	• Tightly constrained by scoring and weighting system.	• Scoring used for initial technical assessment of proposals, with assessment of five separate teams integrated by Proposal Evaluation Committee.
3. Contract duration	• 2.5-4.25 years initially.	• 5.0 years initially.
4. Contract renewal	• Option for renewal up to 5 years. Terms of renewal 'by negotiation', taking account of previous performance and potential cost savings to Government.	• Option for renewal for 5 years, subject to previous satisfactory performance by contractor. Renewal generally to be based on previous contract price (subject to normal cost indexation), but with negotiation/- arbitration procedures if needed.
5. Contract phasing	<ul style="list-style-type: none"> <li>• Original intention for all bus services to be initially tendered over four tender rounds, spread over 2 years (ie 6-monthly intervals); and that subsequent re-tendering be spread over five annual tender rounds.</li> <li>• This would ensure that some services would be tendered every 6 or 12 months.</li> </ul>	<ul style="list-style-type: none"> <li>• Change to the 'big bang' approach: all bus services were offered for tender simultaneously, with all contracts expiring at one time (after 5 years) or being renewed for a further 5 years.</li> <li>• Thus tenders would only be called every 5 (or possibly 10) years.</li> </ul>
6. Successful operators and market share	• TA (54% negotiated, 3 contracts, 24% competitive), Serco (2 contracts, 19%), Hills Transit (1 negotiated contract, 3%).	• Serco (3 contracts, 53%), Torrens Transit (2 contracts, 36%), ATE (1 contract, 8%) and Transitplus (1 contract, 3%).
<b>C. Service Specification and Development</b>		
1. Initial service specification for tender bids	• Tender bid prices based on providing at least current levels of service; but with additional points in tender evaluation for offering additional services and for good understanding of market needs of area.	• Proposal bid prices based on providing current levels of service (with some specified changes, and permitting minor timetable changes).
2. Service planning and review procedures	• Contractor responsible for service reviews, within service standards defined by PTB: any proposals also subject to PTB approval.	• Requirement for comprehensive annual service review initiated by contractor, including market research, consultations, patronage analysis etc.
3. Responsibilities for service planning and development	• Contractor has prime responsibility, PTB required to approve proposed changes.	• 'Partnership' approach. Contractor has prime responsibility, working closely with PTB. PTB provides more information and approves proposed changes (except for minor variations).

TABLE 1: SUMMARY OF TENDERING & CONTRACTING PROCEDURES (Stage 1 & Stage 2)		
Aspects	Stage 1 Contracts	Stage 2 Contracts
4. Fare and ticketing system	<ul style="list-style-type: none"> <li>Integrated (multi-modal) fares and ticketing system specified by PTB. PTB also provides electronic ticketing equipment.</li> <li>Operators responsible for fare collection, ticket operation &amp; minimising fare evasion.</li> <li>All fare revenue returned to PTB.</li> </ul>	<ul style="list-style-type: none"> <li>As for Stage 1.</li> </ul>
<b>D. Contract Payments</b>		
1. Base payment formula	<ul style="list-style-type: none"> <li>Total payment (T) = Fixed sum (F) + Patronage payment (P).</li> <li>Fixed sum (F) is payment relating to base year patronage level.</li> <li>Patronage payment (P) relates to any change (+/-) from base year patronage:  <math>P = \\$0.50 * \Delta \text{ Pass} + \\$0.10 * \Delta \text{ Pass-km}</math>                      (<math>\Delta \text{ Pass}</math>, <math>\Delta \text{ pkm}</math> are changes from base year.)</li> </ul>	<ul style="list-style-type: none"> <li>Total payment (T) = Fixed sum (F) + Patronage payment (P) + Service payment (S).</li> <li>Fixed sum (F) is payment related to base year patronage and service levels.</li> <li>Patronage payment (P) relates to any change (+/-) from base year patronage:  <math>P = \\$0.285 * \Delta \text{ Pass} + \\$0.057 * \Delta \text{ Pass km}</math>                      (becomes <math>\Delta \text{ Pass}</math> given av. trip lgth./contract.)</li> <li>Service payment (S) relates to any agreed change in services from base service levels:  <math>S = K * \Delta \text{ Bus-km} (+B * \Delta \text{ Peak bus} - \text{see below})</math></li> </ul>
2. Basis for tender price bids	<ul style="list-style-type: none"> <li>Tenderer bids (F) only; (P) set by PTB.</li> </ul>	<ul style="list-style-type: none"> <li>Tenderer bids (F), together with K and B (by bus size). Only K used in the end.</li> </ul>
3. Adjustment for patronage changes	<ul style="list-style-type: none"> <li>Adjustment is per (P) formula above.</li> <li>For different contract areas, (P) is between 40% and 67% of average funding (F) per existing passenger, ie. between \$1.00 and \$1.80 per additional passenger.</li> <li>For payment purposes, patronage in any month is capped at 10% more than in the corresponding month in the previous year (to contain budgetary risks).</li> </ul>	<ul style="list-style-type: none"> <li>Adjustment is per (P) formula above.</li> <li>Overall (P) per incremental passenger averages around 25% of average funding per existing passenger (rate is between \$0.60 and \$1.00 per additional passenger).</li> <li>Provision that year 1 patronage payment will not be less than base level.</li> <li>Payment cap removed.</li> </ul>
4. Adjustment for service changes	<ul style="list-style-type: none"> <li>Adjustment only through any patronage changes (as above).</li> </ul>	<ul style="list-style-type: none"> <li>For service changes agreed with PTB, adjustment is per formula above: (S) varies with change in service levels, and (P) with any associated change in patronage. In practice, in most cases (S) payment is significantly greater than (P) payment.</li> </ul>
5. Adjustment for fare changes	<ul style="list-style-type: none"> <li>In the event that average fares increase more than 1.2 times the CPI increase, patronage payments are adjusted based on the estimated elasticity of demand (to compensate for loss in patronage).</li> </ul>	<ul style="list-style-type: none"> <li>No separate provision.</li> </ul>
6. Adjustment for cost indexation	<ul style="list-style-type: none"> <li>All contract payments indexed on a 6-monthly basis in response to changes in a PTB cost index reflecting industry costs.</li> </ul>	<ul style="list-style-type: none"> <li>Similar to Stage 1, but with index restructured and refined. Laspeyres Price Index used and calculated monthly for each contract area.</li> </ul>
7. Asset lease	<ul style="list-style-type: none"> <li>Payments made via contractor.</li> </ul>	<ul style="list-style-type: none"> <li>Payment direct to (Government) asset owner.</li> </ul>
<b>E. Assets</b>		
1. Provision of buses	<ul style="list-style-type: none"> <li>Conforming tender bids required to lease Government bus fleet.</li> <li>Non-conforming tenders could include use of other buses that meet minimum standards. (In practice this was not encouraged: all contracts used the Government fleet).</li> </ul>	<ul style="list-style-type: none"> <li>Contractors required to use Government buses for conforming bids, but with option of supplying own buses.</li> <li>For non-conforming tender bids, contractors able to offer their own buses. (In practice, Government buses used to date.)</li> </ul>
2. Provision of depots	<ul style="list-style-type: none"> <li>Conforming tender bids required to lease Government depots.</li> <li>Non-conforming tenders could nominate use of other depot facilities. (Outcome was use of Government depots, but some subsequently introduced sub-depots).</li> </ul>	<ul style="list-style-type: none"> <li>Government depots available for lease (at commercial rates), but contractors not obliged to use them. (In practice, all contractors use the Government depots, although some additional sub-depots are being introduced).</li> </ul>